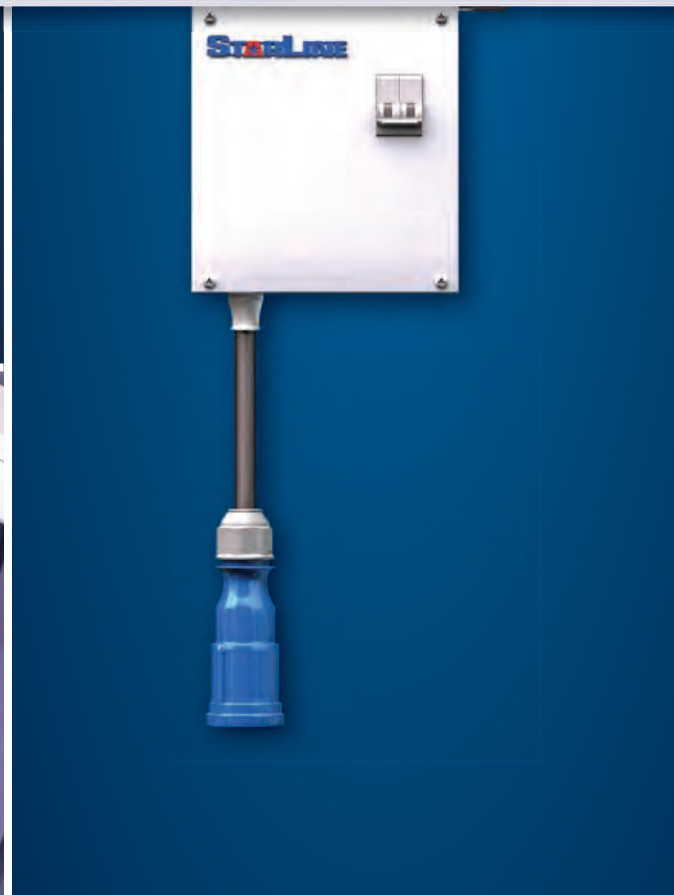
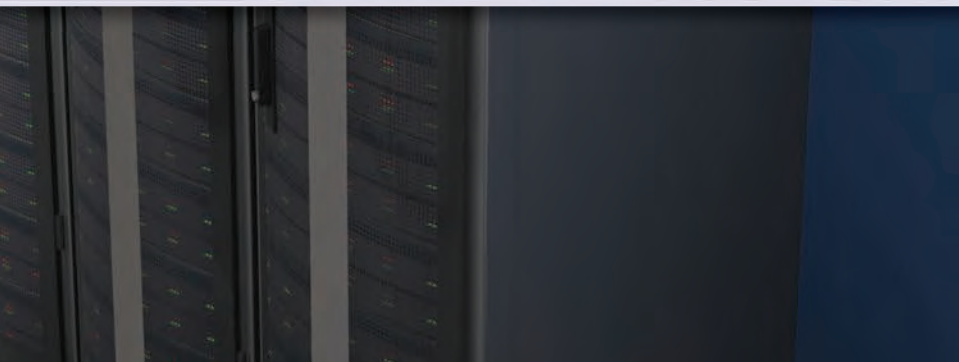




**STARLINE**<sup>®</sup>  
TRACK BUSWAY

## Product Selection Guide





## SELECTION GUIDE INTRODUCTION

**UNIVERSAL Electric Corporation (UEC)** is the leader in electrical power distribution in the mission critical, commercial and light industrial industries with **STARLINE® Track Busway**. It was designed to meet the rugged specification of the UL857, Busway and Associated Fittings, with the flexible features of track lighting – and is comprised of 6 physical sizes with 11 different electrical system configurations. Systems run from 40 Amp to 800 Amp with isolated ground.

It is the simple, versatile, fast and economical solution for supplying power to electrical loads and is unique because the busway can be instantly tapped at any location, with a variety of plug-in units.

This Product Selection Guide was developed to help the design engineer understand and consider all of the options available with **STARLINE Track Busway** when designing a system.

This guide is all-inclusive; however, **UEC** excels at collaborating with design engineers to provide solutions for any application. If you have a need that is not found in this guide, please contact us at **1-800-245-6378** or email us at [info@uecorp.com](mailto:info@uecorp.com). We will be happy to answer your questions over the telephone or schedule a visit with one of our local representatives.

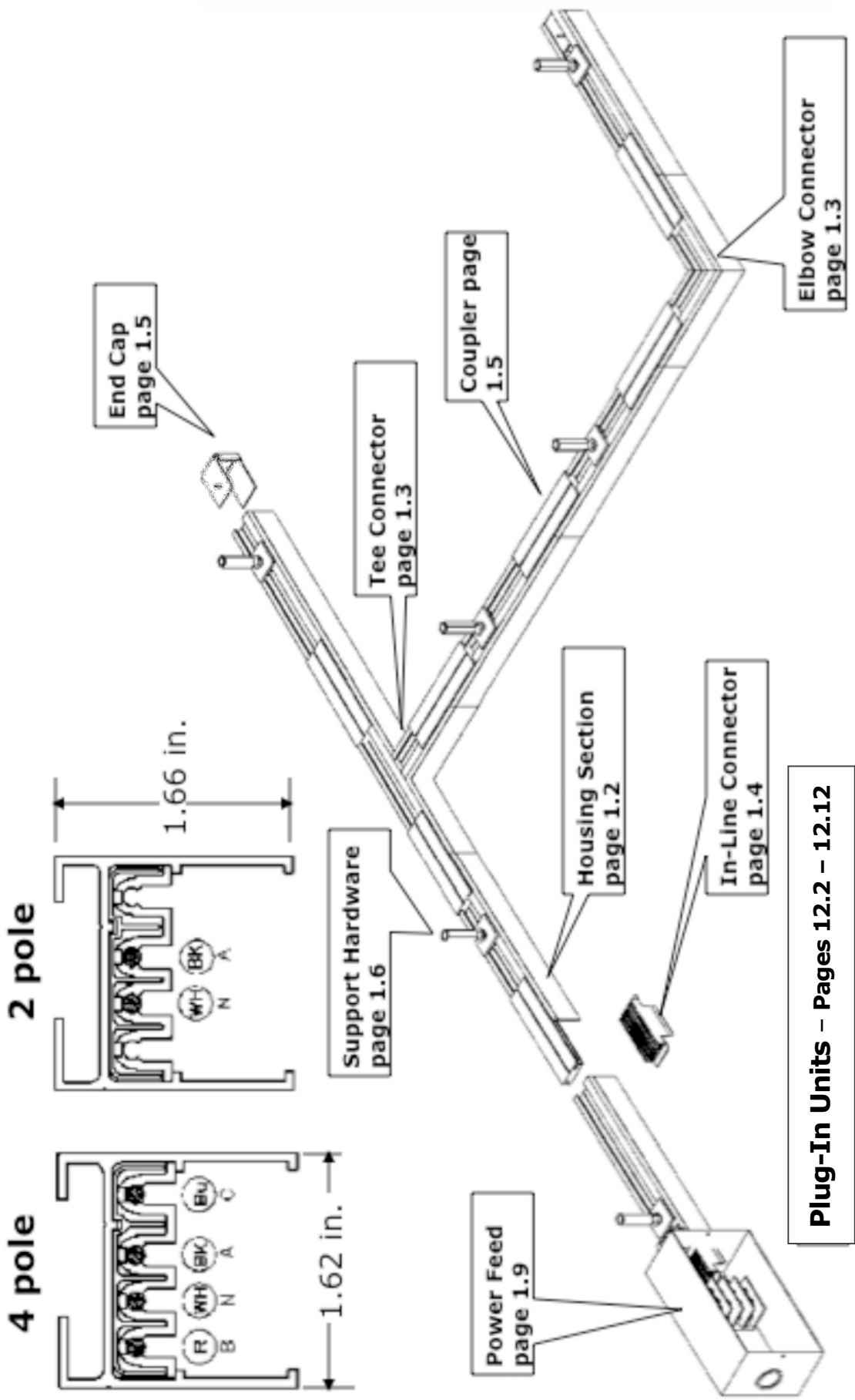
This guide can also be downloaded *free* by visiting [www.StarlinePower.com](http://www.StarlinePower.com).



## TABLE OF CONTENTS

<b>TAB</b>	<b>SYSTEM</b>	<b>SUBJECT</b>	<b>PAGES</b>
<b>1</b>	<b>B40, B50, B60C</b>	<b>Compact 40, 50, 60 Amp / 480 Volt</b>	<b>1.1 - 1.18</b>
<b>2</b>	<b>B60</b>	<b>Standard 60 Amp / 600 Volt</b>	<b>2.1 - 2.14</b>
<b>3</b>	<b>B100C</b>	<b>Compact 100 Amp / 300 Volt</b>	<b>3.1 - 3.11</b>
<b>4</b>	<b>B100A</b>	<b>Standard 100 Amp / 600 Volt</b>	<b>4.1 - 4.12</b>
<b>5</b>	<b>B100N</b>	<b>100 Amp / 200% Neutral</b>	<b>5.1 - 5.7</b>
<b>6</b>	<b>B100G / B100NG</b>	<b>100 Amp / 100% (G) or 200% (NG) Neutral / Isolated Ground</b>	<b>6.1 - 6.7</b>
<b>7</b>	<b>B225</b>	<b>225 Amp / 600 Volt</b>	<b>7.1 - 7.14</b>
<b>8</b>	<b>B225G</b>	<b>225 Amp / Isolated Ground</b>	<b>8.1 - 8.6</b>
<b>9</b>	<b>B250T5, B250T5N, B250T5G, B250T5NG</b>	<b>250 Amp / 600 Volt</b>	<b>9.1 - 9.10</b>
<b>10</b>	<b>B400T5, B400T5N, B400T5G, B400T5NG</b>	<b>400 Amp / 600 Volt</b>	<b>10.1 - 10.10</b>
<b>11</b>	<b>B800T5, B800T5G</b>	<b>800 Amp / 600 Volt</b>	<b>11.1 - 11.8</b>
<b>12</b>	<b>All</b>	<b>Plug-in Units</b>	<b>12.1 - 12.46</b>
<b>13</b>	<b>All</b>	<b>Current Monitoring</b>	<b>13.1 - 13.14</b>
<b>14</b>	<b>All</b>	<b>Accessories</b>	<b>14.1</b>
<b>15</b>	<b>All</b>	<b>Specifications</b>	<b>15.1 - 15.13</b>

**Compact B40 / 50 / 60 Amp System  
to 480 Volts**

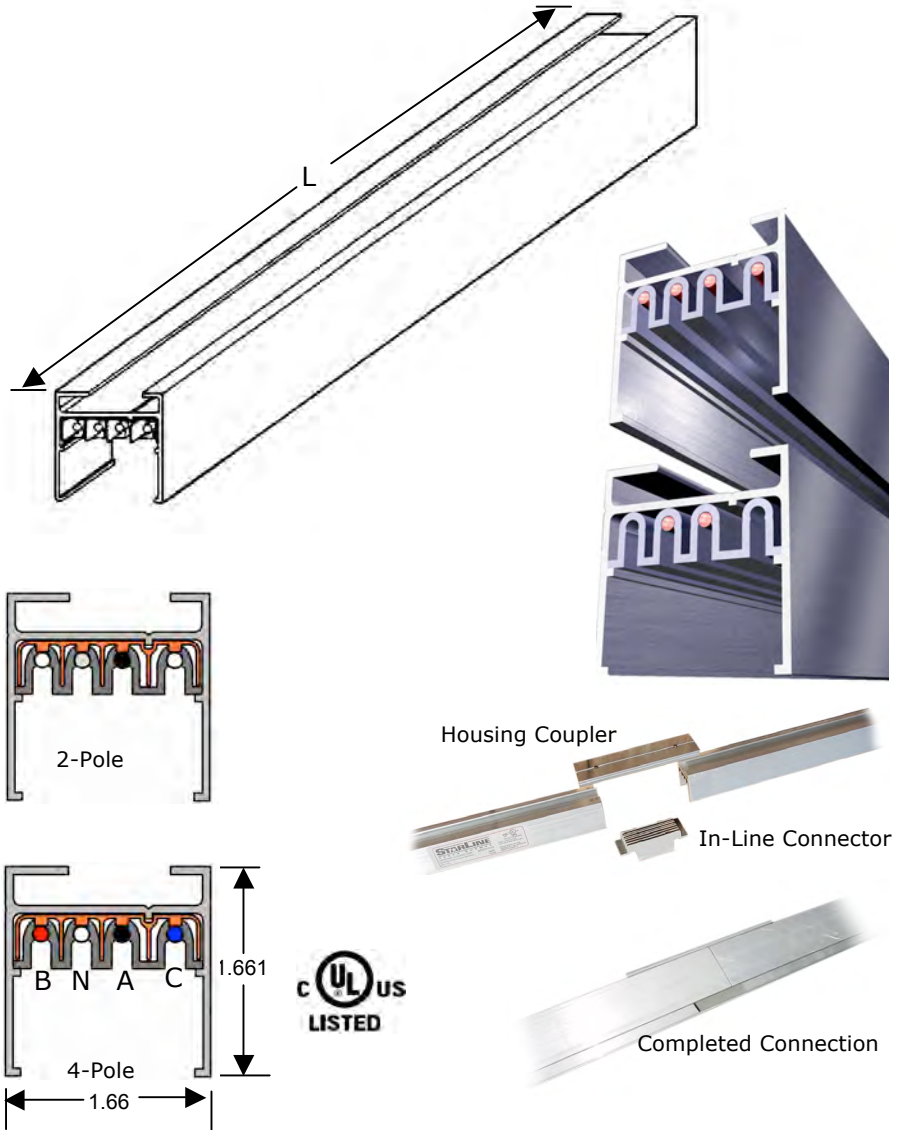


**Plug-In Units – Pages 12.2 – 12.12**

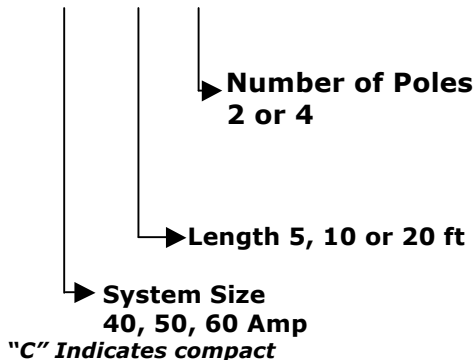
# Compact Series 40, 50, 60 Amp

## HOUSING SECTIONS

Each Track Busway housing section consists of extruded aluminum housing with an insulated strip containing copper conductors mounted on the top interior wall. The aluminum extrusion acts as a 100% ground path meeting UL 857 Standard and complies with applicable paragraphs of Section 250 of the NEC. Each housing section has an open access slot over its entire length for the insertion of snap-in plug-in units. Configurations include 2 and 4-pole varieties, rated at 40/50/60 Amp continuous duty, 480/277 Volts max. Housing sections are connected together using snap-in, in-line connectors and plate type housing couplers. Sections are supported every 10 ft max. (Support Hardware, Page 1.6) and can support 75lbs hanging weight between vertical supports. Four-pole Busway is normally used in 3-phase/4-wire power systems. Four-pole Busway may be used for 2 independent single-phase circuits at different voltages. Sections can be factory cut to any length.



### Catalog Number Sequence B(XX)-(L)-(P)



### Catalog Number Selection

Catalog No.	Description	Length	Weight
B40-5-2 or 4	40 Amp, 2 or 4 pole	5 ft	3.5/4 lbs
B40-10-2 or 4	40 Amp, 2 or 4 pole	10 ft	7/8 lbs
B4-20-2 or 4	40 Amp, 2 or 4 pole	20 ft	13/15 lbs
B50-5-2 or 4	50 Amp, 2 or 4 pole	5 ft	3.5/4 lbs
B50-10-2 or 4	50 Amp, 2 or 4 pole	10 ft	7/8 lbs
B50-20-2 or 4	50 Amp, 2 or 4 pole	20 ft	13/15 lbs
B60C-5-2 or 4	60 Amp, 2 or 4 pole	5 ft	4/4.5 lbs
B60C-10-2 or 4	60 Amp, 2 or 4 pole	10 ft	8/9 lbs
B60C-20-2 or 4	60 Amp, 2 or 4 pole	20 ft	15/17 lbs

## ELBOW & TEE SECTIONS

### Elbow Connector

Factory pre-assembled elbow sections are used for making a 90-degree turn. Elbows are connected to busway sections electrically by means of built-in bus connectors. Connectors are installed by "snapping" into position with housing section butted together. Connectors are polarized to prevent phase mismatch. Housings are then mechanically joined via couplers, ordered separately.

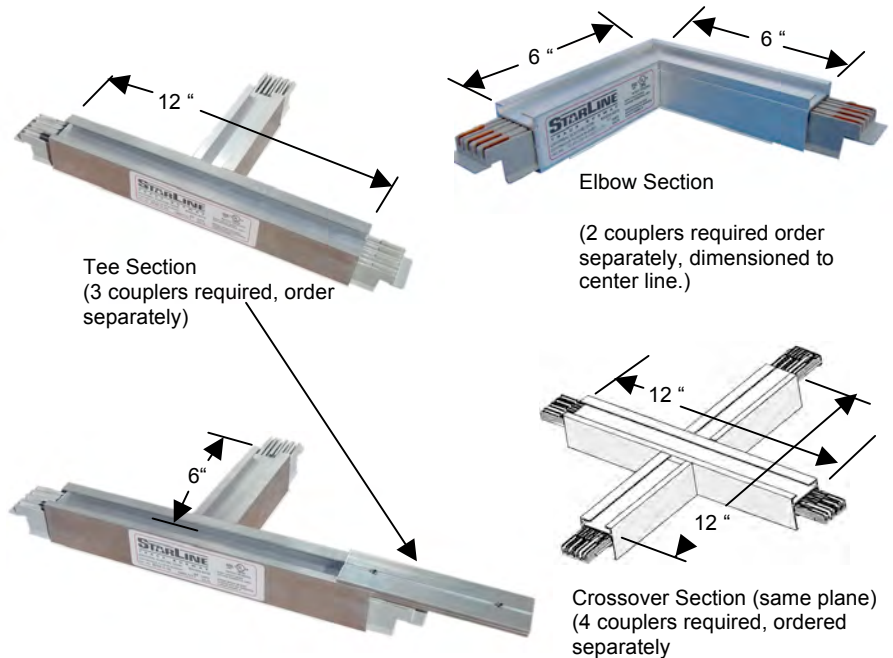
Refer to LAYOUT for polarization issues before making final selection.

### Tee Connector

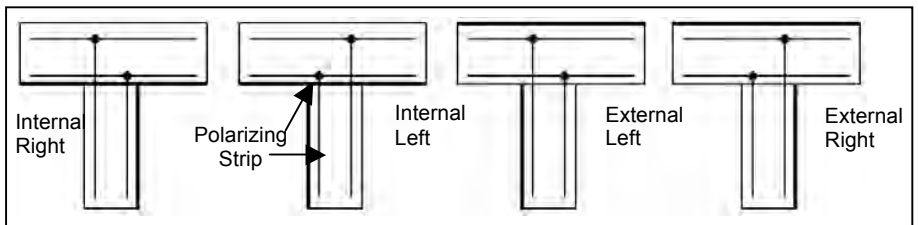
Similar to Elbow Connectors, Tee Connectors are used for connecting branch housing sections at 90 degrees to the main run. Refer to LAYOUT for polarization issues before making final selection.

### Crossover

Typically used for grid designs Four (4) couplers (ordered separately) are required. Refer to LAYOUT.



NOTE: Elbow, Tee and Crossover sections can connect only to adjoining straight housing sections



Please refer to LAYOUT prior to final product selection

### Catalog Number Sequence

(XX)(AA)-(P)-(DIR)

Direction  
Refer to LAYOUT

System Poles

System Size

Connector Type  
EL = Elbow  
BT = Busway Tee  
X = Crossover

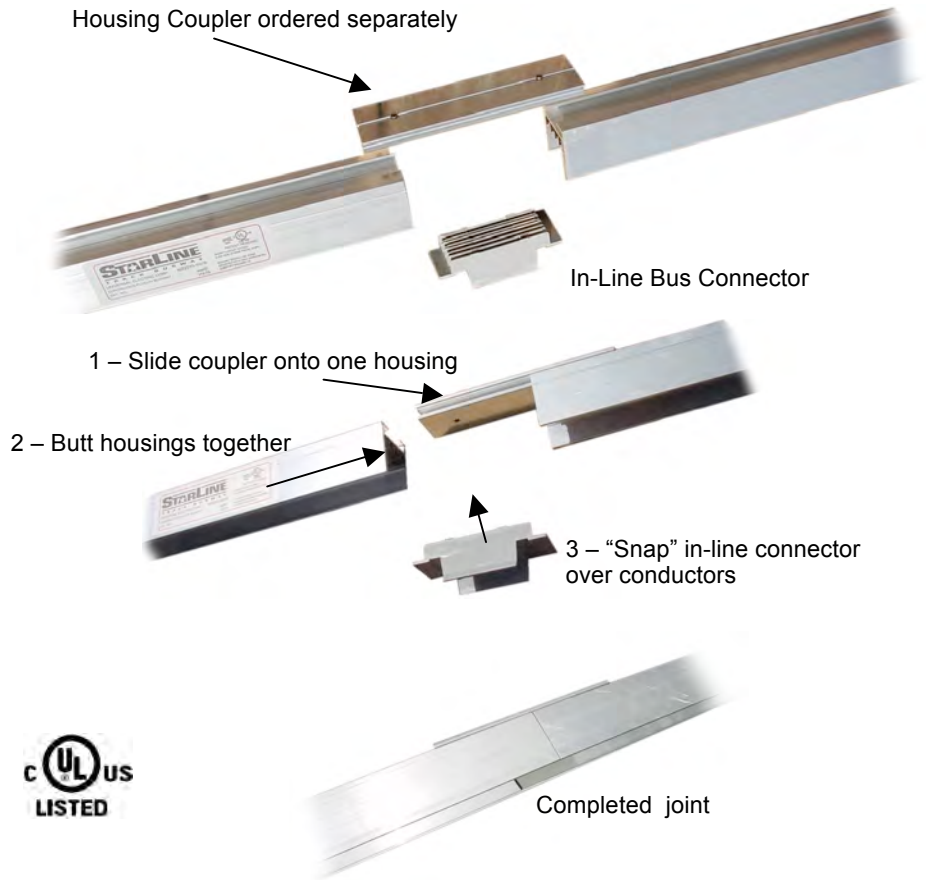
### Catalog Number Selection

Catalog No.	Description	Weight
EL40-2-(IH or EH)	Elbow Connector, 40 Amp, 2 Pole	0.5 lb
EL40-4-(IH or EH)	Elbow Connector, 40 Amp, 4 Pole	0.5 lb
EL50-2-(IH or EH)	Elbow Connector, 50 Amp, 2 Pole	0.5 lb
EL50-4-(IH or EH)	Elbow Connector, 50 Amp, 4 Pole	0.5 lb
EL60C-2-(IH or EH)	Elbow Connector, 60 Amp, 2 Pole	0.5 lb
EL60C-4-(IH or EH)	Elbow Connector, 60 Amp, 4 Pole	0.5 lb
BT40-4IR	Tee Connector, 4 Pole, Internal Right	1.0 lb
BT50-4IL	Tee Connector, 4 Pole, Internal Left	1.0 lb
BT60C-4ER	Tee Connector, 4 Pole, External Right	1.0 lb
BT60C-4EL	Tee Connector, 4 Pole, External Left	1.0 lb
X40- (2 or 4)	Crossover, 40 Amp 2 or 4-pole	1.5 lbs
X50- (2 or 4)	Crossover, 50 Amp 2 or 4-pole	1.5 lbs
X60C- (2 or 4)	Crossover, 60 Amp 2 or 4-pole	1.5 lbs

## IN-LINE BUS CONNECTORS

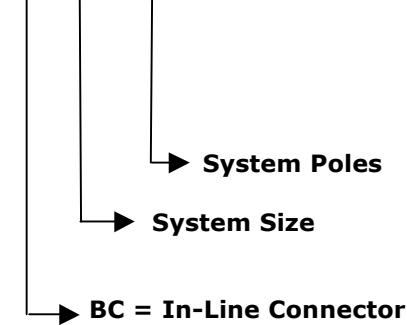
### In-Line Connector

Sections of busway are joined electrically by means of an in-line connector. The connector is installed by "snapping" into position with housing section butted together. All in-line bus connectors are polarized to prevent phase mismatch. Housings are mechanically joined via a housing coupler, ordered separately. The mechanical coupler also acts as 100% ground connection.



### Catalog Number Sequence

BC(AA)-(P)



### Catalog Number Selection

Catalog No.	Description	Weight
BC40-2	In-Line Connector, 2 Pole, 40A max	0.1 lb
BC40-4	In-Line Connector, 4 Pole, 40A max	0.1 lb
BC50-2	In-Line Connector, 2 Pole, 50A max	0.1 lb
BC50-4	In-Line Connector, 4 Pole, 50A max	0.1 lb
BC60C-2	In-Line Connector, 2 Pole, 60A max	0.1 lb
BC60C-4	In-Line Connector, 4 Pole, 60A max	0.1 lb

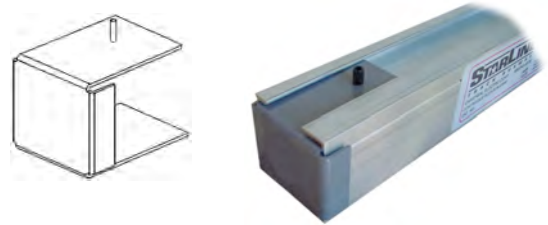
## CONNECTION ACCESSORIES

**END CAP**

Used for insulating the female end of busway.

**PART NUMBER**  
EC50

**WEIGHT**  
0.2 lb



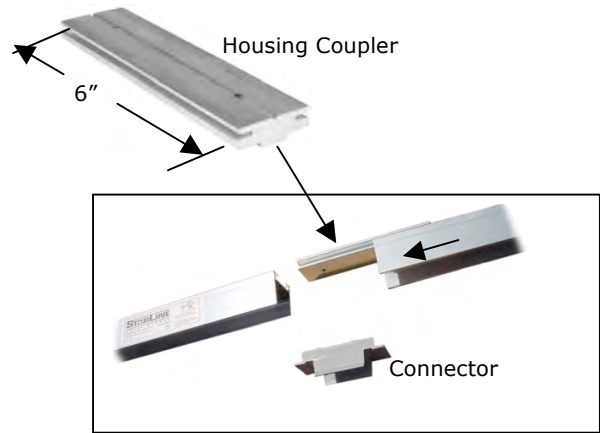
**HOUSING COUPLERS**

Plate Type

For concealed connecting busway sections. One required per connection.

**PART NUMBER**  
HC50-2

**WEIGHT**  
0.8 lb



**CLOSURE STRIP**


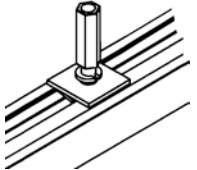

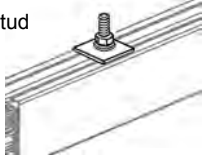


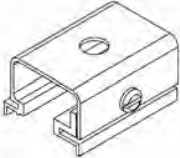
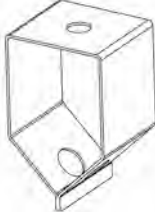
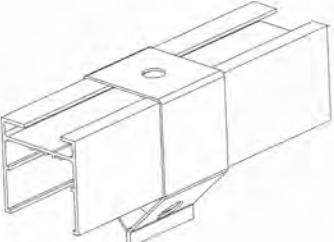

Made of white, rigid PVC, the closure strip is used to close the continuous access slot of the busway. It may be used for aesthetic purposes, for keeping dust and dirt from entering the busway or as an added safety measure. It is easily cut to length in the field to be installed between plug-in units.

**PART NUMBER**  
CS50



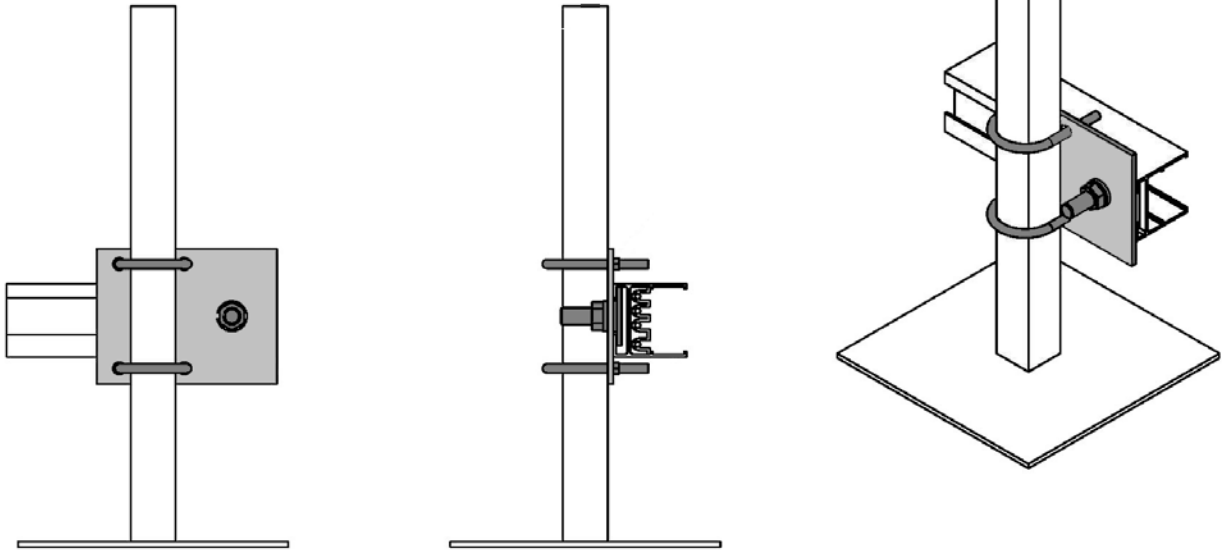


## SUPPORT HARDWARE

<p><b>Threaded Rod Hanger</b></p> <p>For mounting to 3/8-16 threaded rod. Can be inserted anywhere along full access top slot of Busway. Hanger support spacing is every 10 ft maximum.</p>	<p><b>PART NUMBER</b> RHB-3</p> <p><b>WEIGHT</b> 0.3 lb</p>	 <p>3/8" Rod Coupler</p>  <p>RHB-3 Threaded Rod Hanger</p> <p>Every 10 ft.</p>
<p><b>Standard</b></p> <p>For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along top full access slot. Hanger support is every 10 ft maximum.</p>	<p><b>PART NUMBER</b> THB-3 3/8" THB-1/4 1/4"</p> <p><b>WEIGHT</b> 0.2 lb</p>	 <p>3/8" or 1/4" Stud</p>  <p>THB-3 Standard Hanger</p> <p>Every 10 ft</p>
<p><b>Cable</b></p> <p>For mounting to 1/16' or 3/32" aircraft cable with easy grip clamp assembly. Cable is not included. Hanger support is every 10 ft maximum.</p>	<p><b>PART NUMBER</b> ACH-1 1/16" cable ACH-2 3/32" Cable</p> <p><b>WEIGHT</b> 0.2 lb</p>	 <p>ACH-(X) Cable Suspension Assembly</p>
<p><b>T-Bar Suspended Ceiling</b></p> <p>For mounting to inverted T-bar. Clip locks onto T-bar and Busway connected to stud on clip. T-bar mounting with surface clip. 5 ft. max spacing</p>	<p><b>PART NUMBER</b> THB-5</p> <p><b>WEIGHT</b> 0.1 lb</p>	 
<p><b>Weight Hook Adapter</b></p> <p>Can be used as a hanger to suspend Busway from chains or cables. Can also be used to hang loads up to 50 lbs under the Busway, such as light fixtures, tools and balancers.</p>	<p><b>PART NUMBER</b> WHR-50</p> <p><b>WEIGHT</b> 0.2 lb</p>	  

**For B40/50/60C Systems SIDE MOUNT**

**RFB50-2**



**Vertical Support by others**

# Compact Series 40, 50, 60 Amp

**FOR CEILING MOUNT**

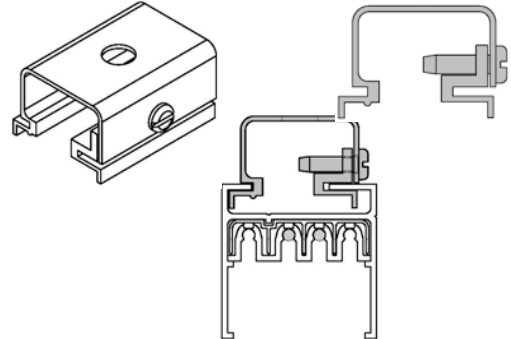
**Surface Mount**  
  
For mounting to surface.  
Comes with 7/32 in. hole  
  
For Rod Mounting, comes  
with 3/8 in. hole

**PART NUMBER**

**MC40-S Surface**  
**MC40-R Rod**

**MC40-S or R**

cross section



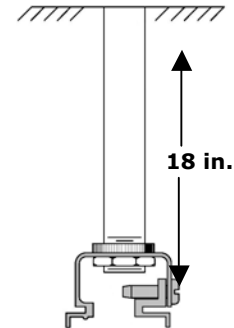
mounted to busway

**Pendant Mount**  
  
Kit, complete with 18 in.  
Pendant

**PART NUMBER**

**MC40-P**

**MC40-P**



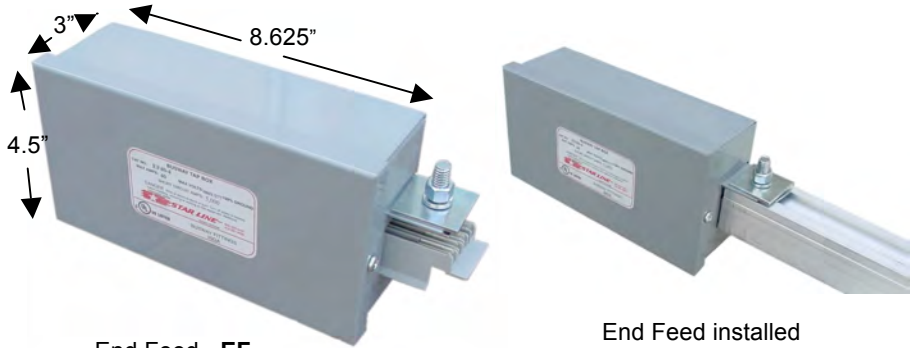
## POWER FEED UNITS

**End Power Feed (EF)**  
Consists of a steel junction box with a removable side, a connector to insert into the Busway run and terminal block for field connections. Unit is bolted to first Busway section. Rated at 480/277 Volts.

**End Feed Connector (EFC)**  
Provide an inconspicuous means for connecting power. Consists of a 1 ft. section of Busway with connector mounted inside and wire lead exiting through end cap. A 1" conduit mounting adapter is included. Ordered separately, a Housing Coupler is used to connect to Busway section.

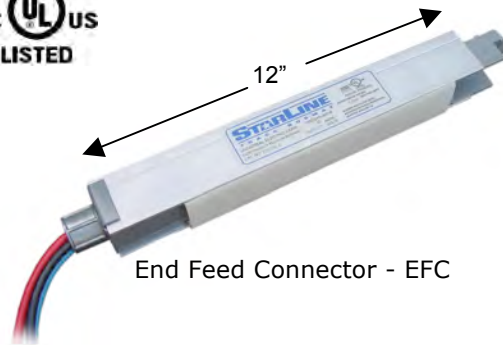
**Center Feed (CF)**  
Consists of a 2 ft. section of Busway with connectors at both ends to connect to adjacent Busway sections and junction box mounted on top with terminal block for field connection.

**Pendant Wired (PW)**  
Consists of 1 ft. Busway section with 1" conduit size access hole for access to connection leads inside Busway. 1" conduit mounting adapter included.



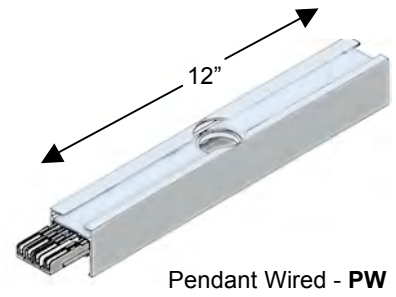
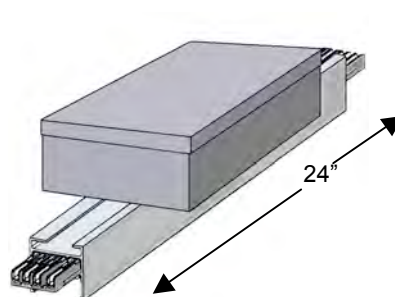
End Feed - EF

End Feed installed



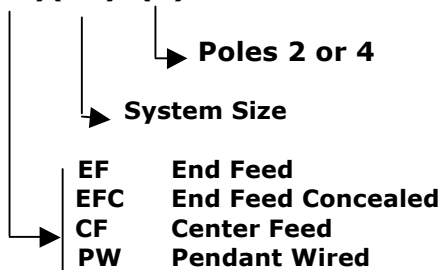
End Feed Connector - EFC

End Feed Connector Installed



Pendant Wired - PW

### Catalog Number Sequence (XX)(AA)-(X)



### Catalog Number Selection

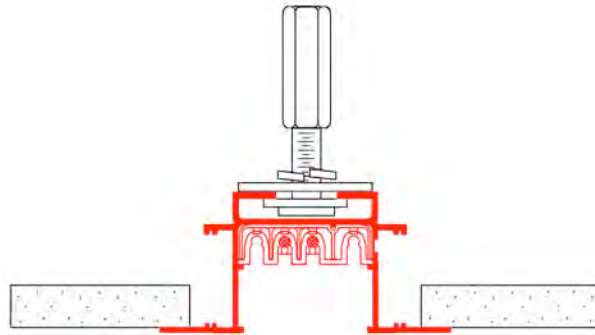
Catalog No.	Description	Weight
EF40-X	End Feed, 40 Amp	3.3 lbs
EF50-X	End Feed, 50 Amp	3.3 lbs
EF60C-X	End Feed, 60 Amp	3.3 lbs
EFC40-X	End Feed, Concealed, 40 Amp	2 lbs
EFC50-X	End Feed, Concealed, 50 Amp	2 lbs
EFC60C-X	End Feed, Concealed, 60 Amp	2 lbs
CFB40-X	Center Feed, 40 Amp	5 lbs
CFB50-X	Center Feed, 50 Amp	5 lbs
CFB60C-X	Center Feed, 60 Amp	5 lbs
PW40-X	Pendant Wired, 40 Amp	2 lbs
PW50-X	Pendant Wired, 50 Amp	2 lbs
PW60C-X	Pendant Wired, 60 Amp	2 lbs

Busway sections (shown in red) are available in 20, 10 and 5 ft lengths for three standard drop or suspended ceiling configurations.

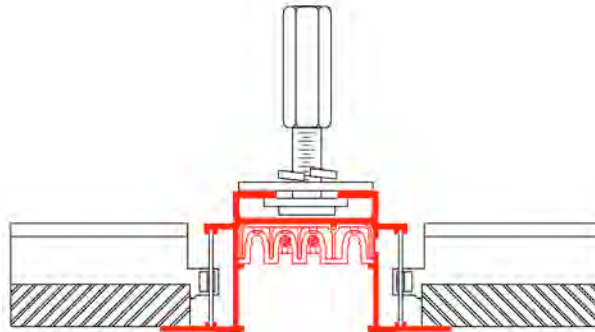


**NOTE:** Add "R" for recessed to basic housing part number. Example: B50R-20-4 for a 20 ft section of B50 with 4-pole housing.

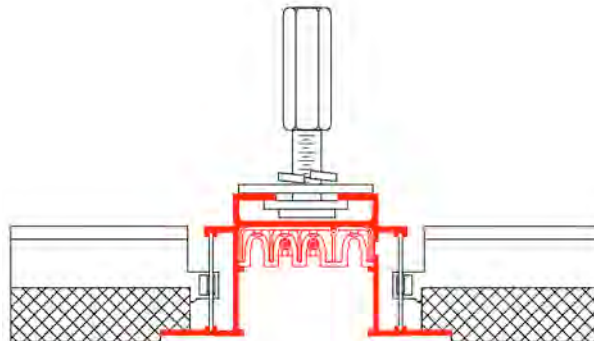
## Dry Wall



## Standard Tile



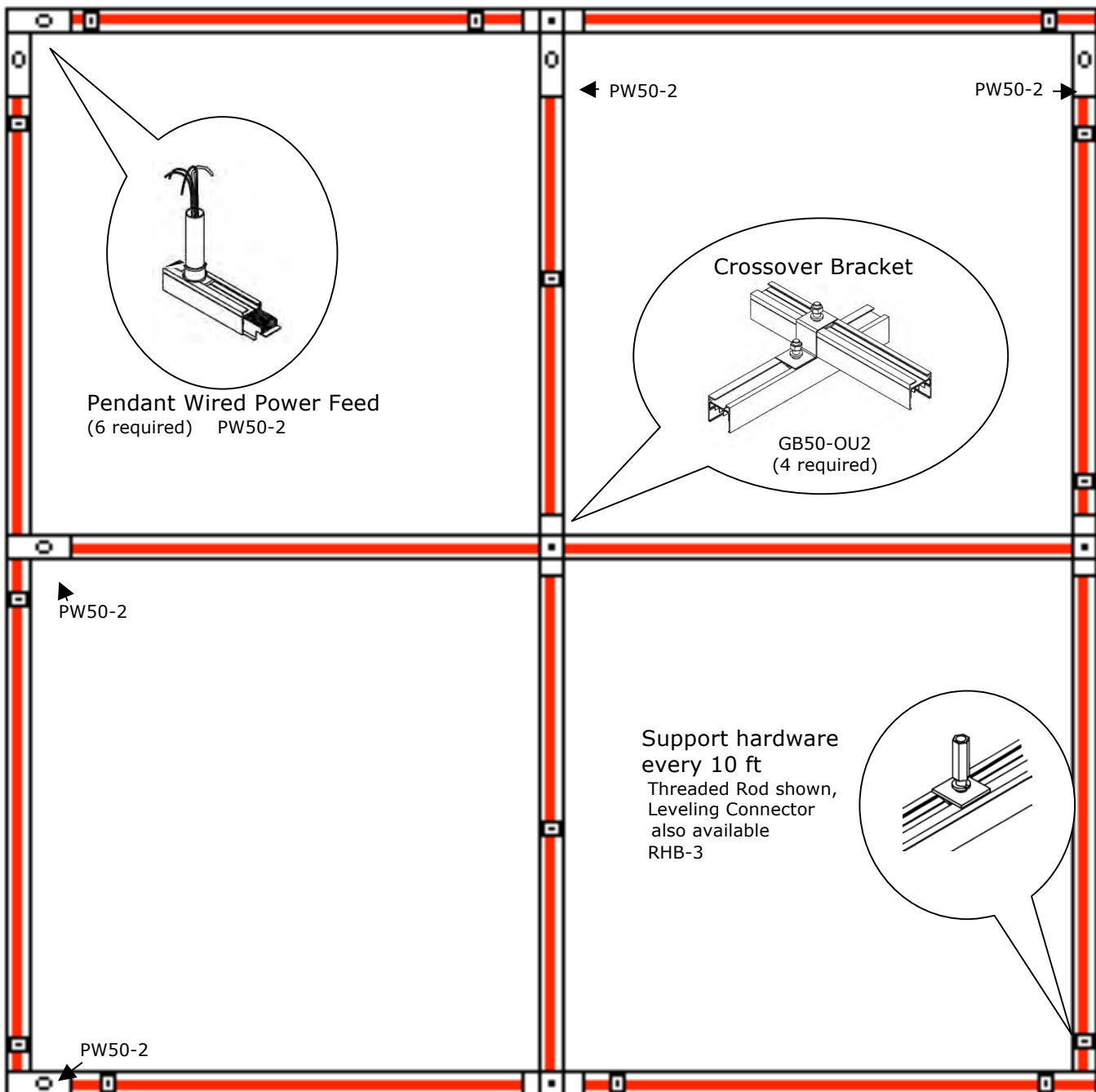
## Regular Tile



**GRID LAYOUT**

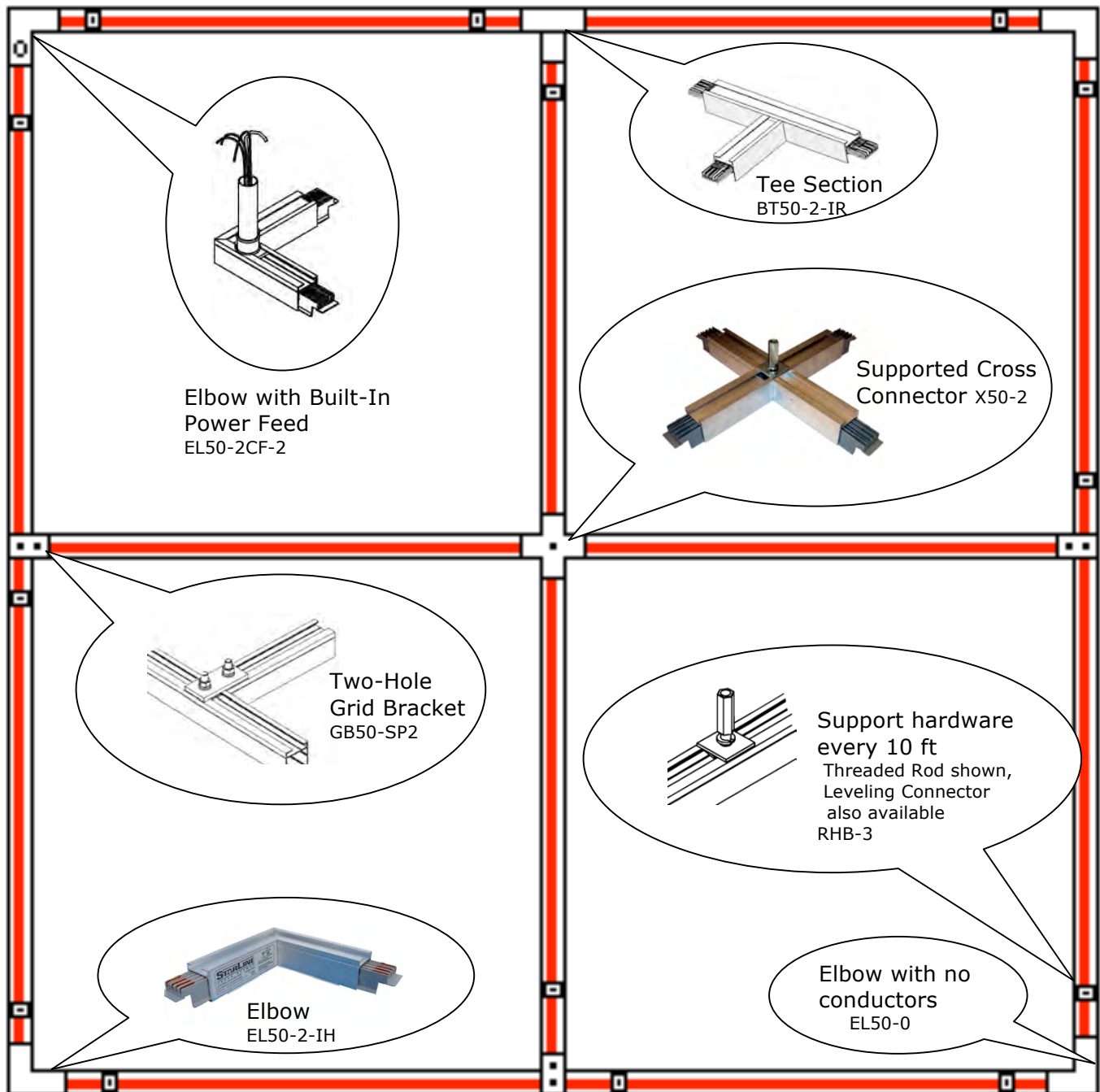
**IT IS HIGHLY RECOMMENDED THAT YOU REQUEST THE ASSISTANCE OF YOUR LOCAL STARLINE APPLICATIONS SPECIALIST TO ASSIST IN GRID LAYOUT. FOR A MODEST FEE, FINAL LAYOUT AND BILLS OF MATERIAL CAN BE PROVIDED WITH THE ASSISTANCE OF OUR ENGINEERING DEPARTMENT.**

**TWO PLANE EXAMPLE      Electrical path in both directions**



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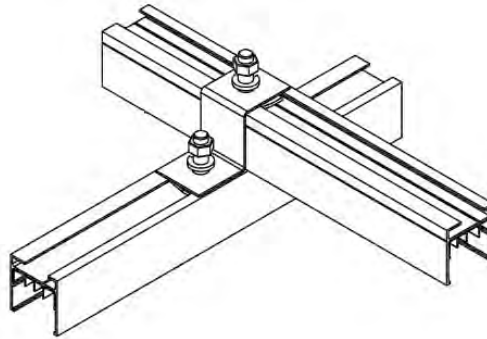
**ONE PLANE EXAMPLE      Electrical path in both directions**



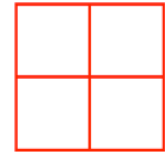
## GRID LAYOUT SUPPORT

### TWO PLANE (OVER-UNDER)

The most economical method for providing single, two or three phase power in both directions. Use simple straight runs with power feeds from either end.

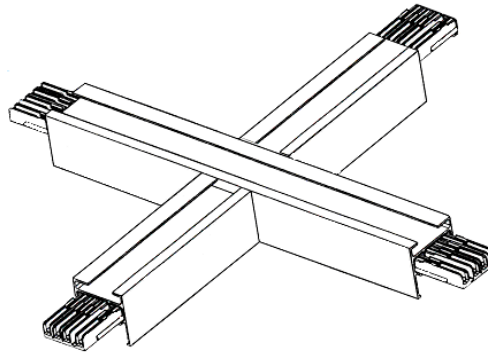


Electrical Path

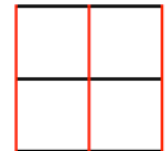


### SINGLE PLANE (Open Ceiling)

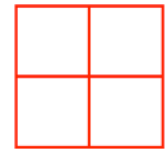
Can provide single, two-phase or three-phase power on the same plane over the entire grid layout (in both directions) or in one direction only. Ideal for isolating assigned grid sections.



Electrical Path

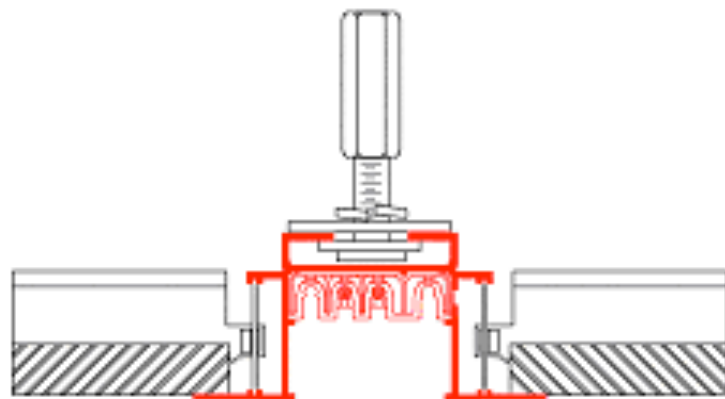


OR



### SINGLE PLANE (Drop Ceiling)

T-Bar ceiling extrusion is designed to replace the main runner of T-Bar ceilings. Extrusion allows for hardware, joining hardware and t-bar clips and accepts cross-t's of the acoustical tile system. Use in SINGLE PLANE applications by substituting the standard B40, B50 or B60C housing with the designation "R" as in B40R. All other components remain the same.



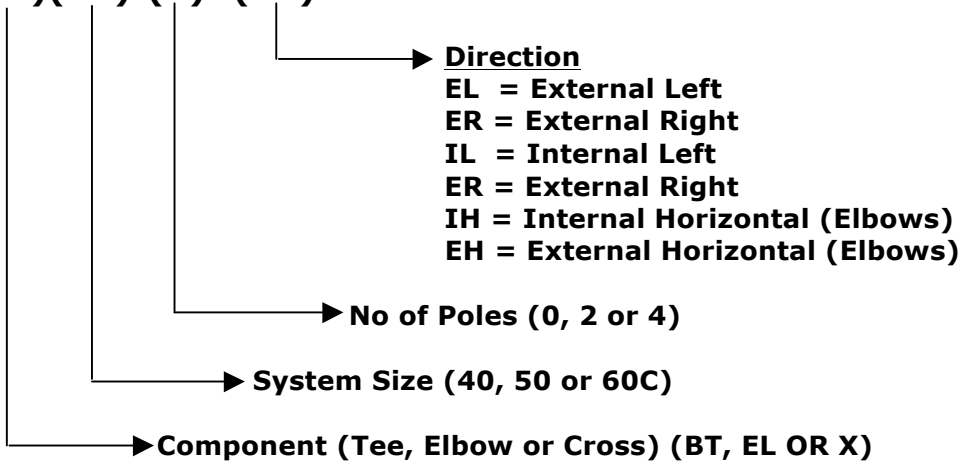


## GRID CONNECTORS ELBOWS

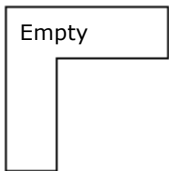
IT IS HIGHLY RECOMMENDED THAT YOU REQUEST THE ASSISTANCE OF YOUR LOCAL STARLINE APPLICATIONS SPECIALIST TO ASSIST IN GRID LAYOUT. FOR A MODEST FEE, FINAL LAYOUT AND BILLS OF MATERIAL CAN BE PROVIDED WITH THE ASSISTANCE OF OUR ENGINEERING DEPARTMENT. SELECTION OF THE PROPER GRID CONNECTORS IS CRITICAL AS ALL SECTIONS OF STARLINE TRACK BUSWAY ARE POLARIZED TO PREVENT PHASE MISMATCH.

### Catalog Number Sequence for Elbow Sections used in Grid Layouts

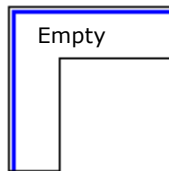
(XX)(XX)-(X)-(XX)



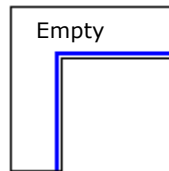
**ELBOWS** Electrical Path in Thin Line — Polarizing Strip in Heavy Line —



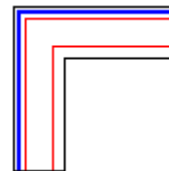
**EL50-0**  
(used for ALL SYSTEMS)



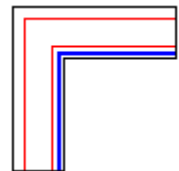
**EL50-0-EH**



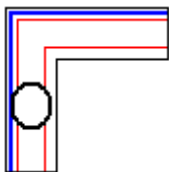
**EL50-0-IH**



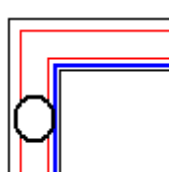
**EL(XX)-(X)-EH**



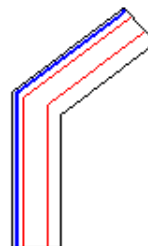
**EL(XX)-(X)-IH**



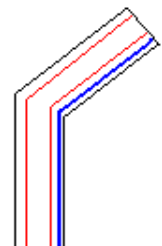
**EL(XX)-(X)CF-EH**



**EL(XX)-(X)CF-IH**



**EL(XX)-(X)-EH-45**

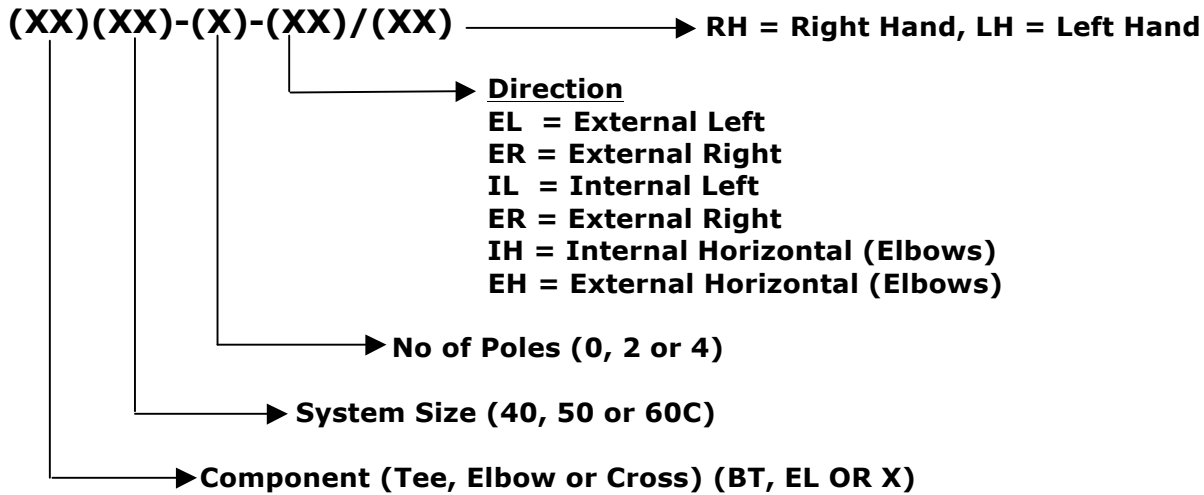


**EL(XX)-(X)-IH-45**

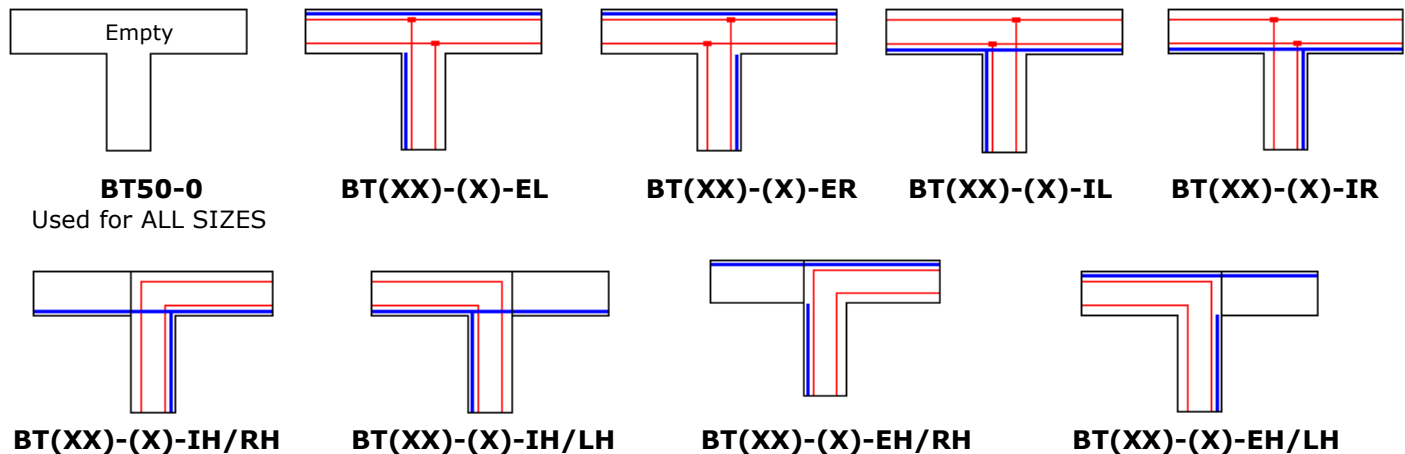
## GRID CONNECTORS TEES

IT IS HIGHLY RECOMMENDED THAT YOU REQUEST THE ASSISTANCE OF YOUR LOCAL STARLINE APPLICATIONS SPECIALIST TO ASSIST IN GRID LAYOUT. FOR A MODEST FEE, FINAL LAYOUT AND BILLS OF MATERIAL CAN BE PROVIDED WITH THE ASSISTANCE OF OUR ENGINEERING DEPARTMENT. SELECTION OF THE PROPER GRID CONNECTORS IS CRITICAL AS ALL SECTIONS OF STARLINE TRACK BUSWAY ARE POLARIZED TO PREVENT PHASE MISMATCH.

### Catalog Number Sequence for Tee Sections used in Grid Layouts



### TEE'S Electrical Path in Thin Line — Polarizing Strip in Heavy Line —

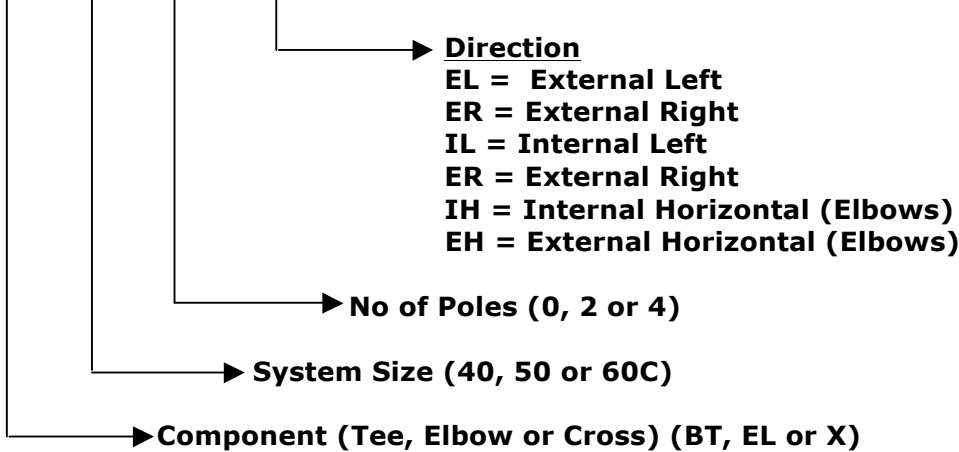


## GRID CONNECTORS CROSSES

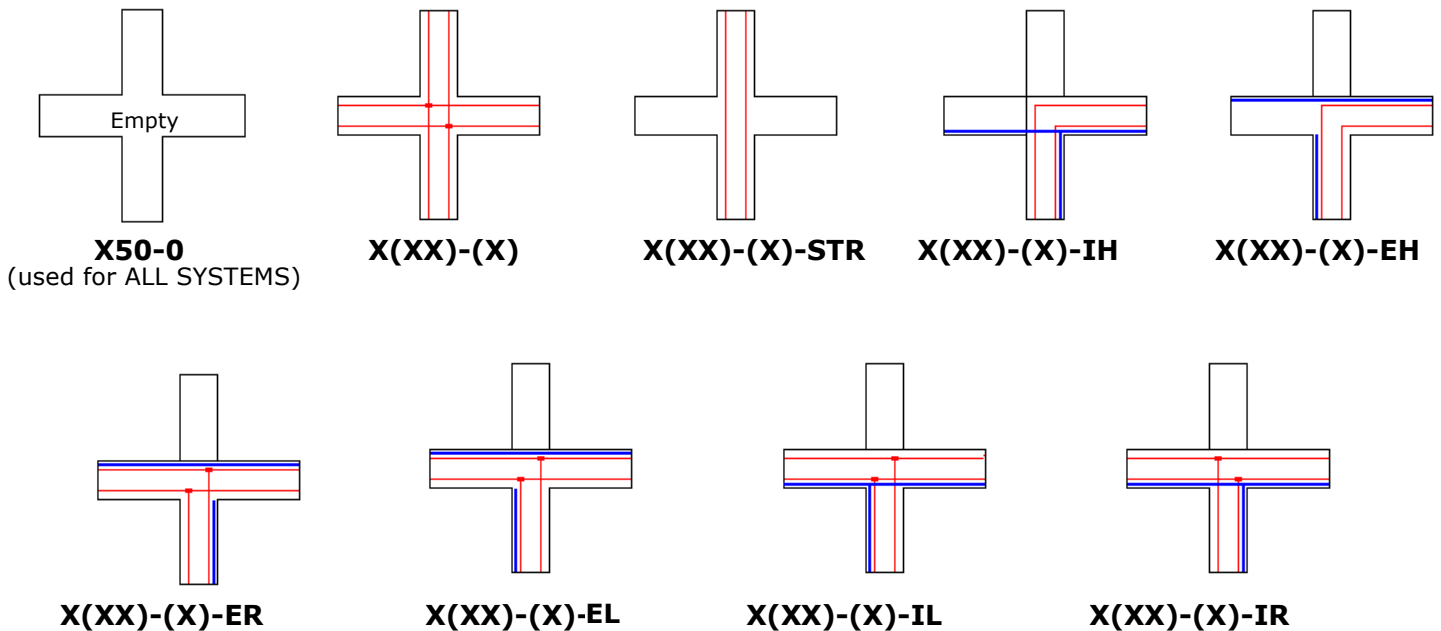
IT IS HIGHLY RECOMMENDED THAT YOU REQUEST THE ASSISTANCE OF YOUR LOCAL STARLINE APPLICATIONS SPECIALIST TO ASSIST IN GRID LAYOUT. FOR A MODEST FEE, FINAL LAYOUT AND BILLS OF MATERIAL CAN BE PROVIDED WITH THE ASSISTANCE OF OUR ENGINEERING DEPARTMENT. SELECTION OF THE PROPER GRID CONNECTORS IS CRITICAL AS ALL SECTIONS OF STARLINE TRACK BUSWAY ARE POLARIZED TO PREVENT PHASE MISMATCH.

### Catalog Number Sequence for Cross Sections used in Grid Layouts

**(XX)(XX)-(X)-(XX)**



**ELBOWS**    Electrical Path in thin line ———    Polarizing Stripe in heavy line ———





# Compact Series 40, 50, 60 Amp

## GENERAL LAYOUT TIPS

- Try to keep all runs as straight as possible because tees, elbows and crosses are added cost. With grid or any other bi-directional applications, there is a choice of two-plane with each direction on a separate plane or using cross sections if single-plane is required. Single-plane applications can provide power in both directions as well as parallel runs. Please refer to GRID LAYOUT for more detail.
- Standard Busway lengths are available in 20, 10 and 5-foot increments. Although the factory can cut individual STARLINE Track Busway sections to any length under 20 feet, it is highly recommend to keep all layout runs in increments of 5 feet. This recommendation is based on our experience with economics and simplifying job site installation. If housing sections are cut to 3, 4, 6ft, etc, it can become cumbersome at the job site to determine which length goes with which run. By staying with 5-foot increments, this condition is minimized.
- Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

**LENGTH OF BUSWAY FOR A ONE VOLT DROP IN LINE TO LINE VOLTAGE**

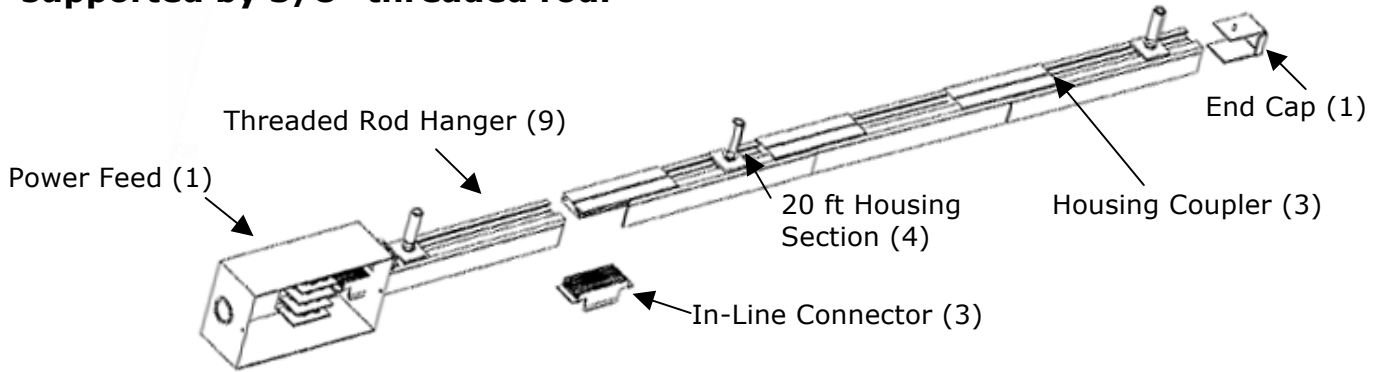
<b>SYSTEM DESIGNATION</b>	<b>DISTRIBUTED LOAD</b>	<b>VOLTAGE DROP @ 0.8 PF Single Phase</b>	<b>VOLTAGE DROP @ 0.8 PF Three Phase</b>
B40	40 Amps	39 feet	45 feet
B50	50 Amps	31 feet	36 feet
B60C	60 Amps	39 feet	46 feet

- There is no need to be concerned with the specific detail and total count of support hardware, connectors and end caps as your local STARLINE Track Busway Applications Engineer will assist during the quotation process. Refer to SPECIFICATIONS for the suggested STARLINE specification form.
- Understand component relationship before specifying or ordering specific Tee or Elbow Sections. Refer to Component Relationship for details.

**SAMPLE TAKE-OFF**

**Description:**

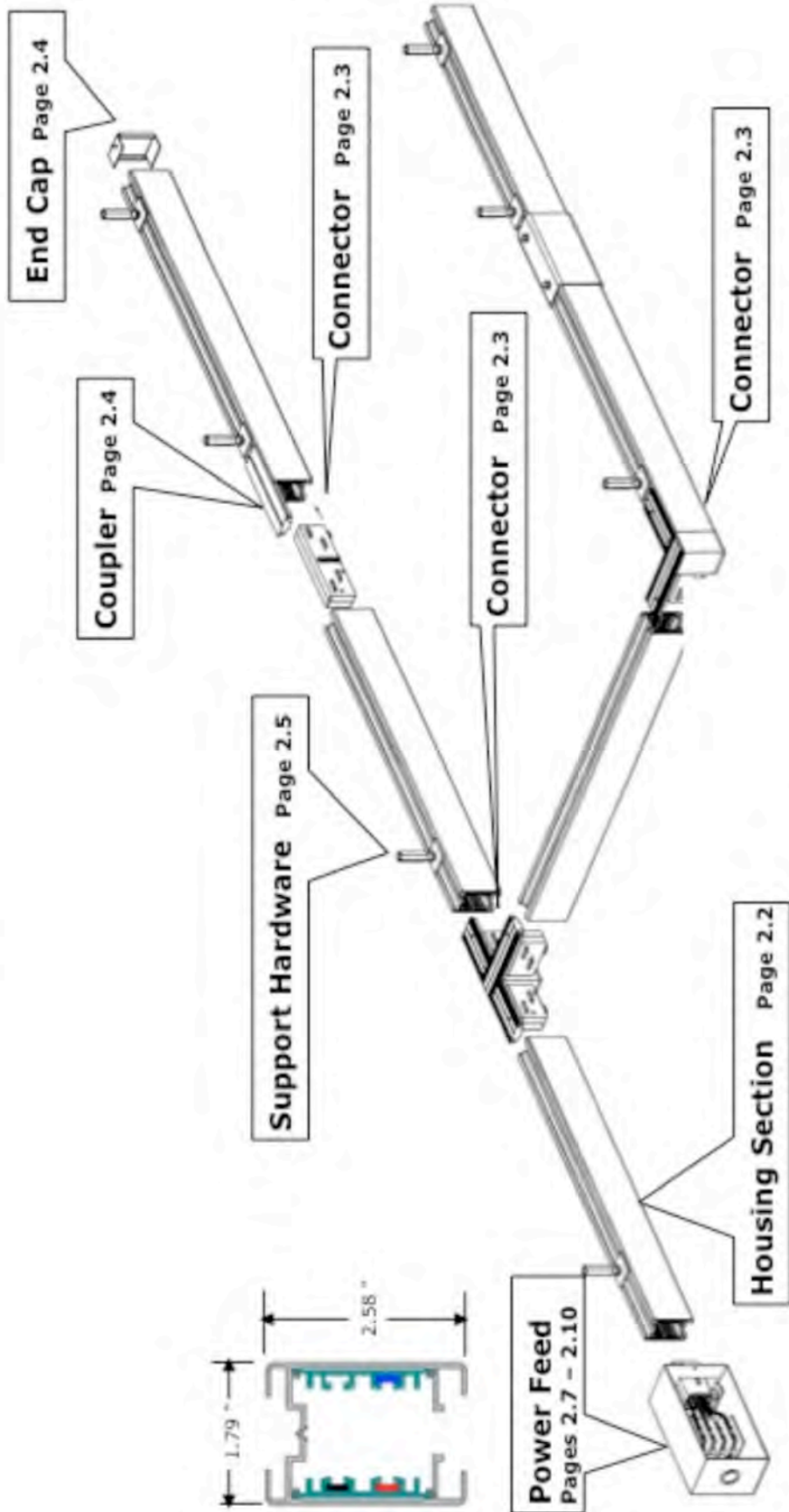
**Straight run, 50 Amp system, 80 feet long, 4-pole with End Feed and supported by 3/8" threaded rod.**



**BILL OF MATERIAL:**

<b>QTY</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
<b>4</b>	<b>B50-20-4</b>	<b>Housing Section, 20 Feet, 4-Pole</b>
<b>3</b>	<b>BC50-4</b>	<b>In-Line Connector, 4-Pole</b>
<b>3</b>	<b>HC50-2</b>	<b>Housing Coupler, Plate Type</b>
<b>1</b>	<b>EC50</b>	<b>End Cap</b>
<b>9</b>	<b>RHB-3</b>	<b>3/8" Threaded Rod Hanger</b>
<b>1</b>	<b>EF50-4</b>	<b>End Power Feed, 4-Pole</b>

**Standard B60 Amp System  
to 600 Volts**



**Plug-in Units** page  
12.13a - 12.13b

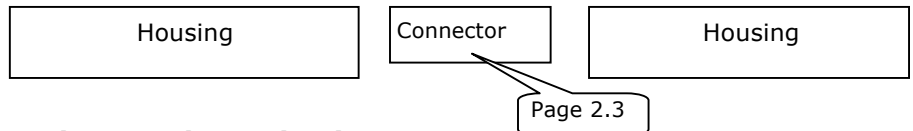
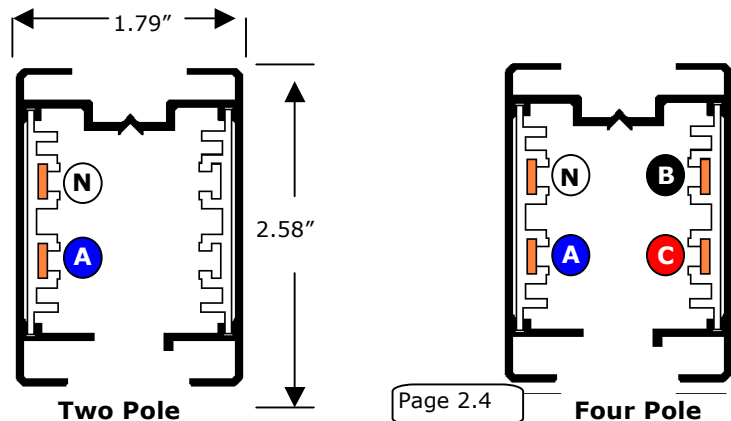
**Accessories - Closure Strip** page 2.4  
**Weight Hook** page 2.5

## HOUSING SECTIONS

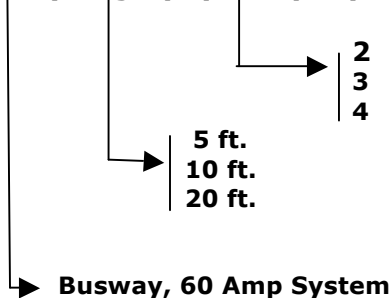
Track Busway housings consist of an extruded aluminum outer shell with PVC insulated copper conductor strips mounted on the two opposite interior side walls. The aluminum extrusion acts as a 100% ground path meeting UL 857 Standard and complies with applicable paragraphs of Section 250 of the NEC. Each housing has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 2, 3 and 4 pole varieties in both 300 and 600 Volt designs. Track Busway housing are connected together using plug-in connectors and plate or wrap around type Housing Couplers (Page 2.6).

**MATERIAL:** Extruded Aluminum  
**RATINGS:** 100% Ground Path  
 60 Amp, 300 Volt  
 60 Amp, 600 Volt  
**LENGTH:** 5 Ft, 10 Ft, 20 Ft.

**VOLTAGE DROP:** distributed load  
 Single Phase 37ft (.8PF)  
 Three Phase 43ft (.8PF)



### Catalog Number Sequence B60-(Length)-(Poles) - (600)



### Catalog Number Selection

For 300 Volt Applications - Shown  
 For 600 Volt Applications - add "-600" to catalog number

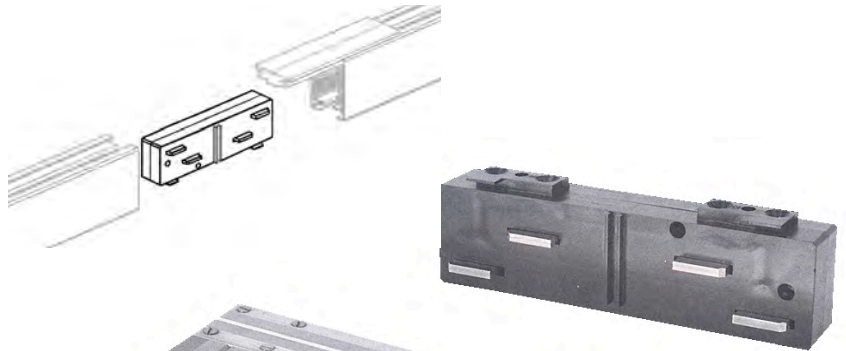
Length	TWO POLE	lbs	FOUR POLE	lbs
5 ft	B60 - 5 - 2	5	B60 - 5 - 4	6.2
10 ft	B60 - 10 - 2	10	B60 - 10 - 4	12.5
20 ft	B60 - 20 - 2	20	B60 - 20 - 4	25

NOTES: Busway sections CANNOT be cut on site. Although Busway sections come in standard lengths of 5, 10 & 20 feet, factory cut lengths between 1 and 19 feet can be ordered. Consult factory for price and delivery.

## CONNECTORS

### In-Line Connector

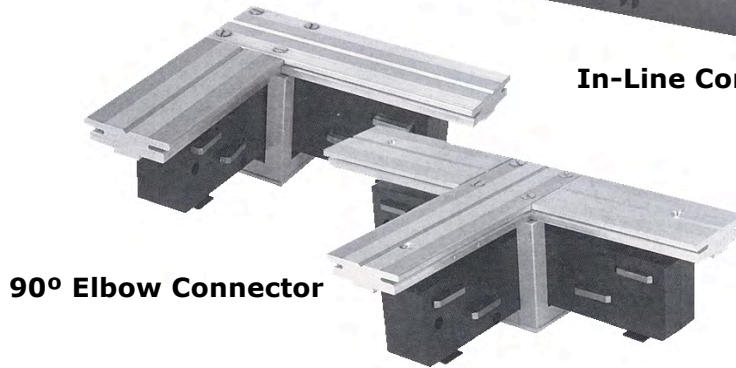
Sections of 60 Amp Busway are joined electrically by means of an in-line connector. The connector is installed by inserting in each end of the housing sections to be joined. Hex head compression screws are tightened to make a reliable contact to bus connection. All in-line connectors are polarized to prevent phase mismatch.



**In-Line Connector**

### Elbow Connector

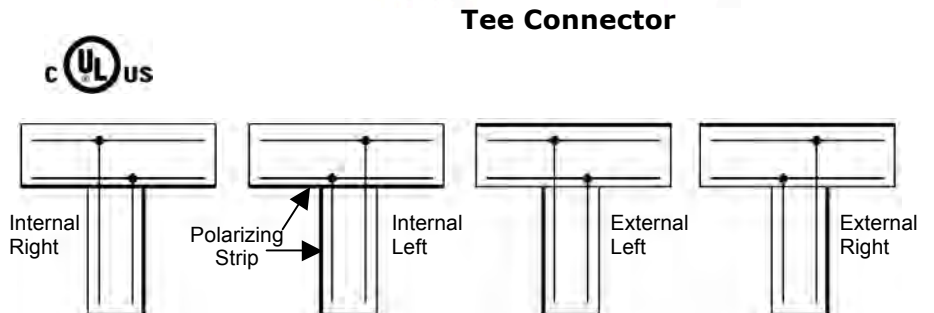
Factory pre-assembled, elbow connectors are used for making a 90-degree turn for 60 Amp Compact systems. Refer LAYOUT for polarization issues before making final selection.



**90° Elbow Connector**

### Tee Connector

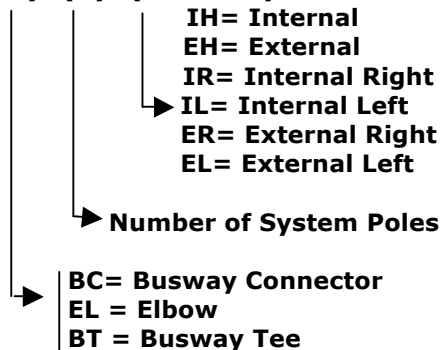
Similar to Elbow Connectors, Tee Connectors are used for connecting branch housing sections at 90 degrees to the main run. Refer LAYOUT for polarization issues before making final selection.



**Tee Connector**

Please refer to LAYOUT prior to final product selection

### Catalog Number Sequence (XX)-(P)-(Polarize)



### Catalog Number Selection

Catalog No.	Connector Type	Weight
BC-2	In-Line, 2-Pole	0.3 lb
BC-(3P3PH or 3P1PH)	In-Line, 3-Pole	0.3 lb
BC-4	In-Line, 4-Pole	0.4 lb
EL60-2-(IH or EH)	Elbow, 2-Pole	0.5 lb
EL60-(3P3PH or 3P1PH)	Elbow, 4-Pole	0.5 lb
BT60-4IR	Tee, 4-Pole, Internal Right	1.0 lb
BT60-4IL	Tee, 4-Pole, Internal Left	1.0lb
BT60-4ER	Tee, 4-Pole, External Right	1.0lb
BT60-4EL	Tee, 4-Pole, External Left	1.0lb

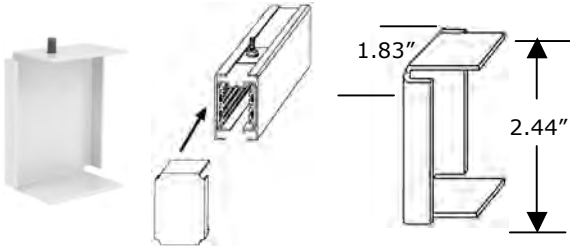




## CONNECTION ACCESSORIES

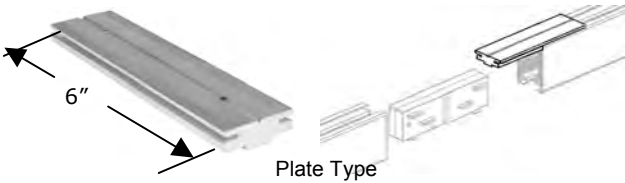
**END CAP**  
For insulating female end of Busway.

**PART NUMBER**  
EC60  
**WEIGHT**  
0.2 lb



**HOUSING COUPLER**  
**Plate Type**  
For concealed connecting Busway sections. One required.

**PART NUMBER**  
HC-2  
**WEIGHT**  
0.8 lb



**CLOSURE STRIP**  
Made of white, rigid PVC, the closure strip is used to close the continuous access slot of the Busway. It may be used for aesthetic purposes, for keeping dust and dirt from entering the Busway or as an added safety measure. It is easily cut to length in the field to be installed around plug-in units.

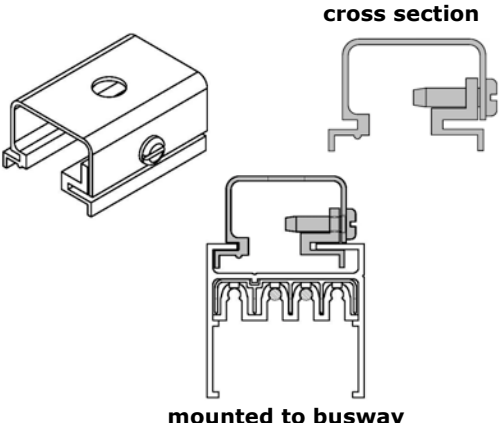
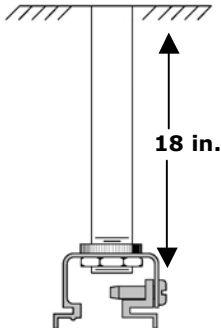
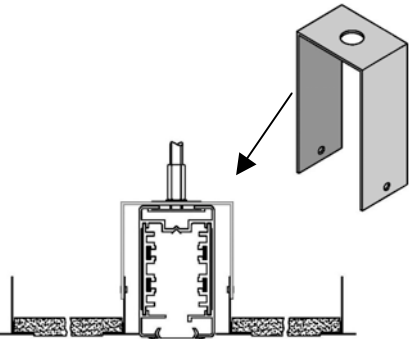
**PART NUMBER**  
CS60



## SUPPORT HARDWARE

<p><b>Threaded Rod</b></p> <p>For mounting to 3/8-16 threaded rod. Can be inserted anywhere along full access top slot of Busway. Typical hanger support spacing every 10 ft maximum.</p>	<p><b>PART NUMBER</b> RHB-3</p> <p><b>WEIGHT</b> 0.3 lb</p>	<p>3/8" Rod Coupler</p> <p>RHB-3 Threaded Rod Hanger</p> <p>Every 10 ft.</p>
<p><b>Standard</b></p> <p>For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along top full access slot.</p>	<p><b>PART NUMBER</b> THB-3 3/8" THB-1/4 1/4"</p> <p><b>WEIGHT</b> 0.2 lb</p>	<p>3/8" or 1/4" Stud</p> <p>THB-3 Standard Hanger</p>
<p><b>Cable</b></p> <p>For mounting to 1/16' or 3/32" aircraft cable with easy grip clamp assembly. Cable is not included.</p>	<p><b>PART NUMBER</b> ACH-1 1/16" cable ACH-2 3/32" Cable</p> <p><b>WEIGHT</b> 0.2 lb</p>	<p>ACH-(X) Cable Suspension Assembly</p>
<p><b>T-Bar Suspended Ceiling</b></p> <p>For mounting to inverted T-bar. Clip locks onto T-bar and Busway connected to stud on clip. T-bar mounting with surface clip.</p>	<p><b>PART NUMBER</b> THB-4</p> <p><b>WEIGHT</b> 0.1 lb</p>	
<p><b>Weight Hook</b></p> <p>Can be used as a hanger to suspend Busway from chains or cables. Can also be used to hang loads up to 50 lbs under the Busway, such as light fixtures, tools and balancers.</p>	<p><b>PART NUMBER</b> WHR-1</p> <p><b>WEIGHT</b> 0.2 lb.</p>	

## CEILING MOUNT

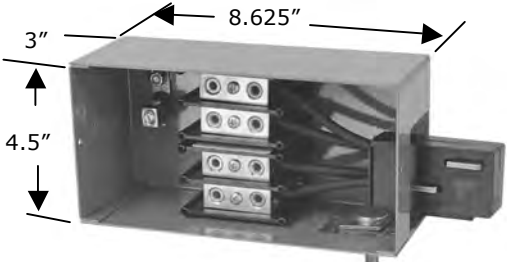
<p><b>Surface Mount</b></p> <p><b>For surface mounting - Comes with 3/8 in. hole</b></p> <p><b>For rod mounting - Comes with 7/16 in. hole</b></p>	<p><b>PART NUMBER</b></p> <p><b>MC60-S Surface MC60-R Rod</b></p>	 <p>cross section</p> <p>mounted to busway</p>
<p><b>Pendant Mount Kit</b></p> <p><b>"P" 9/16 in. hole</b></p> <p><b>Pendants are supplied by others.</b></p>	<p><b>PART NUMBER</b></p> <p><b>MC60-P</b></p>	 <p>18 in.</p>
<p><b>Recessed Mount</b></p>	<p><b>PART NUMBER</b></p> <p><b>RM60-1</b></p>	

# 60 Amp

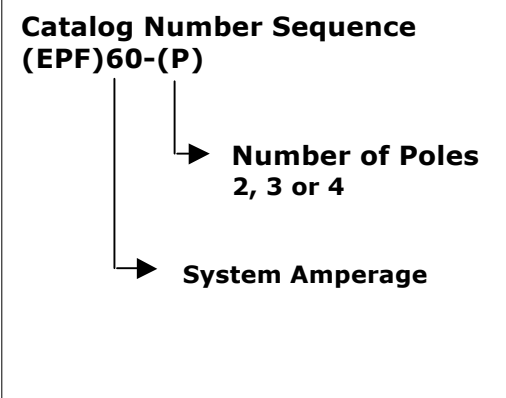


## POWER END FEED UNITS. Supplying power to END of Busway

**With Built-In Connector**  
**Consists of a steel junction box with removable side, a terminal block for field connections and an in-line connector already terminated to one side of terminal block. The unit is inserted into the Busway and held in position via bolted connection to Busway.**



With Built-In Connector - **EPF** Series



Catalog Number Selection		
Catalog No.	Illustration	Weight
EPF60-2	A with 2-pole	3.3 lbs
EPF60-(3P3PH or 3P1PH)	A with 3-pole	3.3 lbs
EPF60-4	A with 4-pole	3.5 lbs

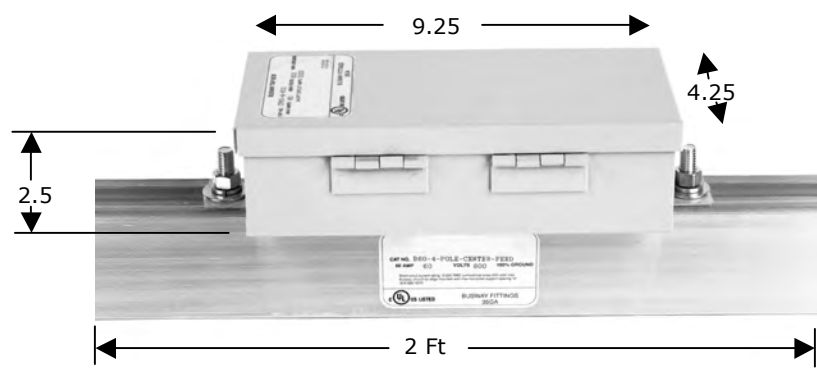
## POWER TOP FEED UNITS. Supplying power to TOP of Busway

**Top CENTER Feed**  
Used for supplying power anywhere along the top of a Busway run. Consists of a two-foot section of Busway, and a junction box with 60A rated terminal block.

Concealed applications can be supplied without a junction box, in any length up to 20 feet. A 1in conduit access hole is cut in top of the 2 ft busway for field connection of supply wires to connection lugs inside of Busway section.

Two in-line connectors and housing couplers (supplied separately) are used to connect two adjacent busway sections.

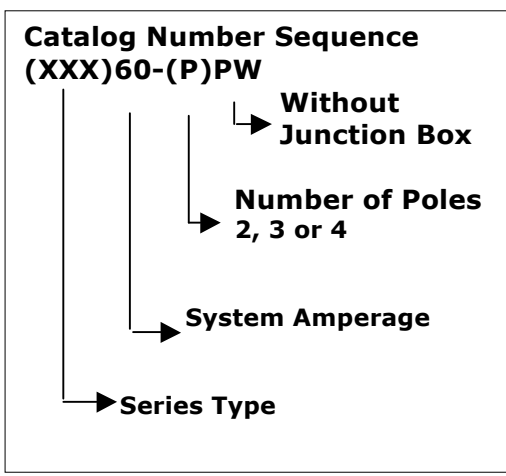
**Top END Feed**  
Same as top center feed, except box is connected to top end section of Busway. An in-line connector and housing coupler (supplied separately) is used to connect the busway run.



D. for Top Center Feed - **CFB** Series



E. for Top End Feed - **TF** Series

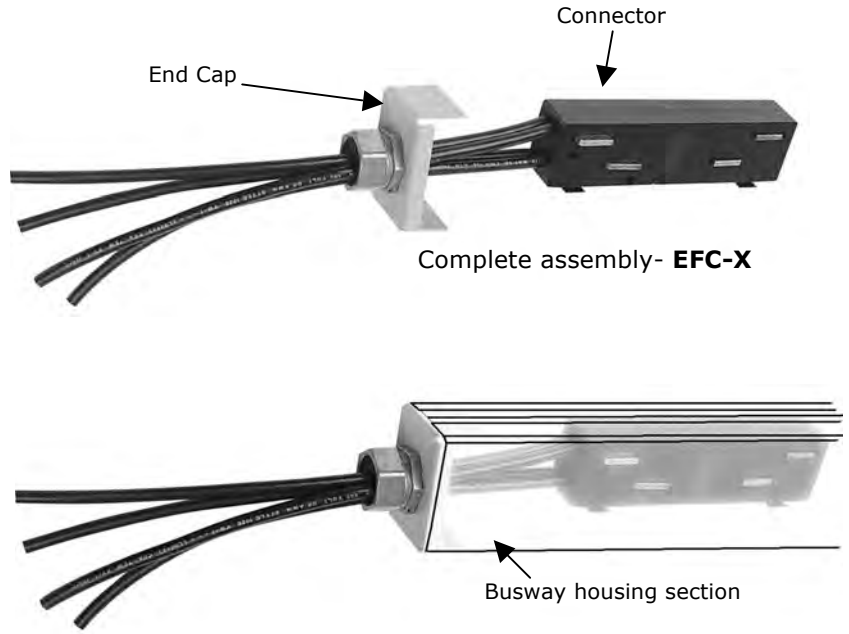


Catalog No.	Illustration	Weight
CFB60-2	D. with 2-Pole	4.8 lbs
CFB60-3	D. with 3-Pole	5 lbs
CFB60-4	D. with 4-Pole	5 lbs
TF60-2	E. with 2-Pole	4.8 lbs
TF60-3	E. with 3-Pole	5 lbs
TF60-4	E. with 4-Pole	5 lbs
CF60-2	D. without box 2-Pole	2 lbs
CF60-3	D. without box 3-Pole	2 lbs
CF60-4	D. without box 4-Pole	2 lbs
B60-x-yPW	D. without box, 4-pole plus Busway "x" = Length of Busway, "y" = 2, 3, 4-P Busway	2 lbs

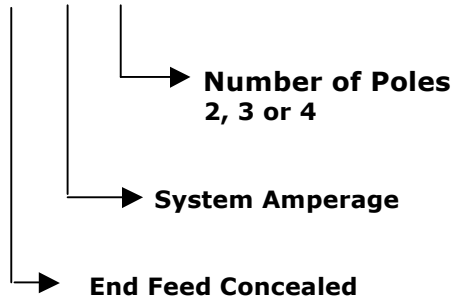
## CONCEALED POWER FEED Supplying power to END of Busway

### Concealed Power Feed

This design of power feed has a built in connector and is used primarily in applications where aesthetic appearance is important - such as retail. Wire leads are preassembled to the connector and eliminate the junction box on the Busway. Twenty-four inch wire length is standard, but any length can be supplied.



### Catalog Number Sequence EFC60-(P)



### Catalog Number Selection

Catalog No.	Illustration	Weight
EFC60-2	2-pole	2 lbs
EFC60-(3P3PH or 3P1PH)	3-pole	2 lbs
EFC60-4	4-pole	2 lbs

# 60 Amp



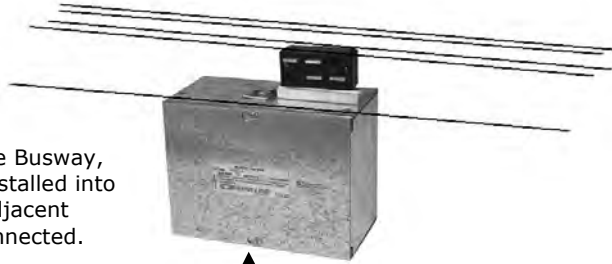
## UNIVERSAL POWER FEED Supplying power to BOTTOM of Busway

### Universal Power Feed

A Universal Power Feed is designed to be installed anywhere along the full-access opening of a Busway run. Insert the Power Feed connector into the Busway run where desired and secure with a hanger bolt (supplied). The Universal Power Feed unit must be completely installed in the selected Busway housing before the adjacent housing section can be installed. A terminal block is provided in the box for field terminations. Power supply cable is fed in from under the unit.



Universal Power Feed **PF** Series

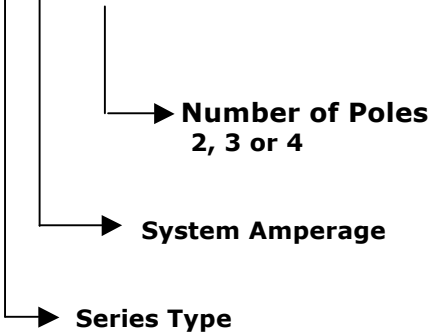


When installing BELOW the Busway, the power feed must be installed into selected housing before adjacent housing section can be connected.

↑  
Power supply cable from bottom



### Catalog Number Sequence PF60- (X)



### Catalog Number Selection

Catalog No.		Weight
PF60-2	2-Pole	4.5 lbs
PF60-(3P3PH or 3P1PH)	3-Pole	4.7 lbs
PF60-4	4-Pole	4.8 lbs



## GENERAL LAYOUT TIPS

- Try to keep all runs as straight as possible as tees and elbows are added cost.
- Standard Busway lengths are available in 20, 10 and 5-foot increments. Although the factory can cut individual STARLINE Track Busway sections to any length under 20 feet, it is highly recommend to keep all layout runs in increments of 5 feet. This recommendation is based on our experience with economics and simplifying job site installation. If housing sections are cut to 3, 4, 6ft, etc it can become cumbersome at the job site to determine which length goes with which run. By staying with 5-foot increments, this condition is minimized.
- Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

### LENGTH OF BUSWAY FOR A ONE VOLT DROP IN LINE TO LINE VOLTAGE

SYSTEM DESIGNATION	DISTRIBUTED LOAD	VOLTAGE DROP @ 0.8 PF Single Phase	VOLTAGE DROP @ 0.8 PF Three Phase
B60 (standard)	60 Amps	37 FT	43 FT

- There is no need to be concerned with the specific detail and total count of support hardware, connectors and end caps as your local STARLINE Track Busway Applications Engineer will assist during the quotation process. Refer to SPECIFICATIONS for both the suggested short and long form STARLINE specifications.
- Printed Installation drawings are supplied with each system shipment. CAD files of these drawings are also available by contacting your local STARLINE Applications Engineer.





## COMPONENT RELATIONSHIP

When ordering material, it is important to understand the relationship between various components. Examples:

- Each housing section requires a connector and coupler. Determine the total number of housing sections (regardless of length) as this becomes the number of In-Line Connectors (BC) and Housing Couplers (HC) that will be needed.
- Add one extra In-Line Connector (BC) and Housing Coupler (HC) for each Tee Connector.
- No need to add extra Connectors and Housing Couplers for Elbow Connectors, as they are already part of your housing count.
- If using an “EF” style Power Feed, order an In-Line Connector (BC) and Housing Coupler (HC) for each Power Feed.
- General support hardware rule to follow:

$$\text{Total System Length} + 0.10 (10\%) = \text{Support Hardware Qty } 10$$

10 equal 10 ft spacing and 10% extra is recommended for job site changes.

- Total Power Feeds and End Caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering elbow or tee connectors, it is important to understand polarity and the relationship to direction of outlets. Please refer to POLARITY CONCERNS for more detail.

- Try to keep all runs as straight as possible as tees and elbows are added cost.
- Standard Busway lengths are available in 20, 10 and 5-foot increments. Although the factory can cut individual STARLINE Track Busway sections to any length under 20 feet, it is highly recommend to keep all layout runs in increments of 5 feet. This recommendation is based on our experience with economics and simplifying job site installation. If housing sections are cut to 3, 4, 6ft, etc it can become cumbersome at the job site to determine which length goes with which run. By staying with 5-foot increments, this condition is minimized.
- Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

*LENGTH OF BUSWAY FOR A ONE VOLT DROP IN LINE TO LINE VOLTAGE*

<b>SYSTEM DESIGNATION</b>	<b>DISTRIBUTED LOAD</b>	<b>VOLTAGE DROP @ 0.8 PF Single Phase</b>	<b>VOLTAGE DROP @ 0.8 PF Three Phase</b>
B60 (standard)	60 Amps	37 FT	43 FT

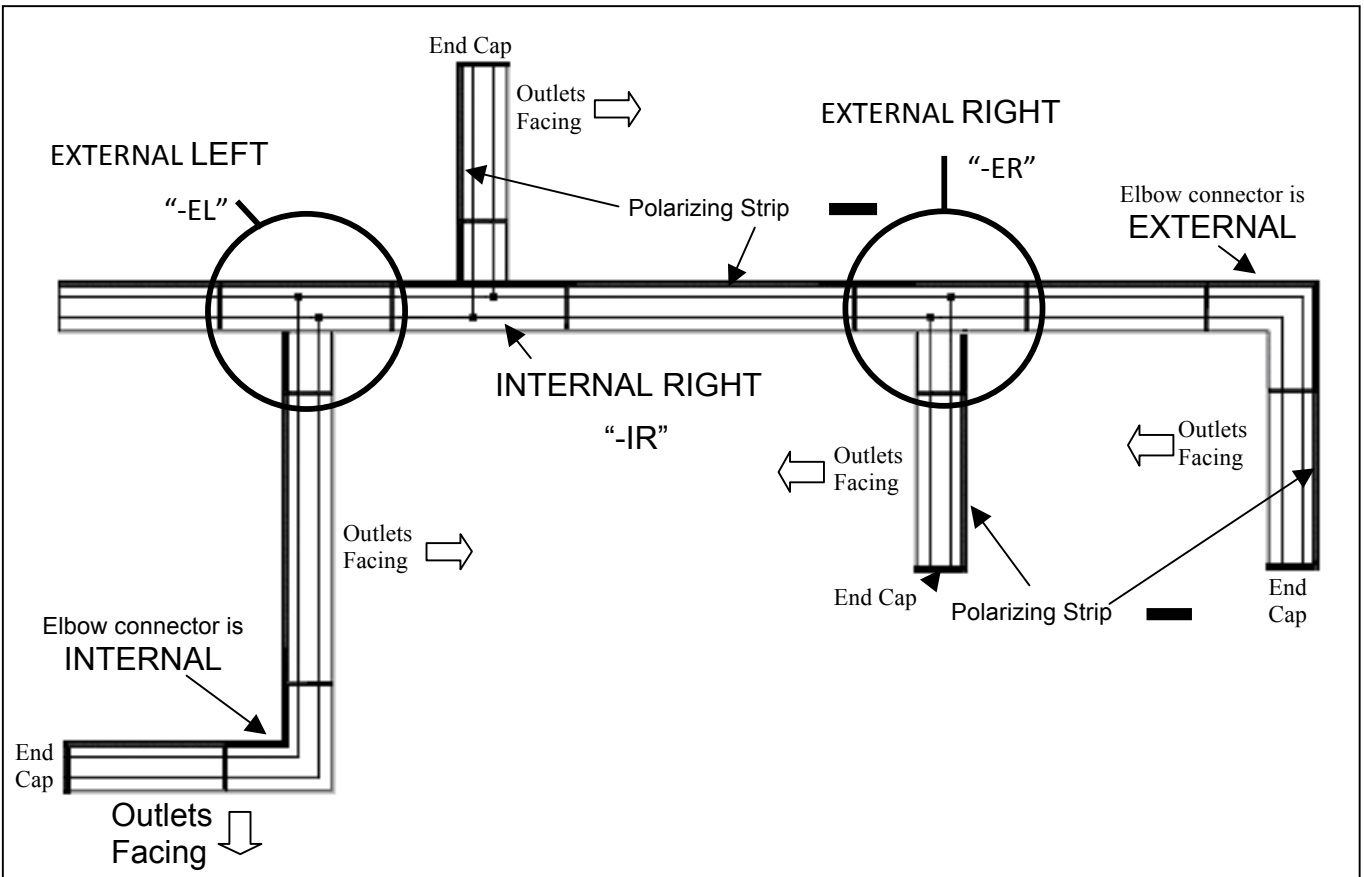
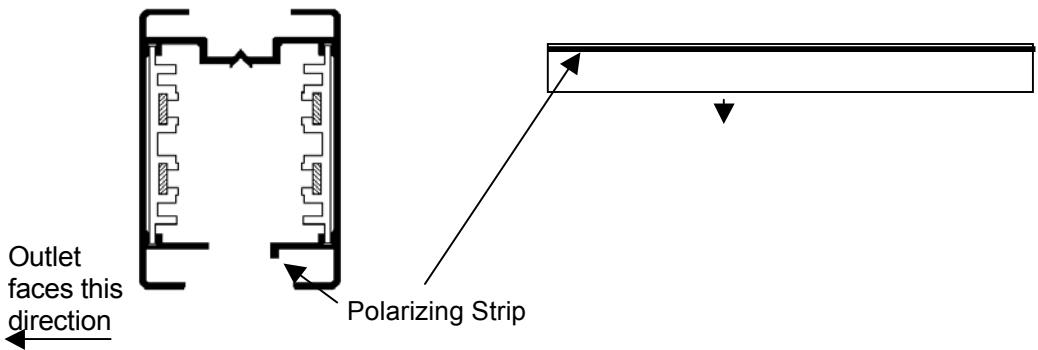
- There is no need to be concerned with the specific detail and total count of support hardware, connectors and end caps as your local STARLINE Track Busway Applications Engineer will assist during the quotation process. Refer to SPECIFICATIONS for both the suggested short and long form STARLINE specifications.

Printed Installation drawings are supplied with each system shipment. CAD files of these drawings are also available by contacting your local STARLINE Applications Engineer.



## POLARITY CONCERNS

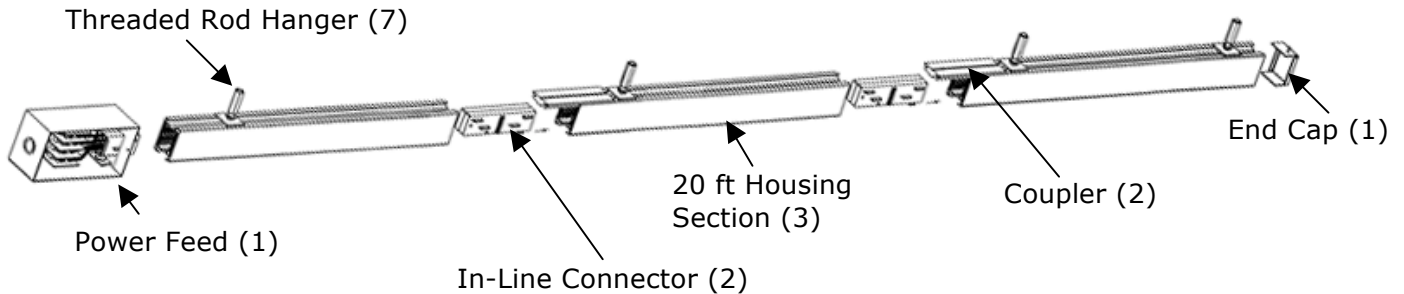
STARLINE utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation. It is particularly important to understand this design concept prior to ordering and/or installing some components. For example, if the face direction of a STARLINE plug-in unit is important in your installation, consider that they will always face away from the polarizing strip.



## SAMPLE TAKE-OFF

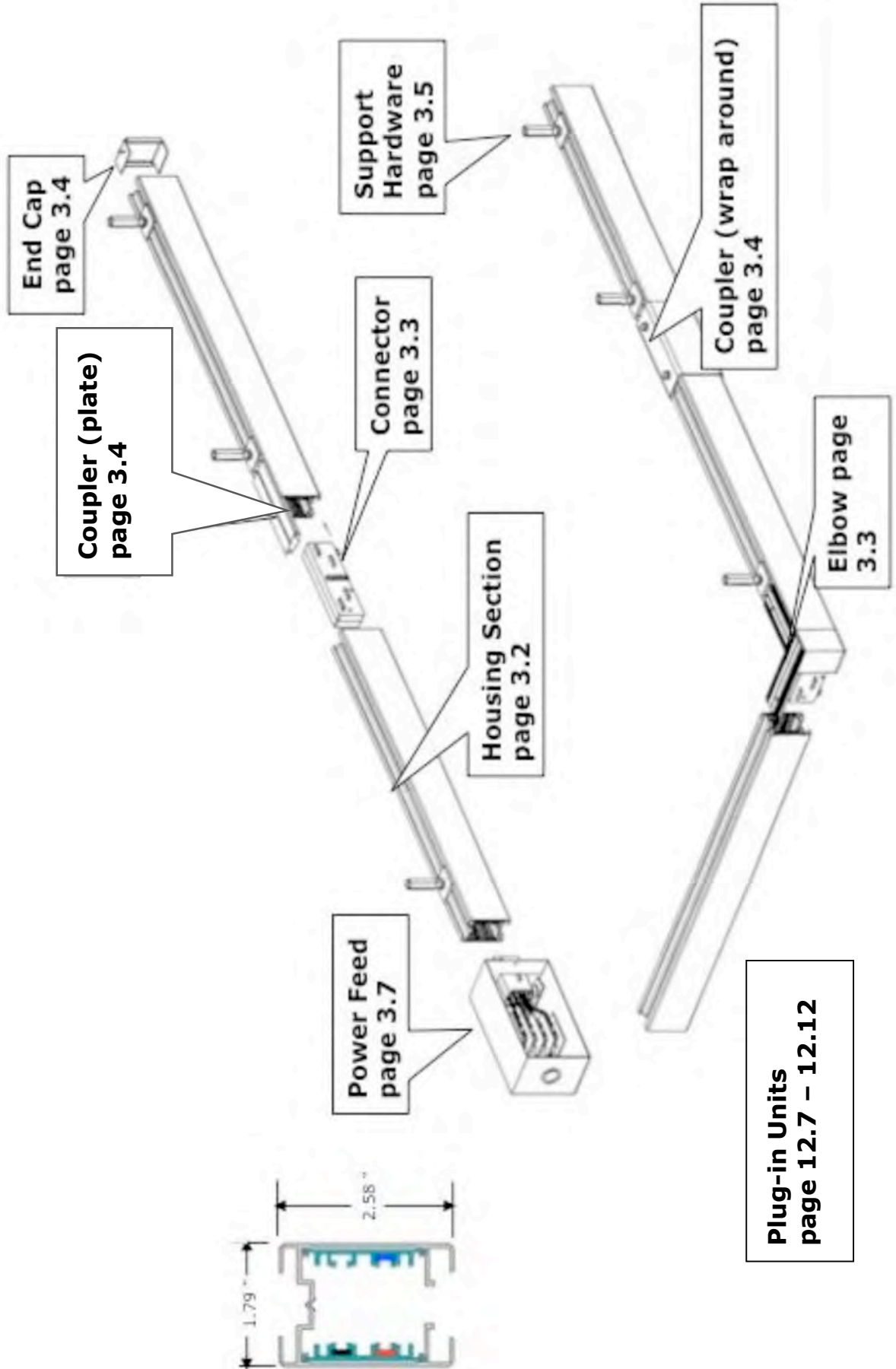
**Description:**

**Straight run, 60 feet long, 4-pole with End Feed and supported by 3/8" threaded rod.**



<b>BILL OF MATERIAL</b>		
<b>QTY</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>
<b>3</b>	<b>B60-20-4</b>	<b>Housing Section, 20 feet, 4-Pole</b>
<b>2</b>	<b>BC-4</b>	<b>In-Line Connector, 4-Pole</b>
<b>2</b>	<b>HC-2</b>	<b>Housing Coupler, plate type</b>
<b>1</b>	<b>EC60</b>	<b>End Cap</b>
<b>7</b>	<b>RHB-3</b>	<b>3/8" Threaded Rod Hanger</b>
<b>1</b>	<b>EPF60-4</b>	<b>End Power Feed, 4-Pole</b>

**Compact 100 Amp System  
to 300 Volts**



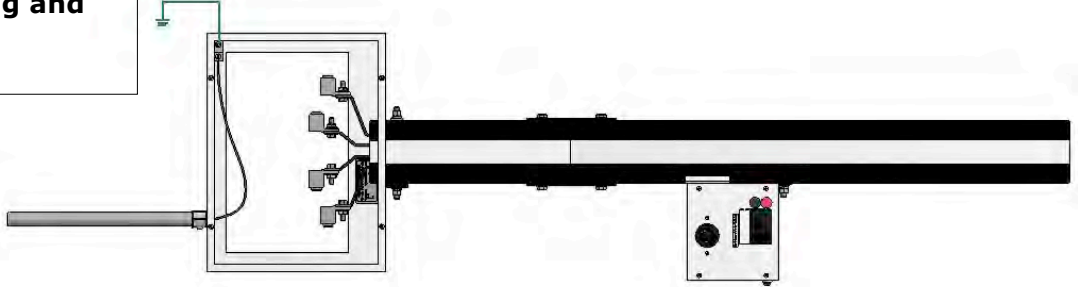
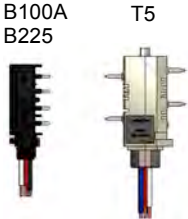
**Plug-in Units  
page 12.7 – 12.12**

# Ground Options

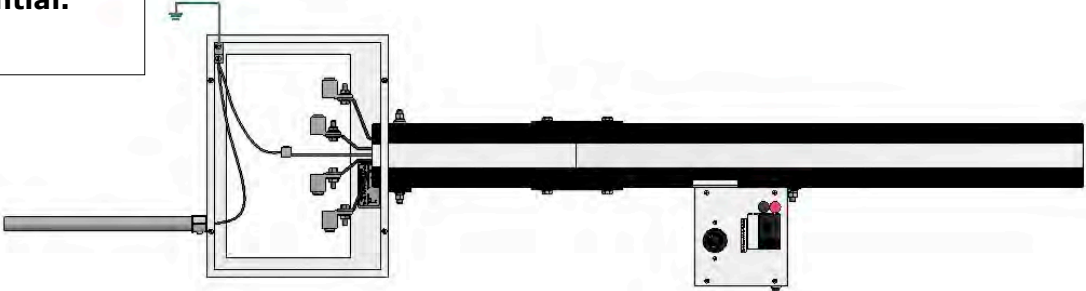
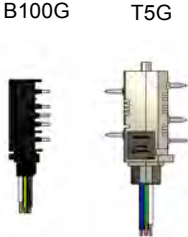


## FAQ CASE GROUND, DEDICATED GROUND, ISOLATED GROUND

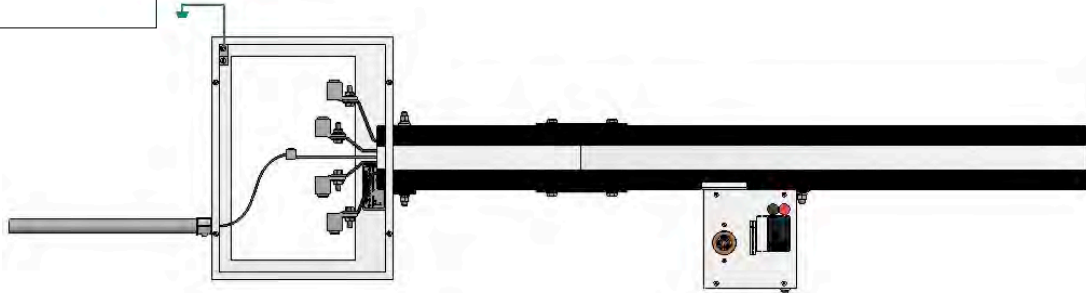
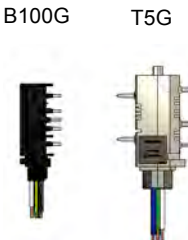
**CASE GROUND**  
Uses aluminum housing and no extra copper bar.



**DEDICATED GROUND**  
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.



**ISOLATED GROUND**  
Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.



# 100 Amp Compact



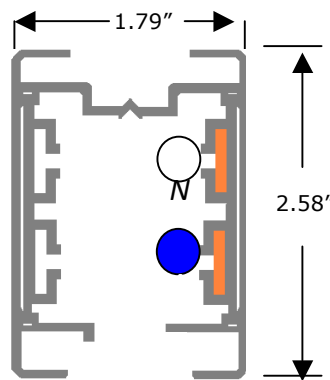
## HOUSING SECTION

Track Busway housings consist of an extruded aluminum outer shell with PVC insulated copper conductor strips mounted on the two opposite interior side walls. The aluminum extrusion acts as a 100% ground path meeting UL 857 Standard and complies with applicable paragraphs of Section 250 of the NEC. Each section of housing has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 2 and 4-pole varieties to 600 Volt designs. Track Busway housings are connected together using plug-in connectors and plate or wrap around type housing couplers.

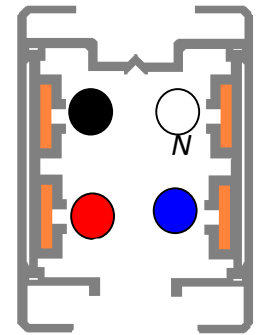
**MATERIAL:** Extruded Aluminum  
**RATINGS:** 100% Ground Path  
 100 Amp, 600 Volt

**LENGTH:** 5 Ft, 10 Ft, 20 Ft.

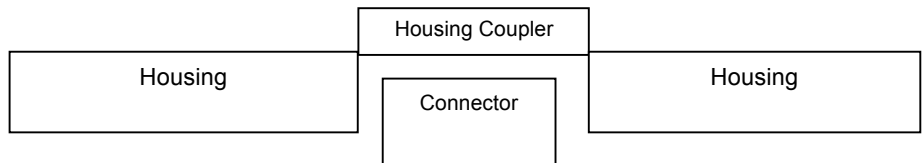
**VOLTAGE DROP:** distributed load  
 Single Phase 55ft (.8PF)  
 Three Phase 64ft (.8PF)



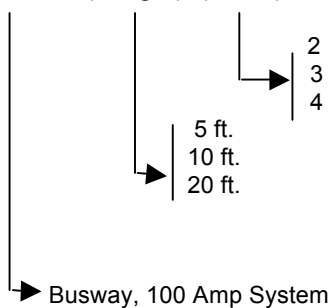
Two Pole



Four Pole



Catalog Number Sequence  
 B100C-(Length)-(Poles)



2 pole	2 pole	lbs	4 pole	lbs
5 ft	B100C - 5 - 2	6.4	B100C - 5 - 4	8
10 ft	B100C - 10 - 2	13	B100C - 10 - 4	16
20 ft	B100C - 20 - 2	26	B100C - 20 - 4	32

**NOTES:** Busway sections CANNOT be cut on site. Although Busway sections come in standard lengths of 5, 10 & 20 feet, factory cut lengths between 1 and 19 feet can be ordered. Consult factory for price and delivery.

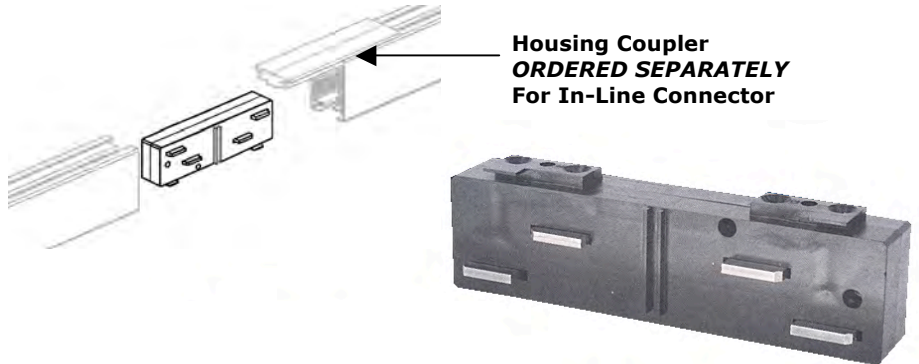
# 100 Amp Compact



## CONNECTORS

### In-Line Connector

Sections of 100 Amp Compact Busway are joined electrically by means of an in-line connector. The connector is installed by inserting it into each end of the housing sections to be joined. Hex head compression screws are tightened to make a reliable contact to bus connection. All in-line connectors are polarized to prevent phase mismatch. Housing Coupler HC-1 or HC-2 ORDERED SEPARATELY.

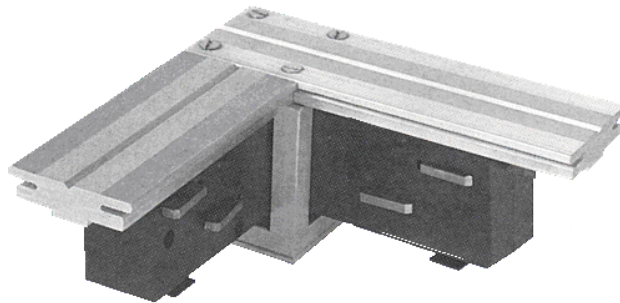


Housing Coupler  
**ORDERED SEPARATELY**  
For In-Line Connector

**In-Line Connector**

### Elbow Connector

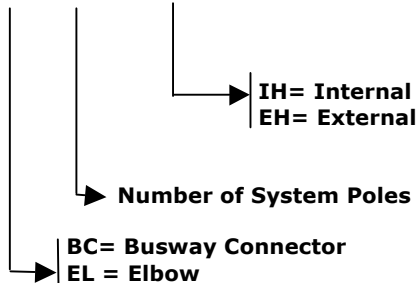
Factory pre-assembled, elbow connectors are used for making a 90-degree turn for 100 Amp Compact systems. Refer LAYOUT for polarization issues before making final selection.



**Elbow Connector**

**(NO TEES AVAILABLE FOR B100C SYSTEMS)**

### Catalog Number Sequence (XX)-(P)-(Polarize)



### Catalog Number Selection

Catalog No.	Connector Type	Weight
BC-2	In-Line, 2-Pole	0.3 lb
BC-(3P3PH or 3P1PH)	In-Line, 3-Pole	0.3 lb
BC-4	In-Line, 4-Pole	0.4 lb
EL100C-2-(IH or EH)	Elbow, 2-Pole	0.5 lb
EL100C-3-(IH or EH)	Elbow, 3-Pole	0.5 lb
EL100C-4-(IH or EH)	Elbow, 4-Pole	0.5 lb



# 100 Amp Compact



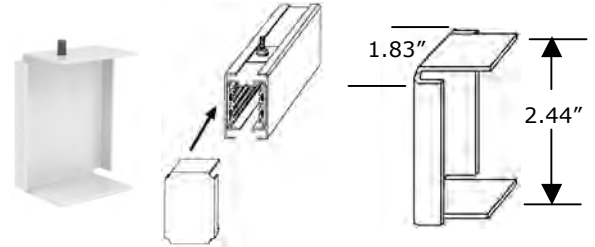
## CONNECTION ACCESSORIES

### END CAP

For insulating female end of Busway.

**PART NUMBER**  
EC60

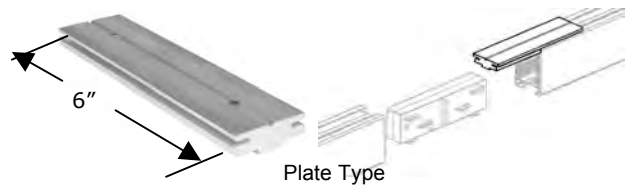
**WEIGHT**  
0.2 lb



### HOUSING COUPLER

**Plate Type**  
For concealed connecting Busway sections. One required.

**PART NUMBER**  
HC-2  
**WEIGHT**  
0.8 lb



### CLOSURE STRIP

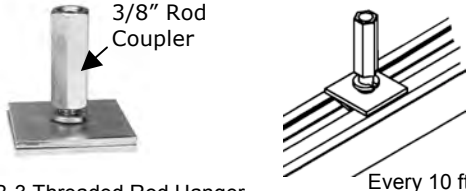
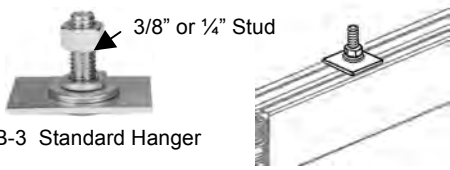


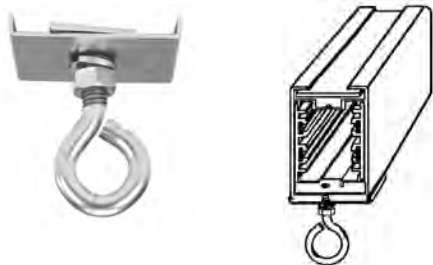
Made of white, rigid PVC, the closure strip is used to close the continuous access slot of the Busway. It may be used for aesthetic purposes, for keeping dust and dirt from entering the Busway or as an added safety measure. It is easily cut to length in the field to be installed around plug-in units.

**PART NUMBER**  
CS60



# 100 Amp Compact



<p><b>Threaded Rod</b></p> <p>For mounting to 3/8-16 threaded rod. Can be inserted anywhere along full access top slot of Busway. Typical hanger support spacing every 10 ft maximum.</p>	<p><b>PART NUMBER</b> RHB-3</p> <p><b>WEIGHT</b> 0.3 lb</p>	 <p>3/8" Rod Coupler</p> <p>RHB-3 Threaded Rod Hanger</p> <p>Every 10 ft.</p>
<p><b>Standard</b></p> <p>For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along top full access slot.</p>	<p><b>PART NUMBER</b> THB-3 3/8" THB-1/4 1/4"</p> <p><b>WEIGHT</b> 0.2 lb</p>	 <p>3/8" or 1/4" Stud</p> <p>THB-3 Standard Hanger</p>
<p><b>Cable</b></p> <p>For mounting to 1/16' or 3/32" aircraft cable with easy grip clamp assembly. Cable is not included.</p>	<p><b>PART NUMBER</b> ACH-1 1/16" cable ACH-2 3/32" Cable</p> <p><b>WEIGHT</b> 0.2 lb</p>	 <p>ACH-(X) Cable Suspension Assembly</p>
<p><b>T-Bar Suspended Ceiling</b></p> <p>For mounting to inverted T-bar. Clip locks onto T-bar and Busway connected to stud on clip. T-bar mounting with surface clip.</p>	<p><b>PART NUMBER</b> THB-4</p> <p><b>WEIGHT</b> 0.1 lb</p>	
<p><b>Weight Hook</b></p> <p>Can be used as a hanger to suspend Busway from chains or cables. Can also be used to hang loads up to 50 lbs under the Busway, such as light fixtures, tools and balancers.</p>	<p><b>PART NUMBER</b> WHR-1</p> <p><b>WEIGHT</b> 0.2 lb.</p>	

# 100 Amp Compact

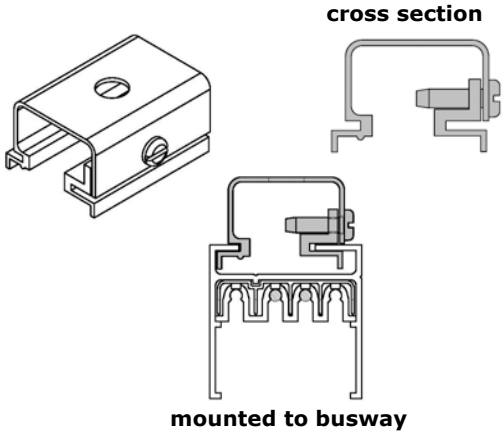


## CEILING MOUNT

**Surface Mount**  
 For mounting to surface.  
 Comes with 3/8 in. hole

**PART NUMBER**

**MC60-S Surface**  
**MC60-R Rod**



**T-Bar Suspended Ceiling**  
 For mounting to inverted  
 T-bar. Clip locks onto T-bar  
 and Busway connected to  
 stud on clip. T-bar mounting  
 with surface clip.

**PART NUMBER**

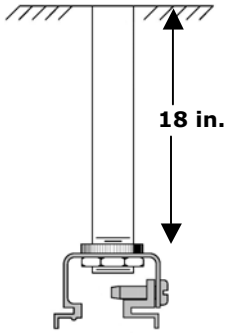
**THB-4**



**Pendant MountKit**  
 complete with 18 in. Pendant

**PART NUMBER**

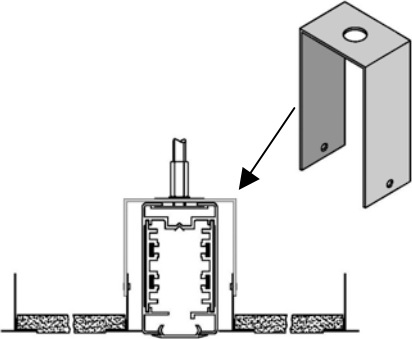
**MC60-P**



**Recessed Mount**

**PART NUMBER**

**RM60-1**



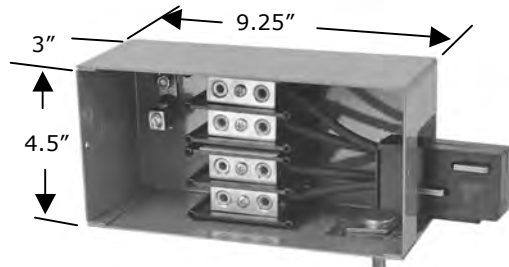
# 100 Amp Compact



## POWER FEED UNITS Supplying power to END or CENTER of Busway

### With built-in connector

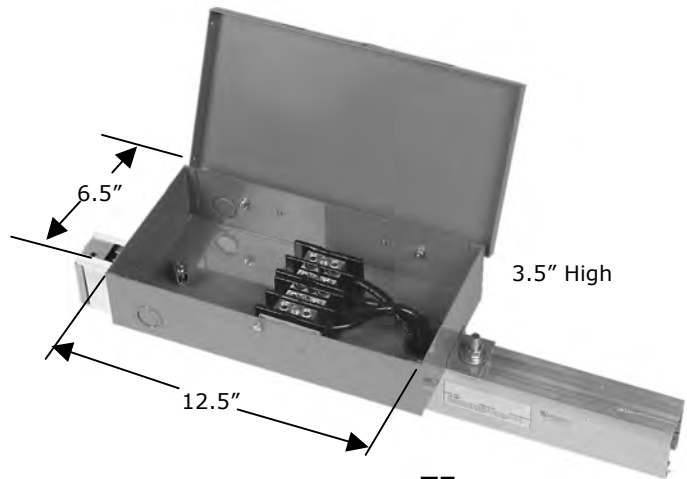
This unit consists of a steel junction box with a removable side, a terminal block for field connections and an in-line connector already terminated to one side of terminal block. The unit is inserted into the Busway and held in position via bolted connection to Busway.



A. With Built-In Connector - **EPF** Series

### Top END Feed

This unit is connected to the top end section of Busway. An in-line, tee or elbow connector and housing coupler (supplied separately) is used to connect to the Busway run.



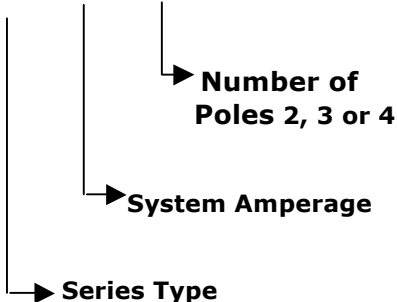
B. for Top End Feed - **TF** Series

### Top CENTER Feed

This unit is the same unit as an End Feed, however it is located in the center of a 2 ft section of Busway.



### Catalog Number Sequence (XXX)100C-(P)



### Catalog Number Selection

Catalog No.	Illustration	Weight
EPF100C-2	A with 2-pole	3.3 lbs
EPF100C-(3P3PH or 3P1PH)	A with 3-pole	3.3 lbs
EPF100C-4	A with 4-pole	3.5 lbs
TF100C-2	B with 2-pole	4.8 lbs
TF100C-(3P3PH or 3P1PH)	B with 3-pole	5 lbs
TF100C-4	B with 4-pole	5 lbs
CFB100C-2	B with 2-pole	4.8 lbs
CFB100C-(3P3PH or 3P1PH)	B with 3-pole	5 lbs
CFB100C-4	B with 4-pole	5 lbs

# 100 Amp Compact



## GENERAL LAYOUT TIPS

- Try to keep all runs as straight as possible as tees and elbows are added cost.
- Standard Busway lengths are available in 20, 10 and 5-foot increments. Although the factory can cut individual STARLINE Track Busway sections to any length under 20 feet, it is highly recommend to keep all layout runs in increments of 5 feet. This recommendation is based on our experience with economics and simplifying job site installation. If housing sections are cut to 3, 4, 6ft, etc it can become cumbersome at the job site to determine which length goes with which run. By staying with 5-foot increments, this condition is minimized.
- Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

### LENGTH OF BUSWAY FOR A ONE VOLT DROP IN LINE TO LINE VOLTAGE

SYSTEM DESIGNATION	DISTRIBUTED LOAD	VOLTAGE DROP @ 0.8 PF Single Phase	VOLTAGE DROP @ 0.8 PF Three Phase
B100C (compact)	100 Amps	55 FT	64 FT

- There is no need to be concerned with the specific detail and total count of support hardware, connectors and end caps as your local STARLINE Track Busway Applications Engineer will assist during the quotation process. Refer to SPECIFICATIONS for both the suggested short and long form STARLINE specifications.
- Printed Installation drawings are supplied with each system shipment. CAD files of these drawings are also available by contacting your local STARLINE Applications Engineer.

# 100 Amp Compact



## COMPONENT RELATIONSHIP

When ordering material it is important to understand the relationship between various components. Examples:

- Each housing section requires a connector and coupler. Determine the total number of housing sections (regardless of length) as this becomes the number of In-Line Connectors (BC) and Housing Couplers (HC) that will be needed.
- Add one extra In-Line Connector (BC) and Housing Coupler (HC) for each Tee Connector.
- No need to add extra Connectors and Housing Couplers for Elbow Connectors, as they are already part of your housing count.
- If using an "EF" style Power Feed, order an In-Line Connector (BC) and Housing Coupler (HC) for each Power Feed.
- General support hardware rule to follow:

$$\text{Total System Length} + 0.10 (10\%) = \text{Support Hardware Qty } 10$$

10 equal 10 ft spacing and 10% extra is recommended for job site changes.

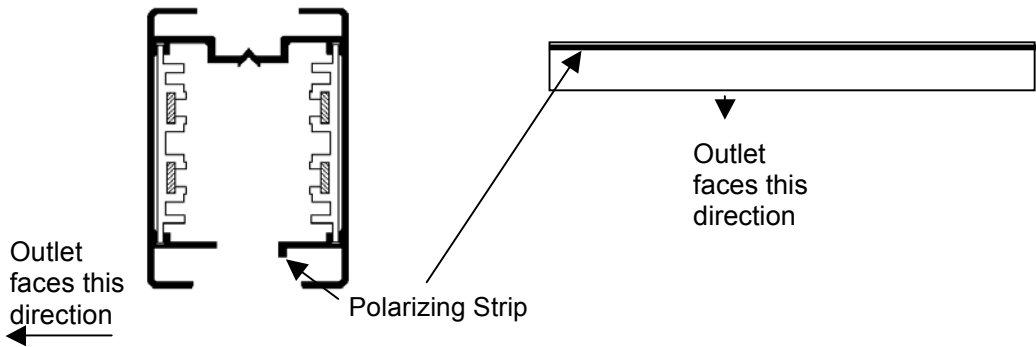
- Total Power Feeds and End Caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering elbow or tee connectors, it is important to understand polarity and the relationship to direction of outlets. Please refer to POLARITY CONCERNS for more detail.

# 100 Amp Compact



## POLARITY CONCERNS

STARLINE utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation. It is particularly important to understand this design concept prior to ordering and/or installing some components. For example, if the face direction of a STARLINE plug-in unit is important in your installation consider that they will always face away from the polarizing strip.

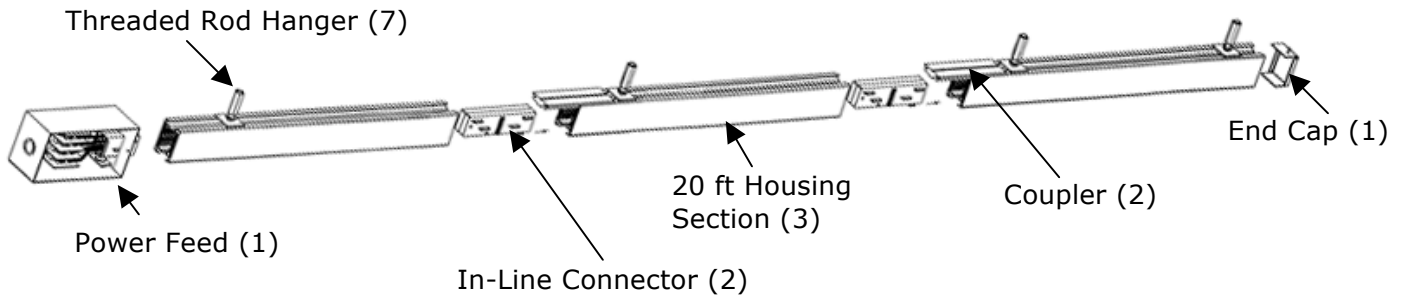


# 100 Amp Compact



## SAMPLE TAKE-OFF

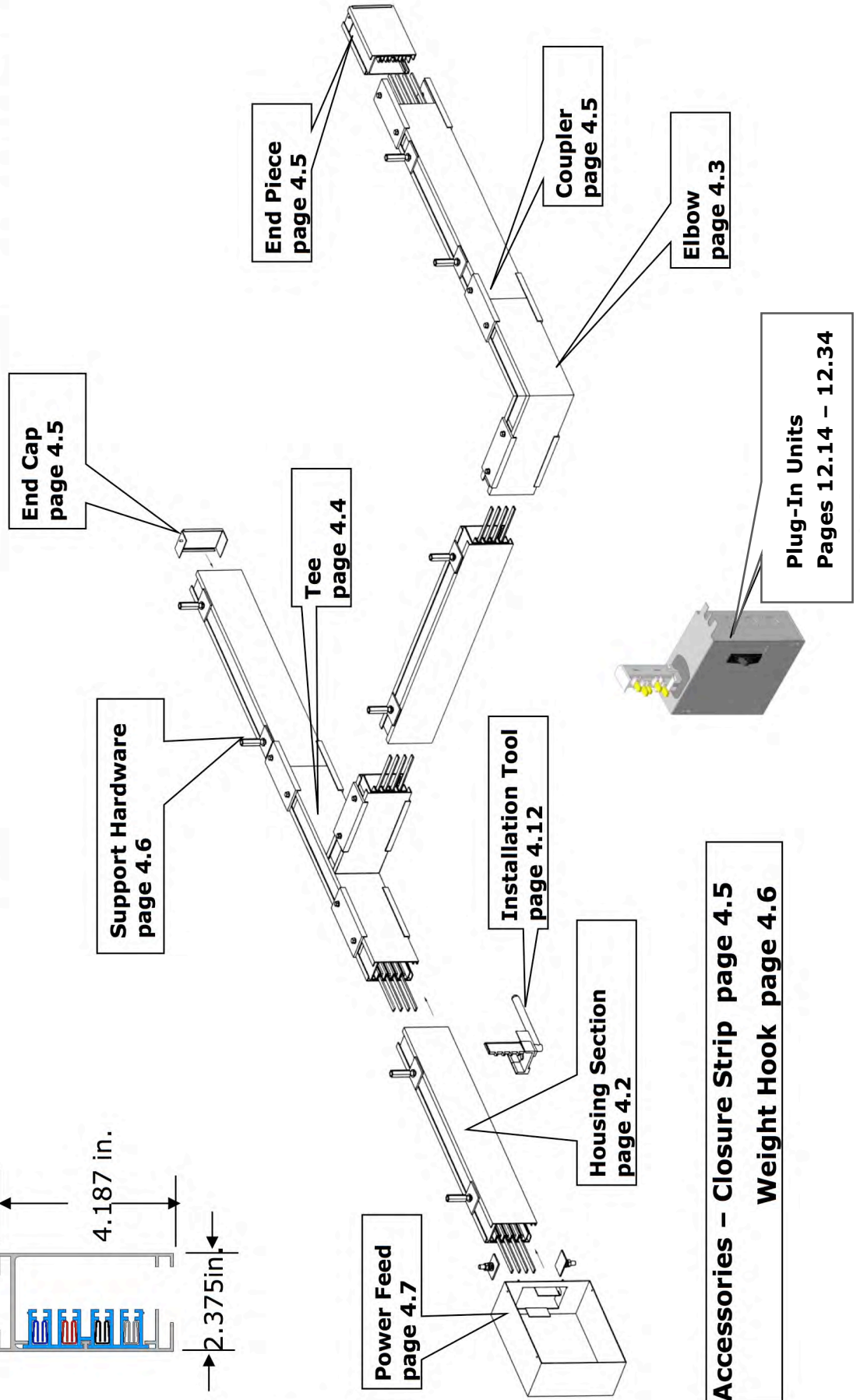
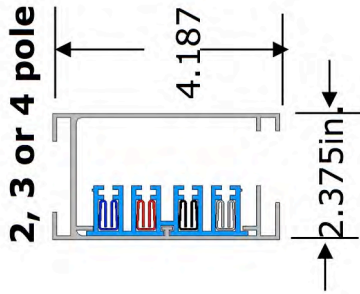
### Description:



<b>BILL OF MATERIAL:</b>		
<b>QTY</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
3	B100C-20-4	Housing Section, 20 Feet, 4-Pole
2	BC-4	In-Line Connector, 4-Pole
2	HC-2	Housing Coupler, Plate Type
1	EC60	End Cap (Same as B60)
7	RHB-3	3/8" Threaded Rod Hanger
1	EPF100C-4	End Power Feed, 4-Pole



# Standard B100A Amp System to 600 Volts



# Ground Options

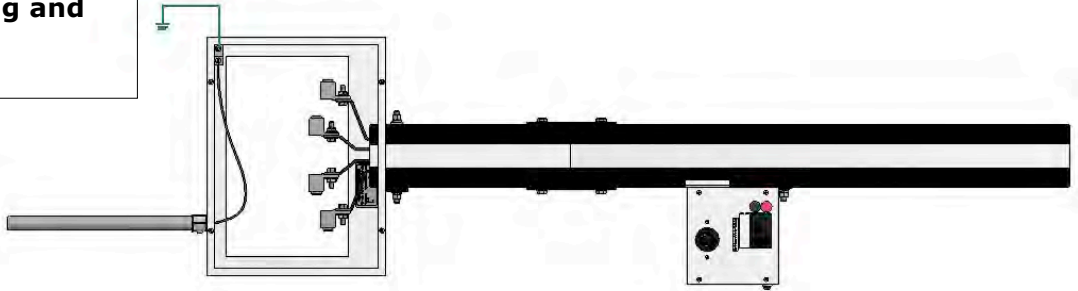
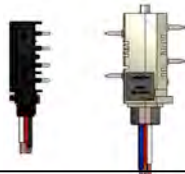


## FAQ CASE GROUND, DEDICATED GROUND, ISOLATED GROUND

**CASE GROUND**  
Uses aluminum housing and no extra copper bar.

B100A  
B225

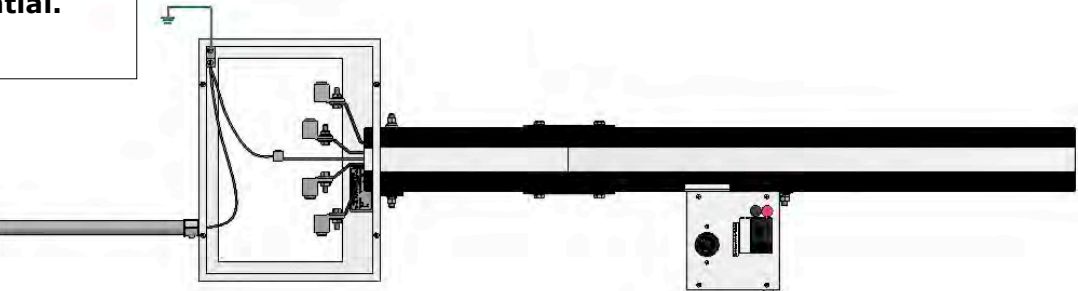
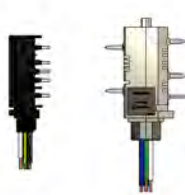
T5



**DEDICATED GROUND**  
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.

B100G

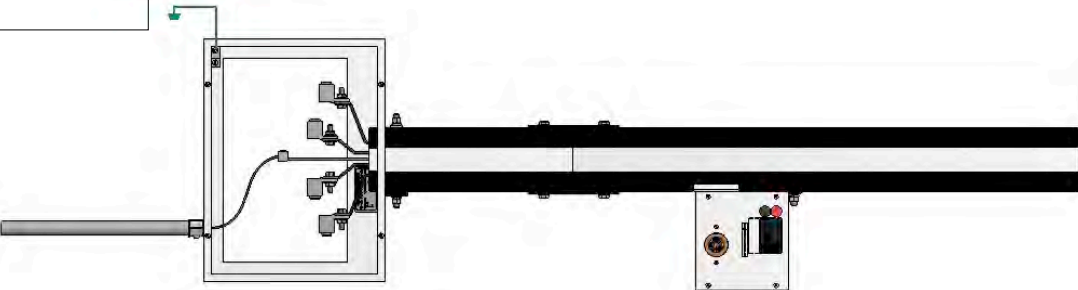
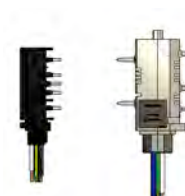
T5G



**ISOLATED GROUND**  
Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.

B100G

T5G



## HOUSING SECTIONS

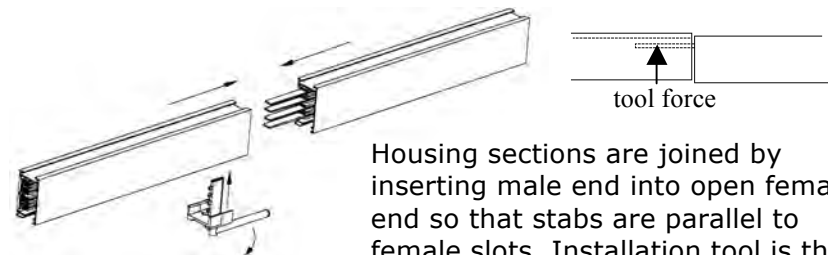
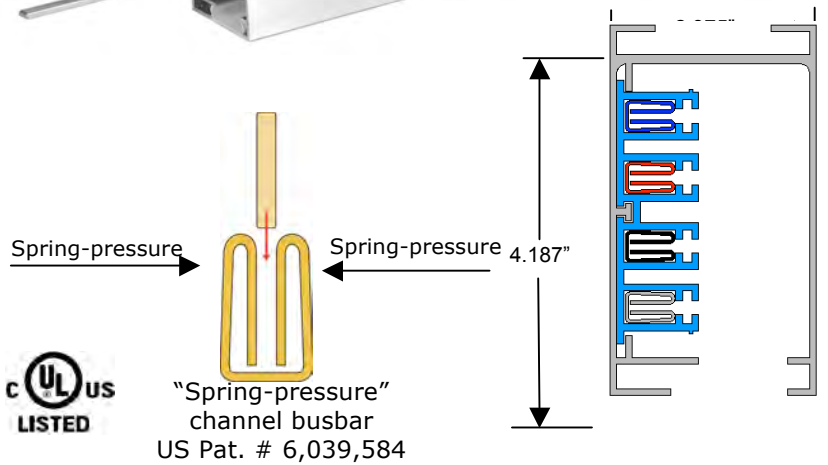
Track Busway housing section consists of an extruded aluminum shell with channel type solid copper busbars contained in a full length PVC insulator mounted on one side on the interior wall. The aluminum extrusion acts as a 100% ground path meeting UL 857 Standard and complies with applicable paragraphs of Section 250 of the NEC. Each housing has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations includes 2, 3 and 4 pole, 600 Volt. Each housing section has male stabs protruding at one end which fit into the channels of the adjoining section. An installation tool (Page 4.12) is used to force the stabs into the busbar channels for a solid spring-tempered electrical connection.

**MATERIAL:** Extruded Aluminum

**RATINGS:** 100% Ground Path  
100 Amp, 600 Volt

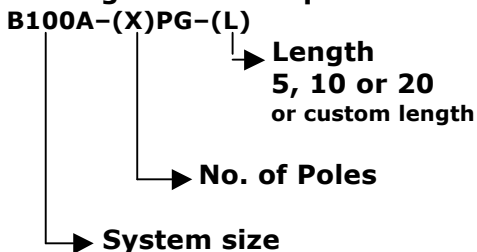
**LENGTH:** 5 Ft, 10 Ft, 20 Ft.

**VOLTAGE DROP:** distributed load  
Single Phase 54ft (.8PF)  
Three Phase 62ft (.8PF)



Housing sections are joined by inserting male end into open female end so that stabs are parallel to female slots. Installation tool is then rotated to force stabs into slots.

### Catalog Number Sequence



### Catalog Number Selection

Catalog No.	Description	Length	Weight
B100A-3PG-5	100 amp, 3 pole	5 ft	12.5lbs
B100A-3PG-10	100 amp, 3 pole	10 ft	25 lbs
B100A-3PG-20	100 amp, 3 pole	20 ft	50 lbs
B100A-4PG-5	100 amp, 4 pole	5 ft	13 lbs
B100A-4PG-10	100 amp, 4 pole	10 ft	26 lbs
B100A-4PG-20	100 amp, 4 pole	20 ft	52 lbs

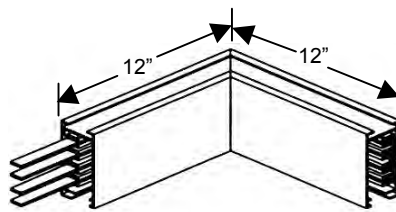
## ELBOW SECTIONS

### Elbow Section

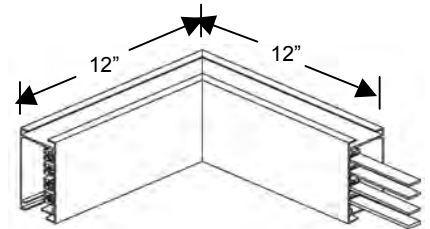
Elbows are used for making a 90 degree in a Busway run. Horizontal and vertical elbows are available. Specify right or left elbow according to the orientation of the busbars in the Busway sections to be connected. Refer to Layout B100A for detail. Elbow sections are connected to adjacent Busway sections using Installation Tool B100AIT, Page 4.12. Coupler set BHC-1, Page 4.5 (ordered separately) is used to mechanically connect top and bottom of Tee section to adjacent Busway.



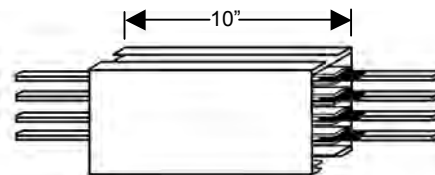
Horizontal Elbow



Right Elbow - EL100A-4-R



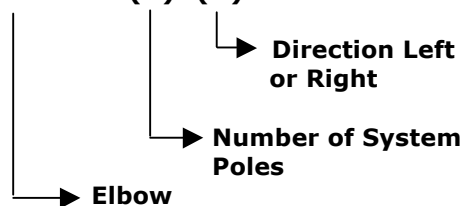
Left Elbow - EL100A-4-L



Male to Male Adapter - AD100A-4



### Catalog Number Sequence EL100A- (P)-(X)



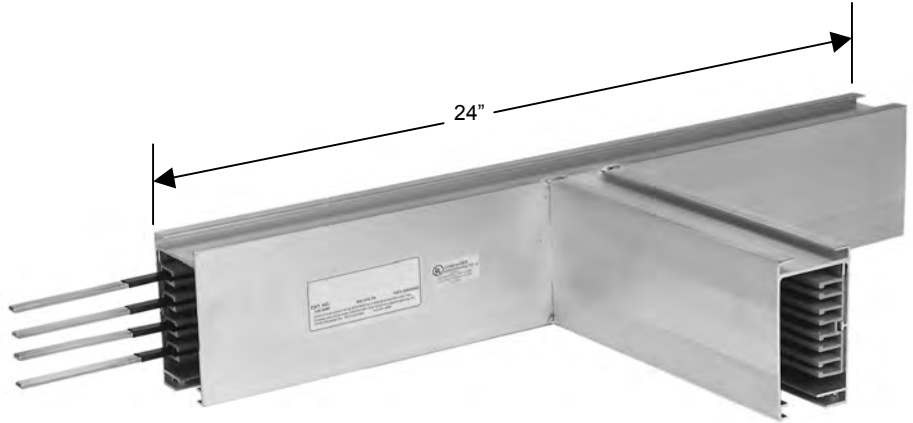
### Catalog Number Selection

Catalog No.	Description	Weight
EL100A-3-L	Elbow, horizontal, 3-pole, left	5.5 lbs
EL100A-3-R	Elbow, horizontal, 3-pole, right	5.5 lbs
EL100A-4-L	Elbow, horizontal, 4-pole, left	5.5 lbs
EL100A-4-R	Elbow, horizontal, 4-pole, right	5.5 lbs
AD100A-4	Male to Male Adapter, 4-pole	

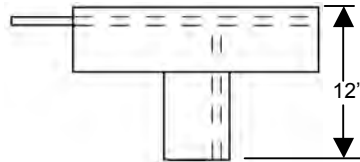
## TEE SECTIONS

### Tee Section

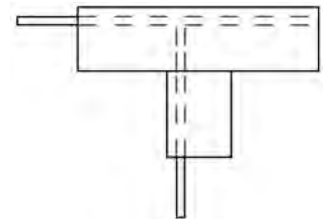
Tee sections are used for creating a 90 degree branch leg in a Busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Refer to Layout B100A for further detail. Tee sections are connected to adjacent Busway sections using Installation Tool B100AIT. Coupler set BHC-1 (ordered separately) is used to mechanically connect top and bottom of Tee section to adjacent Busway.



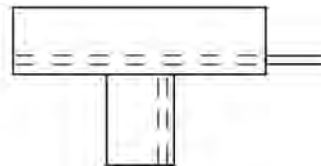
External Right  
T100A-(X)-ER



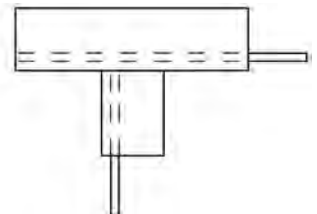
External Left  
T100A-(X)-EL



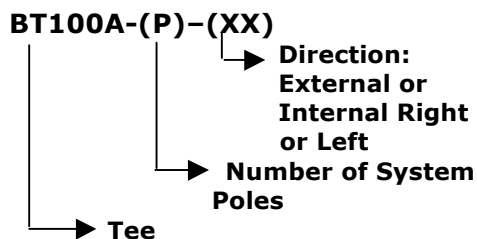
Internal Right  
T100A-(X)-IR



Internal Left  
T100A-(X)-IL



### Catalog Number Sequence



### Catalog Number Selection

Catalog No.	Description	Weight
T100A-3-ER	Tee, 3-pole, External Right	8 lbs
T100A-3-EL	Tee, 3-pole, External Left	8 lbs
T100A-4-ER	Tee, 4-pole, External Right	8 lbs
T100A-4-EL	Tee, 4-pole, External Left	8 lbs
T100A-4-IR	Tee, 4-pole, Internal Right	8 lbs
T100A-4-IL	Tee, 4-pole, Internal Left	8 lbs



 **CONNECTION ACCESSORIES**

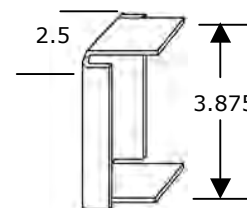
### END CAP

For covering the female end of B100A Busway. End Piece (EP) is used to cover male end.

PART NUMBER

EC-1

WEIGHT 0.2 lb



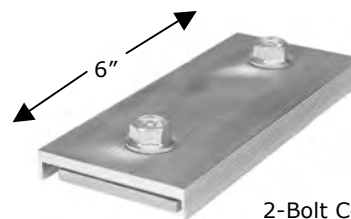
### HOUSING COUPLERS

For connecting adjacent Busway sections and/or end piece. One pair required. BHC-1 consists of two, 2-bolt couplers per set; one for the top and one for the bottom.

PART NUMBER

BHC-1

WEIGHT 0.8 lb



2-Bolt Coupler on top and bottom

### END PIECE

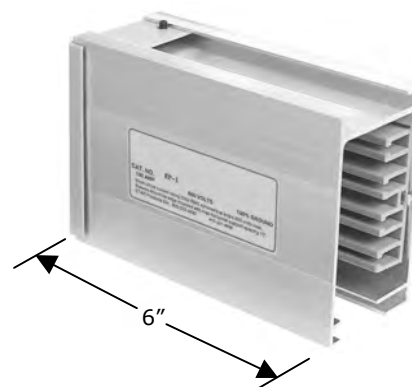
The end piece is a 6 in. section of Busway housing and insulator and end cap. It is used to cover the protruding copper busbar connector blades at the male end of a Busway run. End Cap (EC) is used to cover female end.

***BHC-1 IS ALSO REQUIRED***

PART NUMBER

EP-2

WEIGHT 0.8 lb



### OPTIONAL CLOSURE STRIP

Snaps into bottom access slot of B100A housing sections. Normally shipped in 10 ft lengths and can be field cut to fit exact desired length.

PART NUMBER

CS-1 - PVC

CS-1-AL - Aluminum

CUT LENGTH = 10ft



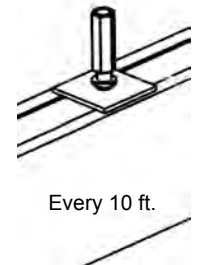


## SUPPORT HARDWARE

<p><b>Threaded Rod</b> For mounting to 3/8-16 threaded rod. Can be inserted anywhere along full access top slot of Busway. Hanger support spacing every 10 ft maximum.</p>
<p><b>Standard</b> For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along top full access slot.</p>
<p><b>Weight Hook</b> Can be used as a hanger to suspend Busway from chains or cables. Can also be used to hang loads up to 100 lbs under the Busway, such as light fixtures, tools and balancers</p>
<p><b>Recessed Suspended Ceilings</b></p>
<p><b>Raised Access Floor</b></p>

**PART NUMBER**  
BRH-1

**WEIGHT**  
0.3 lb



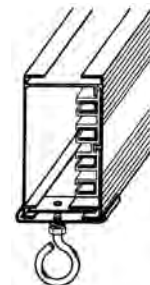
**PART NUMBER**  
BH-1

**WEIGHT**  
0.2 lb

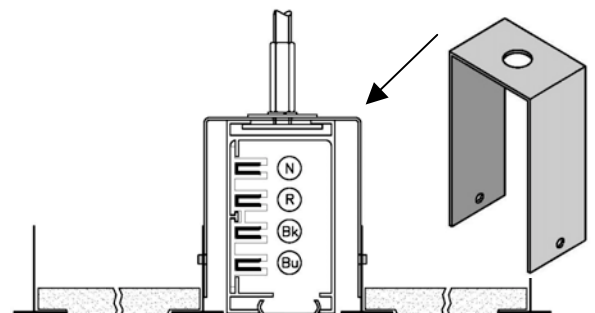


**PART NUMBER**  
WHR-2

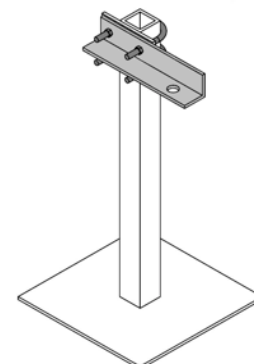
**WEIGHT**  
0.2 lb.



**PART NUMBER**  
RM100-1



**PART NUMBER**  
RFB-1



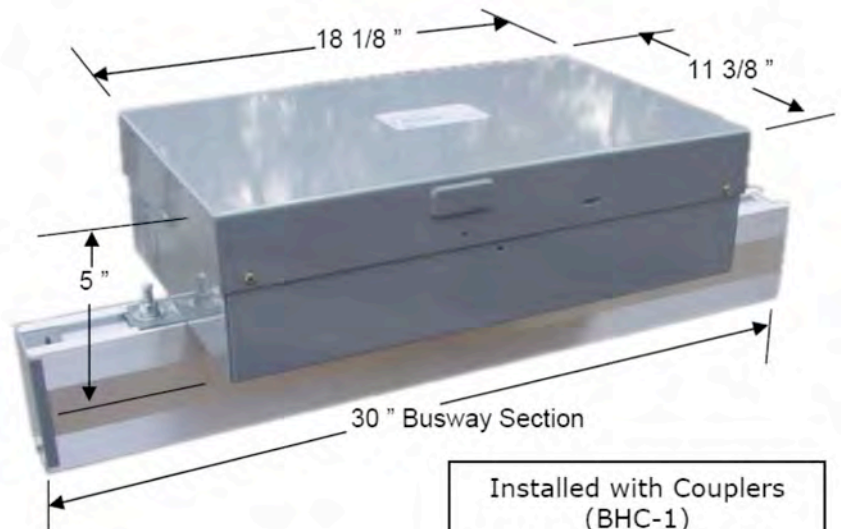
# 100 Amp



## POWER FEED UNITS Supplying power to TOP of Busway

### TOP Feed / Center Feed

The Top Feed Power unit comes as a completely pre-wired steel box to the top of a 30" section of Busway. A connection lug is located inside the box for field termination of supply power cable up to 1/0. This unit is then connected to the male end of an adjoining Busway section using an Installation Tool and set of Housing Couplers (ordered separately). CENTER Feed similar.



### END Feed

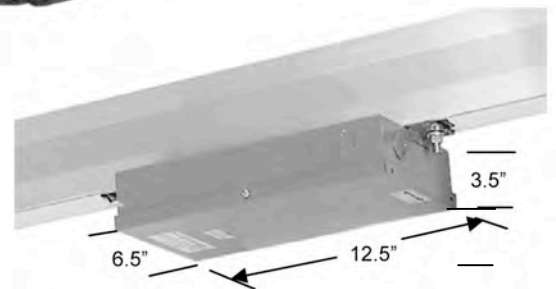
The standard End Feed consists of a steel junction box with removable side, box lugs and shrink tubing. The power feed box slips over the male end of the first Busway section and secured in place with mounting studs (supplied). Power supply cable is then terminated to each of the male Busway stabs using the box lugs.



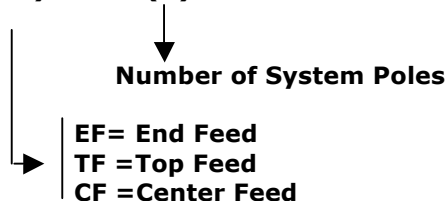
### BOTTOM Feed

Bottom feed can be made by using a 100Amp Terminal Block plug-in unit inserted and mounted below the Busway.

### BOTTOM Feed Using Terminal Block



### Catalog Number Sequence (XX)100A-(P)



### Catalog Number Selection

Catalog No.	Description	Weight
EF100A-3	End Feed, 3-Pole	6 lbs
EF100A-4	End Feed, 4-Pole	6 lbs
TF100A-3	Top Feed, 3-Pole	12.5 lbs
TF100A-4	Top Feed, 4-Pole	12.5 lbs
CF100A-3	Center Feed, 3-Pole	12.5 lbs
CF100A-4	Center Feed, 4-Pole	12.5 lbs
TB100A-100-3	Terminal Block, 100A, 3-pole	6.5 lbs
TB100A-100-4	Terminal Block, 100A, 4-pole	6.5 lbs
PFA100A-4	End Feed, 4-pole with ft flex For connection to trunk busway	8 lb





## GENERAL LAYOUT TIPS

- Try to keep all runs as straight as possible as tees and elbows are added cost.
- Standard Busway lengths are available in 20, 10 and 5-foot increments. Although the factory can cut individual STARLINE Track Busway sections to any length under 20 feet, it is highly recommend to keep all layout runs in increments of 5 feet. This recommendation is based on our experience with economics and simplifying job site installation. If housing sections are cut to 3, 4, 6ft, etc it can become cumbersome at the job site to determine which length goes with which run. By staying with 5-foot increments, this condition is minimized.
- Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

### LENGTH OF BUSWAY FOR A ONE VOLT DROP IN LINE TO LINE VOLTAGE

SYSTEM DESIGNATION	DISTRIBUTED LOAD	VOLTAGE DROP @ 0.8 PF Single Phase	VOLTAGE DROP @ 0.8 PF Three Phase
B100A (all systems)	100 Amps	54 FT	62 FT

- There is no need to be concerned with the specific detail and total count of support hardware, connectors and end caps as your local STARLINE Track Busway Applications Engineer will assist during the quotation process. Refer to SPECIFICATIONS for the suggested STARLINE specifications.
- Understand component relationship before specifying or ordering specific Tee or Elbow Sections. Refer to Component Relationship for details.



## COMPONENT RELATIONSHIP

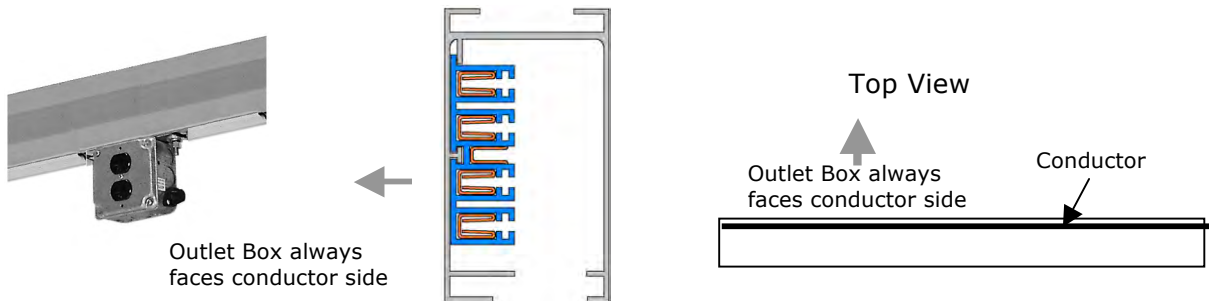
When ordering material it is important to understand the relationship between various components. Examples:

- Each housing section requires a coupler set. Determine the total number of housing sections (regardless of length) as this becomes the number of Housing Couplers (BHC) that will be needed. Part No BHC-1 contains a set (two).
- One BHC-1 Housing Coupler set is required for each end of all L's and T's.
- If this is your first installation, you will need to order Installation Tool B100AIT.
- General support hardware rule to follow:  
$$\text{Total System Length} + 0.10 (10\%) = \text{Support Hardware Qty } 10$$

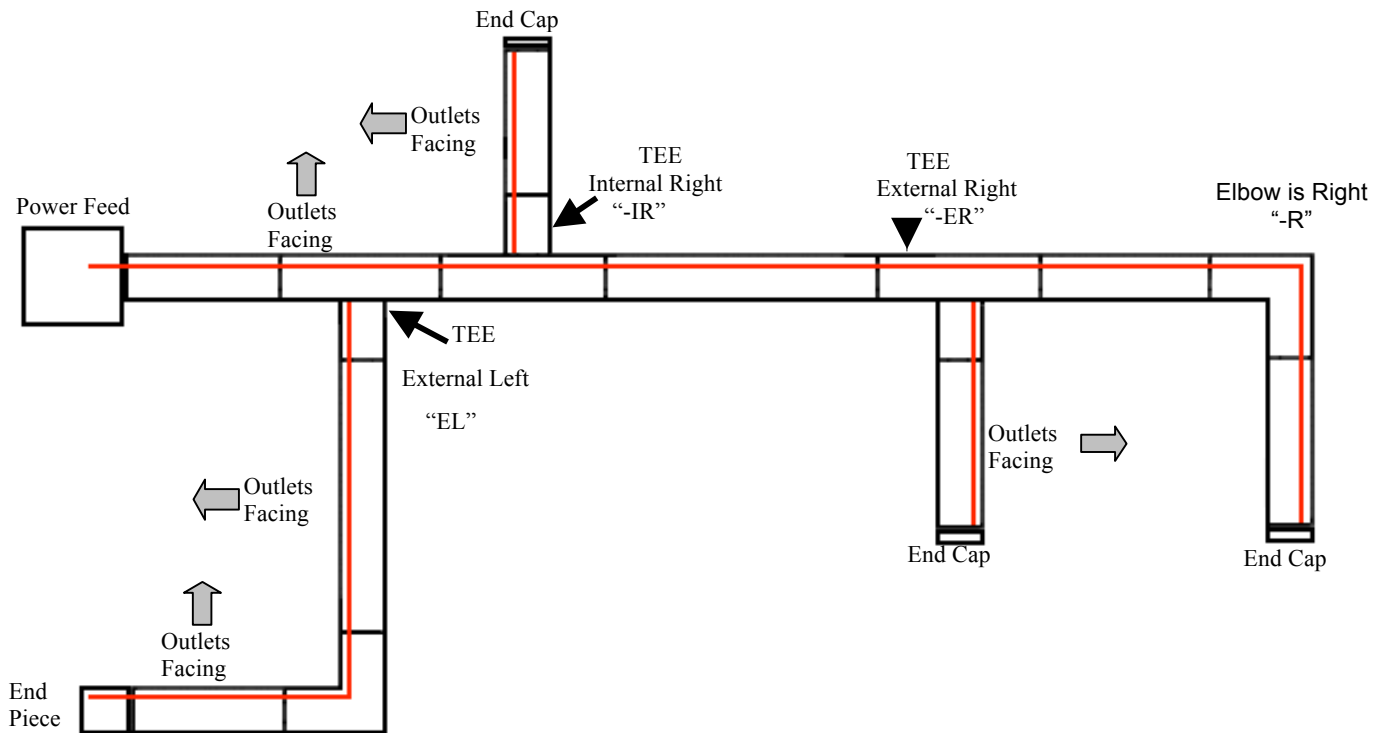
10 equal 10 ft spacing and 10% extra is recommended for job site changes.
- Total Power Feeds and End Caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering elbow or tee sections, it is important to understand polarity and the relationship to direction of outlets. Please refer to POLARITY CONCERNS for more detail.

## POLARITY CONCERNS

STARLINE utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation. It is particularly important to understand this design concept prior to ordering and/or installing some components. For example, if the face direction of a STARLINE plug-in unit is important in your installation consider that they will always face the conductor side. Certain plug-in units are 'reversible', designated by 'R', to face devices away from the conductor side.



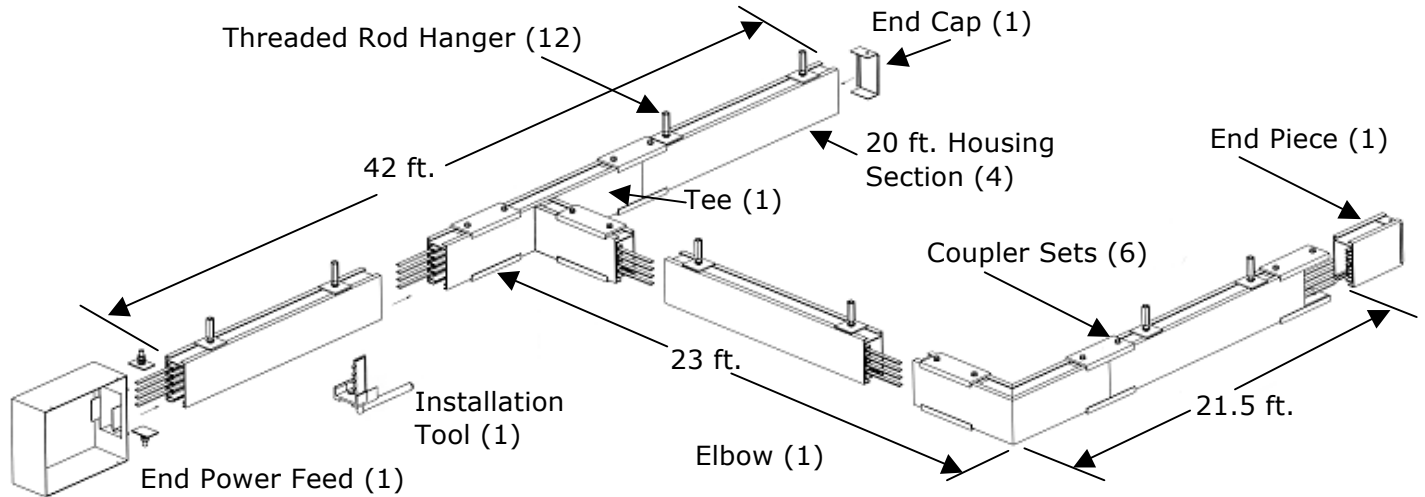
**Tee's and Elbow Section** are specified according to desired polarity



# 100 Amp



## SAMPLE TAKE-OFF



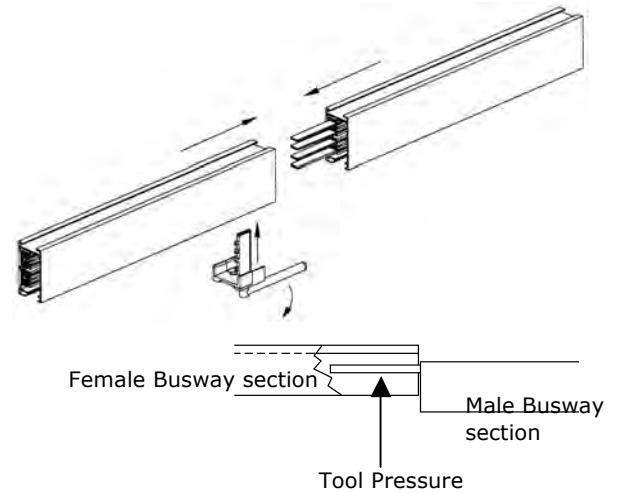
<b>BILL OF MATERIAL:</b>		
<b>QTY</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
<b>4</b>	<b>B100A-4PG-20</b>	<b>Housing Section, 20 feet, 4-Pole</b>
<b>1</b>	<b>EP-2</b>	<b>End Piece</b>
<b>6</b>	<b>BHC-1</b>	<b>Housing Coupler (pair)</b>
<b>1</b>	<b>EC-1</b>	<b>End Cap</b>
<b>12</b>	<b>BRH-1</b>	<b>3/8" Threaded Rod Hanger</b>
<b>1</b>	<b>T100A-4-EL</b>	<b>Tee, External Left -refer to Page 4.4</b>
<b>1</b>	<b>EL100A-4-R</b>	<b>Elbow, Right - refer to Page 4.3</b>
<b>1</b>	<b>B100AIT</b>	<b>Installation Tool</b>

# 100 Amp



## INSTALLATION TOOL

Used to connect two adjacent sections of Busway. Busway sections are first offset and butted together so that male stabs line up parallel to female busbar conductors. Installation tool is then inserted into joined intersection and rotated 90° forcing stabs into m-shaped female conductors making a spring-loaded, secure electrical connection. Mechanical Couplers (BHC) are then positioned over joined sections and tightened.



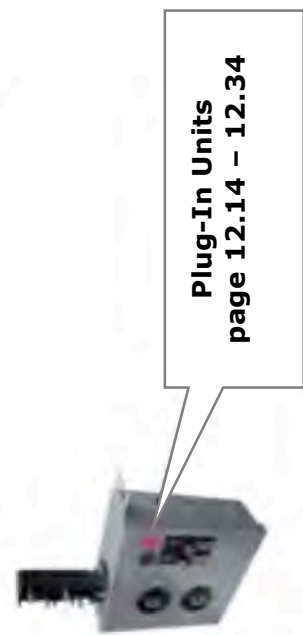
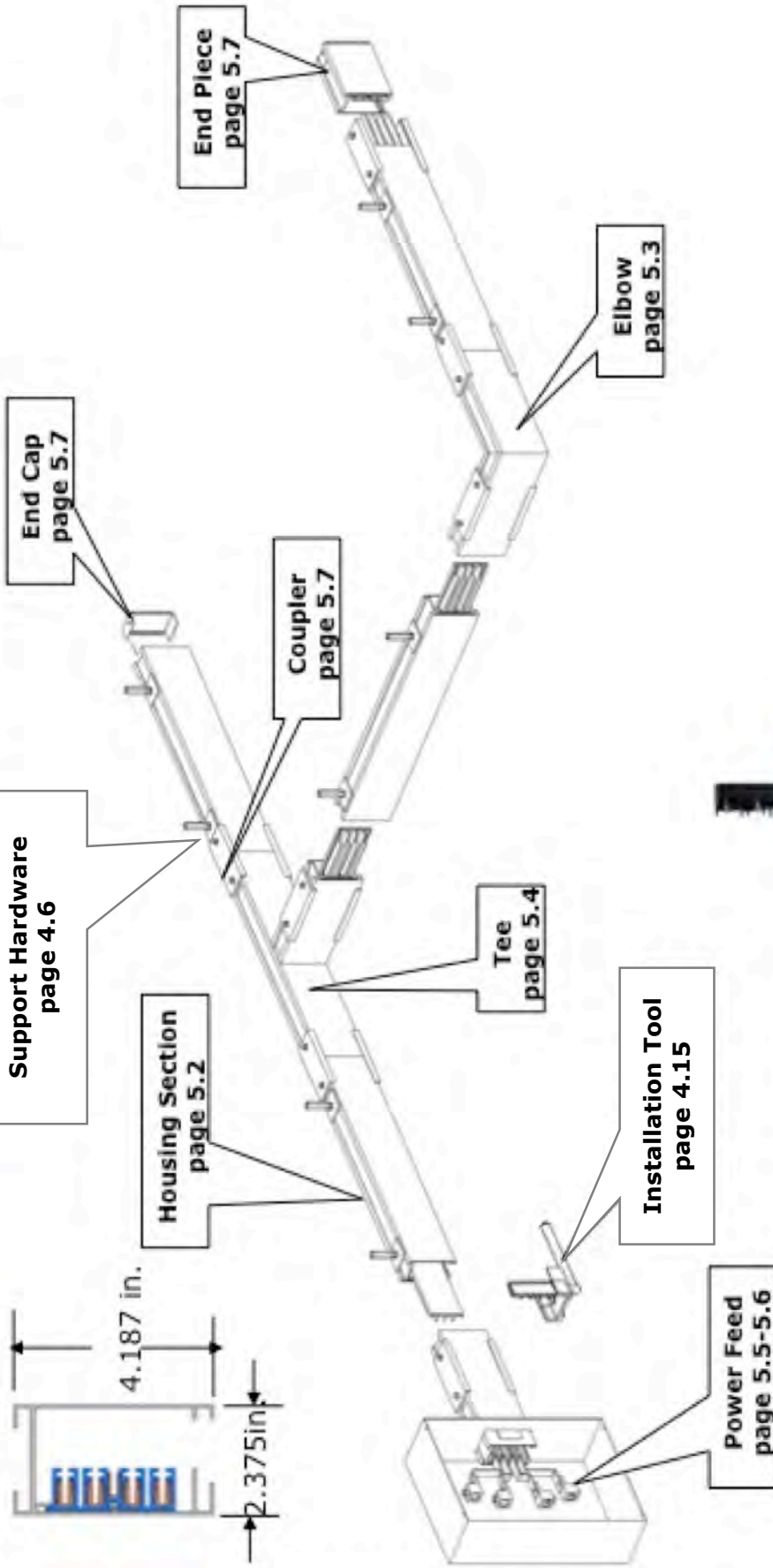
**For B100A  
PART NUMBER**

**B100AIT  
Weight 2.5 lbs**



**B100N Amp System to 600 Volt**  
**200% NEUTRAL**

3 or 4 pole



Accessories – Closure Strip page 5.7  
Weight Hook page 4.6

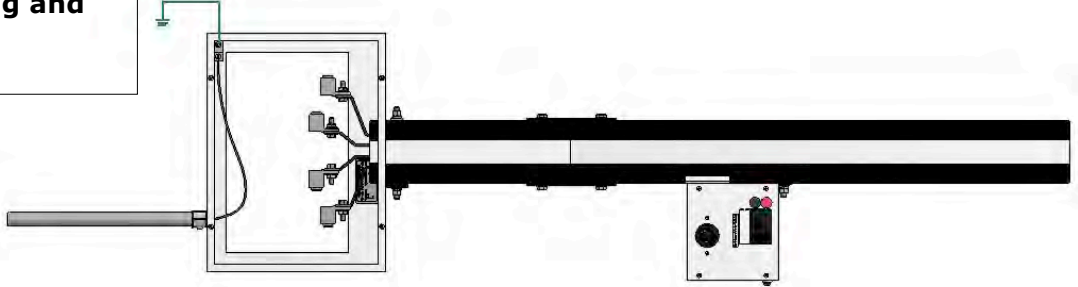
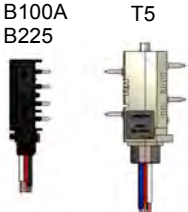
Plug-In Units  
page 12.14 – 12.34

# Ground Options

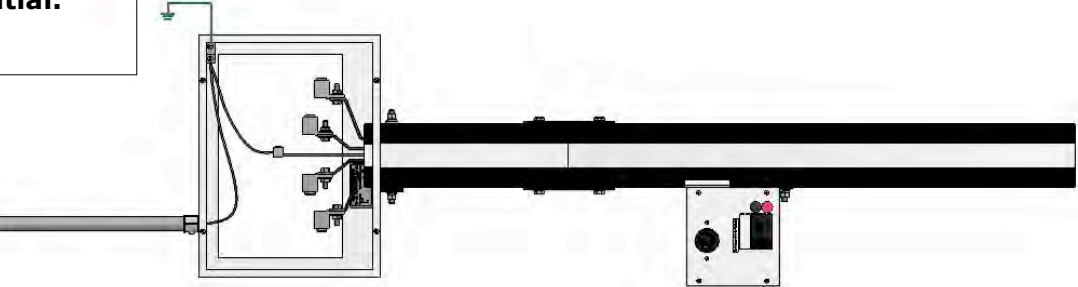
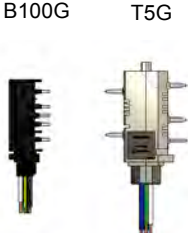


## FAQ CASE GROUND, DEDICATED GROUND, ISOLATED GROUND

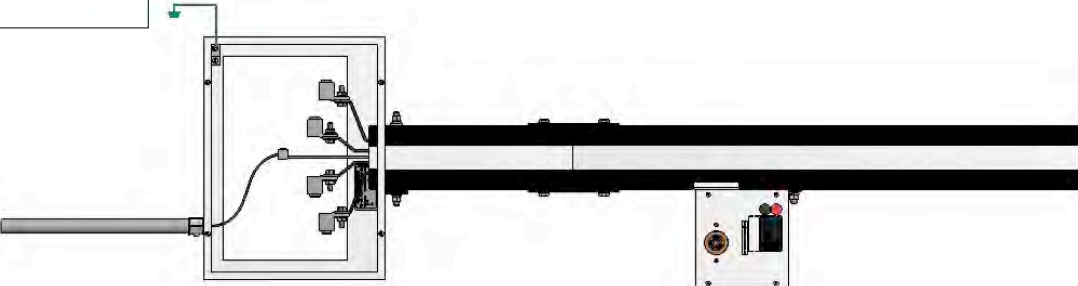
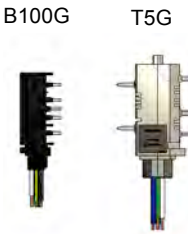
**CASE GROUND**  
Uses aluminum housing and no extra copper bar.



**DEDICATED GROUND**  
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.



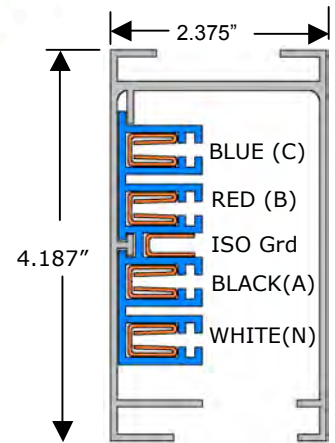
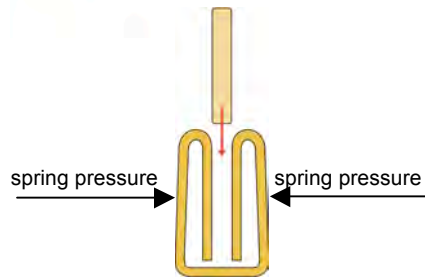
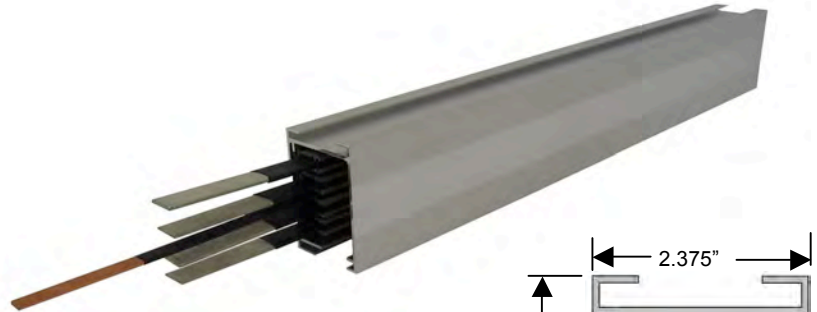
**ISOLATED GROUND**  
Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.



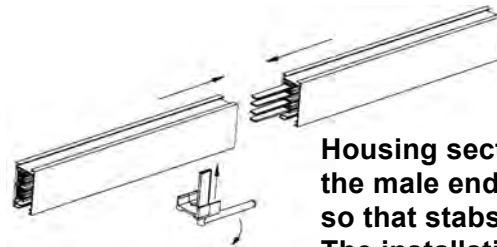
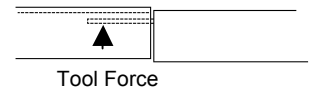
**HOUSING SECTIONS**

Track Busway housing section consists of an extruded aluminum shell with “spring-pressure” type copper channel busbars contained in a full length PVC insulator mounted on one side on the interior wall. The aluminum extrusion acts as a 100% ground path meeting UL 857 Standard and complies with applicable paragraphs of Section 250 of the NEC. Each housing has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 2, 3 and 4-pole varieties with 600 Volt maximum rating. Each housing section has male stabs protruding at one end which fit into the channels of the adjoining section. An installation tool is used to force the stabs into the busbar channels for a solid spring-tempered electrical connection.

- MATERIAL:** Extruded Aluminum  
**RATINGS:** 100% Ground Path  
 100 Amp, 600 Volt  
 200 Amp Neutral  
**LENGTH:** 5 Ft, 10 ft, 20 Ft.  
**VOLTAGE:** Distributed load  
**DROP:** Single Phase 40 ft (.8PF)  
 Three Phase 45 ft (.8PF)

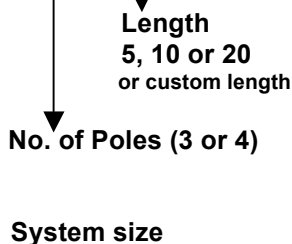


**“Spring-pressure”  
channel busbar  
U.S. Pat. 6,039,584**



Housing sections are joined by inserting the male end into the open female end so that stabs are parallel to female slots. The installation tool is then rotated to force stabs into slots.

**Catalog Number Sequence  
B100NG-(X)PG-(L)**



**Catalog Number Selection**

Catalog No.	Description	Length	Weight
B100N-3PG-5	100 Amp, 3-pole	5 feet	16 lbs
B100N-3PG-10	100 Amp, 3-pole	10 feet	29 lbs
B100N-3PG-20	100 Amp, 3-pole	20 feet	57 lbs
B100N-4PG-5	100 Amp, 4-pole	5 feet	17 lbs
B100N-4PG-10	100 Amp, 4-pole	10 feet	33 lbs
B100N-4PG-20	100 Amp, 4-pole	20 feet	64 lbs



**ELBOW SECTIONS**

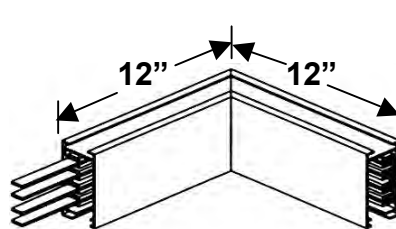
**Elbow Section**

Elbows are used for making a 90 degree in a Busway run. Specify right or left elbow, according to the orientation of the busbars in the Busway sections to be connected. Refer to POLARITY for detail.

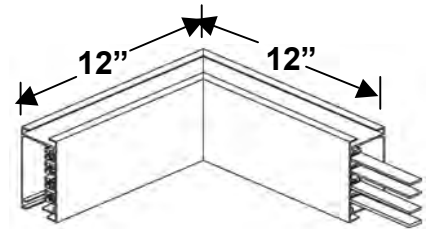
Coupler set BHC-2 (CONNECTION ACCESSORIES ordered separately) is used to mechanically connect top and bottom of Elbow section to adjacent Busway.



**Horizontal Elbow**



**Right Elbow**

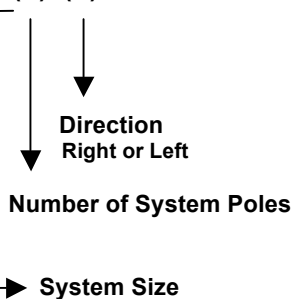


**Left Elbow**



Installed with couplers (**ORDERED SEPARATELY**)

**Catalog Number Sequence  
EL100N-(P)-(X)**



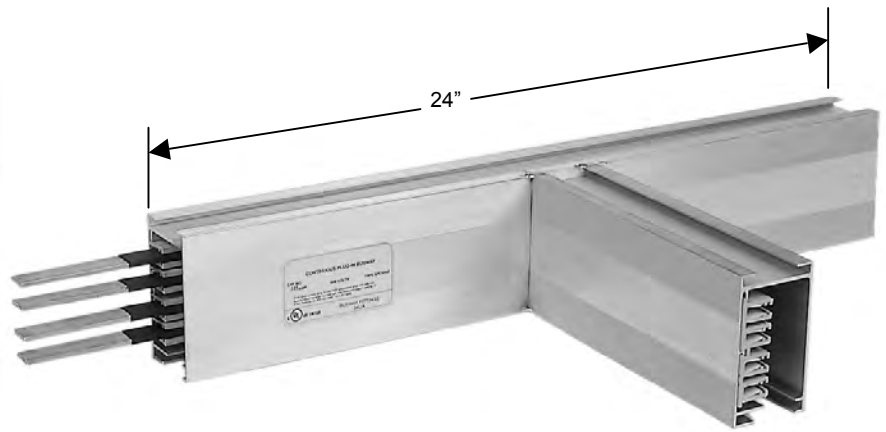
**Catalog Number Selection**

Catalog No.	Description	Weight
EL100N-3-L	Elbow, horizontal, 3-pole, left	5.6 lbs
EL100N-3-R	Elbow, horizontal, 3-pole, right	5.6 lbs
EL100N-4-L	Elbow, horizontal, 4-pole, left	5.6 lbs
EL100N-4-R	Elbow, horizontal, 4-pole, right	5.6 lbs

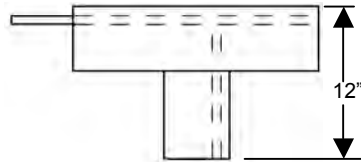
**TEE SECTIONS**

**Tee Section**

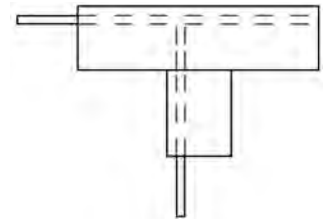
Tee sections are used for creating a 90 degree branch leg in a Busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Refer to LAYOUT for further detail. Tee sections are connected to adjacent Busway sections using an installation tool B225IT. A housing coupler set BHC-2 (ordered separately) is used to mechanically connect the top and bottom of tee sections to adjacent Busway.



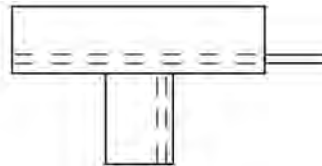
**External Right  
-ER**



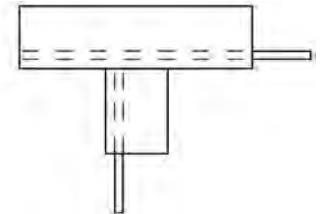
**External Left  
-EL**



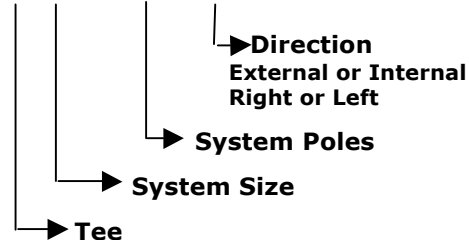
**Internal Right  
-IR**



**Internal Left  
-IL**



**Catalog Number Sequence  
T100N- (P)-(XX)**



**Catalog Number Selection**

Catalog No.	Description	Weight
T100N-4-IL	Tee, 4-pole, Internal Left	9.2 lbs
T100N-4-EL	Tee, 4-pole, External Left	9.2 lbs
T100N-4-IR	Tee, 4-pole, Internal Right	9.2 lbs
T100N-4-ER	Tee, 4-pole, External Right	9.2 lbs

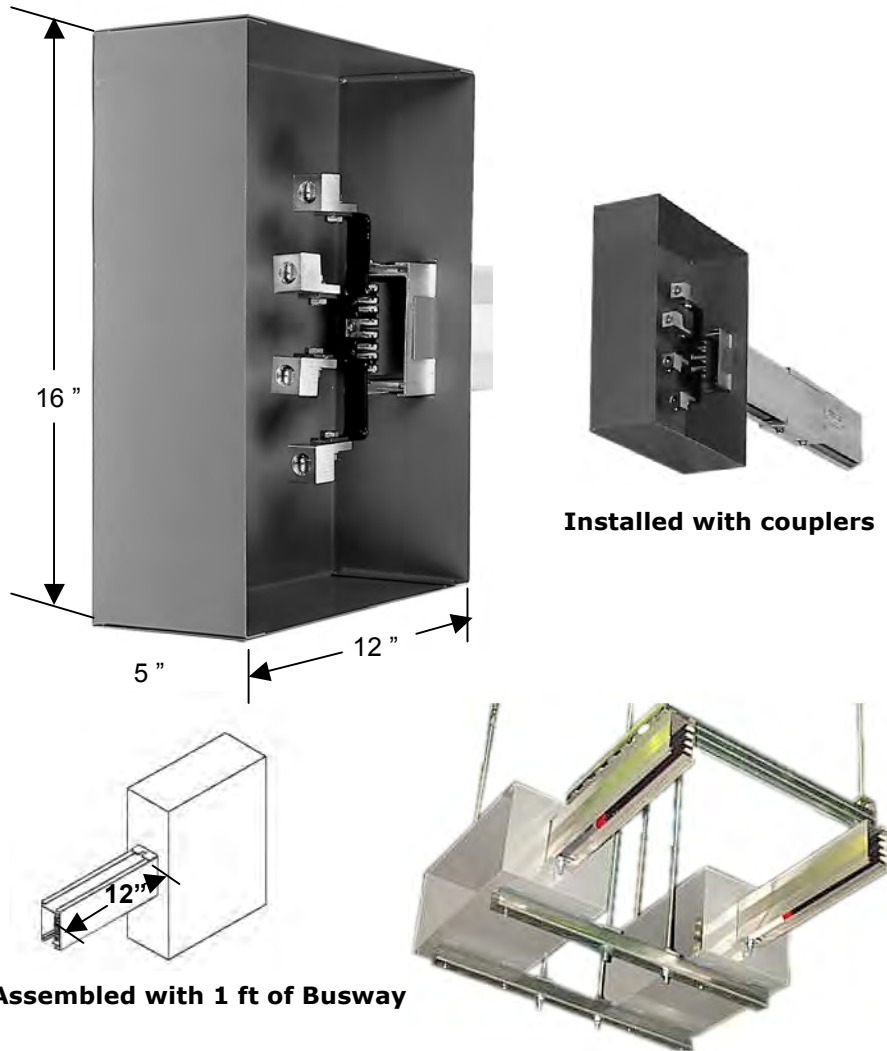
**END POWER FEED UNITS**  
Supplying power to END of Busway

**End Power Feed Units**

Standard End Power Feed units connect to the male end of the Busway. Factory assembled unit consists of a 12 X 16 X 5 in. steel junction box, with removable side, connected to a 1 ft section of Busway. The assembly includes connection lugs, a ground lug and shrink tubing for wires up to 300 MCM. End feed units for connection to female Busway ends are also available.

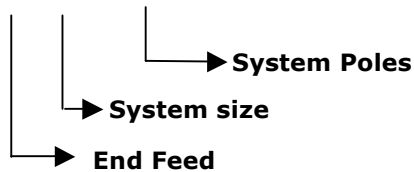
End Power Feed units are connected to adjacent Busway sections using Installation Tool B225IT and Housing Coupler Set BHC-2 (ordered separately).

Special need power feed units for confined spaces as found in Mission Critical Data Centers can also be designed and fabricated requiring minimum quantities.



Data Center custom units can also be fabricated with minimum quantities

**Catalog Number Sequence**  
EF100N-(P)



**Catalog Number Selection**

Catalog No.	Description	Weight
EF100N-4	End Feed, 4-Pole	17 lbs
EF100N-3	End Feed, 3-Pole	16.5 lbs
EF100N-4M	End Feed, 4-Pole male Busway end	17 lbs
EF100N-3M	End Feed, 3-Pole male Busway end	17 lbs

# 100 Amp 200% Neutral

## TOP POWER FEED

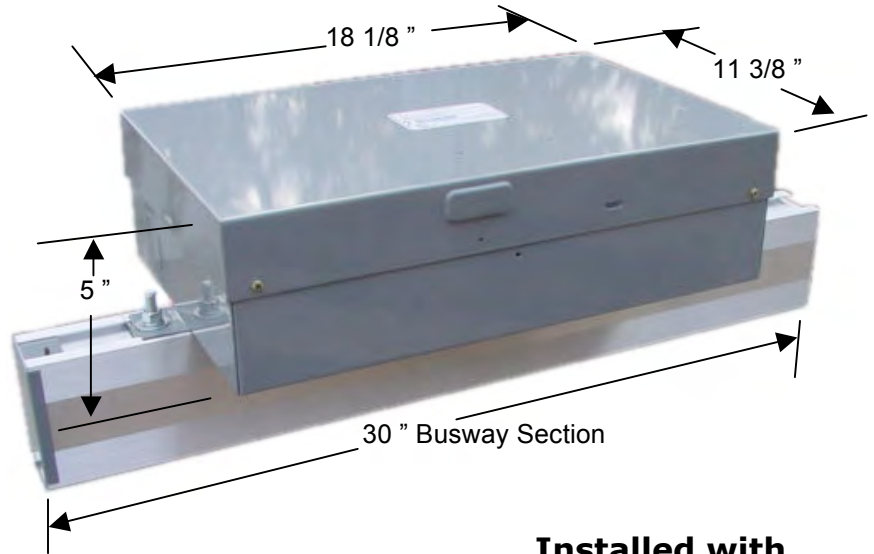
Supplying power to TOP of Busway

### Top Power Feed Units

Standard Top Power Feed units connect to the top of the Busway. Factory assembled unit consists of a 18.125 X 11.375 X 5 in. steel junction box, with removable top, mounted on top of a 30 in. section of Busway.

Top Feed Power units can be on the end of the Busway run by connecting to adjacent Busway sections using Installation Tool B225IT (Page 8.10) and Coupler Set BHC-2 (Page 8.8).

Center Feed unit can also be used as top power supply point anywhere along Busway run by connecting to adjacent Busway sections at both ends.

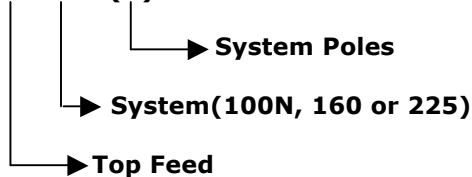


**Installed with  
Couplers (BHC-2)  
Ordered Separately**



### Catalog Number Sequence

TF225-(P)



### Catalog Number Selection

Catalog No.	Description	Weight
TF100N-4*	End Feed, 4-Pole	16.5 lbs
TF100N-3	End Feed, 3-Pole	16 lbs
CFB100N-4	Center Feed, 4-Pole	

Substitute "100NG" for B100NG system

# 100 Amp 200% NEUTRAL



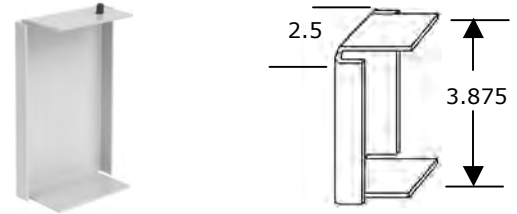
## CONNECTION ACCESSORIES

### END CAP

For covering the female end of B100 Busway. End Piece (EP) is used to cover male end.

PART NUMBER  
EC-1

WEIGHT 0.2 lb

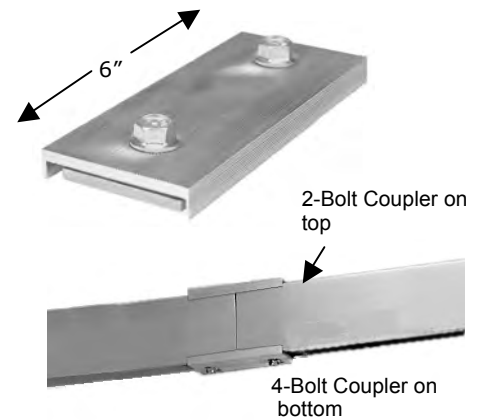


### HOUSING COUPLERS

Connects adjacent Busway sections and/or end piece. One pair required. BHC-1 consists of two, 2-bolt couplers per set; one for the top and one for the bottom.

PART NUMBER  
BHC-2

WEIGHT 0.8 lb



### END PIECE

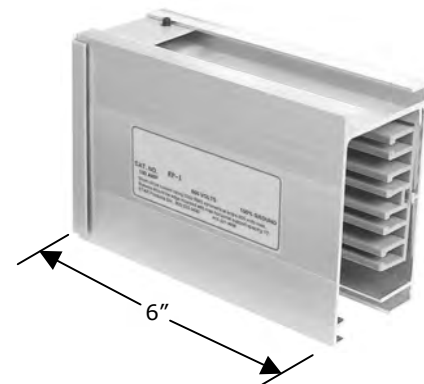
The end piece is a 6 in. section of Busway housing, insulator and an end cap.

It is used to cover the protruding copper busbar connector blades at the male end of a Busway run. An end Cap (EC) is used to cover female end.

**BHC-2 ALSO REQUIRED**

PART NUMBER  
EP-2

WEIGHT 0.8 lb



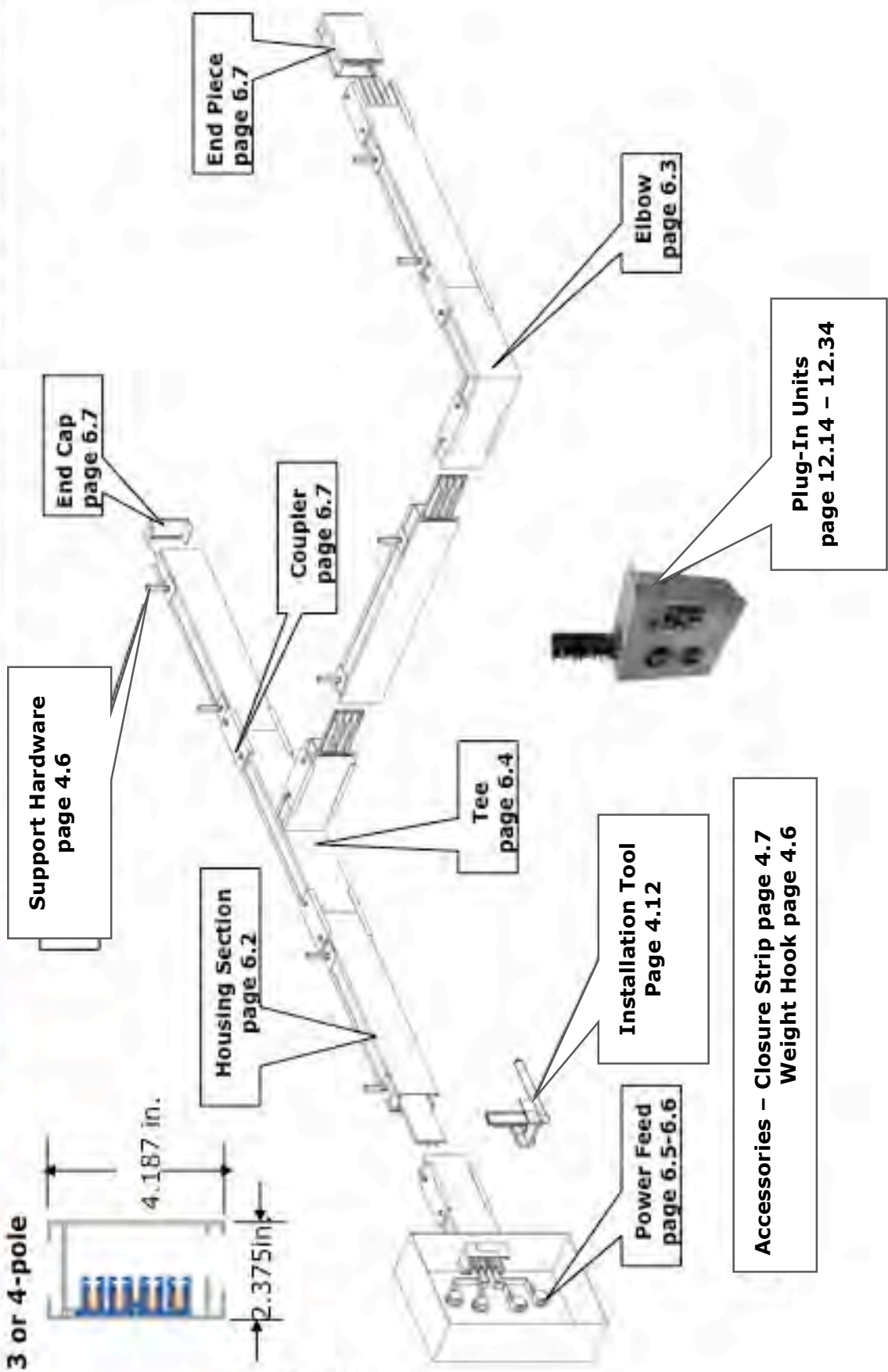
### OPTIONAL CLOSURE STRIP

Snaps into bottom access slot of B100 housing sections. Normally shipped in 10 ft lengths and can be field cut to fit exact desired length.

PART NUMBER  
CS-1 - PVC  
CS-1-AL - Aluminum  
CUT LENGTH = 10 ft



**B100G/B100NG 100Amp Systems**  
ISOLATED GROUND with 100% or 200% Neutral



# Ground Options



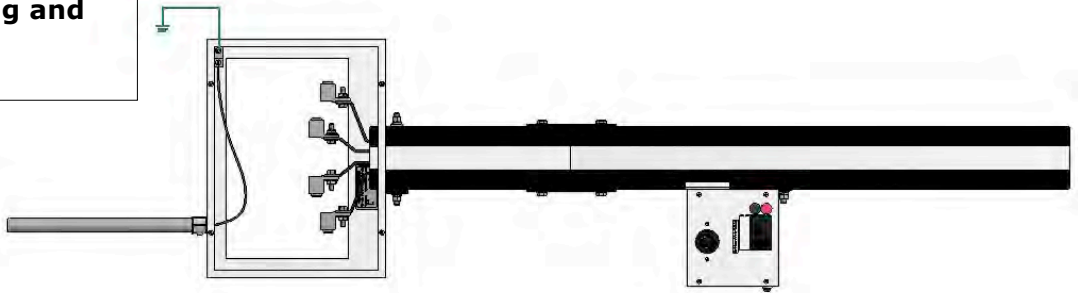
## FAQ CASE GROUND, DEDICATED GROUND, ISOLATED GROUND

**CASE GROUND**  
Uses aluminum housing and no extra copper bar.

B100A  
B225



T5

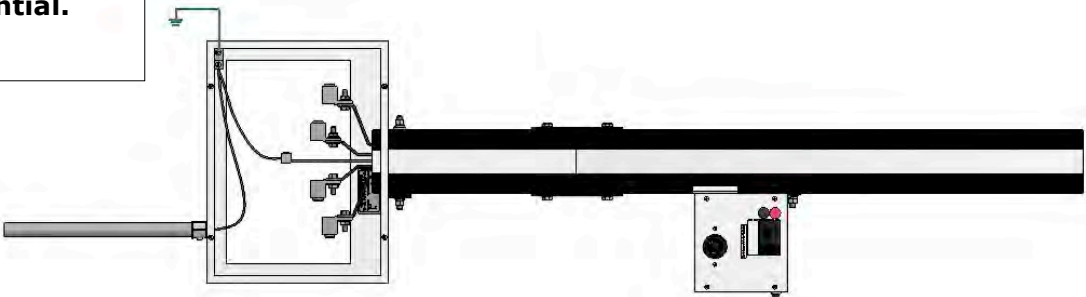
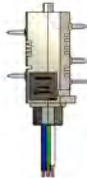


**DEDICATED GROUND**  
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.

B100G



T5G

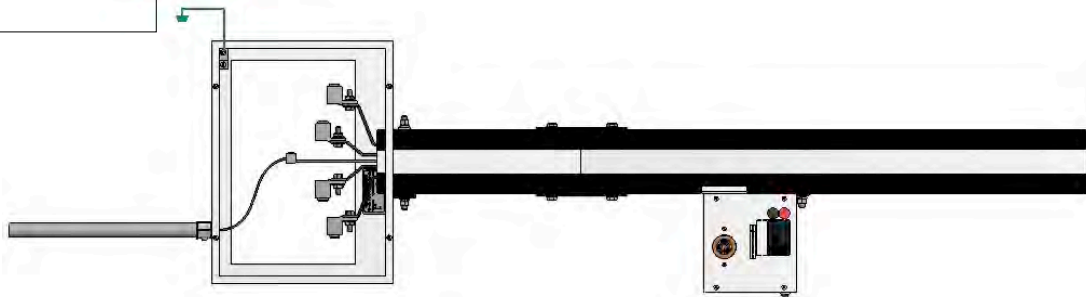


**ISOLATED GROUND**  
Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.

B100G



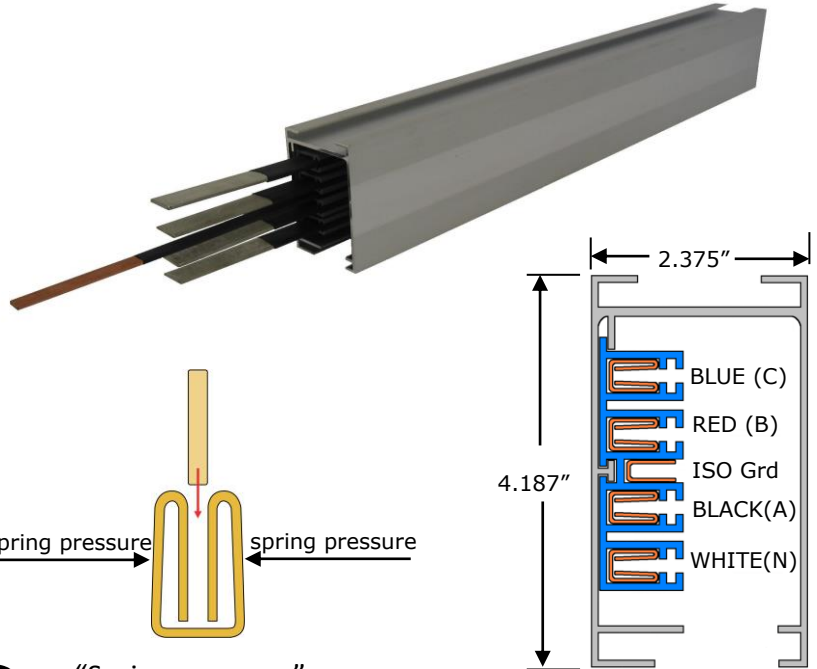
T5G



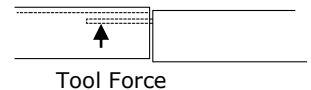
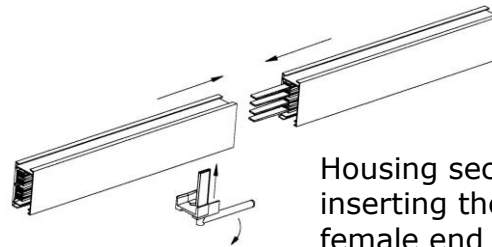
## HOUSING SECTIONS

Track Busway housing section consists of an extruded aluminum shell with "spring-pressure" type copper channel busbars contained in a full length PVC insulator mounted on one side on the interior wall. Center conductor acts as 100% ground path meeting UL 857 Standard and complies with applicable paragraphs of Section 250 of the NEC. Each housing has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 3 and 4-pole varieties with 300 (standard) or 600 Volt maximum rating. Each housing section has male stabs protruding at one end which fit into the channels of the adjoining section. An installation tool is used to force the stabs into the busbar channels for a solid "spring-loaded" electrical connection.

**MATERIAL:** Extruded Aluminum  
**RATINGS:** 100% Ground Path  
 100 Amp, 300 Volt  
**B100NG:** 200 Amp Neutral  
**B100G:** 100 Amp Neutral  
**LENGTH:** 5 Ft, 10 ft, 20 Ft.  
**VOLTAGE DROP:** Distributed load  
 Single Phase  
 54ft (.8PF)  
 Three Phase  
 62ft (.8PF)

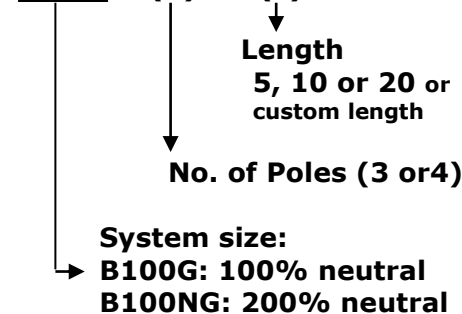


"Spring-pressure" channel busbar  
 U.S. Pat. 6,039,584



Housing sections are joined by inserting the male end into the open female end so that stabs are parallel to female slots. The installation tool is then rotated to force stabs into slots.

### Catalog Number Sequence



### Catalog Number Selection

Catalog No.	Description	Length	Weight
B100G-4PG-5-300	100A/IsoGnd,4-pole	5 ft	17 lbs
B100G-4PG-10-300	100A/IsoGnd,4-pole	10 ft	30 lbs
B100G-4PG-20-300	100A/IsoGnd,4-pole	20 ft	58 lbs
B100NG-4PG-5-300	100A/IsoGnd,200%N	5 ft	18 lbs
B100NG-4PG-10-300	100A/IsoGnd,200%N	10 ft	34 lbs
B100NG-4PG-20-300	100A/IsoGnd,200%N	20 ft	65 lbs



## ELBOW SECTIONS

### Elbow Section

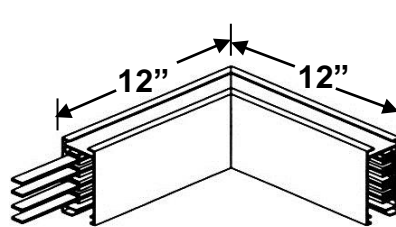
Elbows are used for making a 90 degree angle in a Busway run. Specify right or left elbow, according to the orientation of the busbars in the Busway sections to be connected. Refer to POLARITY for detail.

Housing Coupler set BHC-2 (CONNECTION ACCESSORIES ordered separately) is used to mechanically connect top and bottom of Elbow section to adjacent Busway.

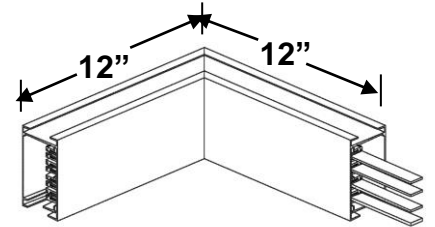
**IMPORTANT NOTE:** Elbows for 300Volt rated systems have 12 in. legs ("X"). Elbows for 600 Volt rated systems have 18 in. legs.



Horizontal Elbow



Right Elbow



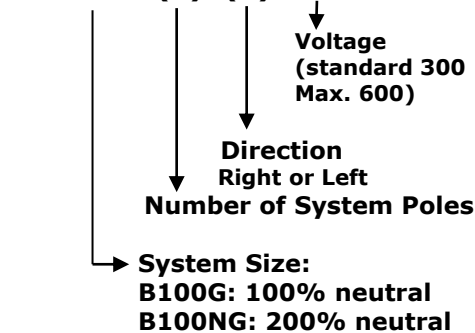
Left Elbow



Installed with couplers  
**(ORDERED SEPARATELY)**



### Catalog Number Sequence



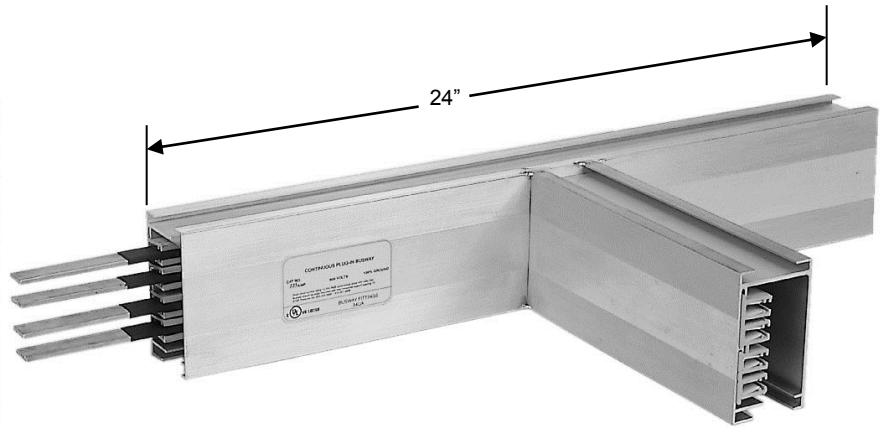
### Catalog Number Selection

Catalog No.	Description	Weight
EL100G-3-L	Elbow, horizontal, 3-pole, left	5.6 lbs
EL100G-3-R	Elbow, horizontal, 3-pole, right	5.6 lbs
EL100G-4-L	Elbow, horizontal, 4-pole, left	5.6 lbs
EL100G-4-R	Elbow, horizontal, 4-pole, right	5.6 lbs
EL100NG-3-L	Elbow, horizontal, 3-pole, left	5.6 lbs
EL100NG-3-R	Elbow, horizontal, 3-pole, right	5.6 lbs
EL100NG-4-L	Elbow, horizontal, 4-pole, left	5.6 lbs
EL100NG-4-R	Elbow, horizontal, 4-pole, right	5.6 lbs

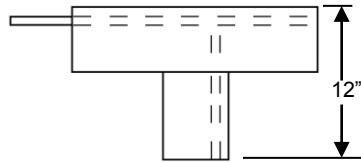
**TEE SECTIONS for 300 VOLT ONLY**

**Tee Section**

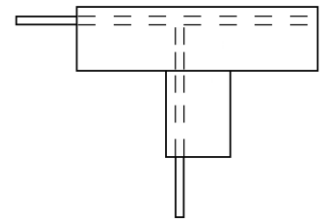
Tee sections are used for creating a 90 degree branch leg in a Busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Refer to LAYOUT for further detail. Tee sections are connected to adjacent Busway sections using an installation tool B225IT. A housing coupler set BHC-2 (ordered separately) is used to mechanically connect the top and bottom of tee sections to adjacent Busway.



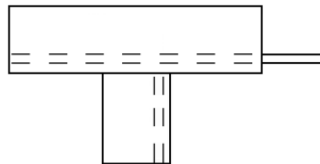
**External Right  
-ER**



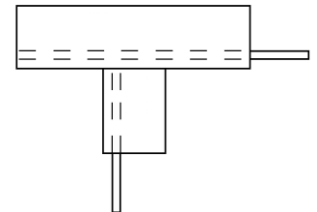
**External Left  
-EL**



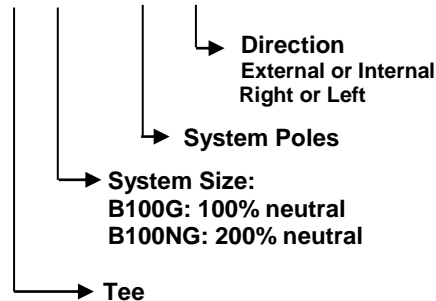
**Internal Right  
-IR**



**Internal Left  
-IL**



**Catalog Number Sequence  
T100NG- (P)-(XX)**



**Catalog Number Selection**

Catalog No.	Description	Weight
T100G-4-IL-300	Tee, 4-pole, Internal Left	9.2 lbs
T100G-4-EL-300	Tee, 4-pole, External Left	9.2 lbs
T100G-4-IR-300	Tee, 4-pole, Internal Right	9.2 lbs
T100G-4-ER-300	Tee, 4-pole, External Right	9.2 lbs
T100NG-4-IL-300	Tee, 4-pole, Internal Left	9.2 lbs
T100NG-4-EL-300	Tee, 4-pole, External Left	9.2 lbs
T100NG-4-IR-300	Tee, 4-pole, Internal Right	9.2 lbs
T100NG-4-ER-300	Tee, 4-pole, External Right	9.2 lbs

# B100G/B100NG Systems

## POWER FEED UNITS Supplying power to END of Busway

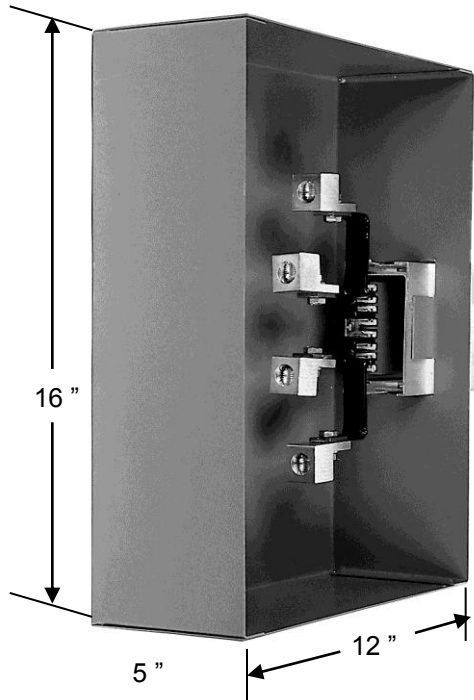
### End Power Feed Units

Standard End Power Feed units connect to the male end of the Busway. Factory assembled unit consists of a 12 X 16 X 5 in. steel junction box, with removable side, connected to a 1 ft section of Busway. It includes connection lugs, ground lugs and shrink tubing for wires up to 300 MCM. Units for connection to female Busway ends are also available.

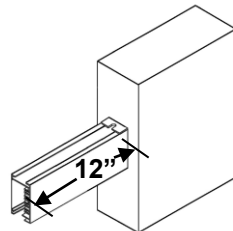
End Power Feed units are connected to adjacent Busway sections using Installation Tool B225IT and Housing Coupler Set BHC-2 (ordered separately).

**IMPORTANT NOTE:** Power feed Units for 300Volt rated systems have 12 in. Busway Sections ("X"). Busway Sections for 600 Volt rated systems have 18 in. legs.

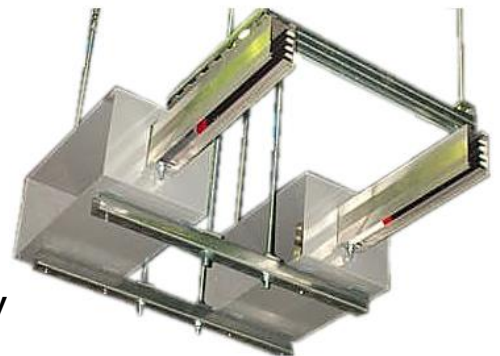
Special need power feed units for confined spaces as found in Mission Critical Data Centers can also be designed and fabricated, minimum quantities required.



Installed with couplers



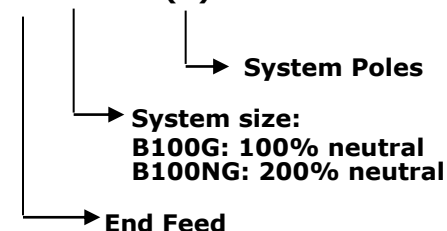
Assembled with 1 ft of Busway



Data Center custom units can also be fabricated with minimum quantities



### Catalog Number Sequence EF100NG-(P)-300



### Catalog Number Selection

Catalog No.	Description	Weight
EF100G-4-300	End Feed, 4-Pole	17 lbs
EF100G-3-300	End Feed, 3-Pole	16.5 lbs
EF100G-4M-300	End Feed, 4-Pole male end	17 lbs
EF100G-3M-300	End Feed, 3-Pole male end	17 lbs
EF100NG-4-300	End Feed, 4-Pole	17 lbs
EF100NG-3-300	End Feed, 3-Pole	16.5 lbs
EF100NG-4M-300	End Feed, 4-Pole male end	17 lbs
EF100NG-3M-300	End Feed, 3-Pole male end	17 lbs

# B100G/B100NG Systems

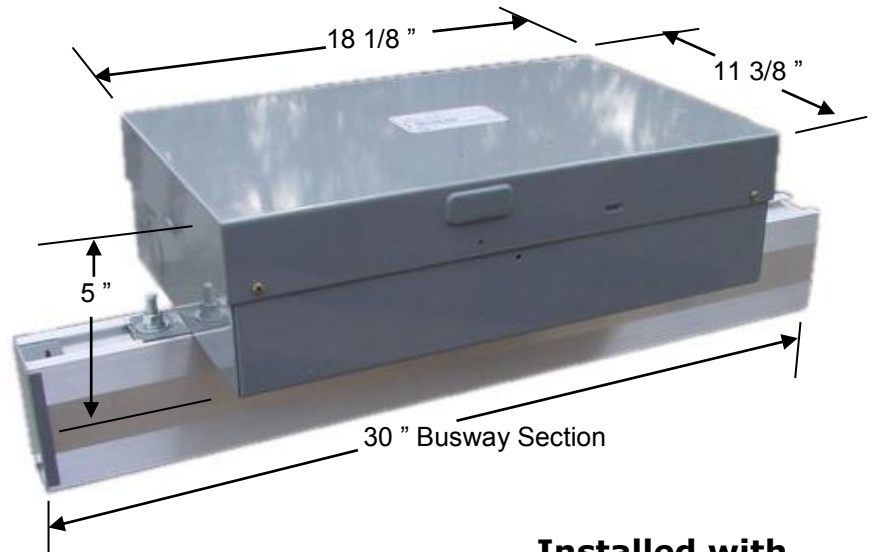
**TOP POWER FEED**  
Supplying power to TOP of Busway

### Top Power Feed Units

Standard Top Power Feed units connect to the top of the Busway. Factory assembled unit consists of a 18.125 X 11.375 X 5 in. steel junction box, with removable top, mounted on top of a 30 in. section of Busway.

Top Feed Power units can be on the end of Busway run by connecting to adjacent Busway sections using Installation Tool B225IT and Housing Coupler Set BHC-2.

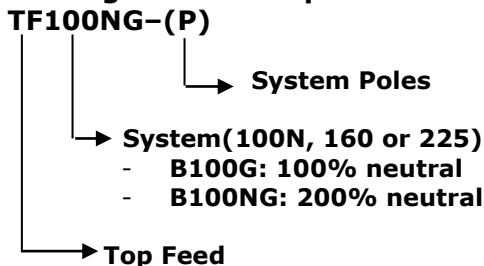
Center Feed unit can also be used as top power supply point anywhere along Busway run by connecting to adjacent Busway sections at both ends.



**Installed with Couplers (BHC-2)  
Ordered Separately**



### Catalog Number Sequence



### Catalog Number Selection

Catalog No.	Description	Weight
TF100G-4-300	End Feed, 4-Pole	16.5 lbs
CFB100G-4-300	Center Feed, 4-Pole	20 lbs
TF100NG-4-300	End Feed, 4-Pole	16.5 lbs
CFB100NG-4-300	Center Feed, 4-Pole	20 lbs

(mounted on top of 30 in. Busway Section)

# B100G/B100NG Systems



## CONNECTION ACCESSORIES

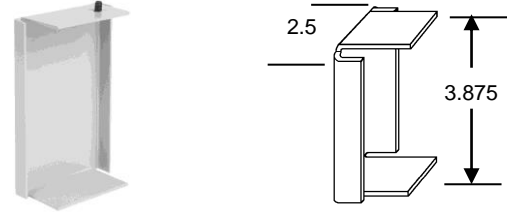
### END CAP

For covering the female end of B100 Busway. End Piece (EP) is used to cover male end.

PART NUMBER

EC-1

WEIGHT 0.2 lb



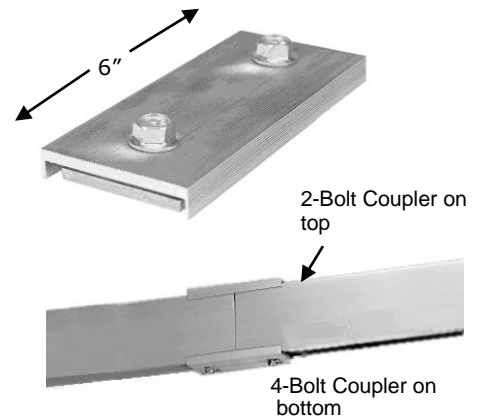
### HOUSING COUPLERS

For connecting adjacent Busway sections and/or end piece. One pair required. BHC-1 consists of two, 2-bolt couplers per set; one for the top and one for the bottom.

PART NUMBER

BHC-2

WEIGHT 0.8 lb



### END PIECE

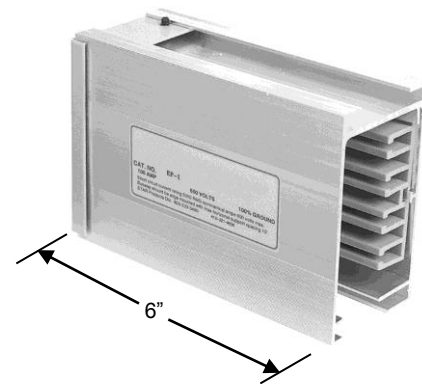
The end piece is a 6 in. section of Busway housing, insulator and an end cap. It is used to cover the protruding copper busbar connector blades at the male end of a Busway run. End Cap (EC) is used to cover female end.

**BHC-2 ALSO REQUIRED**

PART NUMBER

EP-2

WEIGHT 0.8 lb



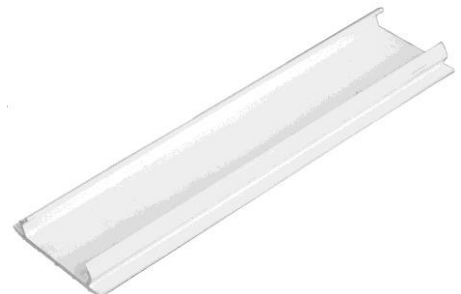
### OPTIONAL CLOSURE STRIP

Snaps into bottom access slot of B100 housing sections. Normally shipped in 10 ft lengths and can be field cut to fit exact desired length.

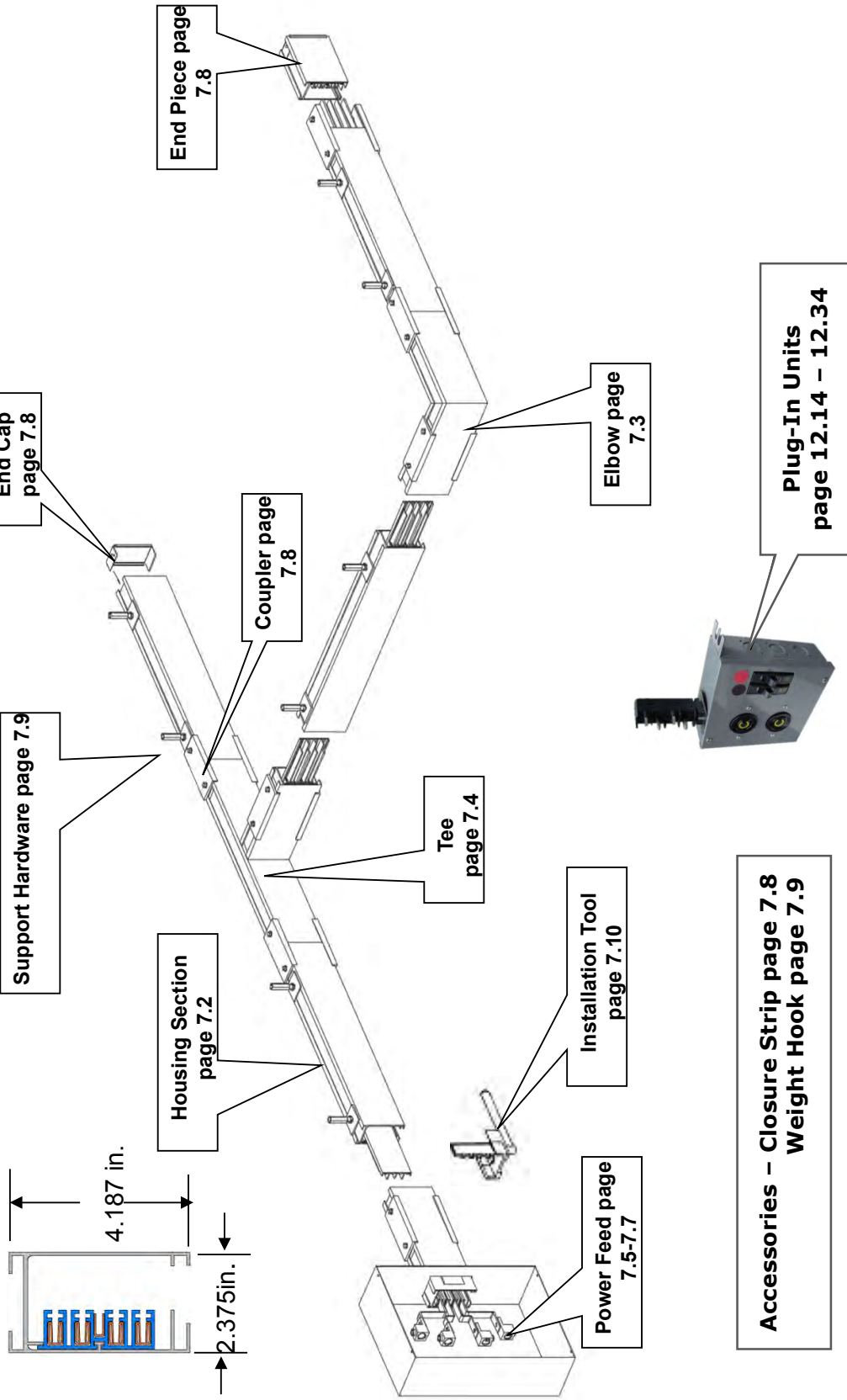
PART NUMBER

CS-1 - PVC  
CS-1AL - Aluminum

CUT LENGTH = 10ft



3 or 4 pole

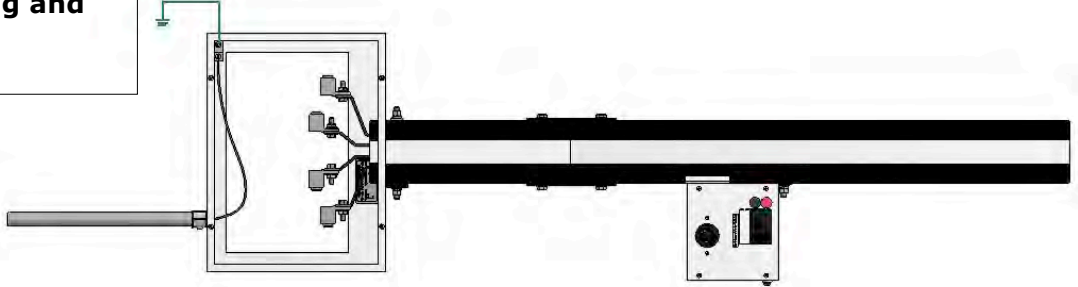
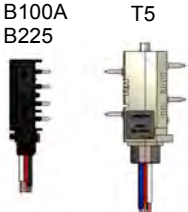


# Ground Options

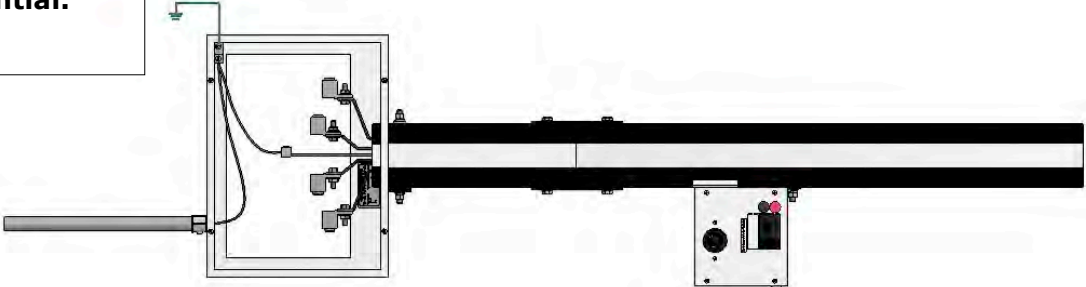
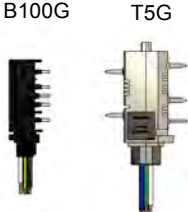


## FAQ CASE GROUND, DEDICATED GROUND, ISOLATED GROUND

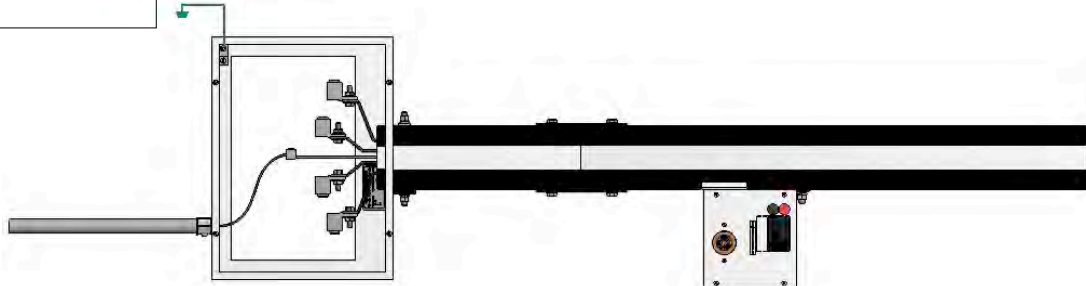
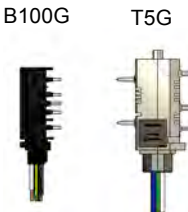
**CASE GROUND**  
Uses aluminum housing and no extra copper bar.



**DEDICATED GROUND**  
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.



**ISOLATED GROUND**  
Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.



# 225 Amp

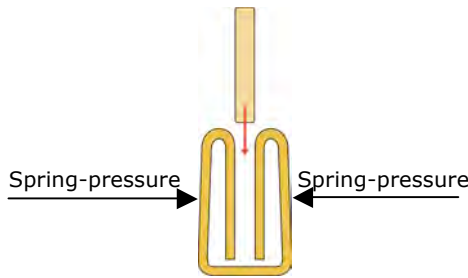
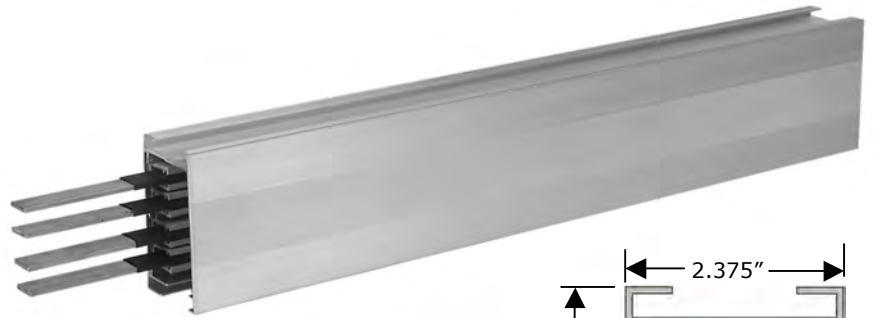


## HOUSING SECTION

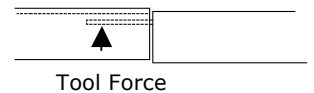
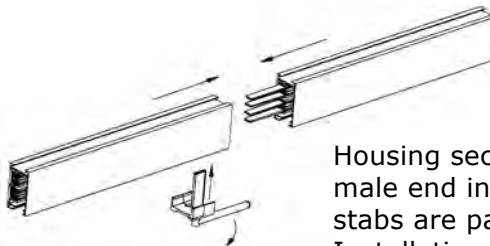
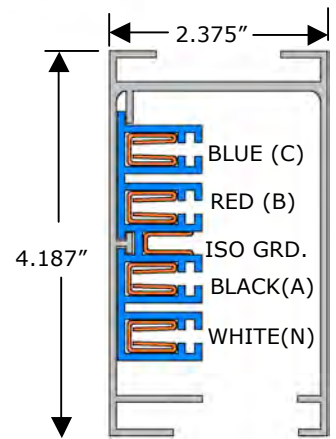
Track Busway housing section consists of an extruded aluminum shell with "spring - pressure" type copper channel busbars contained in a full length PVC insulator mounted on one side on the interior wall. The aluminum extrusion acts as a 100% ground path meeting UL 857 Standard and complies with applicable paragraphs of Section 250 of the NEC. Each housing has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 3 and 4-pole varieties with 600 Volt maximum rating. (B225G 300 volt) Each housing section has male stabs protruding at one end which fit into the channels of the adjoining section. Female-Female construction without male blades is available for some applications. Specify 'FF' suffix. Installation tool is used to force the stabs into the busbar channels for a solid spring-tempered electrical connection.

**RATINGS: 225 Amp, 600 Volt**

**LENGTH: 5, 10, 20 Ft.**

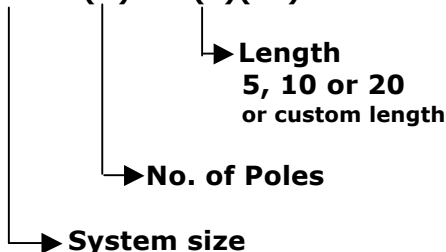


"Spring-pressure"  
channel busbar  
US Pat.# 6,039,584



Housing sections are joined by inserting male end into open female end so that stabs are parallel to female slots. Installation tool is then rotated to force stabs into slots.

**Catalog Number Sequence**  
B225-(X)PG-(L)(FF)



**Catalog Number Selection**

Catalog No.	Description	Length	Weight
B225-3PG-5	225 Amp, 3-pole	5 ft	16 lbs
B225-3PG-10	225 Amp, 3-pole	10 ft	29 lbs
B225-3PG-20	225 Amp, 3-pole	20 ft	57 lbs
B225-4PG-5	225 Amp, 4-pole	5 ft	17 lbs
B225-4PG-10	225 Amp, 4-pole	10 ft	33 lbs
B225-4PG-20	225 Amp, 4-pole	20 ft	64 lbs



## ELBOW SECTIONS

### Elbow Section

Elbows are used for making a 90 degree in a Busway run. Specify right or left elbow, according to the orientation of the busbars in the Busway sections to be connected. Refer to POLARITY for detail.

Coupler set BHC-2

### CONNECTION ACCESSORIES

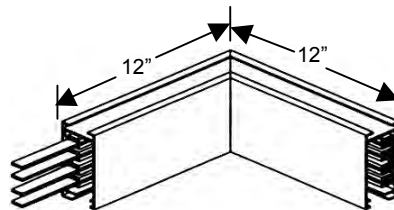
(ordered separately) are used to mechanically connect top and bottom of Tee section to adjacent Busway

### Male To Male Adapter

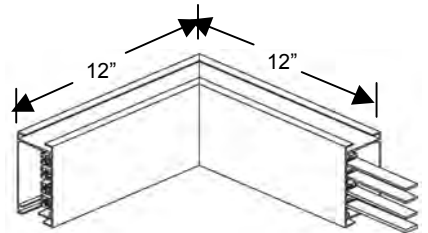
Used for connecting two Busway sections with female ends. Coupler set BHC-2 is used at each end to connect adjacent Busway sections.



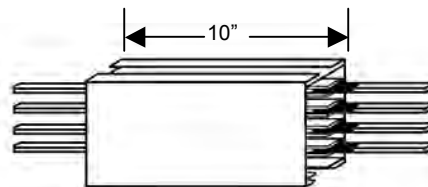
Horizontal Elbow



Right Elbow



Left Elbow

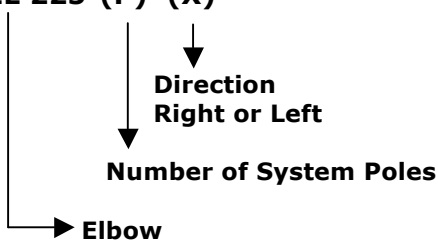


Male To Male Adapter  
AD225-4



Installed with couplers  
(ORDERED SEPARATELY)

### Catalog Number Sequence EL 225-(P)-(X)



### Catalog Number Selection

Catalog No.	Description	Weight
EL225-3-L	Elbow, horizontal, 3-pole, left	5.5 lbs
EL225-3-R	Elbow, horizontal, 3-pole, right	5.5 lbs
EL225-4-L	Elbow, horizontal, 4-pole, left	5.5 lbs
EL225-4-R	Elbow, horizontal, 4-pole, right	5.5 lbs

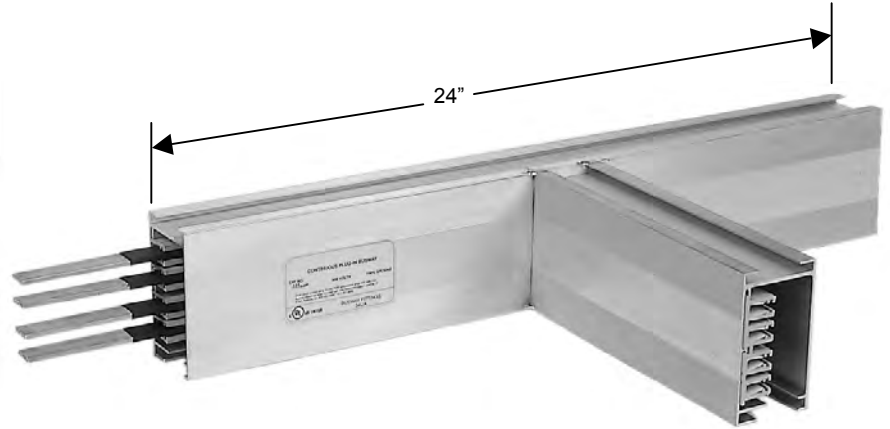
# 225 Amp



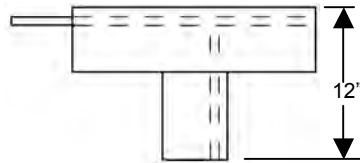
## TEE SECTION

### Tee Section

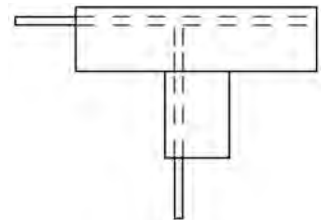
Tee sections are used for creating a 90 degree branch leg in a Busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent Busway sections using an installation tool B225IT page 8.10 Coupler set BHC-2 (Page 8.8 ordered separately) is used to mechanically connect top and bottom of Tee section to adjacent Busway.



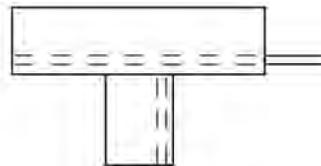
External Right  
-ER



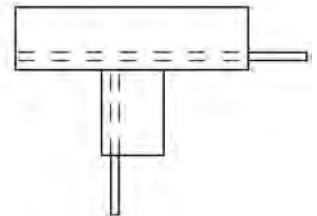
External Left  
-EL



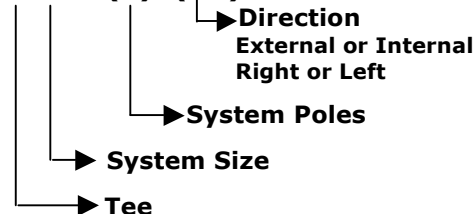
Internal Right  
-IR



Internal Left  
-IL



### Catalog Number Sequence



### Catalog Number Selection

Catalog No.	Description	Weight
T225-4-IL	Tee, 4-pole, Internal Left	9.2 lbs
T225-4-EL	Tee, 4-pole, External Left	9.2 lbs
T225-4-IR	Tee, 4-pole, Internal Right	9.2 lbs
T225-4-ER	Tee, 4-pole, External Right	9.2 lbs

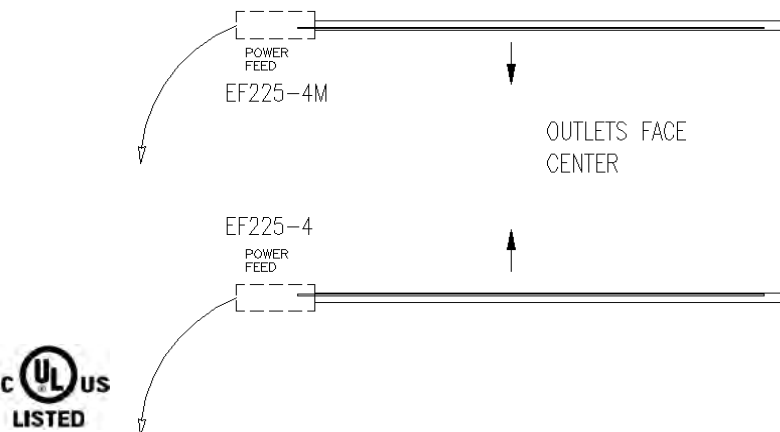
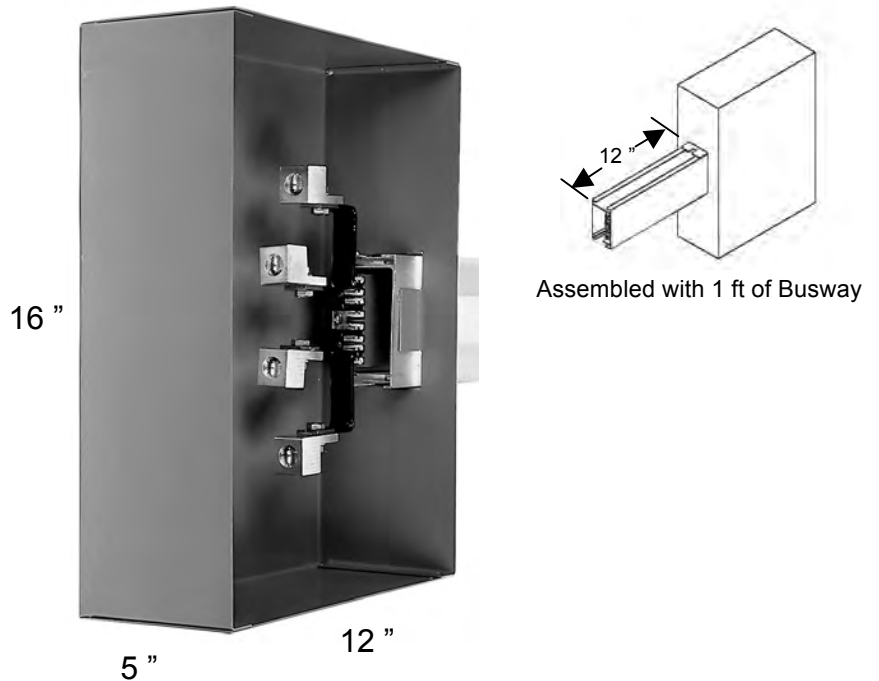
## END POWER FEED UNITS Supplying power to END of Busway

### End Power Feed Units

Standard End Power Feed units connect to the male end of the Busway. Factory assembled unit consists of a 12 X 16 X 5 in. steel junction box, with a removable side, connected to a 1 ft section of Busway. The assembly includes connection lugs, a ground lug and shrink tubing for wires up to 300 MCM. End feed units for connection to female Busway ends are also available.

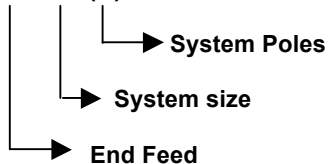
End Power Feed units are connected to adjacent Busway sections using an Installation Tool B225IT and Housing Coupler Set BHC-2 (Ordered Separately).

Special need power feed units for confined spaces as found in Mission Critical Data Centers can also be designed and fabricated, minimum quantities required.



### Catalog Number Sequence

EF225-(P)



### Catalog Number Selection

Catalog No.	Description	Weight
EF225-4	End Feed, 4-Pole	16.5 lbs
EF225-3	End Feed, 3-Pole	16 lbs
EF225-4M	End Feed, 4-Pole male Busway	16.5 lbs
EF225-3M	End Feed, 3-Pole male Busway	16.5 lbs



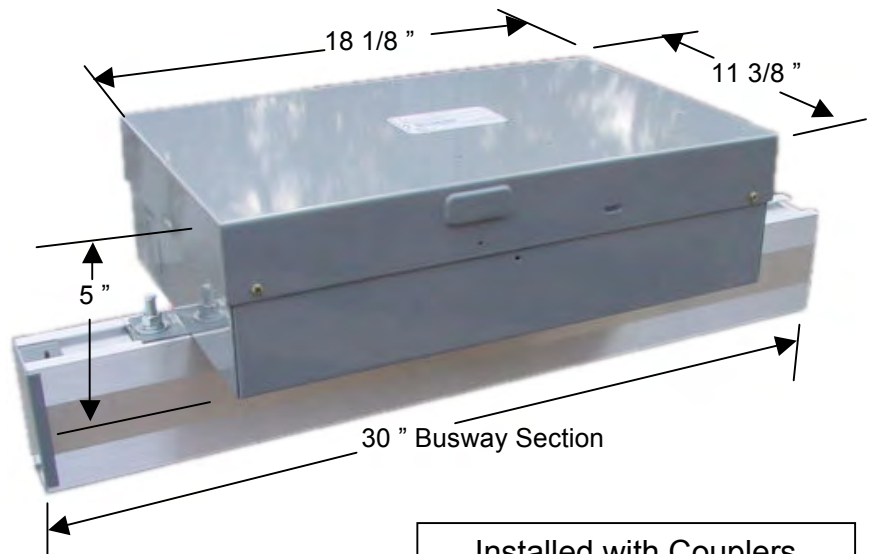
**TOP POWER FEED**  
Supplying power to TOP of Busway

**Top Power Feed Units**

Standard Top Power Feed units connect to the top of the Busway. Factory assembled unit consists of an 18.125 X 11.375 X 5 in. steel junction box, with a removable top mounted on top of a 30 inch section of Busway.

Top Feed Power units can be on the end of a Busway run by connecting to adjacent Busway sections using an Installation Tool B225IT (Page 8.10) and Coupler Set BHC-2 (Page 8.8).

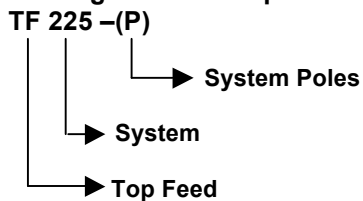
A Center Feed unit can also be used as a top power supply point anywhere along the Busway run by connecting to an adjacent Busway section at both ends.



Installed with Couplers  
(BHC-2)  
Ordered Separately



**Catalog Number Sequence**



**Catalog Number Selection**

Catalog No.	Description	Weight
TF225-4*	End Feed, 4-Pole	16.5 lbs
TF225-3	End Feed, 3-Pole	16 lbs
CFB225-4	Center Feed, 4-Pole	20 lbs

Same units to be used in both B225 and B225G systems

## DUAL NEUTRAL CENTER POWER FEED

### Dual Neutral Center Feed

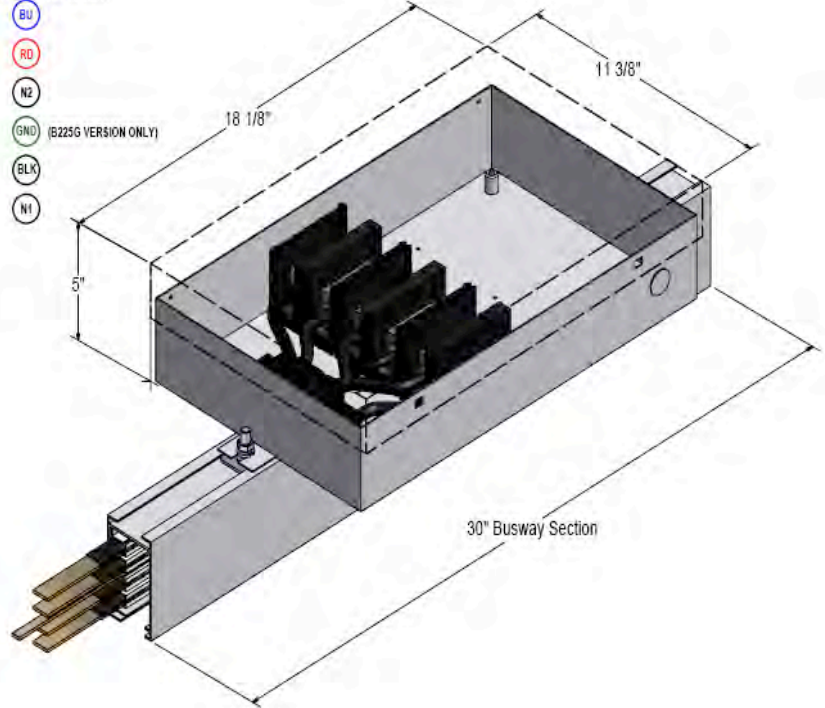
Standard Dual Neutral Center Feed units connect power at the top of the Busway at any point along a busway run. Factory assembled units consists of a 18.125 x 11.375 x 5 in. steel junction box, with a removable top, mounted on top of a 30 inch section of Busway. Dual Neutral Center Feed units can be connected between adjacent Busway sections using the B225IT Installation Tool and Coupler Set BHC-2. Weight: 23 pounds.

Optional Double Lug Terminal Blocks available which facilitates daisy-chaining power supplies. 'M' versions reverse position of conduit KO's for easier field wiring.

Refer to Application Briefs section for further information on Dual Neutral Center Feeds

The Top Feed can take up to 250 MCM wire for standard units and 4/0 for Double Lug versions. A 2.5" knockout is provided.

TERMINAL BLOCK ARRANGEMENT  
(AS VIEWED FROM TOP OF BOX)

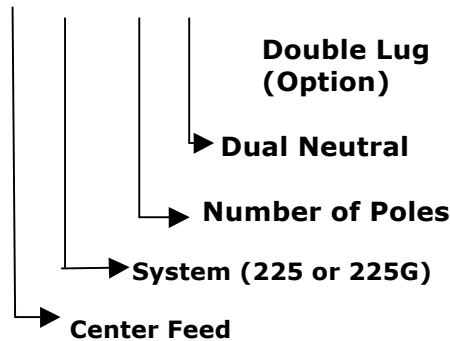


Shown with Lid removed (all dimensions include lid)

Installed with Couplers (BHC-2) Ordered Separately



### Catalog Number Sequence (CF)225(G)-(P)-2N-(DL)



### Catalog Number Selection

Catalog No.	Description
CF225-4-2N	Center Feed / Dbl Neutral
CF225G-4-2N	Iso. Gnd Ctr Feed / Dbl Neutral
CF225-4M-2N	Center Feed/Dbl Neutral/Reverse KO
CF225G-4M-2N	Iso. Gnd Ctr Feed/Dbl Neutral/Reverse KO
CF225-4-2N-DL	Center Feed / Dbl Neutral / Double Lug
CF225G-4-2N-DL	Iso Gnd Ctr Feed / Dbl Neutral / Dual Lug
CF225-4M-2N-DL	Center Feed/ Dbl Neutral /Reverse KO/Dual Lug
CF225G-4M-2N-DL	Iso Gnd Ctr Feed/Reverse KO/Dbl Neutral Double Lug

Weight: 23 pounds

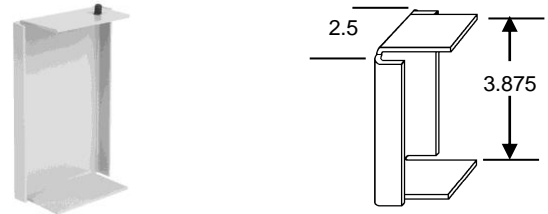

**CONNECTION ACCESSORIES**

### END CAP

For covering the female end of B100 or B225 Busway. End Piece (EP) is used to cover male end.

**PART NUMBER**  
EC-1

**WEIGHT** 0.2 lb

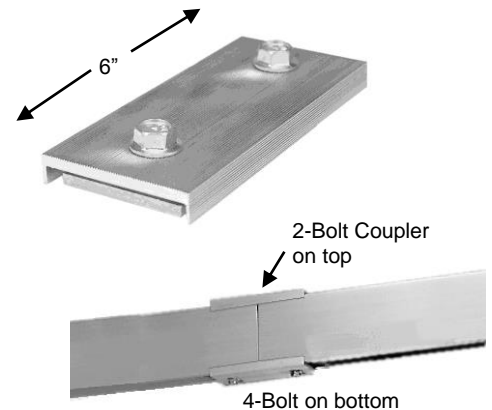


### HOUSING COUPLERS

For connecting adjacent Busway sections and/or end piece. One pair required. consists of 2-bolt for the top and one 4-bolt for the bottom.

**PART NUMBER**  
BHC-2

**WEIGHT** 0.8 lb



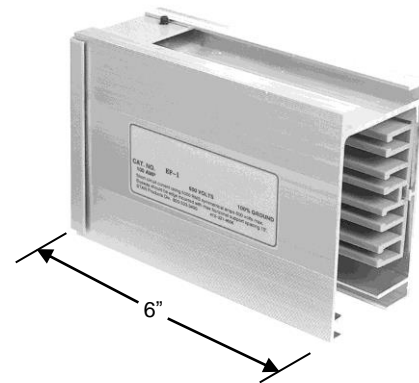
### END PIECE

The end piece is a 6 in. section of Busway housing and insulator and end cap. It is used to cover the protruding copper busbar connector blades at the male end of a Busway run. End Cap (EC) is used to cover female end.

***BHC-2 ALSO REQUIRED***

**PART NUMBER**  
EP-2

**WEIGHT** 1 lb




### OPTIONAL CLOSURE STRIP

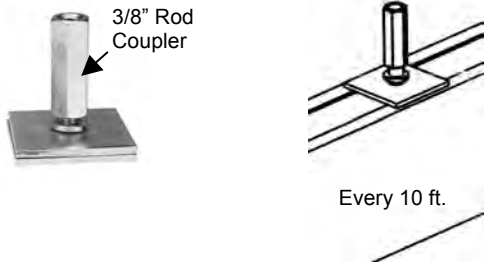

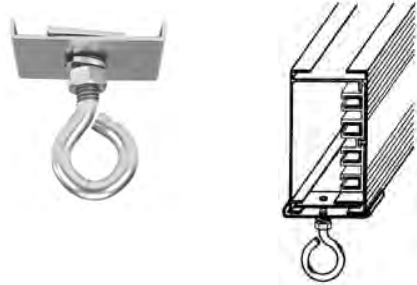
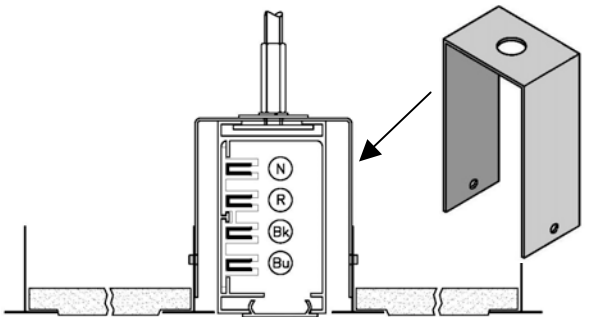
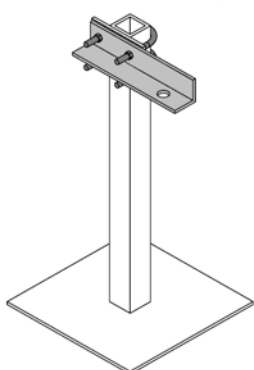
Snaps into bottom access slot of busway housing. Normally shipped in 20 ft lengths and can be field cut to fit exact desired length.

**PART NUMBER**  
CS-1 - PVC  
CS-1AL - Aluminum

**MAXIMUM CUT LENGTH =**  
20ft




**SUPPORT HARDWARE**

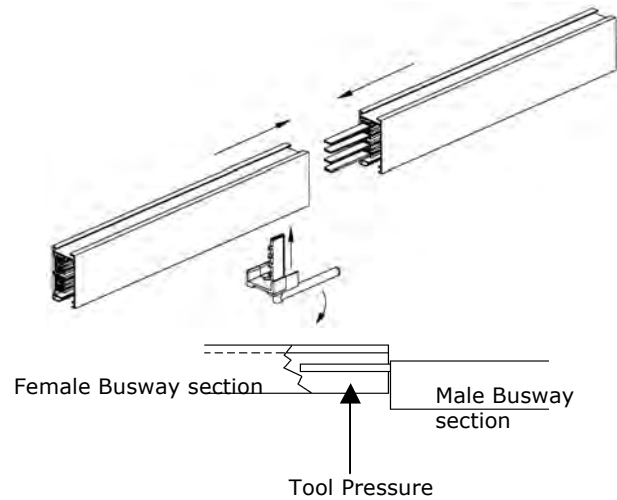
<p><b>Threaded Rod</b> For mounting to 3/8-16 threaded rod. Can be inserted anywhere along full access top slot of Busway. Hanger support spacing every 10 ft maximum.</p>	<p><b>PART NUMBER</b> BRH-1</p> <p><b>WEIGHT</b> 0.3 lb</p>	 <p style="text-align: center;">Every 10 ft.</p>
<p><b>Standard</b> For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along top full access slot.</p>	<p><b>PART NUMBER</b> BH-1</p> <p><b>WEIGHT</b> 0.2 lb</p>	
<p><b>Weight Hook</b> Can be used as a hanger to suspend Busway from chains or cables. Can also be used to hang loads up to 100 lbs under the Busway, such as light fixtures, tools and balancers</p>	<p><b>PART NUMBER</b> WHR-2</p> <p><b>WEIGHT</b> 0.2 lb.</p>	
<p><b>Recessed Suspended Ceilings</b></p>	<p><b>PART NUMBER</b> RM100-1</p>	
<p><b>Raised Access Floor</b></p>	<p><b>PART NUMBER</b> RFB-1</p>	

## INSTALLATION TOOLS

### Installation Tool

Used to connect two adjacent sections of Busway.

Busway sections are first offset and butted together so that male stabs line up parallel to female busbar conductors. Installation tool is then inserted into joined intersection and rotated 90° forcing stabs into u-shaped female conductors making a spring-loaded, secure electrical connection. Housing Couplers (BHC) are then positioned over joined sections and tightened.



**FOR B100N, B100NG, B160, B225 & B225G Systems**

**Weight 2.5 lb**

**PART NUMBER B225IT**







## GENERAL LAYOUT TIPS

- ALL COMPONENTS except Housing, Tee, Elbow Sections and Power Feeds are the same and are interchangeable for B100N (double neutral), B160 and B225 Amp Systems. Substitute either "100N" or "160" for "225" for all Housing, Tee, Elbow Sections and Power Feed units.
- Try to keep all runs as straight as possible as tees and elbows are added cost.
- Standard Busway lengths are available in 20, 10 and 5 ft increments. Although the factory can cut individual STARLINE Track Busway sections to any length under 20 ft, it is highly recommend to keep all layout runs in increments of 5 ft. This recommendation is based on our experience with economics and simplifying job site installation. If housing sections are cut to 3ft, 4ft, 6 ft, etc. It can become cumbersome at the job site to determine which length goes with which run. By staying with 5 ft increments, this condition is minimized.
- Determine the location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

### LENGTH OF BUSWAY FOR A ONE VOLT DROP IN LINE TO LINE VOLTAGE

SYSTEM DESIGNATION	DISTRIBUTED LOAD	VOLTAGE DROP @ 0.8 PF Single Phase	VOLTAGE DROP @ 0.8 PF Three Phase
B225 (all systems)	225 Amp	40 FT	47 FT

- There is no need to be concerned with the specific detail and total count of support hardware, connectors and end caps as your local STARLINE Track Busway Applications Engineer will assist during the quotation process. Refer to SPECIFICATIONS for the suggested STARLINE specifications.
- Understand component relationship before specifying or ordering specific Tee or Elbow Sections. Refer to Component Relationship for details.



## COMPONENT RELATIONSHIP

When ordering material, it is important to understand the relationship between various components. Examples:

- ALL COMPONENTS except Housing, Tee, Elbow Sections and Power Feeds are the same and are interchangeable for B100N (double neutral), B160 and B225 Amp Systems. Substitute either "100N" or "160" for "225" for all Housing, Tee, Elbow Sections and Power Feed units.
- Each housing section requires a coupler set. Determine the total number of housing sections (regardless of length) as this becomes the number of Couplers (BHC) that will be needed.  
Part No BHC-2 contains a set (upper and lower).
- One BHC-1 Housing Coupler set is required for each end of all L's and T's.
- If this is your first installation for B100N, B100NG, B160 or B225 systems, you will need to order Installation Tool B225IT.
- General support hardware rule to follow:

$$\frac{\text{Total System Length}}{10} + 0.10 (10\%) = \text{Support Hardware Qty}$$

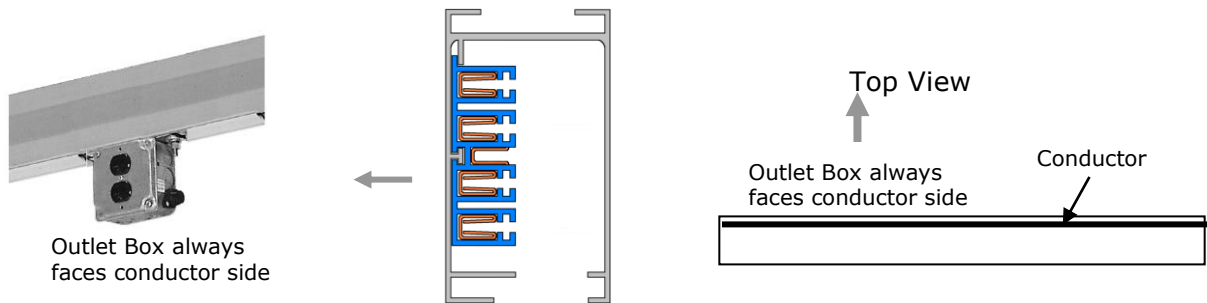
10 equal 10 ft spacing and 10% extra is recommended for job site changes.

- Total Power Feeds and End Caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering elbow or tee sections, it is important to understand polarity and the relationship to direction of outlets. Please refer to POLARITY CONCERNS for more detail.

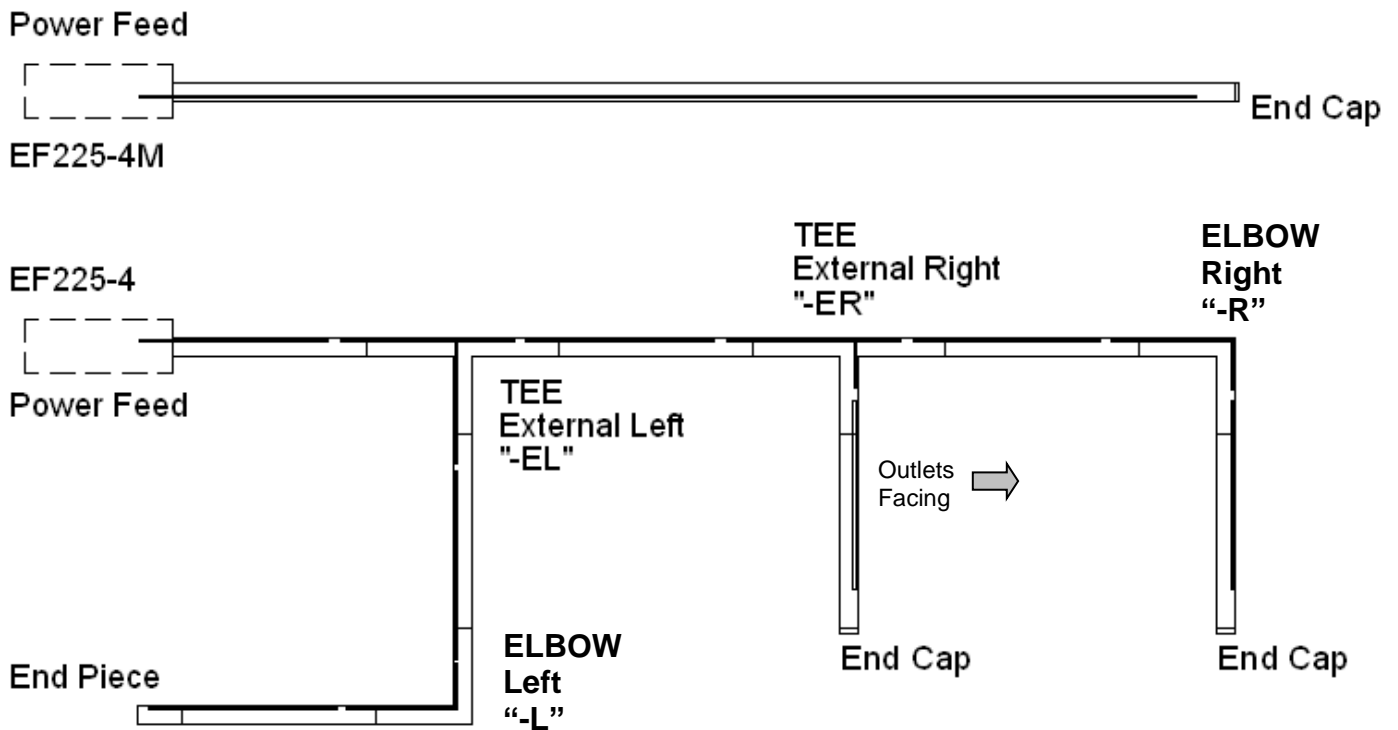


## POLARITY CONCERNS

STARLINE utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation. It is particularly important to understand this design concept prior to ordering and/or installing some components. For example, if the face direction of a STARLINE plug-in unit is important in your installation, consider that they will always face the conductor side. Certain plug-in units are 'reversible', designated by 'R', to face devices away from the conductor side.



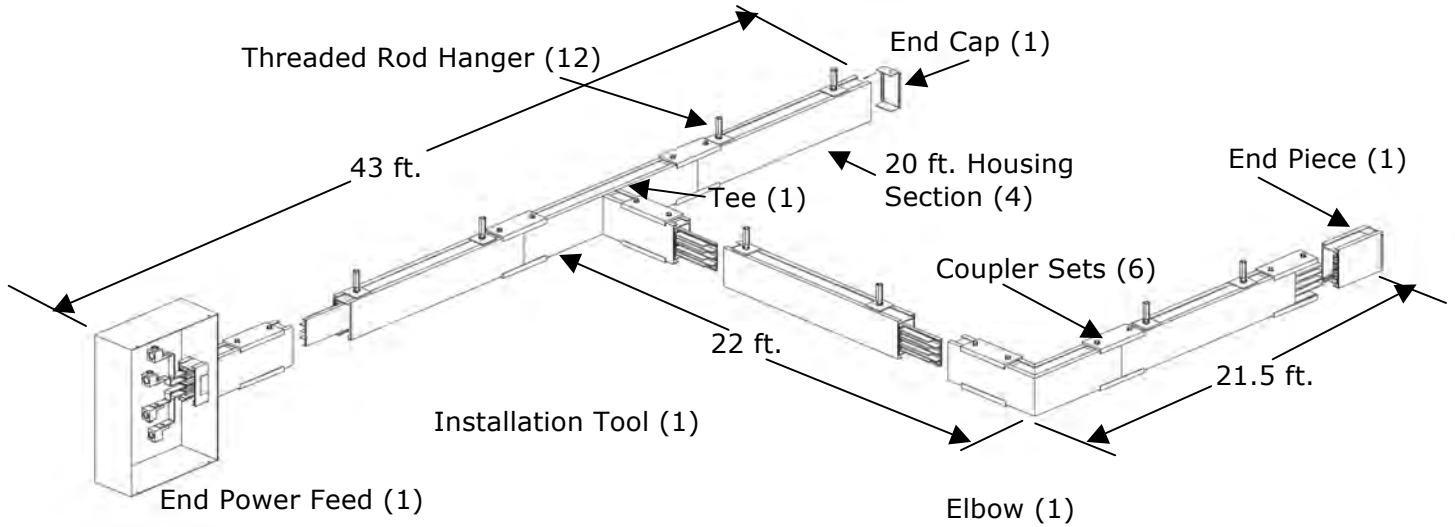
**Tee's and Elbow Sections** are specified according to desired polarity



# 225 Amp



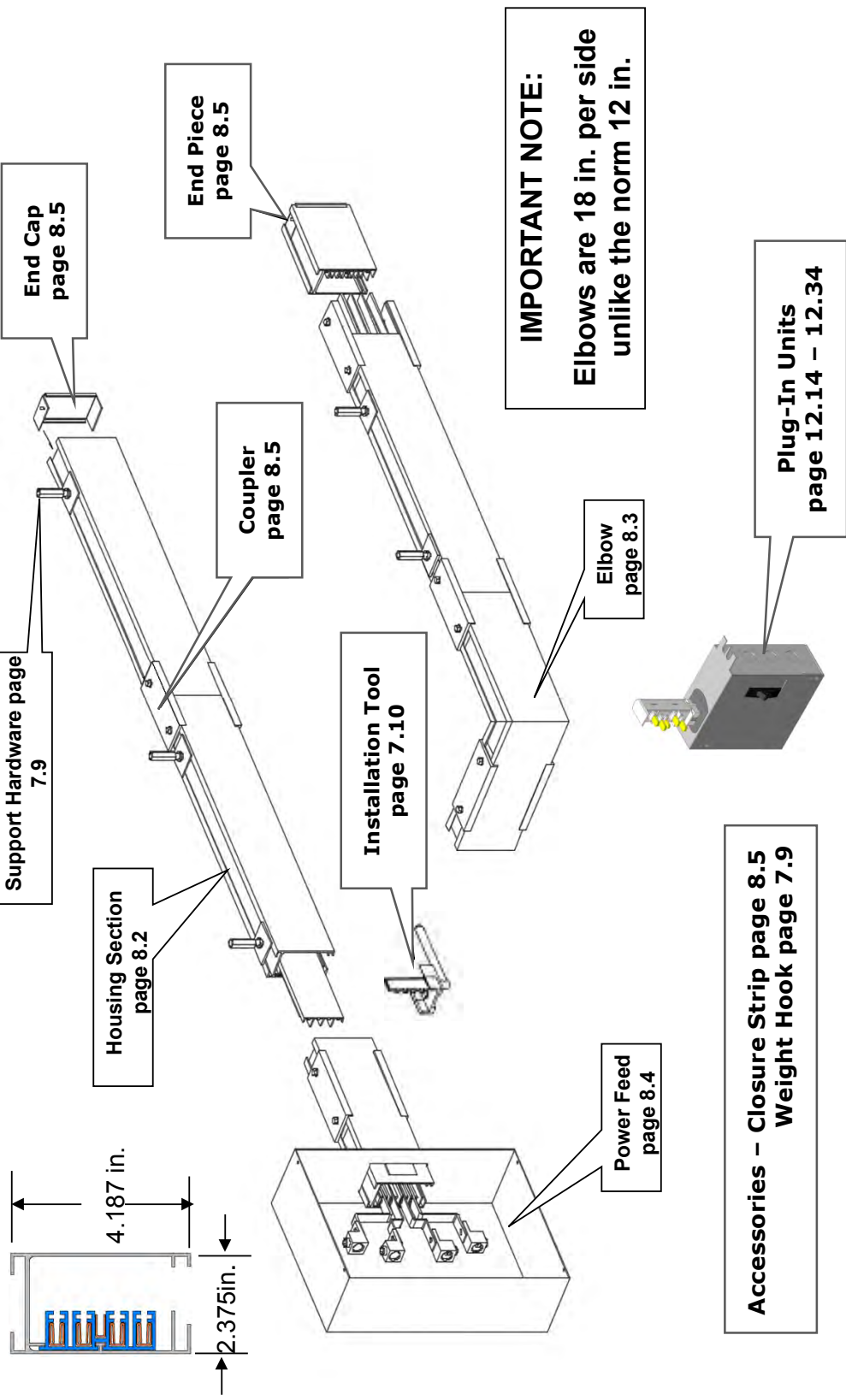
## SAMPLE TAKE-OFF



### BILL OF MATERIAL:

QTY	PART NO.	DESCRIPTION
4	B225-4PG-20	Housing Section, 20 feet long, 4-Pole
1	EP-2	End Piece (over male end, 6 in. long)
7	BHC-2	Housing Coupler set – required for each Housing, Power Feed, Elbow (2), Tee (3) and End Piece (1)
1	EC-1	End Cap (over female end)
12	RHB-3	3/8" Threaded Rod Hanger (required every 10 ft)
1	T225-4-EL	Tee, External Left (24" x 12")
1	EL225-4-R	Elbow, Right (12" x 12")
1	B225IT	Installation Tool

3 or 4 pole with isolated ground

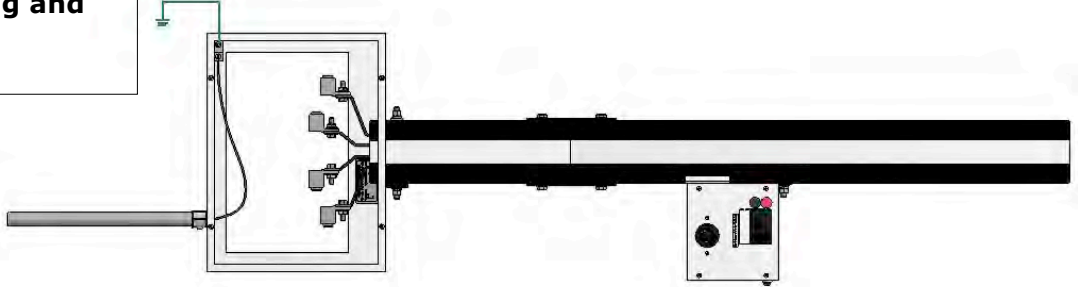
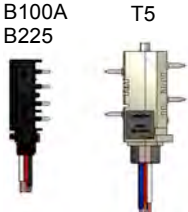


# Ground Options

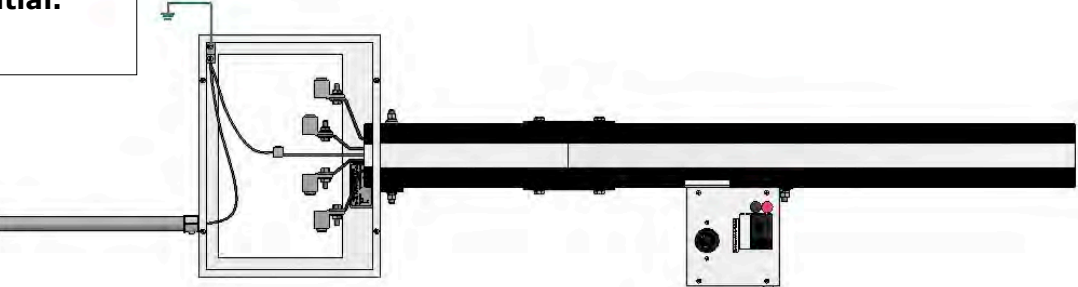
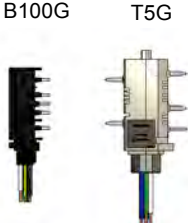


## FAQ CASE GROUND, DEDICATED GROUND, ISOLATED GROUND

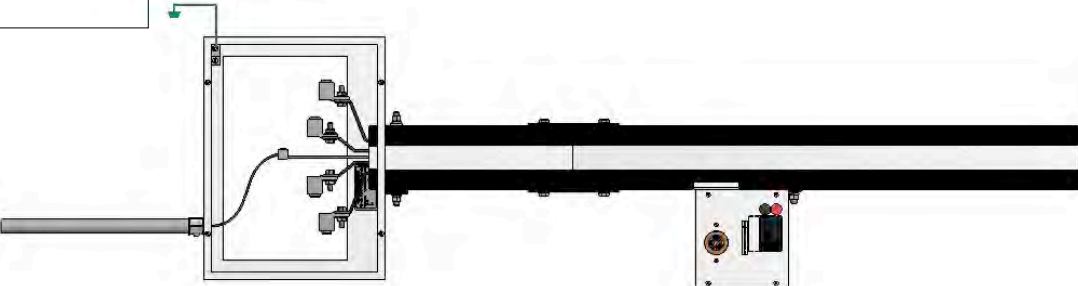
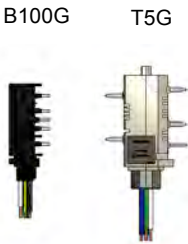
**CASE GROUND**  
Uses aluminum housing and no extra copper bar.



**DEDICATED GROUND**  
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.



**ISOLATED GROUND**  
Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.



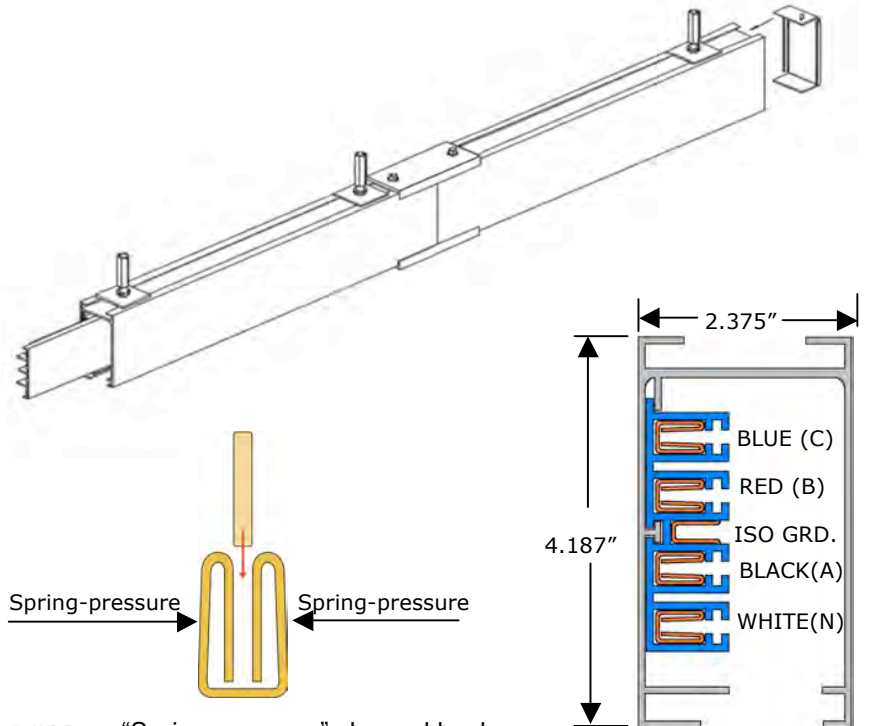
## HOUSING SECTIONS

### Housing Section

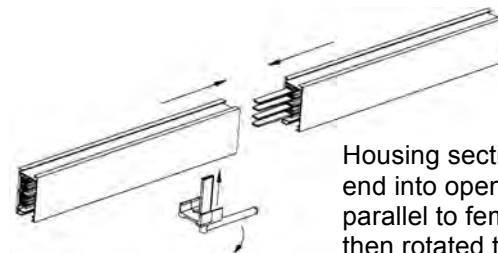
Track Busway housing section consists of an extruded aluminum shell with “spring -pressure” type copper channel busbars contained in a full length PVC insulator mounted on one side on the interior wall. The center conductor acts as a 100% ground path meeting UL 857 Standard and complies with applicable paragraphs of Section 250 of the NEC. Each housing has an open access slot over its entire length for the insertion of plug-in units. Each housing section has male stabs protruding at one end which fit into the channels of the adjoining section. Female-Female construction without male blades is available for some applications. Specify ‘FF’ suffix. Installation tool is used to force the stabs into the busbar channels for a solid spring-tempered electrical connection.

**RATINGS:** 225 Amp, 300 Volt

**LENGTH:** 5 Ft, 10 Ft , 20 Ft.

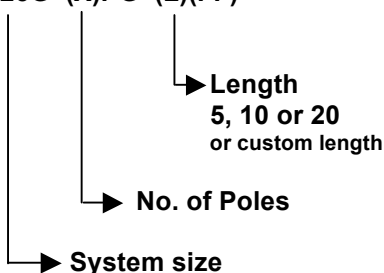


“Spring-pressure” channel busbar  
US Pat.# 6,039,584



Housing sections are joined by inserting male end into open female end so that stabs are parallel to female slots. Installation tool is then rotated to force stabs into slots.

### Catalog Number Sequence B225G-(X)PG-(L)(FF)



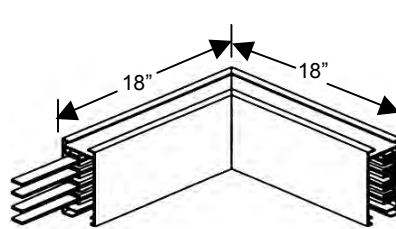
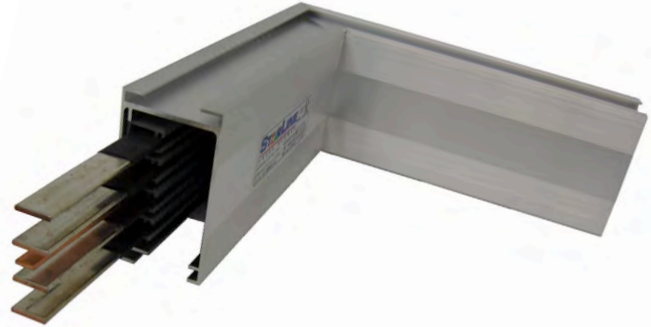
### Catalog Number Selection

Catalog No.	Description	Length	Weight
B225G-4PG-5	225 Amp, 4-pole, Iso Grd	5 ft	17.5 lbs
B225G-4PG-10	225 Amp, 4-pole, Iso Grd	10 ft	34 lbs
B225G-4PG-20	225 Amp, 4-pole, Iso Grd	20 ft	65.5 lbs

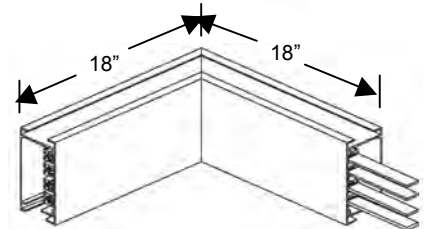
## ELBOW SECTION

### Elbow Section

Elbows are used for making a 90 degree angle in a Busway run. Specify right or left elbow, according to the orientation of the busbars in the Busway sections to be connected. Tee sections are connected to adjacent Busway sections using an Installation Tool B225IT. A Housing Coupler set BHC-2 is used to mechanically connect the top and bottom of a Tee section to an adjacent Busway.



Right Elbow



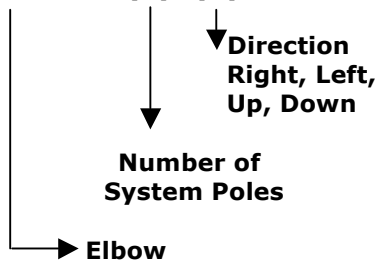
Left Elbow



Installed with couplers  
**(ORDERED SEPARATELY)**



### Catalog Number Sequence EL225G-(P)-(X)



### Catalog Number Selection

Catalog No.	Description	Weight
EL225G-4-L	Elbow, horizontal, 4-pole, left	6 lbs
EL225G-4-R	Elbow, horizontal, 4-pole, right	6 lbs

**NOTE: ALL 300 Volt Rated, legs are 18 in.**



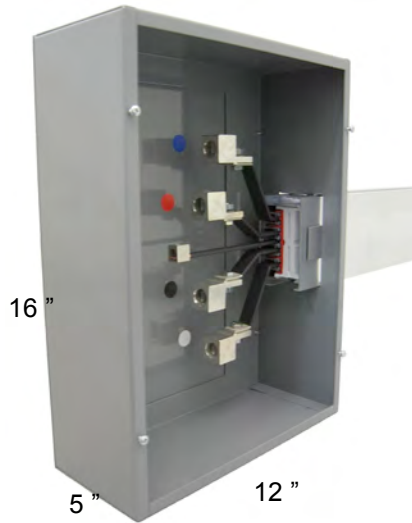
**POWER FEED UNITS**  
Supplying power to END of Busway

**End Power Feed Units**

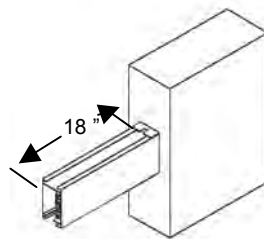
Standard End Power Feed units connect to the male end of the Busway. Factory assembled unit consists of a 12 X 16 X 5 in. steel junction box, with a removable side, connected to an 18" section of Busway. The assembly includes connection lugs, a ground lug and shrink tubing for wires up to 300 MCM. End feed units for connection to female Busway ends are also available.

End Power Feed units are connected to an adjacent Busway sections using an Installation Tool B225IT (Page 8.10) and a Housing Coupler Set BHC-2 (Page 8.8).

Special need power feed units for confined spaces as found in Mission Critical Data Centers can also be designed and fabricated, minimum quantities required.



Installed with couplers



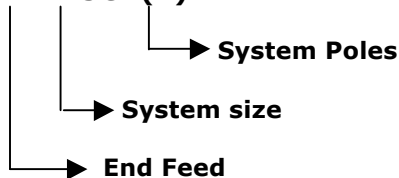
Assembled Unit with  
18" Busway stub



Data Center custom units can also be fabricated with minimum quantities



**Catalog Number Sequence**  
EF225G-(P)



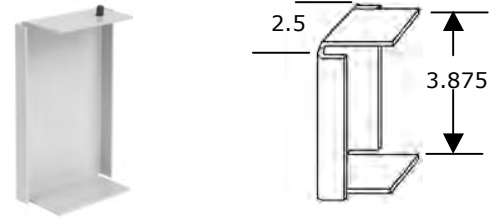
**Catalog Number Selection**

Catalog No.	Description	Weight
EF225G-4	End Feed, 4-Pole	16.5 lbs
EF225G-3	End Feed, 3-Pole	16 lbs
EF225G-4M	End Feed, 4-Pole male	17 lbs
EF225G-3M	End Feed, 3-Pole male	16.5 lbs



**PART NUMBER**  
EC-1

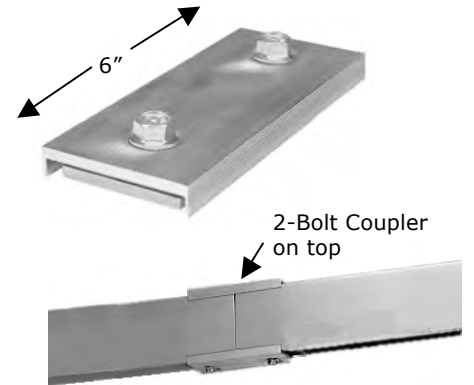
**WEIGHT** 0.2 lb



**HOUSING COUPLERS**  
For connecting adjacent Busway sections and/or end piece. One pair required. consists of 2-bolt for the top and one 4-bolt for the bottom.

**PART NUMBER**  
BHC-2

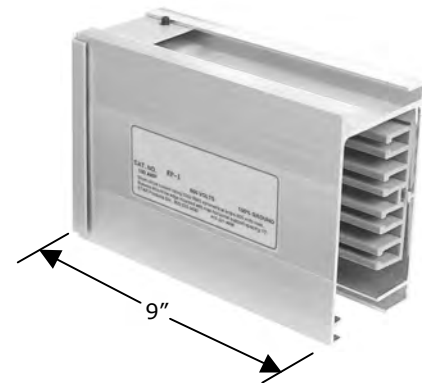
**WEIGHT** 0.8 lb



**END PIECE**  
The end piece is a 9 in. section of Busway housing and insulator and end cap. It is used to cover the protruding copper busbar connector blades at the male end of a Busway run. End Cap (EC) is used to cover female end.  
***BHC-1 ALSO REQUIRED***

**PART NUMBER**  
EP-225G

**WEIGHT** 1 lb



**OPTIONAL CLOSURE STRIP**  
Snaps into bottom access slot of busway housing. Normally shipped in 20 ft lengths and can be field cut to fit exact desired length.

**PART NUMBER**  
CS-1 - PVC  
CS-1AL - Aluminum

**MAXIMUM CUT LENGTH =**  
20ft



# 100A, 100N, 160, 225 Amp



## PLUG-IN SELECTION

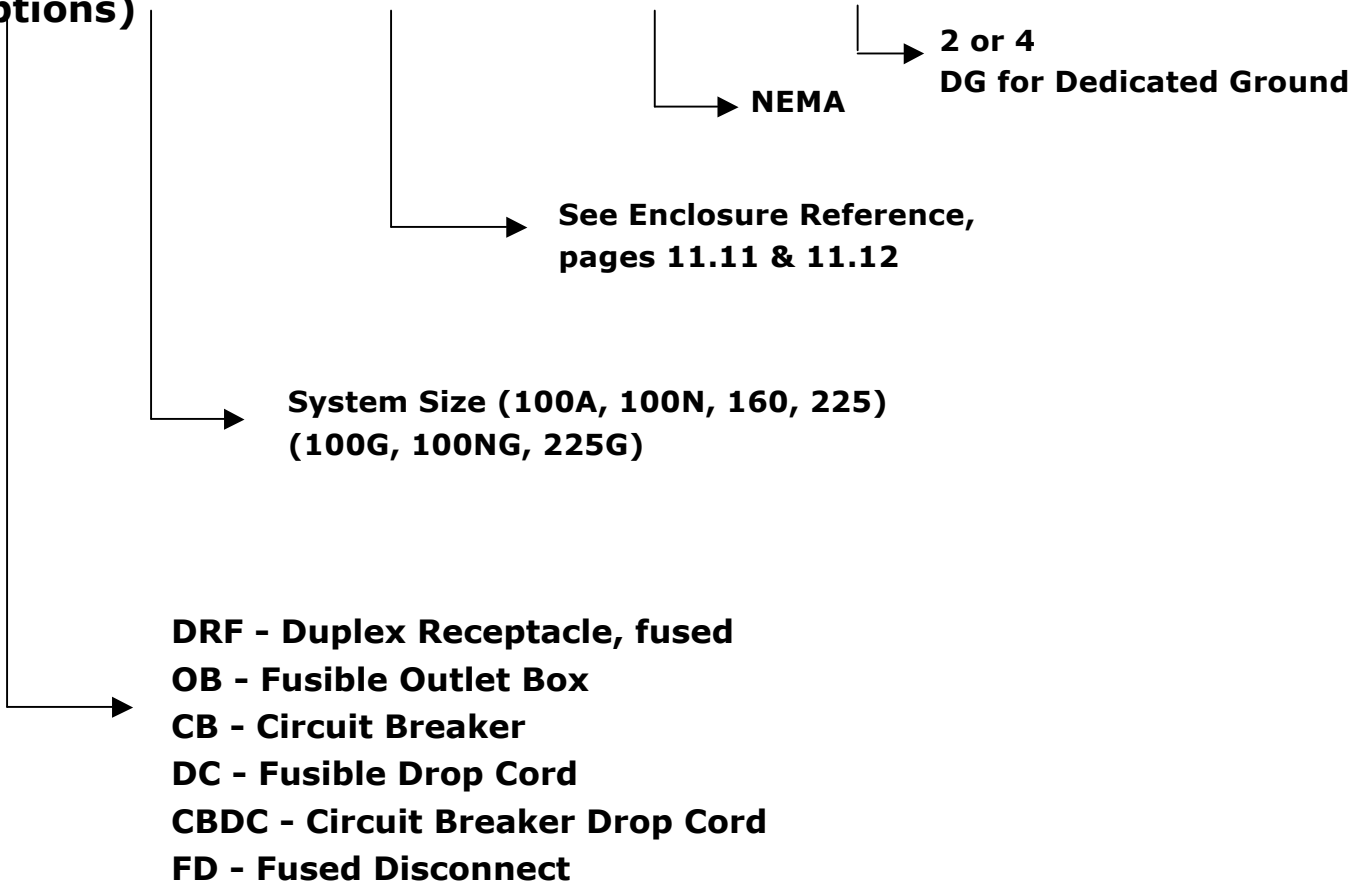
*Same Units to be used in ALL B100A, B100N, B160 and B225 systems*

*Similar Units to be used in ALL B100G, B100NG, and B225G systems*

### Basic Part Number Nomenclature

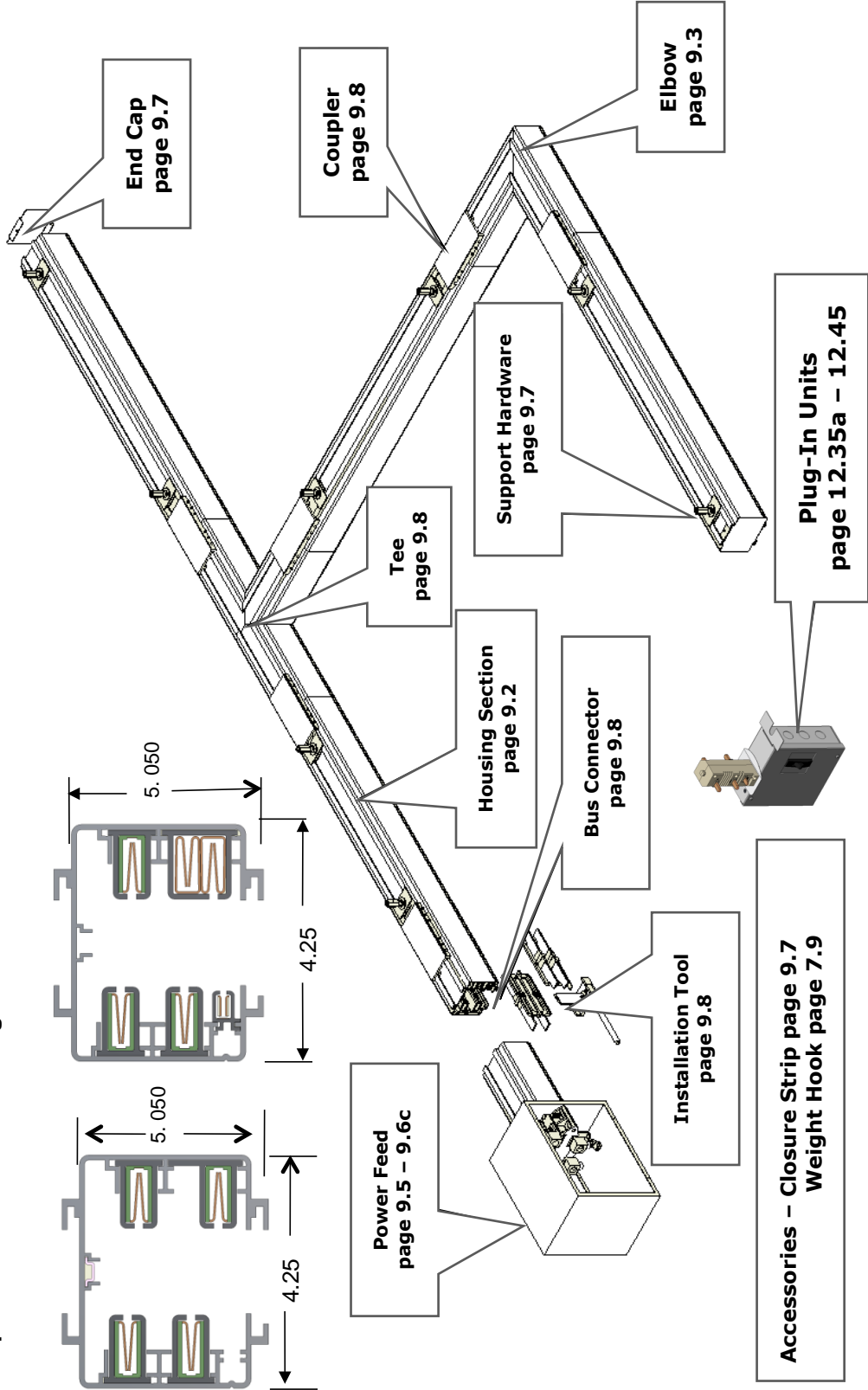
Although there are many custom units available, the units shown below are considered standard

**(Style)(System)(Enclosure) – (Device) – (Busway Poles) – (Options)**



**Standard B250T5, B250 System,  
600 Volts**

3 or 4 pole with/without isolated ground

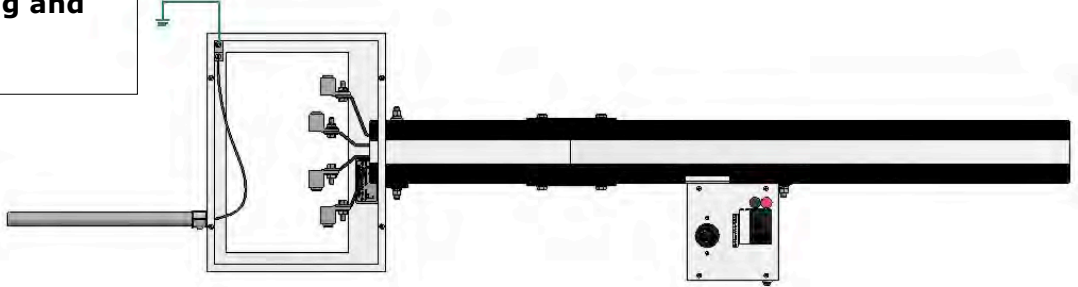
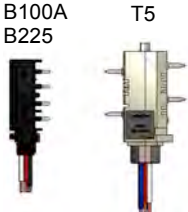


# Ground Options

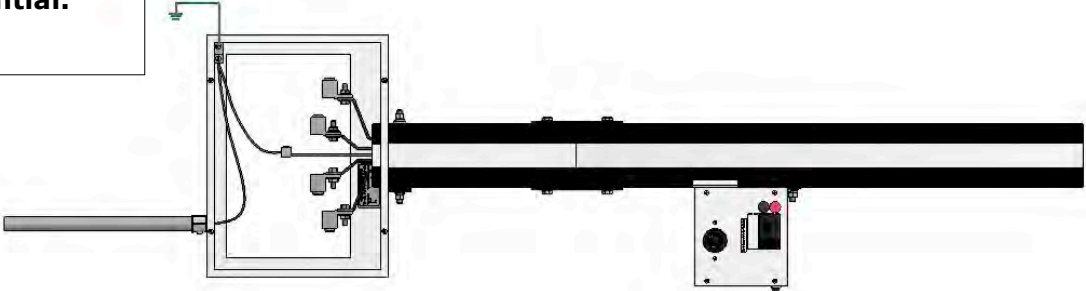
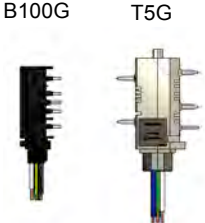


## FAQ CASE GROUND, DEDICATED GROUND, ISOLATED GROUND

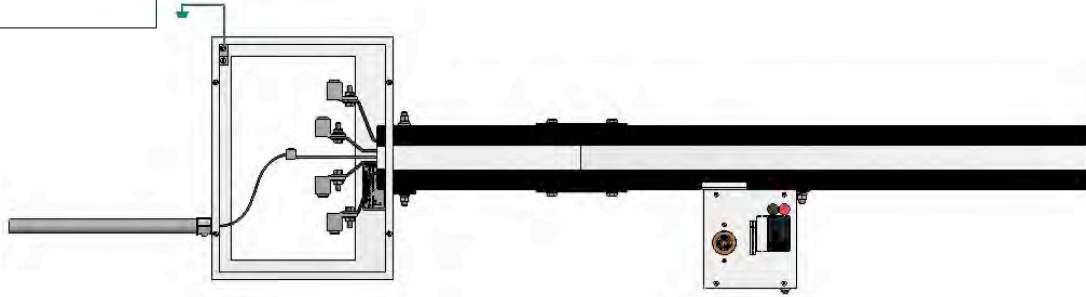
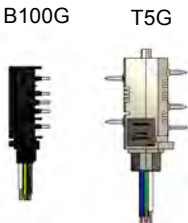
**CASE GROUND**  
Uses aluminum housing and no extra copper bar.



**DEDICATED GROUND**  
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.



**ISOLATED GROUND**  
Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.



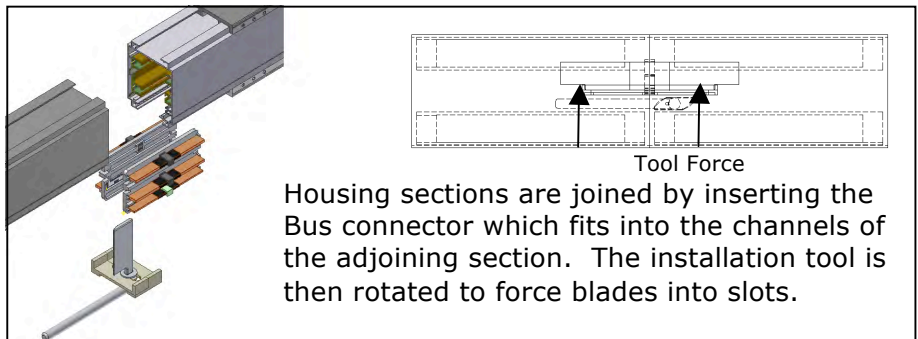
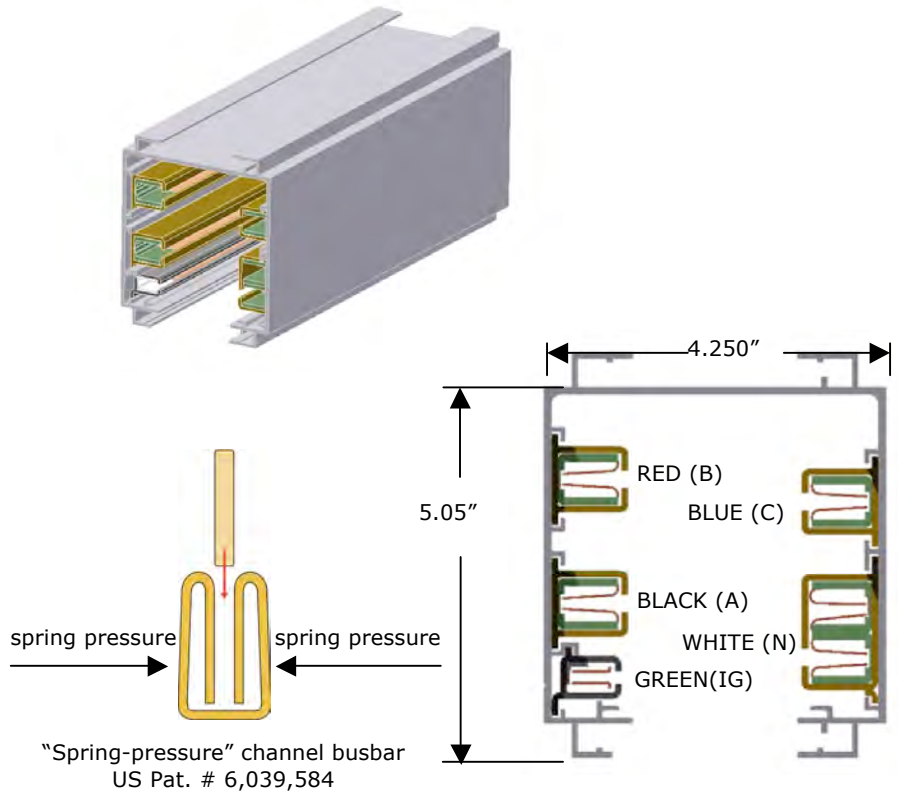
# B250T5, B250T5N, B250T5G, B250T5NG Systems



## HOUSING SECTION

Track Busway housing section consists of an extruded aluminum shell with "spring-pressure" type copper channel busbars contained in a full length halogen-free insulator mounted on the interior walls. The aluminum extrusion acts as a 100% ground path meeting UL 857 Standard and complies with applicable paragraphs of Section 250 of the NEC. Each housing has a continuous access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 3 or 4-pole varieties, optional isolated ground, optional oversize (200%) neutral. The housing sections join together using Bus connectors which fit into the channels of the adjoining section. An Installation tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.

**MATERIAL:** Extruded Aluminum  
**RATINGS:** 100% Ground Path  
 250 Amps  
 B250T5/B250T5G  
 600 Volt  
 B250T5N/B250T5NG  
 600 Volt  
**LENGTH:** 10 Ft, 20 Ft.  
**VOLTAGE DROP:**  
 distributed load, .8PF  
 Single Phase 49ft per Volt  
 Three Phase 58 ft per Volt



**Catalog Number Sequence**  
**B250T5-(X)PG-(L)**

Length  
 10 or 20  
 or custom length

No. of Poles (3 or 4)

System size = 250T5  
 G - isolated ground  
 NG - IG & Oversize Neutral

### Catalog Number Selction

Catalog No.	Description	Length	Weight
B250T5-4PG-10	250A, 4-pole	10 ft	41.0 lbs
B250T5-4PG-20	250A, 4-pole	20 ft	82.0 lbs
B250T5G-4PG-10	250A, 4P/iso. Gnd	10 ft	46.0 lbs
B250T5G-4PG-20	250A, 4P/iso. Gnd	20 ft	92.0 lbs
B250T5N-4PG10	250A, 4P/ 200%N	10 ft	47.0 lbs
B250T5N-4PG-20	250A, 4P/ 200%N	20 ft	94.0 lbs
B250T5NG-4PG-10	250A, 4P/IG/200%N	10 ft	51.0 lbs
B250T5NG-4PG-20	250A, 4P/IG/200%N	20 ft	102.0 lbs

# B250T5, B250T5N, B250T5G, B250T5NG Systems



## ELBOW SECTIONS

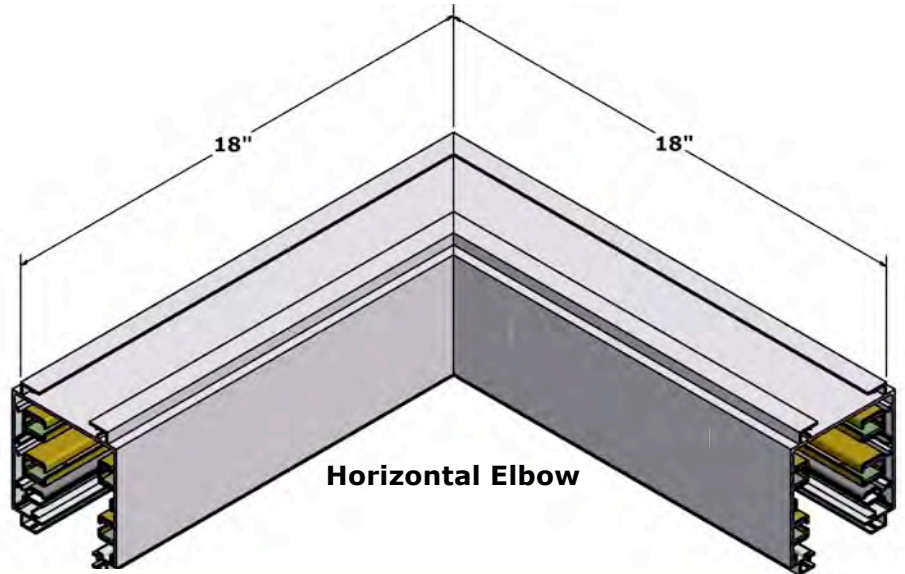
### Elbow Section

An Elbow is used for making a horizontal 90 degree change of direction in a Busway run. Specify right or left elbow, according to the orientation of the polarizing stripe in the Busway sections to be connected.

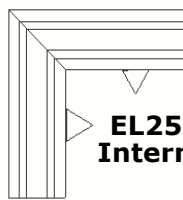
### CONNECTION ACCESSORIES:

(Ordered Separately)

Joint Kit (JK250T5 series) is used to make mechanical and electrical connections to adjacent Busway sections.



Horizontal Elbow



EL250T5-4-L  
Internal Elbow



EL250T5-4-R  
External Elbow



Installed with couplers

### Catalog Number Sequence

EL 250T5-(P)-(X)

Direction  
Right, Left

Number of Poles (3 OR 4)

System size = 250  
G – isolated ground  
NG – IG & 200% Neutral

Elbow

### Catalog Number Selection

Catalog No.	Description	Weight
EL250T5-4-L	Elbow, 4-pole, left	13.0 lbs
EL250T5-4-R	Elbow, 4-pole, right	13.0 lbs
EL250T5G-4-L	Elbow, 4-pole/IG, left	13.5 lbs
EL250T5G-4-R	Elbow, 4-pole/IG, right	13.5 lbs
EL250T5N-4-L	Elbow, 4-pole/200% N, left	14.0 lbs
EL250T5N-4-R	Elbow, 4-pole/200% N, right	14.0 lbs
EL250T5NG-4-L	Elbow, 4-pole/IG/200% N, left	14.5 lbs
EL250T5NG-4-R	Elbow, 4-pole/IG/200% N, right	14.5 lbs

# B250T5, B250T5N, B250T5G, B250T5NG Systems



## TEE SECTION

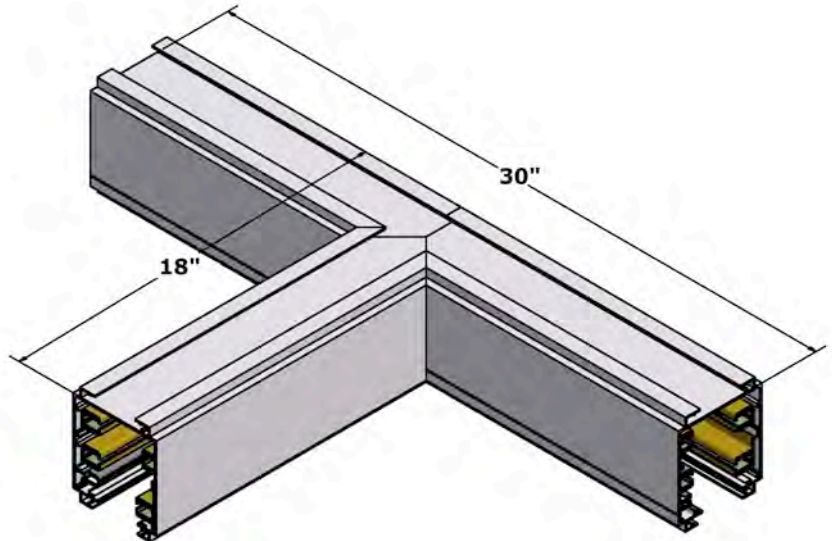
### Tee Section

A Tee is used for making a horizontal 90 degree branch leg in a Busway run. Specify internal, external, right, or left tee, according to the orientation of the polarizing stripe in the Busway sections to be connected.

### CONNECTION ACCESSORIES:

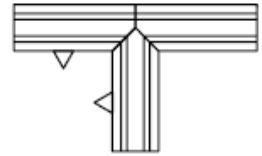
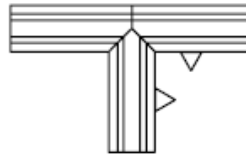
(Ordered Separately)

Joint Kit (JK250T5 series) is used to make mechanical and electrical connections to adjacent Busway sections.



Internal Right  
-IR

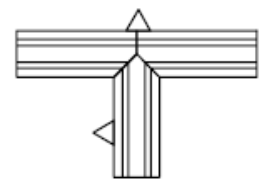
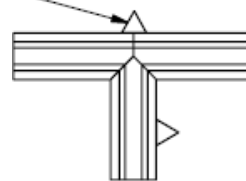
Internal Left  
-IL



External Right  
-ER

External Left  
-EL

Polarizing Stripe



### Catalog Number Sequence

T250T5- (P)-(XX)

Direction

External or Internal  
Right or Left

No. of Poles (3 or 4)

System size = 250

G – isolated ground

NG – IG & 200% Neutral

Tee

### Catalog Number Selection (standard B250T5 shown)

Catalog No.	Description	Weight
T250T5-4-IL	Tee, 4-pole, Internal Left	19.5 lbs
T250T5-4-EL	Tee, 4-pole, External Left	19.5 lbs
T250T5-4-IR	Tee, 4-pole, Internal Right	19.5 lbs
T250T5-4-ER	Tee, 4-pole, External Right	19.5 lbs



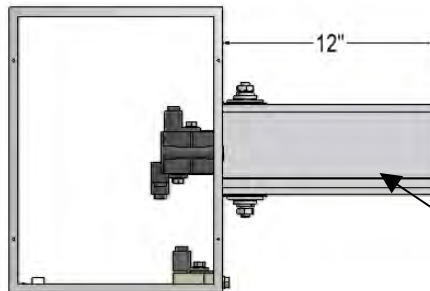
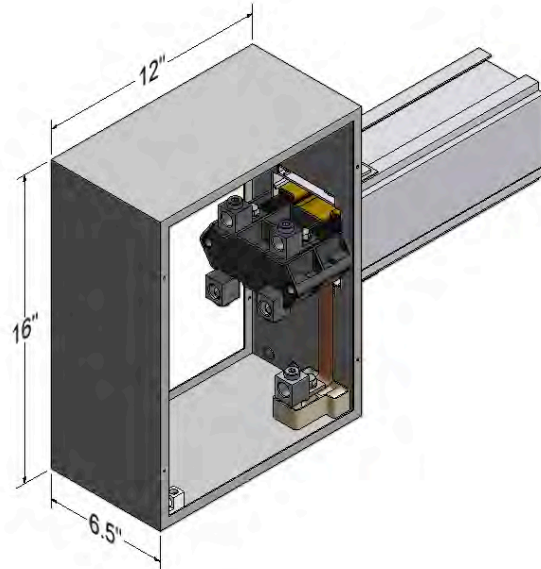
# B250T5, B250T5N, B250T5G, B250T5NG Systems

## END POWER FEED UNITS Supplying power to END of Busway

Standard End Power Feed units connect to the end of any busway section. Factory assembled unit consists of a 12 X 16 X 6.5 in. steel junction box, with removable sides, connected to a 1 foot section of Busway. The assembly includes connection lugs and a ground lug for wires up to 300 MCM. Reverse End feed units for connection to opposite end of busway section (polarizing stripe faces to right as viewed from end of unit).

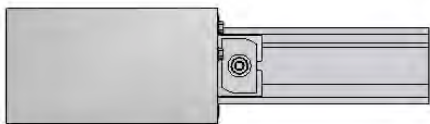
End Power Feed units are connected to adjacent Busway sections using Housing Coupler and bus connector (sold separately).

Special need power feed units for confined spaces as might be found in Mission Critical Data Centers can also be designed and fabricated, requiring minimum quantities.

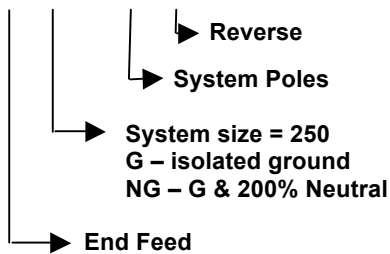


Assembled with 1 ft of Busway

Polarizing Stripe (Reversed Version Shown)



### Catalog Number Sequence EF250T5-(P)(R)



### Catalog Number Selection

Catalog No.	Description	Weight
EF250T5-4	End Feed, 4-Pole	17.5lbs
EF250T5-4R	End Feed, 4-Pole	17.5 lbs
EF250T5G-4	End Feed, 4-Pole/IG	18 lbs
EF250T5G-4R	End Feed, 4-Pole/IG	18 lbs
EF250T5N-4	End Feed, 4-Pole/200% N	19 lbs
EF250T5N-4R	End Feed, 4-Pole/200% N	19 lbs
EF250T5NG-4	End Feed, 4-Pole/IG/200% N	19.5 lbs
EF250T5NG-4R	End Feed, 4-Pole/IG/200% N	19.5 lbs

# B250T5, B250T5N, B250T5G, B250T5NG Systems

## FUSED POWER FEED UNITS

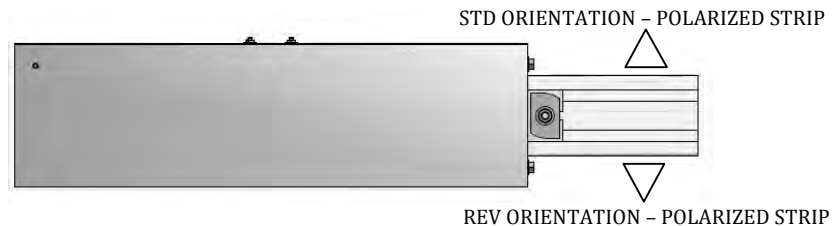
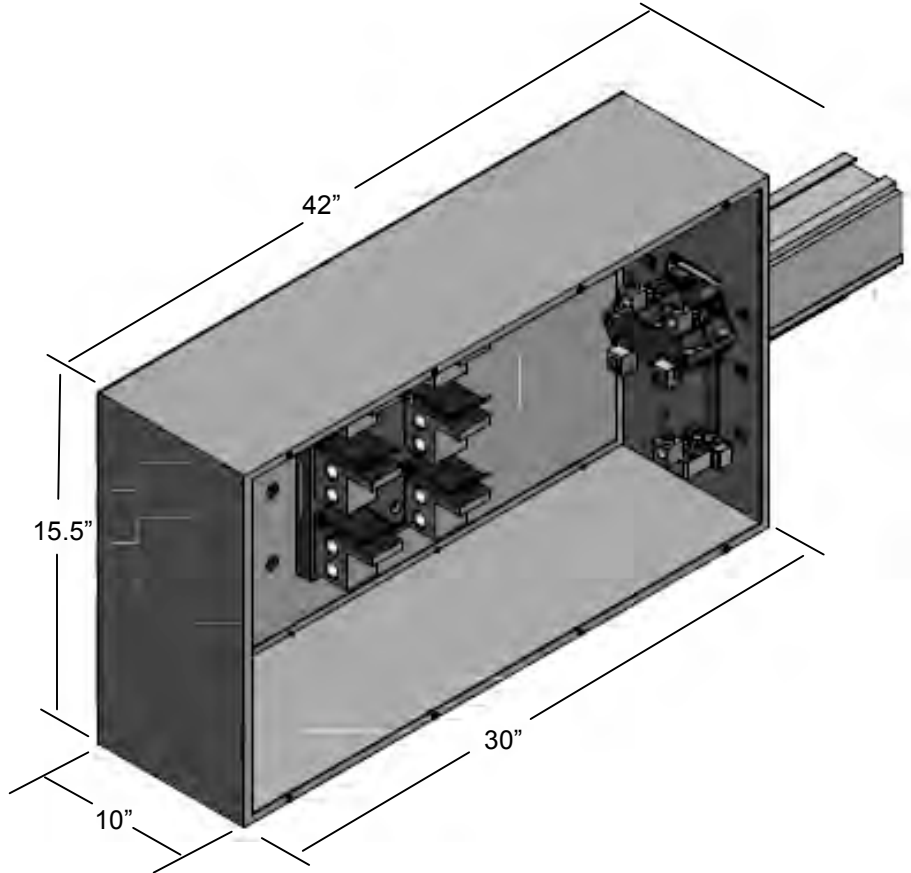
Supplying power to END of Busway

### Fused Power Feed Units

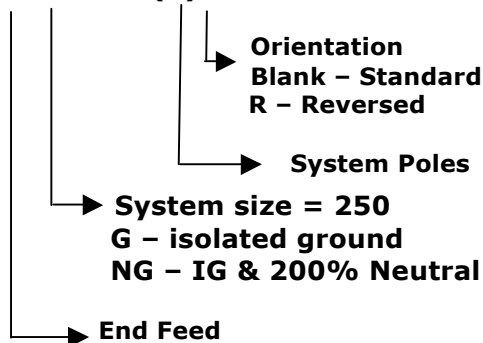
Fused End Power Feed units connect to the end of any busway section. Factory assembled unit consists of a 30 X 15.5 X 10 in. steel junction box, with a removable side, connected to a 1 foot section of Busway. The assembly includes 300MCM wire connections from the fuse base. Customers are required to provide the appropriate sized Class-J fuses.

The end feed box is sized such that one or two 4" conduits can be installed in the end of the box.

Fused End Power units are connected to adjacent Busway sections using Housing Coupler and bus connector (sold separately).



### Catalog Number Sequence EF250T5--(P)R-FUSED



### Catalog Number Selection

Catalog No.	Description	Weight
EF250T5-4-FUSED	Top Feed, 4-Pole	82.0 lbs
EF250T5-4R-FUSED	Top Feed, 4-Pole	82.0 lbs
EF250T5G-4-FUSED	Top Feed, 4-Pole/IG	84.0 lbs
EF250T5G-4R-FUSED	Top Feed, 4-Pole/IG	84.0 lbs
EF250T5N-4-FUSED	Top Feed, 4-Pole/200% N	88.0 lbs
EF250T5N-4R-FUSED	Top Feed, 4-Pole/200% N	88.0 lbs
EF250T5NG-4-FUSED	Top Feed, 4-Pole/IG/200% N	90.0 lbs
EF250T5NG-4R-FUSED	Top Feed, 4-Pole/IG/200% N	90.0 lbs

# B250T5, B250T5N, B250T5G, B250T5NG Systems

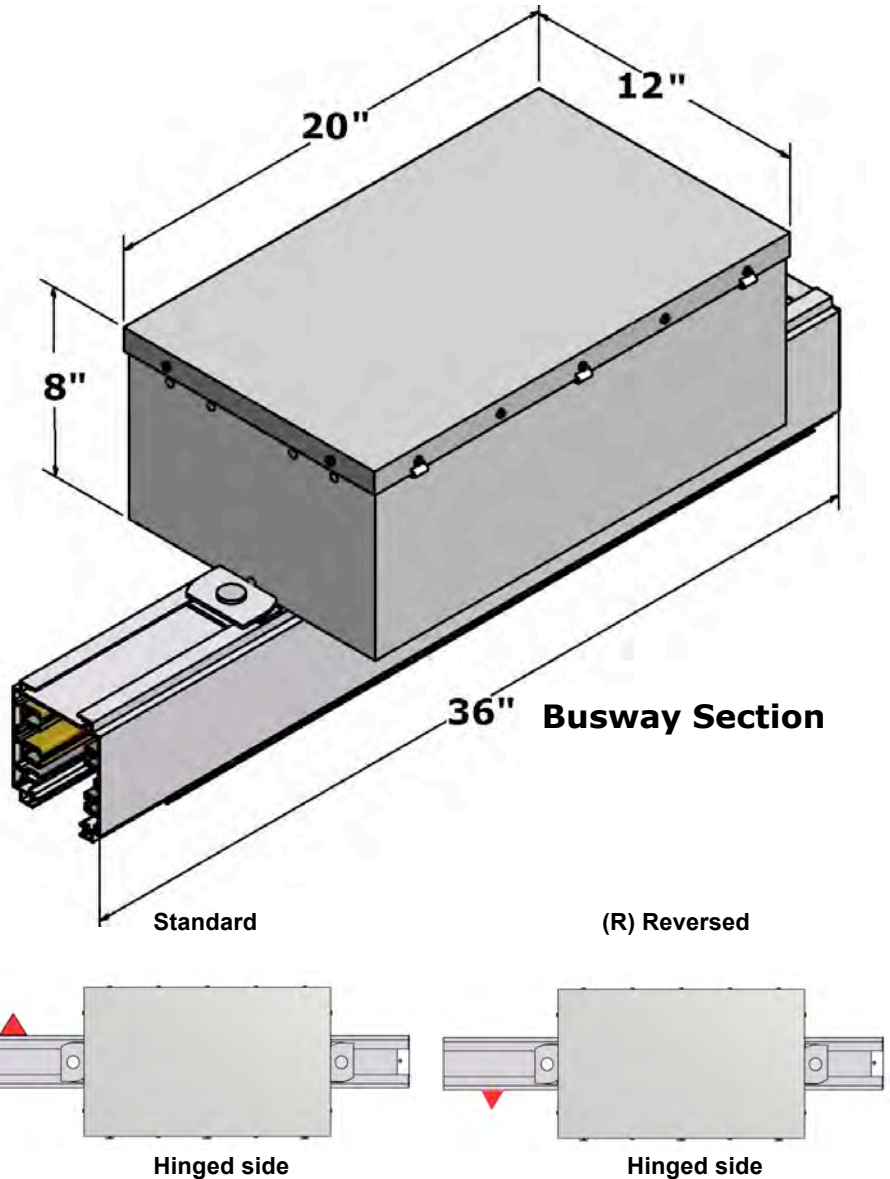
**TOP POWER FEED**  
Supplying power to TOP of Busway

**Top Power Feed Units**

Standard Top Power Feed units supply power from the topside of the Busway. Factory assembled unit consists of a 20 X 12 X 8 in. steel junction box, with hinged cover, mounted on top of a 36 inch section of Busway.

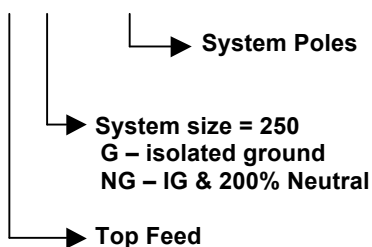
Top Feed Power units can be positioned at end or anywhere along a busway run. Connections to adjoining busway sections are made by the standard means, requiring couplers and bus connectors which are sold separately.

Top Feed unit can also be used as top power supply point anywhere along Busway run by connecting to adjacent Busway sections at both ends.



**Catalog Number Sequence**

TF250T5-(P)



**Catalog Number Selection**

Catalog No.	Description	Weight
TF250T5-4	Top Feed, 4-Pole	42.0 lbs
TF250T5-4R	Top Feed, 4-Pole	42.0 lbs
TF250T5G-4	Top Feed, 4-Pole/IG	43.5 lbs
TF250T5G-4R	Top Feed, 4-Pole/IG	43.5 lbs
TF250T5N-4	Top Feed, 4-Pole/200% N	44.0 lbs
TF250T5N-4R	Top Feed, 4-Pole/200% N	44.0 lbs
TF250T5NG-4	Top Feed, 4-Pole/IG/200% N	45.5 lbs
TF250T5NG-4R	Top Feed, 4-Pole/IG/200% N	45.5 lbs

# B250T5, B250T5N, B250T5G, B250T5NG Systems

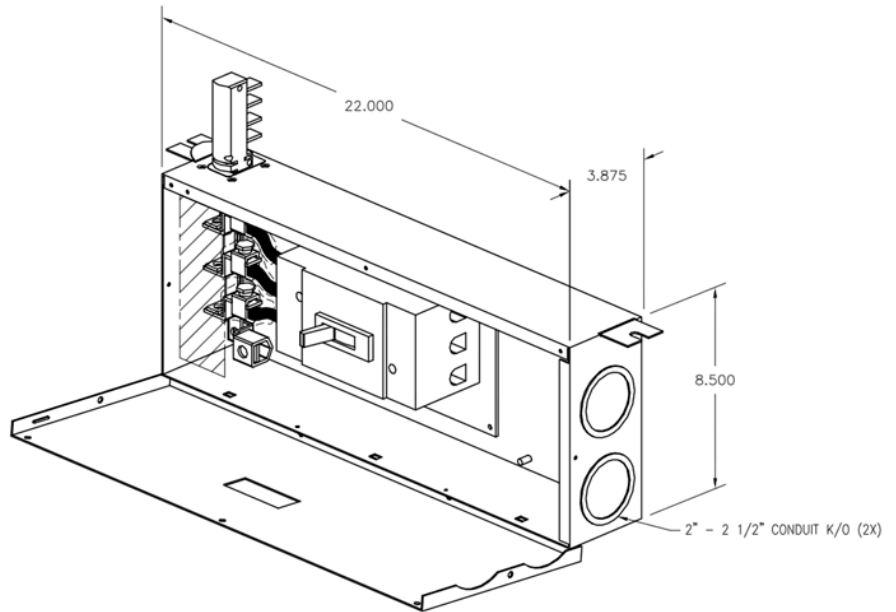
## CIRCUIT BREAKER FEED UNIT

### Circuit Breaker Feed Unit

Unit consists of an E26 enclosure, hinged lid, 225A 240V Square D circuit breaker, and plug head. Insert plug head into the busway and turn 90 degrees to make electrical connection. Unit is held in position by inserting the supplied bolt hangers in mounting tabs on either side of the unit.

Boxes have (4) 2 1/2" knockouts, two on the side, and two on the bottom. See images below for location of knockouts.

All units include a copper ground lug for copper wire size ranging from #8 to #2.



### Catalog Number Selection

Catalog No.	Description
CB225HS-225-300-4-PFS	Power Feed Unit, E26, 225A, 240V, 4-Pole, 22kAIC
CB225HSR-225-300-4-PFS	Power Feed Unit Reverse, E26, 225A, 240V, 4-Pole, 22kAIC

# B250T5, B250T5N, B250T5G, B250T5NG Systems

## TERMINAL BLOCK FEED UNIT

### Terminal Block Feed Unit

Unit consists of an E26 enclosure, hinged lid, terminal blocks, and plug head. Insert plug head into the busway and turn 90 degrees to make electrical connection. Unit is held in position by inserting the supplied bolt hangers in mounting tabs on either side of the unit.

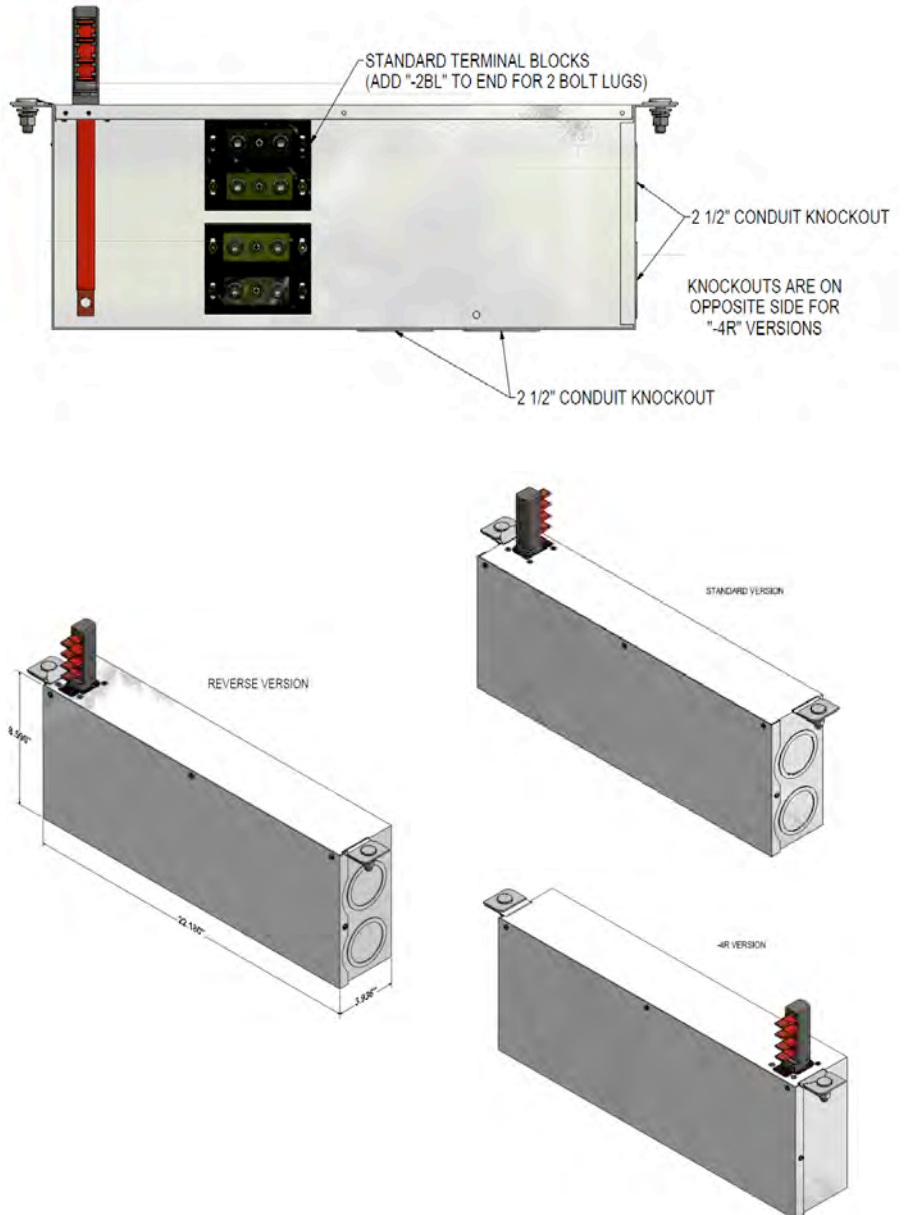
Boxes have (4) 2 1/2" knockouts, two on the side, and two on the bottom. See images below for location of knockouts.

All units include a copper ground lug for copper wire size ranging from #8 to #2.

Standard and reverse paddle units include terminal blocks for wire size ranging from 350mcm to #6.

2BL units have terminal blocks with 1/2-13x1 3/8" studs spaced 1 3/4" apart.

Units are rated to 225A and 600V.



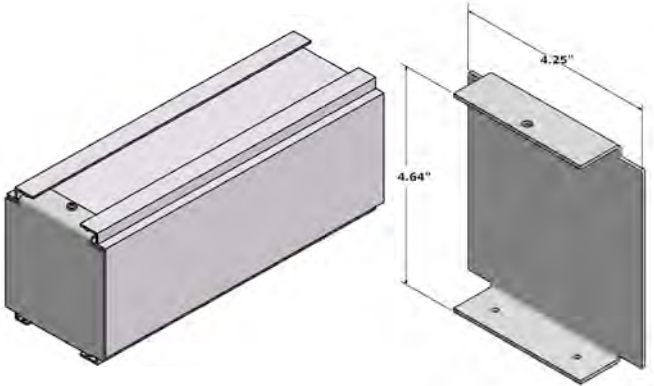
### Catalog Number Selection

Catalog No.	Description
TB225E26-225-4	Terminal Block, E26, 225A, 600V, 4-Pole
TB225E26-225-4-2BL	Terminal Block, E26, 225A, 600V, 4-Pole, 2 bolt lug
TB225E26R-225-4	Reverse Paddle Terminal Block, E26, 225A, 600V, 4-Pole
TB225E26R-225-4R	Reverse Paddle Terminal Block, Reverse Knockouts, E26, 225A, 600V, 4-Pole
TB225E26R-225-4-2BL	Reverse Paddle Terminal Block, E26, 225A, 600V, 4-Pole, 2 bolt lug
TB225E26R-225-4R-2BL	Reverse Paddle Terminal Block, Reverse Knockouts E26, 225A, 600V, 4-Pole, 2 bolt lug

**CONNECTION ACCESSORIES**

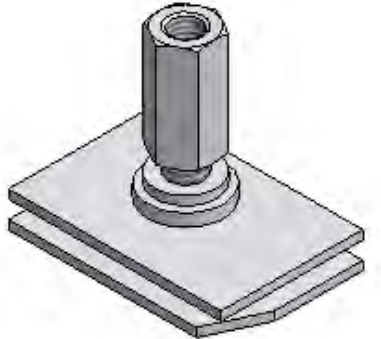
**END CAP**  
For covering the end of B250 Busway run.

**PART NUMBER**  
EC250T5  
**WEIGHT**  
0.4 lb.

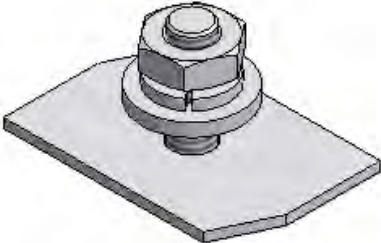


**HANGER BOLTS**  
**Threaded Rod (BRHT5-1)**  
For mounting to 1/2-13 threaded rod. Twist-in design. Can be inserted anywhere along the full access slot on the top of the Busway. Maximum hanger support spacing is every 10ft.  
**Standard (BHT5-1)** For mounting to strut or other flat surfaces. Twist-in design. Can be inserted anywhere along the full access slot on the top of the Busway. Maximum hanger support spacing is every 10ft.

**PART NUMBER**  
BRHT5-1  
BHT5-1  
**WEIGHT**  
1 lb.



BRHT5-1



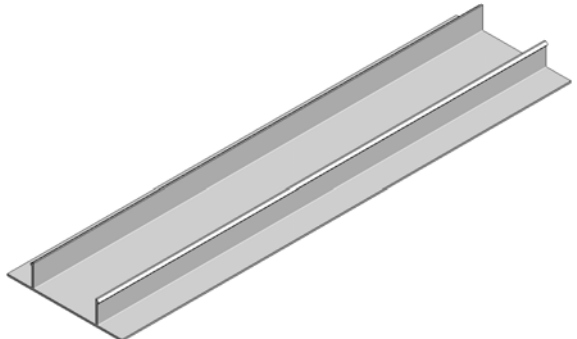
BHT5-1

**OPTIONAL CLOSURE STRIP**  
Snaps into bottom access slot of B250T5 housing sections. Normally shipped in 10 ft lengths.

**PART NUMBER**  
CST5-1  
**WEIGHT**  
0.3 lb/ft.

**ALUMINUM CLOSURE STRIP**  
Affixes with an adhesive backing to access slot of B250T5 housing sections. Normally shipped in 10 ft lengths.

**PART NUMBER**  
CST5-1-AL  
**WEIGHT**  
0.4 lb/ft.



# B250T5, B250T5N, B250T5G, B250T5NG Systems

## JOINT KIT / INSTALLATION TOOLS

**JOINT KIT**

For connection of adjacent Busway sections. One Kit required at each joint. Each Kit is comprised of a housing coupler pair and bus connector set. Specify configuration to match busway configuration.

**HOUSING COUPLER:**

consists of two, 12-screw couplers-one for the top and one for the bottom.

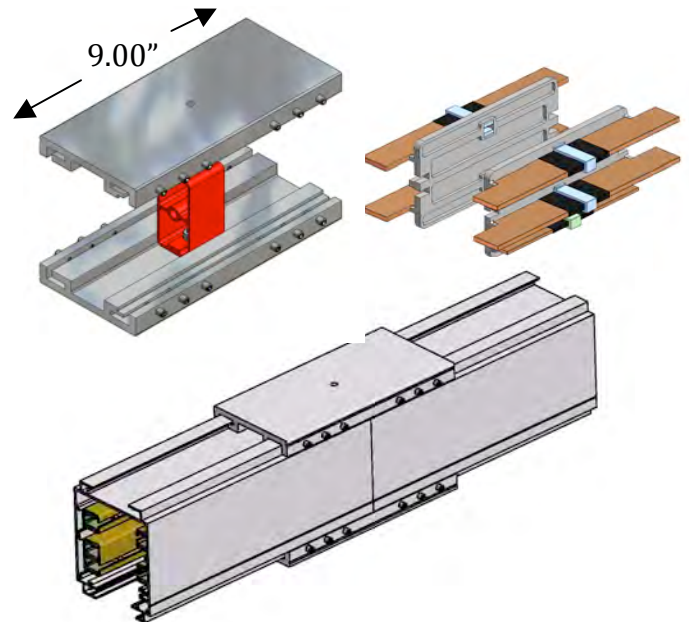
**BUS CONNECTOR:** Copper blades secured to insulating mounting plate. Left and Right set, makes electrical connection between sections.

**PART NUMBER**

- JK250T5-1
- JK250T5G-1
- JK250T5N-1
- JK250T5NG-1

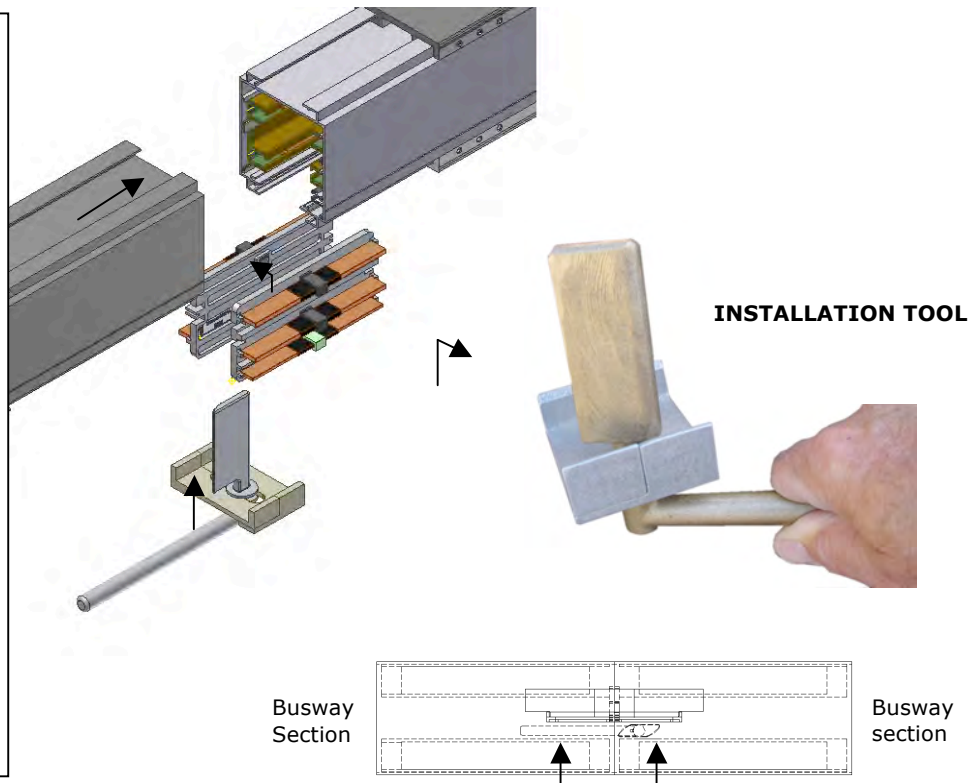
**WEIGHT**

4 lbs.



Used to install the 'bus connector' electrical joint between two adjacent sections of Busway. A 'Joint Kit', comprised of two housing couplers and a bus connector set are required at every joint.

Busway sections are butted together and the top housing coupler is installed. The Bus connector is inserted, centered and seated in the slot of the Busway. The installation tool is inserted into jointed intersection and rotated 90° forcing stabs into u-shaped female conductors making a spring-loaded, secure electrical connection. Housing Coupler is positioned over the bottom joint and tightened.



**For Standard B400ITT5 & B250ITT5**  
Installation Tool PART NUMBER T5IT Weight 3.1 lbs.



# B250T5, B250T5N, B250T5G, B250T5NG Systems

## COMPONENT RELATIONSHIP

When ordering material it is important to understand the relationship between various components. Examples:

- B250T5 uses the "T5" series of plug-in units. These plugs are compatible with other Starline T5series busway systems (B400T5 and B800T5).
- ALL COMPONENTS except Housing, Tee, Elbow Sections and Power Feeds are the same and are interchangeable for B250T5, B250T5N (double neutral), B250T5G and B250T5NG Amp Systems. Substitute either "250T5" or "250T5N" or "250T5G" or "250T5NG" for all Housing, Tee, Elbow Sections and Power Feed units.
- Each housing section requires a joint kit. Determine the total number of housing sections (regardless of length) as this becomes the number of Joint Kits (JK250T5 series) that will be needed.
  - Add one extra Joint Kit for each Tee Section.
  - No need to add extra Joint Kits for Elbow Sections, as they are already part of your housing count.
- If this is your first installation for either B250T5, B250T5N, B250T5G or B250T5NG systems, you will need to order Installation Tool T5IT.
- General support hardware rule to follow:

Total System Length + 0.10 (10%) = Support Hardware Qty 10

10 equal 10 ft spacing and 10% extra is recommended for job site changes.

- Total Power Feeds and End Caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering elbow or tee sections, it is important to understand polarity and the relationship to direction of outlets. Please refer to POLARITY CONCERNS for more detail.

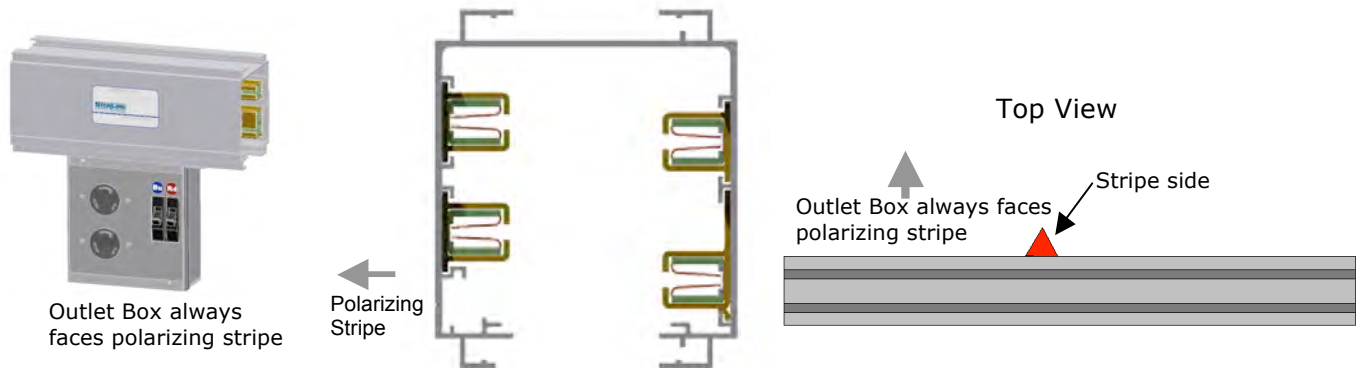


# B250T5, B250T5N, B250T5G, B250T5NG Systems

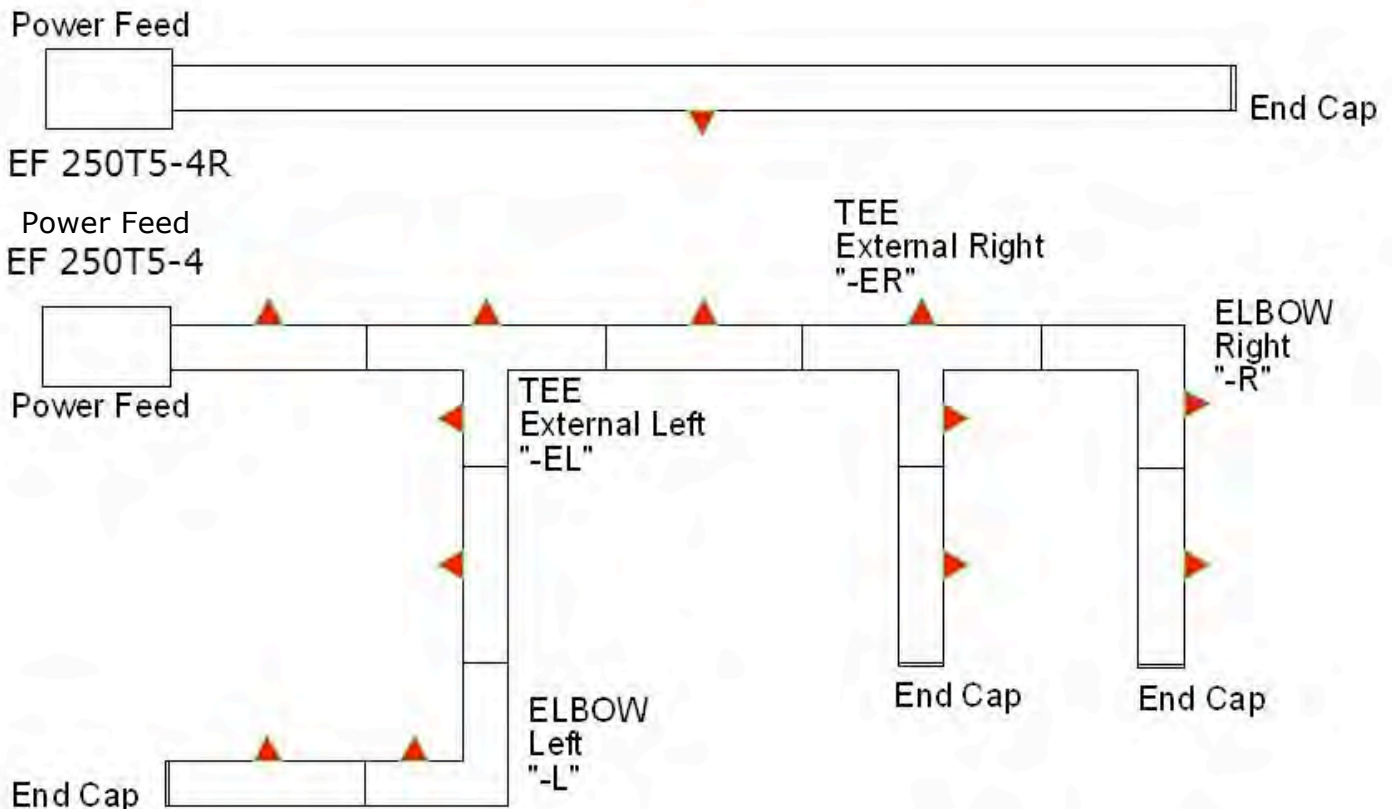


## POLARITY CONCERNS

STARLINE utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation. It is particularly important to understand this design concept prior to ordering and/or installing some components. For example, if the face direction of a STARLINE plug-in unit is important in your installation consider that they will always face the conductor side. Certain plug-in units are 'reversible', designated by 'R', to face devices away from the conductor side.

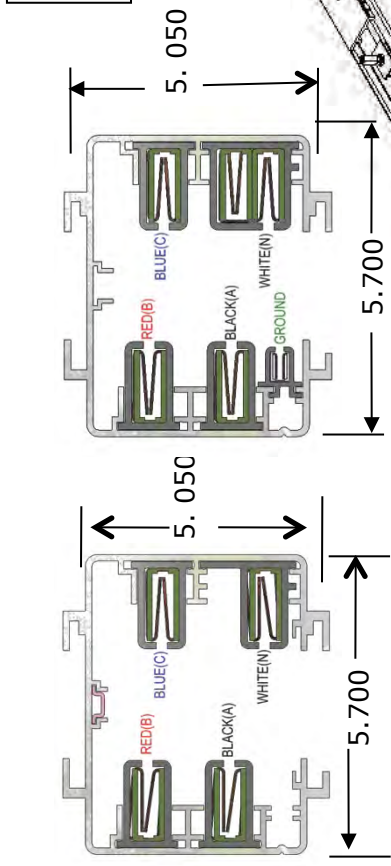


Tee's and Elbow Sections are specified according to desired polarity

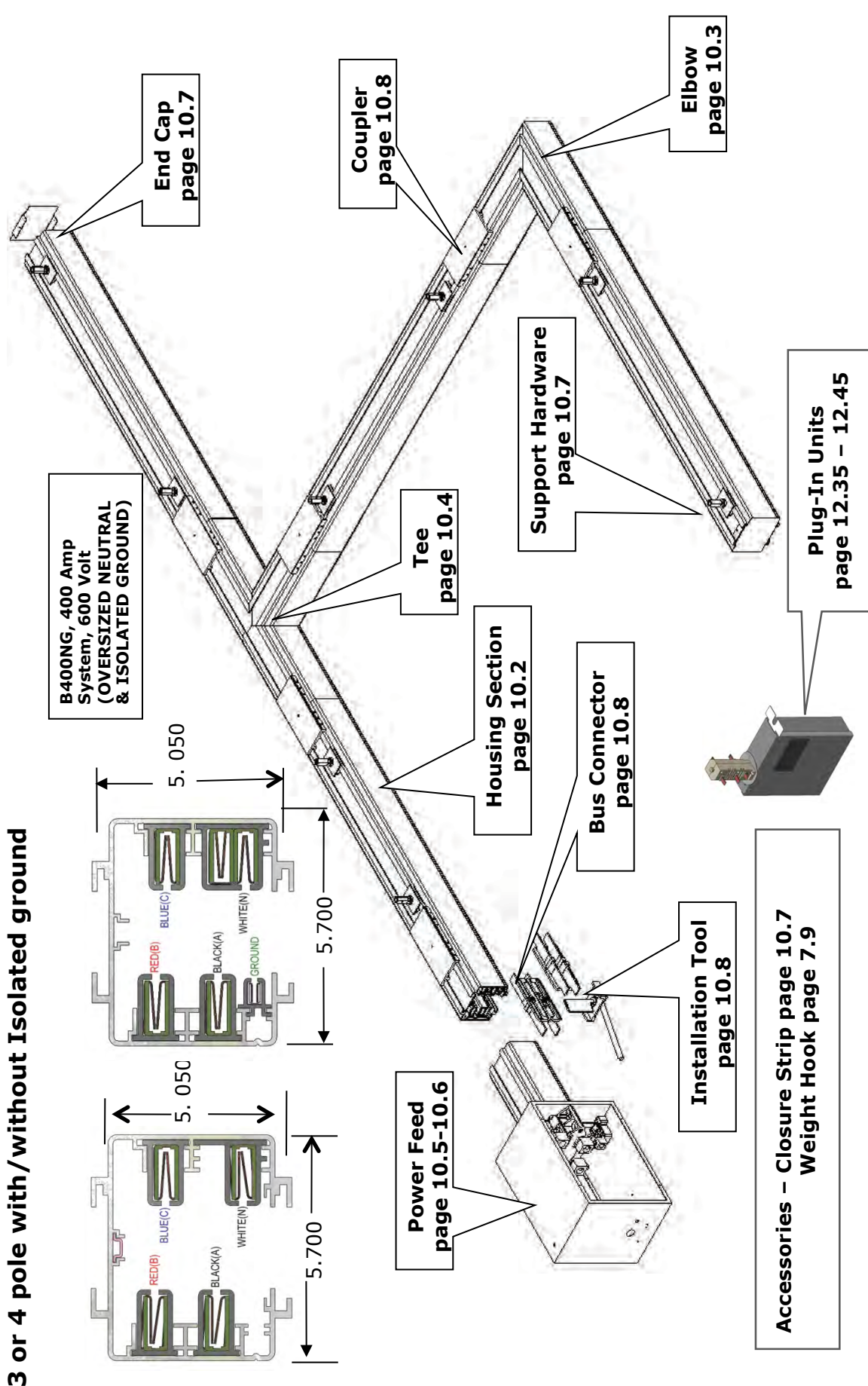


**Standard B400, 400 Amp System,  
600 Volts**

3 or 4 pole with/without Isolated ground



B400NG, 400 Amp System, 600 Volt (OVERSIZED NEUTRAL & ISOLATED GROUND)



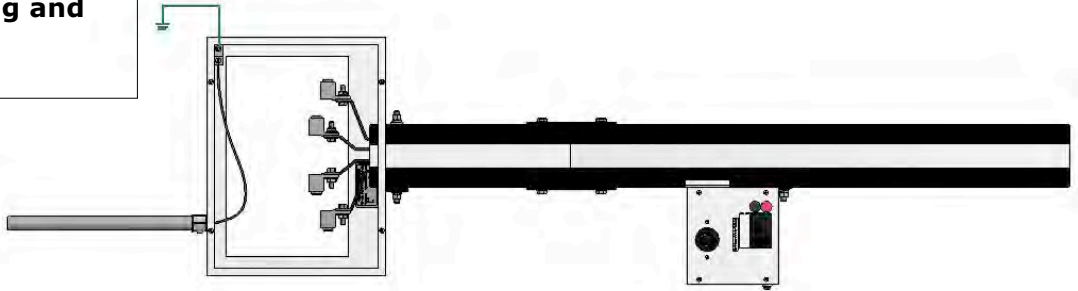
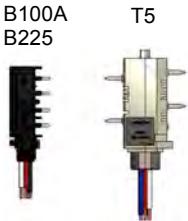
Accessories - Closure Strip page 10.7  
Weight Hook page 7.9

# Ground Options

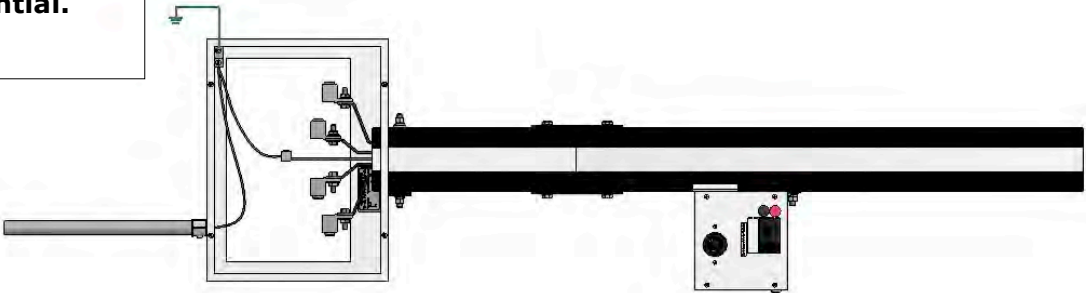
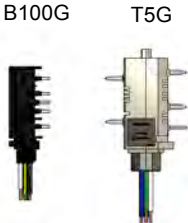


## FAQ CASE GROUND, DEDICATED GROUND, ISOLATED GROUND

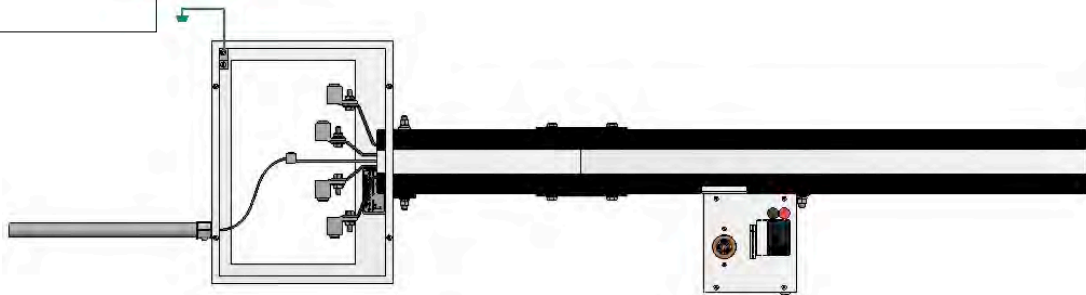
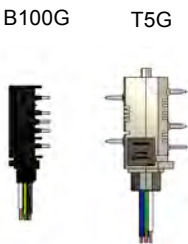
**CASE GROUND**  
Uses aluminum housing and no extra copper bar.



**DEDICATED GROUND**  
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.



**ISOLATED GROUND**  
Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.



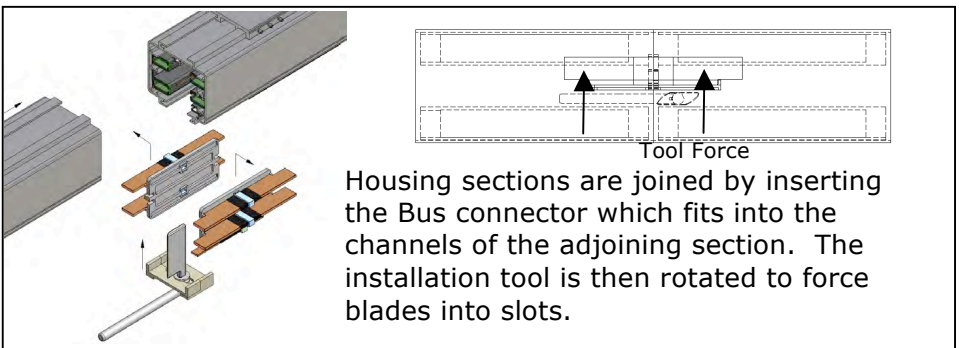
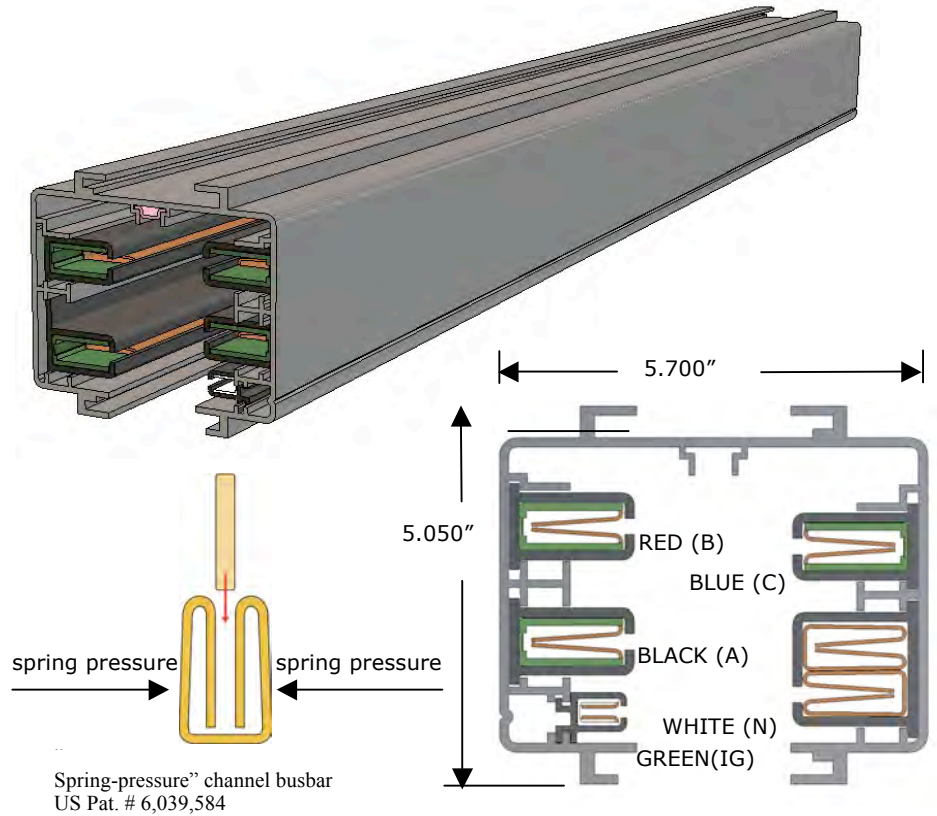
# B400T5, B400T5N, B400T5G, B400T5NG Systems



## HOUSING SECTION

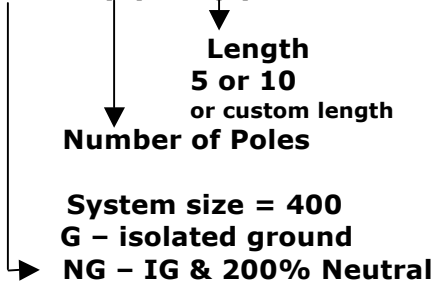
Track Busway housing section consists of an extruded aluminum shell with "spring-pressure" type copper channel busbars contained in a full length PVC insulator mounted on the interior walls. The aluminum extrusion acts as a 100% ground path meeting UL 857 Standard and complies with applicable paragraphs of Section 250 of the NEC. Each housing has a continuous access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 3 or 4-pole varieties, optional isolated ground, optional oversize neutral. The housing sections join together using Bus connectors which fit into the channels of the adjoining section. An Installation tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.

**MATERIAL:** Extruded Aluminum  
**RATINGS:** 100% Ground Path  
**400 Amps**  
**B400T5/B400G 600 Volt**  
**B400N/B400NG 480 Volt**  
**LENGTH:** 5 Ft, 10 Ft.  
**VOLTAGE DROP:**  
 distributed load, .8PF  
 Single Phase 49ft per Volt  
 Three Phase 58 ft per Volt



Housing sections are joined by inserting the Bus connector which fits into the channels of the adjoining section. The installation tool is then rotated to force blades into slots.

### Catalog Number Sequence B400T5-(X)PG-(L)



### Catalog Number Selection

Catalog No.	Description	Length	Weight
B400T5-4PG-5	400A, 4-pole	5 ft	47.5 lbs
B400T5-4PG-10	400A, 4-pole	10 ft	95.0 lbs
B400T5G-4PG-5	400A, 4P/iso. Gnd	5 ft	50.0 lbs
B400T5G-4PG-10	400A, 4P/iso. Gnd	10 ft	100.0 lbs
B400T5N-4PG-5	400A, 4P/ 200%N	5 ft	55.0 lbs
B400T5N-4PG-10	400A, 4P/ 200%N	10 ft	110.0 lbs
B400T5NG-4PG-5	400A, 4P/IG/200%N	5 ft	60.0 lbs
B400T5NG-4PG-10	400A, 4P/IG/200%N	10 ft	120.0 lbs

# B400T5, B400T5N, B400T5G, B400T5NG Systems



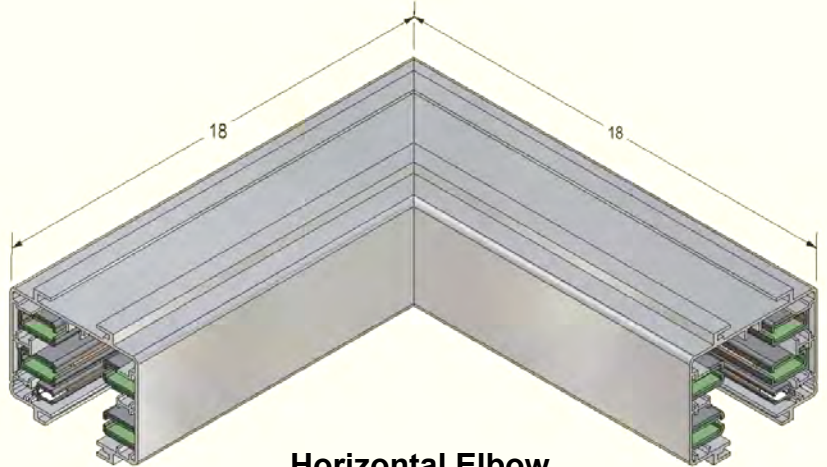
## ELBOW SECTION

### Elbow Section

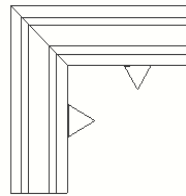
An Elbow is used for making a horizontal 90 degree change of direction in a Busway run. Specify right or left elbow, according to the orientation of the polarizing stripe in the Busway sections to be connected.

**CONNECTION ACCESSORIES:**  
(Ordered Separately)

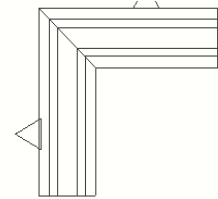
Joint Kit (JK400T5 series) is used to make mechanical and electrical connections to adjacent Busway sections.



Horizontal Elbow



EL400-4-L  
Horizontal Elbow

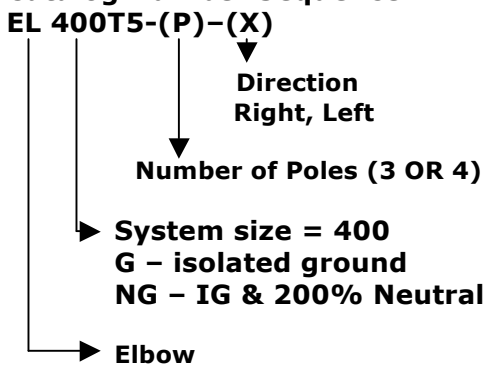


EL400-4-R  
Horizontal Elbow



Installed with couplers

### Catalog Number Sequence



### Catalog Number Selection

Catalog No.	Description	Weight
EL400T5-4-L	Elbow, 4-pole, left	28.0 lbs
EL400T5-4-R	Elbow, 4-pole, right	28.0 lbs
EL400T5G-4-L	Elbow, 4-pole/IG, left	28.0 lbs
EL400T5G-4-R	Elbow, 4-pole/IG, right	28.0 lbs
EL400T5N-4-L	Elbow, 4-pole/200% N, left	28.0 lbs
EL400T5N-4-R	Elbow, 4-pole/200% N, right	28.0 lbs
EL400T5NG-4-L	Elbow, 4-pole/IG/200% N, left	28.0 lbs
EL400T5NG-4-R	Elbow, 4-pole/IG/200% N, right	28.0 lbs

# B400T5, B400T5N, B400T5G, B400T5NG Systems

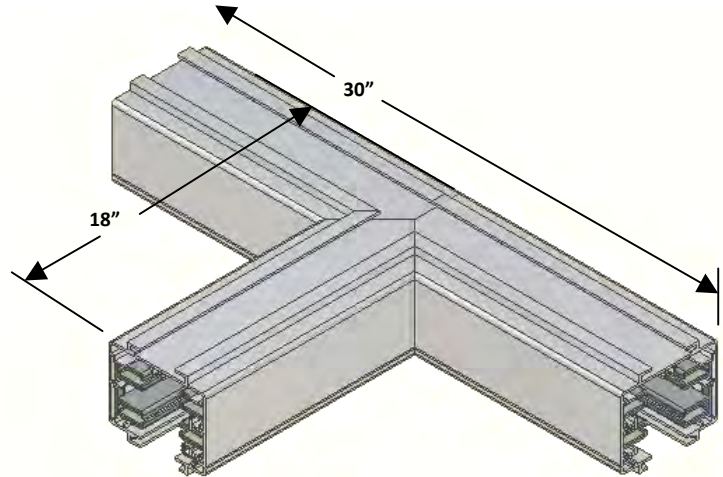
## TEE SECTION

### Tee Section

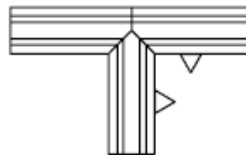
A Tee is used for making a horizontal 90 degree branch leg in a Busway run. Specify internal, external, right, or left tee, according to the orientation of the polarizing stripe in the Busway sections to be connected.

### CONNECTION ACCESSORIES: (Ordered Separately)

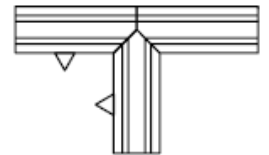
A Joint Kit (JK400T5 series) is used to make mechanical and electrical connections to adjacent Busway sections.



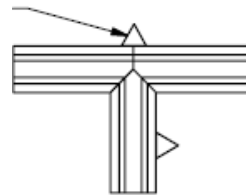
Internal Right  
-IR



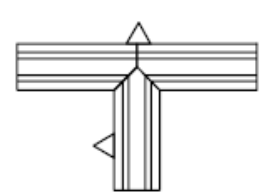
Internal Left  
-IL



External Right  
-ER

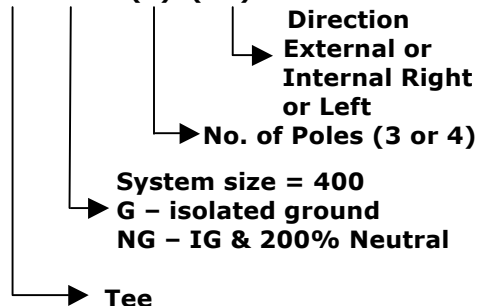


External Left  
-EL



Polarizing Stripe

### Catalog Number Sequence T400T5- (P)-(XX)



### Catalog Number Selection (standard B400 shown)

Catalog No.	Description	Weight
T400T5-4-IL	Tee, 4-pole, Internal Left	42.0 lbs
T400T5-4-EL	Tee, 4-pole, External Left	42.0 lbs
T400T5-4-IR	Tee, 4-pole, Internal Right	42.0 lbs
T400T5-4-ER	Tee, 4-pole, External Right	42.0 lbs

# B400T5, B400T5N, B400T5G, B400T5NG Systems

**END POWER FEED UNITS**  
Supplying power to END of Busway

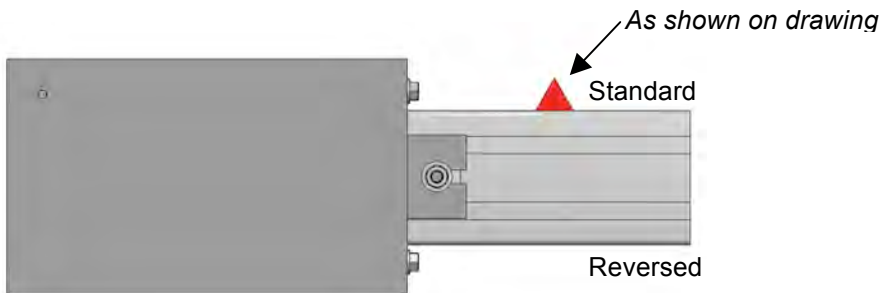
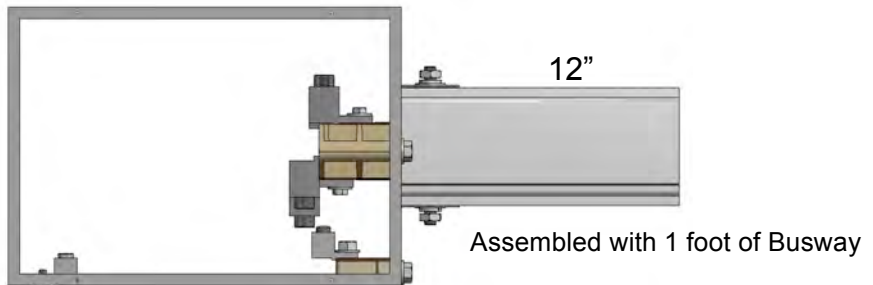
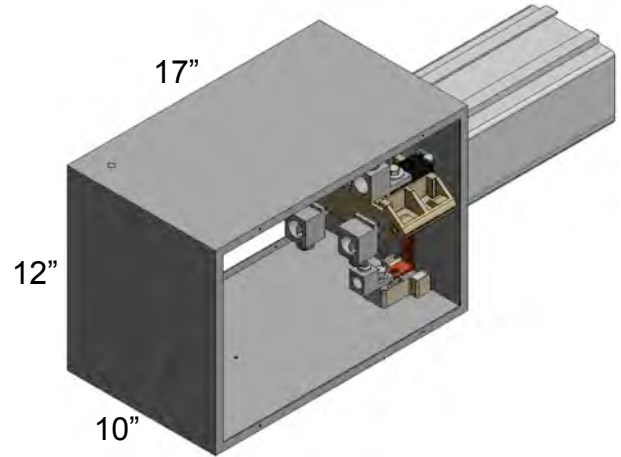
Standard End Power Feed units connect to the end of any busway section. Factory assembled unit consists of a 12 x 17 x 10 in. steel junction box, with removable sides, connected to a 1 ft section of Busway. The assembly includes connection lugs and a ground lug for wires up to 600 MCM.

Reverse End Feed units for connection opposite end of Busway section (polarizing stripe faces to right as viewed from end of unit).

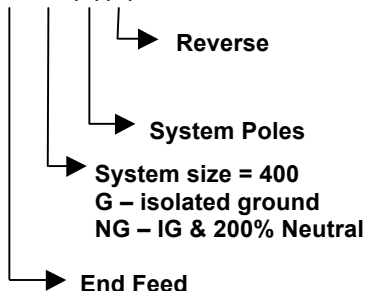
Junction box is sized such that one or two 4 in. conduits can be installed in end of box.

End Power Feed units are connected to adjacent Busway sections using Housing Coupler and Bus Connector (sold separately).

Special Need Power Feed units for confined spaces as might be found in Mission Critical Data Centers can also be designed and fabricated, requiring minimum quantities.



**Catalog Number Sequence**  
EF400-(P)(R)



**Catalog Number Selection**

Catalog No.	Description	Weight
EF400T5-4	End Feed, 4-Pole	31.5 lbs
EF400T5-4R	End Feed, 4-Pole	31.5 lbs
EF400T5G-4	End Feed, 4-Pole/IG	32.0 lbs
EF400T5G-4R	End Feed, 4-Pole/IG	32.0 lbs
EF400T5N-4	End Feed, 4-Pole/200% N	33.0 lbs
EF400T5N-4R	End Feed, 4-Pole/200% N	33.0 lbs
EF400T5NG-4	End Feed, 4-Pole/IG/200% N	33.5 lbs
EF400T5NG-4R	End Feed, 4-Pole/IG/200% N	33.5 lbs

# B400T5, B400T5N, B400T5G, B400T5NG Systems

## FUSED POWER FEED UNITS

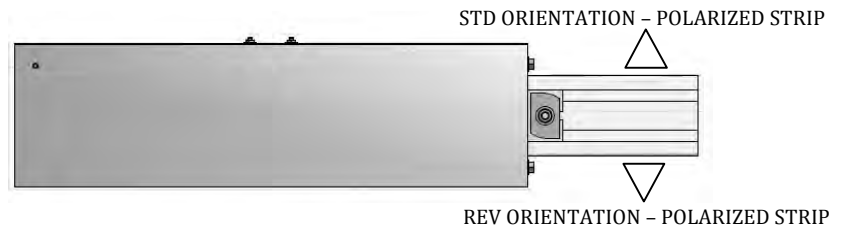
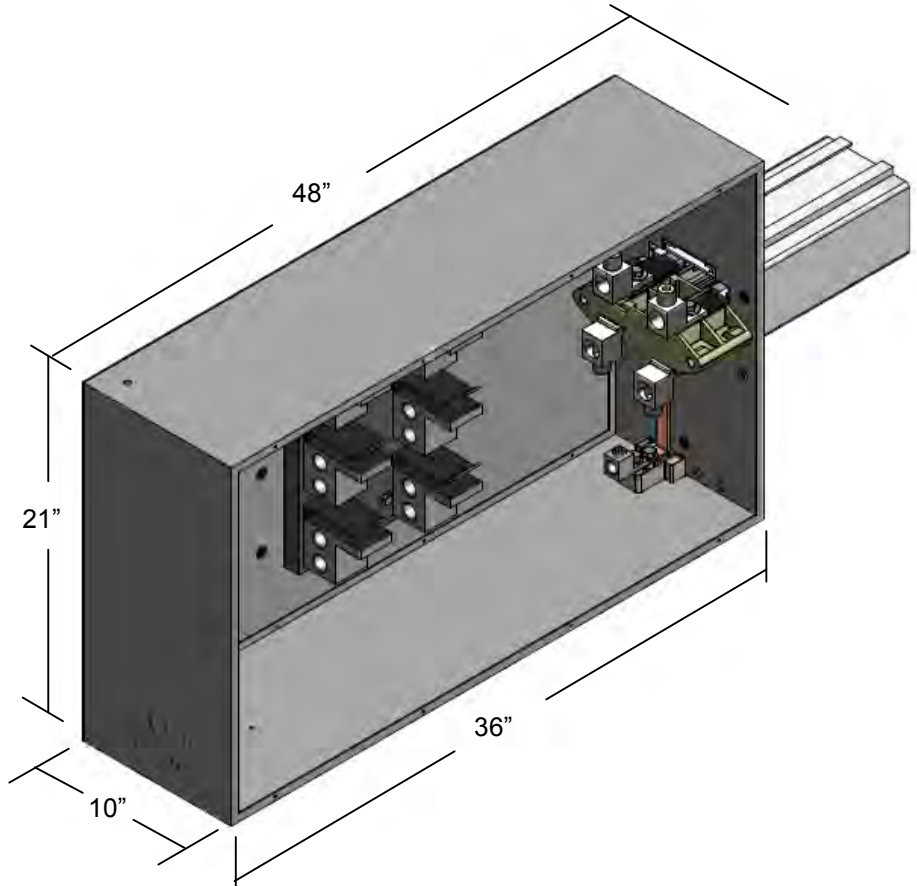
Supplying power to END of Busway

### Fused Power Feed Units

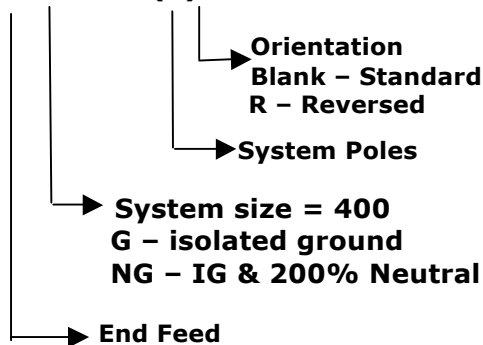
Fused End Power Feed units connect to the end of any busway section. Factory assembled unit consists of a 36 X 21 X 10 in. steel junction box, with a removable side, connected to a 1 foot section of Busway. The assembly includes 600MCM wire connections from the fuse base. Customers are required to provide the appropriate sized Class-J fuses.

The end feed box is sized such that one or two 4" conduits can be installed in the end of the box.

Fused End Power units are connected to adjacent Busway sections using Housing Coupler and bus connector (sold separately).



### Catalog Number Sequence EF400T5-(P)R-FUSED



### Catalog Number Selection

Catalog No.	Description	Weight
EF400T5-4-FUSED	Top Feed, 4-Pole	82.0 lbs
EF400T5-4R-FUSED	Top Feed, 4-Pole	82.0 lbs
EF400T5G-4-FUSED	Top Feed, 4-Pole/IG	84.0 lbs
EF400T5G-4R-FUSED	Top Feed, 4-Pole/IG	84.0 lbs
EF400T5N-4-FUSED	Top Feed, 4-Pole/200% N	88.0 lbs
EF400T5N-4R-FUSED	Top Feed, 4-Pole/200% N	88.0 lbs
EF400T5NG-4-FUSED	Top Feed, 4-Pole/IG/200% N	90.0 lbs
EF400T5NG-4R-FUSED	Top Feed, 4-Pole/IG/200% N	90.0 lbs



# B400, B400N, B400G, B400NG Systems

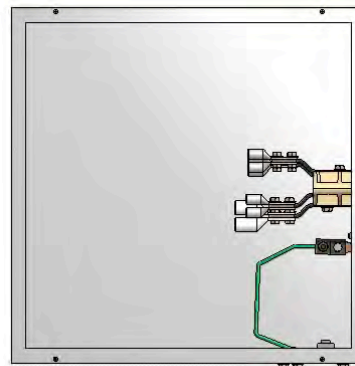
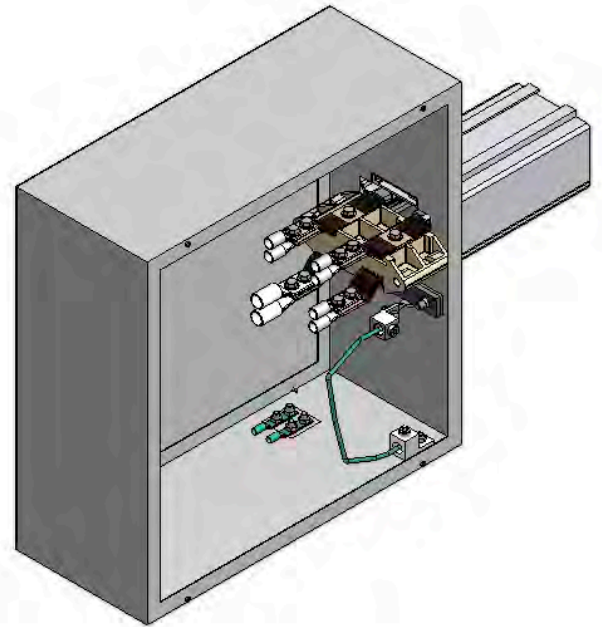


## END POWER FEED UNITS-2 BOLT LUG Supplying power to END of Busway

End Power Feed units connect to the end of any busway section. Factory assembled unit consists of a 24 X 24 X 10 in. steel junction box, with removable sides, connected to a 1 foot section of Busway. The assembly provides landings for standard 2 bolt (1" centers, 3/8" bolt) crimp connection lugs for wires up to 700MCM. Crimp connection lugs are not included. Reverse End feed units for connection to opposite end of busway section (polarizing stripe faces to right as viewed from end of unit).

Two Lugs per busbar can be used for parallel conductor feed arrangements.

End Power Feed units are connected to adjacent Busway sections using Housing Coupler and bus connector (sold separately).



Assembled with 1 ft of Busway

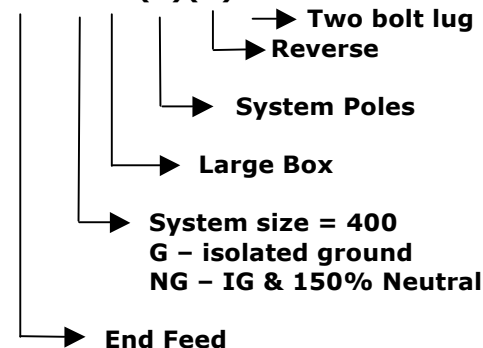
As shown on layout dwg



Standard

Reversed

### Catalog Number Sequence EF400L-(P)(R)-2BL



### Catalog Number Selection

Catalog No.	Description	Weight
EF400L-4-2BL	End Feed, 4-Pole	35.5 lb
EF400L-4R-2BL	End Feed, 4-Pole	35.5 lb
EF400GL-4-2BL	End Feed, 4-Pole/IG	36 lb
EF400GL-4R-2BL	End Feed, 4-Pole/IG	36 lb
EF400NL-4-2BL	End Feed, 4-Pole/150% N	37 lb
EF400NL-4R-2BL	End Feed, 4-Pole/150% N	37 lb
EF400NGL-4-2BL	End Feed, 4-Pole/IG/150% N	37.5 lb
EF400NGL-4R-2BL	End Feed, 4-Pole/IG/150% N	37.5 lb

# B400T5, B400T5N, B400T5G, B400T5NG Systems



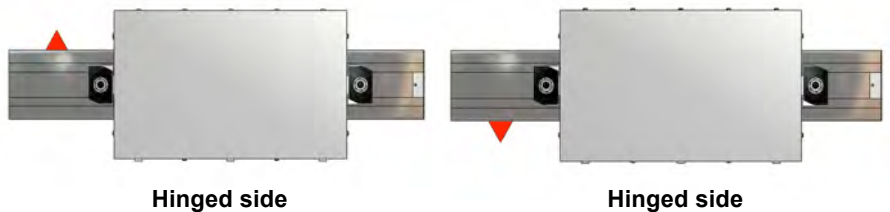
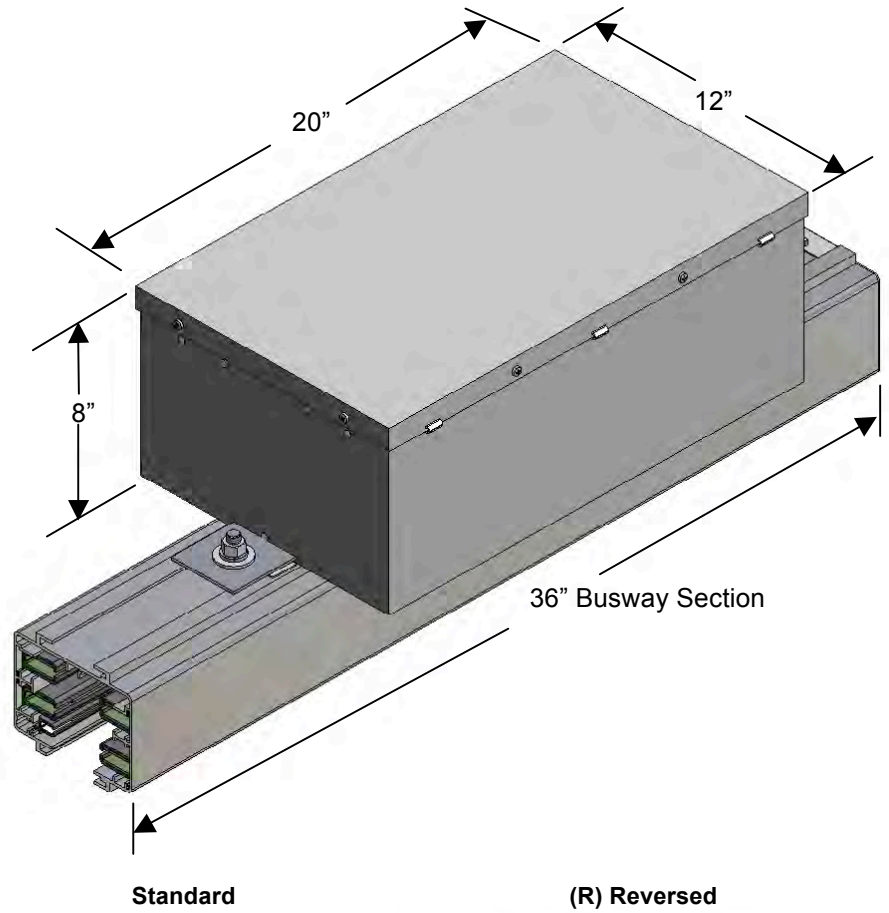
**TOP POWER FEED**  
Supplying power to TOP of Busway

## Top Power Feed Units

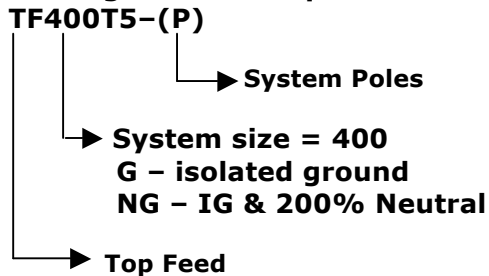
Standard Top Power Feed units supply power from the topside of the Busway. Factory assembled unit consists of a 20 X 12 X 8 in. steel junction box, with hinged cover, mounted on top of a 36 inch section of Busway.

Top Feed Power units can be positioned at end or anywhere along a busway run. Connections to adjoining busway sections are made by the standard means, requiring couplers and bus connectors which are sold separately.

Top Feed unit can also be used as top power supply point anywhere along Busway run by connecting to adjacent Busway sections at both ends.



## Catalog Number Sequence



## Catalog Number Selection

Catalog No.	Description	Weight
TF400T5-4	Top Feed, 4-Pole	46.5 lbs
TF400T5-4R	Top Feed, 4-Pole	46.5 lbs
TF400T5G-4	Top Feed, 4-Pole/IG	46.5 lbs
TF400T5G-4R	Top Feed, 4-Pole/IG	46.5 lbs
TF400T5N-4	Top Feed, 4-Pole/200% N	50.0 lbs
TF400T5N-4R	Top Feed, 4-Pole/200% N	50.0 lbs
TF400T5NG-4	Top Feed, 4-Pole/IG/200% N	50.0 lbs
TF400T5NG-4R	Top Feed, 4-Pole/IG/200% N	50.0 lbs

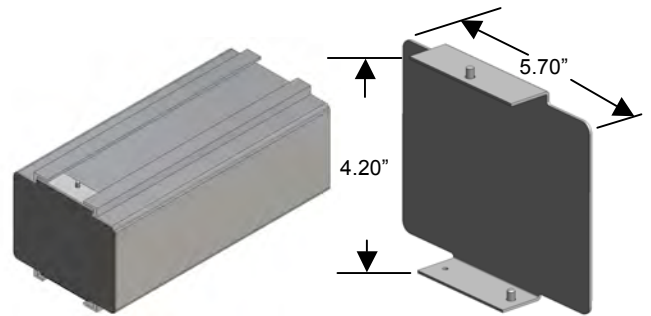
**CONNECTION ACCESSORIES**

**END CAP**

For covering the end of B400T5 Busway run.

**PART NUMBER**  
EC400T5

**WEIGHT**  
0.4 lb/ft.



**HANGER BOLTS**

**Threaded Rod (BRH400-1)**

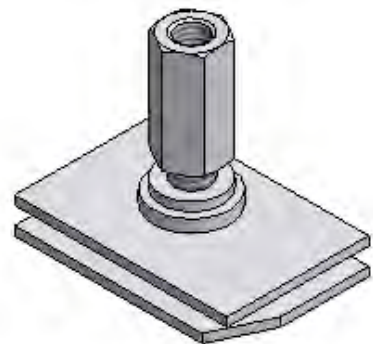
For mounting to 1/2-13 threaded rod. Twist-in design. Can be inserted anywhere along the full access slot on the top of the Busway. Maximum hanger support spacing is every 10ft.

**Standard (BHT5-1)**

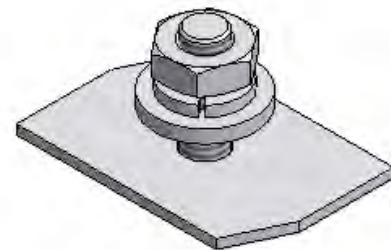
For mounting to strut or other flat surfaces. Twist-in design. Can be inserted anywhere along the full access slot on the top of the Busway. Maximum hanger support spacing is every 10ft.

**PART NUMBER**  
BRHT5-1  
BHT5-1

**WEIGHT**  
1lb/ft.



BRHT5-1



BHT5-1

**OPTIONAL CLOSURE STRIP**

Snaps into bottom access slot of B400T5 housing sections. Normally shipped in 10 ft lengths.

**PART NUMBER**  
CST5-1

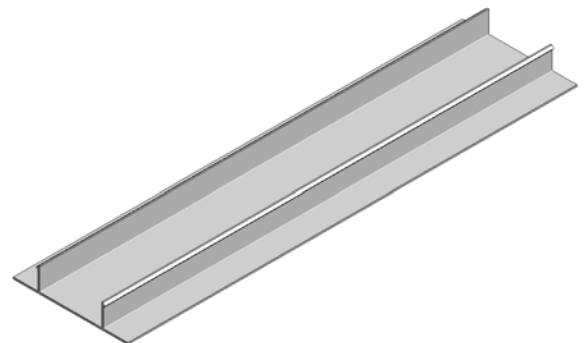
**WEIGHT**  
0.3 lb/ft.

**ALUMINUM CLOSURE STRIP**

Affixes with an adhesive backing to access slot of B400T5 housing sections. Normally shipped in 10 ft lengths.

**PART NUMBER**  
CST5-1-AL

**WEIGHT**  
0.4 lb/ft.



# B400T5, B400T5N, B400T5G, B400T5NG Systems

## JOINT KIT / INSTALLATION TOOL

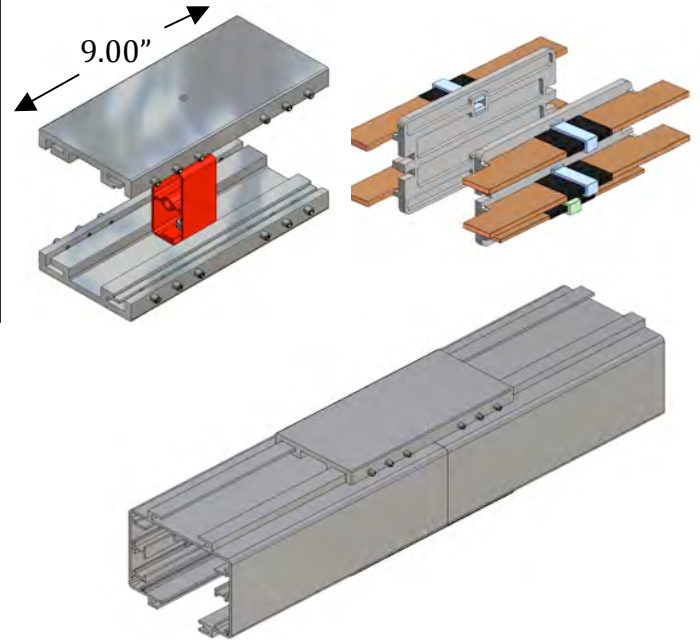
**JOINT KIT**  
For connection of adjacent Busway sections. One Kit required at each joint. Each Kit is comprised of a housing coupler pair and bus connector set. Specify configuration to match busway configuration.

**HOUSING COUPLER:**  
consists of two, 12-screw couplers—one for the top and one for the bottom.

**BUS CONNECTOR:** Copper blades secured to insulating mounting plate. Left and Right set, makes electrical connection between sections.

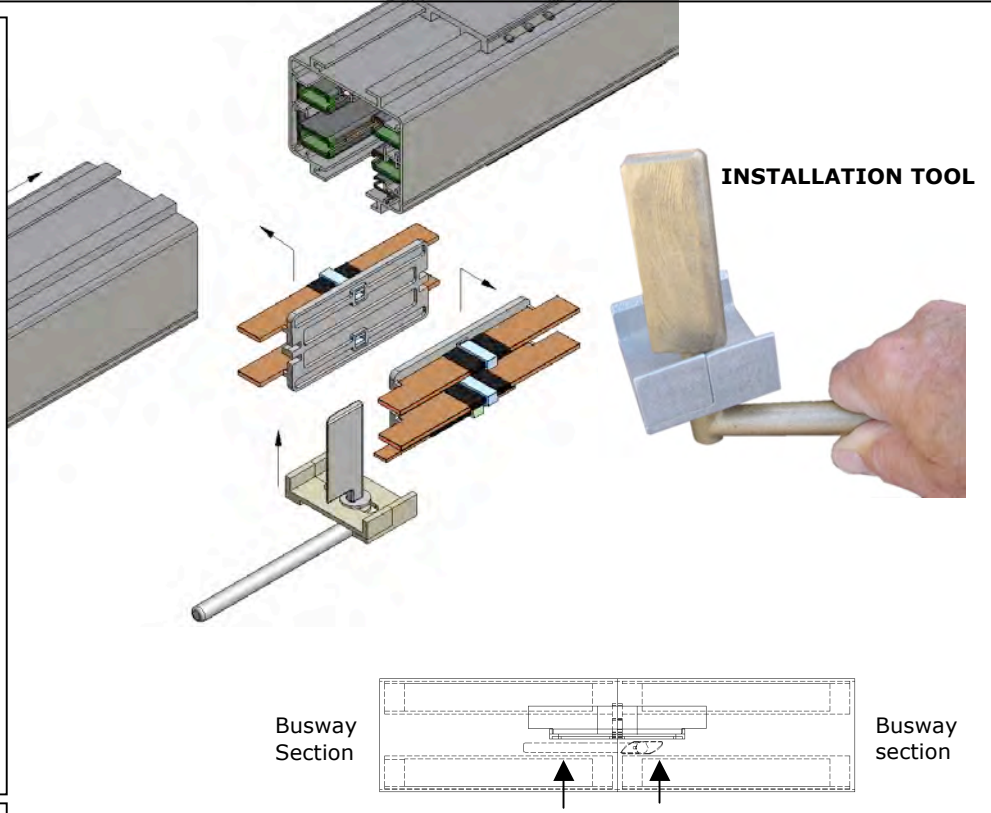
**PART NUMBER**  
JK400T5-1  
JK400T5G-1  
JK400T5N-1  
JK400T5NG-1

**WEIGHT**  
4 lbs.



Used to install the 'bus connector' electrical joint between two adjacent sections of Busway. A 'Joint Kit', comprised of two housing couplers and a bus connector set are required at every joint.

Busway sections are butted together and the top housing coupler is installed. The Bus connector is inserted, centered and seated in the slot of the Busway. The installation tool is inserted into jointed intersection and rotated 90° forcing stabs into u-shaped female conductors making a spring-loaded, secure electrical connection. Housing Coupler is positioned over the bottom joint and tightened.



**Installation Tool**

**PART NUMBER**  
BT5IT  
**Weight 3.1 lbs.**

# B400T5, B400T5N, B400T5G, B400T5NG Systems



## COMPONENT RELATIONSHIP

When ordering material it is important to understand the relationship between various components. Examples:

- ALL COMPONENTS except Housing, Tee, Elbow Sections and Power Feeds are the same and are interchangeable for B400T5, B400T5N (double neutral), B400T5G and B400T5NG Amp Systems. Substitute either "400T5" or "400T5N" or "400T5G" or "400T5NG" for all Housing, Tee, Elbow Sections and Power Feed units.
- Each housing section requires a joint kit. Determine the total number of housing sections (regardless of length) as this becomes the number of Joint Kits (JK400 series) that will be needed.
  - Add one extra Joint Kit for each Tee Section.
  - No need to add extra Joint Kits for Elbow Sections, as they are already part of your housing count.
- If this is your first installation for either B400T5, B400T5N, B400T5G or B400T5NG systems, you will need to order Installation Tool B400T5IT.
- General support hardware rule to follow:

Total System Length + 0.10 (10%) = Support Hardware Qty 10

10 equal 10 ft spacing and 10% extra is recommended for job site changes.

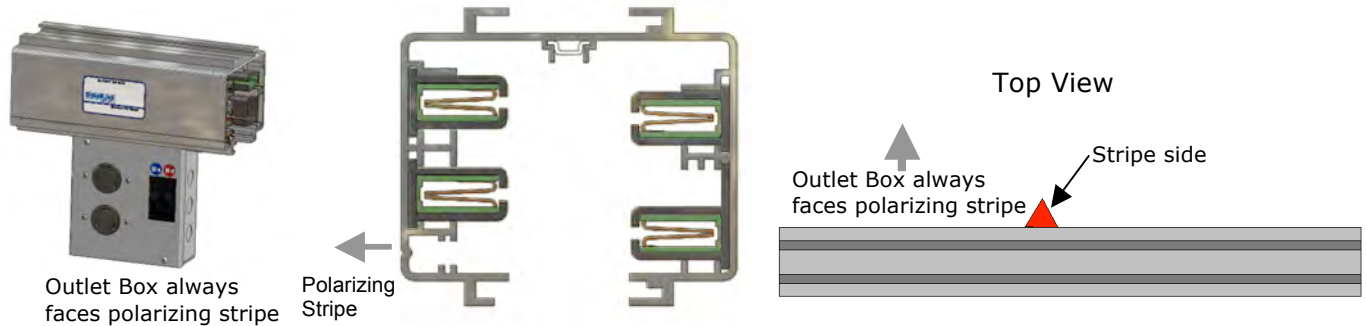
- Total Power Feeds and End Caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering elbow or tee sections, it is important to understand polarity and the relationship to direction of outlets. Please refer to POLARITY CONCERNS for more detail.

# B400T5, B400T5N, B400T5G, B400T5NG Systems

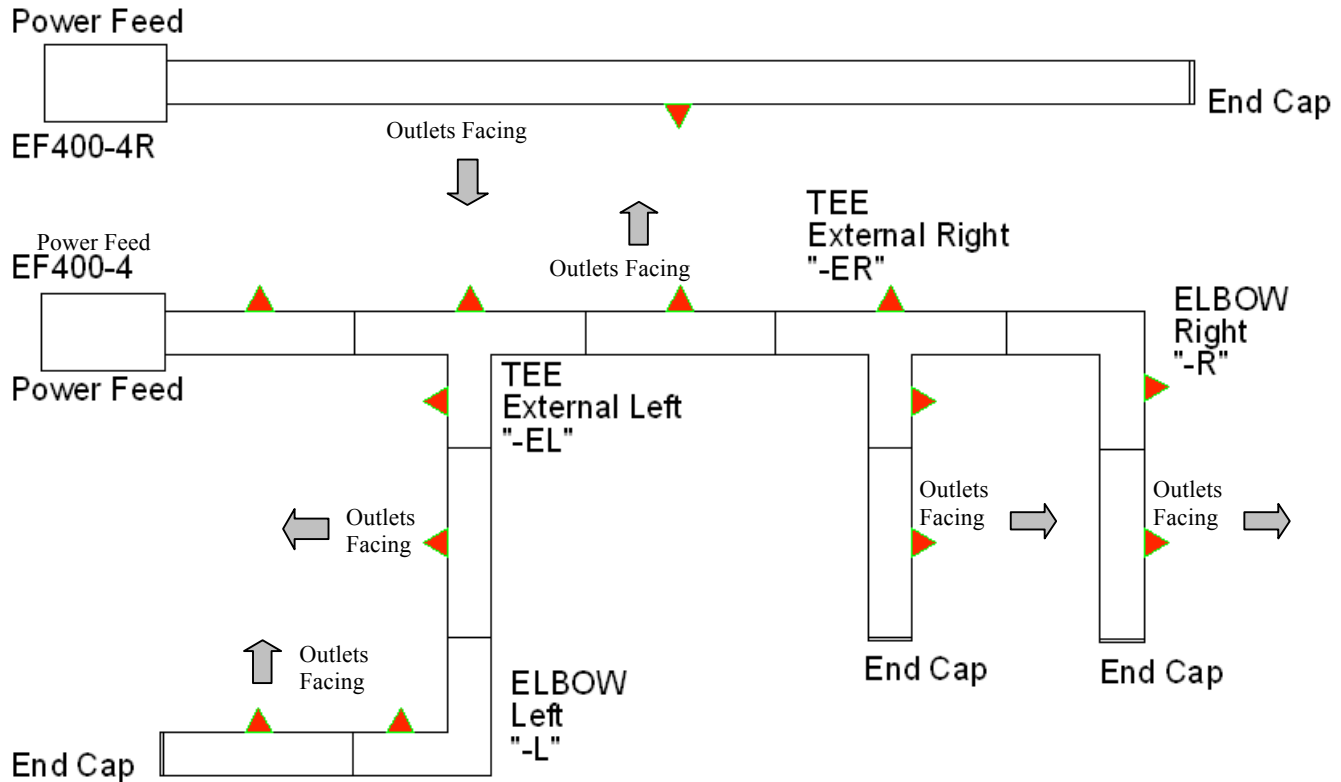


## POLARITY CONCERNS

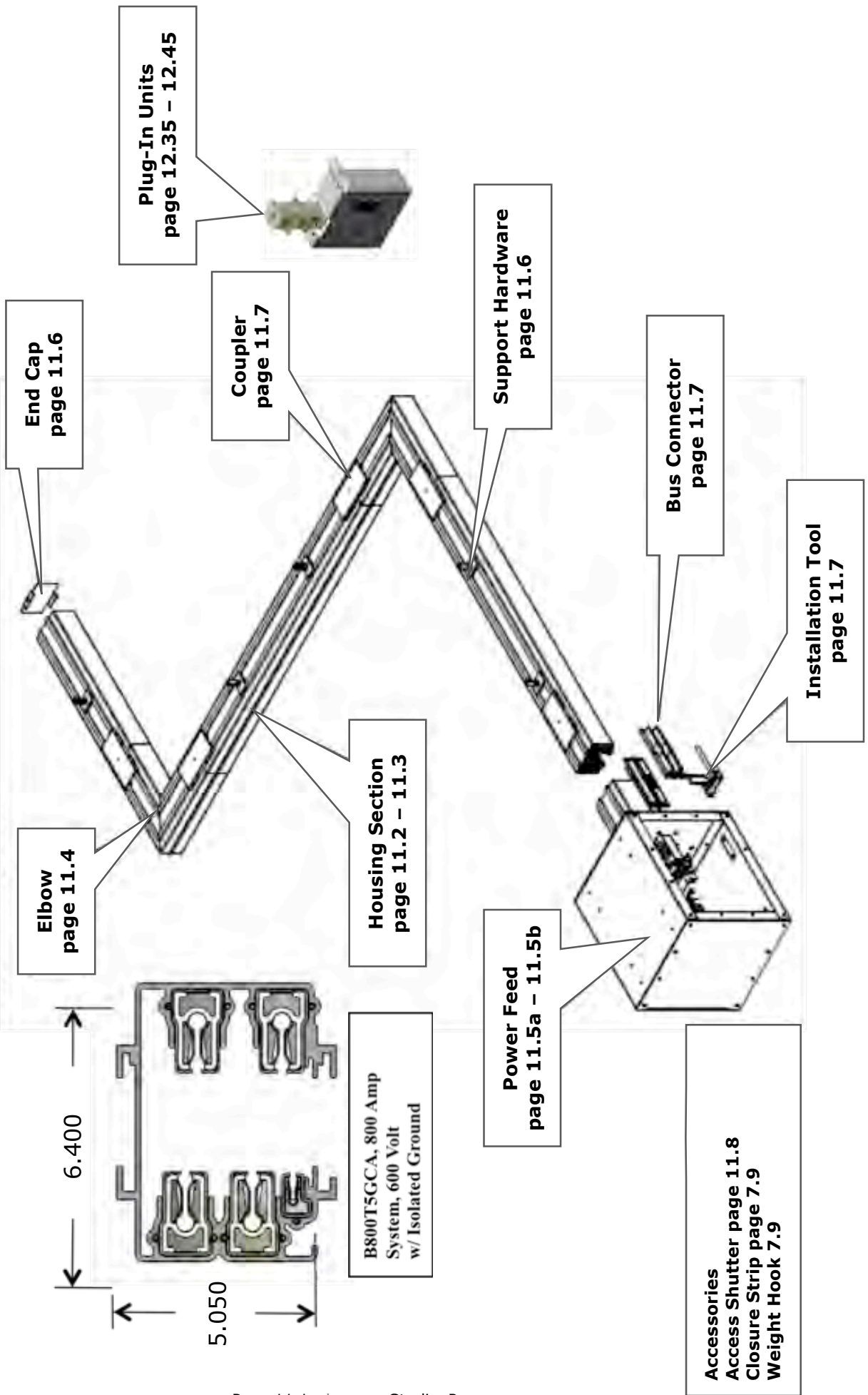
STARLINE utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation. It is particularly important to understand this design concept prior to ordering and/or installing some components. For example, if the face direction of a STARLINE plug-in unit is important in your installation consider that they will always face the conductor side. Certain plug-in units are 'reversible', designated by 'R', to face devices away from the conductor side.



**Tee's and Elbow Sections** are specified according to desired polarity



**3 or 4 pole with/without Isolated ground**

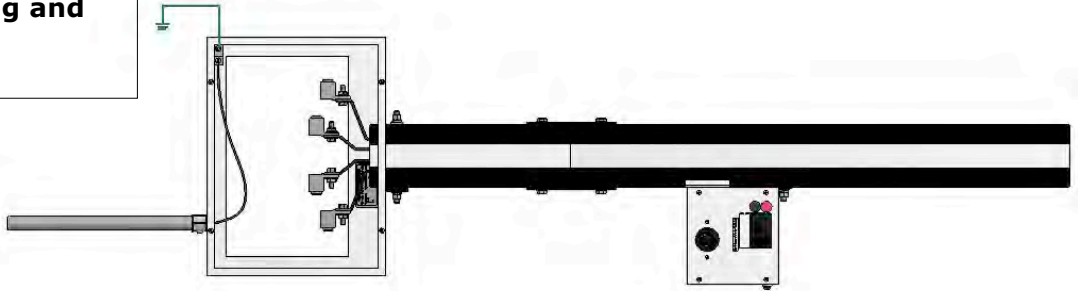
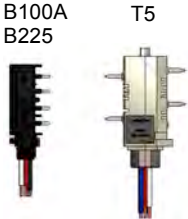


# Ground Options

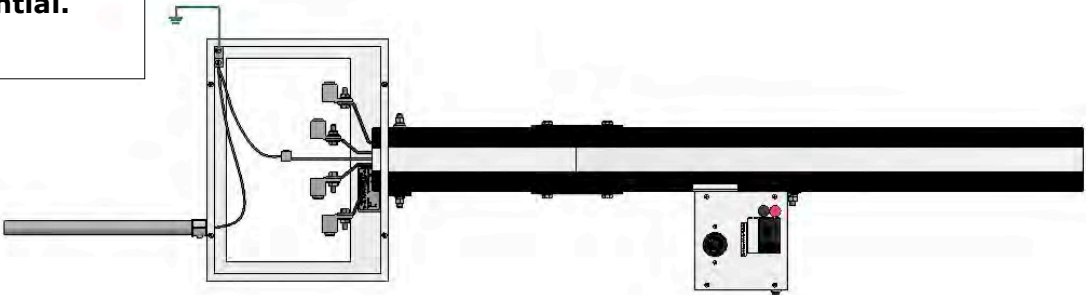
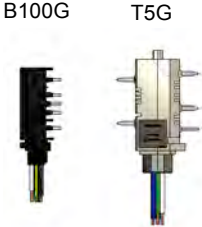


## FAQ CASE GROUND, DEDICATED GROUND, ISOLATED GROUND

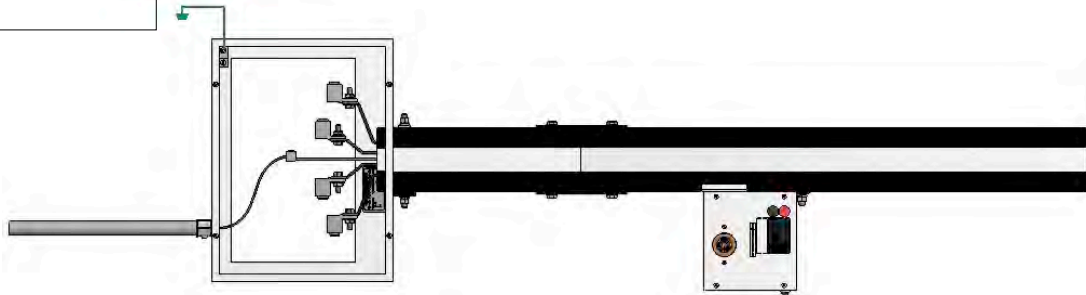
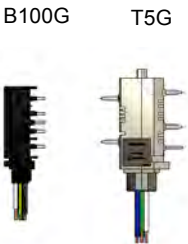
**CASE GROUND**  
Uses aluminum housing and no extra copper bar.



**DEDICATED GROUND**  
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.



**ISOLATED GROUND**  
Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.





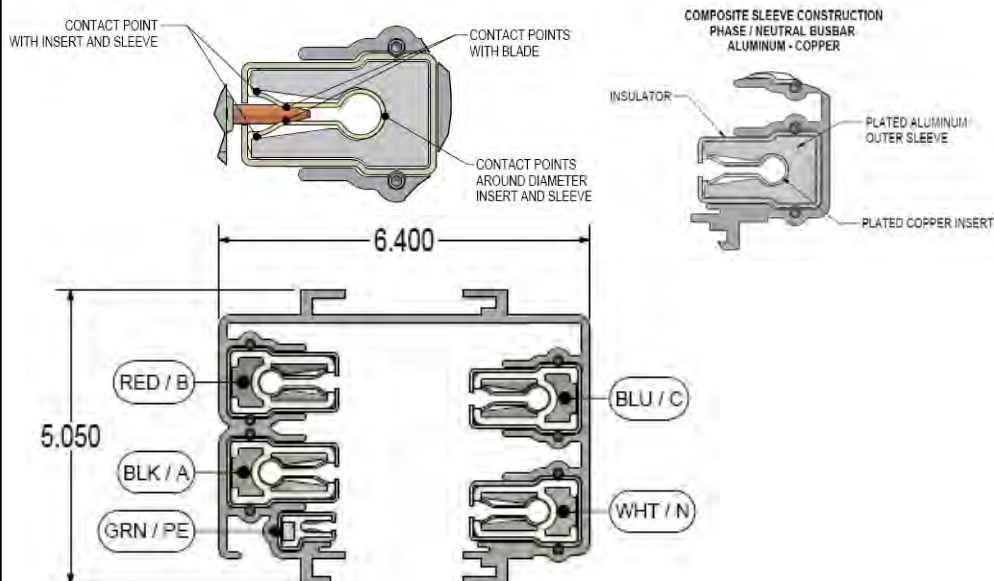
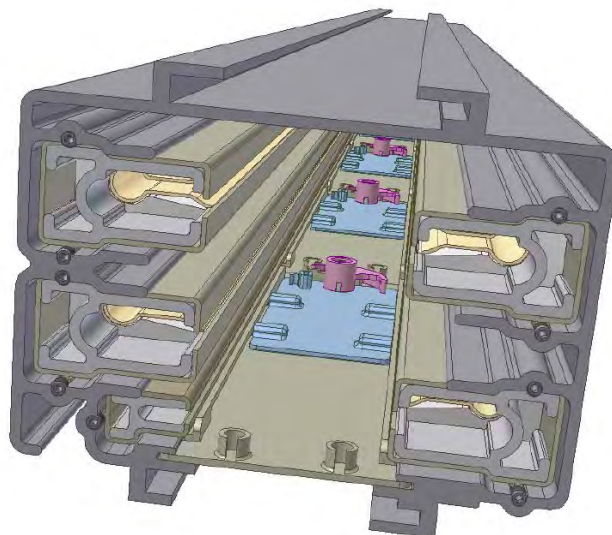
# B800T5CA, B800T5CAG Systems



## HOUSING SECTIONS

Track Busway housing section consists of an extruded aluminum shell with composite copper-aluminum busbar channels contained in a full length, halogen free insulator mounted on the interior walls. The enclosure provides a 100% ground path, meeting UL 857 Standard and Section 250 of the NEC. Plug-In Versions designated type "S" provides access shutters on 10" centers its entire length for the insertion of plug-in units. Housing configurations include 3 or 4 pole varieties, with optional isolated ground. The housing sections join together using Bus connectors which fit into the channels of the adjoining section for a solid electrical connection.

**MATERIAL:** Extruded Aluminum  
**CONDUCTOR:** Composite Cu/Al  
**RATINGS:** 100% Ground Path  
 800 Amps  
 600 Volt  
**LENGTH:** 5 Ft, 10 Ft, Max 10 Ft.



**Catalog Number Sequence**  
**B800T5CA(G)S-(X)PG-(L)**

↓  
**Length**  
 5 or 10  
 or Custom  
 Length  
 ↓  
**No. of Poles**  
 (3 or 4)  
 ↓  
**System Size=800 / CuAL**  
**G - Isolated Ground**

### Catalog Number Selection

Catalog No.	Description	Length	Weight
B800T5CAS-4PG-5	800A, Plug-In Access 4P	5 ft	58.0 lbs
B800T5CAS-4PG-10	800A, Plug-In Access 4P	10 ft	115.0 lbs
B800T5CAGS-4PG-5	800A, Plug-In Access 4P/IG	5 ft	68.0 lbs
B800T5CAGS-4PG-10	800A, Plug-In Access 4P/IG	10 ft	136.0 lbs

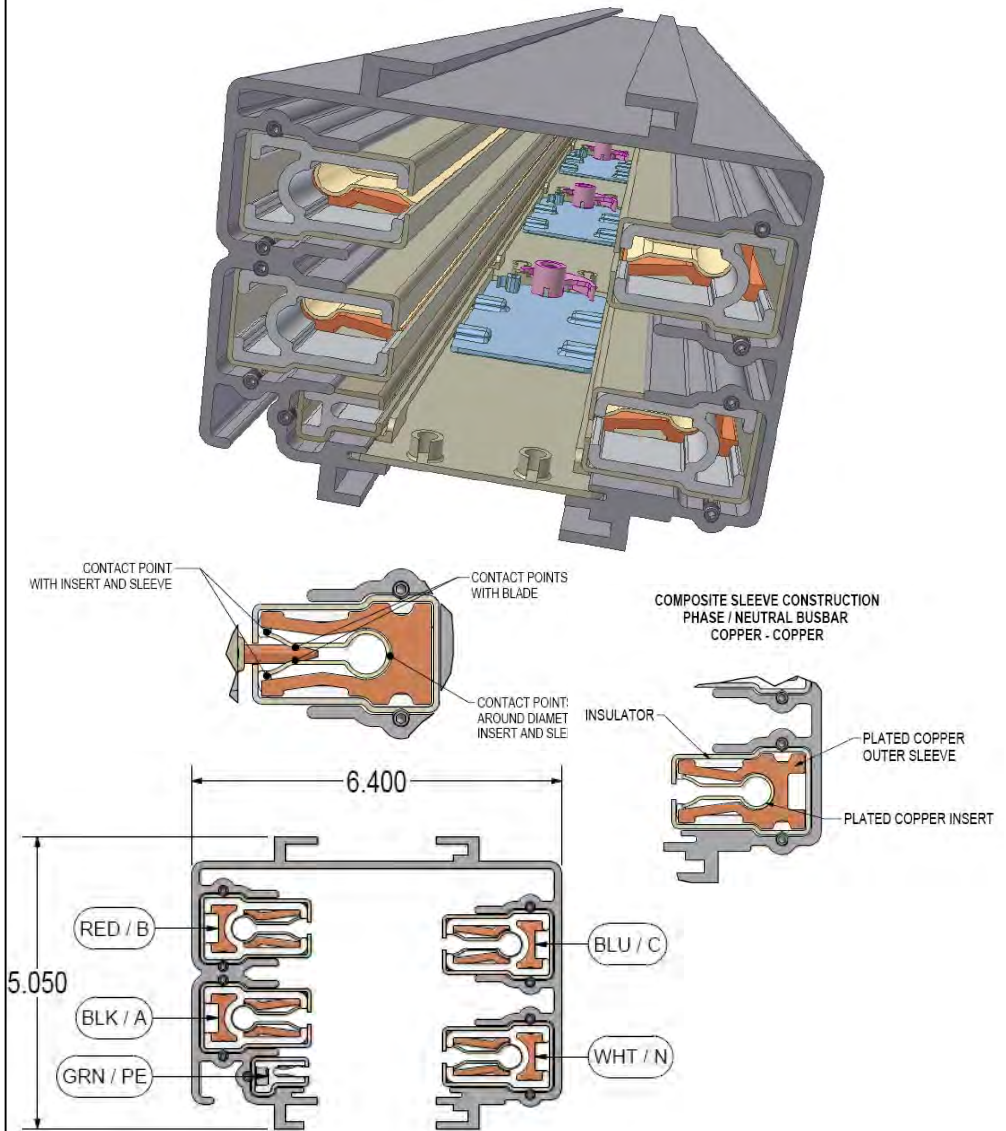
# B800T5CC, B800T5CCG B800T5CCS, B800T5CCGS Systems



## HOUSING SECTIONS

Track Busway housing section consists of an extruded aluminum shell with copper busbar channels contained in a full length halogen free insulator, mounted on the interior walls. The enclosure provides a 100% ground path meeting UL 857 Standard and Section 250 of the NEC. Plug-In Versions designated type "S" provides access shutters on 10" centers its entire length for the insertion of plug-in units. Housing configurations include 3 or 4 pole varieties, with optional isolated ground. The housing sections join together using Bus connectors which fit into the channels of the adjoining section for a solid electrical connection.

**MATERIAL:** Extruded Aluminum  
**CONDUCTOR:** Copper  
**RATINGS:** 100% Ground Path  
 800 Amps  
 600 Volt  
**LENGTH:** 5 Ft, 10 Ft, Max 12 Ft.



**Catalog Number Sequence**  
**B800T5CC(G)S-(X)PG-(L)**

↓  
**Length**  
 5 or 10  
 or Custom  
 Length

↓  
**No. of Poles (3 or 4)**

↓  
**System Size = 800 / CU**  
**G - Isolated Ground**

### Catalog Number Selection

Catalog No.	Description	Length	Weight
B800T5CCS-4PG-5	800A, Plug-In Access 4P	5 ft	98.0 lbs
B800T5CCS-4PG-10	800A, Plug-In Access 4P	10 ft	196.0 lbs
B800T5CCGS-4PG-5	800A, Plug-In Access 4P/IG	5 ft	103.0 lbs
B800T5CCGS-4PG-10	800A, Plug-In Access 4P/IG	10 ft	205.0 lbs

# B800T5 Systems



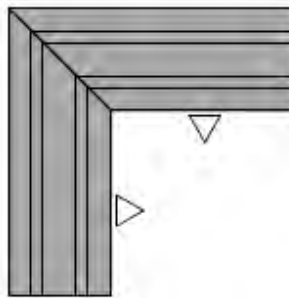
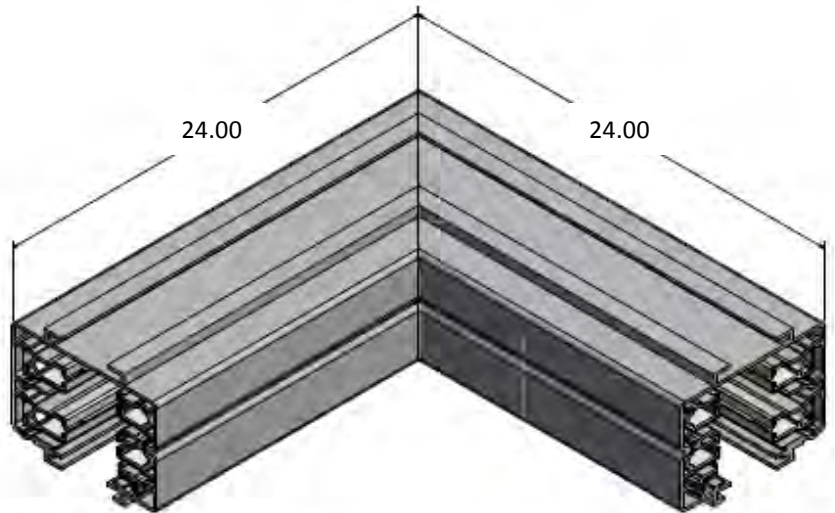
## HORIZONTAL ELBOW SECTIONS

### Elbow Section

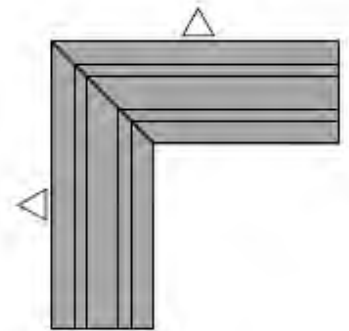
An Elbow is used for making a horizontal 90 degree change of direction in a Busway run. Specify right or left elbow, according to the orientation of the polarizing stripe in the Busway sections to be connected.

### CONNECTION ACCESSORIES: (Ordered Separately)

Joint Kit (JK800 series) is used to make mechanical and electrical connections to adjacent Busway sections.

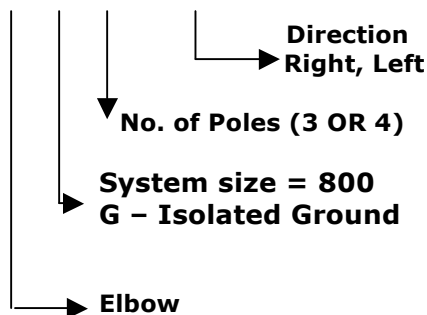


**EL800-4-L**  
Internal Elbow



**EL800-4-R**  
External Elbow

### Catalog Number Sequence EL800-(P)-(X)



### Catalog Number Selection

Catalog No.	Description	Weight
EL800T5-4-L	Elbow, 4-pole, left	28.0 lbs
EL800T5-4-R	Elbow, 4-pole, right	28.0 lbs
EL800T5G-4-L	Elbow, 4-pole/IG, left	30.0 lbs
EL800T5G-4-R	Elbow, 4-pole/IG, right	30.0 lbs

# B800T5 Series Systems



## END POWER FEED UNITS

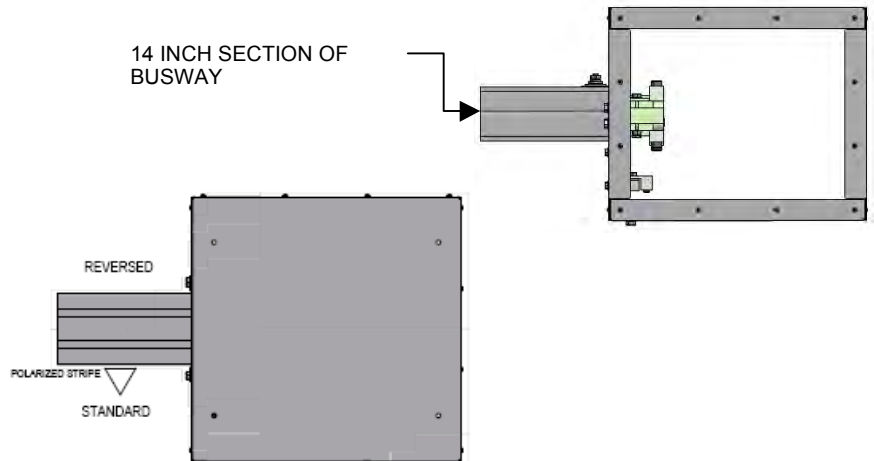
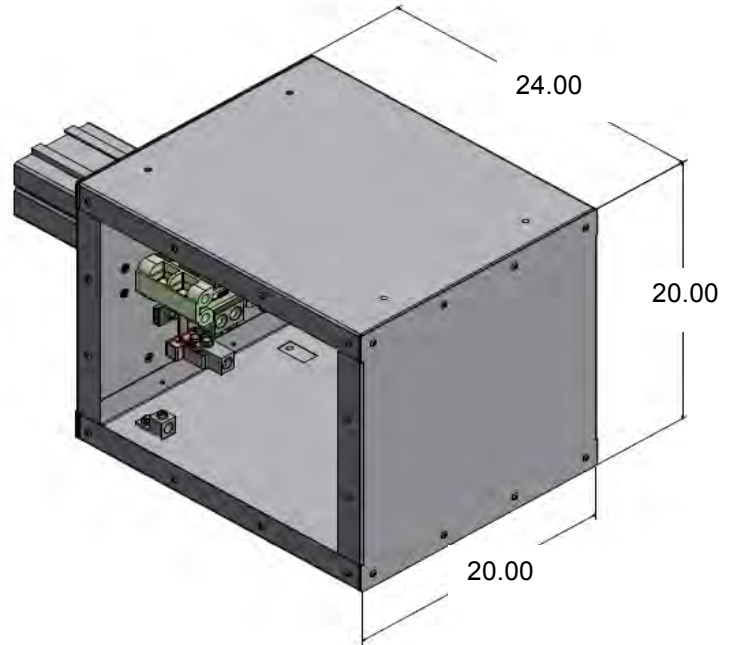
### Supplying power to end of Busway

Standard End Power Feed units connect to the end of any busway section. Factory assembled unit consists of a 24 X 20 X 20 in. steel junction box, with removable sides, connected to a 1 foot section of busway. The assembly includes ground lugs for wires up to 350MCM and connection lugs that can handle up to (2) 600MCM wires (CU) or (2) 600MCM wires (AL). Reverse End feed units for connection to opposite end of busway section (polarizing stripe faces to right as viewed from end of unit).

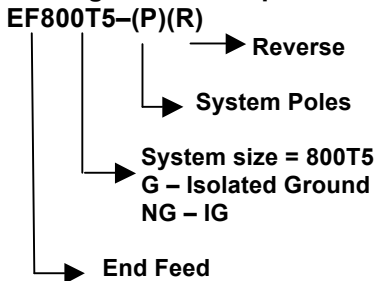
Junction box is sized such that one or two 4" conduits can be installed in end of box.

End Power Feed units are connected to adjacent Busway sections using Housing Coupler and bus connector (sold separately).

Special need power feed units for confined spaces as might be found in Mission Critical Data Centers can also be designed and fabricated, requiring minimum quantities.



### Catalog Number Sequence



### Catalog Number Selection

Catalog No.	Description	Weight
EF800T5-4	End Feed, 4-Pole	31.5 lbs
EF800T5-4R	End Feed, 4-Pole / Rev	31.5 lbs
EF800GT5-4	End Feed, 4-Pole/IG	32.0 lbs
EF800GT5-4R	End Feed, 4-Pole/IG / Rev	32.0 lbs

# B800T5 Series Systems



## CENTER POWER FEED UNITS

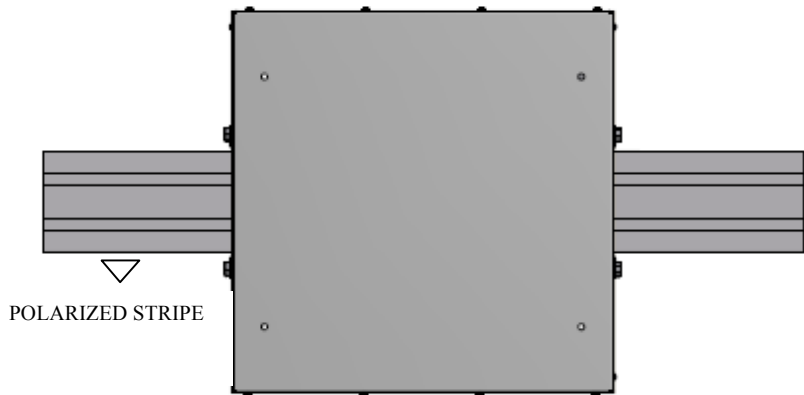
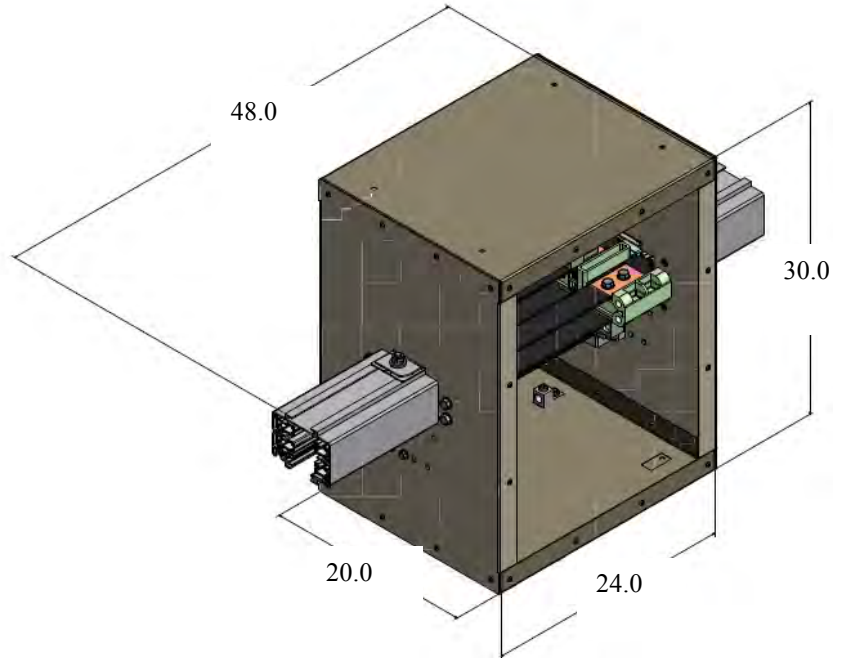
### Supplying power to center of Busway

**Center Power Feed unit connects between adjacent busway sections to provide power in the center of a busway run. Factory assembled unit consists of a 24 X 20 X 30 in. steel junction box, with removable sides, connected to two 1 foot sections of busway. The assembly includes ground lugs for wires up to 600 MCM and connection lugs that can handle up to (2) 600 MCM wires (CU) or (3) 600 MCM wires (AL).**

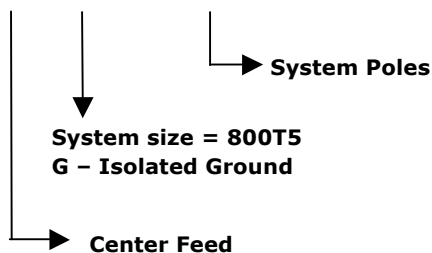
**Junction box is sized such that one or two 4" conduits can be installed in end of box.**

**Center Power Feed units are connected to adjacent Busway sections using Housing Coupler and bus connector (sold separately).**

**Special need power feed units for confined spaces as might be found in Mission Critical Data Centers can also be designed and fabricated, requiring minimum quantities.**



### Catalog Number Sequence CF800T5(X)-(P)



### Catalog Number Selection

Catalog No.	Description	Weight
CF800T5-4	Ctr Feed, 4-Pole	31.5 lb
CF800GT5-4	Ctr Feed, 4-Pole/IG	32.0 lb

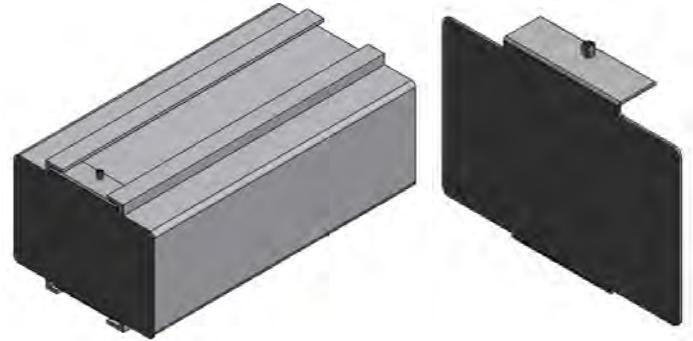
## Connection Accessories

### END CAP

For covering the end of B800 Busway run.

**PART NUMBER**  
EC800T5

**WEIGHT**  
0.4 lb.



### HANGER BOLTS

#### Threaded Rod (BRHT5-1)

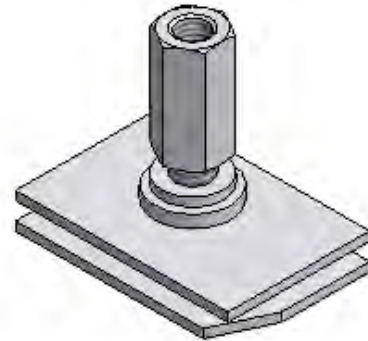
For mounting to 1/2-13 threaded rod. Twist-in design. Can be inserted anywhere along the full access slot on the top of the Busway. Maximum hanger support spacing is every 10ft.

#### Standard (BHT5-1)

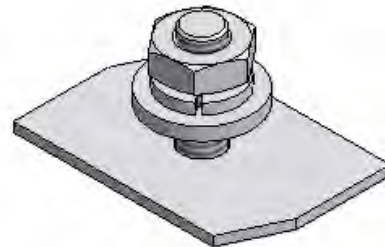
For mounting to strut or other flat surfaces. Twist-in design. Can be inserted anywhere along the full access slot on the top of the Busway. Maximum hanger support spacing is every 10ft.

**PART NUMBER**  
BRHT5-1  
BHT5-1

**WEIGHT**  
1 lb.



BRHT5-1



BHT5-1

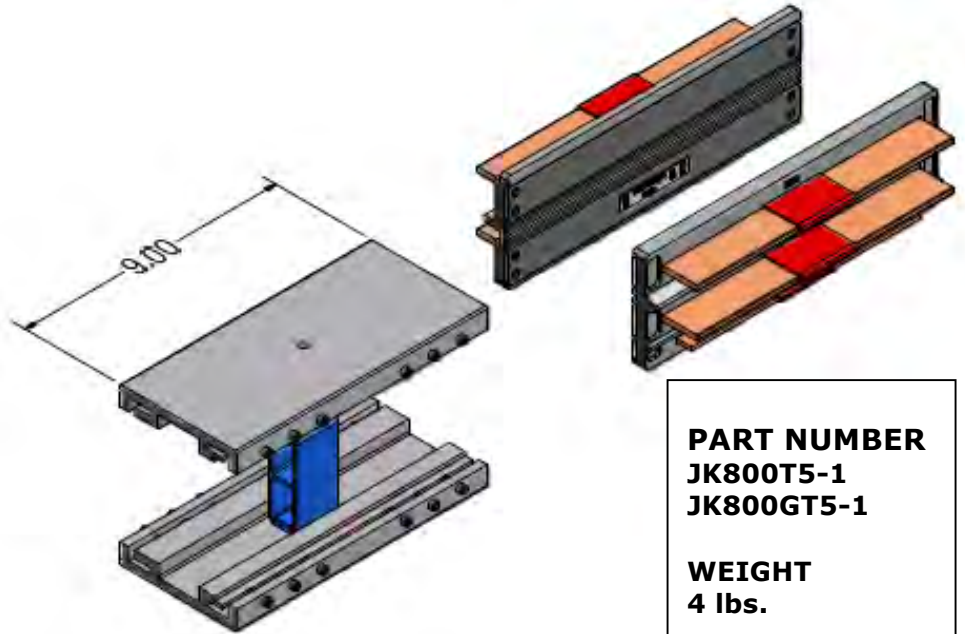
## JOINT KIT/INSTALLATION TOOL

### JOINT KIT

For connection of adjacent Busway sections. One Kit required at each joint. Each Kit is comprised of a housing coupler pair and bus connector set. Specify configuration to match busway configuration.

**HOUSING COUPLER:**  
Consists of two, 12-screw couplers- one for the top and one for the bottom.

**BUS CONNECTOR:**  
Silver plated copper blades secured to insulating mounting plate. Left and Right set, makes electrical connection between sections.



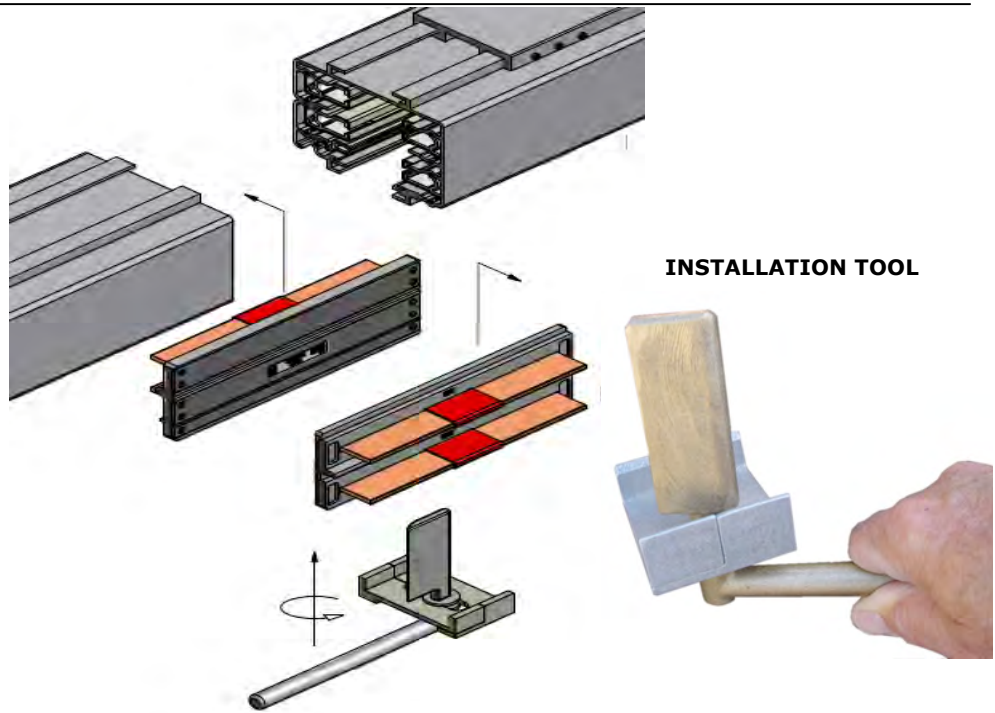
**PART NUMBER**  
JK800T5-1  
JK800GT5-1

**WEIGHT**  
4 lbs.

### INSTALLATION TOOL

Used to install the 'bus connector' electrical joint between two adjacent sections of Busway. A 'Joint Kit', comprised of two housing couplers and a bus connector set are required at every joint.

Busway sections are butted together and the top housing coupler is installed. The Bus connector is inserted, centered and seated in the slot of the Busway. The installation tool is inserted into jointed intersection and rotated 90° forcing stabs into u-shaped female conductors making a secure electrical connection. Housing Coupler is positioned over the bottom joint and tightened.



**Installation Tool**

**PART NUMBER**  
BT5IT  
**Weight 3.1 lbs.**

# B800T5 Systems



## Access Panels

### 800 Amp Busway with installed Access Panels

#### Composition:

Track Busway housing section consists of an extruded aluminum shell with composite copper-aluminum busbar channels contained in a full-length, halogen free insulator. These insulators are then isolated by means of halogen free Access Panels that run the length of the Busway to allow for a wide range of continuous plug installation locations while still meeting UL 857 Standards and Section 250 of the NEC. Panel clips are then installed into the bottom of the busway to give clear indication to the installer where appropriate installation locations for Plug-Ins are available.

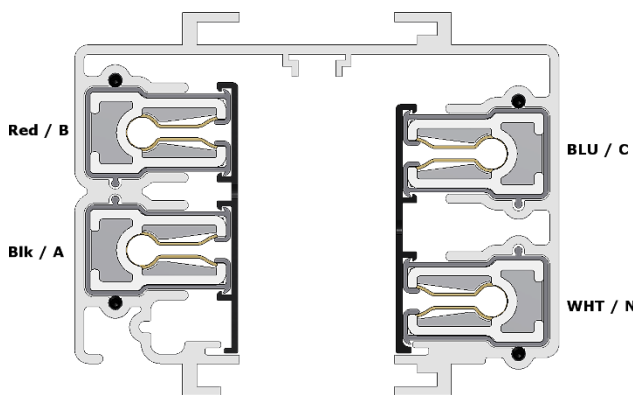
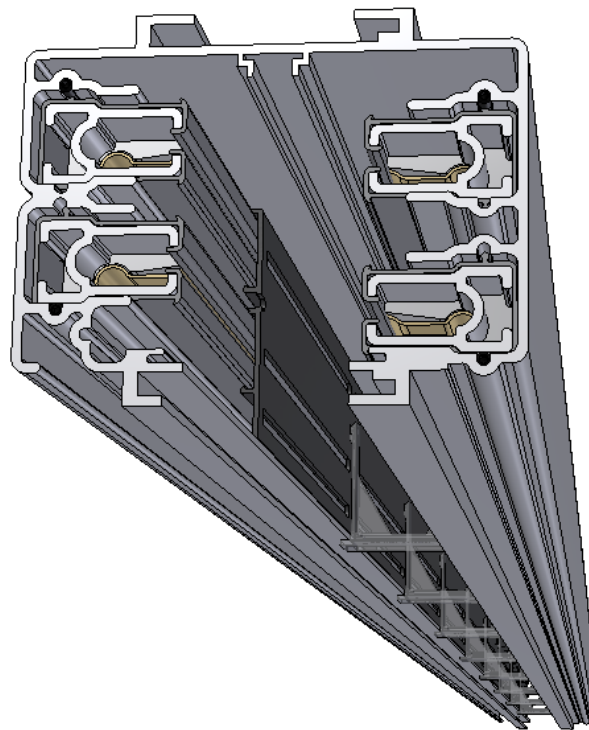
**Housing:** Composite Cu/Al

**Conductor:** Composite Cu/Al

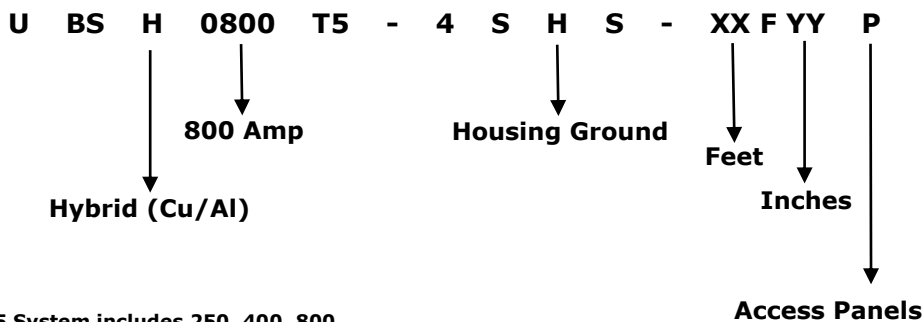
**Insulator/Panels:** Halogen Free

**Ratings:** 100% Ground Path  
800 Amps, 600 Volt  
50kA Rating

**Lengths:** Min 2 Ft, Max 10 Ft



### Catalog Number Sequence



\*T5 System includes 250, 400, 800

### Examples:

UBS0800T5-4SHS-05F00P  
800 Amp Busway, Access Panels, 5FT-0IN

UBS0800T5-4SHS-10F00P  
800 Amp Busway, Access Panels, 10FT-0IN



## Access Shutter

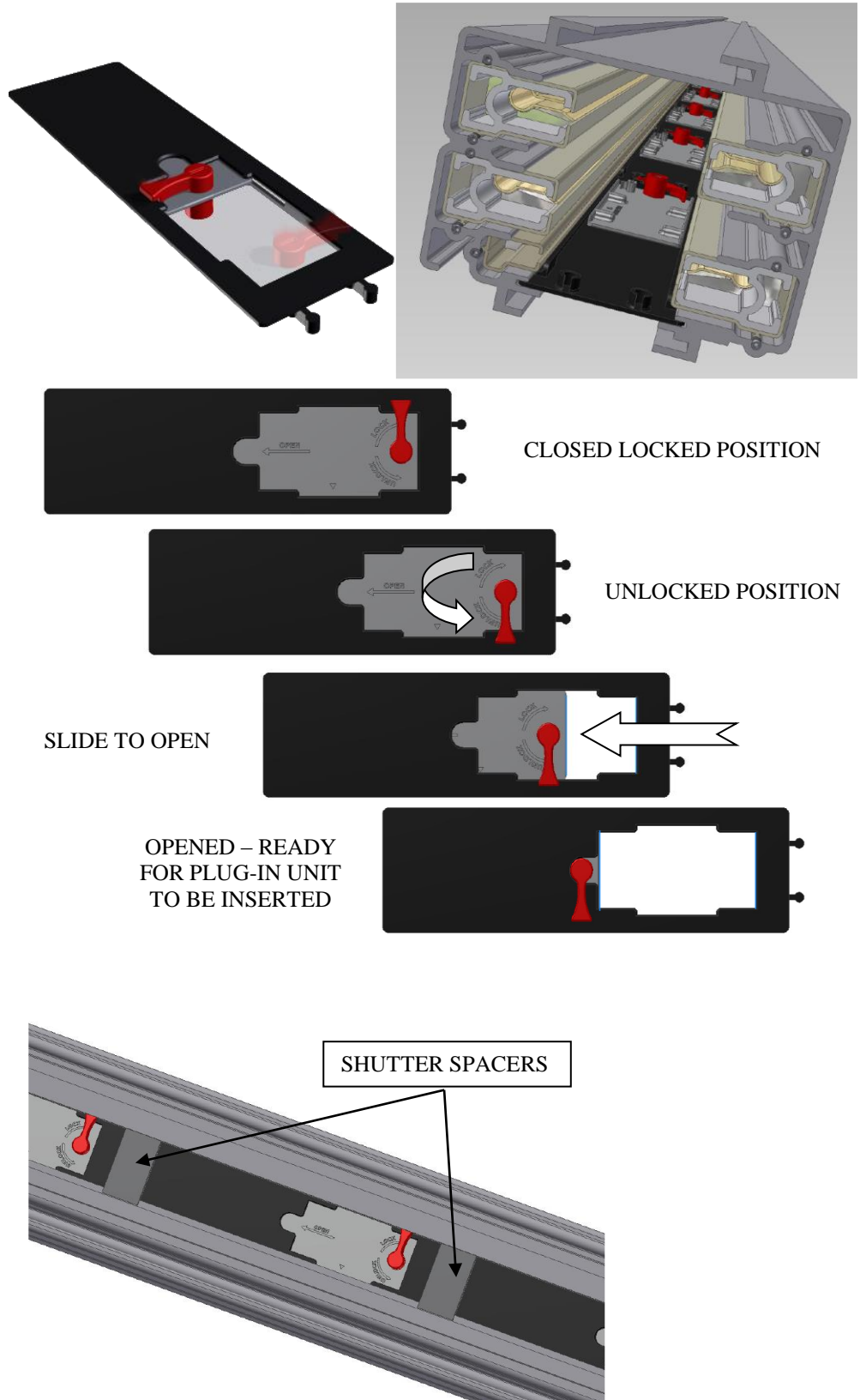
### Access Shutter

UL Standards in the US require that 800 amp busway systems be provided with discrete plug-in ports. Therefore, B800 busway sections are provided with factory installed shutters as shown in the illustrations. The shutter incorporates a sliding door, lockable in the closed position. The door is easily unlocked and slides to the open position to accept a plug-in unit. Standard spacing of shutters is 10" on center, which maximizes the number of openings per the chart below.

### Access Shutters per Section

<u>Length</u>	<u># Shutters</u>
10'	10
9'	9
8'	7
7'	6
6'	5
5'	4
4'	3
2'	1
1'	N/A

Spacers can be added between access shutters to optimize spacing for specific plug-in unit sizes. Please consult factory for further details.





# Plug-in Units

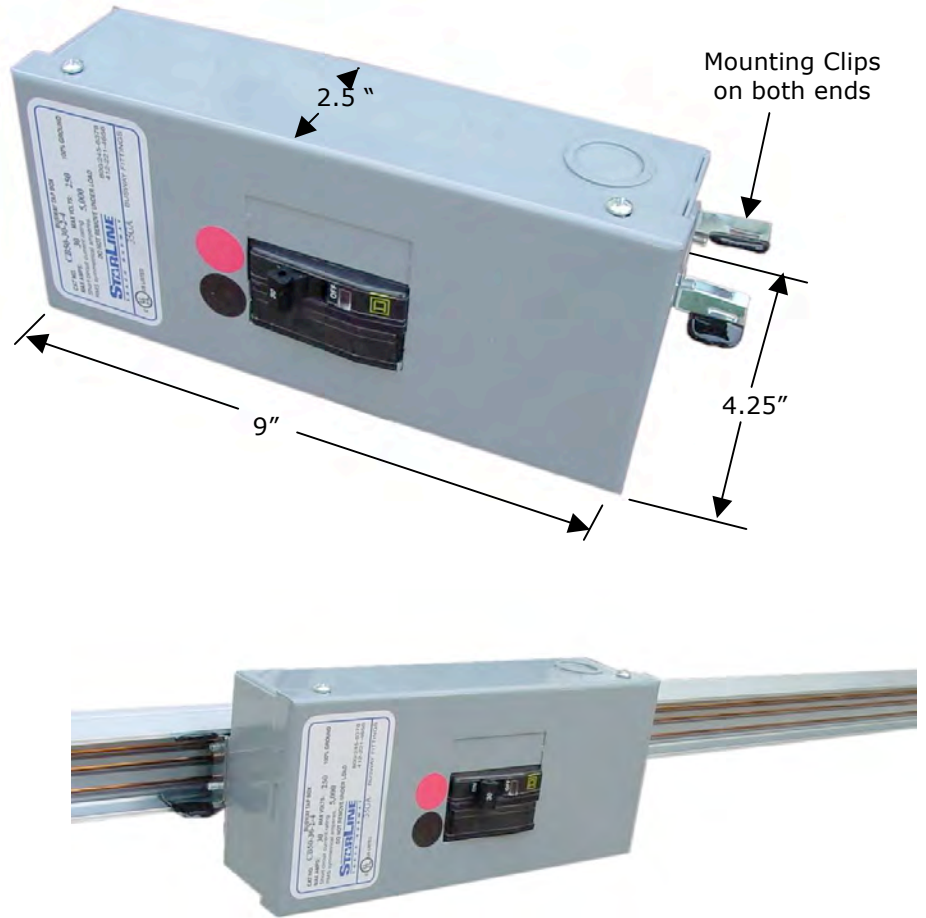
## Table of Contents

<b>SYSTEM(S)</b>	<b>PAGE</b>
<b>B40, B50 &amp; B60C Compact Systems</b>	<b>12.2-12.6</b>
<b>B60 &amp; 100C Compact Systems</b>	<b>12.7-12.13b</b>
<b>B100A, B100N, B225, B100G, B100NG, B225G Systems</b>	<b>12.14-12.34</b>
<b>T5 System; B250T5, B400T5, B800T5</b>	<b>12.35-12.45</b>
<b>Accessories</b>	<b>12.46</b>

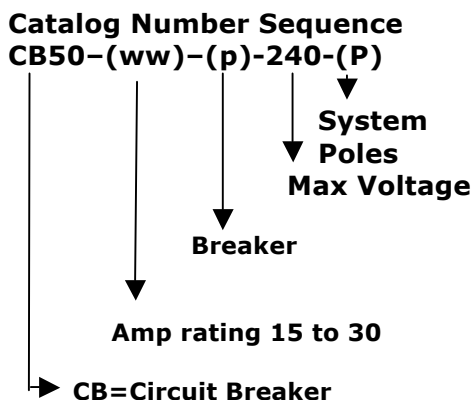
## CIRCUIT BREAKER PLUG-IN

### Circuit Breaker

This plug-in consists of a full-size junction box with hinged lid, plug head and an externally operated circuit breaker. The circuit breaker plug-in is inserted into the busway until mounting clips "snap" into place. The units are normally supplied with breakers installed. Units can be supplied with mounting plate only to allow installation of snap-on breakers in the field. Optional factory-installed receptacles can be added. Circuit breakers can be 15 to 30 amps, 240 volts, and 1, 2 or 3 poles. Units with UL Listed multiple breakers are available. Units include copper grounding lug in the box that fits up to #6 wire, mounting tabs and mounting hardware to secure unit to Busway. Units have 1/2" and 3/4" conduit knockouts on 3 sides.



Circuit Breaker installed on STARLINE



### Catalog Number Selection

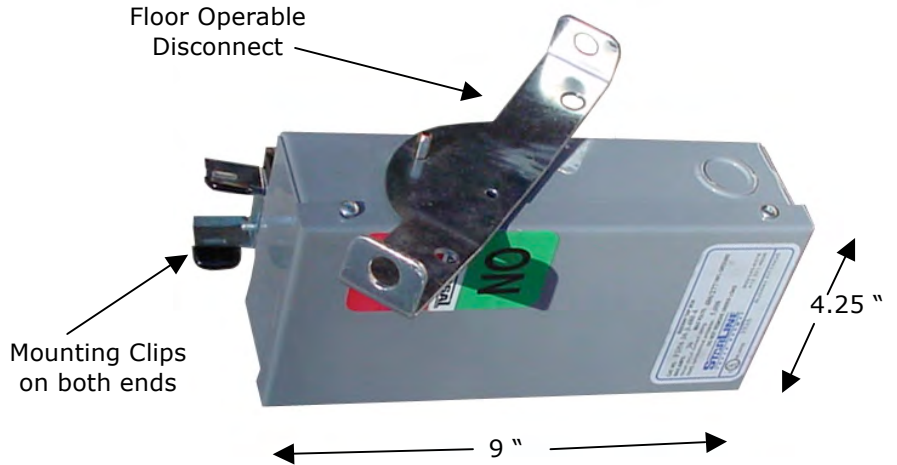
Catalog Number	Description	Weight
CB50-ww-1-240-2	1-pole Circuit Breaker, 2-pole Busway	3.3 lbs
CB50-ww-1-240-4	1-pole Circuit Breaker, 4-pole Busway	3.3 lbs
CB50-ww-2-240-4	2-pole Circuit Breaker, 4-pole Busway	3.3 lbs
CB50-ww-3-240-4	3-pole Circuit Breaker, 4-pole Busway	4.2 lbs

"ww" = specify the ampere rating, 15 to 30 amps.

**FUSED DISCONNECT PLUG-IN**

**Fused Disconnect**

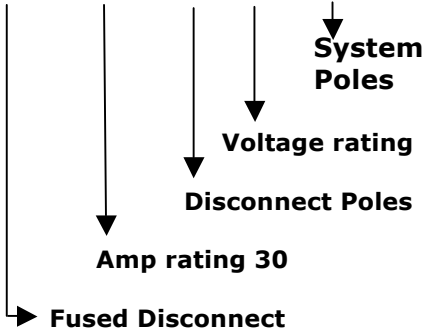
Units provide a 3-pole fuse block for Class CC fuses (ordered separately) with an external floor operable disconnect. The disconnect mechanism is floor operable with chains or a stick. Unit is rated at 30 Amps, 480/277 Volts.



Fused Disconnect installed on STARLINE



**Catalog Number Sequence  
FD50-(ww)-(p)-480-(P)**



**Catalog Number Selection**

Catalog No.	Description	Weight
FD50-30-3-480-4	Fused Disconnect, 30A, 3P, 480V for 4-pole Busway	4.2 lbs

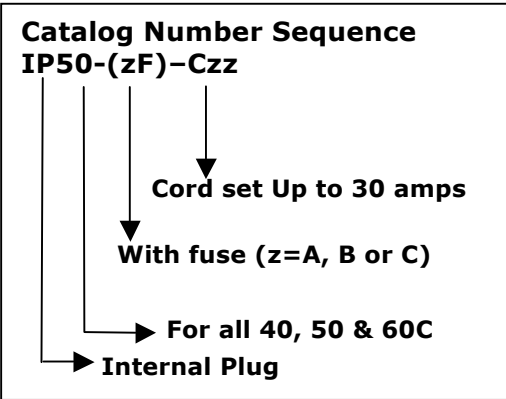
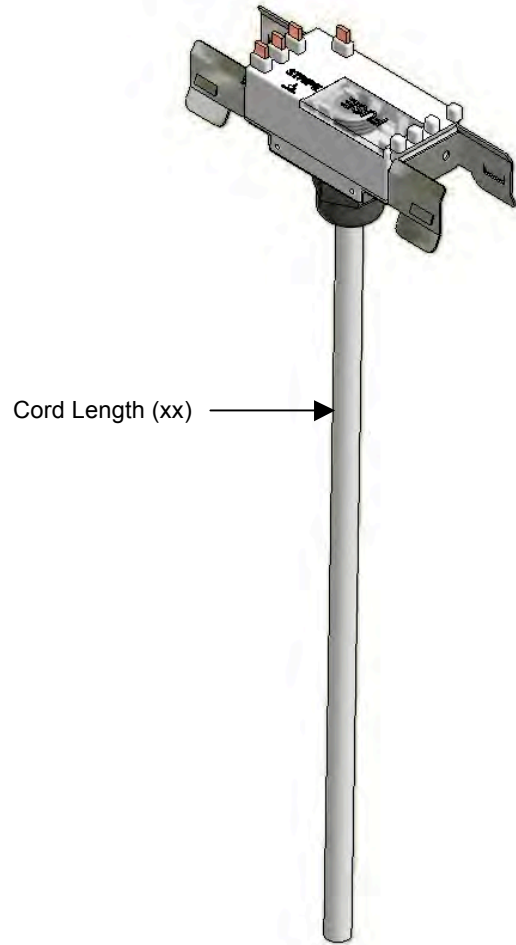
# Compact Series 40, 50, 60 Amp

**IP50 with CORD SET**

**IP50 Cord Set**  
Shipped assembled complete from the factory based on part number selection including cord, fuses, 10' length, and no wiring device. SJO cord is used in all assemblies.

The internal plug-in is ideal for applications where the plug head should not be visible such as light fixtures and retail/commercial areas. This Internal Plug "clicks" into the busway section and provides a mounting plate for light fixture connection. The unit inserts into the busway's continuous slot and snaps into place, making the mechanical, electrical and grounding connections. Units are polarized to inhibit reverse installation.

Internal plugs are available in ratings of 15 and 30 amps, 480/277 volts, fusible or non-fusible. The 15 amp version utilizes high temperature wire for ballast and fixture applications. A ground wire is also included with 15 amp fused units. Ground through the mounting plate for 30 amp internal plugs.



**Catalog Number Examples**

Catalog No.	Description
IP50-AF-C15-5	15A drop cord set, A phase fused, 10ft. cord, for 4-pole system
IP50-BF-C20-2	20A drop cord set, B phase fused, 10ft. cord, for 4-pole system
IP50-CF-C30	30A drop cord set, C phase fused 10ft. cord, for 4-pole system

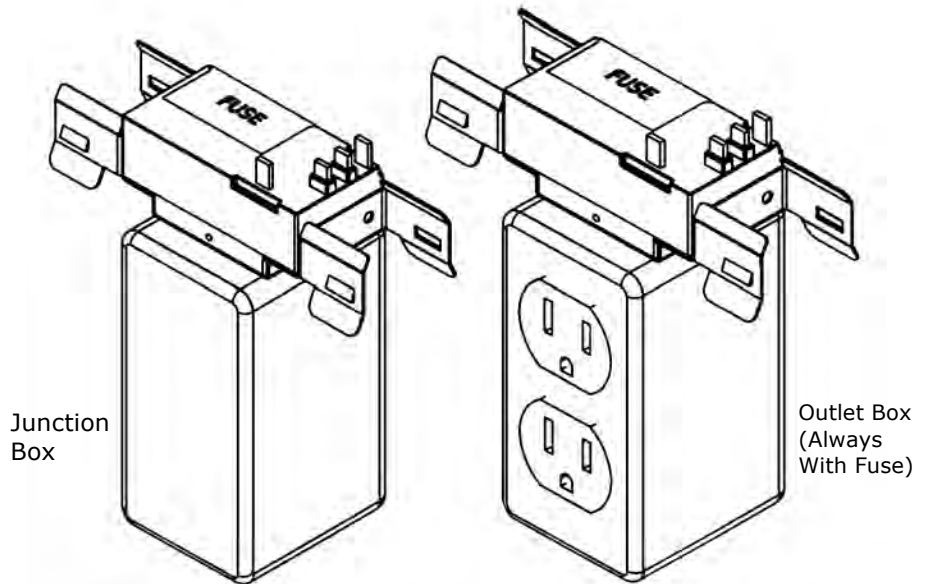
Outlet Plug-In units are used to tap off power from the Busway. All plug-in units are equipped with a special plug head called a "Starjack" which "snaps" into the Busway continuous slot to make the spring-loaded connection. The installer simply inserts the unit into the Busway until a "clicking" sound is heard on each side of the connector. The snap-in connector provides ground connection for the box and load. All plug-in units are polarized to inhibit reverse installation.

### A. Junction Box

Standard unit consists of J-box with connector, cover, ground lug and wire nuts. Optional Class CC fuseholders are available.

### B. Outlet Box

Standard unit consists of J-box with connector, NEMA 5-15 or 5-20 duplex receptacles, Class CC fuse and fuseholder. Other NEMA configurations are also available.

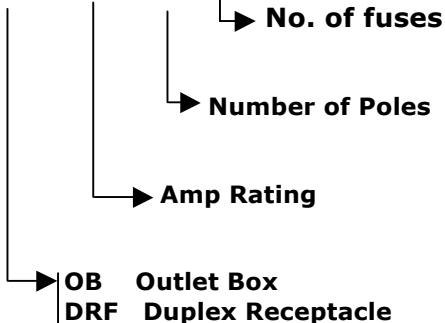


Junction Box

Outlet Box  
(Always With Fuse)



### Catalog Number Sequence (XXX)-(A)-(P)-xF



### Catalog Number Selection

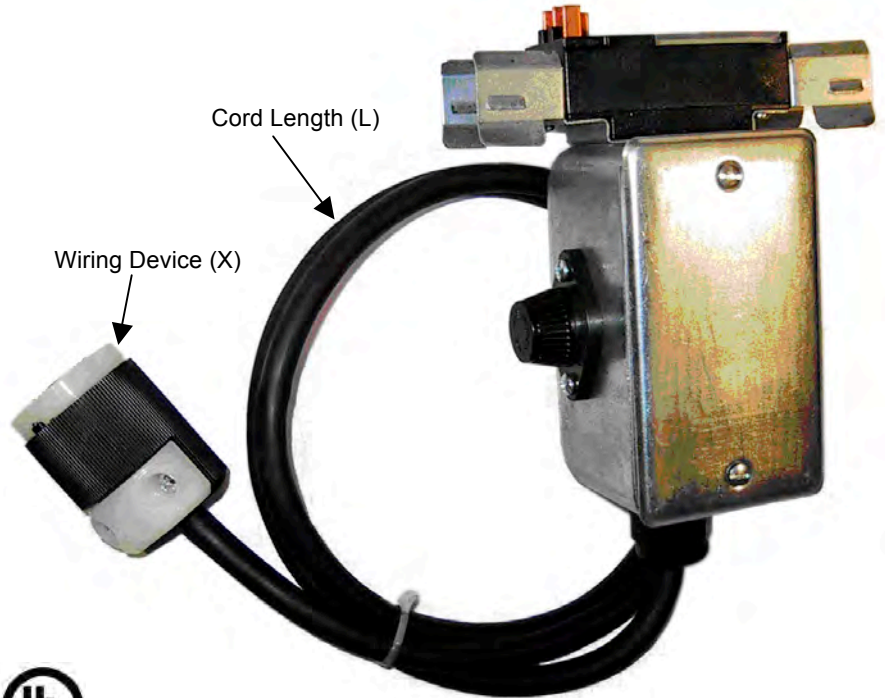
Catalog No.	Description	Weight
OB50-30-2	Junction Box, 30A, 2-pole*	1.2 lbs
OB50-30-4	Junction Box, 30A, 4-pole*	1.2 lbs
OB50-30-4-xF	Junction Box, 30A, 4-pole*	1.3 lbs
DRF50-20-A	Duplex, 20A, 2-pole, A-phase*	1.4 lbs
DRF50-20-B	Duplex, 20A, 2-pole, B-phase*	1.4 lbs
DRF50-20-C	Duplex, 20A, 2-pole, C-phase*	1.4 lbs

\* used in 40, 50 & 60C systems  
'x' = 1, 2 or 3 fuse holders

## DROP CORD PLUG-IN

### Drop Cord Assembly

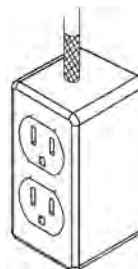
Shipped assembled complete from the factory based on part number selection including cord, fuses, and wiring device. Drop Cord assemblies with connectors body type (C) wiring device include a wire mesh cord grip at outlet of plug-in box. All other assemblies include wire mesh cord grips at both end of the cord. SJO cord is used in all assemblies.



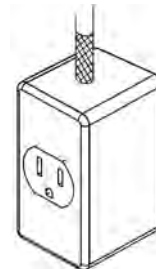
Wiring Device (X)



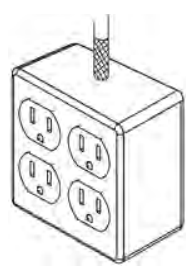
C - Connector



D - Duplex

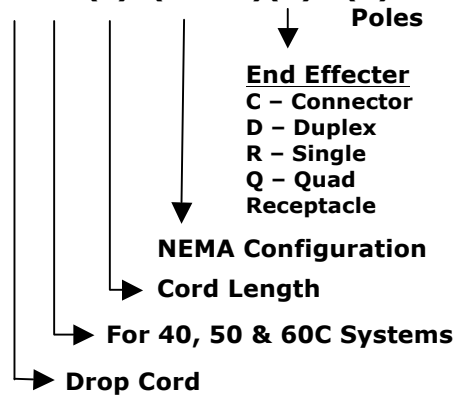


R - Single Receptacle



Q - Quad

### Catalog Number Sequence DC50-(L)-(NEMA)(X) -(Y)



### Catalog Number Examples

Catalog No.	Description
DC50-10-520D-4	10 ft drop cord with NEMA 5-20 duplex on end, for 4-pole system
DC50-15-L520C-2	15 ft drop cord with NEMA L5-20 (locking type) connector on end for 2-pole system
DC50-8-L630R-4	8 ft drop cord with NEMA L6-30 (locking type) single receptacle (J-Box) on end for 4-pole system

# 60 to 100 Amp Compact Same Units used in both Systems

## OUTLET PLUG-IN UNITS

Outlet Plug-In units are used to tap off power from the Busway. All plug-in units are equipped with a special plug head called a "Starjack" which inserts into the Busway's continuous slot and turns 90 degrees to make the spring-loaded connection. The installer squeezes the locking tab, inserts the unit into the Busway, turns 90 degrees, and releases the locking tab. Both the locking and the bolt-on mounting tab provide ground connection for the box and load. All plug-in units are polarized to inhibit reverse installation.

**A. Junction Box**

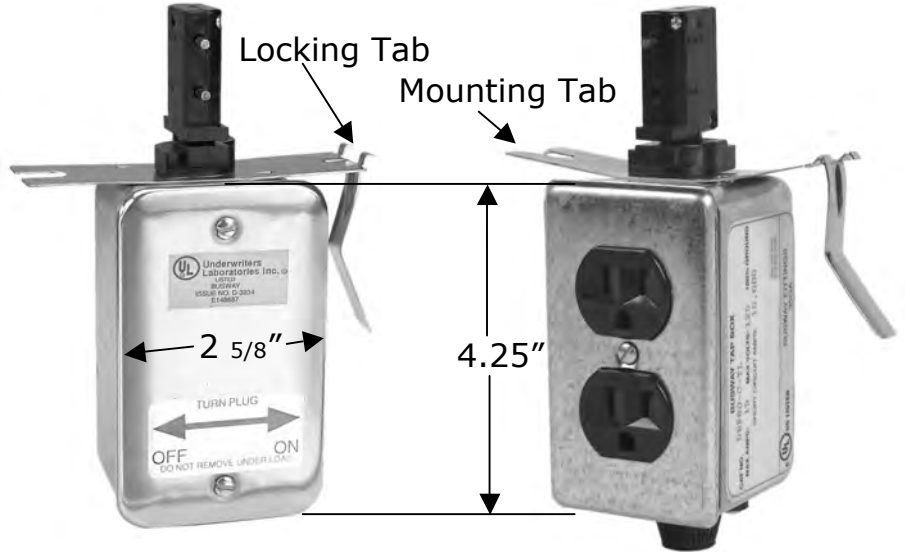
Standard unit consists of J-box with Starjack, cover, ground lug and wire nuts. Optional Class CC fuseholders available.

**B. Receptacle Unit**

Standard unit consists of J-box with Starjack, NEMA 5-15 or 5-20 duplex, Class CC fuse and fuseholder. Other NEMA configurations available.

**Elbow Connector**

Factory pre-assembled, elbow connectors are used for making a 90-degree turn. Refer to Section 8 LAYOUT for polarization issues before making final selection.

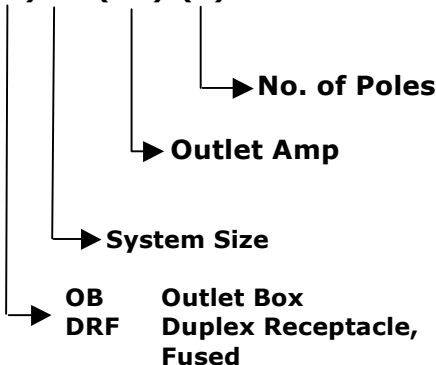


A. Junction Box  
**OB Series**

B. Outlet Box  
**DRF Series**



**Catalog Number Sequence  
(XX)60-(AA)-(P)**



**Catalog Number Selection (Typical)**

Catalog No.	Description	Weight
OB60-L515-4	Outlet box with L5-15 Recpt/w fuse	1.4lbs
OB60-L520-4	Outlet box with L5-20 Recpt/w fuse	1.4lbs
OB60-L615-4	Outlet box with L6-15 Recpt/w fuse	1.4lbs
OB60-L620-4	Outlet box with L6-20 Recpt/w fuse	1.4lbs
OB60-L630-4	Outlet box with L6-30 Recpt/w fuse	1.4lbs
OB60-(15 or 30)-2	Outlet box, 15 or 30 Amp, 2-pole	1.1lbs
OB60-(15 or 30)-4	Outlet box, 15 or 30 Amp, 4-pole (add -1F, -2F, -3F for 1, 2 or 3 fuses)	1.3lbs
DRF60-(A,B or C)	Duplex Outlet NEMA 5-15 (outlet box 300 volt rated, for 600 volt, add "-600" to number) (DRF units are 15 amp. Add "-20" for 20 amp receptacle)	1.4lbs

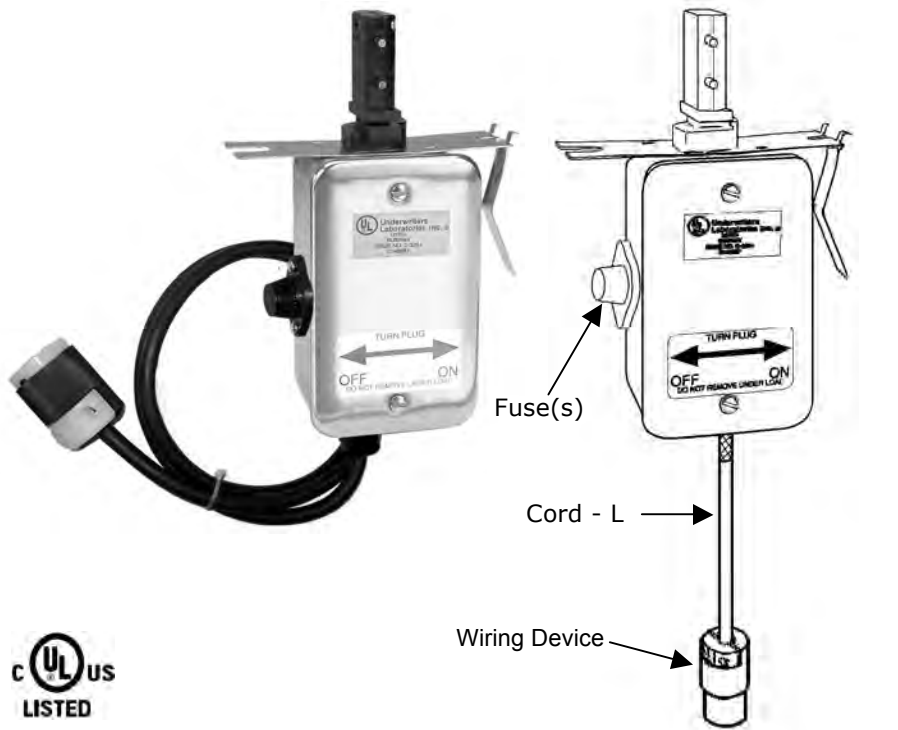


# 60 to 100 Amp Compact Same Units used in both Systems

## DROP CORD PLUG-IN UNITS

### Drop Cord Assembly

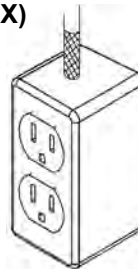
Shipped assembled complete from the factory based on part number selection including cord, fuses, and wiring device. Drop Cord assemblies with connector type (C) wiring device include a wire mesh cord grip at outlet of plug-in box. All other assemblies include wire mesh cord grips at both end of cord. SJO cord is used in all assemblies. Instead of normal fuse type circuit protection, 30 Amp max. circuit breakers can be provided using only E12 or CB60 enclosures. Other NEMA configurations available.



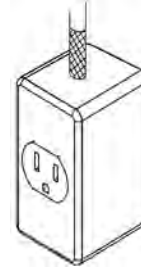
### Wiring Devices (X)



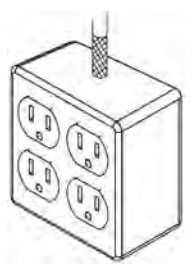
C - Connector



D - Duplex

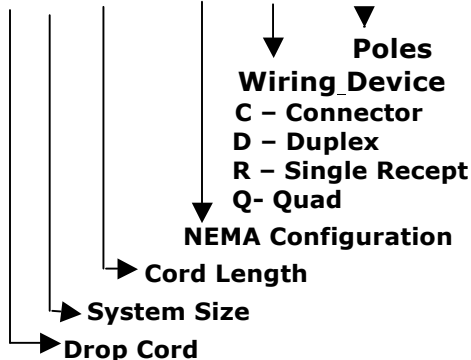


R - Single Receptacle



Q - Quad

### Catalog Number Sequence DC60-(L)-(NEMA)(X)-(Y)



### Catalog Number Examples

Catalog No.	Description
DC60-10-520D-4	10 ft Drop Cord with NEMA 5-20 Duplex on end, for 4-pole system
DC60-15-L520C-2	15 ft Drop Cord with NEMA L5-20 (locking type) Connector on end, for 2-pole system
DC60-8-L630R-4	8 ft Drop Cord with NEMA L6-30 (locking type) single Receptacle (J-Box) on end, for 4-pole system

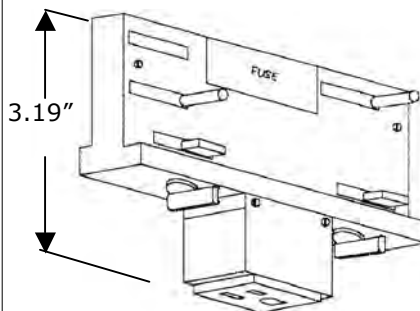
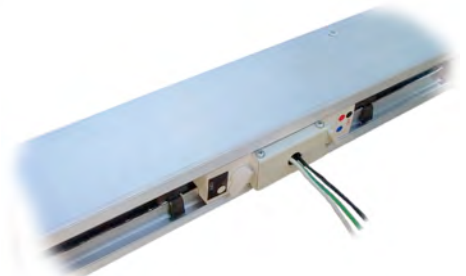
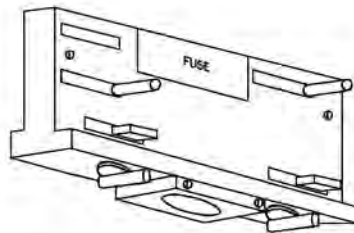
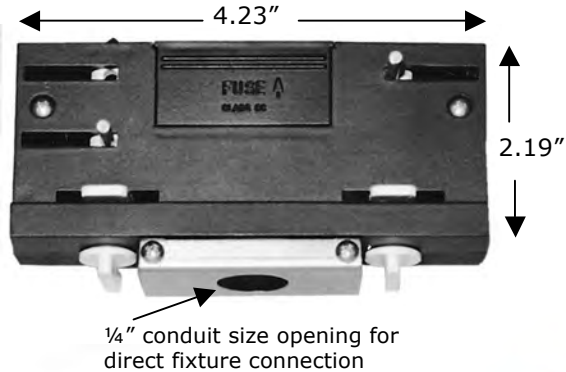
# 60 to 100 Amp Compact Same Units used in both Systems

## INTERNAL PLUG-IN UNITS

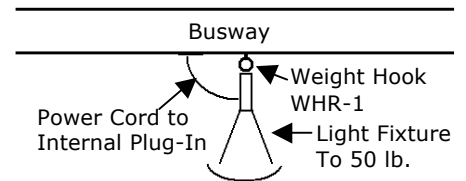
Ideal for applications where the plug head should not be visible such as light fixtures and retail/commercial areas. The unit inserts anywhere along the continuous slot in the STARLINE Track Busway and is energized by turning the two circuit selectors 90 degrees. A mounting plate with a 1/4in. conduit size opening is used for fixture connection. Small unit is rated 13A (for 16AWG wire), 300V max, single phase, fusible, (Class CC fuse not included) and wire nuts. For ballast or fixture applications, 200°C high temperature wire is available.

Internal plugs are also available in ratings of 25A, 300 volt, fusible or non-fusible. The 20 amp version utilizes high temperature wire for ballast and fixture applications.

Unit can also be supplied with a 3 meter SJO cord attached, and no mini box rated at 15A (14/3 SJO) or 20A (12/3 SJO). Units are available with basic cord grip or wire mesh cord grip.



With Optional 15A Receptacle "R"



Common Use for Internal Plug-In



### Catalog Number Sequence

IP60-(X)F

→ phase

→ Internal Plug-in for B60

### Catalog Number Selection

Catalog No.	Description	Weight
IP60-AF	Fused, Blue phase	0.5 lb
IP60-BF	Fused, Black phase	0.5 lb
IP60-CF	Fused, Red phase	0.5 lb
IP60-SF	Fused, selectable to blue or red phase	0.5 lb

- \* Add "H" for strain relief in mounting plate
- "MB" for 25A with mini box
- "C15" for 15A cord, 3M
- "C20" for 20A cord, 3M
- "L10" for high temperature fixture wire
- "R" for built-in receptacle

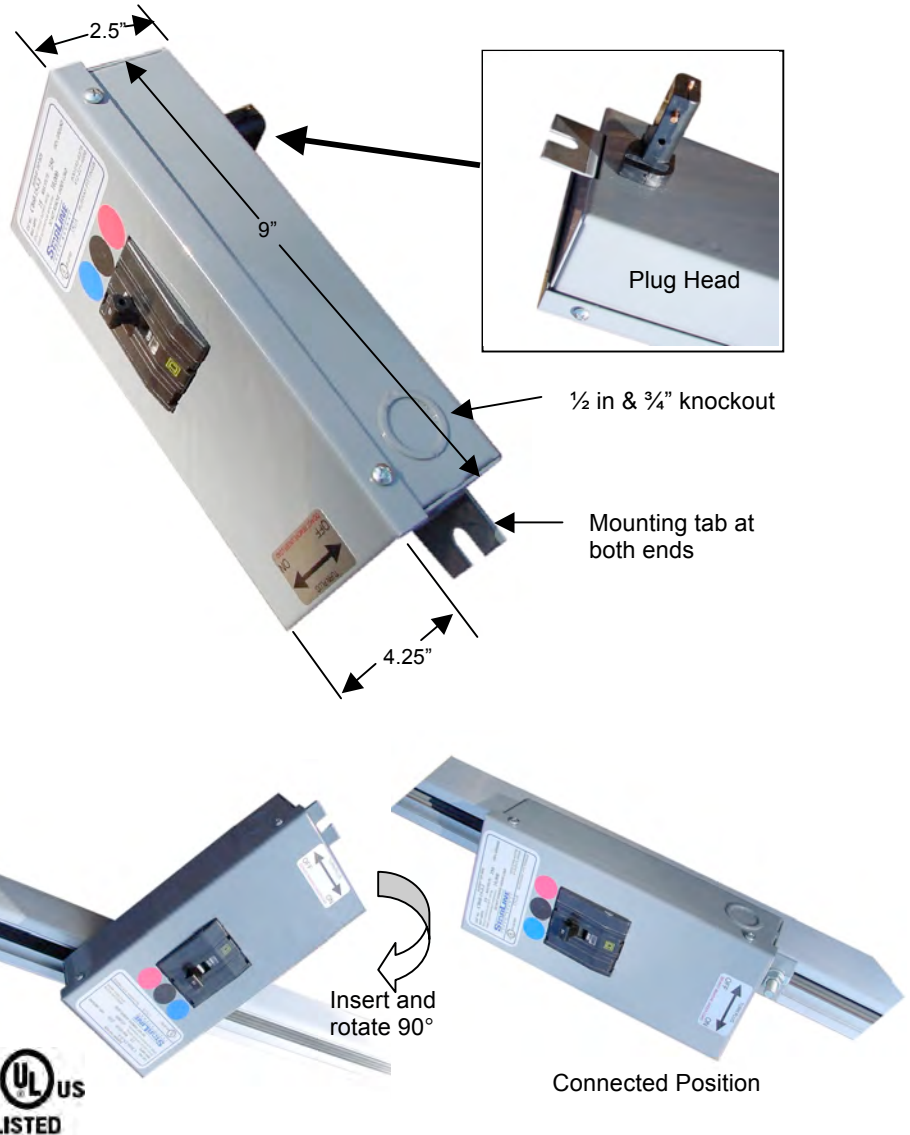
# 60 to 100 Amp Compact Same Units used in both Systems

## CIRCUIT BREAKER PLUG-IN UNITS

### Circuit Breaker

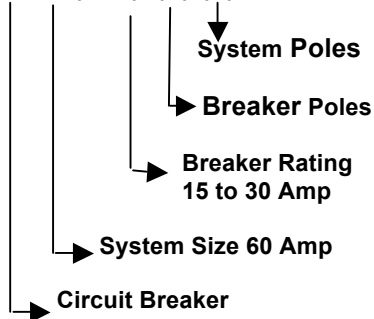
Consists of a full-size junction box with hinged lid, plug head and an externally operated circuit breaker. Insert the plug head into the Busway and rotate 90 degrees to make electrical connections. The units are normally supplied with breakers installed. Units can be supplied with mounting plate only to allow installation of breakers in the field. Optional factory-installed receptacles can be added.

Circuit breakers can be 15 to 30 amps, 250 to 480 volt max, and 1, 2 or 3 pole units. Units with UL Listed multiple breakers are available. For rating over 30 amps and multiple circuit breakers, consult factory. Units include copper grounding lug in the box that fits up to #6 wire, mounting tabs and mounting hardware to secure unit to Busway. UL Listed



### Catalog Number Sequence

CB60-(WW)-(P)-(P)



### Catalog Number Selection

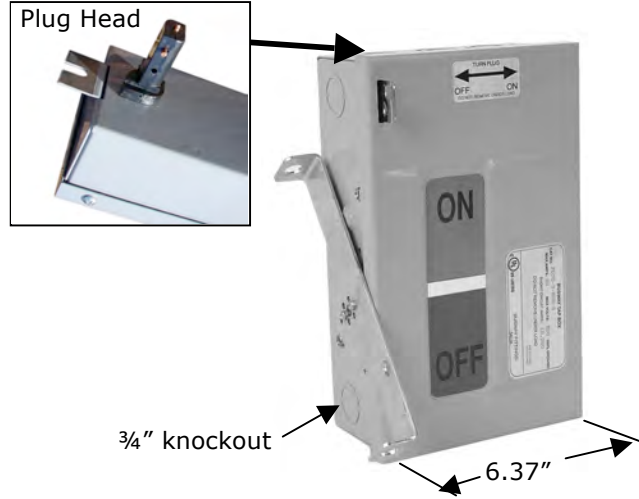
Catalog No.	Description	Weight
CB60-WW-1-4	4 pole system, 1 pole breaker, 120 volt max	3.3 lbs
CB60-WW-2-4	4 pole system, 2 pole breaker, 240 volt max	3.7 lbs
CB60-WW-3-480-4	3 pole breaker on 4 pole system, 480 volt max	

# 60 to 100 Amp Compact Same Units used in both Systems

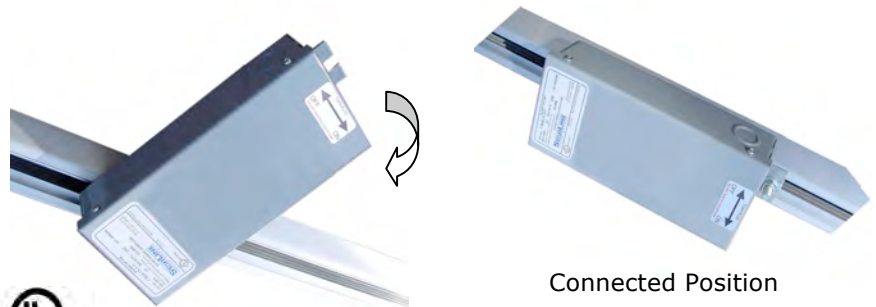
## FUSED/DISCONNECT PLUG-IN

### Fused Disconnect – FD

Consists of a full-size junction box with hinged lid, internal fuse block, plug-head and an externally operable disconnect switch. Rocker handle disconnects circuit before box can be opened. Phenolic fuse block is 3-pole, Class RK, 250 or 600 volt and 30 Amp max. All units include a copper grounding lug, mounting tabs and mounting hardware to secure unit to Busway. UL Listed.



External Disconnect - **FD**

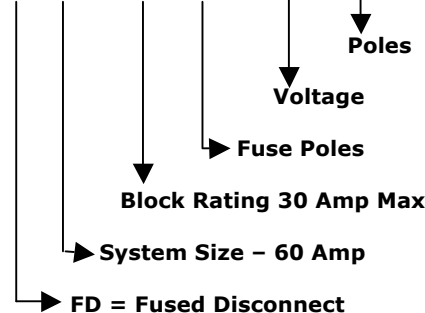


Insert and rotate 90°

Connected Position

### Catalog Number Sequence

FD60-(WW)-(P)-(YYY)-(P)



### Catalog Number Examples

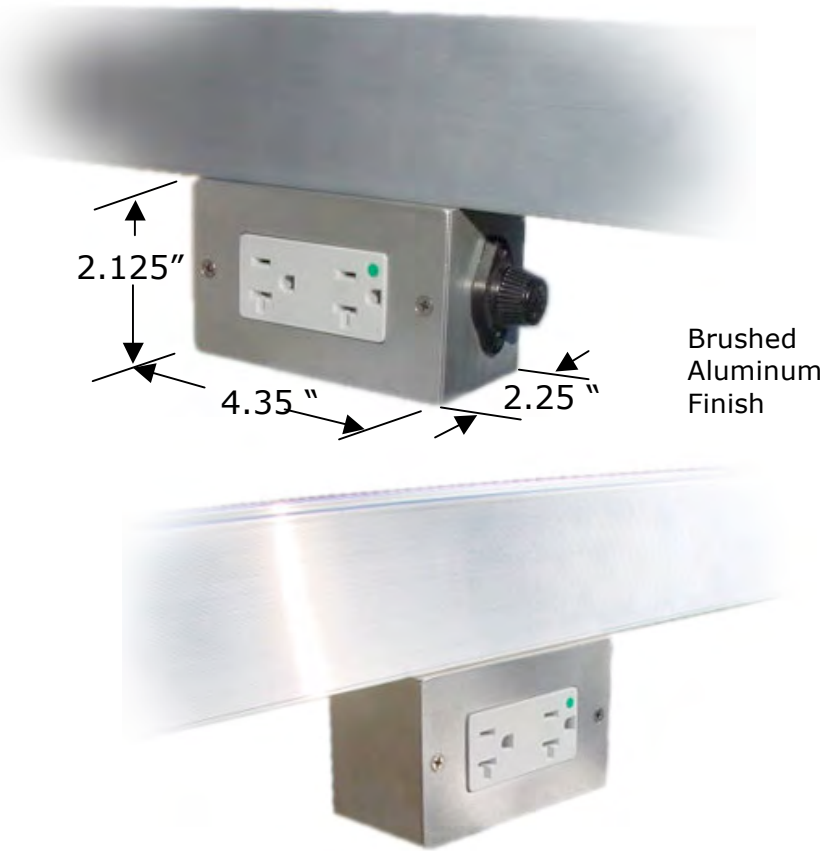
Catalog No.	Description	Weight
FD60-30-4-250-4	Fused Disconnect unit, 3-pole +4W, 30A, 250V, 4-pole system	5.2 lbs

# 60 to 100 Amp Compact Same Units used in both Systems

## COMMERCIAL PLUG-IN

“Commercial” aluminum Outlet plug-in units are used to tap off power from the Busway. All Commercial plug-in units are equipped with the plug head which inserts into the Busway continuous slot and turns 90 degrees to make the spring-loaded connection. The installer simply inserts the unit into the Busway, turns 90 degrees. The bolt-on mounting tab provides ground connection for the box and load. All plug-in units are polarized to inhibit reverse installation.

Standard unit consists of a brushed aluminum box with Starjack. Available with NEMA 5-15 , 5-20 Duplex or L5-30, L6-20, L6-30 receptacle. Class CC fuse and fuseholder(s).

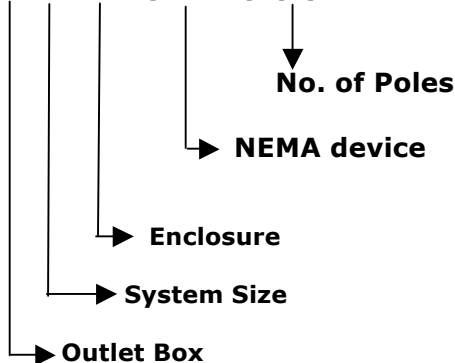


Brushed Aluminum Finish



### Catalog Number Sequence

**OB60E22-(NEMA)-(P)**



### Catalog Number Selection

Limited to 120/240Volt, 15, 20 or 30 Amp

Catalog No.	Description	Weight
OB60E22-515D-4	Outlet box , 5-15 Duplex/w fuse	1.4 lbs
OB60E22-520D-4	Outlet box, 5-20 Duplex/w fuse	1.4 lbs
OB60E22-L620-4	Unit w/L6-20 Recept w/2 fuses	1.4 lbs

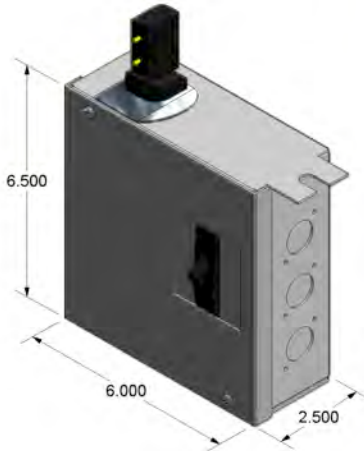
# 60 Amp



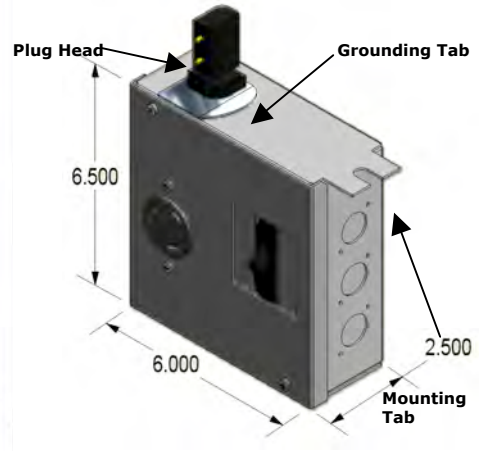
## E12 ENCLOSURE CIRCUIT BREAKER APPLICATIONS

Used to tap off power from the Busway with a wide variety of device configurations. **PREFERRED** enclosure for CB units & OB units with breakers.

- **PREFERRED** enclosure for single or multiple Drop Cords
- Limited to 3 breaker positions.
- Possible combination:
  - NEMA L21-30 with three breaker positions.
  - Double Duplex with 2 breakers
  - Two Drop Cord Assemblies
- Consult factory for possible combinations.
- Maximum ratings of 30 amps, 240V, 10,000 AIC.
- Locked into position with a single bolt on mounting tab.



CB Junction Box



NEMA L5-20 Shown



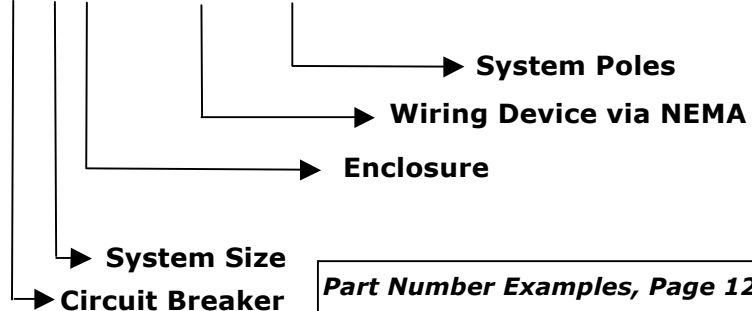
Color Code Phase Designation

Normal position, breaker faces Busway label side

Rear position, must be ordered from factory



### Catalog Number Sequence CB60E12-(NEMA)-(P)



*Part Number Examples, Page 12.15*

## E12 ENCLOSURE CIRCUIT BREAKER PROTECTIN E12 ENCLOSURE

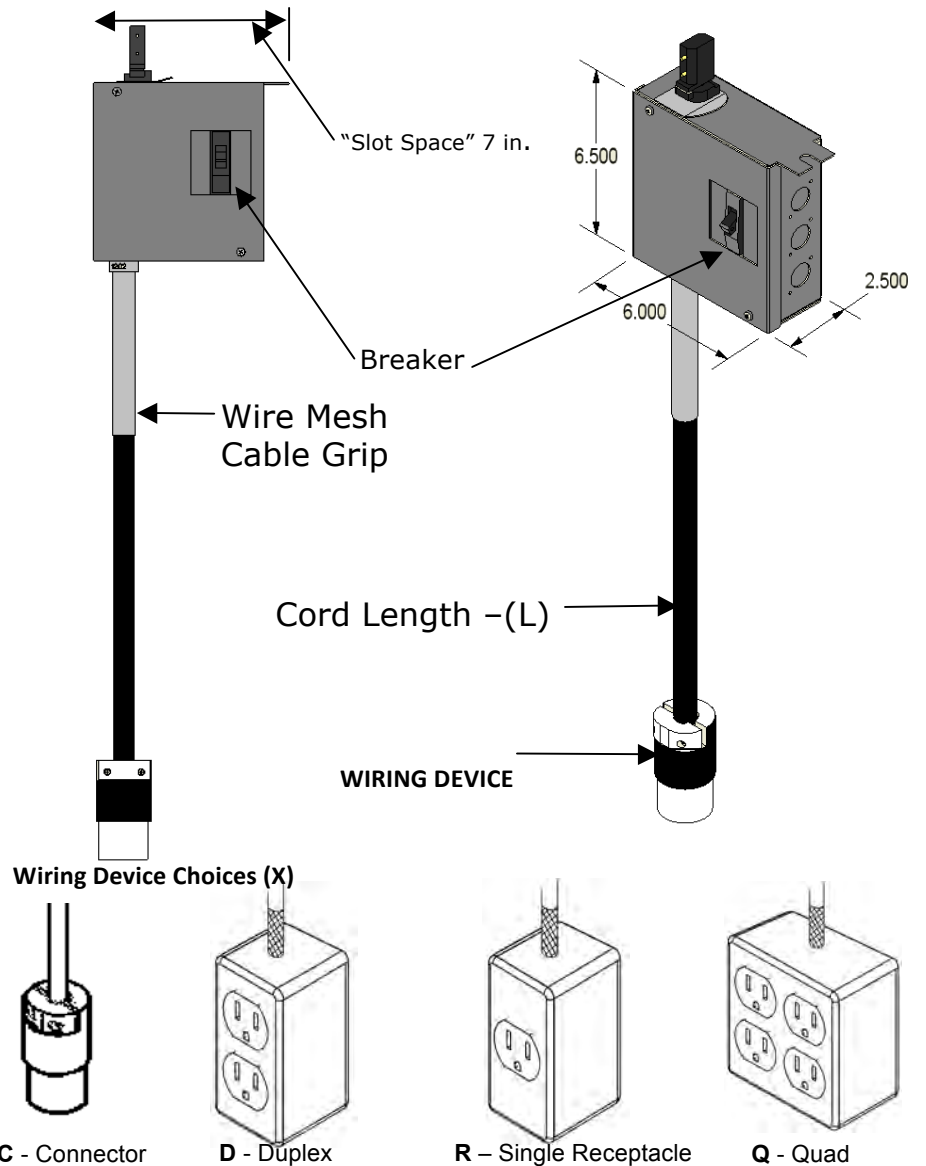
### Drop Cord Assembly

Used to tap off power from the Busway with a wide variety of device configurations. Plug head is reversible to face in opposite direction.

Shipped assembled complete from the factory based on part number selection including cord, breaker(s), and end effector. Drop Cord assemblies with connector (C) end effector include a wire mesh cord grip at outlet of plug-in box. All other assemblies include wire mesh cord grips at both ends of cord.

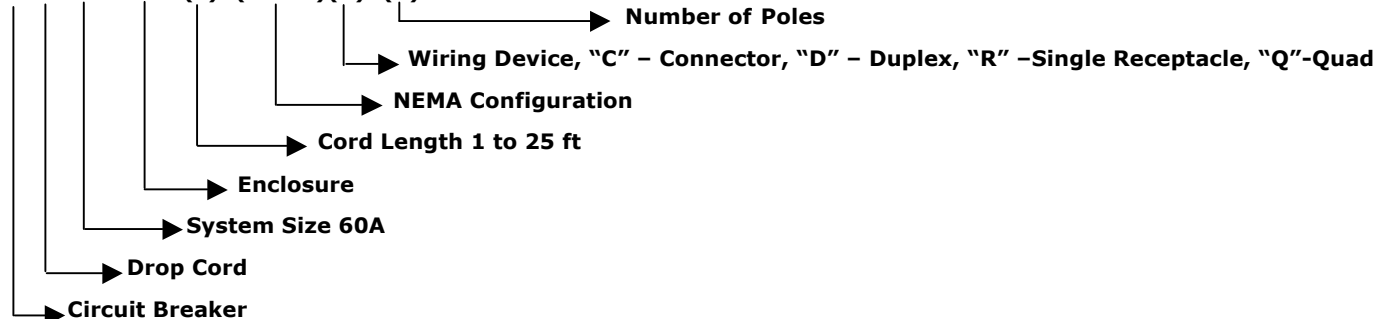
### E12 General Use

- **PREFERRED** enclosure for single or multiple Drop Cords (up to three)
- Limited to 3 breaker positions.
- Consult factory for possible combinations.



### Catalog Number Sequence

CBDC 60 E12-(L)-(NEMA)(X)-(Y)



*Units for use with B100A, B100N, and B225 systems*

*Units for use with B100G, B100NG, and B225G systems*

**Outlet Units** Pages 12.18-12.22

**Drop Cords** Pages 12.23-12.24

**Circuit Breakers** Page 12.25-12.28

**Circuit Breakers** Page 12.29

**Fused Disconnects** Page 12.30-12.32

**Terminal Blocks** Page 12.33-12.34







# 100, 225 Amp B100A, B100N, B225, B100G, B100NG, B225G

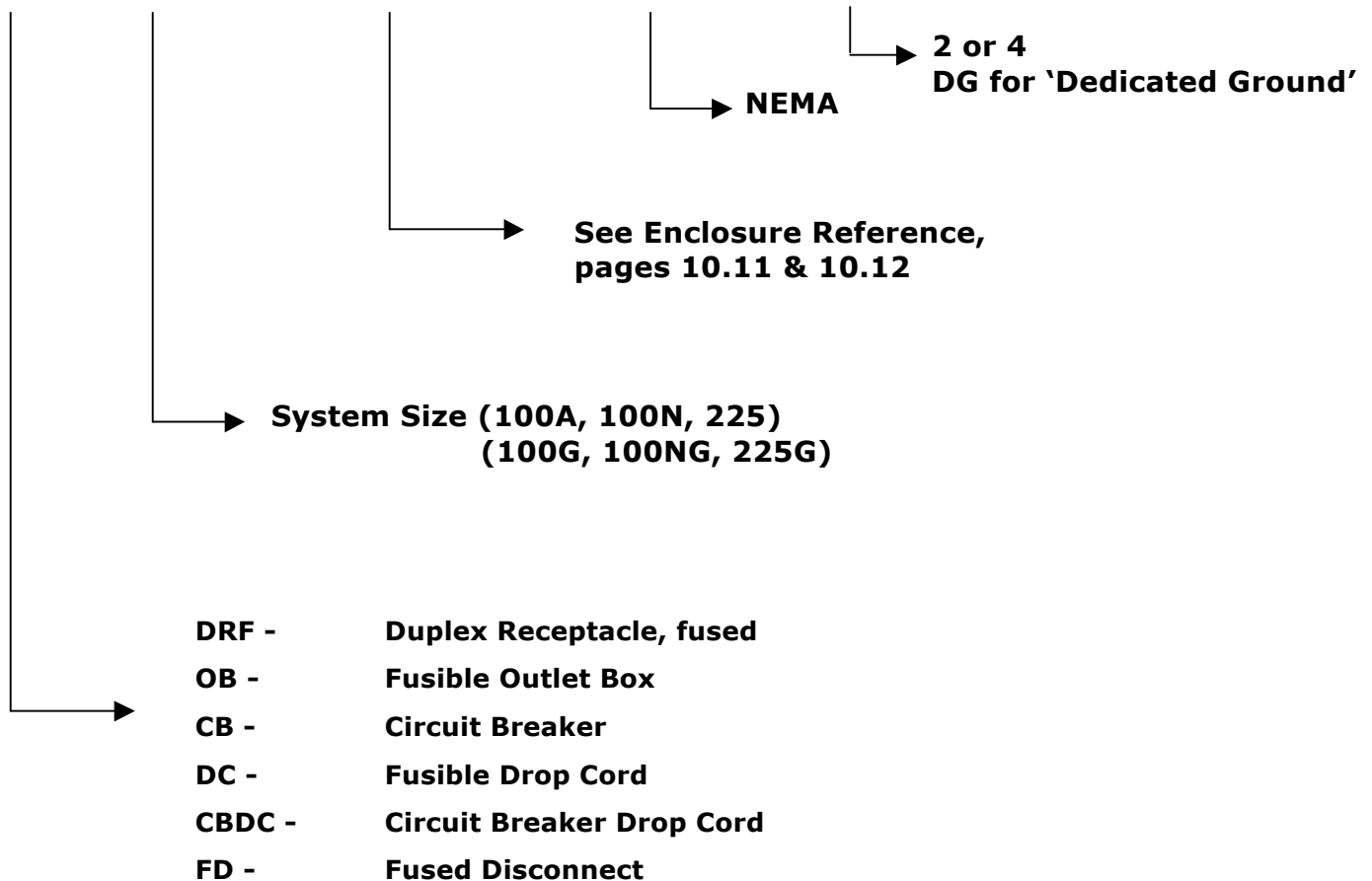
**PLUG-IN SELECTION**

*Same Units to be used in ALL B100A, B100N, and B225 systems  
Similar Units to be used in ALL B100G, B100NG, and B225G systems*

### Basic Part Number Nomenclature

Although there are many custom units available, the units shown below are considered standard

### (Style)(System)(Enclosure) – (Device) - (Busway Poles) – (Options)

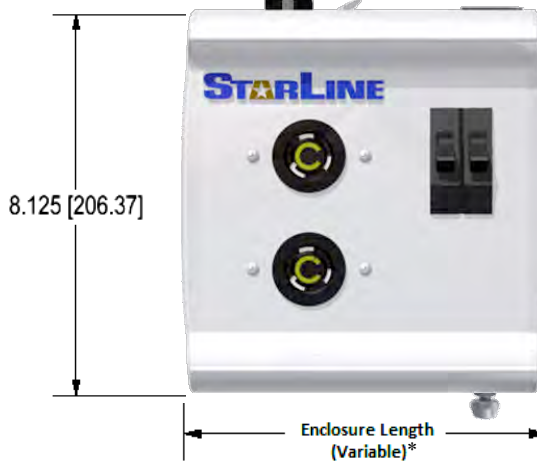


**E90 ENCLOSURE**  
Circuit Breaker Applications

Next-generation, custom engineered enclosure that features a stylish exterior combined with a spacious interior and customizable body length to accommodate a wide variety of applications. The E90-Series enclosure is designed to tap off power from the busway. The option is available to have a reverse paddle such that the enclosure faces in the opposite direction when in the busway.

- Configurable unit length for multiple circuit breaker pole positions.
- Locks into position using a single, easy access bolt
- Maximum rating of 22kA at 480V for B100, 22kA at 240V for B225
- Consult factory for possible combinations\*

Model Shown:  
CBM225E92-(2)L530-4



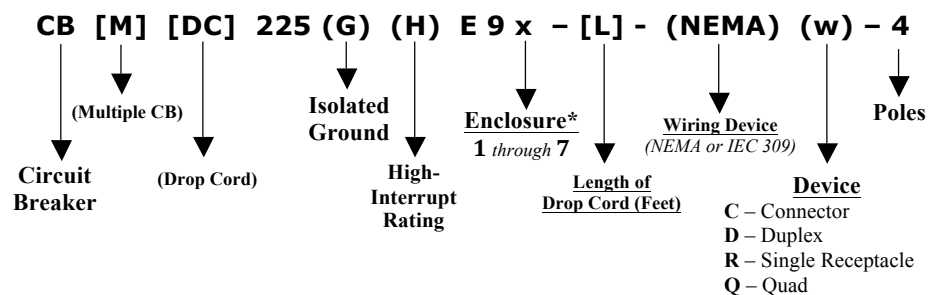
**Enclosure Lengths**

*(Please consult factory for proper sizing)*

- E91 – 6.00”
- E92 – 8.00”
- E93 – 10.00”
- E94 – 12.00”
- E95 – 13.00”
- E96 – 15.00”
- E97 – 18.00”



**Catalog Number Sequence**



# ENCLOSURE REFERENCE



B100A, B100N, B225, B100G  
B100NG, B225G Systems Only

**E2**

2.5" Deep

4"

4"

- Standard for all single fuse applications
- **SLOT SPACE 6 5/8"**

**E3**

2.5" Deep

4 11/16"

4 11/16"

- Standard for two & three fuse applications
- **SLOT SPACE 6 5/8"**

**E9 or "S" or "S"6**

7.25"

12"

3"

- Can be used for four or more breaker positions in one unit.
- Used as a "Mini-Panel" for multiple outlets.
- Connector stab faces away from face. Can be ordered with connector stab facing front. **IMPORTANT** for layout considerations.
- **SLOT SPACE 15"** Consider using two E12 enclosures for less slot space

**E12**

6.5"

6"

2.5"

7"

Slot Space

- **PREFERRED** Outlet Box or Drop Cord for Breaker applications up to 3 positions & 60 Amp/240V
- Connector stab is field reversible.
- **SLOT SPACE 7"**

**E6**

12.7"

2.5" Deep

6 5/8"

- Default Unit for Circuit Breakers
- Connector Stab **CANNOT** be reversed.
- **SLOT SPACE 16"**

# ENCLOSURE REFERENCE



**B100A, B100N, B225, B100G  
B100NG, B225G Systems Only**

**E25**

- Can be used for six or more breaker positions in one unit.
- Used as a "Mini-Panel" for multiple outlets.
- Connector stab is field reversible
- **SLOT SPACE 16.5"**. Consider using two E12 enclosures for less slot space

**E28**

- **PREFERRED** Outlet Box or Drop Cord for Breaker applications up to 7 positions & 60 Amp/240V
- Connector stab is field reversible.
- **SLOT SPACE 9"**

**E30**

- Down facing Outlet Box or Drop Cord for Breaker applications up to 3 positions & 60 Amp/240V
- Connector stab is field reversible.
- **SLOT SPACE 7"**

**E2 & E3 ENCLOSURES**  
FUSE APPLICATIONS

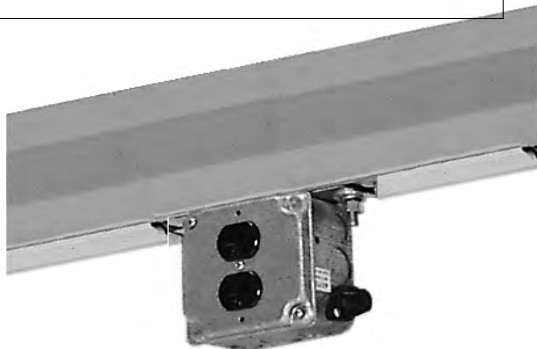
Plug-in units are used to tap off power from the Busway. All plug-in units are equipped with a plug head and grounding tab which inserts into the busway's continuous slot and turns 90 degrees to make the spring-loaded connection. The installer simply inserts the unit into the Busway, becomes automatically grounded and turns 90 degrees. Unit is locked into position with bolt-on mounting tabs. All plug-in units are polarized to inhibit reverse installation. Refer to layout for further explanation.

**OB Junction Box**

Standard unit consists of a 4" or 4-11/16" square junction box with plug-head. Optional Class CC fuse holders are available. 300V max volts for systems >100 amps, 600V max for 100 amp systems.

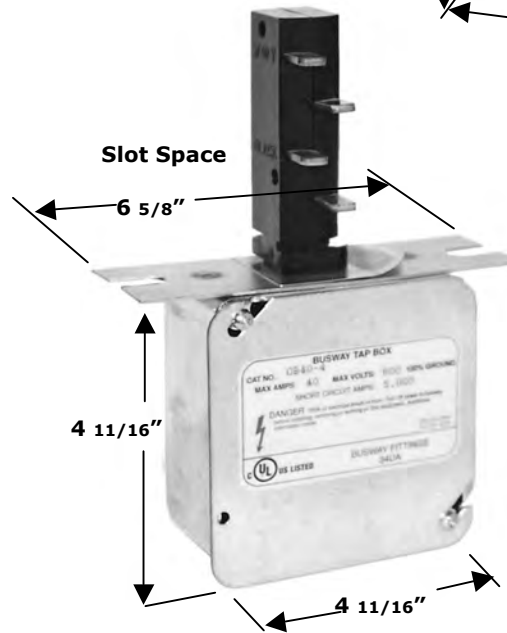
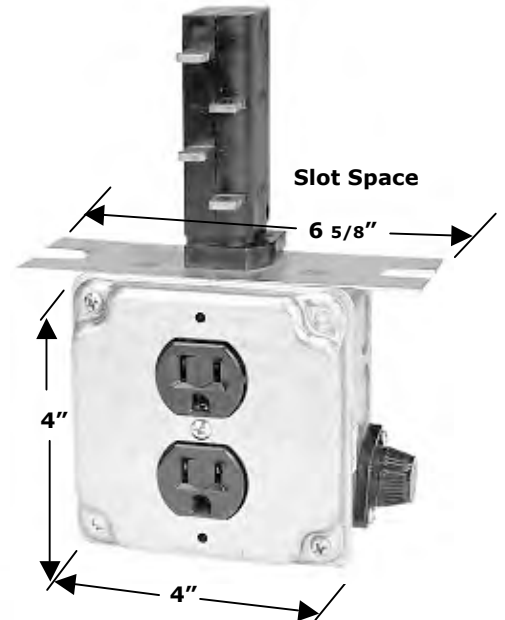
**Duplex Receptacle Unit**

Standard unit consists of box with plug-head, NEMA 5-15, 5-20 duplex, Class CC fuse and fuse holder.



*E2 & E3 enclosures face parallel to busway on conductor side*

**E2**  
**For SINGLE FUSE Applications ONLY**



**E3**  
**For 2 or 3 FUSE Applications ONLY**

**Common Catalog Number Selection**

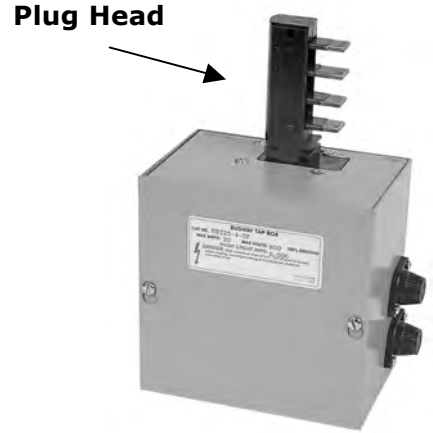
Catalog No.	Description
OB100NE2-515D-4	Outlet Box, Duplex, NEMA 5-15
OB225E2-520D-4	Outlet Box, Duplex, NEMA 5-20
OB100AE3-520Q-4Q	Outlet Box, Quad, NEMA 5-20
OB225E3-520Q-4-2F	Outlet Box, Quad, NEMA 5-20, 2 Fuses

**E4 FOR 480 VOLT**

Plug-in units are used to tap off power from the Busway. All plug-in units are equipped with a plug head and grounding tab which inserts into the Busway continuous slot and turns 90 degrees to make the spring-loaded connection. The installer simply inserts the unit into the Busway. Unit is locked into position with bolt-on mounting tabs. All plug-in units are polarized to inhibit reverse installation.

**OB Junction Box, E4**

Rated to 600 volts for 160 and 225 amp systems. Standard unit consists of a 6 x 6 x4 in. box with plug-head, cover, ground lug and wire nuts. Uses Class CC fuseholders.



**OB Junction Box**  
(shown with two fuses)

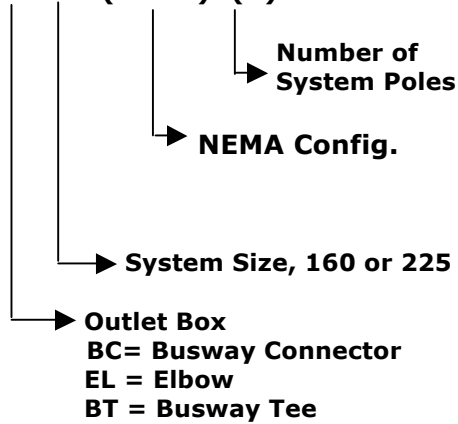


Standard perpendicular facing outlet



**Catalog Number Sequence**

**OB225-(XXXX)-(P)**



**Common Catalog Number Selection**

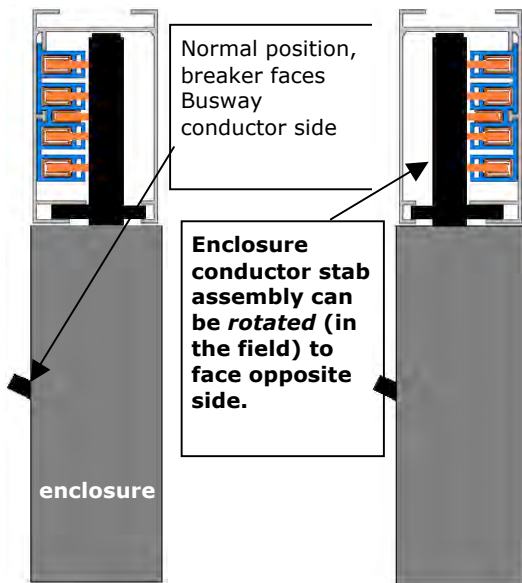
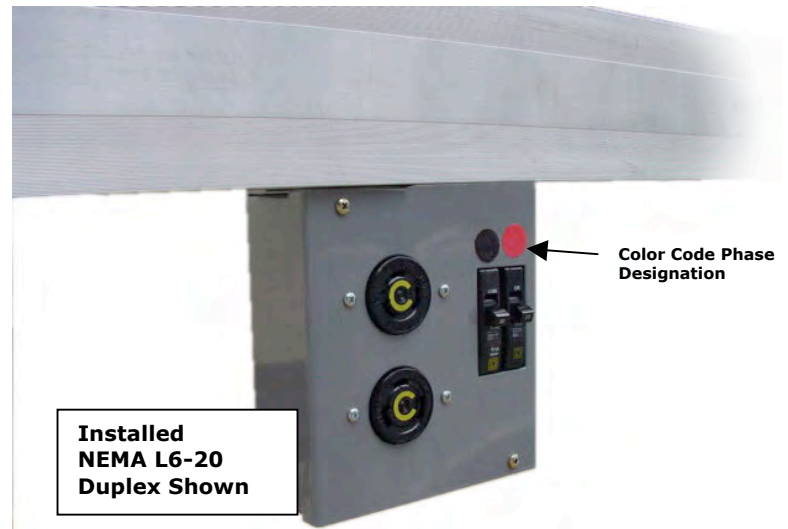
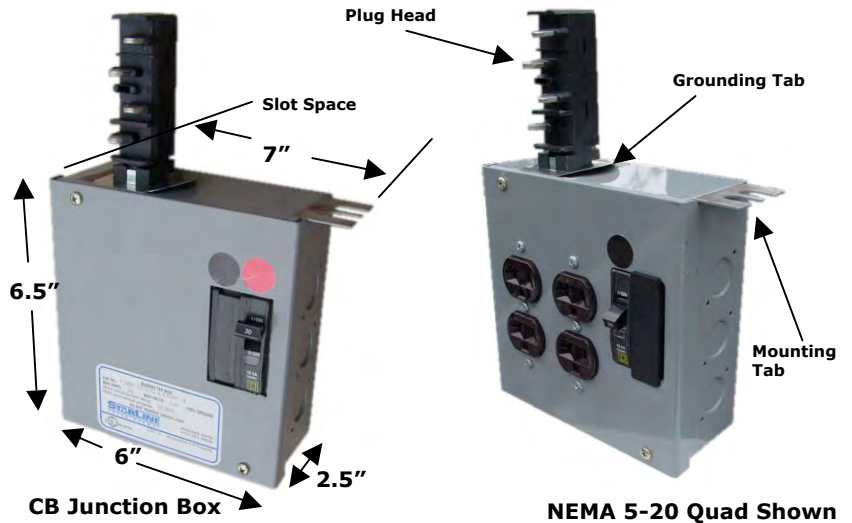
Catalog No.	Description	Weight
OB225-30-4*	Outlet Box, 30 Amp, 4-pole	4 lbs
OB225-30-3*	Outlet Box, 30 Amp, 3-pole	4 lbs
OB225-60-4	Outlet Box, 60 Amp, 4-pole	4.2 lbs
OB225-60-3	Outlet Box, 60 Amp, 3-pole	4.2 lbs
OB225-30-4-3F	Outlet Box, 30A, 3 Fuseholders	4 lbs

\* - add"-1F, -2F or 3F for Class CC fuseholders. Order Class CC fuses separately

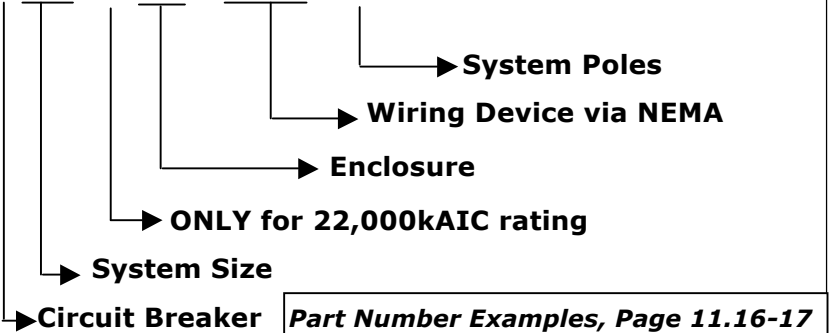
**E12 ENCLOSURES  
CIRCUIT BREAKER APPLICATIONS**

Used to tap off power from the Busway with a wide variety of device configurations. Plug head is reversible to face in opposite direction.

- **PREFERRED** enclosure for CB units & OB units with breakers.
- **PREFERRED** enclosure for single or multiple drop cords
- Limited to 3 breaker positions.
- **Possible combination:**
  - NEMA L21-30 with three breaker positions
  - Double duplex with 2 breakers
  - Two drop cord assemblies
- Consult factory for possible combinations.
- Maximum ratings of 60 amps, 240V, 22,000 AIC. ("H")
- Locked into position with a single bolt on mounting tab.



**Catalog Number Sequence**  
CB(sys)(H)E12-(NEMA)-(P)



# 100, 225 Amp

B100A, B100N, B225, B100G, B100NG, B225G



**E12 ENCLOSURES**  
CIRCUIT BREAKERS APPLICATIONS

CATALOG NUMBER	FUSES		WIRING DEVICES	
	NUMBER	AMPERAGE	NEMA	QTY
OB225E12-30-4	NONE	30	NONE	
OB225E12-515D-4	1	15	5-15 DUPLEX	1
OB225E12-L515-4	1	15	L5-15 SINGLE	1
OB225E12-L515D-4	1	15	L5-15 DUPLEX	1
OB225E12-(3)L515-4	1	15	L5-15 SINGLE	3
OB225E12-520D-4	1	20	5-20 DUPLEX	1
OB225E12-520Q-4	1	20	5-20 DUPLEX	2
OB225E12-520Q-4-2F	2	20	5-20 DUPLEX	2
OB225E12-L520-4	1	20	L5-20 SINGLE	1
OB225E12-L520D-4	1	20	L5-20 DUPLEX	1
OB225E12-(3)L520-4	1	20	L5-20 SINGLE	3
OB225E12-L520-L620-4	3	20	L5-20 SINGLE L6-20 SINGLE	1 1
OB225E12-L530-4	1	30	L5-30 SINGLE	1
OB225E12-(3)L530-4	1	30	L5-30 SINGLE	3
OB225E12-L620-4	2	20	L6-20 SINGLE	1
OB225E12-L630-4	2	30	L6-30 SINGLE	1
OB225E12-L1530-4	3	30	L15-30 SINGLE	1



# 100, 225 Amp

B100A, B100N, B225, B100G, B100NG, B225G



**E12 ENCLOSURES**  
CIRCUIT BREAKERS APPLICATIONS

## PART NUMBER EXAMPLES

CATALOG NUMBER	CIRCUIT BREAKER(S)			WIRING DEVICE	
	Number	Amperage	Poles	NEMA	QTY
CB225E12-15-1-240-4	1	15	1	NONE	
CB225E12-15-2-240-4	1	15	2	NONE	
CB225E12-15-3-240-4	1	15	3	NONE	
CB225E12-20-1-240-4	1	20	1	NONE	
CB225E12-20-2-240-4	1	20	2	NONE	
CB225E12-20-3-240-4	1	20	3	NONE	
CB225E12-30-1-240-4	1	30	1	NONE	
CB225E12-30-2-240-4	1	30	2	NONE	
CB225E12-30-3-240-4	1	30	3	NONE	
CBM225E12-1/20-3-240-4	3	20	1	NONE	
CB225E12-515D-4	1	15	1	5-15 Duplex	1
CB225E12-520D-4	1	20	1	5-20 Duplex	1
CB225E12-520Q-4	1	20	1	5-20 Duplex	2
CB225E12-L515-4	1	15	1	L5-15 Single	1
CB225E12-L515D-4	1	15	1	L5-15 Duplex	1
CB225E12-(3)L515-4	1	15	1	L5-15 Single	3
CB225E12-L520-4	1	20	1	L5-20 Single	1
CB225E12-L520D-4	1	20	1	L5-20 Single	2
CB225E12-(3)L520-4	1	20	1	L5-20 Single	3
CB225E12-L530-4	1	30	1	L5-30 Single	1
CB225E12-(3)L530-4	1	30	1	L5-30 Single	3
CB225E12-L620-4	1	20	2	L6-20 Single	1
CB225E12-L630-4	1	30	2	L6-30 Single	1
CBM225E12-L520-L620-4	1 1	20 20	1 2	L5-20 Single L6-20 Single	1 1
CB225E12-L1530-4	1	30	3	L15-30 Single	1
CB225E12-L2130-4	1	30	3	L21-30 Single	1

**DROP CORD PLUG-IN**  
CIRCUIT BREAKERS PROTECTION E12 ENCLOSURE

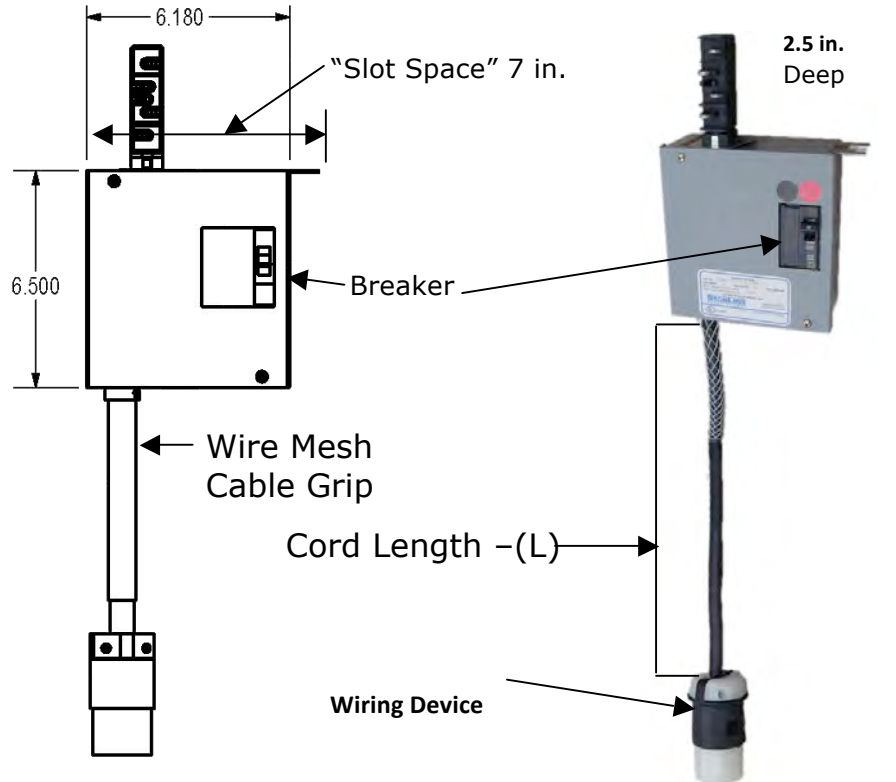
**Drop Cord Assembly**

Used to tap off power from the Busway with a wide variety of device configurations. Plug head is reversible to face in opposite direction.

Shipped assembled complete from the factory based on part number selection including cord, breaker(s). Drop cord assemblies with connector (C) include a wire mesh cord grip at outlet of plug-in box. All other assemblies include wire mesh cord grips at both ends of cord.

**E12 General Use**

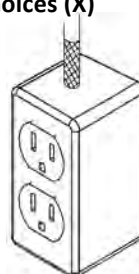
- **PREFERRED** enclosure for single or multiple Drop Cords (up to three)
- Limited to 3 breaker positions.
- Consult factory for possible combinations.



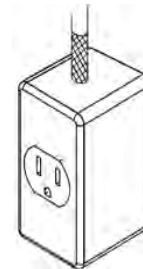
**Wiring Device Choices (X)**



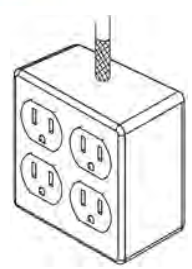
C - Connector



D - Duplex



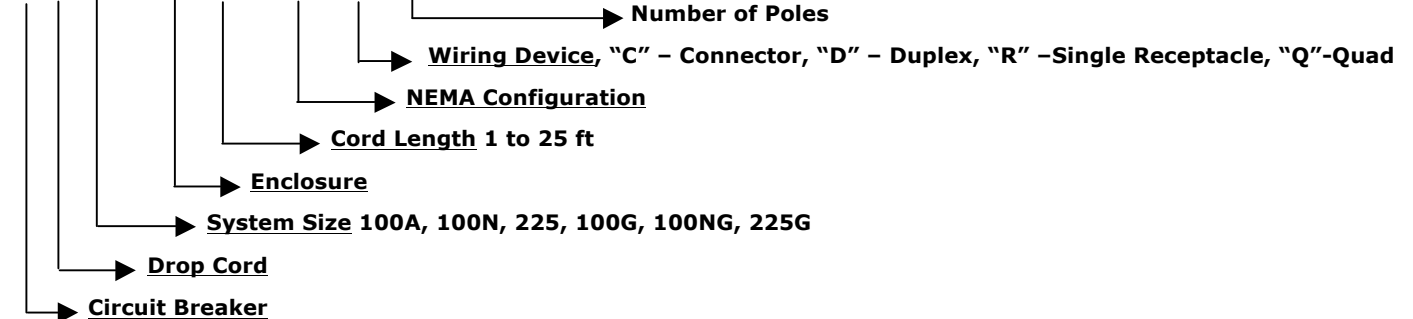
R - Single Receptacle



Q - Quad

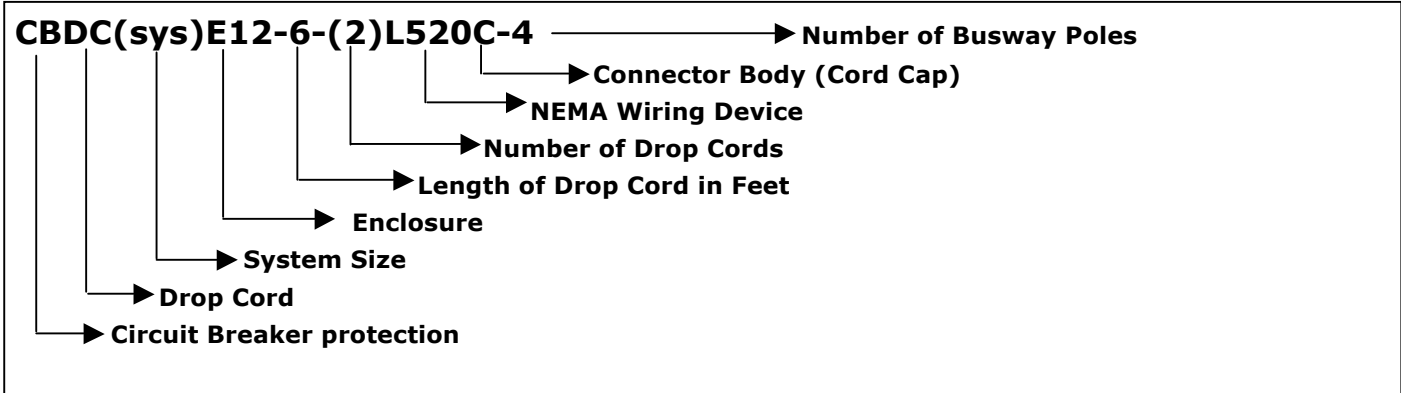
**Catalog Number Sequence**

CBDC(sys) E12-(L)-(NEMA)(X)-(Y)

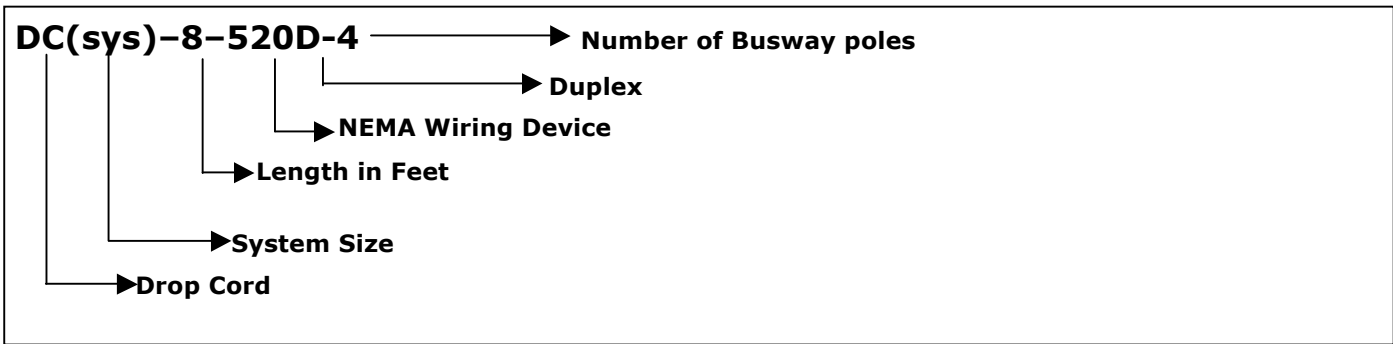


**DROP CORD SELECTION**  
PART NUMBER EXAMPLES

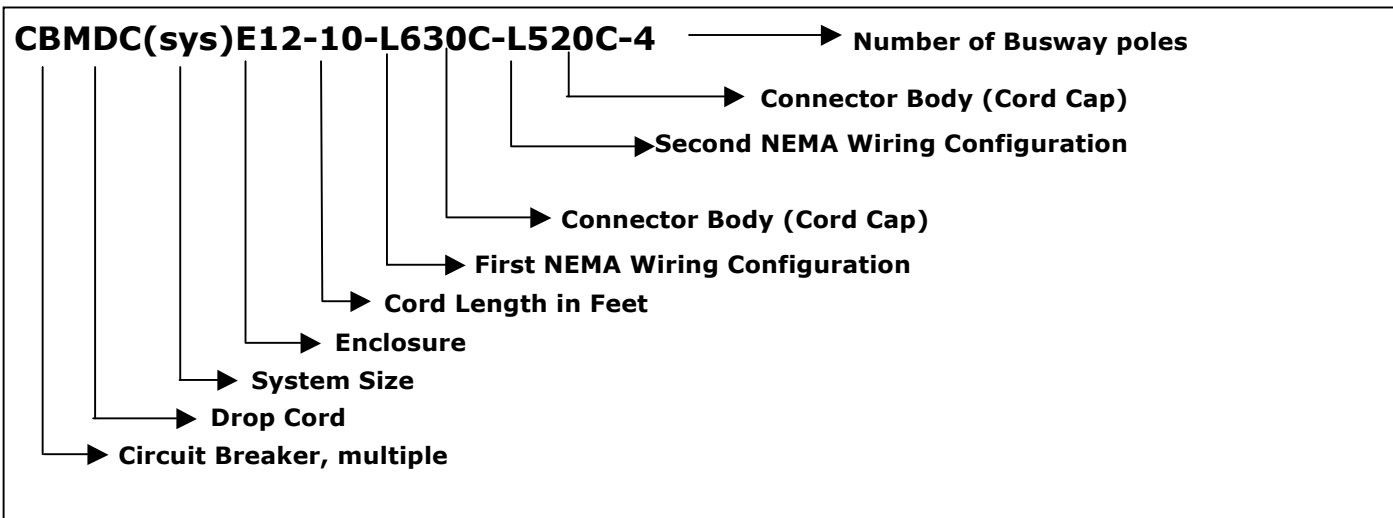
**For B225 System, *Circuit Breaker protection* with two (2), 6 ft Drop Cords, NEMA L5-20 Connectors (Cord Caps)**



**For B100N, a single, 8 ft Drop Cord with 5-20 Duplex, *fuse protection***



**For B225 System, *Circuit Breaker protection* with one 10 ft Drop Cord with NEMA L6-30 Connector and one 10 ft Drop Cord with L5-20 Connector**



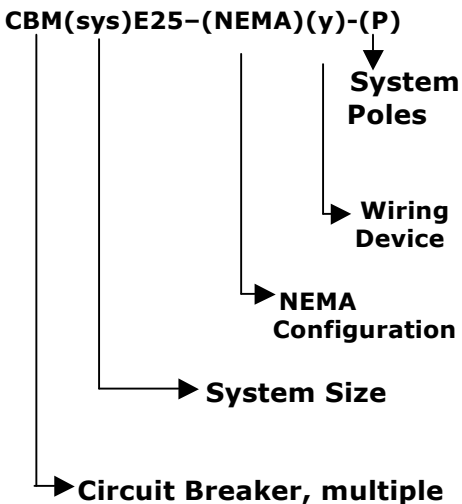
**E25 CIRCUIT BREAKER PLUG-IN**  
VERTICAL (FRONT OPERABLE) TYPE

**Vertical Circuit Breaker**

Basic circuit breaker is front operable and comes with a circuit breaker base that will accommodate 1 thru 6-pole circuit breakers up to 240 volt. Basic unit is rated for 10kAIC with some breaker options for 22kAIC. Selection information for these units should include amp rating, number of breaker poles and Busway system poles. Units are very versatile and can also be ordered with various outlet configurations. Refer to 100 Amp Drop Cords for selection information.



**Catalog Number Sequence**



**Catalog Number Selection**

Catalog No.	Description	Weight
CBM225E25-(x)-(NEMA) (y)-4	240V, 10kAIC, 4-pole Busway	12 lbs
CBM225HE25-(x)-(NEMA) (y)-4	240V, 22kAIC, 4-pole Busway	12 lbs

x=length of cord

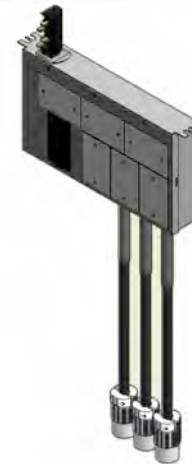
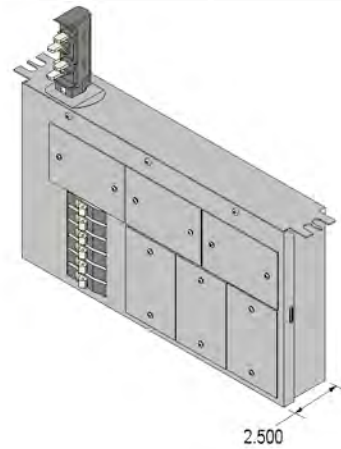
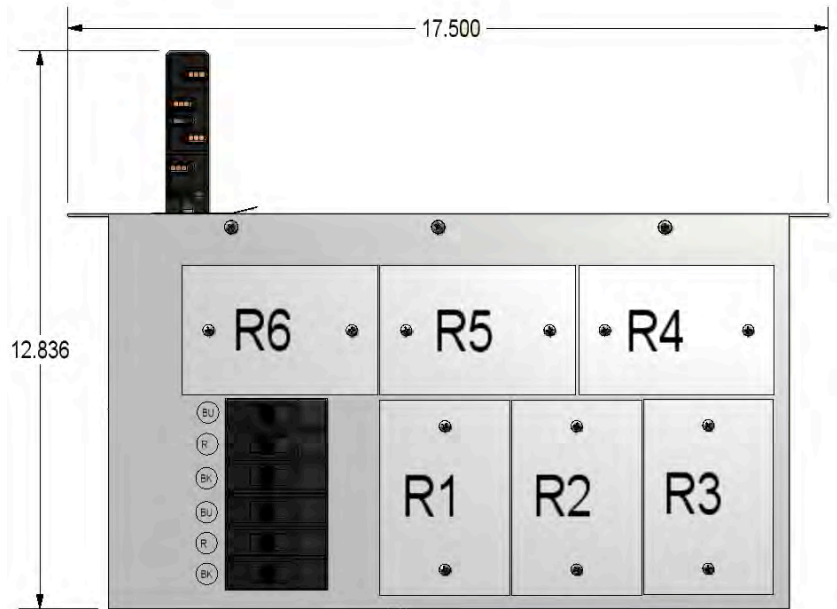
NEMA= NEMA Configuration

"D" – Duplex, "R" – Single Receptacle, "Q" – Quad

**E25 CIRCUIT BREAKER PLUG-IN  
DROP CORD UNITS**

**Vertical Circuit Breaker**

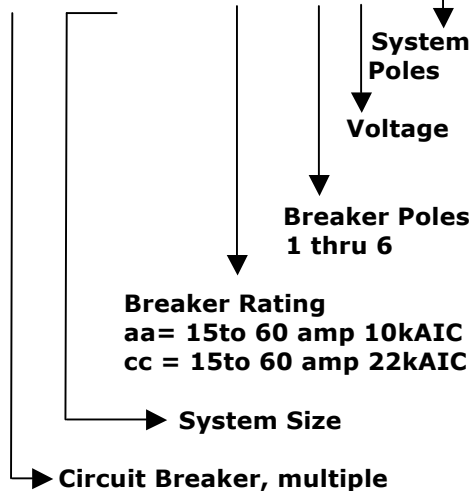
Basic circuit breaker is front operable and comes with circuit breaker base that will accommodate 1, thru 6-pole circuit breakers up to 240 volt. Basic unit is rated for 10kAIC with some breaker options for 22kAIC. Selection information for these units should include amp rating, number of breaker poles and Busway system poles. Units are very versatile and can also be ordered with various outlet and drop cord configurations. Refer to Drop Cord Units for selection information.



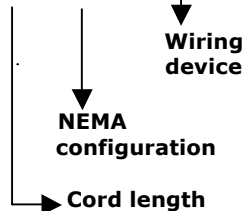
Used with drop cords  
Refer to drop cord section

**Catalog Number Sequence**

**CBM(sys)E25-(aa)-(y)-240-(P)**



**CBMDC225E25-(X)-(NEMA)(w)-4**



**Typical Catalog Number Selection**

Catalog No.	Description	Weight
CBF225E25-60-6-240-4	240V, 10kAIC, 3/4-pole Busway	12 lbs
CBM225E25-p/aa-x-240-4	240V, 10kAIC, 3/4-pole Busway	12 lbs
CBM225AE25-p/cc-x-240-4	240V, 22kAIC, 3/4-pole Busway	12 lbs
CBMDC225AE25-X-L620C-4	240V, 22kAIC, 3/4-pole Busway	12 lbs

p=no. of poles, aa=15-60 Amp, 10kAIC, cc=15-60 Amp, 22kAIC

x=total number of poles, 1-6, X=length of cord

# 100, 225 Amp

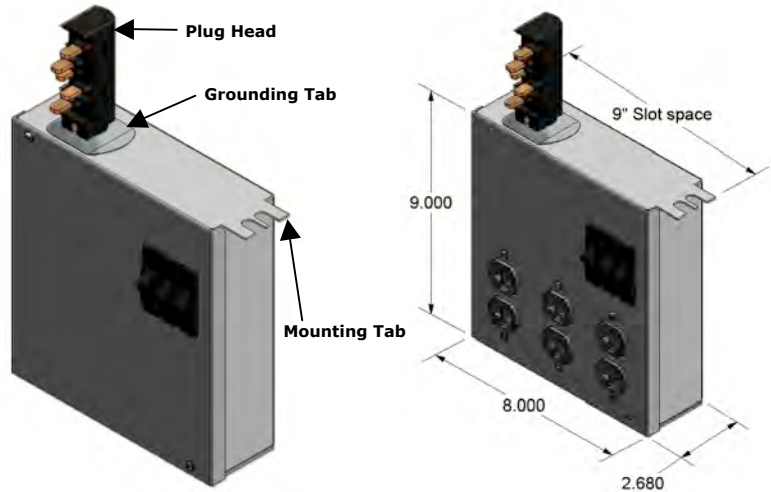
**B100A, B100N, B225; B100G, B100NG, B225G**



## E28 ENCLOSURE CIRCUIT BREAKER APPLICATIONS

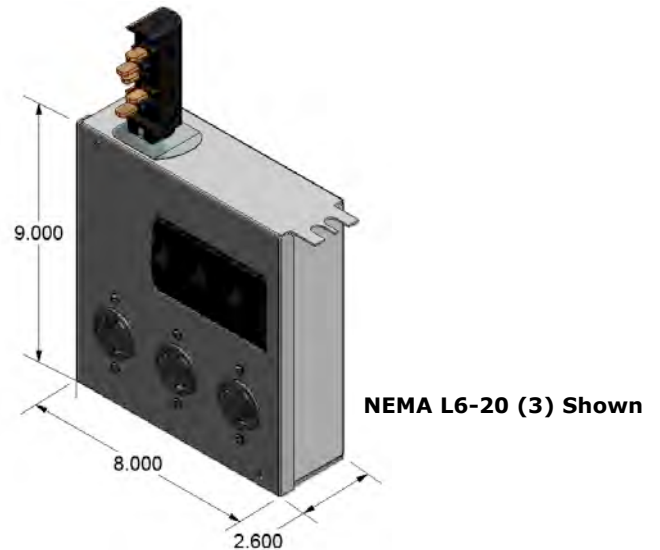
Used to tap off power from the Busway with a wide variety of device configurations. Plug head is reversible to face in opposite direction.

- Use only where E12 is insufficient
- Capable to 7 breaker positions and four receptacles
- Possible combination:
  - (3) NEMA L6-20 and one 5-20 duplex
  - (3) NEMA L6-30
- Consult factory for possible combinations.
- Maximum ratings of 100 total amps, 240V, 22,000 AIC. ("H")
- Locked into position with a single bolt on mounting tab.

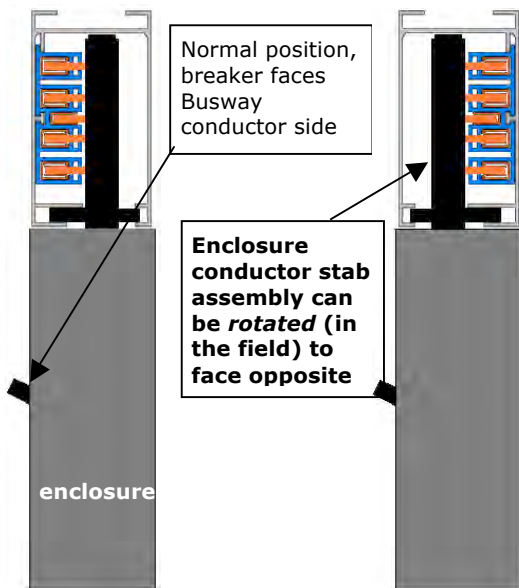


CB Junction Box

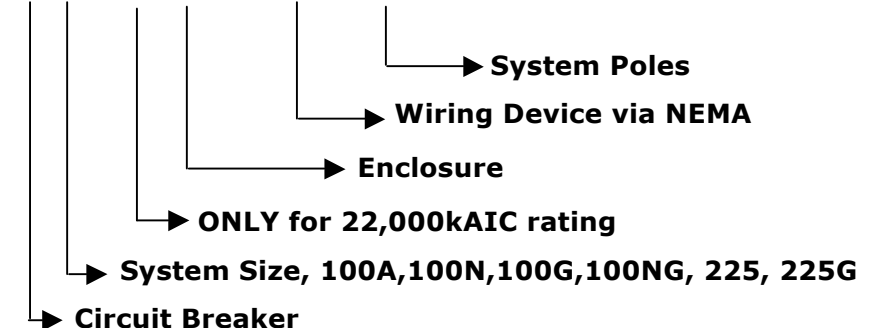
NEMA (3) 5-20D Shown



NEMA L6-20 (3) Shown



### Catalog Number Sequence CB\*\*\* (H)E28-(NEMA)-(P)



# 100, 225 Amp

B100A, B100N, B225; B100G, B100NG, B225G



## DROP CORD PLUG-IN E28 CIRCUIT BREAKER PROTECTION E28 ENCLOSURE

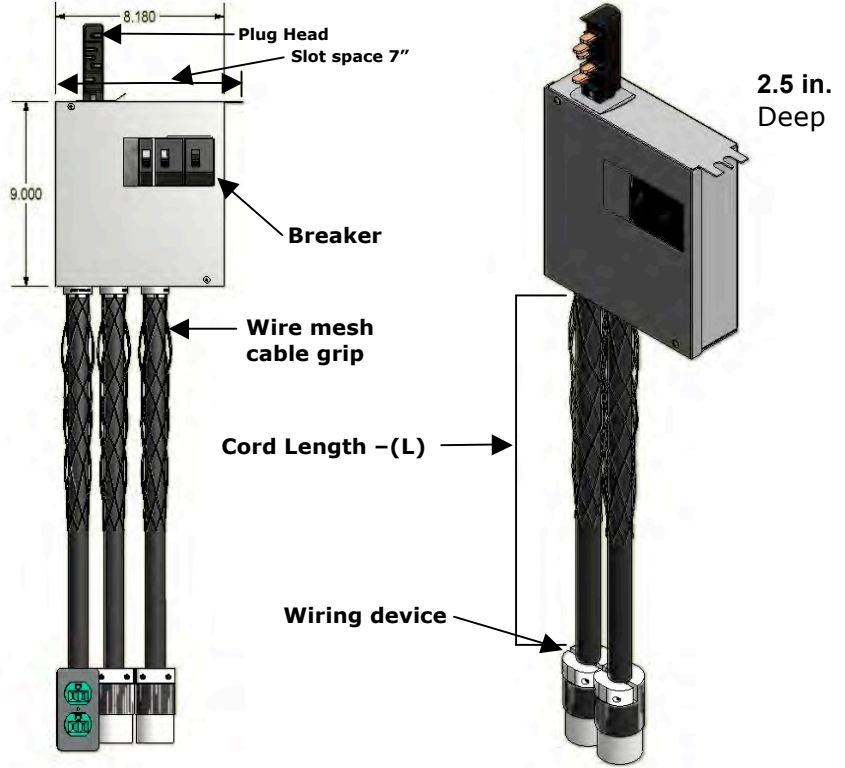
### Drop Cord Assembly

Used to tap off power from the Busway with a wide variety of device configurations. Plug head is reversible to face in opposite direction.

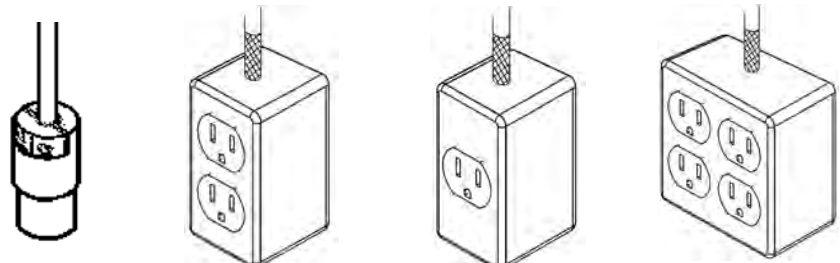
Shipped assembled complete from the factory based on part number selection including cord, breaker(s). Drop cord assemblies with connector (C) include a wire mesh cord grip at outlet of plug-in box. All other assemblies include wire mesh cord grips at both ends of cord.

### E28 General Use

- Use where E12 in insufficient.
- Capable to 7 breaker positions. Drop Cords (up to three)
- Consult factory for possible combinations.



### Wiring Device Choices (X)



C - Connector

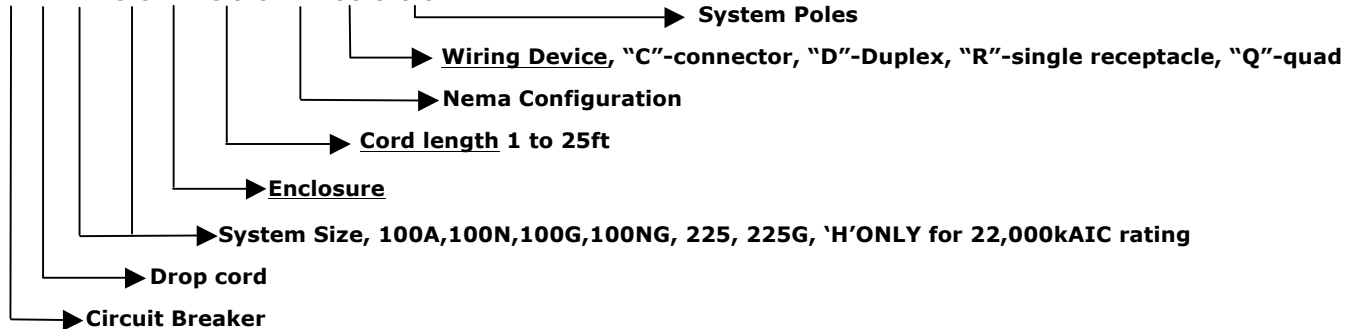
D - Duplex

R - Single Receptacle

Q - Quad

### Catalog Number Sequence

CBDC\*\*\* (H)E28-(L)-(NEMA)(X)-(P)



**DROP CORD PLUG-IN E37 415V or 480V  
CIRCUIT BREAKER PROTECTION E37  
ENCLOSURE**

**Drop Cord Assembly**

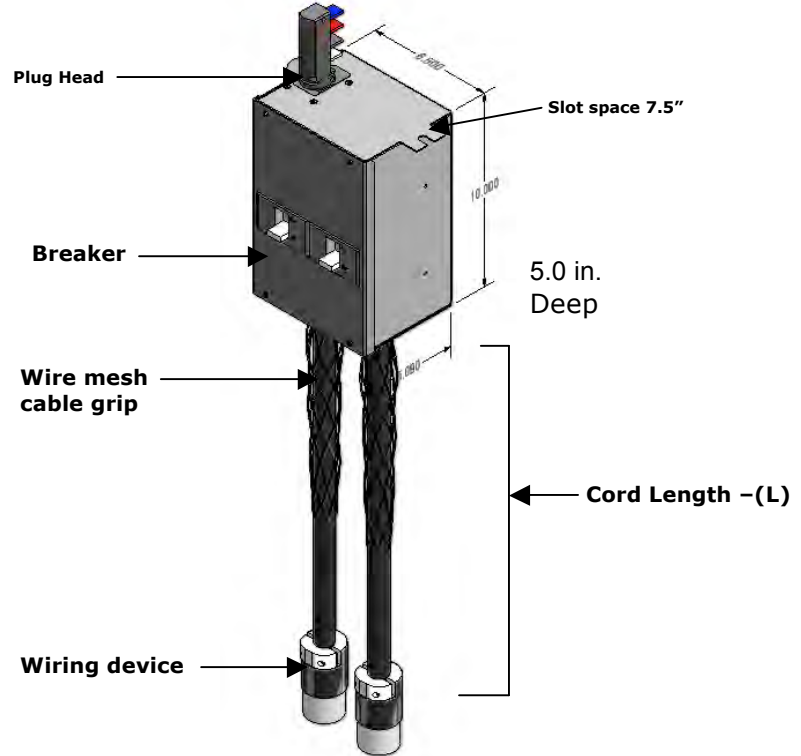
Used to tap off power from the Busway with a wide variety of device (End Effector) configurations. Plug head is not reversible to face in opposite direction.

Shipped assembled complete from the factory based on part number selection including cord, breaker(s), and end effector. Drop cord assemblies with connector (C) end effector includes a wire mesh cord grip at outlet of plug-in box. All other assemblies include wire mesh cord grips at both ends of cord.

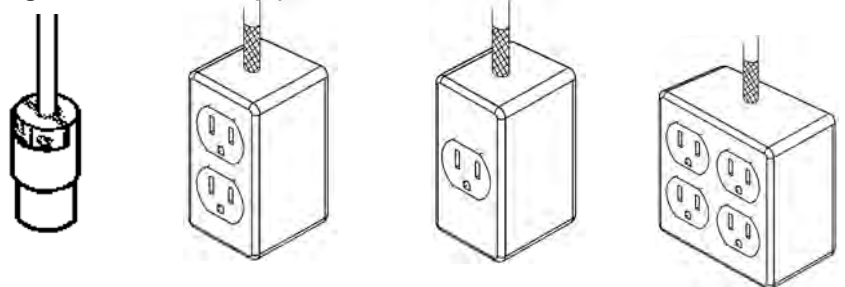
**\*\*This box faces the opposite of the E12 and E28 standard. \*\***

**E37 General Use**

- Use where 480V or 415V is needed.
- Capable to 6 breaker positions. Drop Cords (up to two)
- Consult factory for possible combinations.



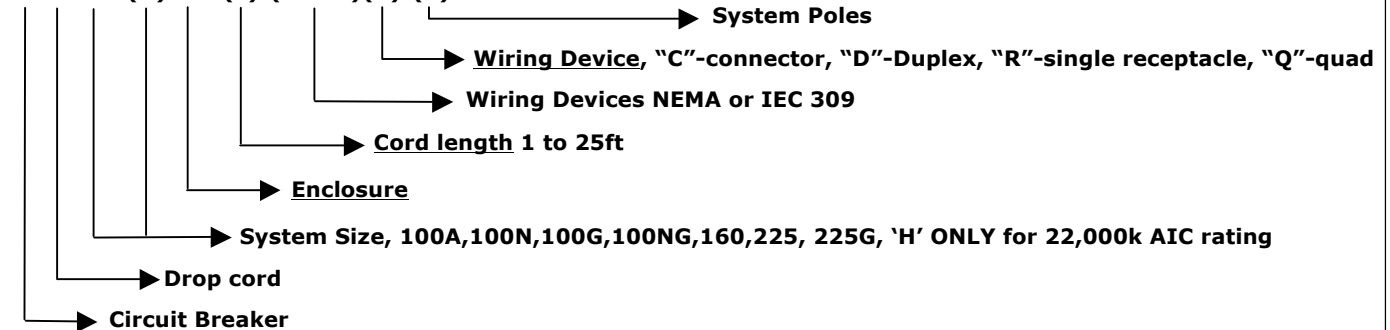
**Wiring Device Choices (X)**



C - Connector      D - Duplex      R - Single Receptacle      Q - Quad

**Catalog Number Sequence**

CBDC\*\*\* (H)E37-(L)-(NEMA)(X)-(P)





# 100, 225 Amp

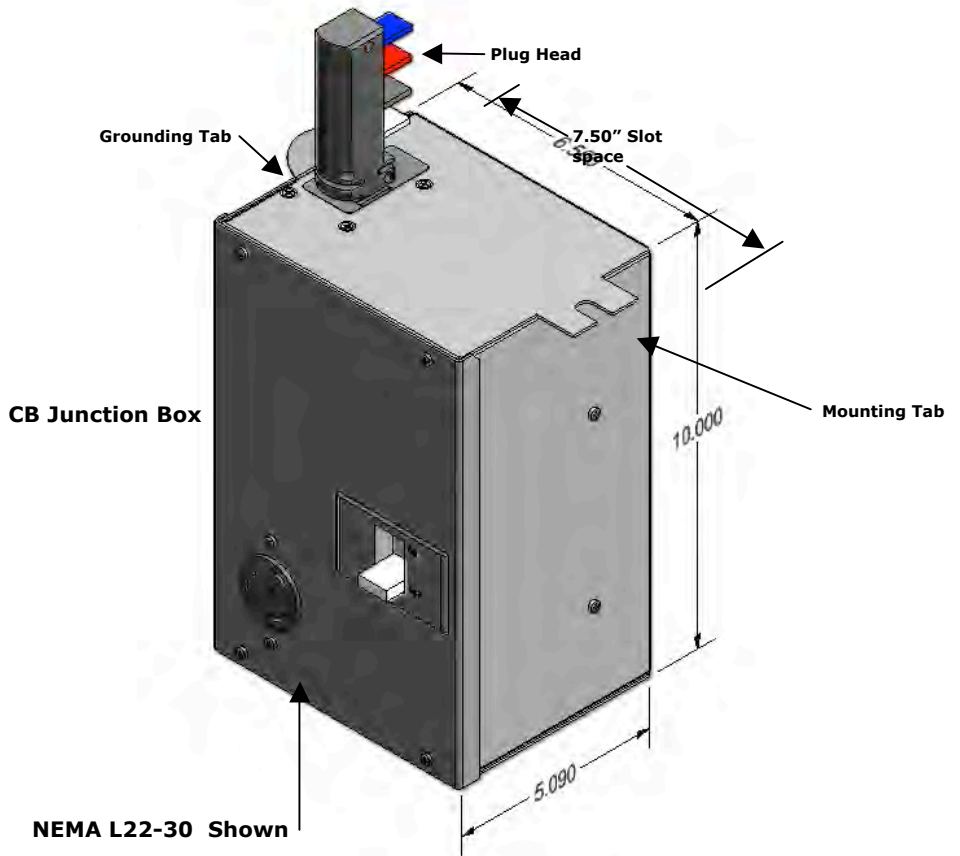
*B100A, B100N, B225; B100G, B100NG*



## E37 ENCLOSURE 415V or 480V CIRCUIT BREAKER APPLICATIONS

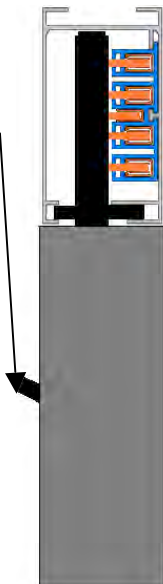
Used to tap off power from the Busway with a wide variety of device configurations. Plug head is not reversible to face in opposite direction.

- **PREFERRED** enclosure for Circuit breaker units up to 60A/480V or 415V
- Capable to 3 breaker positions and three receptacles
- **Example Combination:**
  - (1) NEMA L22-30
  - (3) NEMA L7-30
- Consult factory for possible combinations.
- Maximum ratings of 225 total amps, 415V, 22,000 AIC. ("H")
- Locked into position with a single bolt on mounting tab.



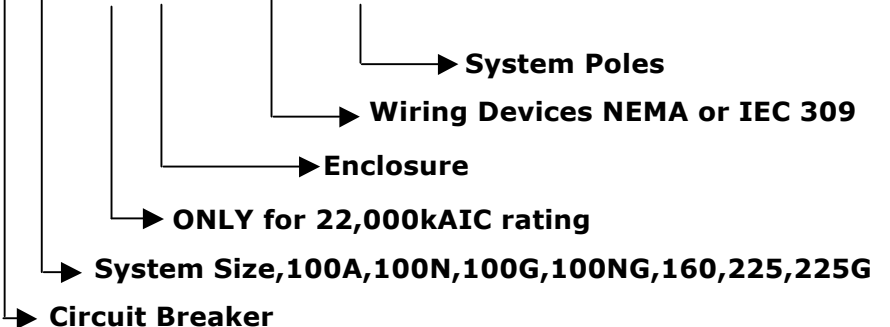
Breaker faces away from Busway conductor side.

This box faces the opposite of the E12 and E28 standard



### Catalog Number Sequence

**CB\*\*\* (H)E37-(NEMA)-(P)**

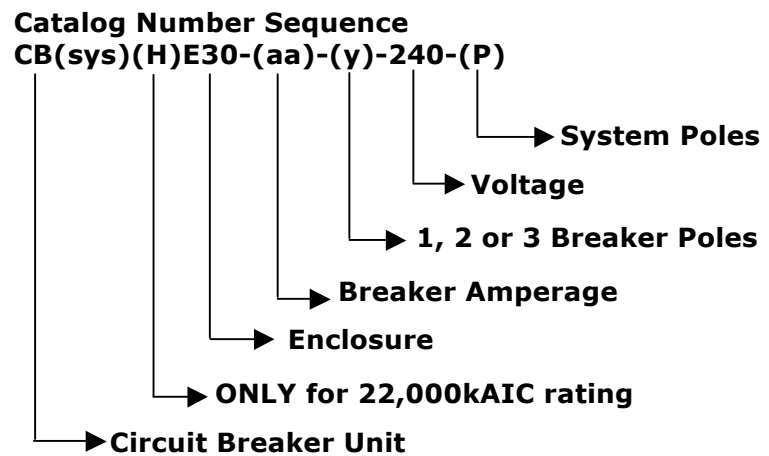
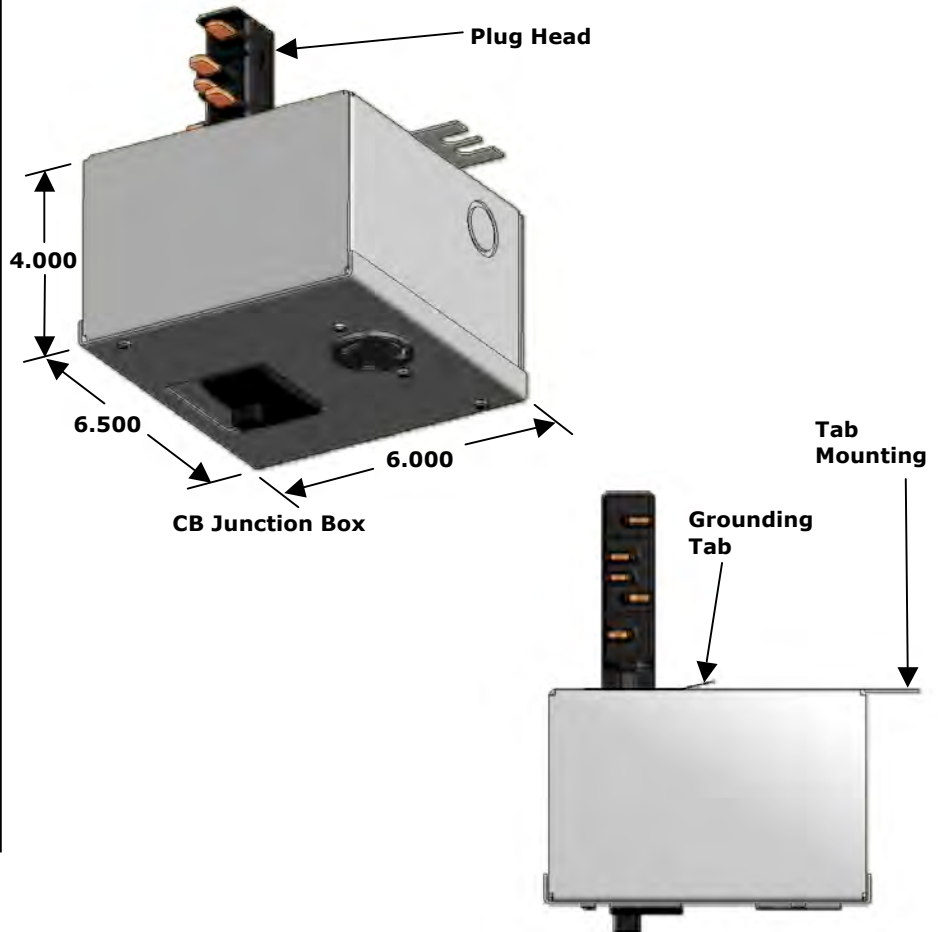


**E30 ENCLOSURE**  
CIRCUIT BREAKER APPLICATIONS

Used to tap off power from the Busway for Circuit Breaker applications. Downward facing circuit breaker operation, device access.

**PREFERRED** enclosure for CB units & OB units with breakers.

- Use where access from below is essential
- Limited to 3 breaker positions
- Variety of drop cords or receptacles available.
- Consult factory for possible combinations.
- Maximum ratings of 60 amps, 240V, 22,000 AIC. ("H")
- Locked into position with a single bolt on mounting tab.

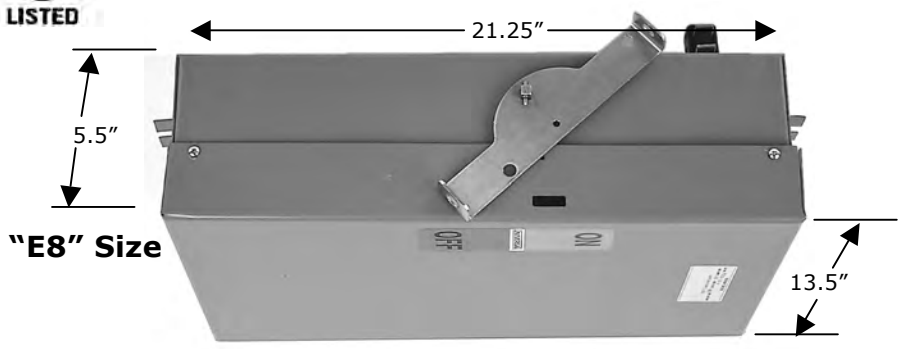
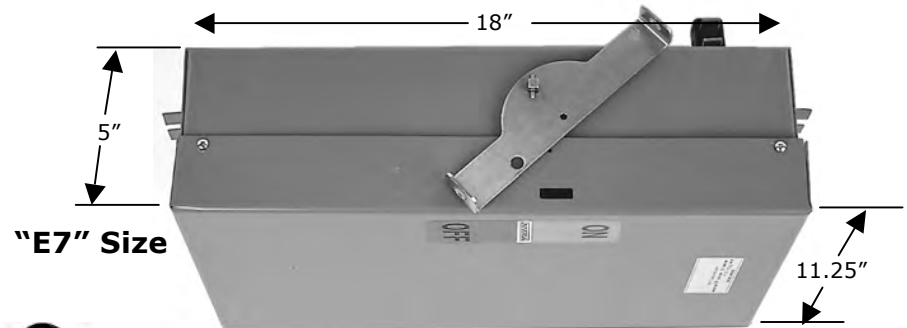
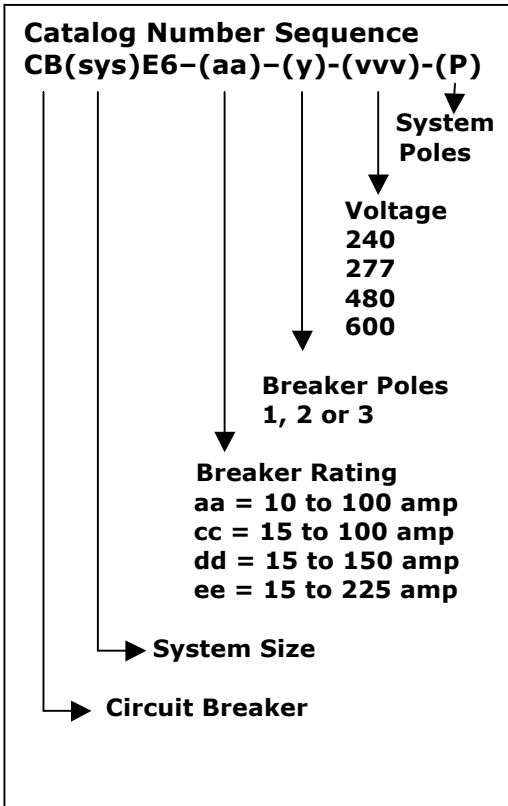


# 100, 225 Amp

B100A, B100N, B225, B100G, B100NG, B225G

## Circuit Breaker Plug-In E6, E7, E8 Enclosures

Basic circuit breaker plug-in faces downward and is available in a wide variety of ratings. Consult factory for assistance. Selection information for these units should include amp rating, voltage rating, number of breaker poles and Busway system poles. All circuit breakers are mounted internally. A floor operable external disconnect is also available with 240V units. Enclosure size varies with required ratings. Units can also be ordered with various drop cord configurations. This is the default circuit breaker enclosure unless specified otherwise.



Typical Catalog Catalog No.	Number Selection Description	Weight
CB225E6-aa-y-240-4	240 Volt for 4-pole Busway	8 lbs
CB225E7-dd-1-277-4	1-Pole/277 Volt/4-pole Busway	19 lbs
CB225E7-dd-1-277-3	1-Pole/277 Volt/3-pole Busway	19 lbs
CB225E7-dd-3-480-4	3-Pole/480 Volt for 4-pole Busway	20 lbs
CB225E8-ee-3-600-4	3-Pole/600 Volt for 4-pole Busway	29 lbs

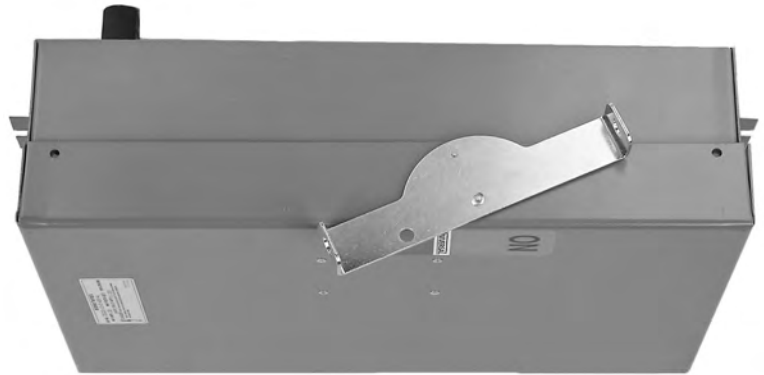
Add "DIS" suffix for Floor Operated Disconnect for 240V Units  
Disconnect standard for ALL other units

**FUSED DISCONNECT PLUG-IN**

**Fused Disconnect**

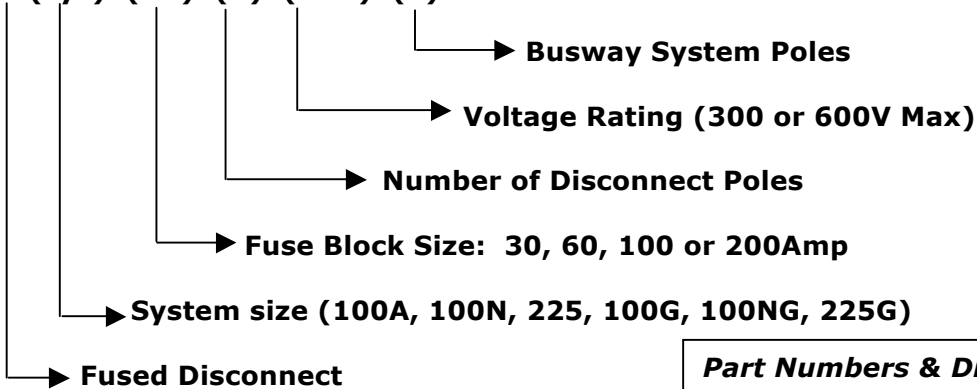
Standard units include J-box, plug head, removable lid, fuse blocks rated at 30, 60, 100 or 200 Amp max, a floor operable disconnect rated at 300 or 600V. 240V and 100 series 600V fuse blocks take Class RL fuses. 160/225 series 600V take Class J Fuses. Fuses are not included and may be ordered separately.

All units include two mounting bolts and a ground lug. All 4-pole units include a neutral connection. Knockouts are provided on two sides. Drop cord assemblies are also available as needed.



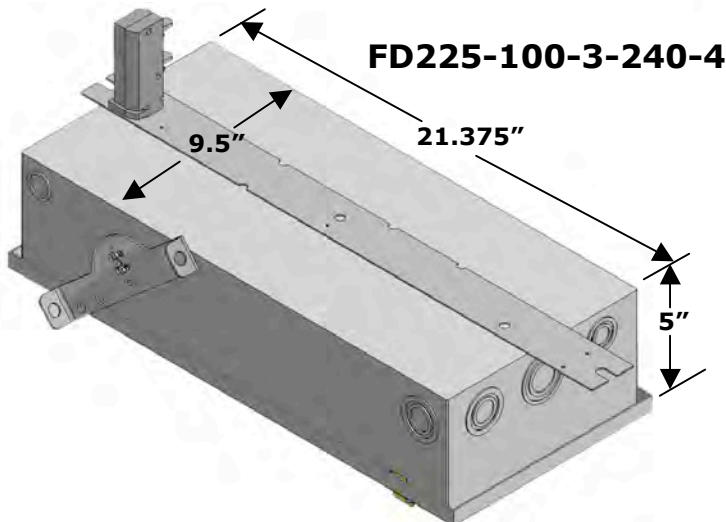
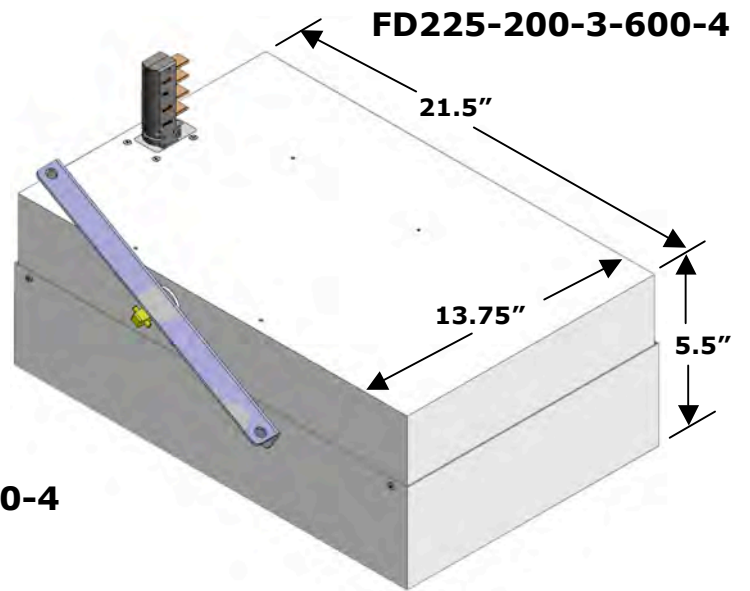
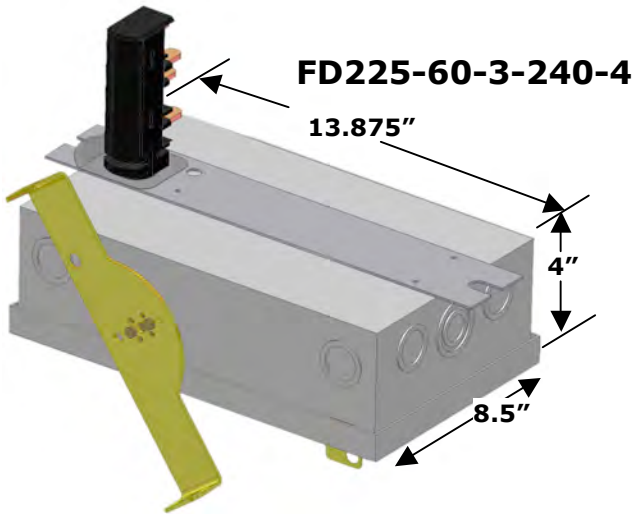
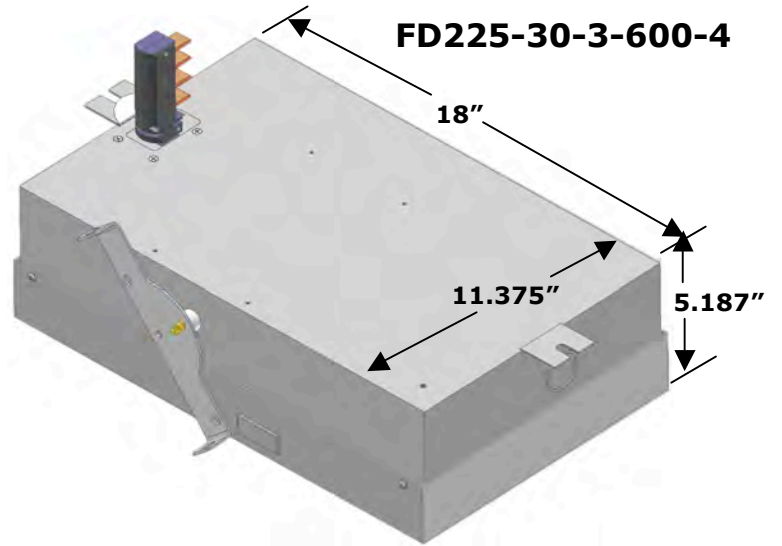
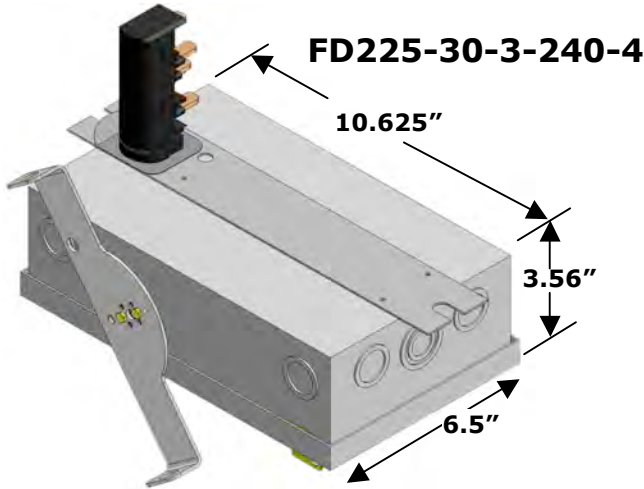
**Catalog Number Sequence**

**FD(sys)-(XX)-(X)-(XXX)-(P)**

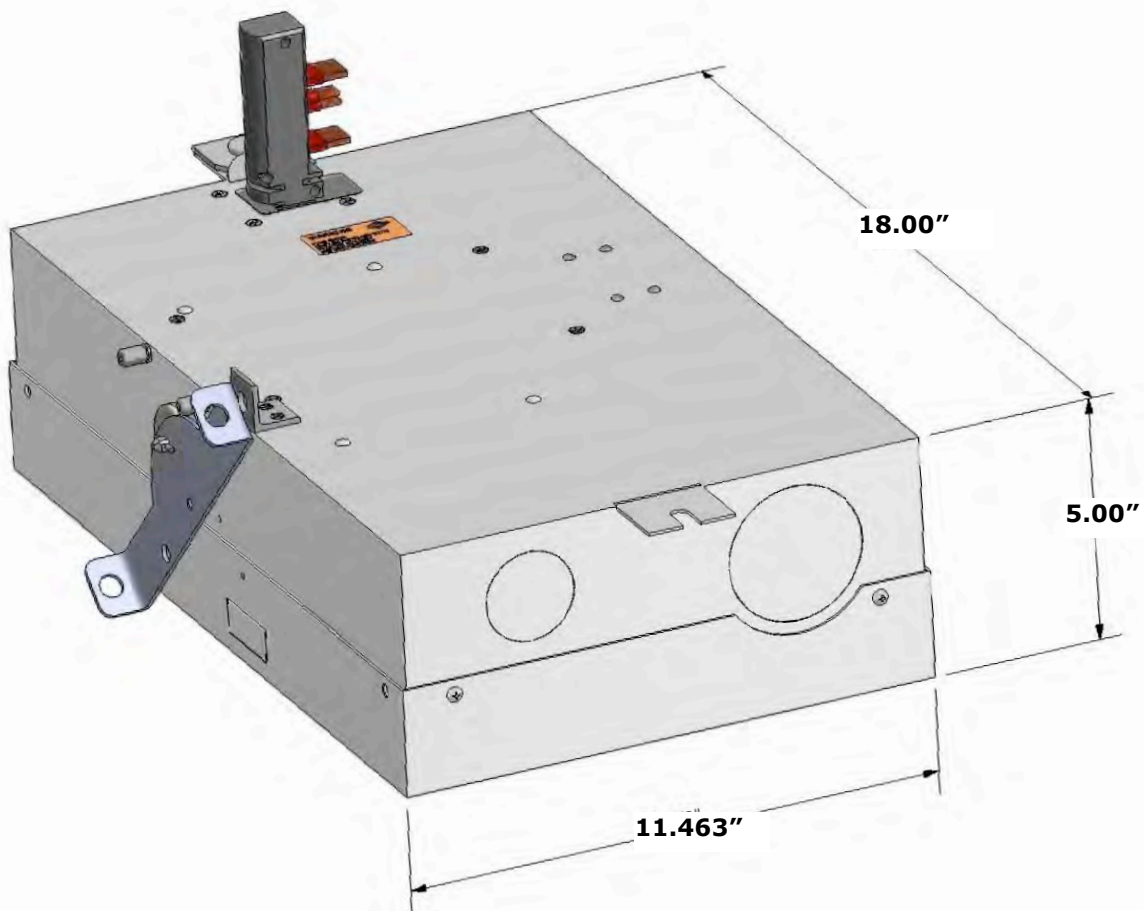


**Part Numbers & Dimensions, Next 2 Pages**

**FUSED DISCONNECT PLUG-IN**



**FUSED DISCONNECT PLUG-IN**



**FD225-30-3-600-4**  
**FD225-60-3-600-4**  
**FD225-100-3-600-4**

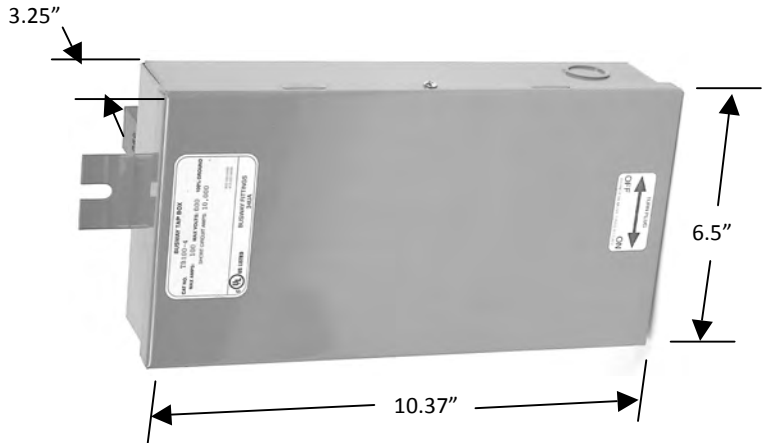
**TERMINAL BLOCK PLUG-IN**

**Terminal Block – TB**

Consist of a full-sized junction box with hinged lid, terminal block, and plug head. Insert plug head in the Busway, rotate 90 degrees to make electrical connection. Held in position by inserting bolt hangers (supplied) in mounting tabs on either side of unit.

All units include a copper grounding lug for up to #6AWG. 4-pole unit includes neutral wire and wire nut or neutral block over 40 Amps. Units have 1/2 in. and 3/4 in. conduit knockouts on 3 sides.

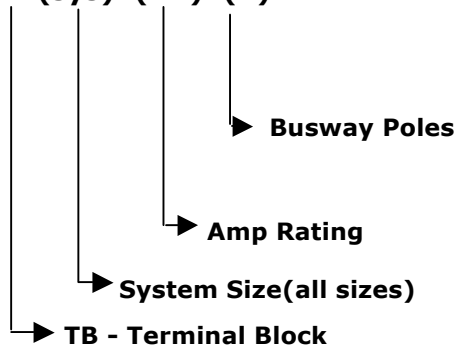
Rated to 40A or 100A/600V for 100A systems; Rated to 100A/300V for systems over 100A. Refer to page 11.28 for larger units.



TB – Terminal Block



**Catalog Number Sequence**  
TB(sys)-(XX)-(P)



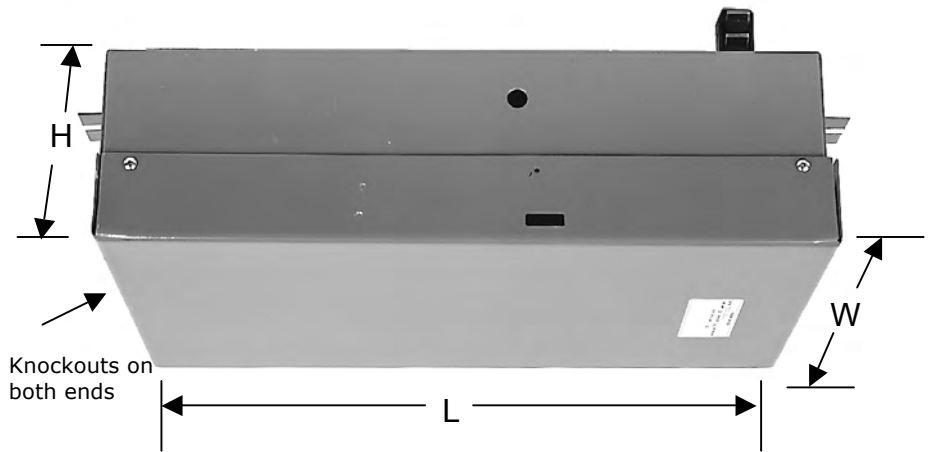
**Catalog Number Selection**

Catalog No.	Description	Weight
TB100A-40-3	Terminal Block, 40A, 600V, 3-pole	5.5 lbs
TB225- 100-3	Terminal Block, 100A, 600V, 3-pole	6.0 lbs

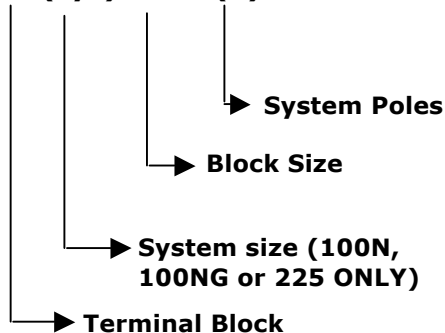
**TERMINAL BLOCK PLUG-IN**

**Terminal Block**

Plug-In units with a 3 or 4-pole insulated terminal block, rated at 100 Amps with 200% neutral and 225 Amps are used for direct wire tap off, or for a bottom power feed. All units include a ground block. All 4-pole units include a neutral block rated at 225 Amps. Units are NOT available for B225G systems.



**Catalog Number Sequence**  
TB(sys)-100-(P)



**Catalog Number Selection**

Catalog No.	Description	Weight	Size		
			L	W	H
TB100NG-100-4	100A/200%N, 300V,4P	16 lbs	12.5"	6.75"	3.5"
TB225-225-4	225A, 600V, 4-pole	17 lbs	18"	11.25"	5"



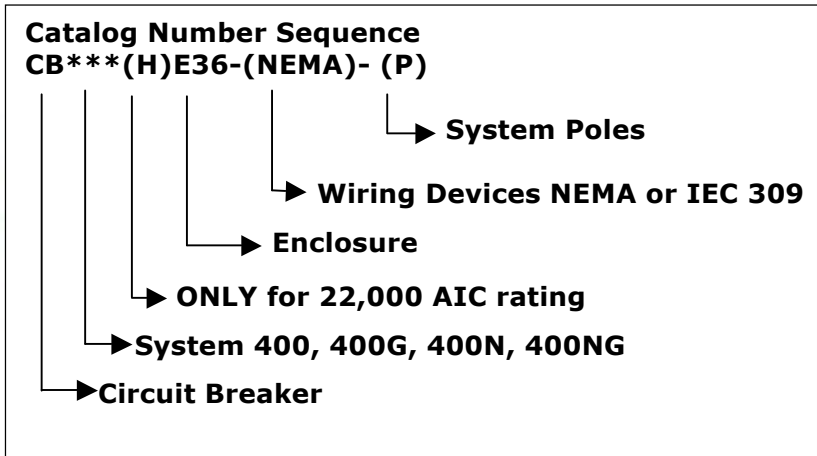
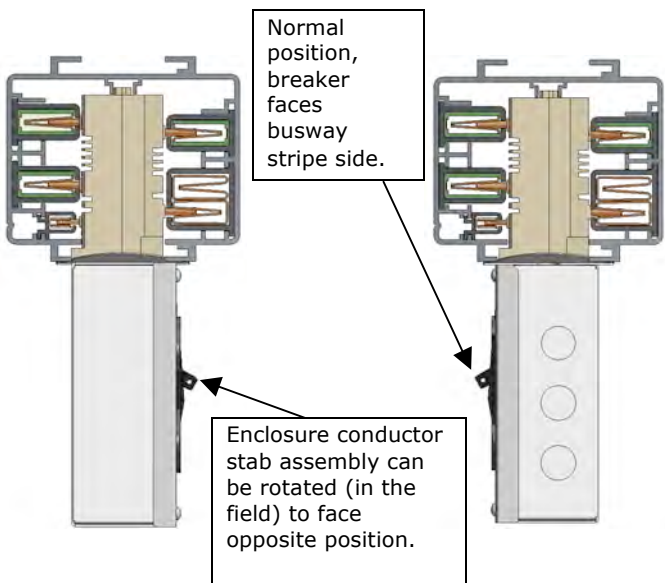
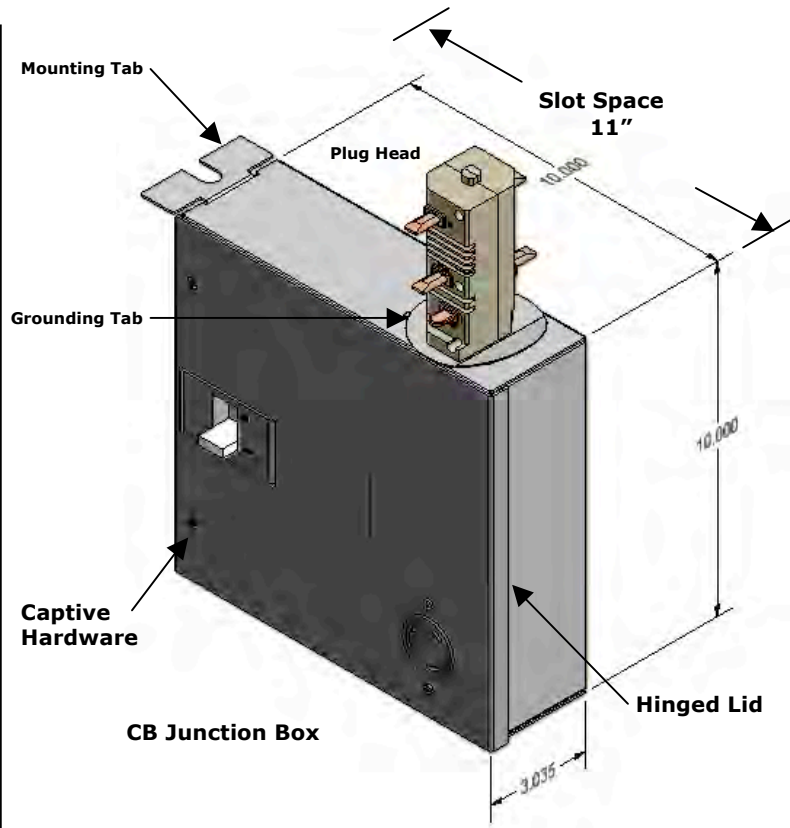
# T5 Series Plug-Ins



## E36 ENCLOSURE 415V or 480V Circuit Breaker Applications

Used to tap off power from the Busway with a wide variety of device configurations. Plug head is reversible to face in opposite direction.

- **PREFERRED** enclosure for Circuit breaker units up to 100A/480V or 415V
- **PREFERRED** enclosure for single or multiple 415 or 480V receptacles
- Capable of up to 6 breaker positions.
- Consult factory for possible combinations.
- Maximum ratings of 100 amps, 480V, 22,000 AIC. ("H") typical
- Locked into position with a single bolt on mounting tab.



# T5 Series Plug-Ins



## DROP CORD PLUG-IN 415V or 480V E36 ENCLOSURE CIRCUIT BREAKER DROP CORD APPLICATIONS

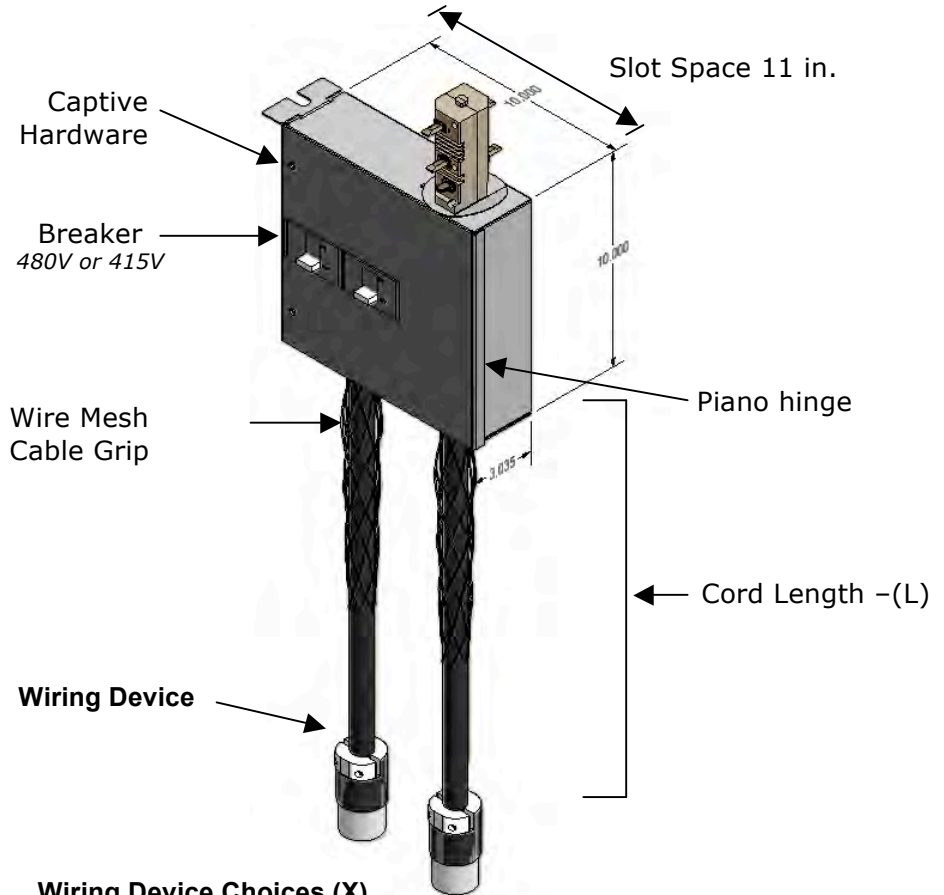
### Drop Cord Assembly

Used to tap off power from the Busway with a wide variety of device configurations. Plug head is reversible to face in opposite direction.

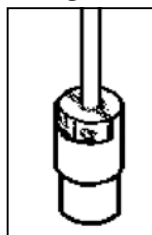
Shipped assembled complete from the factory based on part number selection including cord, breaker(s). Drop Cord assemblies with connectors (C) include a wire mesh cord grip at outlet of plug-in box. All other assemblies include wire mesh cord grips at both ends of cord.

### E36 General Use

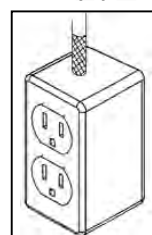
- **PREFERRED** enclosure for single or multiple Drop Cords (two cords max) up to 100A/480V or 415V.
- 6 breaker positions.
- Consult factory for possible combinations.



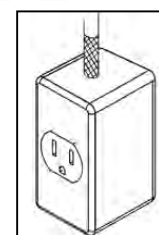
### Wiring Device Choices (X)



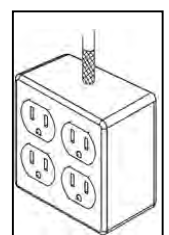
C - Connector



D - Duplex



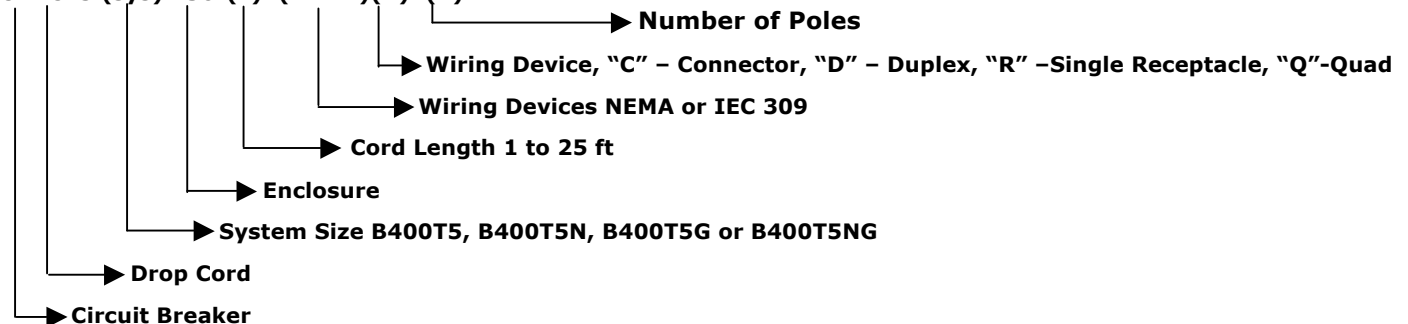
R - Single Receptacle



Q - Quad

### Catalog Number Sequence

CBDCT5 (sys) E36-(L)-(NEMA)(X)-(Y)



# T5 Series Plug-Ins

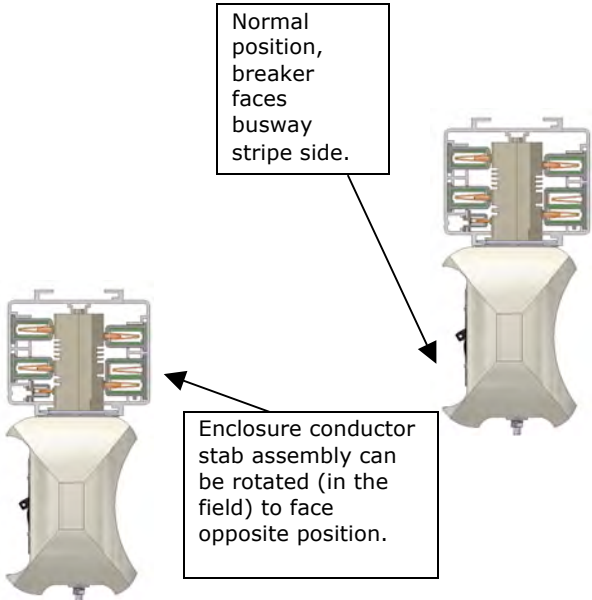
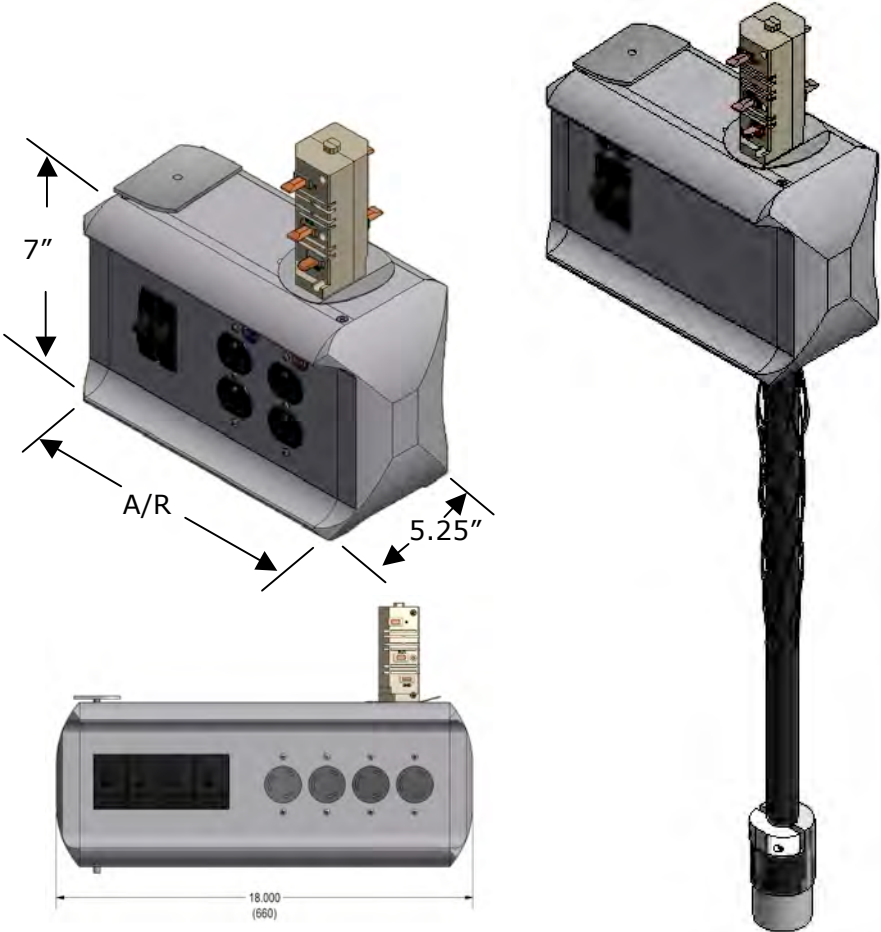
## B250T5, B400T5, B800T5 SYSTEMS



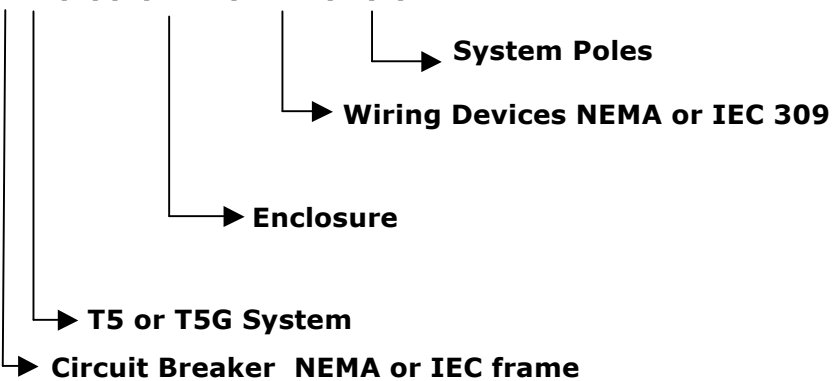
### E40 ENCLOSURE Circuit Breaker Applications

Premium engineered unit that combines style with versatility. Designed to tap off power from the busway. Compatible with all 'T5' busway systems. Plug head is reversible to face in opposite direction.

- Provides multiple circuit breaker pole positions by adjusting unit length.
- Breakers are factory installed to internal DIN rail.
- Consult factory for possible combinations.
- Maximum ratings of 125 total amps, 240V
- Locks into position with a single bolt on mounting tab.



#### Catalog Number Sequence CBT5(G)(H)E4x-(NEMA)- (P)



Next-generation, custom engineered enclosure that features a stylish exterior combined with a spacious interior and customizable body length to accommodate a wide variety of applications. The E50-Series enclosure is designed to tap off power from the busway and is compatible with all "T5" systems. The option is available to have a reverse T5 Paddle such that the enclosure faces in the opposite direction when in the busway.

- Configurable unit length for multiple circuit breaker pole positions.
- Locks easily and quickly into position using a "no tooling" latching mechanism
- Maximum rating of 35kA at 480V
- Consult factory for possible combinations\*

### E50 ENCLOSURE

Circuit Breaker Applications

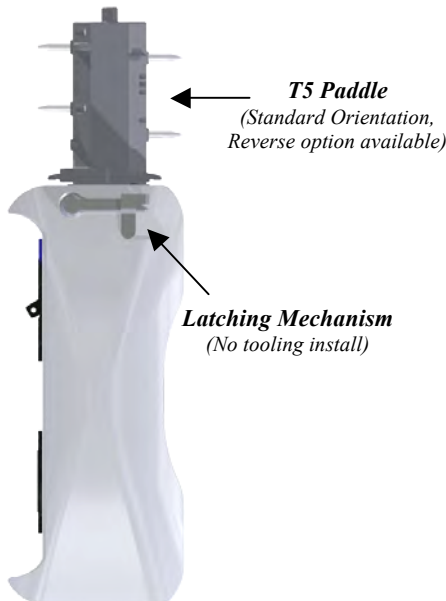
Model Shown:  
CBMT5E53-(2)520D-(2)L630-4



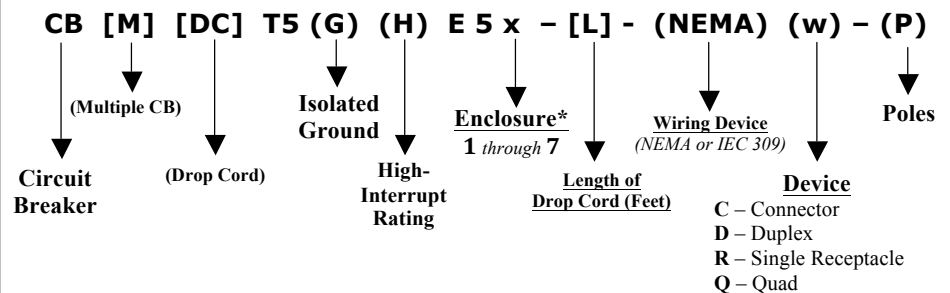
#### Enclosure Lengths

(Please consult factory for proper sizing)

- E51 – 6.14"
- E52 – 8.14"
- E53 – 10.14"
- E54 – 12.14"
- E55 – 13.14"
- E56 – 15.14"
- E57 – 18.14"



#### Catalog Number Sequence



**E50 ENCLOSURE**  
Circuit Breaker Applications

Next-generation, custom engineered enclosure that features a stylish exterior combined with a spacious interior and customizable body length to accommodate a wide variety of applications. The E50-Series enclosure is designed to tap off power from the busway. The option is available to have a reverse paddle such that the enclosure faces in the opposite direction when in the busway.

- Configurable unit length for multiple circuit breaker pole positions.
- Locks into position using a single, easy access bolt
- Maximum rating of 35kA at 480V for B100, 35kA at 240V for B225
- Consult factory for possible combinations\*

Model Shown:  
CBM225E53-(2)S20D-(2)L630-4

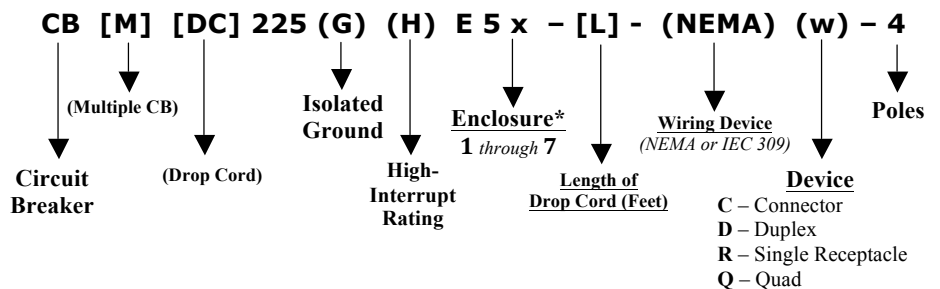


**Enclosure Lengths**  
(Please consult factory for proper sizing)

- E51 – 6.00"
- E52 – 8.00"
- E53 – 10.00"
- E54 – 12.00"
- E55 – 13.00"
- E56 – 15.00"
- E57 – 18.00"



**Catalog Number Sequence**



## T5 Series Plug-Ins

### B250T5, B400T5, B800T5 SYSTEMS

### E90 ENCLOSURE

#### Circuit Breaker Applications

Next-generation, custom engineered enclosure that features a stylish exterior combined with a spacious interior and customizable body length to accommodate a wide variety of applications. The E90-Series enclosure is designed to tap off power from the busway and is compatible with all "T5" systems. The option is available to have a reverse T5 Paddle such that the enclosure faces in the opposite direction when in the busway.

- Configurable unit length for multiple circuit breaker pole positions.
- Locks easily and quickly into position using a "no tooling" latching mechanism
- Maximum rating of 22kA at 480V
- Consult factory for possible combinations\*



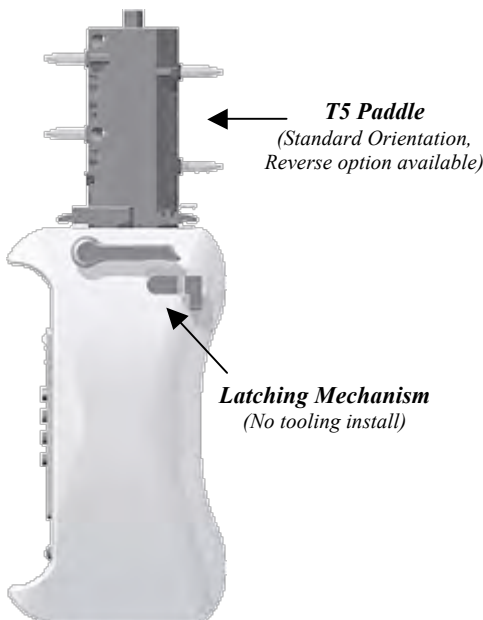
Model Shown:  
CBMT5E92-(2)L530-4



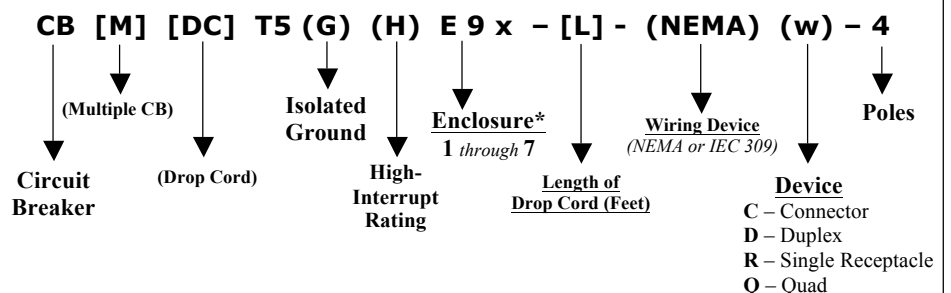
#### Enclosure Lengths

(Please consult factory for proper sizing)

- E91 – 6.14"
- E92 – 8.14"
- E93 – 10.14"
- E94 – 12.14"
- E95 – 13.14"
- E96 – 15.14"
- E97 – 18.14"



### Catalog Number Sequence



# T5 Series Plug-Ins

## B250T5, B400T5, B800T5 SYSTEMS



### DROP CORD PLUG-IN

E12 ENCLOSURE CIRCUIT BREAKER DROP CORD APPLICATIONS

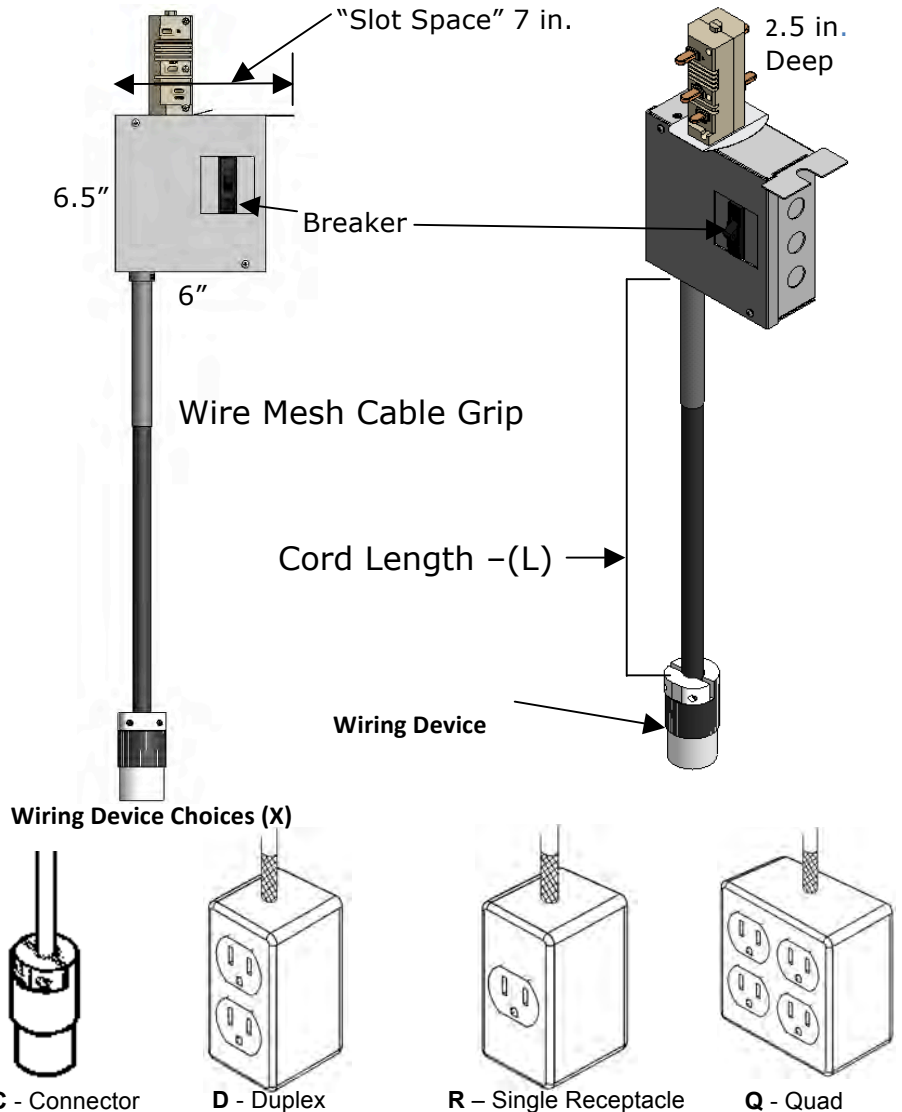
#### Drop Cord Assembly

Used to tap off power from the Busway with a wide variety of device configurations. Plug head is reversible to face in opposite direction.

Shipped assembled complete from the factory based on part number selection including cord, breaker(s), and device. Drop Cord assemblies with connectors (C) include a wire mesh cord grip at outlet of plug-in box. All other assemblies include wire mesh cord grips at both ends of cord.

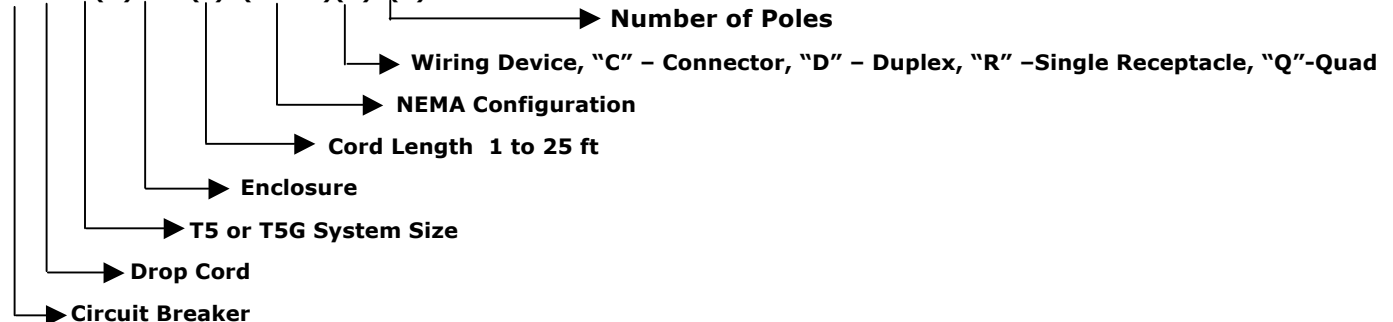
#### E12 General Use

- **PREFERRED** enclosure for single or multiple Drop Cords (up to three)
- Limited to 3 breaker positions.
- Consult factory for possible combinations.



#### Catalog Number Sequence

CBDCT5(G)E12-(L)-(NEMA)(X)-(Y)



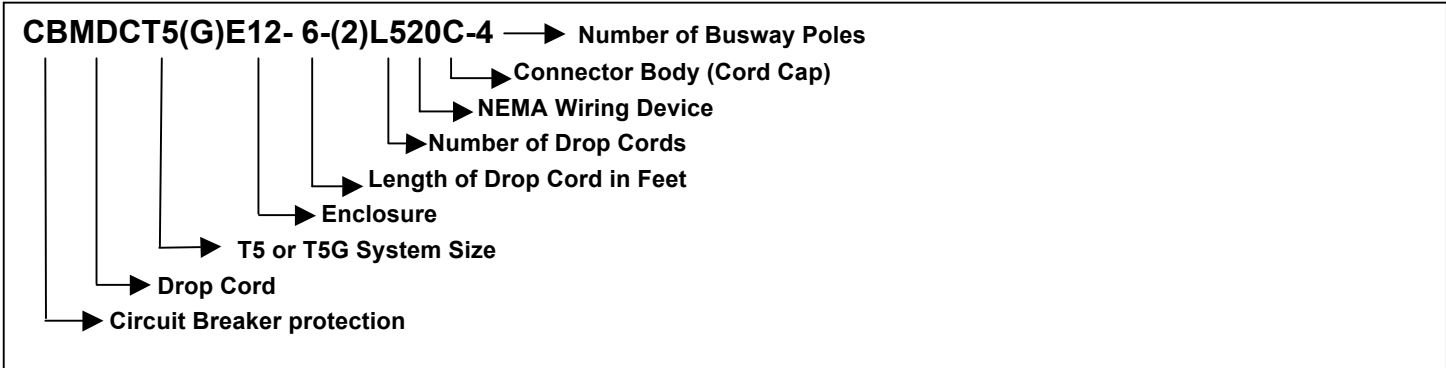
# T5 Series Plug-Ins

## B250T5, B400T5, B800T5 SYSTEMS

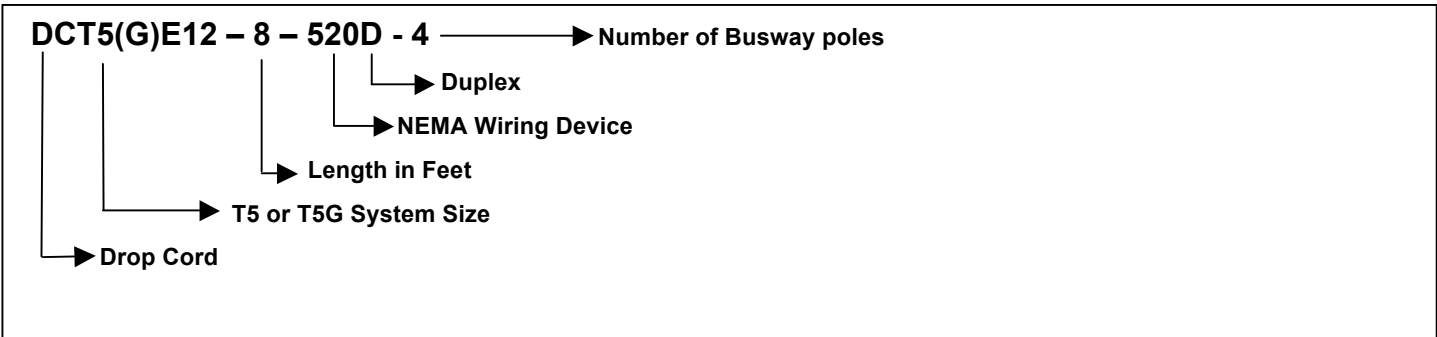


### DROP CORD SELECTION PART NUMBER EXAMPLES

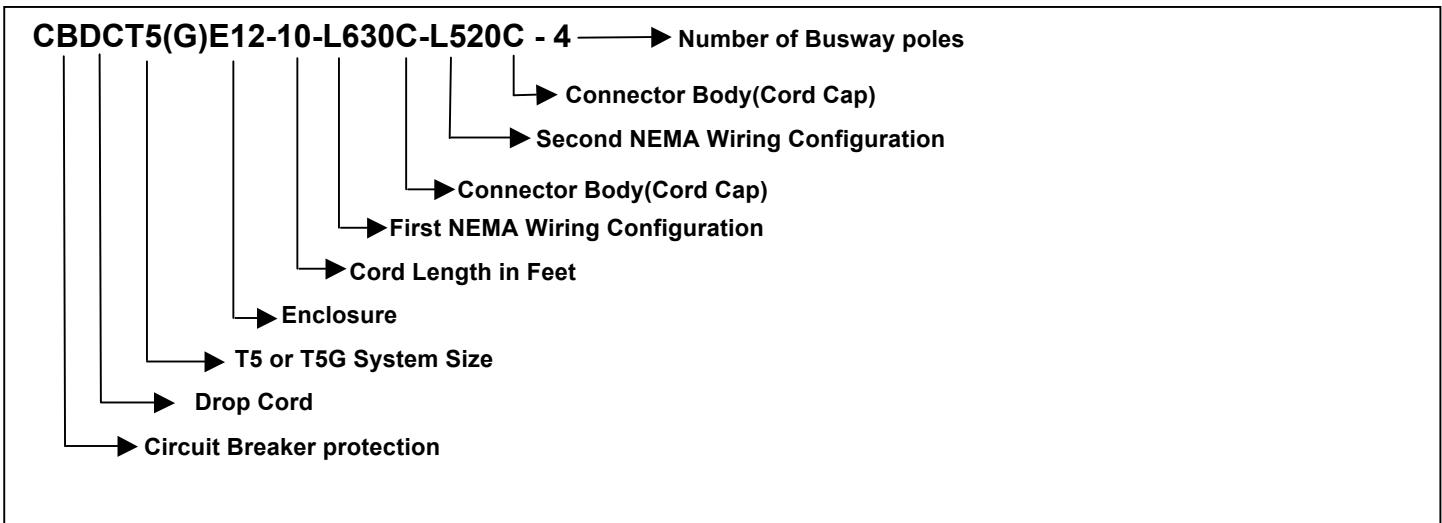
For any T5 System, *Circuit Breaker protection* with two(2), 6 ft Drop Cords, NEMA L5-20 Connectors (Cord Caps)



For any T5 System, a single, 8 ft Drop Cord with 5-20 Duplex, *fuse protection*



For any T5 System, *Circuit Breaker protection* with one 10 ft Drop Cord with NEMA L6-30 Connector and one 10 ft Drop Cord with L5-20 Connector





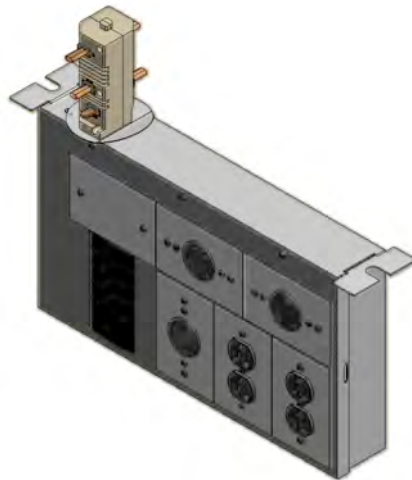
# T5 Series Plug-Ins

## B250T5, B400T5, B800T5 SYSTEMS

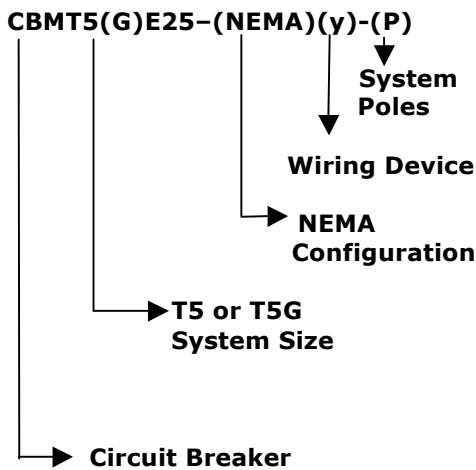
### E25 CIRCUIT BREAKER PLUG-IN VERTICAL (Front Operable Type)

#### Vertical Circuit Breaker

Basic circuit breaker is front operable and comes with circuit breaker base that will accommodate up to 6-circuit breaker poles, 240 volts, 125 total amps. Basic unit is rated for 10kAIC with some breaker options for 22kAIC. Selection information for these units should include amp rating, number of breaker poles and Busway system poles. Units are very versatile and can also be ordered with various outlet configurations.



#### Catalog Number Sequence



#### Typical Catalog Number Selection

Catalog No.	Description	Weight
CBMT5E25-(x)-(NEMA) (y)-4	240V, 10kAIC, 4-pole Busway	12 lbs
CBMT5HE25-(x)-(NEMA) (y)-4	240V, 22kAIC, 4-pole Busway	12 lbs
CBMT5GE25-(x)-(NEMA) (y)-4DG	240V, Ded.Gnd.4P Busway	12 lbs

x=length of cord

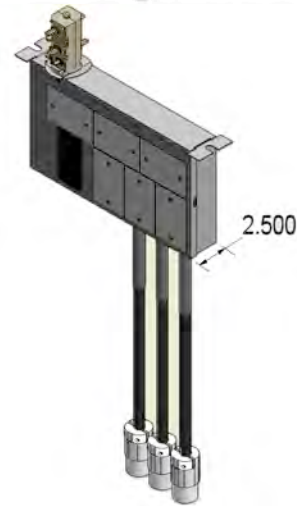
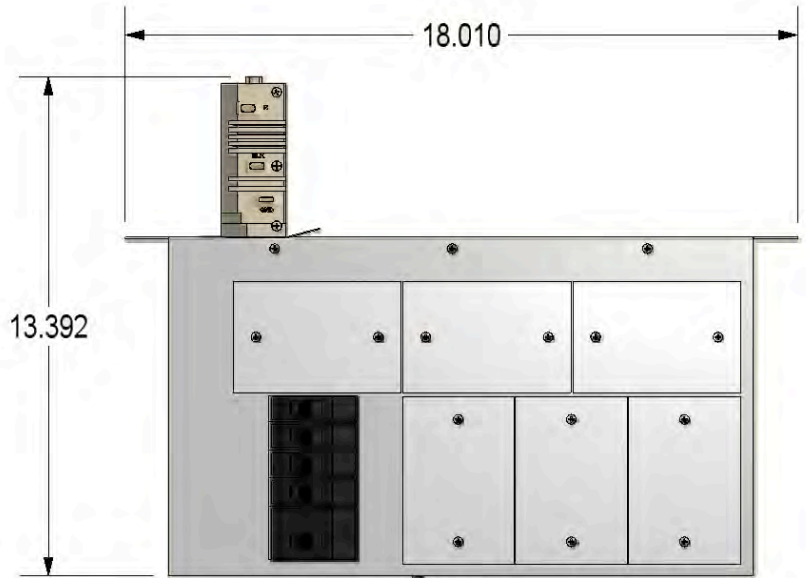
NEMA= Nema Configuration

Y= "D" - Duplex, "R" - Single Receptacle, "Q" - Quad

**E25 CIRCUIT BREAKER PLUG-IN**  
DROP CORD UNITS

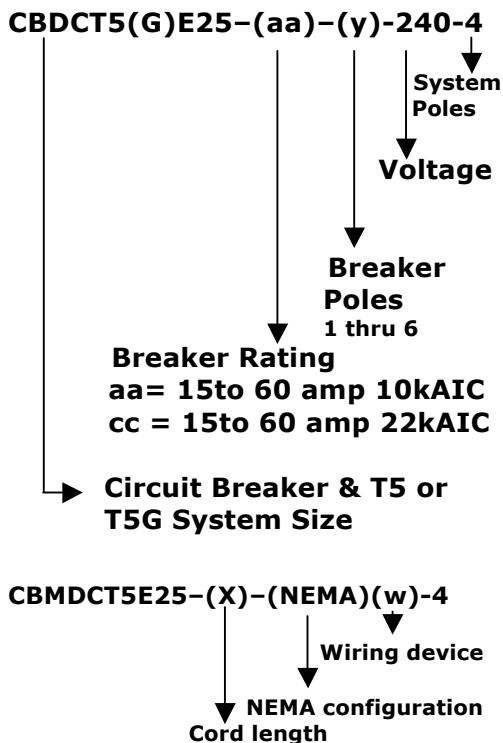
**Vertical Circuit Breaker**

Basic circuit breaker is front operable and comes with circuit breaker base that will accommodate up to 6 circuit breaker poles, 240 volt, 125 total amps. Basic unit is rated for 10kAIC with some breaker options for 22kAIC. Selection information for these units should include amp rating, number of breaker poles and Busway system poles. Units are very versatile and can also be ordered with various outlet and drop cord configurations. Refer to Drop Cord Units for selection information.



Used with drop cords  
Refer to drop cord section

**Catalog Number Sequence**



**Standard Catalog Number Selection**

*\*can be adjusted according to your system needs*

Catalog No.	Description	Weight
CBFT5E25-60-6-240-4	240V, 10kAIC, 3/4-pole Busway	12 lbs
CBMT5E25-p/aa-x-240-4	240V, 10kAIC, 3/4-pole Busway	12 lbs
CBMT5HE25-p/cc-x-240-4	240V, 22kAIC, 3/4-pole Busway	12 lbs
CBMDCT5HE25-X-L620C-4	240V, 22kAIC, 3/4-pole Busway	12 lbs

p=no. of poles, aa=15-60 Amp, 10kAIC, cc=15-60 Amp, 22kAIC

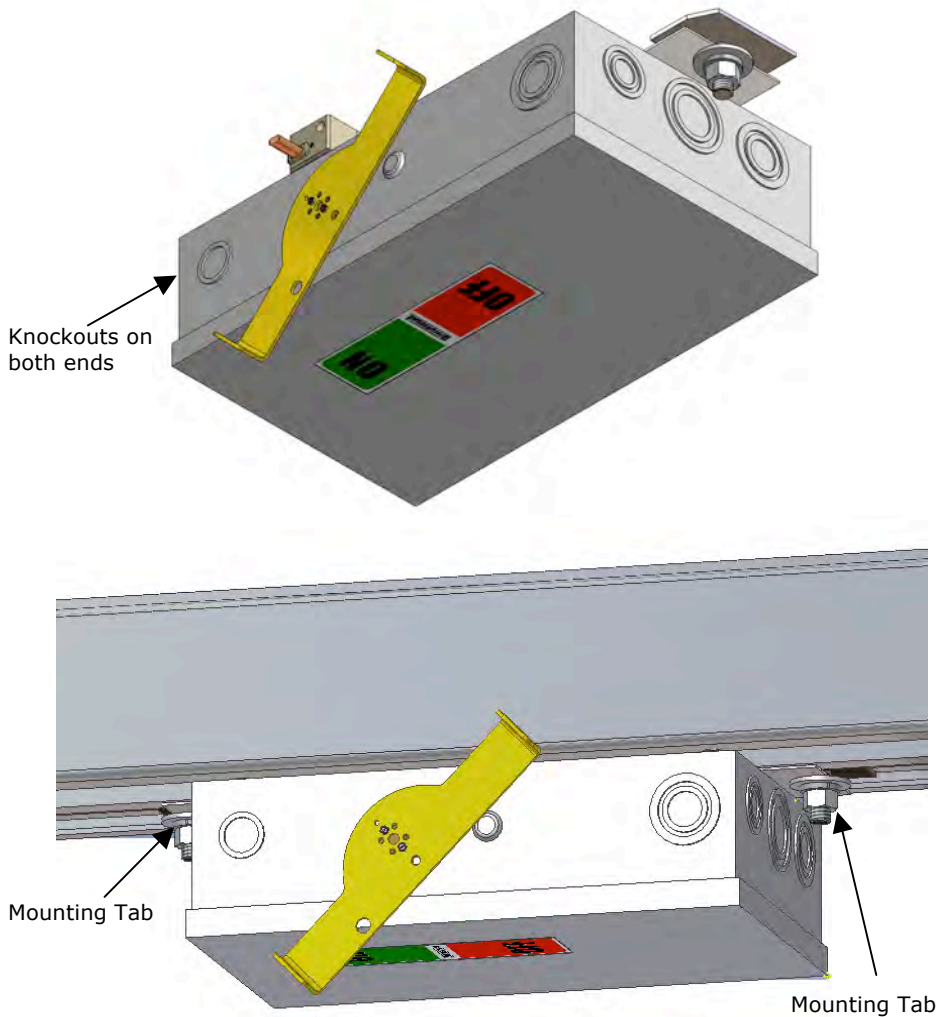
x=total number of poles, 1-6, X=length of cord

**FUSED DISCONNECT PLUG-IN**

**Fused Disconnect**

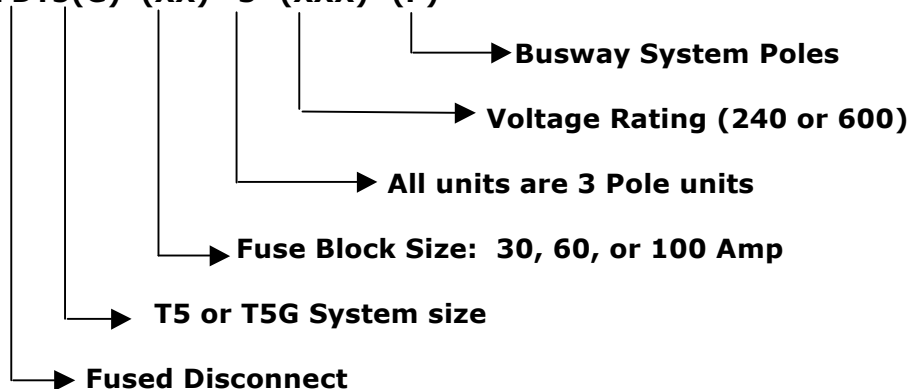
Standard units include J-box, plug head, hinged cover, fuse blocks rated at 30, 60, or 100 Amp max, 250VAC or 600 VAC max, and a floor operable disconnect mechanism. All units require Class RK Fuses. Fuses are not included and may be ordered separately.

All units include two mounting bolts and a ground lug. All 4-pole units include a neutral connection. Knockouts are provided on two sides. Drop cord assemblies are also available as needed.

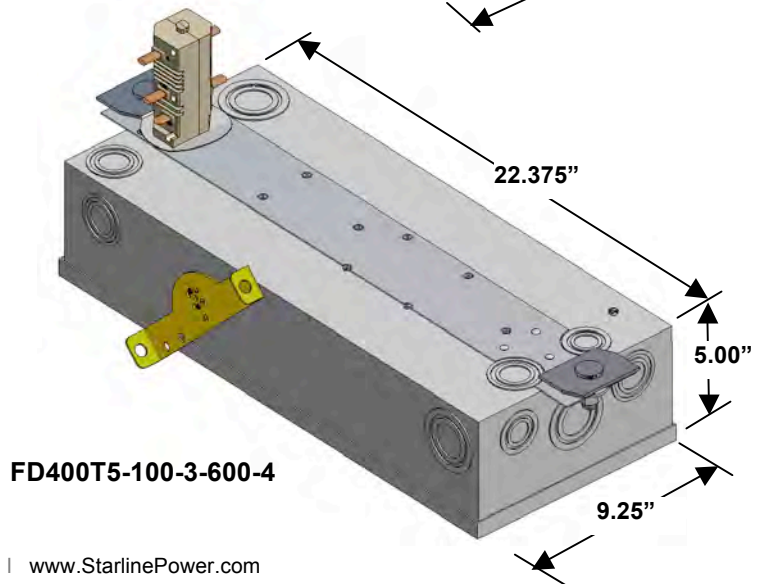
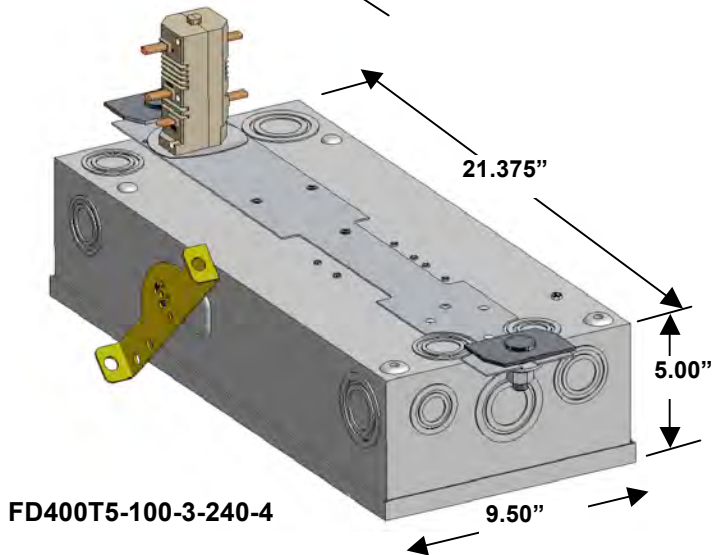
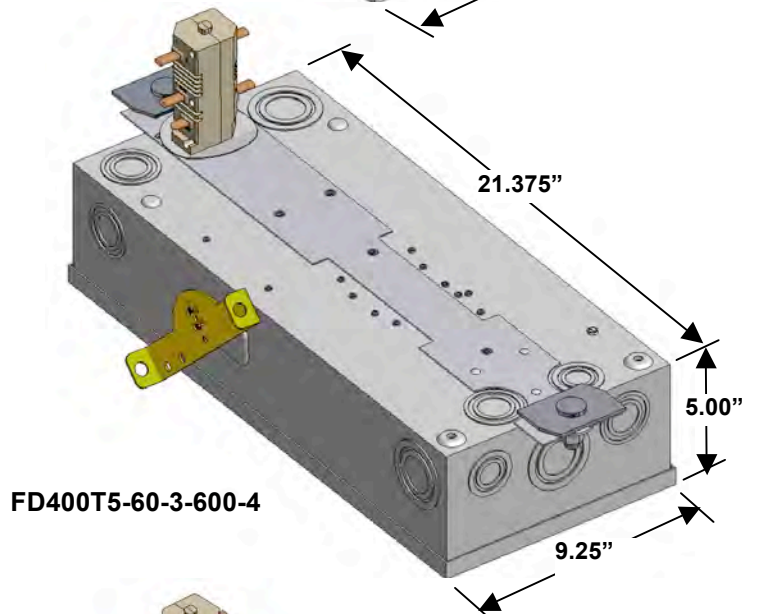
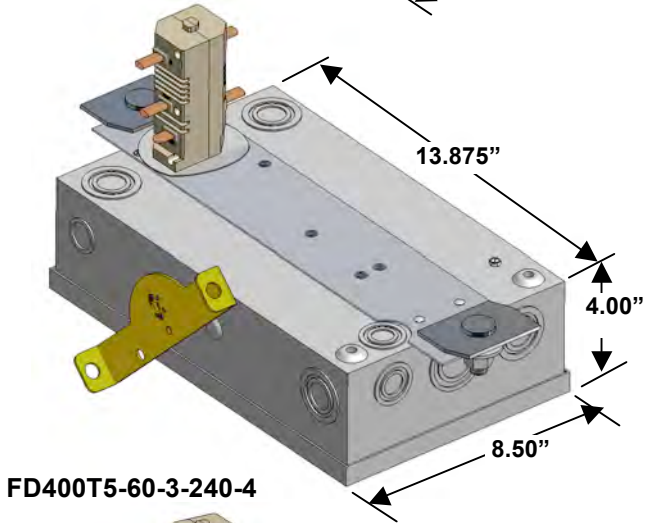
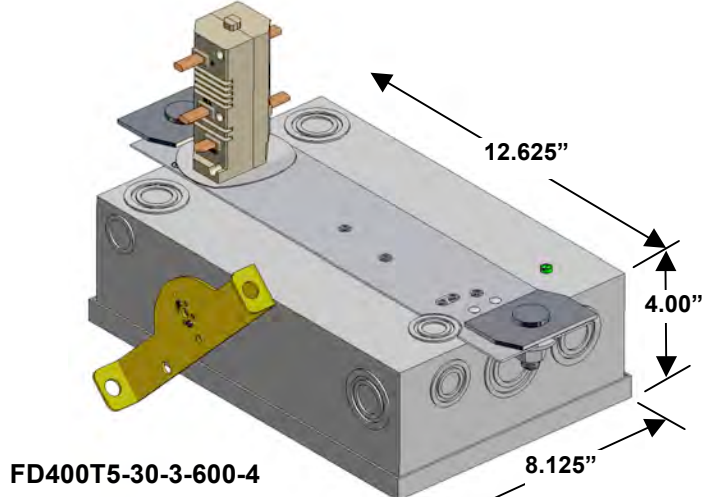
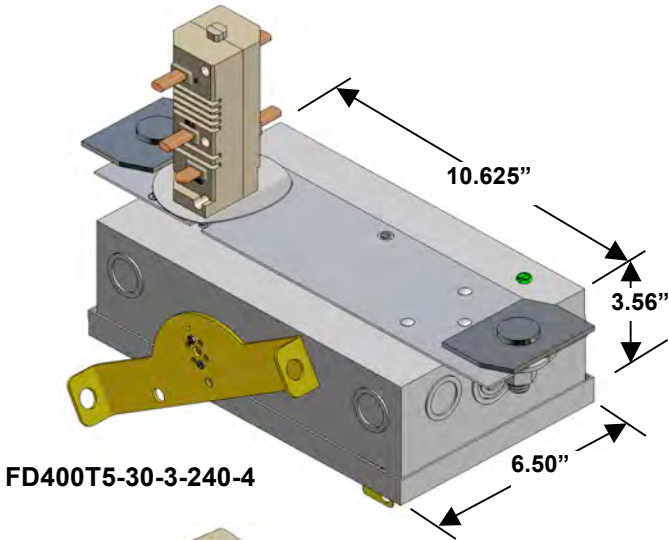


**Catalog Number Sequence**

**FDT5(G)-(XX) -3- (XXX)- (P)**



**FUSED DISCONNECT PLUG-IN**



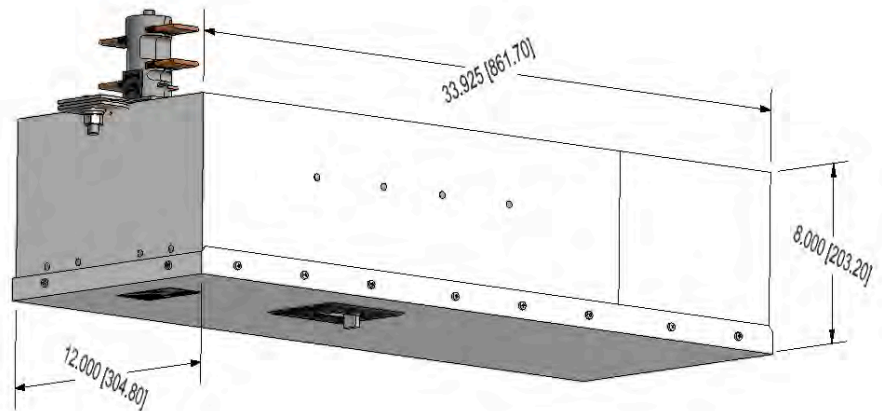
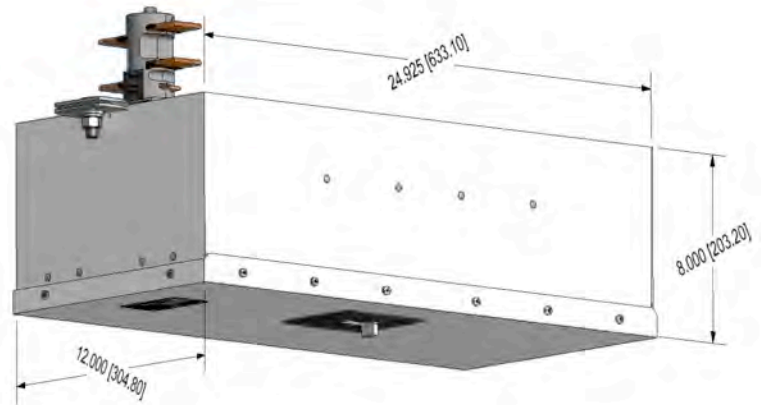
# T5 Series Plug-Ins

B250T5, B400T5, B800T5 SYSTEMS

## CIRCUIT BREAKER PLUG-IN HORIZONTAL (Down Facing) TYPE

### Horizontal Circuit Breaker

Basic circuit breaker plug-in faces downward and is available in a wide variety of ratings: 480 volts up to 400 amps or 600 Volts up to 150 amps. Selection information for these units should include amp rating, voltage rating, number of breaker poles and Busway system poles. All circuit breakers are mounted internally. Units can also be ordered with various drop cord configurations. Refer to 400 Amp Drop Cords for selection information. Specify (H) for high AIC ratings of 22k/240V, 22k/480V or 18k/600V. Specify (VH) for high AIC ratings of 35k/480V.



### Catalog Number Sequence CBT5(G)((V)H)E27-aa-y-vvv-P

System Poles

Voltage

240

277

480

600

Breaker Poles

1, 2 or 3

Breaker Rating

aa=225A/240V max

bb=150A/600V max

cc=250A/480V max

dd=400A/480V max

ONLY for 22,000k  
AIC rating

T5 or T5G System Size

### Catalog Number Selection

Catalog No.	Description	Weight
CBT5E27-100-3-240-4	100A/240V/3 pole	31 lbs
CBT5E27-20-1-277-4	20A/277V/1 pole	31 lbs
CBT5HE27-30-3-480-4	30A/480V/3 pole/22kAIC	32 lbs
CB250T5HE27-250-3-480-4	250A/480V/3 pole/35kAIC	33 lbs
CB400T5VHE27-400-3-480-4	400A/480V/3 pole/35kAIC	35 lbs
CBT5HE27-20-3-600-4	20A/600V/3 pole/18kAIC	32 lbs

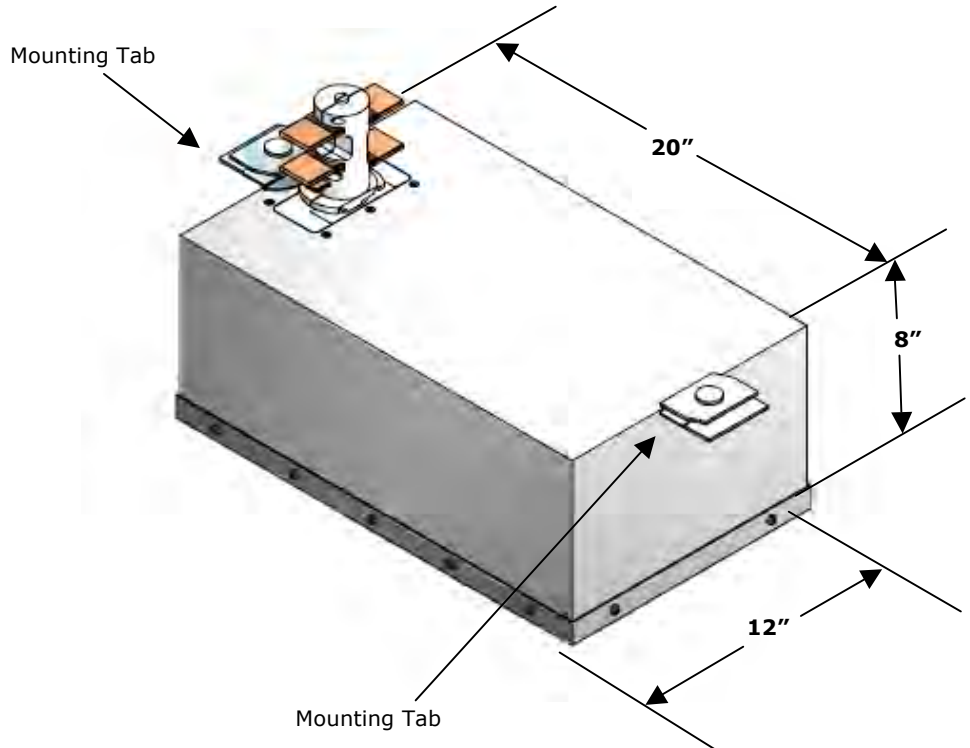
# T5 Series Plug-Ins

B250T5, B400T5, SYSTEMS

## TERMINAL BLOCK PLUG-IN

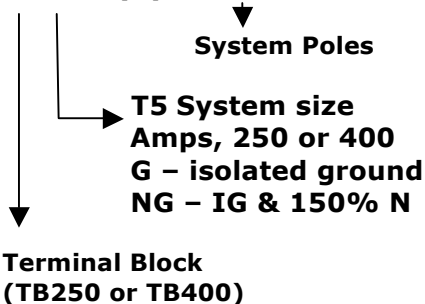
### Terminal Block

Plug-In units with mechanical lugs rated up to 400 Amps are used for direct wire tap off, or for a bottom power feed. All units include a ground lug. Isolated ground units include an isolated lug for this conductor.



### Catalog Number Sequence

TBxxxT5(G)-xxx-4-(R = reverse)



### Catalog Number Selection

Catalog No.	Description	Weight
TBxxxT5-xxx-4	4-Pole	25 lbs
TBxxxT5-xxx-4R	4-Pole	25lbs
TBxxxT5G-xxx-4	4-Pole/IG	25 lbs
TBxxxT5G-xxx-4R	4-Pole/IG	25 lbs
TBxxxT5N-xxx-4	4-Pole/oversized N	25 lbs
TBxxxT5N-xxx-4R	4-Pole/oversized N	25 lbs
TBxxxT5NG-xxx-4	4-Pole/IG/oversized N	25 lbs
TBxxxT5NG-xxx-4R	4-Pole/IG/oversized N	25 lbs

**Plug-Ins with Surge Protective Device**

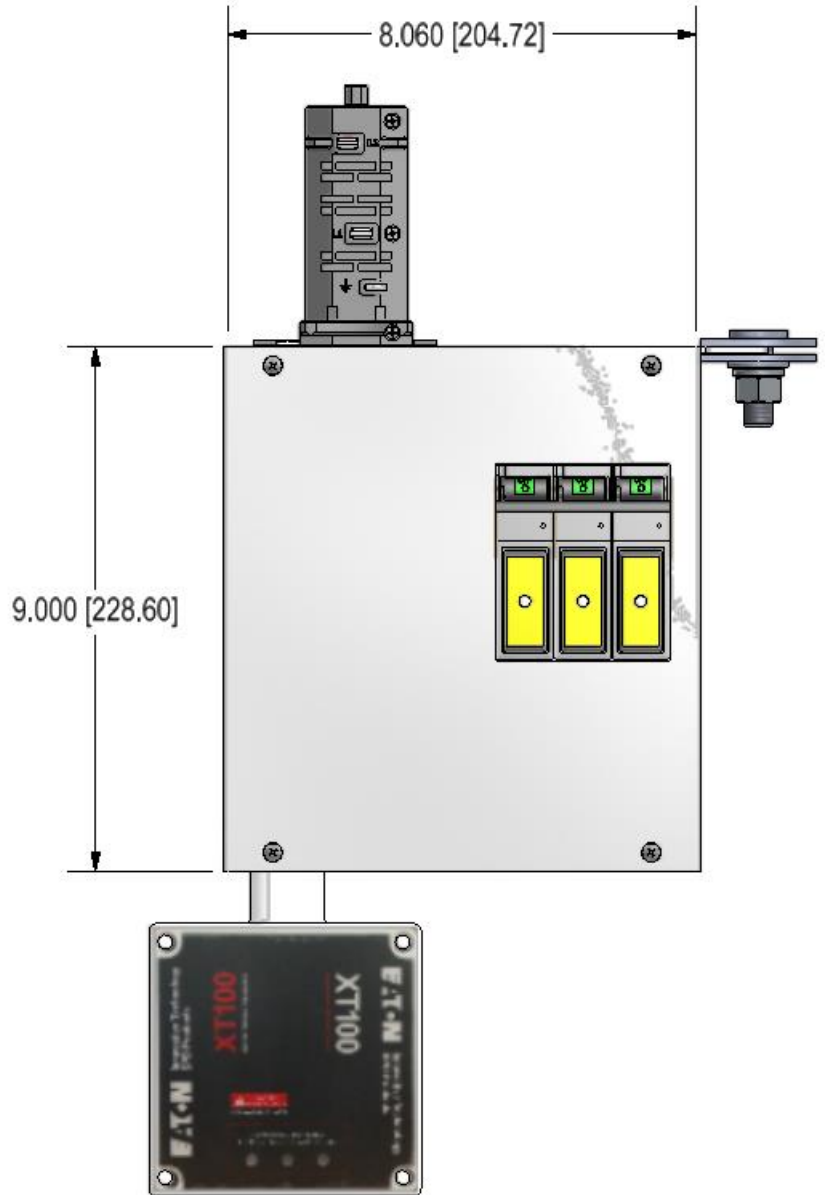
To protect electronic devices from transient voltage variations, we offer a T5 plug in unit that contains a surge protective device (SPD).

The SPD is rated up to 100kA peak surge current with wide range of voltage applications from 100 to 480 Vac.

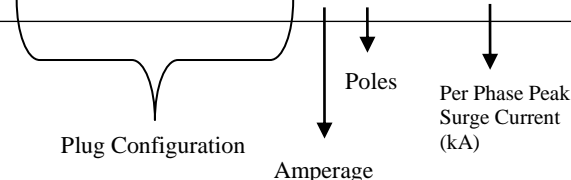
This type of plug-in is protected by a Bussmann 3 Pole CCP fuse disconnect with J Class TCF fusing.

This product carries an ETL listing and can be used in a wide variety of different wiring systems: single phase, split phase, three-phase Wye, or three phase delta.

- Consult the factory for more information



*Model Shown:*  
**FDT5GHE28-30-3-XT100S**



# Plug-In Accessories



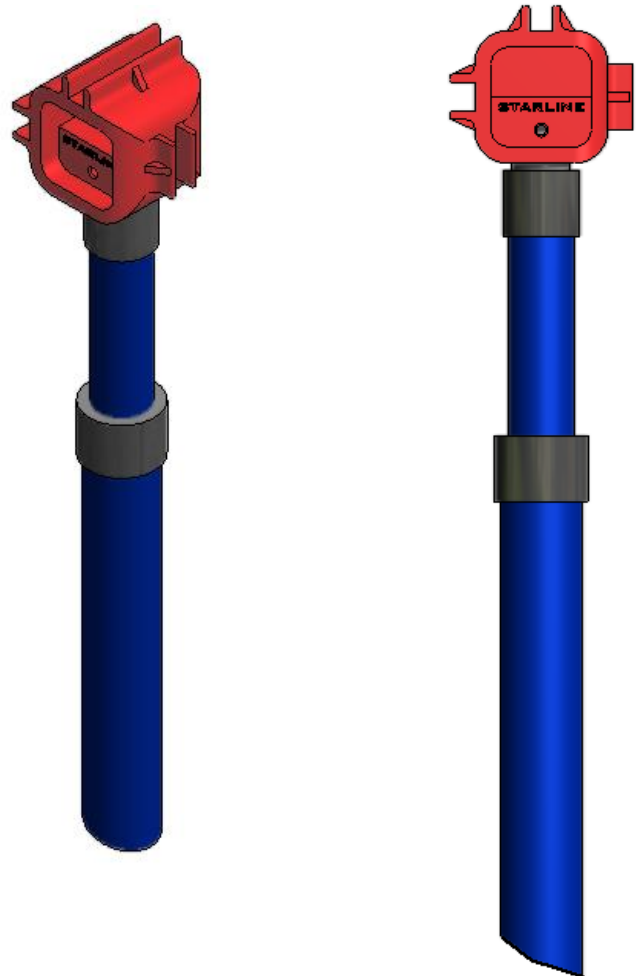
## CIRCUIT BREAKER OPERATING STICKS

Circuit breaker units may be operated from the floor by use of an Operating Stick. Operating Sticks are fully insulated for safety and work on circuit breakers mounted in every orientation. Select from two lengths depending on the installation height. Standard stick length is 12 feet and the long stick is 23 feet.

Catalog Numbers:

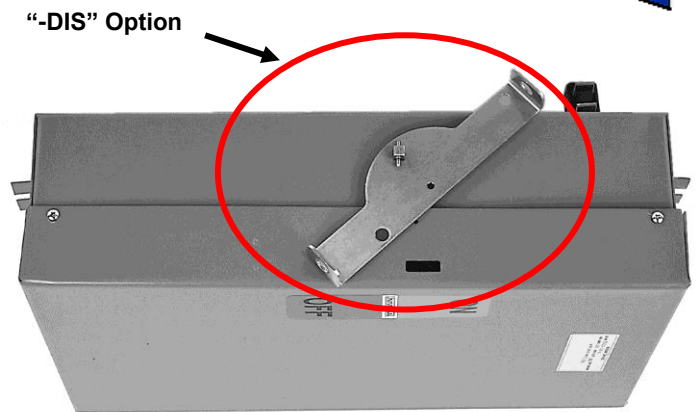
CBOS-V

CBOS-V-23



### “-DIS” OPTION

Also available for most circuit breaker plug-in units is an operating handle. This rocker arm style handle may be easily operated by means of a hook stick or chains. Specify the ‘-DIS’ option at end of selected Part Number.





## CRITICAL POWER MONITORING

M41/M43/M45/M47 DETAILS

*The Starline Critical Power Monitor (CPM) is a revenue grade metering system that enables current and power monitoring in busway systems. Each phase and neutral can be monitored independently. The CPM may be incorporated at a power feed point or directly into a plug-in unit.*

### CURRENT TRANSFORMERS:

Current transformers (CT's) are supplied with the unit for installation onto the customer-supplied feeder cables. Sense leads from the CT's connect to the Meter.

### METER MODULES:

Each unit is calibrated for accuracy and is within 0.5% to meet ANSI Revenue Grade Standards.

### CPM- ENHANCED PACKAGE (M41/M43/M45/M47):

Provides current and voltage inputs, monitoring current, voltage, power, power factor, frequency, apparent power, energy kWh, reactive power, neutral current, power min. and max.

### DISPLAY:

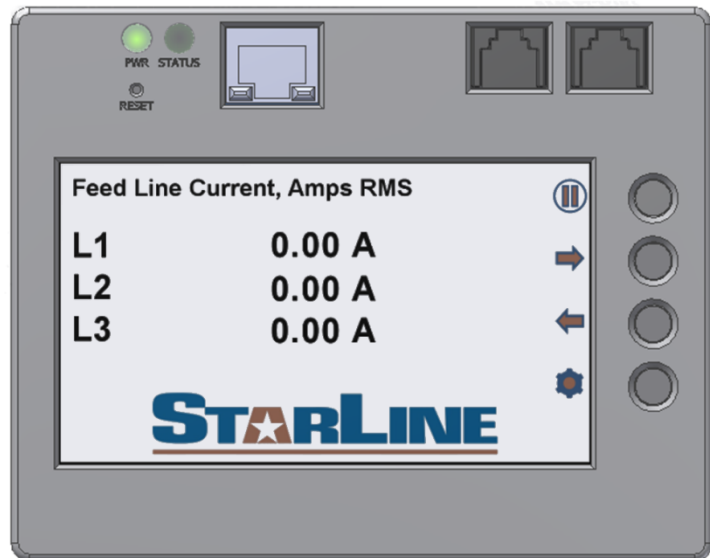
The bright, 4.9" LCD reports basic power measurements and alarms. Display buttons provide configuration and direct control to the active display screen. Large format display is easily readable at a distance and wide viewing angle.

### COMMUNICATION:

Ethernet and Modbus RTU ports are standard. Ethernet port provides an embedded web (HTTP) Interface & supports SNMP. Wi-Fi interface is optional, providing true versatility in the busway environment.

### ALARMS:

When the defined alarm threshold is exceeded, a warning corresponding to that channel will turn ON and send an SNMP trap or an email to the user.



Critical Power Monitor with the (optional) 4.9" Display



Critical Power Monitor (No Display)

*The Critical Power Monitor can be used to manage and maximize power distribution within a three phase power system. It can be employed as a component to help balance three phase power distribution between each phase. This increases efficiency by reducing the power factor and enables a user to fully analyze the power supplied to them.*

### POWER FEED MONITORING

The CPM, incorporated in or near the power feed unit, provides load monitoring of the entire run of busway. These are used in conjunction with BMS systems to ensure busway is not overloaded as well as for general power management. Typically uses the CPM unit with display.

### BRANCH CIRCUIT MONITORING

The CPM, incorporated into a plug-in unit, monitors individual branch circuits. These units are used in conjunction with BMS system for power management and revenue purposes at the rack or circuit level. The CPM is capable of monitoring the entire unit or monitoring up to 4 individual devices, limited to 6 solid core Current Transformers (CTs).

### BUILDING MANAGEMENT INTERFACE

The Starline CPM is easily interfaced with BMS/BCIM systems. Many BMS/BCIM systems offer drivers for use with the Starline CPM. Contact your BMS/BCIM supplier or Starline Engineering for more information.

## POWER FEED UNIT WITH CPM

B100/B225 Power Feed Units

**End Feed with Installed Critical Power Monitor**  
B100/B225

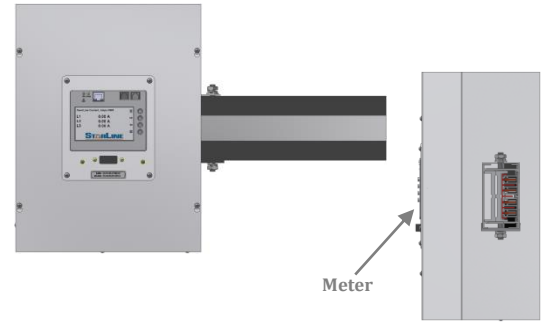
Standard End Power Feed units connect to the male end of the busway. Factory assembled unit consists of a 12" x 16" x 7.62" steel junction box, with removable sides, connected to a 1 foot section of busway. The assembly includes connection lugs, a ground lug, and shrink tubing for wires up to 300 MCM.

Integral CPM installed in the End Feed provides power monitoring and alarm capabilities. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. An automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the embedded webpage.

See Power Monitoring pages for more details.

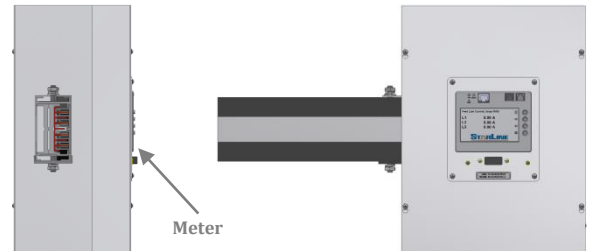
### STANDARD END FEED

- EFxxx-4-RT-MyyRz
- EFxxxN-4-RT-MyyRz
- EFxxxG-4-RT-MyyRz
- EFxxxNG-4-RT-MyyRz



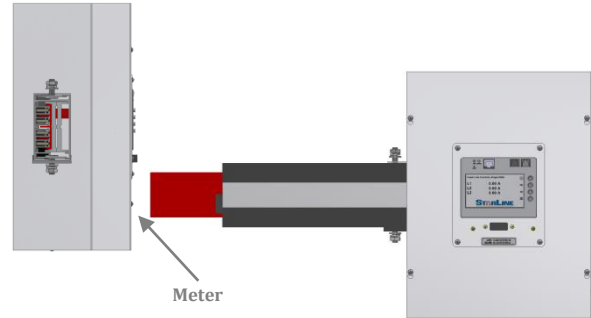
### STANDARD 'LEFT LID' END FEED

- EFxxx-4-L-MyyRz
- EFxxxN-4-L-MyyRz
- EFxxxG-4-L-MyyRz
- EFxxxNG-4-L-MyyRz



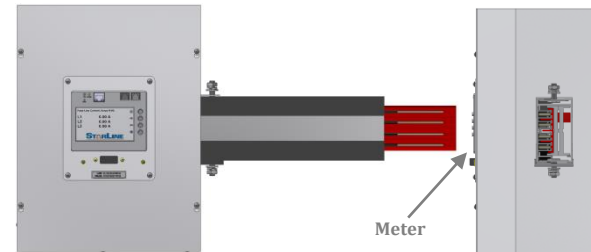
### MALE END FEED

- EFxxx-4M-L-MyyRz
- EFxxxN-4M-L-MyyRz
- EFxxxG-4M-L-MyyRz
- EFxxxNG-4M-L-MyyRz

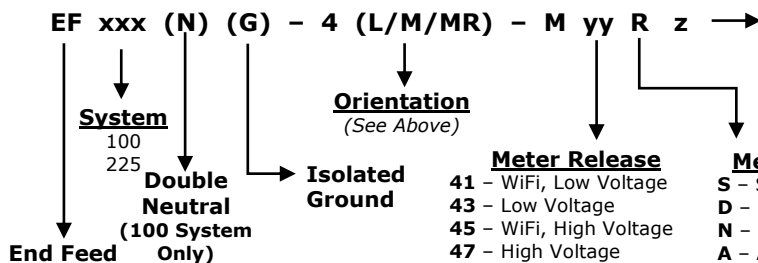


### MALE 'RIGHT LID' END FEED

- EFxxx-4M-RT-MyyRz
- EFxxxN-4M-RT-MyyRz
- EFxxxG-4M-RT-MyyRz
- EFxxxNG-4M-RT-MyyRz



### Catalog Number Sequence



### System Configuration

\*Please contact Engineering for assistance on selecting the appropriate Configuration

### High Voltage Criteria:

Delta System: ≥400V  
Wye System: ≥480V

- F - "Featured" (Display + Alarm)
- E - "Enhanced" (Neutral + Alarm)
- P - "Professional" (Display + Neutral)
- U - "Ultimate" (Display + Neutral + Alarm)

**POWER FEED UNIT WITH CPM**

B250/B400/B800 Power Feed Units

**End Feed with Installed Critical Power Monitor**  
B250/B400/B800

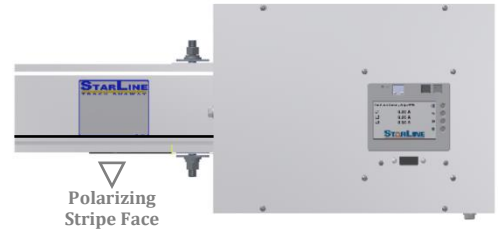
Standard End Power Feed units connect to the end of a Busway section. Factory assembled unit consists of a steel junction box with removable sides and is connected to a small section of busway. Reverse End Feed units for connection to opposite end of busway are also available. (For Frame specific information, see B250T5/ B400T5/B800T5 pages.)

Integral CPM installed in the End Feed provides power monitoring and alarm capabilities. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. An automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the embedded webpage.

See Power Monitoring pages for more details.

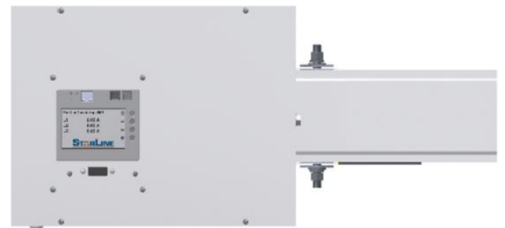
**T5 STANDARD END FEED**

- EFxxxT5-4-L-MyyRz
- EFxxxT5N-4-L-MyyRz
- EFxxxT5G-4-L-MyyRz
- EFxxxT5NG-4-L-MyyRz



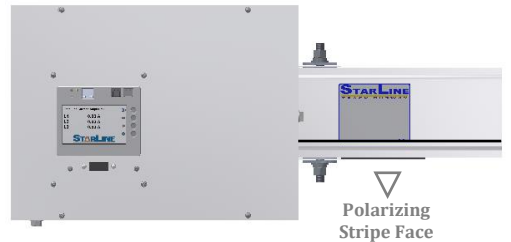
**T5 STANDARD 'RIGHT LID' END FEED**

- EFxxxT5-4-RT-MyyRz
- EFxxxT5N-4-RT-MyyRz
- EFxxxT5G-4-RT-MyyRz
- EFxxxT5NG-4-RT-MyyRz



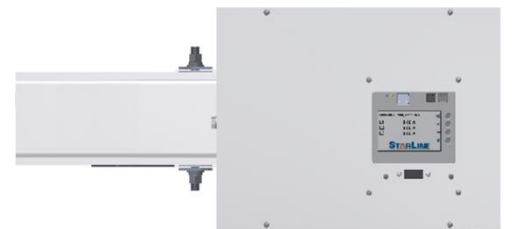
**T5 REVERSED END FEED**

- EFxxxT5-4R-RT-MyyRz
- EFxxxT5N-4R-RT-MyyRz
- EFxxxT5G-4R-RT-MyyRz
- EFxxxT5NG-4R-RT-MyyRz

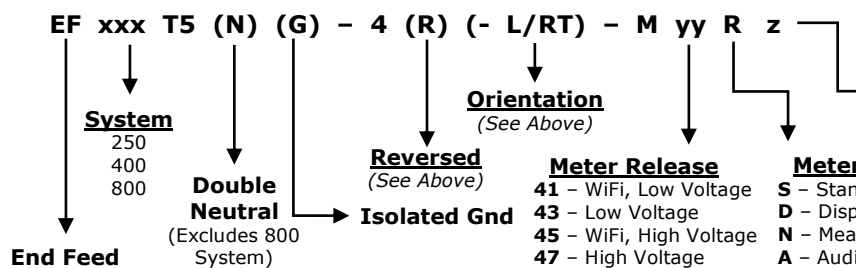


**T5 REVERSED 'LEFT LID' END FEED**

- EFxxxT5-4R-L-MyyRz
- EFxxxT5N-4R-L-MyyRz
- EFxxxT5G-4R-L-MyyRz
- EFxxxT5NG-4R-L-MyyRz



**Catalog Number Sequence**



**System Configuration**

\*Please contact Engineering for assistance on selecting the appropriate Configuration

**High Voltage Criteria:**

Delta System: ≥400V  
Wye System: ≥480V

- F** - "Featured" (Display + Alarm)
- E** - "Enhanced" (Neutral + Alarm)
- P** - "Professional" (Display + Neutral)
- U** - "Ultimate" (Display + Neutral + Alarm)

## OUTLET BOX UNIT WITH CPM

Power Feed Current Monitoring

### Outlet Box with Installed Critical Power Monitor

The CPM plug-in unit is installed within close proximity to the busway Power Feed. Current Transformers (CT) are installed around the feed wires and then cabled to the Outlet Box using factory provided 20 foot leads.

The CPM provides power monitoring of the busway run. The optional, 4.9" LCD screen displays the current level, voltage, and alarm status for each phase and neutral. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. An automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the embedded webpage.

#### Networking:

- Ethernet
- RS-485
- Wi-Fi (Optional)

#### Protocols:

- Web Interface
- Modbus RTU
- SNMP
- Telnet
- Modbus TCP/IP

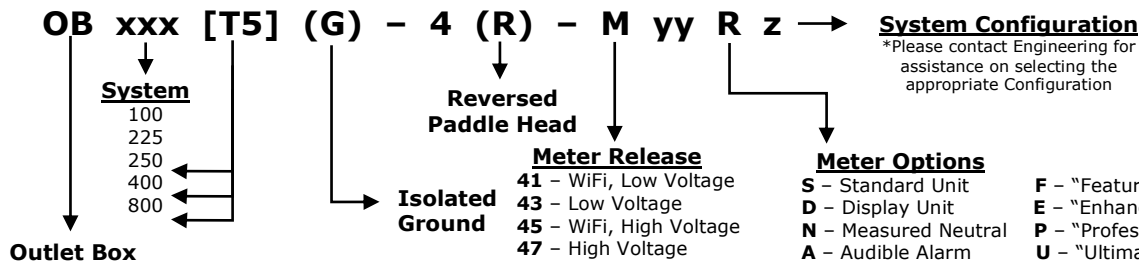
Model Shown:  
OB225-4-M41D1



Knock-Out for easy CT Wiring access



### Catalog Number Sequence



#### High Voltage Criteria:

**Delta System:** ≥400V  
**Wye System:** ≥480V

## M40 SERIES CIRCUIT BREAKER UNIT

Branch Circuit Monitoring

**Circuit Breaker Unit with Installed Critical Power Monitor**

**MONITORING:**

The Branch Circuit Monitoring unit has the capability of monitoring the current of the entire unit (M-Meter) or monitoring up to 4 individual devices (V-Meter), limited to 6 solid core Current Transformers (CTs).

**DISPLAY:**

The optional, bright, 4.9" LCD reports basic power measurements and alarms. Display buttons provide configuration and direct control to the active display screen. Large format display is easily readable at a distance.

**COMMUNICATIONS :**

Ethernet and Modbus RTU ports are standard. Ethernet port provides an embedded web (HTTP) Interface & supports SNMP. Wi-Fi interface is optional, providing true versatility in the busway environment.

**ALARMS:**

When the defined alarm threshold is exceeded, a warning corresponding to that channel will turn ON and send an SNMP trap or an email to the user.

See Power Monitoring pages for more details.

Example:

CBT5GE60-520D-M41D



Example:

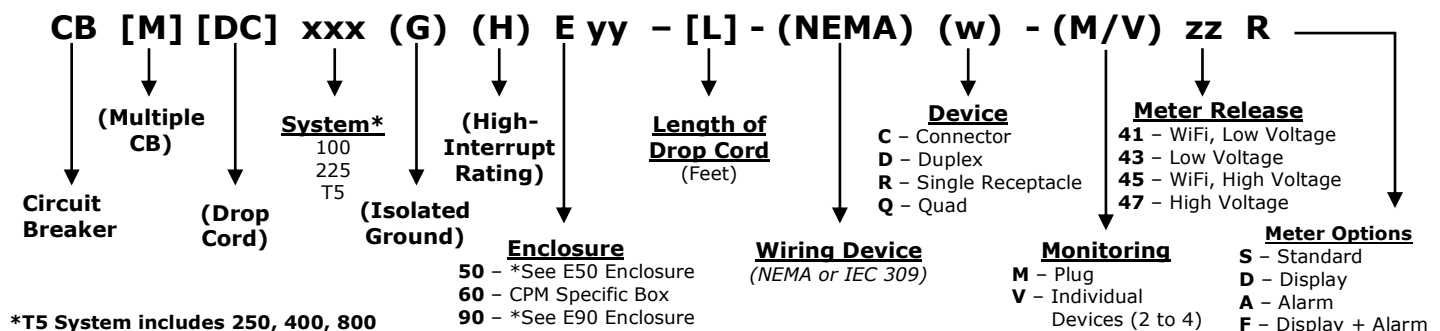
CBDCT5HGE94-1-L2230-M47S



**High Voltage Criteria:**

Delta System: ≥400V  
Wye System: ≥480V

### Catalog Number Sequence



*The StarLine Critical Power Monitor (CPM) is a revenue grade metering system that enables current and power monitoring in busway systems. Each phase and neutral can be monitored independently. The CPM M50 series may be incorporated directly into a plug-in unit.*

**MONITORING:**

The CPM is capable of monitoring the current of the entire unit (M-Meter) or monitoring up to 4 individual devices (V-Meter), limited to 6 solid core Current Transformers (CTs).

**METER MODULES:**

Each unit is calibrated for accuracy and is within 0.5% to meet ANSI Revenue Grade Standards.

**CPM- ENHANCED PACKAGE (V51/V53/V58/V59):**

Provides current and voltage inputs, monitoring current, voltage, power, power factor, frequency, apparent power, energy kWh, reactive power, neutral current, power min. and max.

**COMMUNICATION:**

- V51** – Single Ethernet + Wi-Fi
- V53** – Single Ethernet
- V58** – Dual Ethernet
- V59** – Dual Modbus + Dual Ethernet

**ALARMS:**

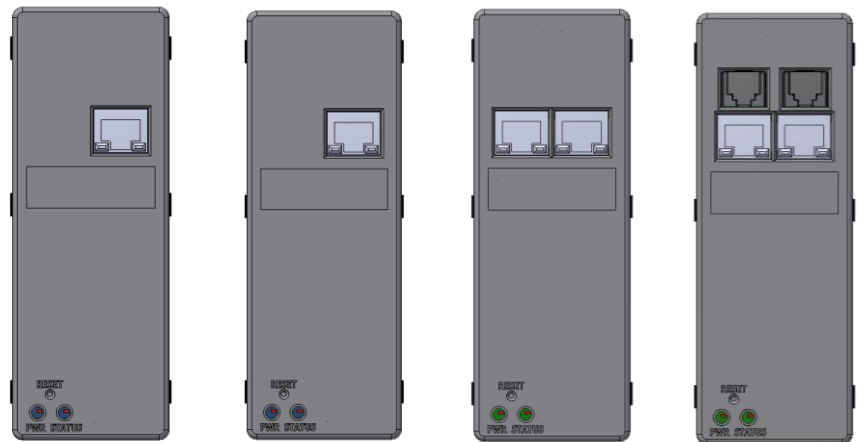
When the defined alarm threshold is exceeded, a warning corresponding to that channel will turn ON and send an SNMP trap or an email to the user.

**FIRMWARE:**

Download the latest version of Firmware from the website. Visit [www.starlinepower.com/CPM](http://www.starlinepower.com/CPM) for link and details.

**Meter Specs:**

- Input Voltage – Up to 480V ac (Wye System)
- Current – Up to 125A



Single Ethernet w/Wi-Fi V51

Single Ethernet V53

Dual Ethernet V58

Dual Modbus Dual Ethernet V59

*The Critical Power Monitor can be used to manage and maximize power distribution within a three phase power system. It can be employed as a component to help balance three phase power distribution between each phase. This increases efficiency and enables a user to fully analyze the power supplied to them.*

**BRANCH CIRCUIT MONITORING**

The CPM, incorporated into a plug-in unit, monitors individual branch circuits. These units are used in conjunction with a BMS for power management and revenue purposes at the rack or circuit level. The CPM is capable of monitoring the entire unit (M-Meter) or monitoring up to 4 individual devices (V-Meter), limited to 6 Current Transformers (CTs).

**BUILDING MANAGEMENT INTERFACE**

The Starline CPM is easily interfaced with BMS/DCIM systems. Many BMS/DCIM systems offer drivers for use with the Starline CPM. Contact your BMS/DCIM supplier or Starline Engineering for more information.

## M50 SERIES CIRCUIT BREAKER UNIT

Branch Circuit Monitoring

**Circuit Breaker Unit with Installed Critical Power Monitor**

**MONITORING:**

The Branch Circuit Monitoring unit is capable of monitoring the current of the entire unit (M-Meter) or monitoring up to 4 individual devices (V-Meter), limited to 6 solid core Current Transformers (CTs).

**Daisy-Chain Ethernet:**

The dual Ethernet configuration (V58 and V59) allows users to implement a daisy-chain topology when wiring meters, thus saving on network switch ports within the facility.

**COMMUNICATIONS:**

A single Ethernet port is standard; choose between optional dual Ethernet, Modbus and Wi-Fi configurations. Ethernet port provides an embedded web (HTTP) interface & supports SNMP. Users can use Modbus and Ethernet ports simultaneously.

**ALARMS:**

When the defined alarm threshold is exceeded, a warning corresponding to that channel will turn ON and send an SNMP trap or an email to the user.

See Power Monitoring pages for more details.

Example:

CBT5E12-L630R-4-V51S-SIDE

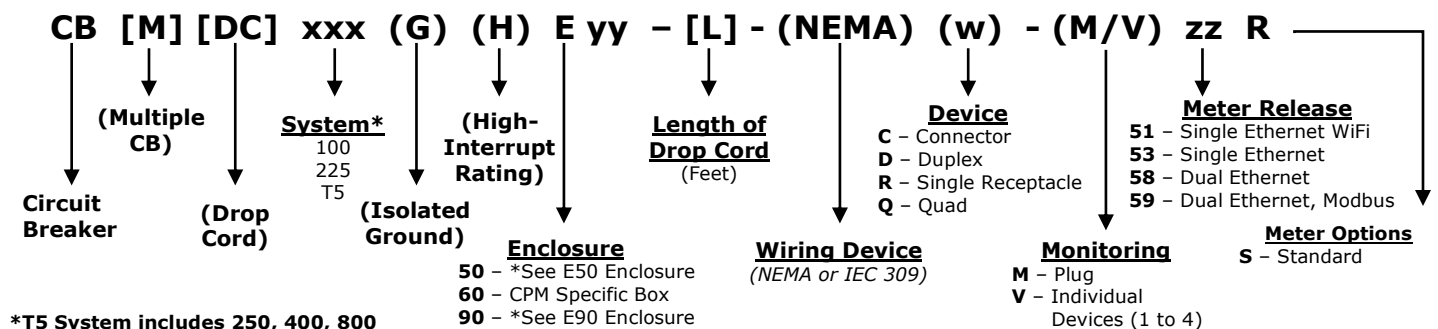


Example:

CBDCT5E93-X-460C9W-4-V51S



### Catalog Number Sequence



**OUTLET BOX UNIT FOR  
POWER FEED CURRENT MONITORING**

**Outlet Box with Installed M6, M7  
or M9 Power Monitor**

An E9 plug-in unit is installed within close proximity of the Busway power feed. Current Transformers (CT) are installed around the feed wires and then cabled to the Outlet Box. Split Core CTs are also available.

**M6- ENHANCED PACKAGE 1**

Provides voltage, average voltage, current, average current, active power, power factor and kWh measurements.

**M7- ENHANCED PACKAGE 2**

In addition to the M6 measurements the M7 provides Reactive and Apparent power, Per phase power and THD.

**M9 - Provides measurement equal to the M7.**

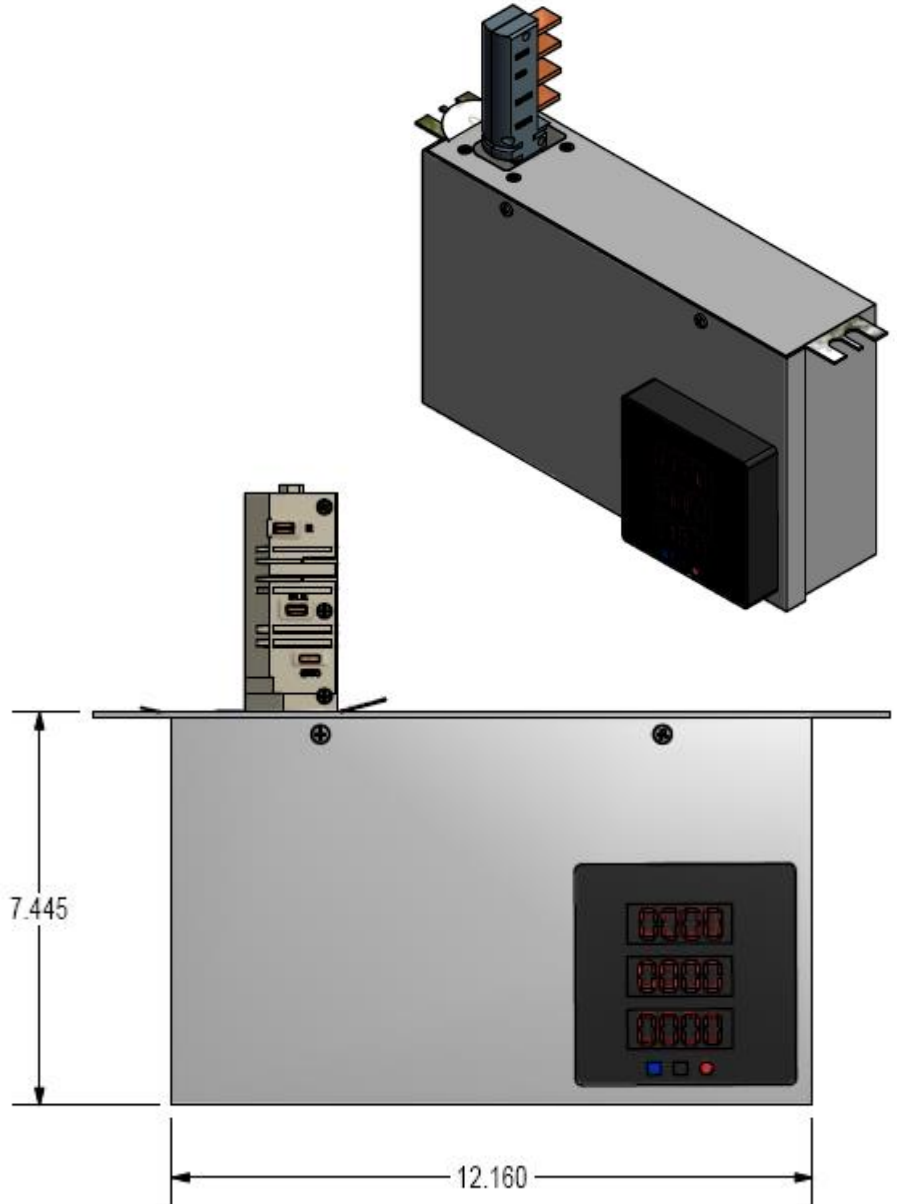
**DISPLAY**

The bright LED display, displays all basic power measurements.

**COMMUNICATION**

**M6/M7 Modbus RTU (Serial Cable)**

**M9 Modbus TCP (Ethernet Cable)**



Catalog No.	Description
OB100AE9R-M6DR100/3	CURRENT MONITOR PLUG-IN, PWR QLTY w/RS-485, 100A
OB100NE9R-M7DR100/3	CURRENT MONITOR PLUG-IN, PWR QLTY w/RS-485, 100A/ ENH PK 2
OB225E9R-M6DR225/3	CURRENT MONITOR PLUG-IN, PWR QLTY w/RS-485, 225A/ENH PK 1
OB225GE9R-M7DR225/3	CURRENT MONITOR PLUG-IN, PWR QLTY w/RS-485, 225A/ ENH PKG 2
OB225Ex-M9DR225/3	CURRENT MONITOR M9 PLUG-IN, PWR QLTY w/RS-485, 225A
OB250T5E9-M6DR250/3	CURRENT MONITOR PLUG-IN, PWR QLTY w/RS-485, 250A/ENH PK 1
OB400T5E9-M7DR400/3	CURRENT MONITOR PLUG-IN, PWR QLTY w/RS-485, 400A/ ENH PK 2
OB400T5EX-M9DR400/3	CURRENT MONITOR M9 PLUG-IN, PWR QLTY w/RS-485, 400A/

X= contact factory for enclosure dimensions



The M6/M7 can be installed into an end feed unit to monitor an entire run of busway.

**M6- ENHANCED PACKAGE 1**  
Provides voltage, average voltage, current, average current, active power, power factor and kWh measurements.

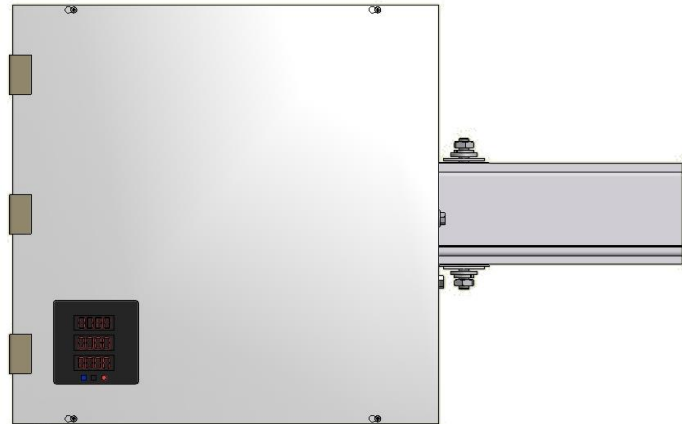
**M7- ENHANCED PACKAGE 2**  
In addition to the M6 measurements the M7 provides Reactive and Apparent power, per phase power and THD. Nuisance tripping may be avoided by using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads which helps to gain efficiency.

**Display**

The bright LED display, displays all basic power measurements.

**COMMUNICATION**

**RS-485 PORT**  
Modbus RTU for integration with energy management systems.



**Catalog Number Selection**

Catalog No.	Description
EF225-4L-MxDR225/3	End Feed w/Meter, RS-485, 225A, Left Lid
EF225-4-MxDR225/3	End Feed w/Meter, RS-485, 225A, Standard
EF225-4M-MxDR225/3	End Feed w/Meter, RS-485, 225A, Male
EF225-4MR-MxDR225/3	End Feed w/Meter, RS-485, 225A, Right Lid
EF400-4-MxDR400/3	End Feed w/Meter, RS-485, 400A, Standard
EF400-4L-MxDr400/3	End Feed w/Meter, RS-485, 400A, Left Lid
EF400-4R-MxDR400/3	End Feed w/Meter, RS-485, 400A, Reverse
EF400-4RT-MxDR400/3	End Feed w/Meter, RS-485, 400A, Right Lid

-Replace 'Mx' with 'M6' for standard package and 'M7' for enhanced package.

**M22 BRANCH CIRCUIT MONITORING FOR CIRCUIT BREAKER UNIT**

**BRANCH CIRCUIT MONITORING**

M22 meter incorporated into each plug-in unit monitors individual branch circuits. Used in conjunction with BMS system for general power management and revenue purposes at the rack or circuit level.

M22 meter with RS-485 ports communicates using the Modbus RTU protocol.

M22 meter (DTS 310) accepts voltage inputs directly up to 300Vac L-N / 120-480Vac L-L or through PTs (potential transformers) for higher voltages.

**The M22 provides metering of current, voltage, power, and energy**

**SOFTWARE**

Download the latest version of the software from the website. See QSG for link and details.

**COMMUNICATION**

Modbus RTU (RS-485, 2-Wire)

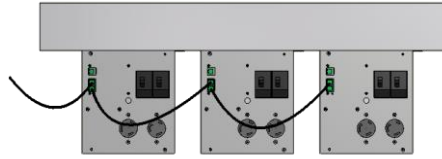
**PORTS**

(2) RJ-11 (RTU)

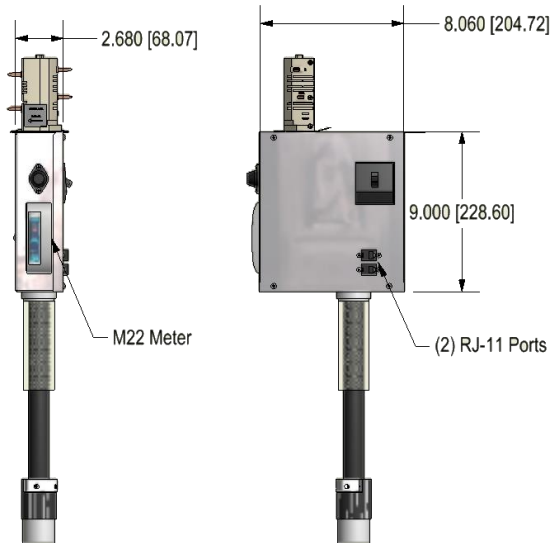
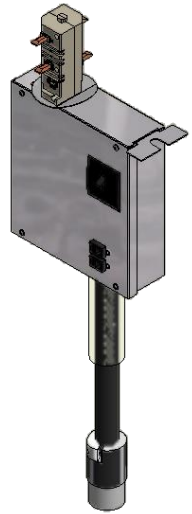
**GATEWAY\***

Use gateways to convert Modbus RTU to SNMP.

\* Check with factory for gateway details.



MODBUS RTU, Daisy-Chain : 32 device limit



Catalog No.	Description
CB100NHE28-L1530-4-M22R30/3	CKT. BKR. UNIT W/RECEPTS - L1530, 22K
CBM225GE28-(2)L630-4-M22R30/2	CKT. BKR. UNIT W/RECEPTS - (2) L630
CBM225GE25-(4)L630-4-M22R30/4	CKT. BKR. UNIT W/RECEPTS - (4) L630
CB400NGHE28-L1530-4-M22R30/3	CKT. BKR. UNIT W/RECEPTS - L1530
CBDC225E28-X-L2130C-4-M22R30/3	CKT. BKR. DROP CORD UNIT W/CONN BODY - L2130C

**M23 BRANCH CIRCUIT MONITORING FOR CIRCUIT BREAKER UNIT**

**BRANCH CIRCUIT MONITORING**

M23 meter incorporated into each plug-in unit monitors individual branch circuits. Used in conjunction with BMS system for general power management and revenue purposes at the rack or circuit level.

M23 meter communicates using Modbus TCP/IP available through the RJ-45 jack.

M25 meter (DTS 310) accepts voltage inputs directly up to 300Vac L-N / 120-480Vac L-L or through PTs (potential transformers) for higher voltages.

**The M23 provides metering of current, voltage, power, and energy.**

**SOFTWARE**

Download the latest version of the software from the website. See QSG for link and details.

**COMMUNICATION**

Modbus TCP/IP (Ethernet)

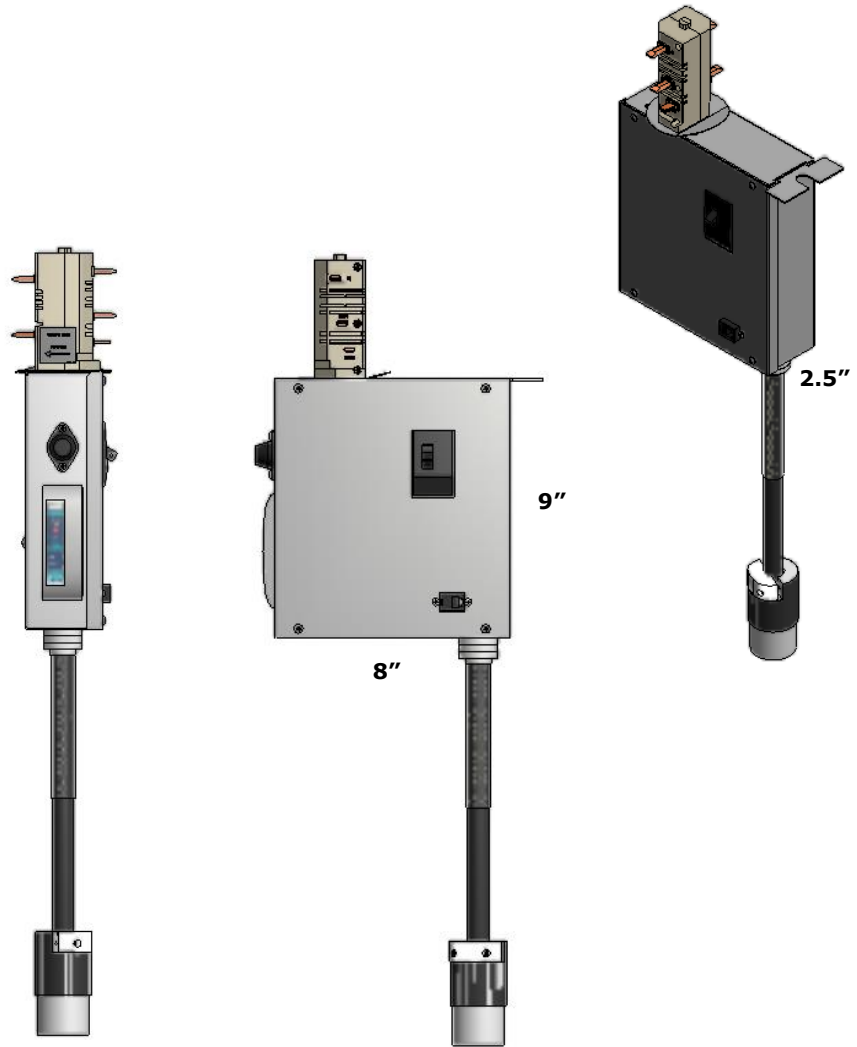
**PORTS**

(1) RJ-45 Ethernet (TCP/IP)

**GATEWAY\***

Use gateways to convert Modbus TCP/IP to SNMP.

\* Check with factory for gateway details.



Catalog No.	Description
CB100NHE28-L1530-4-M23R30/3	CKT. BKR. UNIT W/RECEPTS - L1530, 22K
CBM225GE28-(2)L630-4-M23R30/2	CKT. BKR. UNIT W/RECEPTS - (2) L630
CBM225GE25-(4)L630-4-M23R30/4	CKT. BKR. UNIT W/RECEPTS - (4) L630
CB400NGHE28-L1530-4-M23R30/3	CKT. BKR. UNIT W/RECEPTS - L1530
CBDC225E28-X-L2130C-4-M23R30/3	CKT. BKR. DROP CORD UNIT W/CONN BODY - L2130C

**End Feed with Installed M9 Power Monitor**

Standard End Power Feed units connect to the end of the Busway. Factory assembled unit consists of a steel junction box, with removable sides, connected to a section of Busway. The

Integral M9s installed in the End Feed provide power monitoring. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in continuous challenge to balance the three phase loads.

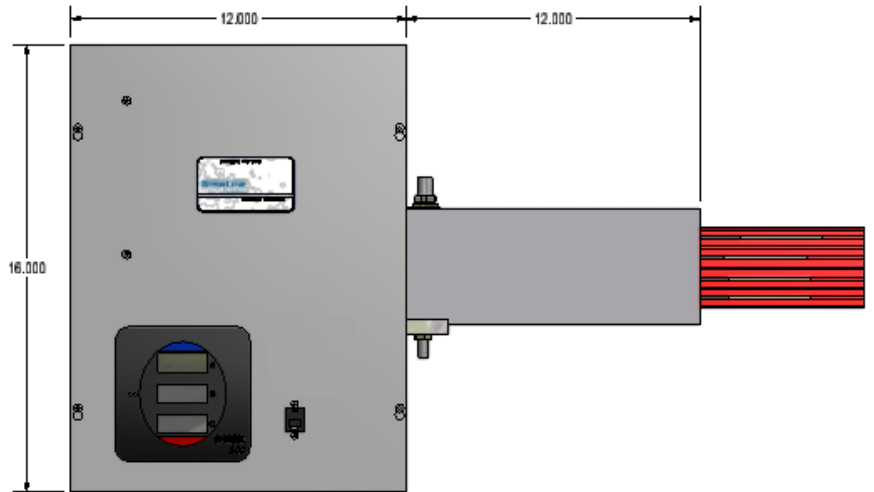
**M9 - Provides voltage, current, power, power factor, and energy.**

**COMMUNICATION**

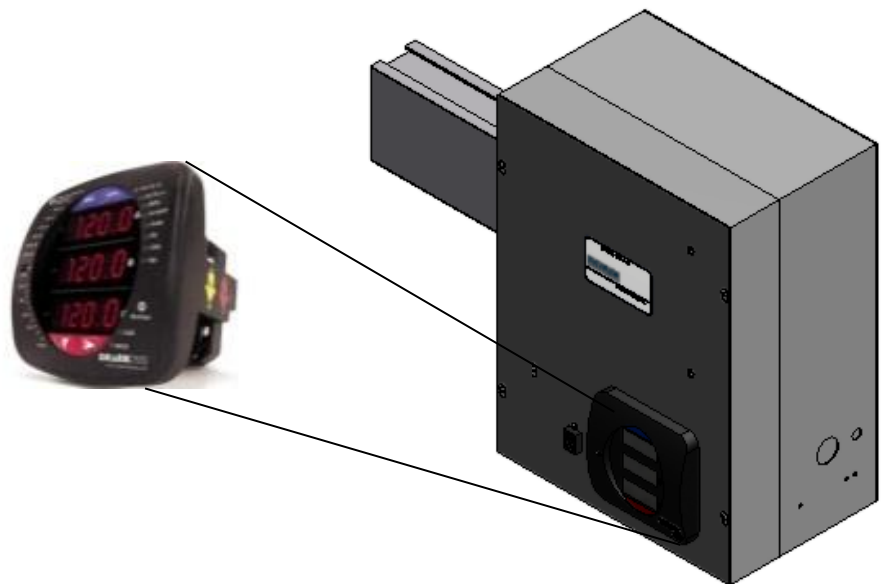
**M9 Modbus TCP**

Lids are field reversible to allow the display to be placed on either side of the enclosure.

Contact sales for End Feed enclosure dimensions, and catalog numbers.



**M9  
99**



**OUTLET BOX UNIT FOR  
POWER FEED CURRENT MONITORING**

**Outlet Box with Installed M26  
Power Monitor**

An E63 plug-in unit is installed within close proximity of the Busway power feed. Current Transformers (CT) are installed around the feed wires and then cabled to the Outlet Box. Split Core CTs are also available.

M26 meter provides 3 voltage measurement and 4 current measurement inputs; active power, apparent power, reactive power, power factor, effective energy, reactive energy and total harmonic distortion (THD) are also the measured parameters. Harmonic analysis up to the 40<sup>th</sup> order is available.

**MEMORY**

256 MB of flash memory

**DISPLAY**

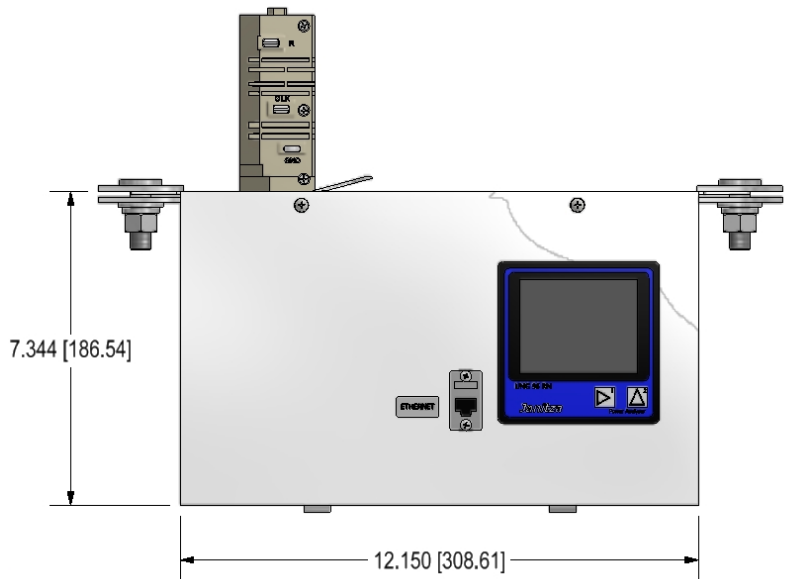
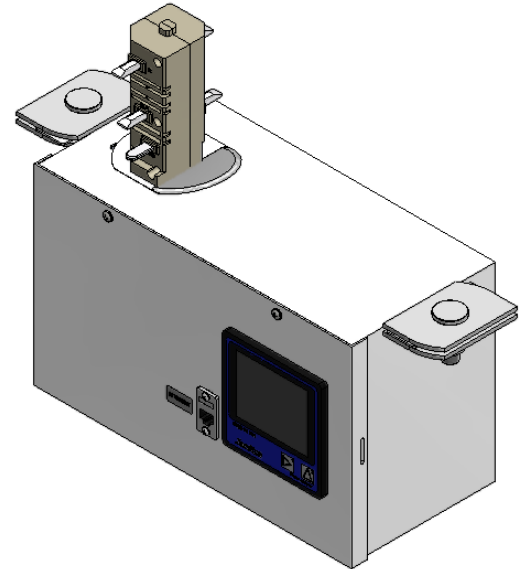
LCD display with backlight, displays all basic power measurements.

**INTERFACES:**

RS485, Ethernet (RJ 45)

**PROTOCOLS:**

Modbus RTU, Modbus Gateway, TCP/IP, SNMP, Webserver/e-mail



**Catalog No.**

**Description**

OB250T5E63-M26DR250/3	CURRENT MONITOR PLUG-IN, PWR QLTY w/ETHERNET, 250A
OB400T5E63-M26DR400/3	CURRENT MONITOR PLUG-IN, PWR QLTY w/ ETHERNET, 400A
OB800T5E63-M26DR800/3	CURRENT MONITOR PLUG-IN, PWR QLTY w/ ETHERNET, 800A

**M25 BRANCH CIRCUIT MONITORING FOR CIRCUIT BREAKER UNIT**

**Branching Circuit Monitor**

M25 meter incorporated into each plug-in unit monitors individual branch circuits. Used in conjunction with BMS system for general power management and revenue purposes at the rack or circuit level.

M25 meter communications using a mesh network to the gateway and then Modbus TCP/IP or SNMP to the BMS.

M25 meter accepts voltage inputs directly up to 250Vac L-N/250 Vac L-L.

The M25 provides metering of current, voltage, power, and energy, apparent power and frequency.

**SOFTWARE**

Download the latest version of the software from the website. See QSG for link and details.

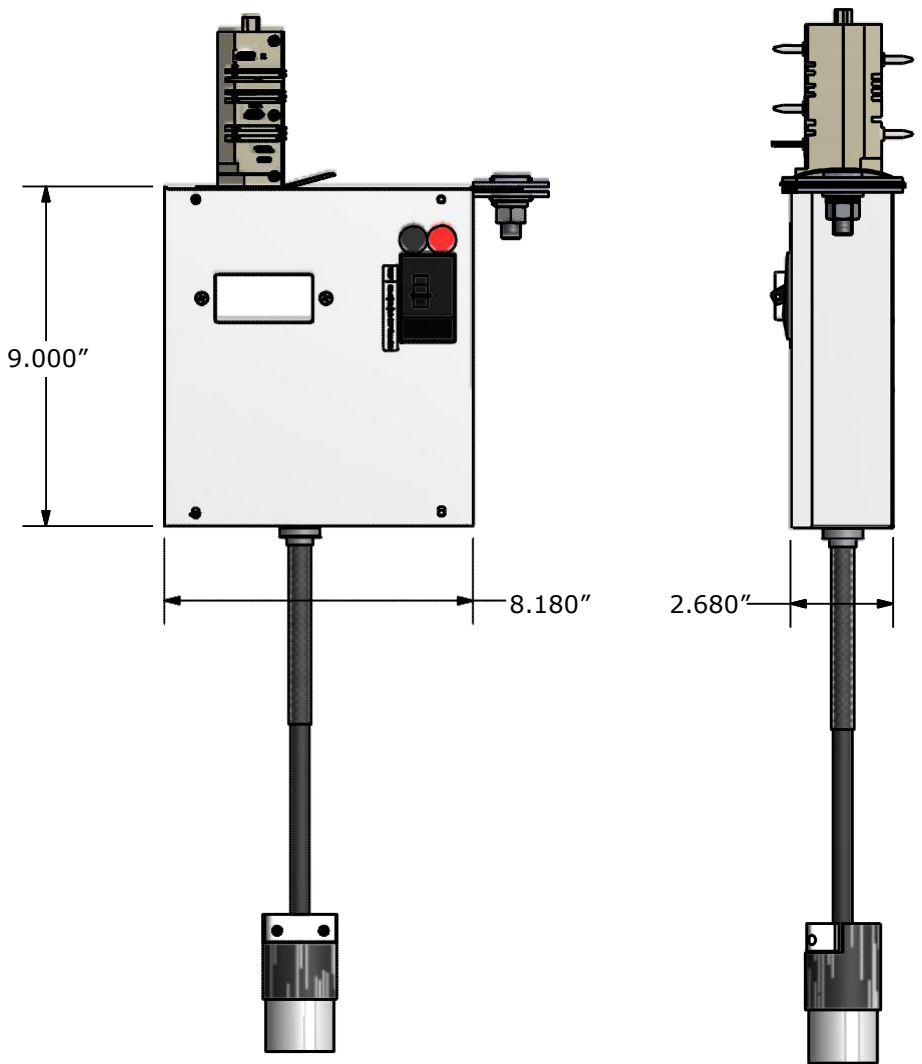
**COMMUNICATION**

ModbusTCP/IP & SNMP (Ethernet)

**GATEWAY\***

The gateway is to be purchased directly from Packet Power.

\*Check with your local rep for details.



**Catalog Number**

- CB100NHE28-L1530-4-M25R30/3
- CBM225GE28-(2)L630-4-M25R30/3
- CBM225GE25-(4)L630-4-M25R30/3
- CB400NGHE28-L1530-4-M25R30/3
- CBDC225E28-X-L2130C-4-M25R30/3

**Description**

- CKT. BKR. UNIT W/RECEPTS – L1530, 22K
- CKT. BKR. UNIT W/RECEPTS - (2) L630
- CKT. BKR. UNIT W/RECEPTS - (4) L630
- CKT. BKR. UNIT W/RECEPTS – L1530
- CKT.BKR. DROP CORD UNIT W/CONN BODY – L2130C

# UNIVERSAL SERVER CABINET MOUNTING BRACKETS



The Universal Server Cabinet Mounting Brackets are designed with generous 3/8" wide through slots to mount directly onto virtually any server cabinet.

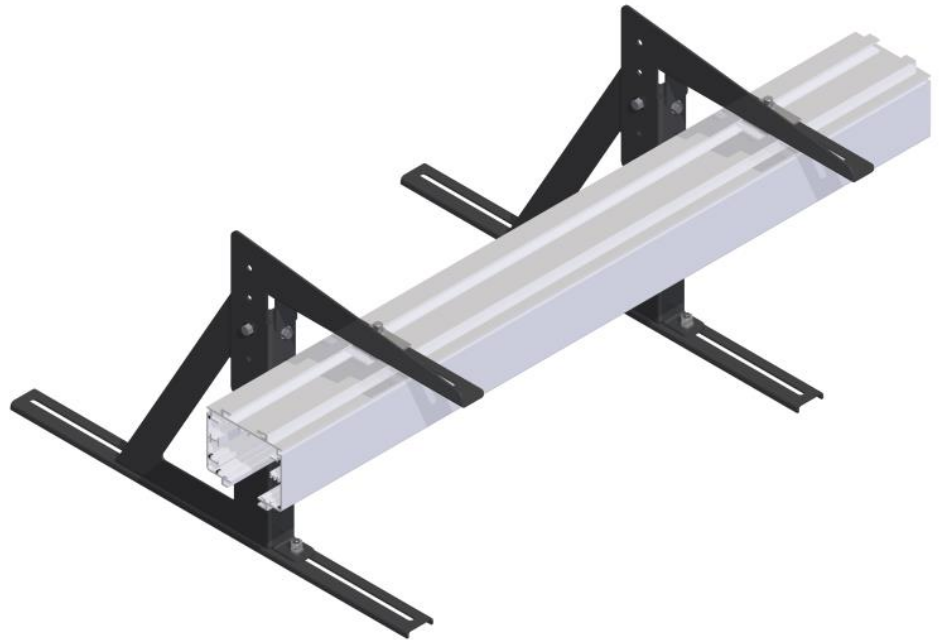
These accessories quickly and easily provide a flexible busway mounting solution on top of server cabinets, eliminating the need for threaded rod and strut support from the ceiling.

The brackets are adjustable in height, can be ordered in virtually any color, and can be positioned at any depth on the server cabinet. Moreover, they can accommodate up to (2) runs of Starline T5 busway.

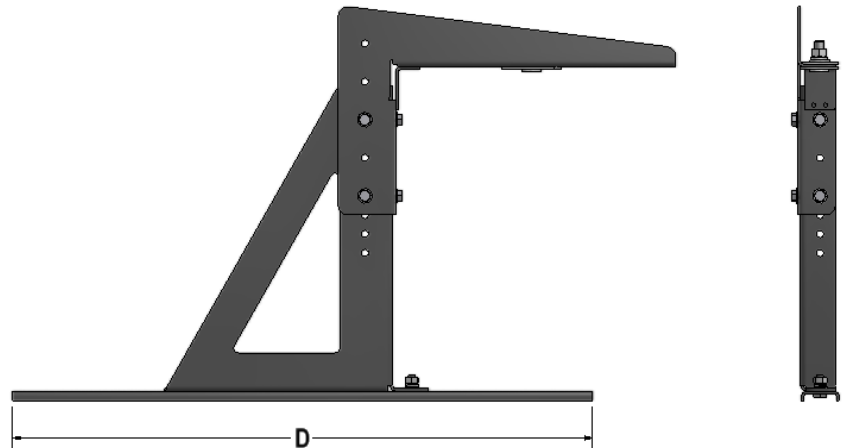
Hanger Bolt Included – BHT5-1/BH-1

**MATERIAL:** Galvanneal Steel  
**HEIGHT:** 16.75" Min  
 23.75" Max

**Maximum Spacing:** Every 10' per run



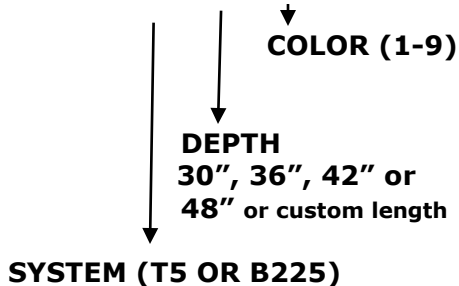
.397 [10.08] MOUNTING SLOT WIDTH



### C: Color (1-9)

- 1- Anodized Silver
- 2- Gray
- 3- Black
- 4- White
- 5- Galvanized (bright)
- 6- Red
- 7- Blue
- 9- \*SP (Special)

### Catalog Number Sequence USCMB-(X)-(D)-(C)



### Catalog Number Selection

Catalog No.	Description	Weight
USCMB-T5-30-(C)	T5, 30" CABINET DEPTH	12.6 lbs
USCMB-T5-36-(C)	T5, 36" CABINET DEPTH	13.1 lbs
USCMB-T5-42-(C)	T5, 42" CABINET DEPTH	13.6 lbs
USCMB-T5-48-(C)	T5, 48" CABINET DEPTH	14.1 lbs
USCMB-225-30-(C)	225, 30" CABINET DEPTH	12.6 lbs
USCMB-225-36-(C)	225, 36" CABINET DEPTH	13.1 lbs
USCMB-225-42-(C)	225, 42" CABINET DEPTH	13.6 lbs
USCMB-225-48-(C)	225, 48" CABINET DEPTH	14.1 lbs

**1.01 SUMMARY**

**A.** This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Busway). The system shall be designed primarily for overhead distribution of electrical power. Supporting designated work areas and equipment. Once installed the Busway will provide a simple, versatile, fast, and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

**1.02 STANDARDS AND CERTIFICATION**

- A.** The BUSWAY shall be designed and manufactured to the follow standards:
1. Low Voltage Directive (73/23/EEC) including Amendment (93/68/EEC).
  2. Low Voltage Switchgear and Controlgear Assemblies, Part 1: Type Tested and partially type tested Assemblies, IEC 60439-1: 1999.
  3. Low Voltage Switchgear and Controlgear Assemblies, Part 2: Particular Requirements for Busbar Trunking systems (Busways), IEC 60439-2: 2000.
  4. Underwriters Laboratories Standard, UL 857 – The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelve edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.
  5. Underwriters Laboratories Standard, UL 857 – The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelve edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.
  6. CUL Listing
  7. National Electric Code (NEC) – Article 368 – Busways
  8. NEMA AB1, Molded Case Circuit Breakers and Molded Case Switches
  9. NEMA KS-1, Enclosed and Miscellaneous Distribution Equipment Switches (600VAC).
  10. NFPA 70 – National Fire Protection Agency

**1.03 SYSTEM DESCRIPTION**

**A.** Electrical Requirement

**B40, B50 or B60C Busway**

Manufactured by:  
 Universal Electric Corp.  
 168 Georgetown Rd.

Canonsburg, PA 15317  
 (724) 257-7800

**Voltage:** All track sections and fittings rated at 480Y/277 volts

**Frequency:** 60 Hz

**Ampacity:** 40A, 50A or 60A

**Neutral Ampacity:** 40A, 50A or 60A

**Conductors:** Qty. 4 (Phase A,B,C and Neutral) option with 2 conductors

**Grounding:** Aluminum Housing

**B. Environmental**

**Indoor, Low Impedance System**

**Ambient Operating Temperature:**  
 40°C / 104°F (consult factory for de-ratings above 40°C)

**1.04 SUBMITTALS**

- A.** Submittals shall be in accordance with specified procedures. Submit shop drawing and product data for record purposes prior to shipment.
- B.** Indicate construction details, including dimensions, weights, clearances, major component layout, power details. Include breaker, fused plug-in and cable schedule (if applicable), including cable lengths and plug-in schedules.
- C.** Include connection diagram for external wiring, and details of conduit and wiring connections and terminations.
- D.** Indicate special receiving and handling procedures.
- E.** Provide electrical characteristics and connection requirements for the system and accessories.



# Section 16121 Busway System



B40, B50, B60C

## 1.05 WARRANTY

- A. The Busway manufacturer shall guarantee the entire system against defective material and workmanship for a period of one (1) year from date of shipment.

## 1.06 COMPONENTS

### A. Frame and Enclosure

1. Extruded Aluminum housing designed to be light weight and act as a 100% ground. Housings to be 5, 10, or 20 ft standard length. This housing should be properly extruded with slots to receive rod mount hangers to hang from a ceiling. This housing should be open on the bottom to accept plug-in units. This opening shall pass UL's hypothetical finger probe test.
2. All conductors shall be made of copper and sized to handle 100% of it's rating continuously with ambient temperatures below 40°C / 104°F. The conductors shall be electrically isolated from the housing.

### B. Plug-in Units

1. Plug-in units shall be polarized to avoid incorrect installation.
2. Plug-in units shall use [circuit breakers] {fuses} for branch circuit protection.
3. Plug-in units shall have snap clips to secure units to the busway.
4. Plug-in units that include drop cords shall be manufactured with cord grips and receptacles as specified in the drawings.
5. Internal Plug – low profile, mounted internally in housing, inserts into continuous slot and snaps into place. This hold unit in place, for usage on 2P or 4Pole Busway; 15 Amp internal plug for lighting; 15, or 30 Amp for power drop usage.

## 1.07 INSTALLATION

- A. Busway Sections – The B40, B50 or B60C, 40A, 50A or 60 ampere runs will consist of lengths as shown on the drawings.
- B. Hanging of the Busway – Using supplied 'Rod Mount Hangers', the RHB-3 busway will be hung from the ceiling using all-thread. The installing contractor shall be responsible for the connections on the ceiling end. The supplied Rod Mount Hangers will connect the busway to the all-thread. The maximum spacing is 10 ft on center for the hangers. The height of the busway shall be coordinated with the Architect.
- C. Connecting Sections of Busway – At a junction of Busway sections, the installer will insert a Bus Connector (BC40-4, BC50-4 or BC60C-4) into the end of housing. Position next housing onto this connector and join (2) sections together using the housing coupler, HC40-2, HC50-2 or HC60C-2.

- D. End of runs – end caps EC40, EC50 OR EC60C will be provided to install at the ends of each run.

- E. Closure Strip – The closure strip can be cut and fitted to cover the bottom opening of the Busway housing to prevent dust and debris from gathering in the Busway (if applicable).

- F. WHR40-2 - Weight Ring – used to support high bay fixtures; 50 lb maximum supporting weight can be suspended on housing. Powered or unpowered weight units and signage can be supported.

- G. ACH-1 – Aircraft Cable Hanger Suspension – fit 1/16" cable, maximum support internal, 10 ft centers.

Supply as manufactured by Universal Electric Corporation; 168 Georgetown Road, Canonsburg, PA 15317 (800) 245-6378; (724) 597-7800; fax (724) 961-2221.  
No known equal.

END OF SECTION

# Section 16121 Busway System



**B60**

## 1.01 SUMMARY

- A. This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Busway). The system shall be designed primarily for overhead distribution of electrical power. Supporting designated work areas and equipment. Once installed the Busway will provide a simple, versatile, fast, and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

## 1.02 STANDARDS AND CERTIFICATION

- A. The BUSWAY shall be designed and manufactured to the follow standards:
1. Low Voltage Directive (73/23/EEC) including Amendment (93/68/EEC).
  2. Low Voltage Switchgear and Controlgear Assemblies, Part 1: Type Tested and partially type tested Assemblies, IEC 60439-1: 1999.
  3. Low Voltage Switchgear and Controlgear Assemblies, Part 2: Particular Requirements for Busbar Trunking systems (Busways), IEC 60439-2: 2000.
  4. Underwriters Laboratories Standard, UL 857 – The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelve edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.
  5. Underwriters Laboratories Standard, UL 857 – The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelve edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.
  6. CUL Listing
  7. National Electric Code (NEC) – Article 368 – Busways
  8. NEMA AB1, Molded Case Circuit Breakers and Molded Case Switches
  9. NEMA KS-1, Enclosed and Miscellaneous Distribution Equipment Switches (600VAC).
  10. NFPA 70 – National Fire Protection Agency

## 1.03 SYSTEM DESCRIPTION

- A. Electrical Requirement

**B60 Busway**

Manufactured by:

Universal Electric Corp.  
168 Georgetown Rd.

Canonsburg, PA 15317  
(724) 597-7800

**Voltage: 120/208V, 300V or 600V**

**Frequency: 60 Hz**

**Ampacity: 60 A**

**Neutral Ampacity: 60 A**

**Conductors: Qty. 4 (Phase A,B,C and Neutral)**

**Grounding: Aluminum Casing**

- B. **Environmental**

**Indoor, Low Impedance System**

**Ambient Operating Temperature:  
40°C / 104°F (consult factory for de-ratings above 40°C)**

## 1.04 SUBMITTALS

- A. Submittals shall be in accordance with specified procedures. Submit shop drawing and product data for record purposes prior to shipment.
- B. Indicate construction details, including dimensions, weights, clearances, major component layout, power details. Include breaker, fused plug-in and cable schedule (if applicable), including cable lengths and plug-in schedules.
- C. Include connection diagram for external wiring, and details of conduit and wiring connections and terminations.

# Section 16121 Busway System



**B60**

D. Indicate special receiving and handling procedures.

E. Provide electrical characteristics and connection requirements for the system and accessories.

## 1.05 WARRANTY

A. The Busway manufacturer shall guarantee the entire system against defective material and workmanship for a period of one (1) year from date of shipment.

## 1.06 COMPONENTS

A. Frame and Enclosure

1. Extruded Aluminum housing designed to be light weight and act as a 100% ground. Housings to be 5, 10, or 20 ft standard length. This housing should be properly extruded with slots to receive rod mount hangers to hang from a ceiling. This housing should be open on the bottom to accept plug-in units. This opening shall pass UL's hypothetical finger probe test.
2. All conductors shall be made of copper and sized to handle 100% of it's rating continuously with ambient temperatures below 40°C / 104°F. The conductors shall be electrically isolated from the housing.

B. Plug-in Units

1. Plug-in units shall be polarized to avoid incorrect installation.
2. Plug-in units shall use {{circuit breakers} {fuses}} for branch circuit protection.
3. Plug-in units shall have locking clips or bolt-on tabs to secure units to the busway.
4. Plug-in units that include drop cords shall be manufactured with cord grips and receptacles as specified in the drawings.
5. Internal Plug – low profile, mounted internally in housing, two selectors rotate to hold to hold unit in place, for usage on 1P, 2P or 3Pole Busway; 13A unit for lighting; 15, 20, or 25 Amp for power drop usage (cord available, if required).

## 1.07 INSTALLATION

A. Busway Sections – The B60-ampere and runs will consist of lengths as shown on the drawings.

B. Hanging of the Busway – Using supplied 'Rod Mount Hangers', the RHB-3 busway will be hung from the ceiling using all thread. The installing contractor shall be responsible for the connections on the ceiling end. The supplied Rod Mount Hangers will connect the busway to the all thread. The maximum spacing is 10 ft

on center for the hangers. The height of the busway shall be coordinated with the Architect.

C. Connecting Sections of Busway – At a junction of Busway sections, the installer will insert a Bus Connector (BC-4) into the end of housing. Position next housing onto this connector and join (2) sections together.

D. End of runs – End pieces and end caps will be provided to install at the ends of each run.

E. Closure Strip – The closure strip can be cut and fitted to cover the bottom opening of the Busway housing to prevent dust and debris from gathering in the Busway (if applicable).

F. WHR-1 - Weight Ring – used to support high bay fixtures; 50 lb maximum supporting weight can be suspended on housing. Powered or unpowered weight units and signage can be supported.

G. ACH-1 – Aircraft Cable Hanger Suspension – fit 1/16" cable, maximum support internal, 10 ft centers.

Supply as manufactured by Universal Electric Corporation, 168 Georgetown Rd, Canonsburg, PA 15317; (800) 245-6378; (724) 597-7800; fax (724) 916-2221. No known equal.

**END OF SECTION**

## B100A, B100N, B100NG, B225, B225G

### 1.01 SUMMARY

A. This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Track Busway). The system shall be designed primarily for overhead distribution of electrical power. Supporting designated work areas and equipment. Once installed the Busway will provide a simple, versatile, fast and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

### 1.02 STANDARDS AND CERTIFICATION

- A. The Track Busway shall be designed and manufactured to the following standards:
1. Low Voltage Directive (73/23/EEC) including Amendment (93/68/EEC).
  2. Low Voltage Switchgear and Controlgear Assemblies, Part 1: Type Tested and partially type tested Assemblies, IEC 60439-1: 1999.
  3. Low Voltage Switchgear and Controlgear Assemblies, Part 2: Particular Requirements for Busbar Trunking systems (Busways), IEC 60439-2: 2000.
  4. Underwriters Laboratories Standard, UL 857 – The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelve edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.
  5. CUL Listing
  6. National Electric Code (NEC) – Article 364 – Busways
  7. NEMA AB1, Molded Case Circuit Breakers and Molded Case Switches
  8. NEMA KS-1, Enclosed and Miscellaneous Distribution Equipment Switches (600VAC).
  9. NFPA 70 – National Fire Protection Agency

### 1.03 SYSTEM DESCRIPTION

A. Electrical Requirements  
STARLINE Track Busway

Manufactured by:  
 Universal Electric Corp.  
 168 Georgetown Rd.  
 Canonsburg, PA 15317  
 (724) 597-7800

Voltage: 120/208 V, 300V or 600V  
 Frequency: 60 Hz  
 Ampacity: 100A /225 A  
 Neutral Ampacity: 225 A  
 Conductors: Qty 4 (Phases A, B, C and Neutral)  
 Grounding: Aluminum Casing

### System Designation:

System	Amperage	Neutral	Iso Ground
B100A	100	100	No
B100N	100	200	No
B100NG	100	200	Yes
B225	225	225	No
B225G	225	225	Yes

B. Environmental  
 Indoor, Low Impedance System  
 Ambient Operating Temperature:  
 40°C / 140°F (consult factory for de-ratings above 40°C)

### 1.04 SUBMITTALS

- A. Submittals shall be in accordance with specified procedures. Submit shop drawing and product data for record purposes prior to shipment.
- B. Indicate construction details, including dimensions, weights, clearances, major component layout, power details. Include circuit breaker, fused plug-in, and cable schedule (if applicable), including cable lengths and plug-in schedules.
- C. Include connection diagram for external wiring, and details of conduit and wiring connections and terminations.
- D. Indicate special receiving and handling procedures.
- E. Provide electrical characteristics and connection requirements for the system and accessories.

### 1.05 WARRANTY

A. The Track Busway manufacturer shall guarantees the entire system against defective material and workmanship for a period of one (1) year from date on shipment.

# Section 16468

## Track Busway System



B100A, B100N, B100NG,  
B225, B225G

### 1.06 COMPONENTS

#### A. Frame and Enclosure:

1. Extruded Aluminum housing certified to serve as a 100% ground. Housings to be 5, 10 or 20 ft standard length. This housing should be properly extruded with slots to receive rod mount hangers to hang from a ceiling. This housing should be open on the bottom to accept plug-in units anywhere along its length. This opening shall pass UL's hypothetical finger probe test.
2. All conductors shall be made of copper and sized to handle 100% of its rating continuously with ambient temperatures below 40°C / 104°F. The conductors shall be electrically isolated from the housing.

#### B. Plug-in Units

1. Plug-in units shall be polarized to avoid incorrect installation.
2. Plug-in units shall use [circuit breakers] [fuses] for branch circuit protection.
3. Plug-in units shall have locking clips or bolt-on tabs to secure units to the busway.
4. Plug-in units that include drop cords shall be manufactured with cord grips and receptacles as specified in the drawings.

### 1.07 INSTALLATION

- A. Track Busway Sections – The runs will consist of lengths as shown on the drawings.
- B. Hanging of the Track Busway – Using supplied 'Rod Mount Hangers' the busway will be hung from the ceiling using all thread. The installing contractor shall be responsible for the connections on the ceiling end. The supplied Rod Mount Hangers will connect the track busway to the all thread. The maximum spacing is 10 ft on center for the hangers. The height of the track busway shall be coordinated with the Architect.
- C. Connecting Sections of Track Busway – At a junction of Track Busway sections, the installer will install the top housing coupler; the bus connector is inserted, centered and seated in the slot of the Busway. The installation tool is inserted into jointed intersection and rotated 90 deg. Forcing stabs into u-shaped female conductors. Housing coupler is positioned over the bottom joint and tightened. A manufacturer supplied tool will assist in joining sections together.
- D. End of Runs – End caps will be provided to install at the ends of each run.
- E. Closure Strip – The closure strip can be cut and fitted to cover the bottom opening of the Track Busway housing to prevent dust and debris from gathering in the Track Busway (if applicable).

Supply as manufactured by Universal Electric Corporation; 168 Georgetown Rd; Canonsburg, PA 15317; (800) 245-6378; (724) 597-7800; fax (724) 916-2221. No known equal.

END OF SECTION



# Section 16121 Track Busway System

**B250T5, B250T5G, B250T5N, B250T5NG**

**1.01 SUMMARY**

A. This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Track Busway). The system shall be designed primarily for overhead distribution of electrical power. Supporting designated work areas and equipment. Once installed the Busway will provide a simple, versatile, fast and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

**1.02 STANDARDS AND CERTIFICATION**

- A. The Track Busway shall be designed and manufactured to the following standards:
1. Underwriters Laboratories Standard, UL 857 – The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelfth edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.
  2. Low Voltage Switchgear and Controlgear Assemblies, Part 1: Type Tested and partially type tested Assemblies, IEC 60439-1: 1999.
  3. Low Voltage Switchgear and Controlgear Assemblies, Part 2: Particular Requirements for Busbar Trunking systems (Busways), IEC 60439-2: 2000.Low Voltage Directive (73/23/EEC) including Amendment (93/68/EEC).
  4. ETL Certified (US/Canada) to UL857
  5. National Electric Code (NEC) – Article 368 – Busways
  6. NEMA AB1, Molded Case Circuit Breakers and Molded Case Switches
  7. NEMA KS-1, Enclosed and Miscellaneous Distribution Equipment Switches (600VAC).
  8. NFPA 70 – National Fire Protection Agency

**1.03 SYSTEM DESCRIPTION**

A. Electrical Requirements

STARLINE Track Busway

Manufactured by:  
 Universal Electric Corp.  
 168 Georgetown Rd.  
 Canonsburg, PA 15317  
 (724) 597-7800

Voltage: 600V AC and DC

Frequency: 50/60 Hz

Ampacity: 250A

Neutral Ampacity: 250A or 500A

Conductors: 3 Phase conductors, 1 Neutral Conductor  
 Solid Copper, Tin Plated

Grounding: Aluminum Casing

System Designation:

System	Amperage	Neutral	Iso Ground
B250T5	250	250	No
B250T5G	250	250	Yes
B250T5N	250	500	No
B250T5NG	250	500	Yes

B. Environmental

Indoor, Low Impedance System

Ambient Operating Temperature:  
 40°C / 104°F (consult factory for de-ratings above 40°C)

**1.04 SUBMITTALS**

- A. Indicate construction details, including dimensions, weights, clearances, major component layout, power details. Include circuit breaker, fused plug-in, and cable schedule (if applicable), including cable lengths and plug-in schedules.
- B. Include connection diagram for external wiring, and details of conduit and wiring connections and terminations.
- C. Indicate special receiving and handling procedures.
- D. Provide electrical characteristics and connection requirements for the system and accessories.

**1.05 WARRANTY**

A. The Track Busway manufacturer shall guarantee the entire system against defective material and workmanship for a period of one (1) year from date of shipment.

**1.06**     COMPONENTS

**A.**        **Frame and Enclosure:**

1.    Extruded Aluminum housing designed to act as a 100% ground. Housings to be 5, 10 or 15 ft standard length. This housing should be properly extruded with slots to receive rod mount hangers to hang from a ceiling. This housing should be open on the bottom to accept plug-in units anywhere along its length. This opening shall pass UL's hypothetical finger probe test.
2.    All conductors shall be made of copper and sized to handle 100% of its rating continuously with ambient temperatures below 40°C / 104°F. The conductors shall be electrically isolated from the housing.

**B.**        **Plug-in Units**

1.    Plug-in units shall be polarized to avoid incorrect installation.
2.    Plug-in units shall use [{circuit breakers} {fuses}] for branch circuit protection.
3.    Plug-in units shall have locking clips or bolt-on tabs to secure units to the busway.
  
4.    Plug-in units that include drop cords shall be manufactured with cord grips and receptacles as specified in the drawings.

**1.07**     INSTALLATION

**A.**        **Track Busway Sections** – The runs will consist of lengths as shown on the drawings.

**B.**        **Hanging of the Track Busway** – Using supplied 'Rod Mount Hangers' the busway will be hung from the ceiling using all thread. The installing contractor shall be responsible for the connections on the ceiling end. The supplied Rod Mount Hangers will connect the track busway to the all thread. The maximum spacing is 10 ft on center for the hangers. The height of the track busway shall be coordinated with the Architect.

**C.**        **Connecting Sections of Track Busway** – At a junction of Track Busway sections, the installer will install the top housing coupler; the bus connector is inserted, centered and seated in the slot of the Busway. The installation tool is inserted into jointed intersection and rotated 90 deg. Forcing stabs into u-shaped female conductors. Housing coupler is positioned over the bottom joint and tightened. A manufacturer supplied tool will assist in joining sections together.

**D.**        **End of Runs** – End caps will be provided to install at the ends of each run.

**E.**        **Closure Strip** – The closure strip can be cut and fitted to

cover the bottom opening of the Track Busway housing to prevent dust and debris from gathering in the Track Busway (if applicable).

Supply as manufactured by Universal Electric Corporation; 168 Georgetown Rd; Canonsburg, PA 15317; (800) 245-6378; (724) 597-7800; fax (724) 916-2221. No known equal.

**END OF SECTION**

# Section 16468 Track Busway System



**B400, B400N, B400G, B400NG**

**1.01 SUMMARY**

A. This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Track Busway). The system shall be designed primarily for overhead distribution of electrical power. Supporting designated work areas and equipment. Once installed the Busway will provide a simple, versatile, fast and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

**1.02 STANDARDS AND CERTIFICATION**

- A. The Track Busway shall be designed and manufactured to the following standards:
1. Low Voltage Directive (73/23/EEC) including Amendment (93/68/EEC).
  2. Low Voltage Switchgear and Controlgear Assemblies, Part 1: Type Tested and partially type tested Assemblies, IEC 60439-1: 1999.
  3. Low Voltage Switchgear and Controlgear Assemblies, Part 2: Particular Requirements for Busbar Trunking systems (Busways), IEC 60439-2: 2000.
  4. Underwriters Laboratories Standard, UL 857 – The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelfth edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.
  5. ETL Classified (US/Canada) to UL857
  6. National Electric Code (NEC) – Article 368 – Busways
  7. NEMA AB1, Molded Case Circuit Breakers and Molded Case Switches
  8. NEMA KS-1, Enclosed and Miscellaneous Distribution Equipment Switches (600VAC).
  9. NFPA 70 – National Fire Protection Agency

**1.03 SYSTEM DESCRIPTION**

A. Electrical Requirements  
  
STARLINE Track Busway

Manufactured by:  
 Universal Electric Corp.  
 168 Georgetown Rd.  
 Canonsburg, PA 15317  
 (724) 597-7800

Voltage: 600V (B400N-480V)

Frequency: 60 Hz

Ampacity: 400A

Neutral Ampacity: 400A or 800A

Conductors: Qty 4 (Phases A, B, C and Neutral)

Grounding: Aluminum Casing

System Designation:

System	Amperage	Neutral	Iso Ground
B400	400	400	No
B400N	400	800	No
B400G	400	400	Yes
B400NG	400	800	Yes

B. Environmental

Indoor, Low Impedance System  
 Ambient Operating Temperature:  
 40°C / 104°F (consult factory for de-ratings above 40°C)

**1.04 SUBMITTALS**

- A. Submittals shall be in accordance with specified procedures. Submit shop drawing and product data for record purposes prior to shipment.
- B. Indicate construction details, including dimensions, weights, clearances, major component layout, power details. Include circuit breaker, fused plug-in, and cable schedule (if applicable), including cable lengths and plug-in schedules.
- C. Include connection diagram for external wiring, and details of conduit and wiring connections and terminations.
- D. Indicate special receiving and handling procedures.
- E. Provide electrical characteristics and connection requirements for the system and accessories.

**1.05 WARRANTY**

A. The Track Busway manufacturer shall guarantee the entire system against defective material and workmanship for a period of one (1) year from date of shipment.



**1.06**     **COMPONENTS**

**A.**       **Frame and Enclosure:**

1.   Extruded Aluminum housing designed to act as a 100% ground. Housings to be 5 or 10 ft standard length. This housing should be properly extruded with slots to receive rod mount hangers to hang from a ceiling. This housing should be open on the bottom to accept plug-in units anywhere along its length. This opening shall pass UL's hypothetical finger probe test.
2.   All conductors shall be made of copper and sized to handle 100% of it's rating continuously with ambient temperatures below 40°C / 104°F. The conductors shall be electrically isolated from the housing.

**B.**       **Plug-in Units**

1.   Plug-in units shall be polarized to avoid incorrect installation.
2.   Plug-in units shall use {{circuit breakers} {fuses}} for branch circuit protection.
3.   Plug-in units shall have locking clips or bolt-on tabs to secure units to the busway.
4.   Plug-in units that include drop cords shall be manufactured with cord grips and receptacles as specified in the drawings.

**1.07**     **INSTALLATION**

**A.**       **Track Busway Sections –** The runs will consist of lengths as shown on the drawings.

**B.**       **Hanging of the Track Busway –** Using supplied 'Rod Mount Hangers' the busway will be hung from the ceiling using all thread. The installing contractor shall be responsible for the connections on the ceiling end. The supplied Rod Mount Hangers will connect the track busway to the all thread. The maximum spacing is 10 ft on center for the hangers. The height of the track busway shall be coordinated with the Architect.

**C.**       **Connecting Sections of Track Busway –** At a junction of Track Busway sections, the installer will install the top housing coupler; the bus connector is inserted, centered and seated in the slot of the Busway. The installation tool is inserted into jointed intersection and rotated 90 deg. Forcing stabs into u-shaped female conductors. Housing coupler is positioned over the bottom joint and tightened. A manufacturer supplied tool will assist in joining sections together.

**D.**       **End of Runs –** End caps will be provided to install at the ends of each run.

**E.**       **Closure Strip –** The closure strip can be cut and fitted to cover the bottom opening of the Track Busway housing to prevent dust and debris from gathering in the Track Busway (if applicable).

Supply as manufactured by Universal Electric Corporation; 168 Georgetown Rd; Canonsburg, PA 15317; (800) 245-6378; (724) 597-7800; fax (724) 916-2221. No known equal.

END OF SECTION

# Section 16468

## Track Busway System



**B800T5CG, B800T5GCC, B800T5CA, B800T5GCA**

**1.01 SUMMARY**

A. This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Track Busway). The system shall be designed primarily for overhead distribution of electrical power. Supporting designated work areas and equipment. Once installed the Busway will provide a simple, versatile, fast and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

**1.02 STANDARDS AND CERTIFICATION**

- A. The Track Busway shall be designed and manufactured to the following standards:
1. Underwriters Laboratories Standard, UL 857 – The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelfth edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.
  2. Low Voltage Switchgear and Controlgear Assemblies, Part 1: Type Tested and partially type tested Assemblies, IEC 60439-1: 1999.
  3. Low Voltage Switchgear and Controlgear Assemblies, Part 2: Particular Requirements for Busbar Trunking systems (Busways), IEC 60439-2: 2000.Low Voltage Directive (73/23/EEC) including Amendment (93/68/EEC).
  4. ETL Certified (US/Canada) to UL857
  5. National Electric Code (NEC) – Article 368 – Busways
  6. NEMA AB1, Molded Case Circuit Breakers and Molded Case Switches
  7. NEMA KS-1, Enclosed and Miscellaneous Distribution Equipment Switches (600VAC).
  8. NFPA 70 – National Fire Protection Agency

**1.03 SYSTEM DESCRIPTION**

A. **Electrical Requirements**

**STARLINE Track Busway**

**Manufactured by:**  
 Universal Electric Corp.  
 168 Georgetown Rd.  
 Canonsburg, PA 15317  
 (724) 597-7800

**Voltage: 600V AC and DC**

**Frequency: 50/60 Hz**

**Ampacity: 800A**

**Neutral Ampacity: 800A**

**Conductors: 3 Phase conductors, 1 Neutral Conductor**

**Copper: Solid Copper, Nickel Plated**

**Composite: Continuous nickel plated Copper contact surface within nickel plated aluminum busbar**

**Grounding: Aluminum Casing**

**System Designation:**

System	Amperage	Neutral	Iso Ground
B800T5CC	800	800	No
B800T5GCC	800	800	Yes
B800T5CA	800	800	No
B800T5GCA	800	800	Yes

- B. **Environmental**
- Indoor, Low Impedance System**
- Ambient Operating Temperature:**  
 40°C / 104°F (consult factory for de-ratings above 40°C)

**1.04 SUBMITTALS**

- A. Submittals shall be in accordance with specified procedures. Submit shop drawing and product data for record purposes prior to shipment.
- B. Indicate construction details, including dimensions, weights, clearances, major component layout, power details. Include circuit breaker, fused plug-in, and cable schedule (if applicable), including cable lengths and plug-in schedules.
- C. Include connection diagram for external wiring, and details of conduit and wiring connections and terminations.
- D. Indicate special receiving and handling procedures.
- E. Provide electrical characteristics and connection requirements for the system and accessories.

**1.05 WARRANTY**

- A. The Track Busway manufacturer shall guarantee the entire system against defective material and workmanship for a period of one (1) year from date of shipment.

# Section 16468

## Track Busway System



B800T5CG, B800T5GCC, B800T5CA, B800T5GCA

### 1.06 COMPONENTS

#### A. Frame and Enclosure:

1. Extruded Aluminum housing certified to serve as a 100% ground. Housings to be 5 or 10 ft standard length. This housing should be properly extruded with slots to receive rod mount hangers to hang from a ceiling. This housing should be open on the bottom to accept plug-in units anywhere along its length. This opening shall pass UL's hypothetical finger probe test.
2. All conductors shall be made of copper or composite copper/aluminum and sized to handle 100% of its rating continuously with ambient temperatures below 40°C / 104°F. The conductors shall be electrically isolated from the housing.

#### B. Plug-in Units

1. Plug-in units shall be polarized to avoid incorrect installation.
2. Plug-in units shall use [{circuit breakers} {fuses}] for branch circuit protection.
3. Plug-in units shall have locking clips or bolt-on tabs to secure units to the busway.
4. Plug-in units that include drop cords shall be manufactured with cord grips and receptacles as specified in the drawings.

### 1.07 INSTALLATION

- A. Track Busway Sections – The runs will consist of lengths as shown on the drawings.
- B. Hanging of the Track Busway – Using supplied 'Rod Mount Hangers' the busway will be hung from the ceiling using all thread. The installing contractor shall be responsible for the connections on the ceiling end. The supplied Rod Mount Hangers will connect the track busway to the all thread. The maximum spacing is 10 ft on center for the hangers. The height of the track busway shall be coordinated with the Architect.
- C. Connecting Sections of Track Busway – At a junction of Track Busway sections, the installer will install the top housing coupler; the bus connector is inserted, centered and seated in the slot of the Busway. The installation tool is inserted into jointed intersection and rotated 90 deg. Forcing stabs into u-shaped female conductors. Housing coupler is positioned over the bottom joint and tightened. A manufacturer supplied tool will assist in joining sections together.
- D. End of Runs – End caps will be provided to install at the ends of each run.
- E. Closure Strip – The closure strip can be cut and fitted to cover the bottom opening of the Track Busway housing to prevent dust and debris from gathering in the Track Busway (if applicable).

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END OF SECTION



# Section 16468 Track Busway System

## Busway Short-Circuit Ratings

### Busway Short Circuit Ratings

System	SCCR
<b>B40/B50/B60C</b>	<b>5,000</b>
<b>B60</b>	<b>10,000</b>
<b>B100C</b>	<b>10,000</b>
<b>B100A, N, G, NG</b>	<b>22,000</b>
<b>B225, G</b>	<b>22,000*</b>
<b>B250T5, N, G, NG</b>	<b>35,000</b>
<b>B400T5, N, G, NG</b>	<b>42,000*</b>
<b>B800CA</b>	<b>50,000*</b>
<b>B800CC</b>	<b>35,000*</b>

\*Short circuit rating can be increased when the busway is protected by factory specified overcurrent devices. Contact the factory for details.



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Universal Electric Corporation (UEC), the manufacturer of STARLINE, has been a leader in power distribution since 1924. The company's founders led the way for many new technologies in the power distribution equipment industry. Today, this family tradition of innovation continues to pave the way for safer and more reliable electrical power distribution systems. Other UEC products include STARLINE Plug-In Raceway and U-S Safety Trolley. Visit [www.StarlinePower.com](http://www.StarlinePower.com) for your Flexible Power Solutions.

For installation details, RS Means Electrical Estimating cost comparisons, and actual case histories of projects where savings with STARLINE have been documented, contact UEC's Customer Service Department at 1-800-245-6378 or +1 724-597-7800.



Most STARLINE systems and most standard components are UL, CE or ETL listed.

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