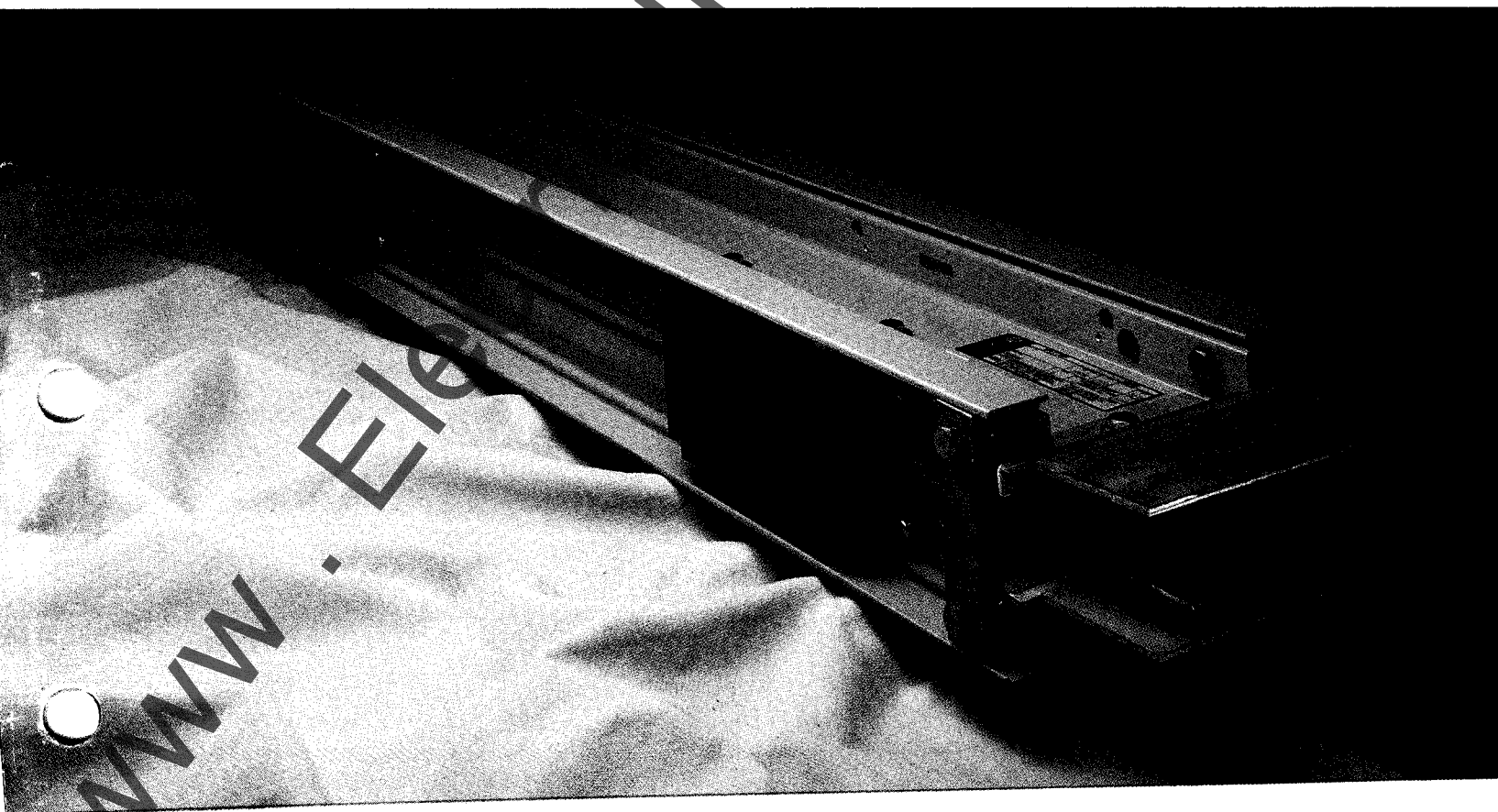
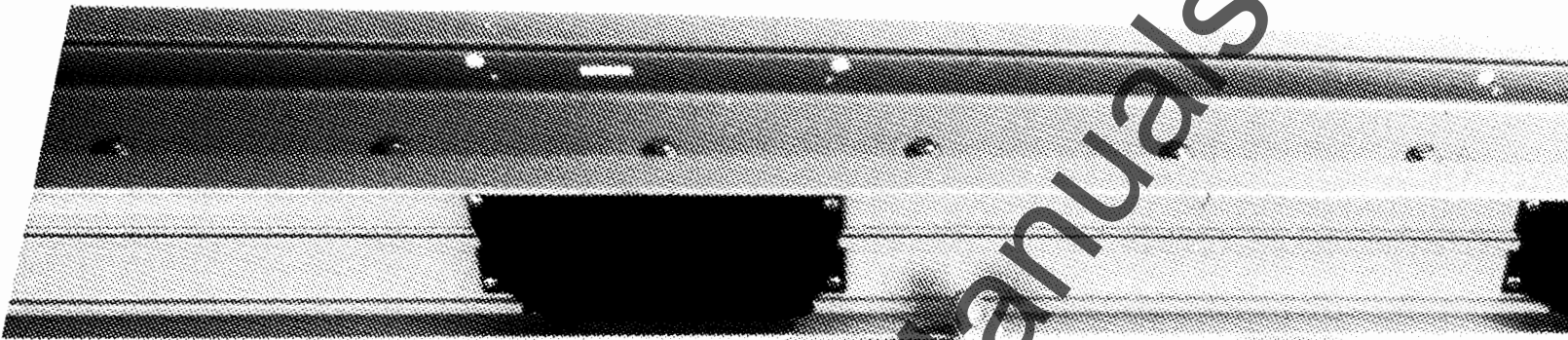




**Spectra Series™ Busway**





10 ft., 1200 amp aluminum Spectra busway





# GE Spectra Series™ Busway. All the muscle without the weight.

GE engineers have broken the weight barrier with Spectra Series™ busway. Its computer-designed, all-aluminum housing is up to 50% lighter than other busway – while providing the current-carrying capacity (up to 5,000 amps) and short-circuit protection you've always counted on from GE busway.

## Less weight means big labor savings.

Since Spectra Series busway is lighter than other busways, it's easier to handle and hang. You save on labor and installation time – for a rock-bottom total installed cost.

## Epoxy insulation protects your investment.

GE has applied its 25 years of experience with material coatings to bring advanced epoxy insulation technology to Spectra Series busway. Our special Class B 130°C epoxy insulation provides tougher, longer life (50 years expected) than the mylar, PVC, and glass tape used by other manufacturers. And, since it's precision-applied in our state-of-the-art automated facility, you're assured of consistent quality. The bottom line: performance that protects your busway investment – and your equipment.

A load of extras.

most efficient busway systems available.

Our exclusive adjustable joint connector allows quick  $\pm 1/2$ " busway length adjustment – right in the field. This new level of flexibility makes it easy to cope with unexpected building variations during installation.

Spectra Series busway also includes our specially designed belleville spring washer that retains over 90% of its original contact pressure. So you get a more secure, reliable and virtually maintenance-free joint.

Our new busway can often be hung with a unique GE hanger that employs just a single drop rod. Plug-assist and plug-position locators make installation a snap (even on larger plugs). And 50% housing ground is standard.

Tip the scale in your favor. Choose new Spectra Series busway from GE.

Quick Index	Pages
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■ Electrical Data	8-11
■ Physical Data	12-28
■ Plugs	29-30
■ Cataloging	31-34
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# Physical Data

## CABLE TAP BOXES\*

Spectra Series Tap boxes are used where a run of busway is fed by cable and conduit. Our corner post design permits removal of up to three side walls for cable access/entrance and for greater flexibility and installation ease. universal lug terminal plates will accept almost all NEMA and non-NEMA mechanical and compression lugs without field modification.  
(Max 1 7/8" wide).

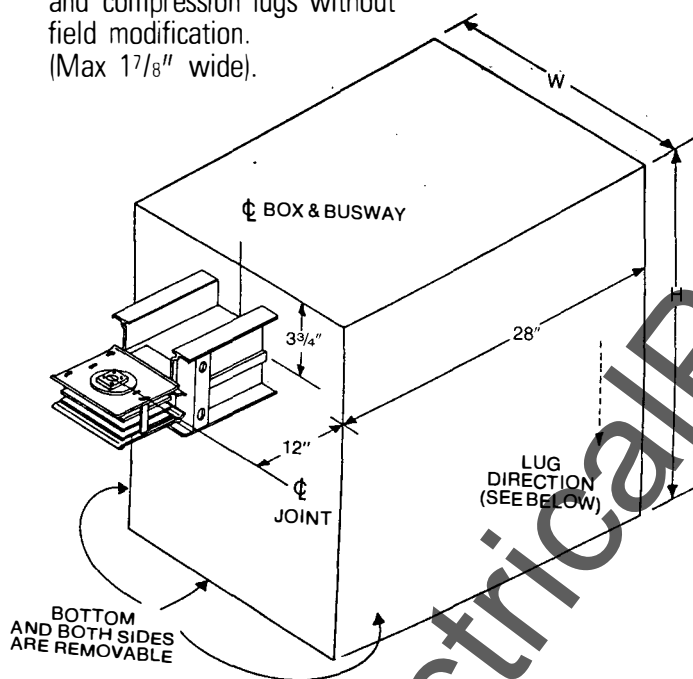


Fig. 18.1 End Tap Box: Feeder or Plug-In

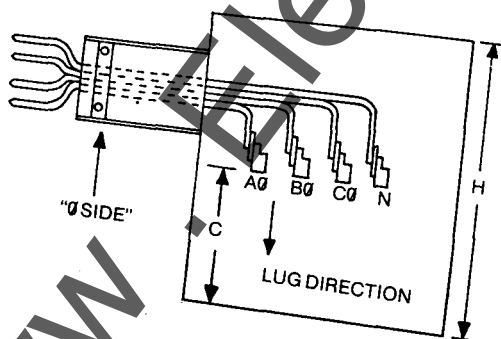


Fig. 18.2 Standard Box Down Position, Side View

\*IMPORTANT: Certain local/city code requirements can affect the dimensions, number of lugs furnished, lug position, etc., of fittings. In these situations, refer to company.

Table 18.1 Dimensions (inches)

No. of Stacks	Dimensions, Cable Bending Space and Lug Data						Number of #2-600 MCM Lugs Per Phase <sup>1</sup>
	Amp	Aluminum W	Aluminum H	Copper W	Copper H	"C" Cable Bend Space	
1	225	17	26	17	26	15	1
	400	17	26	17	26	15	2
	600	17	26	17	26	15	2
	800	17	26	17	26	15	3
	1000	17	26	17	26	15	3
	1200	20	29	20	29	18	4
	1350	20	29	20	29	18	4
	1600	20	29	20	29	18	5
	2000	26	29	26	29	18	6
	2500	—	—	26	29	18	8
2	2500	26	29	—	—	18	8
	3000	33	34	33	34	23	9
	4000	33	34	33	34	23	12
	5000	—	—	39	34	23	15

(1) Mechanical Type (CU-AL wire) Lugs Standard; Crimp Type Optional. One Ground Lug Standard through 3000-Amp CU. Two Ground Lugs Standard for 4000-Amp AL, 5000-Amp CU. Optional One Ground Lug per Phase Lug.

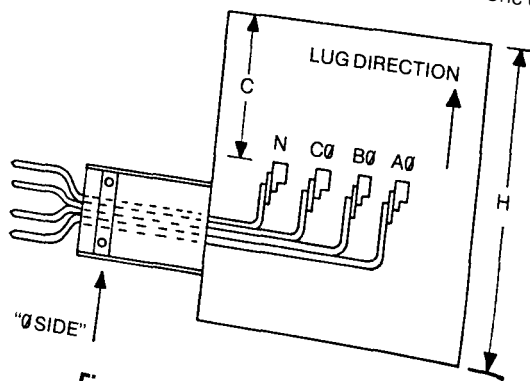


Fig. 18.3 Inverted Box Up Position

## ALTERNATE CABLE TAP BOXES

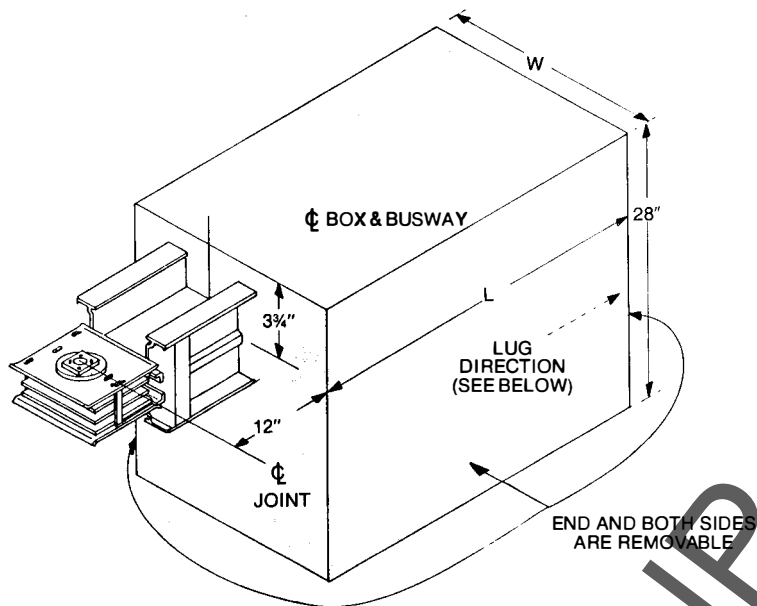


Fig. 19.1 Alternate End Tap Box: Feeder or Plug-In

Table 19.1 Dimensions (inches)

No. of Stacks	Dimensions, Cable Bending Space and Lug Data						Number of #2-600 MCM Lugs Per Pole <sup>1</sup>
	Amp	Aluminum W	Aluminum L	Copper W	Copper L	"C" Cable Bend Space	
1	225	17	26	17	26	15	1
	400	17	26	17	26	15	2
	600	17	26	17	26	15	2
	800	17	26	17	26	15	3
	1000	17	26	17	26	15	3
	1200	20	29	20	29	18	4
	1350	20	29	20	29	18	4
	1600	20	29	20	29	18	5
	2000	26	29	26	29	18	6
	2500	—	—	26	29	18	8
2	2500	26	29	—	—	18	8
	3000	33	34	33	34	23	9
	4000	33	34	33	34	23	12
	5000	—	—	39	34	23	15

(1) Mechanical Type (CU-AL wire) Lugs Standard; Crimp Type Optional. One Ground Lug Standard through 3000-Amp CU. Two Ground Lugs Standard for 4000-Amp AL, 5000-Amp. CU. Optional One Ground Lug per Phase Lug.

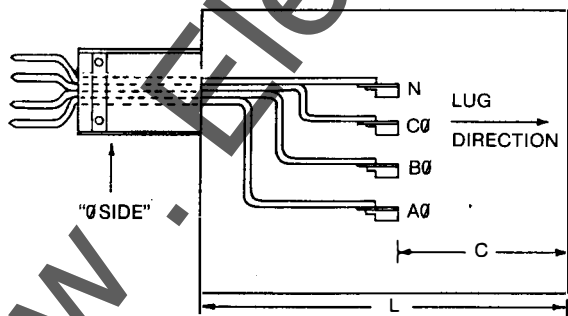


Fig. 19.2 Standard Box Down Position, Side View

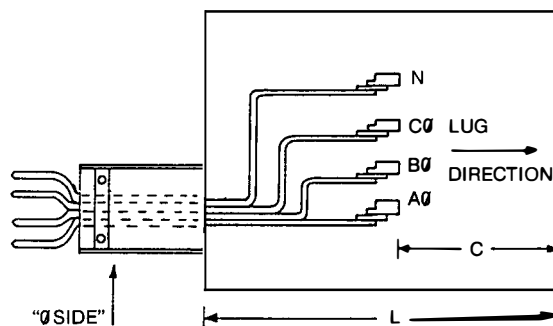


Fig. 19.3 Inverted Box Up Position, Side View

# Physical Data

## CENTER CABLE TAP BOXES

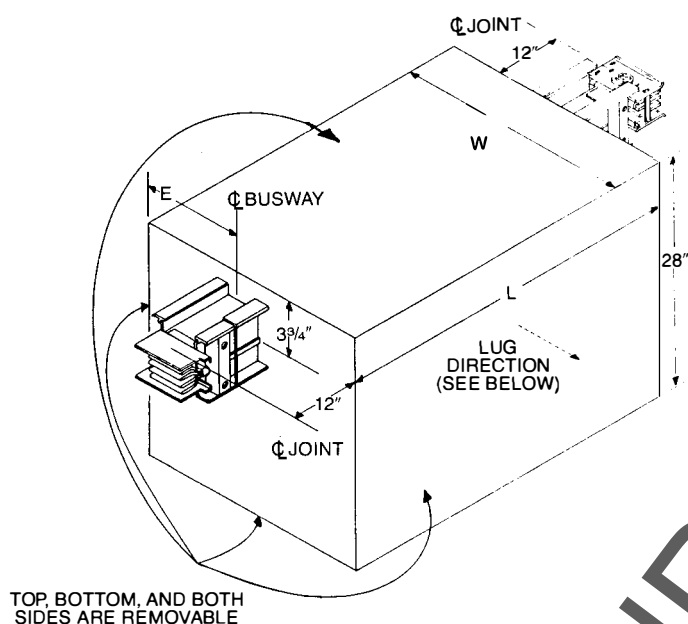


Fig. 20.1 Center Tap Box: Feeder or Plug-In

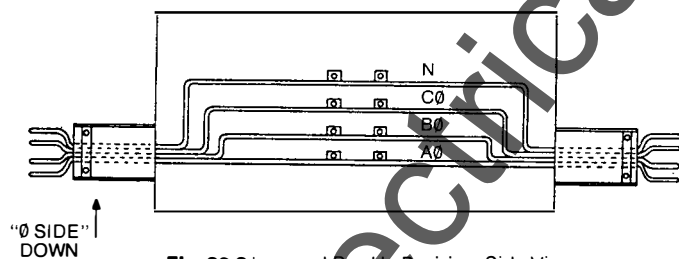


Fig. 20.2 Inverted Box Up Position, Side View

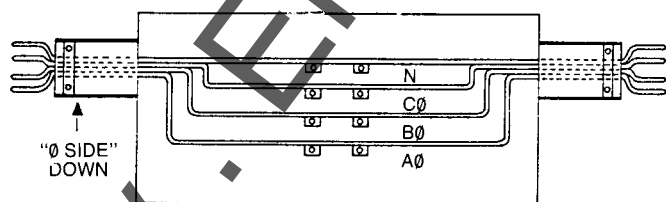


Fig. 20.3 Standard Box Down Position, Side View

Table 20.1 Dimensions (inches)

No. of Stacks	Dimensions, Cable Bending Space and Lug Data								Number of #2-600 MCM Lugs Per Pole <sup>1</sup>
	Amp	Aluminum			Copper			Cable Bend Space	
1	225	24	4 3/8	20	24	4 3/8	20	15	1
	400	24	4 3/8	20	24	4 3/8	20	15	2
	600	24	4 3/8	20	24	4 3/8	20	15	2
	800	24	4 3/8	20	24	4 3/8	20	15	3
	1000	24	4 3/8	20	24	4 3/8	20	15	3
	1200	30	6	28	30	6	28	18	4
	1350	30	6	28	30	6	28	18	4
	1600	30	6	28	30	6	28	18	5
	2000	36	9	28	36	9	28	18	6
	2500	—	—	—	36	9	32	18	8
2	2500	36	9	32	—	—	—	18	8
	3000	48	12 3/4	39	48	12 3/4	39	23	9
	4000	48	12 3/4	39	48	12 3/4	39	23	12
	5000	—	—	—	48	12 3/4	46	23	15
<b>2000 Amp (Max) Center Branch Tap Boxes</b>									
1	2500	—	—	—	36	9	28	18	6
2	2500	36	9	28	—	—	—	18	6
	3000	43	12 3/4	28	43	12 3/4	28	18	6
	4000	43	12 3/4	28	43	12 3/4	28	18	6
	5000	—	—	—	43	12 3/4	28	18	6

(1) Mechanical Type (CU-AL wire) Lugs Standard; Crimp Type Optional. One Ground Lug Standard. Two Ground Lugs Standard for 4000-Amp AL, 5000-Amp CU. Optional One Ground Lug per Phase Lug.

## TRANSFORMER TAPS

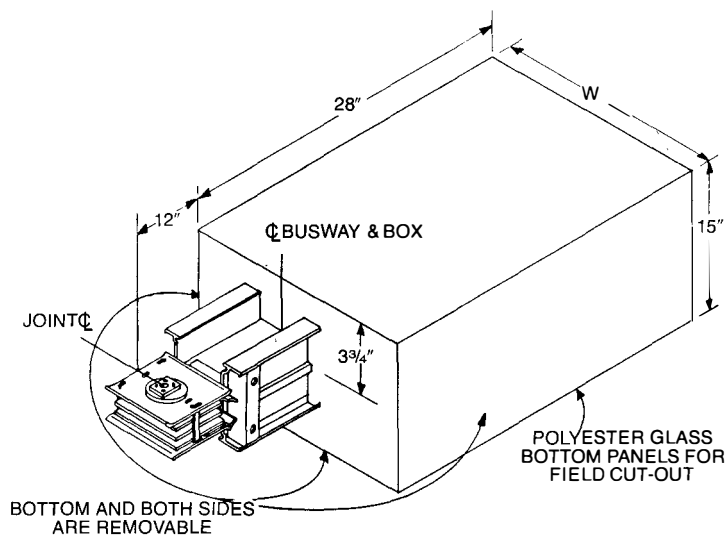


Fig. 21.1 Three-Phase End Tap

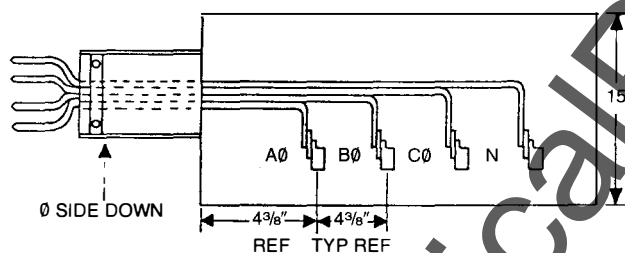


Fig. 21.2 Standard Lug Position

Table 21.1 Dimensions (inches) Three Phase End Tap

No. of Stacks	Dimensions and Lug Data			Number of #2-600 MCM Lugs Per Phase <sup>1</sup>
	Amp	Aluminum W	Copper W	
1	600	17	17	2
	800	17	17	2
	1000	17	17	2
	1200	20	20	3
	1350	20	20	3
	1600	20	20	3
	2000	26	26	4
	2500	—	26	5
2	2500	26	—	5
	3000	33	33	6
	4000	33	33	8
	5000	—	39	10

(1) Mechanical Type (CU-AL wire) Lugs Standard; Crimp Type Optional. One Ground Lug Standard. Two Ground Lugs Standard for 4000-Amp AL, 5000-Amp CU. Optional One Ground Lug per Phase Lug.

Table 21.2 Dimensions (inches) Single Phase Transformer Taps

No. of Stacks	Dimensions and Lug Data			Number of #2-600 MCM Lugs Per Phase <sup>1</sup>
	Amp	Aluminum W	Copper W	
1	1000	16	—	2
	1200	16	16	3
	1350	20	16	3
	1600	20	16	3
	2000	20	20	4
	2500	—	20	5
2	2500	24	—	5
	3000	32	24	6
	4000	32	32	8
	5000	—	32	10

(1) Mechanical Type (CU-AL wire) Lugs Standard; Crimp Type Optional. One Ground Lug Standard. Two Ground Lugs Standard for 4000-Amp AL, 5000-Amp CU. Optional One Ground Lug per Phase Lug.

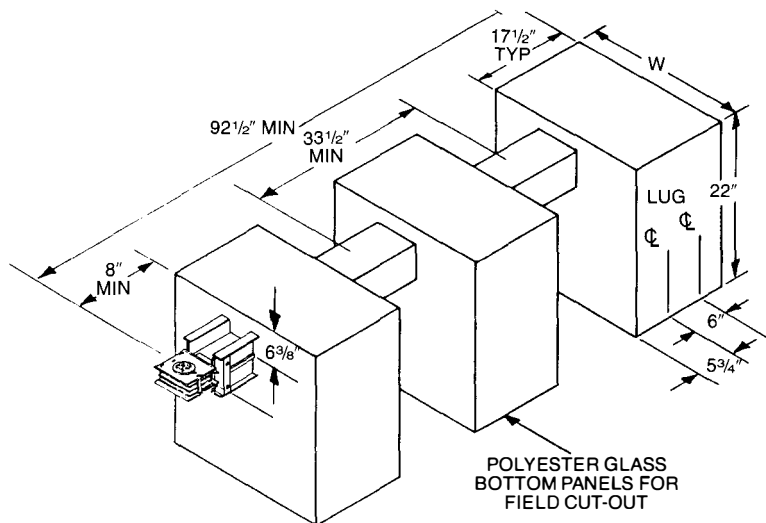


Fig. 21.3 Single-Phase Transformer Taps

# Physical Data

## FLANGED END STUB

Provides a universal stub for field connections. Available with or without lugs. Accepts all NEMA lugs up to 1 $\frac{7}{8}$ " wide. (See cable tap box data for lug type and quantity.)

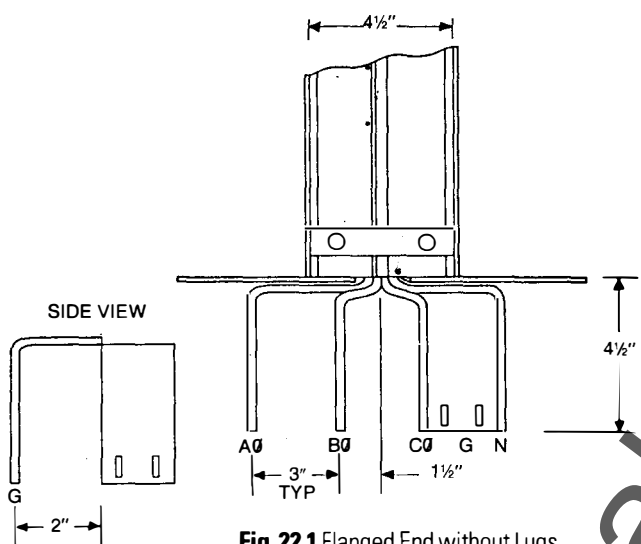


Fig. 22.1 Flanged End without Lugs

## BAR HOLE PATTERN (1 STACK AND 2 STACK ARE SAME.) (All holes are .438 x .562 rectangles.)

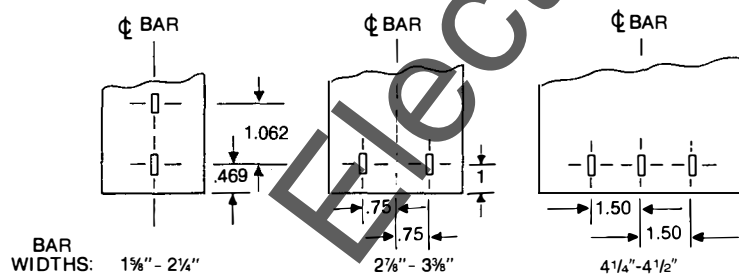
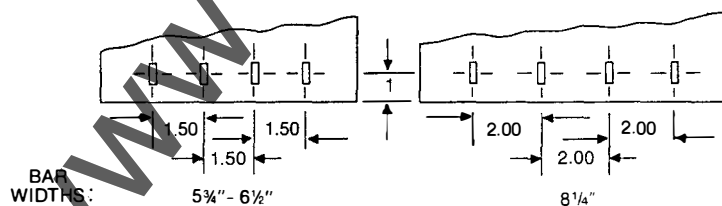


Fig. 22.2



## SWITCHBOARD/SWITCHGEAR STUB

Spectra Series offers full factory coordination to other GE equipment as shown. Other entrance combinations are available. Refer to company. Straight and Elbow Stubs are available with flange to  $\phi$  joint or elbow dimensions per Table 20.1.

REFER TO GE PUB. GET-6937  
FOR SWITCHGEAR DATA.

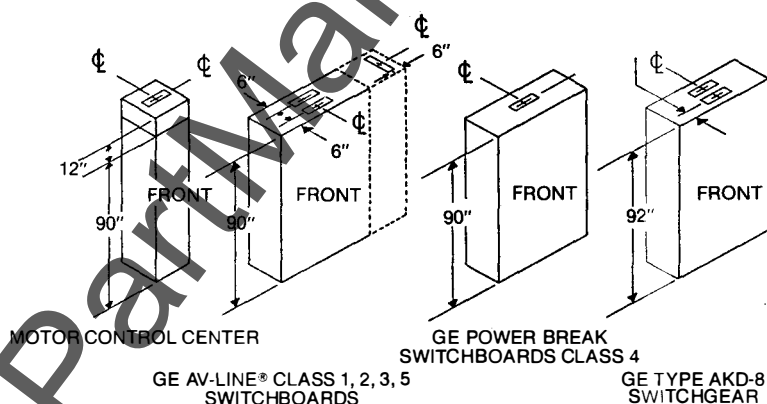


Fig. 22.3

Table 22.1 Stubs, Flanged Ends

AMPS	Min. Stub Dimensions (Inches)*		
	Straight Stubs	Edgewise Elbows	Flat Elbows
AL 225- 600	8	6	4
800-1200	8	6	5
1350	8	6	6
1600-2000	8	6	7
2500	8	6	10
3000	8	6	11
4000	8	6	13
CU 225-1000	8	6	4
1200-1600	8	6	5
2000	8	6	6
2500	8	6	7
3000	8	6	9
4000	8	6	11
5000	10	6	13

\*Add 1 inch to dimensions shown for GE Type AKD-8 Switchgear



# FLANGED END (WITHOUT LUGS)\* CUTOUT & DRILLING PATTERN

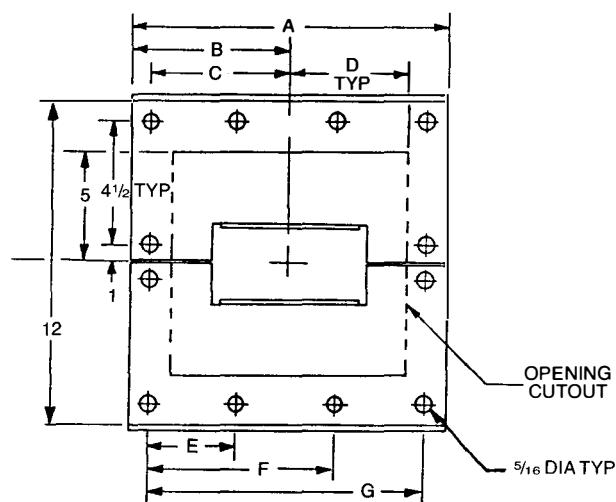


Fig. 23.1

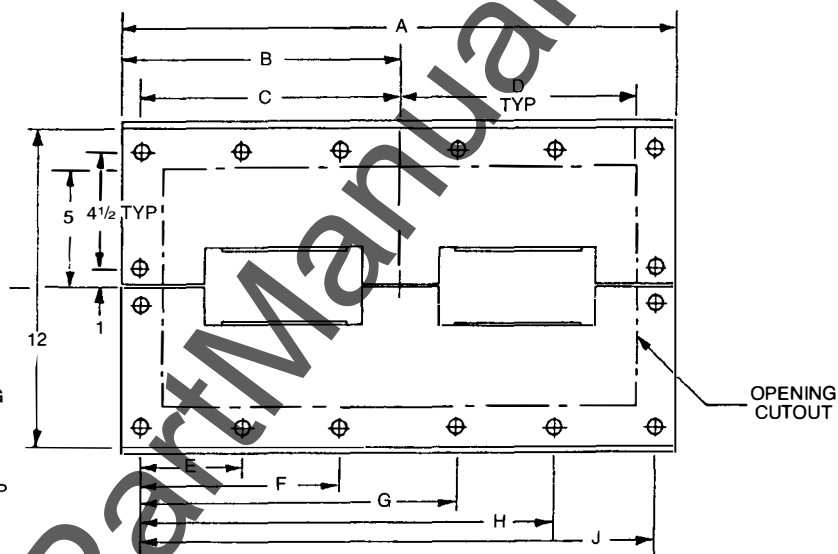


Fig. 23.2

Table 23.1 Dimensions (inches)

AMPS	Figure	A	B	C	D	E	F	G	H	J
225-1200 AL 225-1350 CU	23.1	11 1/2	5 3/4	5 1/4	4 3/4	5 1/4	—	10 1/2	—	—
1600-2000 AL 2000-2500 CU	23.1	15 1/4	7 5/8	7 1/8	6 5/8	4 3/4	9 1/2	14 1/4	—	—
2500 AL 3000 CU	23.2	19 3/4	9 7/8	9 3/8	8 7/8	4 11/16	9 3/8	14 1/16	—	18 3/4
3000-4000 AL 4000-5000 CU	23.2	27 1/4	13 5/8	13 1/8	12 5/8	5 1/4	10 1/2	15 3/4	21	26 1/4

\*Refer to Company for dimensions on Flanged Ends with Lugs.

## Physical Data

## POWER TAKEOFFS

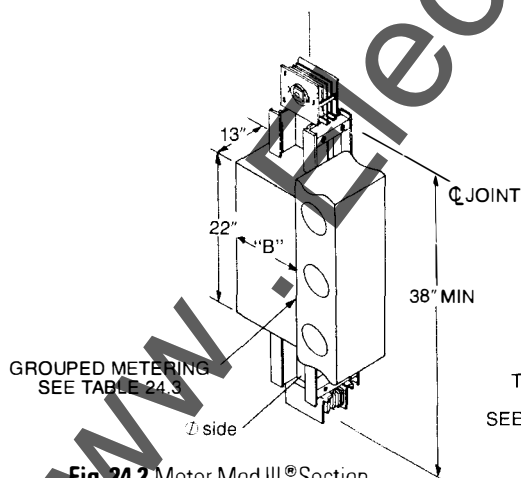
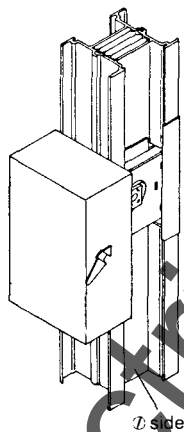
Spectra Series Flex-A-Tap™ joints accept bolted power takeoff devices up to 1600 amps for many applications.

The compact size and flexibility resulting from the modular design allow takeoffs to be mounted at any joint, whether feeder or plug-in. See Fig. 24.1

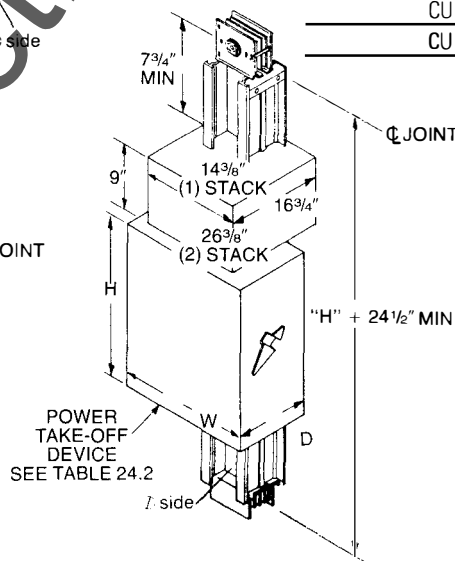
### Table 24.1

Device	Amp Rating
Fusible Switches	600-1600
Molded Case Circuit Breakers	1000-1200
Cable Boxes	1600

**Fig. 24.1** Flex-A-Tap™ PTO



**Fig. 24.2** Meter Mod III<sup>®</sup> Section



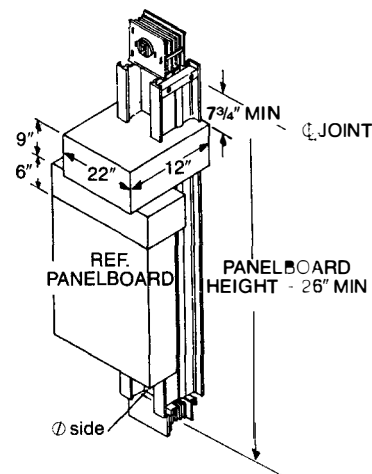
**Fig. 24.3** Flatwise PTO Section

### Table 24.2

Power Take-Off Device Dimensions				
RATING	TYPE	"H"	"W"	"D"
100A	QMR	17 <sup>3</sup> / <sub>4</sub>	9 <sup>3</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>4</sub>
200A	QMR	24 <sup>3</sup> / <sub>8</sub>	15 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>
400A	QMR	18	18 <sup>1</sup> / <sub>2</sub>	17 <sup>9</sup> / <sub>16</sub>
400A	QMW	18	18 <sup>1</sup> / <sub>2</sub>	17 <sup>9</sup> / <sub>16</sub>
600A	QMR	24	18 <sup>1</sup> / <sub>2</sub>	17 <sup>9</sup> / <sub>16</sub>
800A & 1200A	QMR	45 <sup>1</sup> / <sub>8</sub>	36 <sup>3</sup> / <sub>4</sub>	12 <sup>3</sup> / <sub>4</sub>
225A	FJ	17 <sup>3</sup> / <sub>4</sub>	9 <sup>3</sup> / <sub>4</sub>	7 <sup>3</sup> / <sub>4</sub>
400A	JJ	24	15 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>
600A	JK	24	15 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>
600-800A	KM	36	15 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>
600A	JH, JL, J4V, JL4V	36	15 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>
1200A	K4V, KL4V, KM, KH, KL	45 <sup>1</sup> / <sub>2</sub>	15 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>
WITH OR WITHOUT GROUND FAULT				
400A	TB4 TRI-BREAK	30	15 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>
600A	TB6 TRI-BREAK	44 <sup>3</sup> / <sub>4</sub>	15 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>
800A	TB8 TRI-BREAK	49 <sup>3</sup> / <sub>4</sub>	15 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>
150A	TE & TB1	17 <sup>3</sup> / <sub>4</sub>	9 <sup>3</sup> / <sub>4</sub>	6 <sup>3</sup> / <sub>4</sub>

**Table 24.3** Meter Mod III® Widths

<b>AMPS</b>	<b>"B" Dimension</b>
AL 225-1600 CU 225-2000	16¾
AL 2000 CU 2500	20
AL 2500 CU 3000	25
AL 3000 CU 4000	28¾
CU 5000	32



**Fig.24.4** Panelboard Section

## END BOXES

End Boxes are used to terminate busway runs. No joint is required, and the end surface of the box is even with the joint centerline. See Table 26.1 for "A" dimension. Box is secured via joint cap bolts.

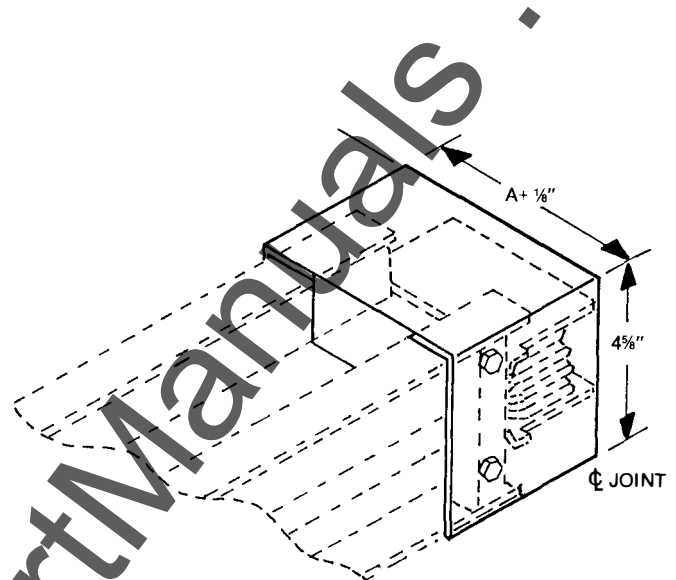


Fig. 25.1

## WALL, CEILING AND FLOOR FLANGES

Flanges are used to close wall openings when busway runs pass through walls, ceilings and floors. See Table 26.1 for "A" dimensions. Hole pattern aligns with spring riser brackets. See Fig. 28.1.

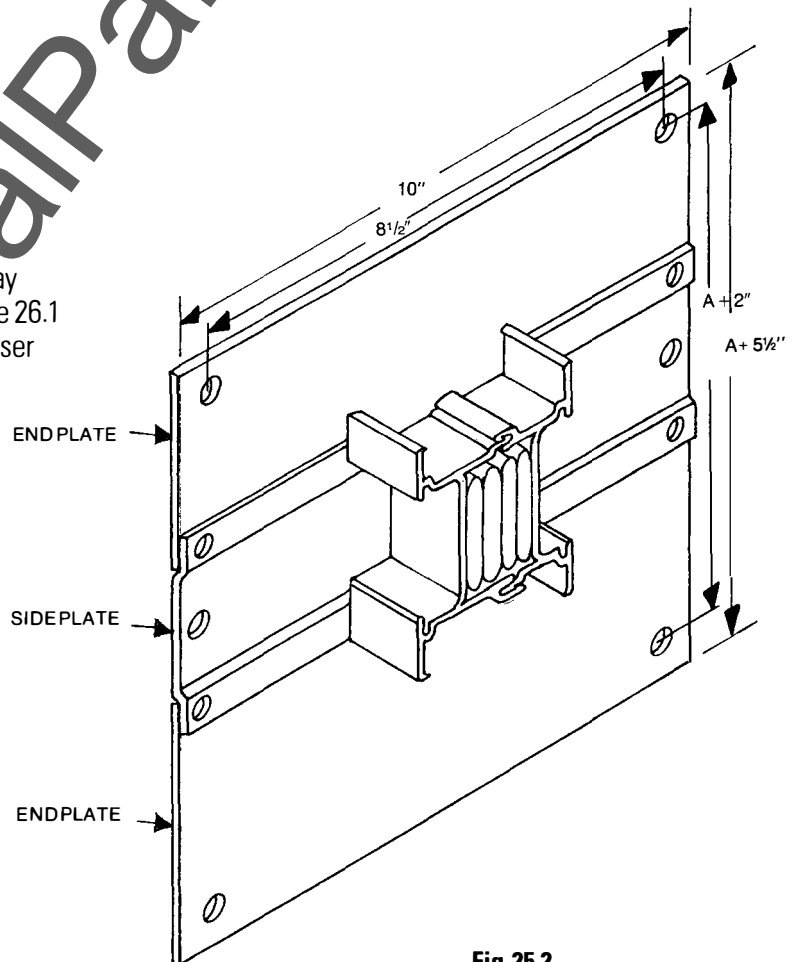


Fig. 25.2

# Physical Data

## NO FUSE REDUCERS

**Table 26.1** "A" Dimensions (inches)

No. of Stacks	Amp	Aluminum	Copper
1	225	4 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>
	400	4 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>
	600	4 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>
	800	5 <sup>5</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>8</sub>
	1000	6 <sup>1</sup> / <sub>8</sub>	5
	1200	7	5 <sup>5</sup> / <sub>8</sub>
	1350	8 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>8</sub>
	1600	9 <sup>1</sup> / <sub>4</sub>	7
	2000	11	8 <sup>1</sup> / <sub>2</sub>
	2500	—	11
2	2500	15 <sup>1</sup> / <sub>2</sub>	—
	3000	18	15
	4000	23	18
	5000	—	23

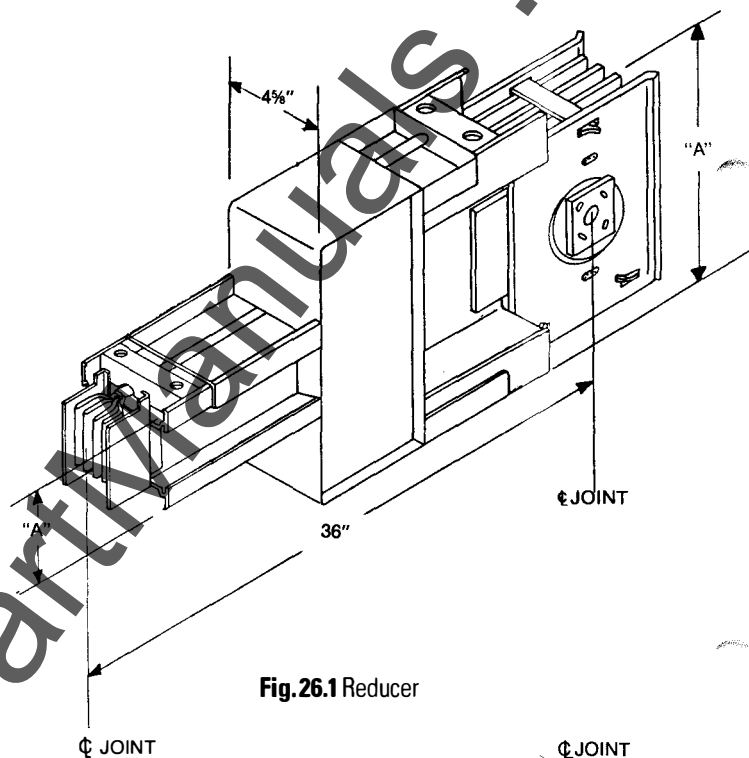
Note: Per NEC 364-11, a no-fuse reduced busway shall not exceed 50 feet in length and have a current rating at least <sup>1</sup>/<sub>3</sub> the rating of the upstream overcurrent protective device.

## EXPANSION LENGTHS – THERMAL EXPANSION $\pm 1"$ – BUILDING EXPANSION $\pm 2"$

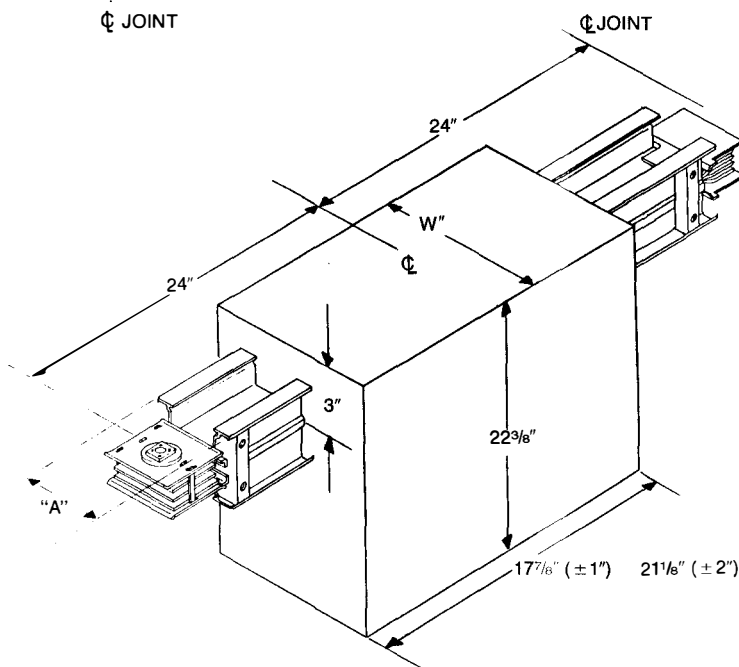
Consideration should be given to the effects of thermal expansion. The  $\pm 1"$  expansion fittings may be necessary for long straight runs of 150 feet or more, particularly if the busway is not free to move at the ends of the run. The use of the  $\pm 2"$  expansion fitting is recommended when the busway run crosses a building expansion joint.

**Table 26.2** "W" Dimensions (inches)

No. of Stacks	Amp	Aluminum	Copper
1	225	16	16
	400	16	16
	600	16	16
	800	16	16
	1000	17 <sup>5</sup> / <sub>8</sub>	16
	1200	17 <sup>5</sup> / <sub>8</sub>	16
	1350	21 <sup>5</sup> / <sub>8</sub>	17 <sup>5</sup> / <sub>8</sub>
	1600	21 <sup>5</sup> / <sub>8</sub>	17 <sup>5</sup> / <sub>8</sub>
	2000	21 <sup>5</sup> / <sub>8</sub>	21 <sup>5</sup> / <sub>8</sub>
	2500	—	21 <sup>5</sup> / <sub>8</sub>
2	2500	29	—
	3000	29	29
	4000	33 <sup>5</sup> / <sub>8</sub>	29
	5000	—	33 <sup>5</sup> / <sub>8</sub>



**Fig. 26.1** Reducer



**Fig. 26.2** Expansion Length

## TRANSPOSITION LENGTHS

A transposition length is available in any dimension from three feet through 10 feet. Standard lengths are 36" and 42" "A" dimension varies with ampere rating. See Table 26.1 for "A" dimension.

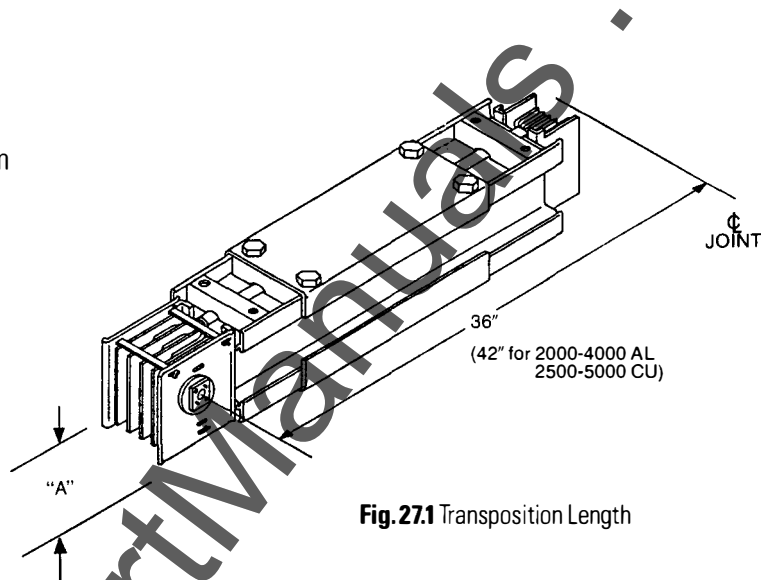
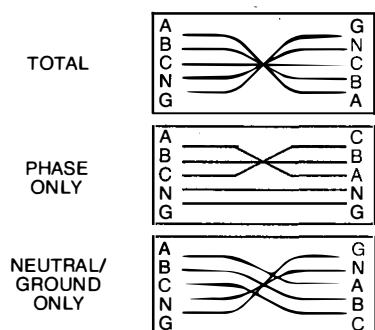


Fig. 27.1 Transposition Length

## BUSWAY FIELD CHECK PIECES/REPLACEMENT PIECES

A Field Check Piece is a length of busway inserted into a run after the major portion of that run has been installed. This permits the release of straight lengths and portions of the run with known dimensions long before final dimensions are set. Valuable time is saved by installing busway early in a construction project and using Field Check Pieces to complete the job. The  $\pm 1/2$ -inch joint will provide even further flexibility.

To determine the length of piece(s) to be inserted, measure the opening length "L" as shown from the end of each housing and subtract 8 1/4 inches. This equals the busway length "X" from center line of joint to joint and is the way to measure all Spectra Series busway pieces.

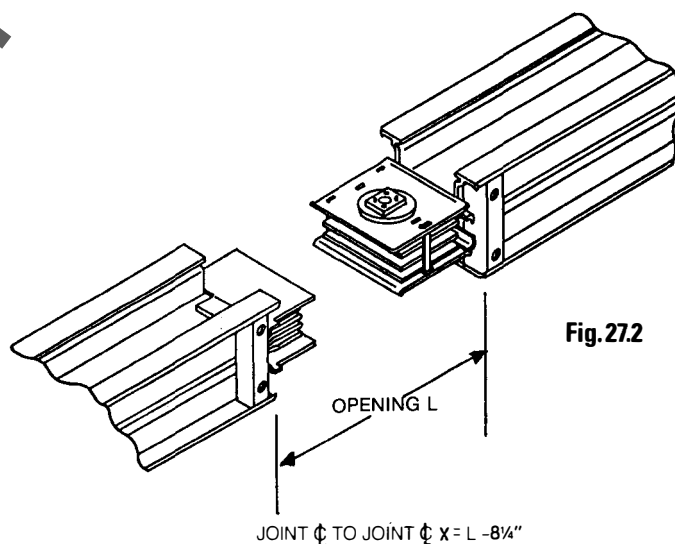


Fig. 27.2

## JOINTS WITH $\pm 1/2$ -INCH ADJUSTABILITY

Every Spectra Series busway is supplied with the  $\pm 1/2$ -inch adjustable joint as standard. The modular joint pack is preassembled to one end of each piece of busway and shipped in the "nominal" position. The joint caps have four housing mounting holes (eight on 5000 amp Copper) that contain twistouts permitting expansion or contraction of the joint up to 1/2 inch in either direction.

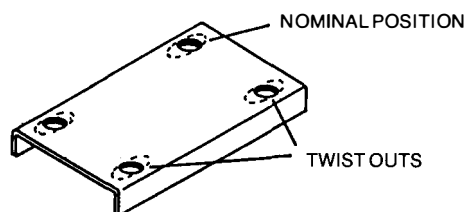


Fig. 27.3 Joint Cap

# Physical Data

## HANGERS

### VERTICAL MOUNTING

Spring hangers are furnished to support the busway at each floor. When the floor-to-floor span is over 16 feet, support for the spring hanger should be provided. The quantity of springs supplied is based on busway weight. Simple adjustment procedures are included with installation instructions. Mounting holes align with floor flanges.

Cat. No. (SBR "X") where "X" = Quantity of springs 1, 2 or 3

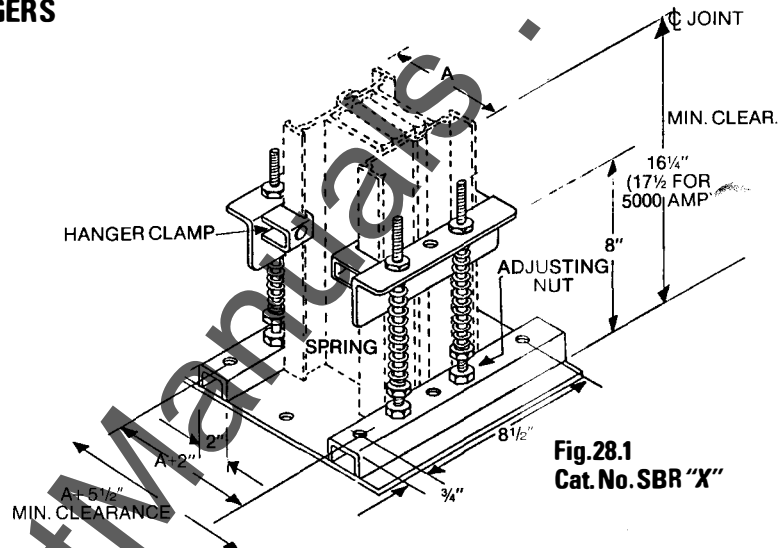


Fig. 28.1  
Cat. No. SBR "X"

### HORIZONTAL MOUNTING

Furnished one for every 10 feet. Designed for 1/2-inch diameter drop rods.

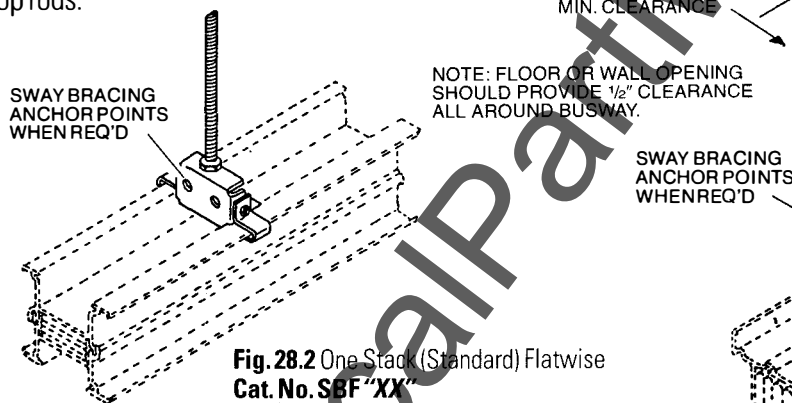


Fig. 28.2 One Stack (Standard) Flatwise  
Cat. No. SBF "XX"

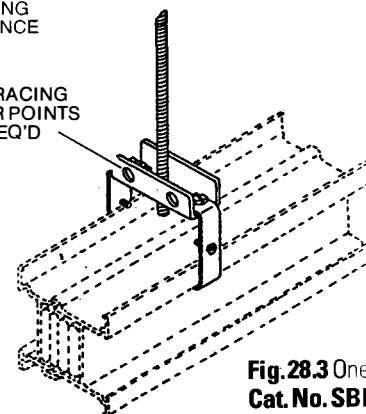


Fig. 28.3 One Stack Edgewise  
Cat. No. SBE45

#### WHERE "XX" = BAR WIDTH

16 = 1 5/8"	33 = 3 3/8"	57 = 5 7/8"
22 = 2 1/4"	42 = 4 1/4"	65 = 6 1/2"
28 = 2 7/8"	45 = 4 1/2"	82 = 8 1/4"

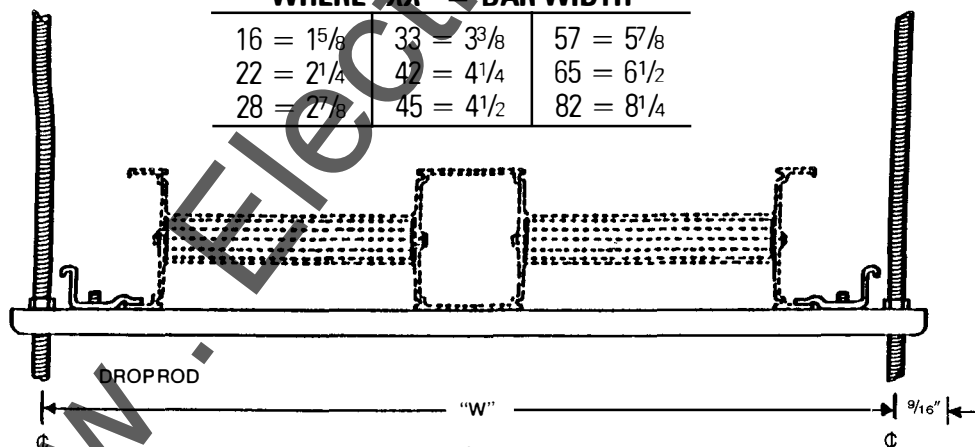


Fig. 28.4. One or two Stack Flatwise Trapeze

CAT. NO.	STACKS	BAR WIDTHS	"W" (inches)
SBT E	(1)	1 5/8"-4 1/2"	10 1/4
SBT F	(1)	5 3/4"-8 1/4"	14
SBT G	(2)	4 1/4"-4 1/2"	18 1/2
SBT H	(2)	5 3/4"-6 1/2"	22 1/2
SBT J	(2)	8 1/4"	26

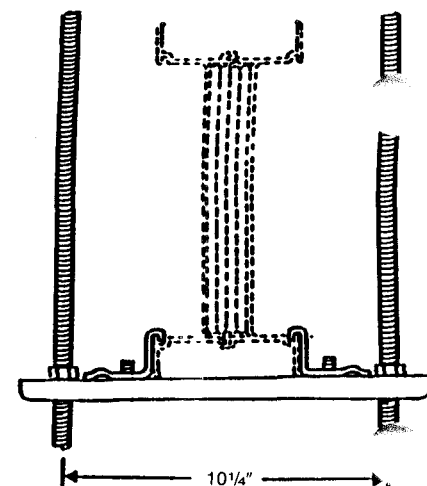


Fig. 28.5 Edgewise Trapeze  
Cat. No. SBT

Switch-operated fusible plugs are equipped with type QMR quick-make, quick-break mechanisms, in ratings from 30 to 600 amps, 240 and 600 volts. Positive pressure NEC fuse clips are furnished standard. They are also available with class "J" or "R" fuse clips.

Circuit breaker plugs are available with molded case circuit breakers, in ratings from 15 to 800 amps, 240 to 600 volts.

Both fusible and circuit breaker Spectra Series busway plugs have:

- Plug assist mechanism standard on plugs rated above 100 amps.
- A cover interlock that prevents opening the cover when the switching device is in the "ON" position. The interlock can be defeated by operating the release mechanism through the door. However, by bending down a tab inside the cover, the interlock becomes non-defeatable.
- A device interlock that prevents the switching device from being accidentally operated when the cover is open.
- A provision to padlock the plug in the "OFF" position when the cover is closed (suitable for single padlock with a 5/16-inch shank).
- A handle that can be mounted either on the side or end of the plug. In addition, the handle may be mounted in one of two positions at each location.
- A handle that can be operated by a hook stick.
- A safety interlock that prevents insertion or removal of the plug when in the "ON" position.
- Positive locator pin for exact, safe positioning.

**Table 29.1** Recommended Type QMR and QMW<sup>®</sup> Fusible Switch Combinations

Fusible Switch		Fuse		Short-Circuit Rating In Amperes RMS Symmetrical
Type	Amp-eres	U/L Class	Description	
QMR	30-600	H R J	One-Time Current Limiting Rejection Current Limiting Rejection	10,000 200,000 200,000

The interrupting rating of the fuse must equal or exceed the short-circuit rating of the switch. If it is lower, then the interrupting rating of the switch is the same as for the fuse. Both QMR and QMW switches have no short-circuit ratings if renewable fuses are used.

① For type QMW, refer to Company.

**Table 29.2** Fusible Plug Horsepower Ratings<sup>①</sup>

Device Rating In Amperes	3-Phase Horsepower Ratings					
	With NEC Fuses			With Time Delay Fuses		
	240 Volts	480 Volts	600 Volts	240 Volts	480 Volts	600 Volts
30	3	5	7 1/2	10	20	20
60	7 1/2	15	15	20	40	50
100	15	25	30	30	60	75
200	25	50	60	60	125	150
400	50	100	125	125	250	350
600	75	150	200	200	400	500

① Ratings are based on NEC Article 430. Horsepower ratings for plugs with NEC fuses are based on one-time fuses having minimum time delay. When time delay fuses are used, the horsepower ratings are maximum for the plug.

**Table 29.3** Circuit Breaker Plug Interrupting Ratings<sup>①</sup>

Circuit Breaker		Trip Range Rating in Amperes	Interrupting Ratings in Thousand Amperes RMS Symmetrical		
Frame	Number of Poles		120-V or 240-V	480-V	600-V
Standard Frames					
TEB	1, 2, 3	15-100	10	—	—
TED	1	15-50	14	—	—
TED4	2, 3	15-100	18	14	—
TED6	3	15-150 <sup>②</sup>	18	14	14
TFJ <sup>③</sup> TFK <sup>③</sup>	2, 3	70-225	25	22	22
TJJ, TJK4	2, 3	125-400	42	30	22
TJK6	2, 3	250-600	42	30	22
TKM8	2, 3	300-800	42	30	22
TJ4V	3	150-600	42	30	22
TK4V	3	400-800	42	30	22
Hi-Break <sup>®</sup> Frames					
THED <sup>③</sup>	2-3	15-150 <sup>②</sup>	65	25	18
THFK <sup>③</sup>	2-3	70-225	65	25	22
THJK4	2-3	125-400	65	35	25
THKM8	2-3	300-800	65	35	25
THJ4V	3	150-600	65	35	25
TJH6S	3	60-600	65	35	25
TKL4V	3	400-800	100	65	42
TKH8S	3	300-800	65	50	25
High-Interrupting 65KAIC Frames					
TEL	3	15-150	100	65	25
TFL	3	70-225	100	65	25
TLB4	3	225-400	85	65	—
Current Limiting Frames					
THLC1	3	15-150	200	150	—
THLC2	3	125-225	200	150	—
THLC4	3	250-400	200	150	—
Tri-Break <sup>®</sup> Frames					
TB1	2-3	15-100	200	200	200
TB4	3	125-400	200	200	200
TB6	3	300-600	200	200	200
TB8	3	600-800	200	200	200

① These are maximum ratings regardless of the busway rating.

② 110-150-amp trip ratings are available for 3-pole only.

③ 2-pole rated 480 Vac Max.

**Table 30.1** Molded Case Circuit Breakers

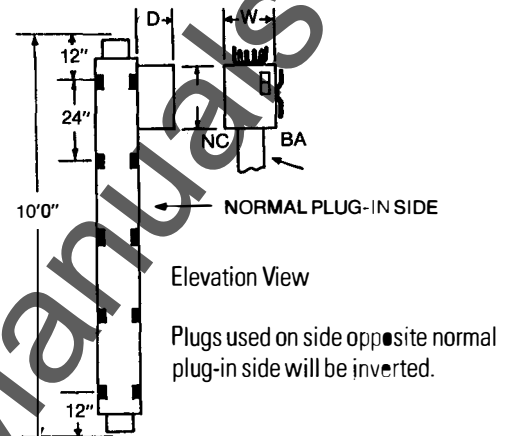
Type	Frame	Trip Range	Voltage Rating	Dimension (Inches)			Fig. No.
				W	L	D	
Standard and Hi-Break®	TED, THED	15-100	240	9 <sup>5</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>8</sub>	6 <sup>5</sup> / <sub>8</sub>	26.2
	TEL, TFK, THFK	15-150	600		16 <sup>3</sup> / <sub>4</sub>		
	TFL	15-150	480	9 <sup>5</sup> / <sub>8</sub>	16 <sup>3</sup> / <sub>4</sub>	7 <sup>5</sup> / <sub>8</sub>	26.2
	TJJ, TJK4, TJK6	70-225	600				
Micro-VersaTrip® Programmer	TKM8	125-225	480	15 <sup>1</sup> / <sub>2</sub>	22 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>	26.3
	TJ4V, THJ4V, TJL4V	125-600	600	15 <sup>1</sup> / <sub>2</sub>	34 <sup>3</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>4</sub>	26.3
	TK4V, THK4V, TKL4V	125-600	600	15 <sup>1</sup> / <sub>2</sub>	44 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>	26.3
	TJH, TJL	125-600	600	15 <sup>1</sup> / <sub>2</sub>	34 <sup>3</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>4</sub>	26.3
	TKH, TKL	125-600	600	15 <sup>1</sup> / <sub>2</sub>	44 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>	26.3
	THLC1	15-150	480	9 <sup>5</sup> / <sub>8</sub>	22 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>	26.2
	THLC2	125-225	480	5 <sup>1</sup> / <sub>2</sub>	28 <sup>3</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>4</sub>	26.3
	THLC4, TLB4	250-400	480	15 <sup>1</sup> / <sub>2</sub>	43 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>	26.3
Fused Current Limiting	TB1	15-100	240	9 <sup>5</sup> / <sub>8</sub>	16 <sup>3</sup> / <sub>4</sub>	6 <sup>5</sup> / <sub>8</sub>	26.2
	TB4	125-400	600	15 <sup>1</sup> / <sub>2</sub>	43 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>	26.3
	TB6	300-600	600	15 <sup>1</sup> / <sub>2</sub>	43 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>	26.3
	TB8	600-800	600	15 <sup>1</sup> / <sub>2</sub>	43 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>	26.3

(1) TLC 480 Volts

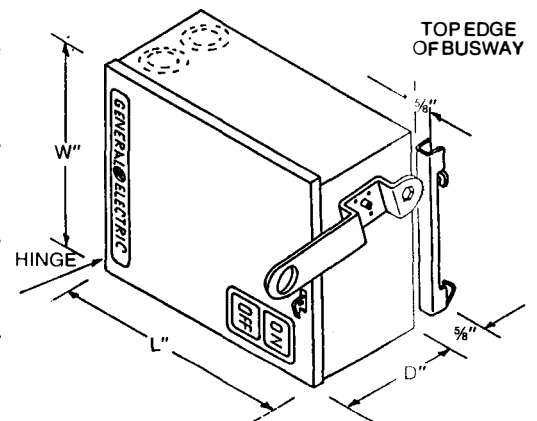
**Table 30.2** Fusible Switches

Type	Amps	Weight (lbs.)	Voltage Rating	Dimensions (Inches)				Fig. No.
				W	Length		D	
					Standard Gutter	Extended Gutter		
QMR	30	24	240 and 600	9 <sup>5</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>8</sub>	16 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>4</sub>	26.2
	60	25				NA		
	100	28		15 <sup>3</sup> / <sub>4</sub>	16 <sup>3</sup> / <sub>4</sub>	22 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>	26.3
	200	46				NA		
	400	135		18 <sup>1</sup> / <sub>2</sub>	16 <sup>3</sup> / <sub>4</sub>	NA	17 <sup>1</sup> / <sub>4</sub>	
	600	160			22 <sup>1</sup> / <sub>2</sub>			

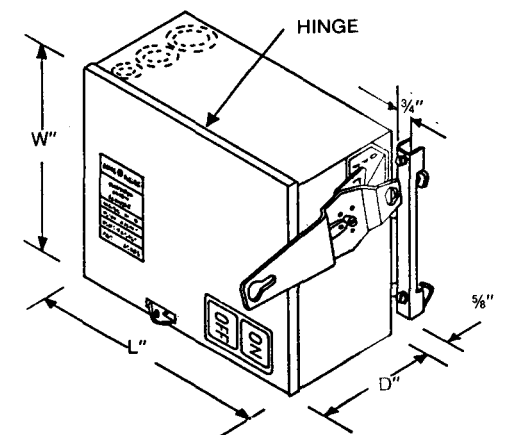
NA = Not Available



**Fig. 30.1** Typical Vertical Application (Riser Bus)



**Fig. 30.2** Door hinges at left end. For overall dimension, add 1 1/2 inches to "L" dimension.



**Fig. 30.3** Door hinges at top. For overall dimension, add 1 1/2 inches to "L" dimension.





## BUSWAY PLUGS

### FUSIBLE BUS PLUG CATALOG NUMBERING SYSTEM

Table 31.1

	Code	Description	SB	3	6	2	R	G	R	P	I
<b>Type</b>	SB	Spectra Bus									
	AC	Aarmor Clad									
	FVK	FVK Bus									
<b>Service</b>	3	3Ø 3W									
	4	3Ø 4W									
<b>Volts</b>	2	240 V									
	6	600 V									
<b>Amps</b>	1	30									
	2	60									
	3	100									
	4	200									
	5	400									
	6	600									
<b>Switch</b>	R	QMR									
	W	QMW									
<b>Ground</b>	G	Ground Stab									
	Omit	None									
<b>Fuse Clips</b>	R	Class R									
	J	Class J									
	Omit	Class H									
<b>Plug Assist</b>	P	Plug Assist (Std. on 200-600)									
	Omit	None									
<b>Drip Resistant</b>	I	Cover & Base Gasketing									
	Omit	None									

# Cataloging

## BUSWAY PLUGS

A plug assist is furnished as standard on all plugs greater than 100 amps listed on this page. If plug assist is required on other plugs, add Suffix "P" to Catalog Number.

When a grounding stab to engage internal or integrated housing ground bus is required, add Suffix "G" to Catalog Number. Mating stab is standard on Spectra Series plug-in busway.

All fusible plugs are furnished with Type "NEC" fuse clips as standard. Optional fuse clips are available.

**Table 32.1** Switch-operated Fusible Plug with OMR Interrupter

Volts ac	Amps	30-3W Catalog Number	30-4W Catalog Number
240	30	SB 321R	SB 421R
	60	SB 322R	SB 422R
	100	SB 323R	SB 423R
	200	SB 324R	SB 424R
	400	SB 325R	SB 425R
480 or 600	600	SB 326R	SB 426R
	30	SB 361R	SB 461R
	60	SB 362R	SB 462R
	100	SB 363R	SB 463R
	200	SB 364R	SB 464R
	400	SB 365R	SB 465R
	600	SB 366R	SB 466R

**Table 32.2** Combination Ground Detectors and Neutralizer Flex-A-Plug Unit (Not UL Listed)

Volts	30-3W Catalog Number
208-240	SB 321N
440-600	SB 361N

**Table 32.3** Adapter Kits to Convert Spectra Series Bus Plugs to Armor Clad Ground Stab included. See GE Instructions Pub. No. GEH 5647

Amps	Catalog Number
30-100	SBAC1G
200-225	SBAC4G
400-600	SBAC5G

Note: Kits to adapt Armor Clad "style 7" only plugs to Spectra bus (shipped after 1/90) are also available.

**Table 32.4** Combination Motor Starter Plugs – Fusible and Circuit Breaker (1) (3-pole, full-voltage, non-reversing, single-speed) (Includes 3 overload relays with manual reset)

NEMA Size	Max Hp Rating, 3-phase		With Fusible Switch Disconnect	With Circuit Breaker Disconnect
	240 Volts	440/550 Volts	Max Fuse Size, Amp	Max Trip Size, Amp
0	3	5	30	20
1	7 1/2	10	60	50
2	15	25	100	70
3	30	50	200	100

(1) Order by description.

## BUSWAY PLUGS

Plug assist is furnished as standard on all circuit breaker plugs except in the 100-amp frame sizes.

If plug assist is required on the 100-amp frame sizes,

add Suffix "P" to Catalog Number.

When a grounding stab to engage internal or integrated housing ground bus is required, add Suffix "G" to Catalog Number. Standard ground path is through plug hangers.

**Table 33.1** Circuit Breaker Plugs

Type Frame	Trip Amps	3Ø-3W Catalog Number	3Ø-4W Catalog Number
<b>Standard Circuit Breakers<sup>1</sup></b>			
<b>TB 240 Volts</b>	15	SB31EB	SB41EB
	20	SB32EB	SB42EB
	25	SB32.5EB	SB42.5EB
	30	SB33EB	SB43EB
	35	SB33.5EB	SB43.5EB
	40	SB34EB	SB44EB
	45	SB34.5EB	SB44.5EB
	50	SB35EB	SB45EB
	60	SB36EB	SB46EB
	70	SB37EB	SB47EB
<b>TED4 480 Volts</b>	15	SB31E04	SB41E04
	20	SB32E04	SB42E04
	25	SB32.5E04	SB42.5E04
	30	SB33E04	SB43E04
	35	SB33.5E04	SB43.5E04
	40	SB34E04	SB44E04
	45	SB34.5E04	SB44.5E04
	50	SB35E04	SB45E04
	60	SB36E04	SB46E04
	70	SB37E04	SB47E04
<b>TED6 600 Volts</b>	15	SB31E06	SB41E06
	20	SB32E06	SB42E06
	25	SB32.5E06	SB42.5E06
	30	SB33E06	SB43E06
	35	SB33.5E06	SB43.5E06
	40	SB34E06	SB44E06
	45	SB34.5E06	SB44.5E06
	50	SB35E06	SB45E06
	60	SB36E06	SB46E06
	70	SB37E06	SB47E06
<b>TFJ 600 Volts</b>	70	SB37FJ	SB47FJ
	80	SB38FJ	SB48FJ
	90	SB39FJ	SB49FJ
	100	SB310FJ	SB410FJ
	110	SB311FJ	SB411FJ
	125	SB312FJ	SB412FJ
	150	SB315FJ	SB415FJ
	175	SB317FJ	SB417FJ
	200	SB320FJ	SB420FJ
	225	SB322FJ	SB422FJ
<b>TFK 600 Volts</b>	70	SB37FK	SB47FK
	80	SB38FK	SB48FK
	90	SB39FK	SB49FK
	100	SB310FK	SB410FK
	110	SB311FK	SB411FK
	125	SB312FK	SB412FK
	150	SB315FK	SB415FK
	175	SB317FK	SB417FK
	200	SB320FK	SB420FK
	225	SB322FK	SB422FK
<b>TJJ 600 Volts</b>	125	SB312JJ	SB412JJ
	150	SB315JJ	SB415JJ
	175	SB317JJ	SB417JJ
	200	SB320JJ	SB420JJ
	225	SB322JJ	SB422JJ
	250	SB325JJ	SB425JJ
	300	SB330JJ	SB430JJ
	350	SB335JJ	SB435JJ
	400	SB340JJ	SB440JJ

Type Frame	Trip Amps	3Ø-3W Catalog Number	3Ø-4W Catalog Number
<b>Standard Circuit Breakers<sup>1</sup></b>			
<b>TJK4 600 Volts</b>	125	SB312JK4	SB412JK4
	150	SB315JK4	SB415JK4
	175	SB317JK4	SB417JK4
	200	SB320JK4	SB420JK4
	225	SB322JK4	SB422JK4
	250	SB325JK4	SB425JK4
	300	SB330JK4	SB430JK4
	350	SB335JK4	SB435JK4
	400	SB340JK4	SB440JK4
	450	SB345JK4	SB445JK4
<b>TJK6 600 Volts</b>	250	SB325JK6	SB425JK6
	300	SB330JK6	SB430JK6
	350	SB335JK6	SB435JK6
	400	SB340JK6	SB440JK6
	450	SB345JK6	SB445JK6
	500	SB350JK6	SB450JK6
	600	SB360JK6	SB460JK6
	700	SB370JK6	SB470JK6
	800	SB380JK6	SB480JK6
	900	SB390JK6	SB490JK6
<b>TKM8 600 Volts</b>	300	SB330KM	SB430KM
	350	SB335KM	SB435KM
	400	SB340KM	SB440KM
	450	SB345KM	SB445KM
	500	SB350KM	SB450KM
	600	SB360KM	SB460KM
	700	SB370KM	SB470KM
	800	SB380KM	SB480KM
	900	SB390KM	SB490KM
	1000	SB400KM	SB500KM
<b>TJ4V 600 Volts</b>	150	SB315TJR	SB415TJR
	200	SB320TJR	SB420TJR
	300	SB330TJR	SB430TJR
	400	SB340TJR	SB440TJR
	500	SB350TJR	SB450TJR
	600	SB360TJR	SB460TJR
	700	SB370TJR	SB470TJR
	800	SB380TJR	SB480TJR
	900	SB390TJR	SB490TJR
	1000	SB400TJR	SB500TJR
<b>TK4V 600 Volts</b>	400	SB340TKR	SB440TKR
	600	SB360TKR	SB460TKR
	800	SB380TKR	SB480TKR
	900	SB390TKR	SB490TKR
	1000	SB400TKR	SB500TKR
	1100	SB410TKR	SB510TKR
	1200	SB420TKR	SB520TKR
	1300	SB430TKR	SB530TKR
	1400	SB440TKR	SB540TKR
	1500	SB450TKR	SB550TKR
<b>Tri-Break<sup>®</sup> Circuit Breakers<sup>2</sup> (Includes Limiters)</b>			
<b>TB1 600 Volts</b>	15	SB31B1E05	SB41B1E05
	20	SB32B1E05	SB42B1E05
	25	SB32.5B1E05	SB42.5B1E05
	30	SB33B1E05	SB43B1E05
	35	SB33.5B1E05	SB43.5B1E05
	40	SB34B1E05	SB44B1E05
	45	SB34.5B1E05	SB44.5B1E05
	50	SB35B1E05	SB45B1E05
	60	SB36B1E05	SB46B1E05
	70	SB37B1E05	SB47B1E05
<b>TB4 600 Volts</b>	125	SB312B4F14	SB412B4F14
	150	SB315B4F14	SB415B4F14
	175	SB317B4F14	SB417B4F14
	200	SB320B4F14	SB420B4F14
	225	SB322B4F14	SB422B4F14
	250	SB325B4F14	SB425B4F14
	300	SB330B4F14	SB430B4F14
	350	SB335B4F14	SB435B4F14
	400	SB340B4F14	SB440B4F14
	450	SB345B4F14	SB445B4F14
<b>TB6 600 Volts</b>	300	SB330B6J14	SB430B6J14
	350	SB335B6J14	SB435B6J14
	400	SB340B6J14	SB440B6J14
	450	SB345B6J14	SB445B6J14
	500	SB350B6J14	SB450B6J14
	600	SB360B6J14	SB460B6J14
	700	SB370B6J14	SB470B6J14
	800	SB380B6J14	SB480B6J14
	900	SB390B6J14	SB490B6J14
	1000	SB400B6J14	SB500B6J14

Type Frame	Trip Amps	3Ø-3W Catalog Number	3Ø-4W Catalog Number
<b>Tri-Break<sup>®</sup> Circuit Breakers<sup>2</sup> (Includes Limiters)</b>			
<b>TB8<sup>®</sup> 600 Volts</b>	600	SB360B8K20	SB460B8K20
	700	SB370B8K20	SB470B8K20
	800	SB380B8K20	SB480B8K20
	900	SB390B8K20	SB490B8K20
	1000	SB400B8K20	SB500B8K20
	1100	SB410B8K20	SB510B8K20
	1200	SB420B8K20	SB520B8K20
	1300	SB430B8K20	SB530B8K20
	1400	SB440B8K20	SB540B8K20
	1500	SB450B8K20	SB550B8K20
<b>Hi-Break<sup>®</sup> Circuit Breakers<sup>2</sup></b>			
<b>THED 600 Volts</b>	15	SB31HED	SB41HED
	20	SB32HED	SB42HED
	25	SB32.5HED	SB42.5HED
	30	SB33HED	SB43HED
	35	SB33.5HED	SB43.5HED
	40	SB34HED	SB44HED
	45	SB34.5HED	SB44.5HED
	50	SB35HED	SB45HED
	60	SB36HED	SB46HED
	70	SB37HED	SB47HED
<b>THFK 600 Volts</b>	70	SB37HFK	SB47HFK
	80	SB38HFK	SB48HFK
	90	SB39HFK	SB49HFK
	100	SB310HFK	SB410HFK
	110	SB311HFK	SB411HFK
	125	SB312HFK	SB412HFK
	150	SB315HFK	SB415HFK
	175	SB317HFK	SB417HFK
	200	SB320HFK	SB420HFK
	225	SB322HFK	SB422HFK
<b>THJK4 600 Volts</b>	125	SB312HJK4	SB412HJK4
	150	SB315HJK4	SB415HJK4
	175	SB317HJK4	SB417HJK4
	200	SB320HJK4	SB420HJK4
	225	SB322HJK4	SB422HJK4
	250	SB325HJK4	SB425HJK4
	300	SB330HJK4	SB430HJK4
	350	SB335HJK4	SB435HJK4
	400	SB340HJK4	SB440HJK4
	450	SB345HJK4	SB445HJK4
<b>THKM8 600 Volts</b>	300	SB330HKM	SB430HKM
	350	SB335HKM	SB435HKM
	400	SB340HKM	SB440HKM
	450	SB345HKM	SB445HKM
	500	SB350HKM	SB450HKM
	600	SB360HKM	SB460HKM
	700	SB370HKM	SB470HKM
	800	SB380HKM	SB480HKM
	900	SB390HKM	SB490HKM
	1000	SB400HKM	SB500HKM
<b>THJ4V 600 Volts</b>	150	SB315THJR	SB415THJR
	200	SB320THJR	SB420THJR
	300	SB330THJR	SB430THJR
	400	SB340THJR	SB440THJR
	500	SB350THJR	SB450THJR
	600	SB360THJR	SB460THJR
	700	SB370THJR	SB470THJR
	800	SB380THJR	SB480THJR
	900	SB390THJR	SB490THJR
	1000	SB400THJR	SB500THJR
<b>TJH6S 600 Volts</b>	150	SB315THJS	SB415THJS
	200	SB320THJS	SB420THJS
	300	SB330THJS	SB430THJS
	400	SB340THJS	SB440THJS
	500	SB350THJS	SB450THJS
	600	SB360THJS	SB460THJS
	700	SB370THJS	SB470THJS
	800	SB380THJS	SB480THJS
	900	SB390THJS	SB490THJS
	1000	SB400THJS	SB500THJS
<b>TKL4V 600 Volts</b>	400	SB340THKR	SB440THKR
	600	SB360THKR	SB460THKR
	800	SB380THKR	SB480THKR
	900	SB390THKR	SB490THKR
	1000	SB400THKR	SB500THKR
	1100	SB410THKR	SB510THKR
	1200	SB420THKR	SB520THKR
	1300	SB430THKR	SB530THKR
	1400	SB440THKR	SB540THKR
	1500	SB450THKR	SB550THKR
<b>TKH8S 600 Volts</b>	400	SB340THKS	SB440THKS
	600	SB360THKS	SB460THKS
	800	SB380THKS	SB480THKS
	900	SB390THKS	SB490THKS
	1000	SB400THKS	SB500THKS
	1100	SB410THKS	SB510THKS
	1200	SB420THKS	SB520THKS
	1300	SB430THKS	SB530THKS
	1400	SB440THKS	SB540THKS
	1500	SB450THKS	SB550THKS

(1) TEB, TED4, THED, TFJ and TJJ are fixed trip circuit breakers.

(2) TBI is a fixed trip circuit breaker.

(3) Not UL listed.

# Cataloging

**SPECTRA SERIES™ BUSWAY CATALOG NUMBERING SYSTEM: A COMPREHENSIVE SYSTEM THAT COMPLETELY DESCRIBES MOST LENGTHS AND FITTINGS.**

**Table 34.1**

	Description	Code	F	3	H	C	10	LS	I	0603 <sup>®</sup>
Type	Feeder	F					02	225		
	Plug-in	P					04	400		
	Riser	R					06	600		
Service	1Ø 2W	2					08	800		
	3Ø 3W	3					10	1000		
	3Ø 4W	4					12	1200		
	DC 4W	5					13	1350		
							16	1600		
Ground	Integrated Housing	H					20	2000		
	Internal Bus	G					25	2500		
Conductor	Copper	C					30	3000		
	Aluminum	A					40	4000		
							50	5000		
							60	6000 (DC)		
							70	7000 (DC)		
							80	8000 (DC)		
Amp Rating_____										
Configurations	Length Straight	LS								
	Elbow Left	EL								
	Elbow Right	ER								
	Elbow Up	EU								
	Elbow Down	ED								
	Offset Left	OL								
	Offset Right	OR								
	Offset Up	OU								
	Offset Down	OD								
	End Box	EB								
	Tee Left	TL								
	Tee Right	TR								
	Tee Up	TU								
	Tee Down	TD								
	Cross Flat	CF								
	Armor-Clad Adaptor	AC								
	Center Cable Tap Box	CD								
	Center Cable Tap Box Up	CU								
	Expansion	EX								
	No-Fuse Reducer	NF								
	Total Ø Transp.	XT								
	A-C Ø Transp.	XP								
	Neutral Transp.	XN								
	Spectra Stub Left Neutral	SL								
	Spectra Stub Right Neutral	SR								
	ADK8/Power Bk Stub	KS								
	AV Stub	VS								
	Flanged End w/o Lugs	FE								
	Flanged End w/ Lugs	FL								
	Std. End Cable Tap Box	SD								
	Std. End Cable Box Up	SU								
	Alternate Cable Tap Box	AD								
	Alternate Cable Box Up	AU								
	End XFMR Tap (3Ø)	TD								
Housing	Indoor	I								
	Outdoor	O								
	Drip Resistant	D								
Feeder Straight Lengths	Shown (In inches up to 120".)	60 <sup>3/8</sup> <sup>®</sup>								

For either plug-in or riser type busway (Code "P" or "R") use the following "configuration":

Length	Code
2 Feet	02
4 Feet	04
6 Feet	06
8 Feet	08
10 Feet	10

<sup>®</sup> Last digit is in 1/8" increments.

# Guide Form Specifications

## DRAWING NOTES FOR SPECTRA SERIES™ FEEDER AND PLUG-IN BUSWAY

The following information should appear on the electrical drawings:

1. Amp rating, continuous.
2. Service: \_\_\_\_\_ phase, \_\_\_\_\_ wire, \_\_\_\_\_ volts, with or without internal ground.
3. Available short-circuit current at input end in amps rms symmetrical.

4. Maximum voltage drop and power factor at output end and whether load is distributed along run or concentrated at end of run.

5. Bus bar material (aluminum or copper).
6. Location of all fittings. For expansion fittings, show amount of compensation required as " $\pm$  inches, total \_\_\_\_\_ inches."
7. Limiting dimensions of busway width and depth where passing through walls or floors or around obstructions.
8. Mounting position of busway (flatwise, edgewise, or vertical riser).

### FEEDER BUSWAY SPECIFICATIONS

Where shown on plans, furnish and install a totally enclosed, low-impedance busway system of the indicated ratings with all necessary fittings, power takeoffs, hanging devices and accessories.

Material and installation shall comply with all applicable codes, recommended practices, and standards of ANSI, IEEE, NEMA and UL. All components of the busway shall be UL Listed. Arrangements, details, and locations shall be as shown on the drawings and specified herein.

The housing shall be of extruded aluminum to provide maximum protection against corrosion from water and other contaminants normally encountered during construction. All hardware shall be plated to prevent corrosion.

Tie bolts shall brace aluminum housing and bars to withstand, without damage or permanent distortion, short-circuit currents of the magnitude shown on the drawings when tested in accordance with UL standard. Busway shall be finished in ANSI-61 grey enamel.

Joints shall be of the one-bolt removable/isolatable type with through-bolts that can be checked for tightness without de-energizing the system. It shall be possible to make up a joint from one side in the event the busway is installed against a wall or ceiling. The joint shall be so designed as to allow removal of any length without disturbing adjacent lengths. Belleville springs shall be provided to give positive pressure over complete contact area. Plug-in and feeder shall use identical parts, and all multi-stacks shall be phase collected.

The maximum hot-spot temperature rise at any point in the busway at continuous rated load shall not exceed 55°C above a maximum ambient temperature of 40°C in any position.

Bus bars shall be suitably plated at all joints and contact surfaces.

All insulation material shall be NEMA class B (130°C).

Horizontal runs of busway shall be UL Listed for hanging on 10-foot centers in any position. Vertical riser runs of busway shall be supported with rigid and/or spring hangers in positions indicated on plans (max 16' centers).

Final field measurements shall be made by the contractor prior to release for manufacture to assure coordination with other trades.

The busway shall be General Electric Spectra Series.

### PLUG-IN BUSWAY SPECIFICATIONS

Plug-in busway shall be identical to feeder construction and performance except:

There shall be five dead-front hinged cover type plug outlets per side per 10-foot length. All outlets shall be usable simultaneously.

### PLUGS

Where shown on plans, furnish and install busway plugs of the types and ratings indicated. When applicable, plugs shall be UL labeled.

Housing shall completely enclose the switching device and shall be of sheet steel furnished in ANSI-61 grey enamel over a rust inhibitor. Provide stab shields that protect stabs and ground plug body to busway housing before stabs make power contact. Provide grounding terminal inside plug body and adequate shielding to prevent access to live parts when cover is open. A ground stab to engage grounding tab on busway and internal ground bus shall be provided when required. Provide means for padlocking cover and operating handle in "OFF" position. The operating handle shall be easily moved from end to side or vice versa so that it will be in the correct position to operate from the floor. All current-carrying parts shall be suitably plated.

Operating switch type plugs shall have positive quick-make, quick-break interrupter, and positive-pressure fuse clips. Provide a releasable cover interlock that prevents opening cover except when switch is in "OFF" position. This interlock shall be convertible to non-releasable type on the job. A releasable interlock preventing closing switch with cover open shall also be included, as well as an interlock to prevent insertion or removal from busway when in "ON" position.

Circuit breaker type plugs shall have an interrupting rating of not less than \_\_\_\_\_ amps rms symmetrical. They shall have a releasable cover interlock that prevents opening of cover except with breaker in "OFF" position. This interlock shall be convertible to non-releasable type on the job. An interlock to prevent insertion or removal from busway when in "ON" position shall be provided, as well as an interlock (releasable) to prevent closing circuit breaker with cover open.

Plug assists shall be furnished on all plugs over 100 amps that will mechanically engage or disengage the plug from the busway, but only when the plug is in the "OFF" position.



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