

Busway Systems

Catalog

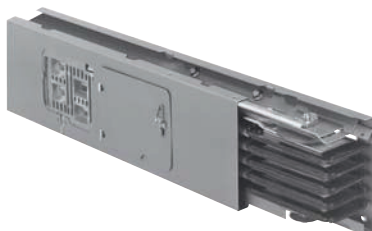
5600CT9101R03/18

2018

Class 5600



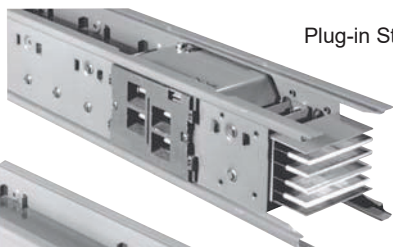
Powerbus™ 100-400 A



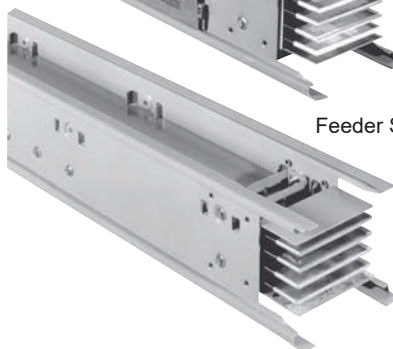
I-Line™ Plug-in Busway 225-600 A



Power-Zone™ Busway



Plug-in Style



Feeder Style

I-Line II Busway 800-5000 A



I-Line Plug-in Units



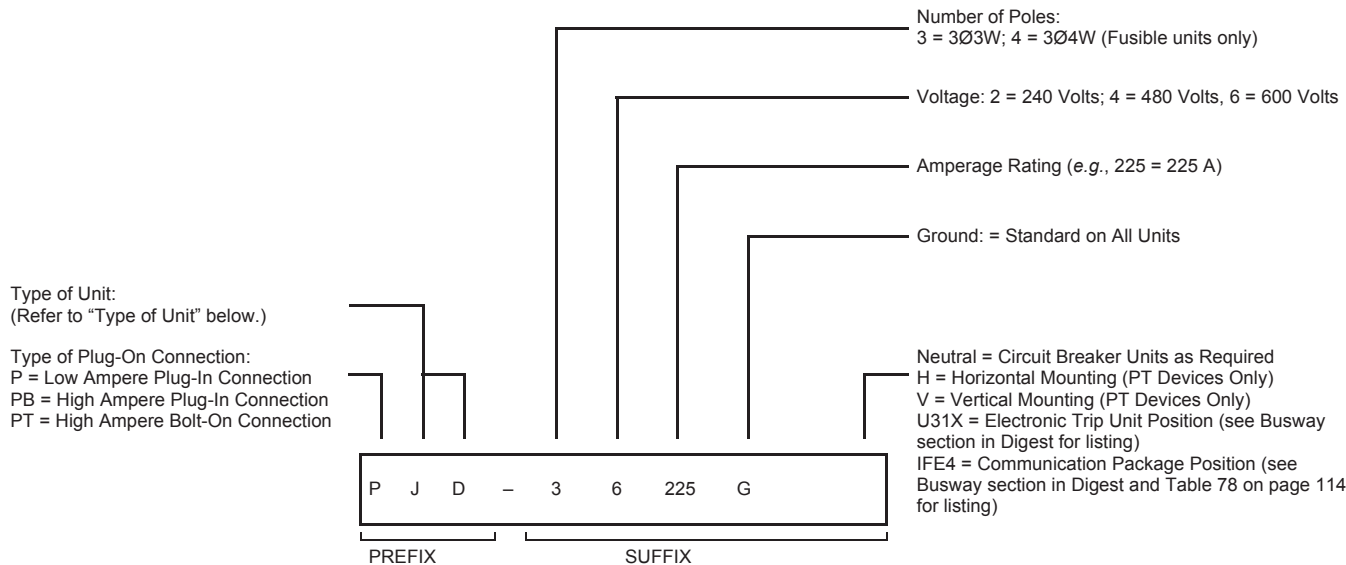
TM

by Schneider Electric

Section 9—I-Line™ Plug-In Units—Bus Plugs

Plug-In Catalog Numbering System

Catalog numbers are composed of two basic parts—the **prefix** plus the **suffix**. The **prefix** contains the general descriptive details of the plug-in unit and outline on pages 99–123. The **suffix** defines the exact device type.



Type of Unit

Table 64: Maximum Amperage for Unit Types

Type	Amperage
Q-Fusible Unit	1200 A Maximum
S-Fusible Vertical Riser Unit	200 A Only
FA-FA Frame Circuit Breaker Unit	100 A Maximum
FH-FH Frame Circuit Breaker Unit	100 A Maximum
HD-HD Frame Circuit Breaker Unit	150 A Maximum
HG-HG Frame Circuit Breaker Unit	150 A Maximum
HJ-HJ Frame Circuit Breaker Unit	150 A Maximum
HL-HL Frame Circuit Breaker Unit	150 A Maximum
JD-JD Frame Circuit Breaker Unit	250 A Maximum
JG-JG Frame Circuit Breaker Unit	250 A Maximum
JJ-JJ Frame Circuit Breaker Unit	250 A Maximum
JL-JL Frame Circuit Breaker Unit	250 A Maximum
LD-LD Frame Circuit Breaker Unit	600 A Maximum

Type	Amperage
LG-LG Frame Circuit Breaker Unit	600 A Maximum
LJ-LJ Frame Circuit Breaker Unit	600 A Maximum
LL-LL Frame Circuit Breaker Unit	600 A Maximum
LR-LR Frame Circuit Breaker Unit	600 A Maximum
MG-MG Frame Circuit Breaker Unit	800 A Maximum
MJ-MJ Frame Circuit Breaker Unit	800 A Maximum
PG-PG Frame Circuit Breaker Unit	1200 A Maximum
PJ-PJ Frame Circuit Breaker Unit	1200 A Maximum
RG-RG Frame Circuit Breaker Unit	1600 A Maximum
RJ-RJ Frame Circuit Breaker Unit	1600 A Maximum
RL-RL Frame Circuit Breaker Unit	1600 A Maximum

NOTE: Special purpose plug-in devices are not defined by this catalog numbering system. Consult the factory for catalog numbering details for these devices.

Compatibility

All non-IP54 plug-in units in this catalog can be used on original I-Line as well as I-Line II busway. There is no need to stock two different types of units.

Fusible

All plug-in switches contain a heavy-duty safety switch mechanism.

Circuit Breakers

Molded case circuit breaker plug-in devices are available in frame sizes of 100 A (FA)—1600 A (RG) with standard, high-interrupting, current-limiting, and solid-state trip circuit breakers.

The operating handle gives visual indication of tripped status for all devices as well as floor operable reset on all devices. The FA frame circuit breaker unit would fit into the same enclosure as the standard molded case breaker shown below.

The mounting and the interlock are identical to the fusible unit shown above.

The short circuit ratings for circuit breaker devices are listed on page 103.

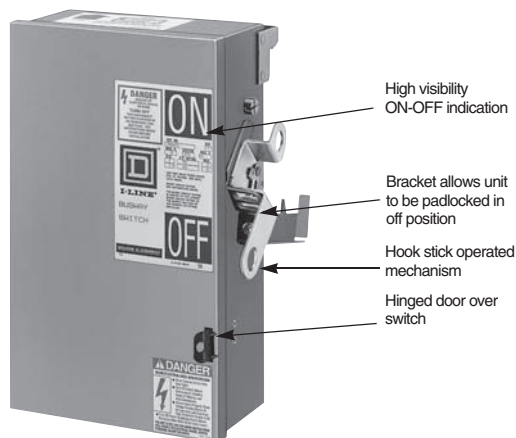


Figure 107: Fusible Unit

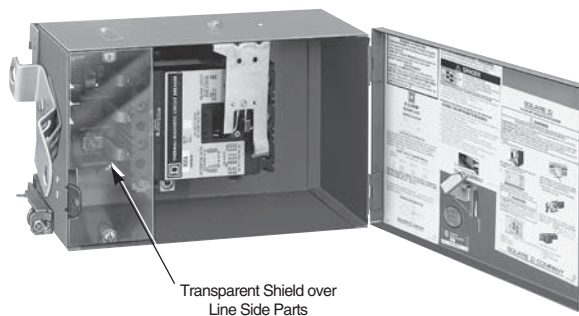


Figure 108: Standard Molded Case Circuit Breaker

Circuit Breakers with Communications

Busway plug-in units are available with optional communication capabilities.

NOTE: The communications box is not available as standalone.



Plug-In Device Mounting

Plug-in units are positioned along the busway length by notches in the busway housing top that accept the mounting hooks of the plug-in unit. This aligns the plug-in unit connectors with the plug-in opening. After the unit is positioned on the busway, it is allowed to swing down into the plug-in opening where the connectors make contact with the bus bars. This is accomplished in a “hook-swing” sequence of motions.

Interlock

Plug-in devices rated for 30–250 A are interlocked with the busway housing to prevent installation or removal of the unit when the disconnect is turned ON. All devices incorporate an interlock to prevent the door over the disconnect from being opened when the unit is ON. This door interlock can be defeated from outside the unit.



Figure 109: Plug-In Device Mounting

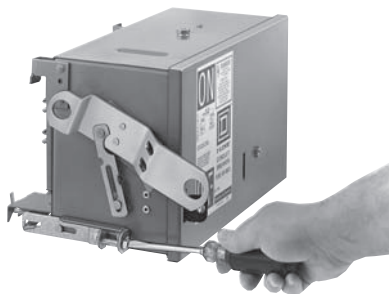


Figure 110: Interlock

Grounding

All plug-in units come with standard grounding means. A grounding spring cuts through the busway paint and forms an electrical ground continuity. An equipment ground is established before the phase jaws make contact with the bus bars by means of a grounding stab, which then makes contact with two ground jaws on the busway. A ground lug on the inside of the plug-in unit is provided for the purpose of attaching a ground wire.

Splash Resistant Feature (Optional)

Plug-in units installed on IP54 busway also require protection from occasional water exposure, such as roof leaks or sprinklers. The plug-in unit splash resistant feature is tested per the IEC 60529 standard and is rated IP54. This feature is available as an option for most plug-in unit enclosures and is identified by the addition of “M54” at the end of the standard catalog number.

IP54 plug-in units are designed to be installed only on I-Line II IP54 busway.

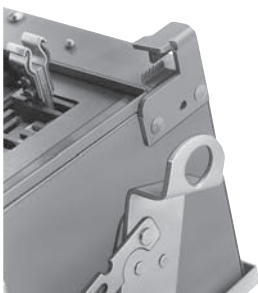


Figure 111: Grounding Spring

Special Purpose Plug-In Devices

- Combination motor starter from NEMA Size 0–Size 2: fusible or circuit breaker primary disconnect
- Lighting contactor: 30 A, 60 A, 100 A, fusible disconnect
- Magnetic contactor from NEMA Size 0–Size 2: Fusible or circuit breaker primary disconnect
- Ground detector and neutralizer: used to provide means for indicating grounds on an ungrounded 3-phase system and to create a discharge path for static electricity. Consult the factory for dimensional details.
- Capacitor banks: 2.5 kVAR–30 kVAR auxiliary devices mount directly on busway prewired for use with separate fusible or circuit breaker disconnect. Consult the factory for dimensional details.
- Single-phase transformer plug-in devices from 1 kVA–10 kVA: auxiliary devices mount directly on busway prewired for use with separate fusible or circuit breaker disconnect. Consult the factory for dimensional details.
- Surge protection devices: 160 kA and 240 kA, circuit breaker disconnect

Table 65: Special Purpose Plug-In Devices—Horsepower Rating

UL Horsepower Rating		Motor–3-Phase Horsepower Rating	
	Plug-In Unit Ampere Rating	Fusible Switch	
		Standard	Maximum
240 Vac	30	3	7.5
	60	7.5	15
	100	15	30
	200	25	60
	400	—	—
	600	—	—
480 Vac	30	5	15
	60	15	30
	100	25	30
	200	50	125
	400	—	—
	600	—	—
600 Vac	30	7.5	20
	60	15	50
	100	30	60
	200	60	150
	400	125	350
	600	250	500

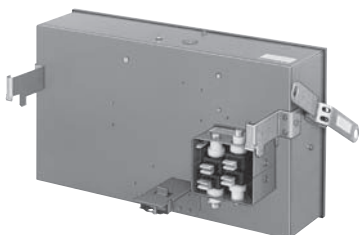
Busway Systems Catalog

Section 9—I-Line™ Plug-In Units—Bus Plugs

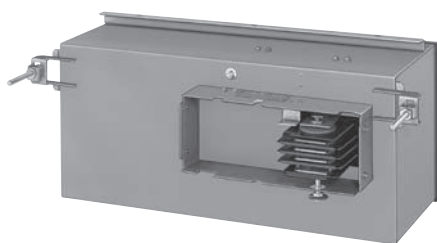
Interrupting Capacity of Fusible Switch Plug-In Units



Type PQ Fusible Switch Low Ampere Plug-In Connection



Type PBLG Circuit Breaker High Ampere Plug-In Connection



Type PTMG Circuit Breaker High Ampere Bolt-On Connection

Figure 112: Fusible Switch Plug-In Units

Table 66: Fusible Switch Plug-In Units Capacity

Catalog Number Prefix	Current Rating	Fuse Class (Includes 240 V, 480 V, and 600 V)			
		K or H	J ¹	R	L
PQ	30	10,000	200,000	200,000	—
PQ	60	10,000	200,000	200,000	—
PQ	100	10,000	200,000	200,000	—
PQ & PS	200	10,000	200,000	200,000	—
PBQ	400	10,000	100,000	100,000	—
PBQA	400	—	100,000	100,000	—
PBQ	600	10,000	100,000	100,000	—
PTQ	800	—	—	—	100,000
PTQ	1000	—	—	—	100,000
PTQ	1200	—	—	—	100,000

¹ Provisions for installing class J fuses are included in 600 V devices only.

Interrupting Capacity of Circuit Breaker Plug-In Units

Table 67: Circuit Breaker Plug-In Units Capacity

Catalog Number Prefix	Trip Range (Amperes)	Interrupting Rating—RMS Symmetrical Amperes		
		240 Vac	480 Vac	600 Vac
With Molded Case Circuit Breakers				
PFA	15–100	25000	18000	14000
PFH	15–100	65000	25000	18000
PHD	15–150	25000	18000	14000
PHG	15–150	65000	35000	18000
PHJ	15–150	100000	65000	25000
PHL	15–150	125000	100000	50000
PJD	175–250	25000	18000	14000
PJG	175–250	65000	35000	18000
PJJ	175–250	100000	65000	25000
PJL	175–250	125000	100000	50000
PBLD	250–600	25000	18000	14000
PBLG	250–600	65000	35000	18000
PBLJ	250–600	100000	65000	25000
PBLL	250–600	125000	100000	50000
PBLR	250–600	200000	200000	100000
PTMG	300–800	65000	35000	18000
PTMJ	300–800	100000	65000	25000
PTPG	250–1200	65000	35000	18000
PTPJ	250–1200	100000	65000	25000
PTRG	600–1600	65000	35000	18000
PTRJ	600–1600	100000	65000	25000
PTRL	600–1600	125000	100000	50000

Busway Systems Catalog

Section 9—I-Line™ Plug-In Units—Bus Plugs

Required Clearances for Plug-In Unit Mounting

NOTES:

1. Check these dimensions carefully before installing busway lengths.
2. For required working clearances, consult the National Electrical Code/Canadian Electrical Code.

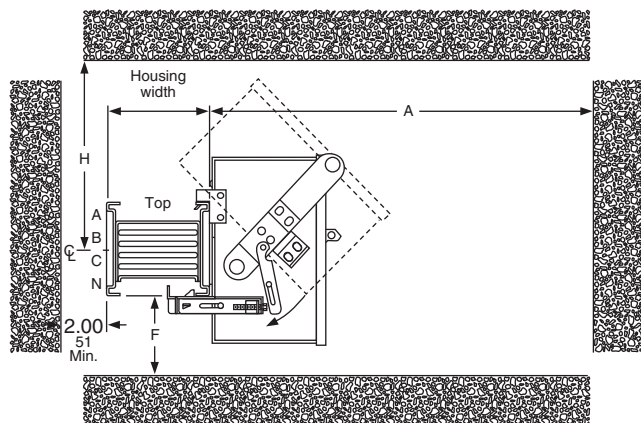


Figure 113: Required Clearances for Plug-In Units

Table 68: Required Clearances for Plug-In Unit Mounting

Circuit Breaker without Communications		A ¹		F		H	
Cat. No. Prefix	Ampere Rating	IN	mm	IN	mm	IN	mm
PFA, PFH	15–100	20.87	530	2.12	54	10.00	254
PHD, PHG, PHJ, PHL	15–150	25.63	651	2.38	60	11.00	279
PJD, PJG, PJJ, PJL	175–250	25.63	651	2.38	60	11.00	279
PBLD, PBLG, PBLJ, PBL, PBLR	250–600	35.00	889	8.00	203	20.00	508
PTMG, PTMJ, PTPG, PTPJ	250–1200	37.00	940	10.25	260	13.75	349
PTRG, PTRJ, PTRL	600–1600	41.81	1062	12.59	320	13.84	352
Circuit Breaker with Communications		A ¹		F		H	
Cat. No. Prefix	Ampere Rating	IN	mm	IN	mm	IN	mm
PHD, PHG, PHJ, PHL	15–150	30.40	772	11.38	289	11	279
PJD, PJG, PJJ, PJL	175–250	30.40	772	11.38	289	11	279
PBLD, PBLG, PBLJ, PBL, PBLR	250–600	38.58	980	17	432	20	506
Fusible Switch		A ¹		F		H	
Cat. No. Prefix	Ampere Rating	IN	mm	IN	mm	IN	mm
PQ	30	15.22	387	7.98	203	8.00	203
	60	15.22	387	7.98	203	8.00	203
	100	15.22	387	11.98	304	8.00	203
	200	27.50	699	15.00	381	15.00	381
PS	200	27.50	699	9.00	229	12.00	305
PBQ	400	48.00	1219	7.25	184	18.00 ²	457
	600	48.00	1219	7.25	184	18.00 ²	457
PTQ	800	40.00	1016	10.25	260	13.60	345
	1000	40.00	1016	10.25	260	13.60	345
	1200	40.00	1016	10.25	260	13.60	345

¹ Includes depth of plug-in unit and swing clearance for load side door.

² Horizontal only. This dimension is 14 in. (356 mm) for vertical applications.

Vertical Mounting

Fusible Units

Fusible switch plug-in units (30–100 A) mount on either side of the vertical busway and comply with NEC Article 404.6 and CEC Article 14.502 concerning gravity tending to close a switch blade. With unit mounted on one side of the busway, the operating handle is on top and when mounted on the opposite side, the handle is on the bottom. The 200 A fusible unit (“PS”) mounts only on the front of the busway. (“TOP” sticker on the busway is on the right.) The operating handle is on the right side of the mounted unit.

The 400–1200 A fusible units mount only on the front of the busway. The operating handle is on the cover.

NOTE: Orientation of the busway is essential for proper mounting of plug-in units. The busway must be positioned so that the top marking is to the right and the neutral position is to the left.

Circuit Breaker Units

Circuit breaker plug-in units (15–250 A) can be installed on both sides of a riser. However, when the handle of the plug-in unit is operated vertically rather than rotationally or horizontally, the handle in the up position must be the ON position.

Fusible Switch Plug-In Units—30–100 A (Type “PQ”)

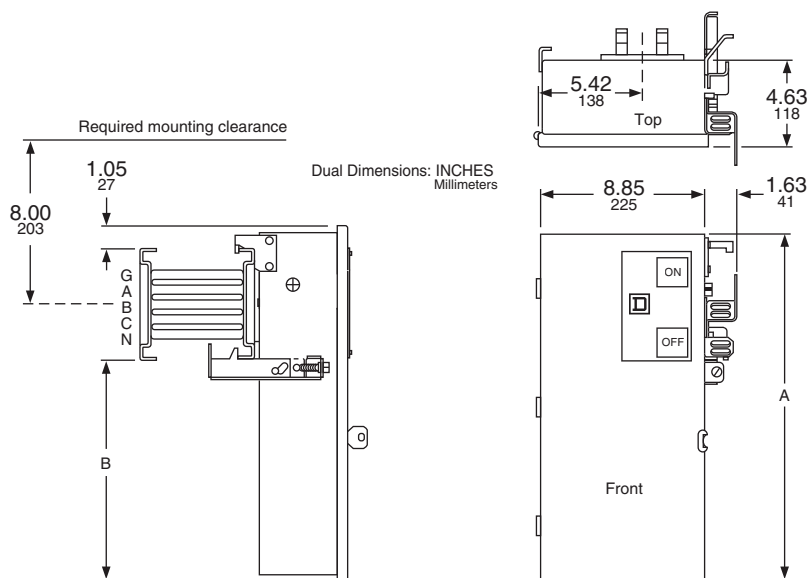


Figure 114: Fusible Switch Plug-In Units—30–100 A (Type “PQ”)

Table 69: Fusible Switch Plug-In Units—30–100 A (Type “PQ”) Specifications

Fusible Switch		Weight		Lugs Per Phase		Lugs Per Neutral		Ground Lugs		A		B	
Cat. No. Prefix	Ampere Rating	Lb	Kg	Qty.	Size	Qty.	Size	Qty.	Size	IN	mm	IN	mm
PQ	30	15.0	33.0	1	#12 – #2	1	#12 – #1/0	1	#10 – #2	14.95	379	7.98	203
	60	15.0	33.0	1	#12 – #2	1	#12 – #1/0	1	#10 – #2	14.95	379	7.98	203
	100	17.0	37.5	1	#12 – #1/0	1	#12 – #1/0	1	#10 – #2	18.97	480	11.98	304

NOTE: A PQ100N kit is available to convert a 3-wire unit to a 4-wire unit.

NOTE: These units are available with the IP54 option. Contact Schneider Electric for IP54 enclosure dimensions.

Busway Systems Catalog
Section 9—I-Line™ Plug-In Units—Bus Plugs

Fusible Switch Plug-In Unit—200 A (Type “PQ”)

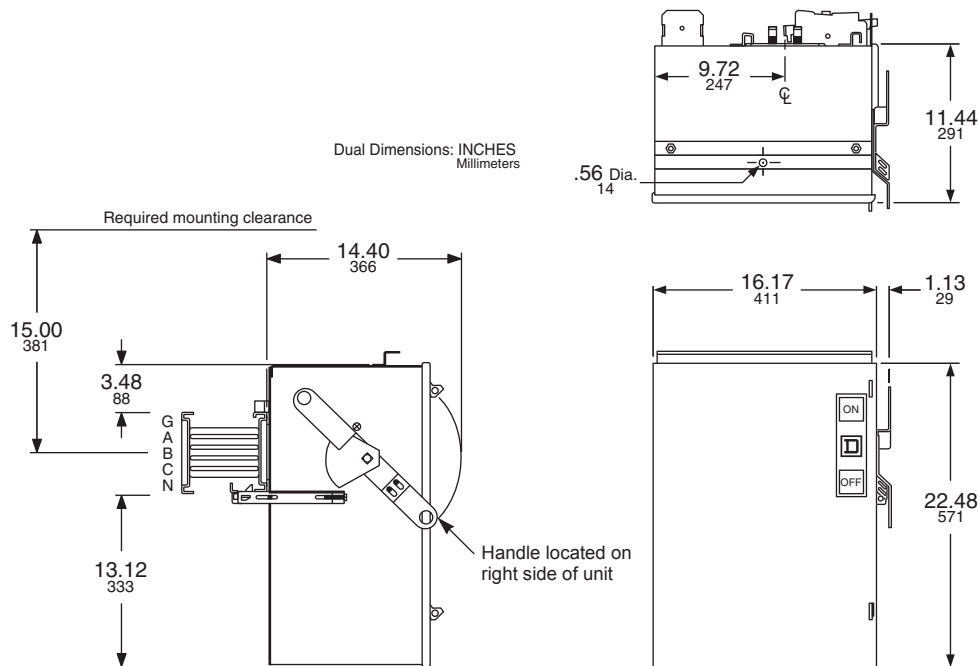


Figure 115: Fusible Switch Plug-In Unit—200 A (Type “PQ”)

Table 70: Fusible Switch Plug-In Unit—200 A (Type “PQ”) Specifications

Fusible Switch		Weight (Approx.)		Lugs Per Phase and Neutral		Ground Lugs	
Cat. No. Prefix	Ampere Rating	Lb	Kg	Qty.	Size	Qty.	Size
PQ ¹	200	71	32	1	#6-300 kcmil	1	#10-2/0

¹ 200 A “PQ” units are for use primarily on horizontally mounted busway. Refer to “PS” units for use primarily on vertically mounted busway.

These units are available with the IP54 option. Contact Schneider Electric for IP54 enclosure dimensions.

Fusible Switch Plug-In Unit—200 A (Type “PS”)

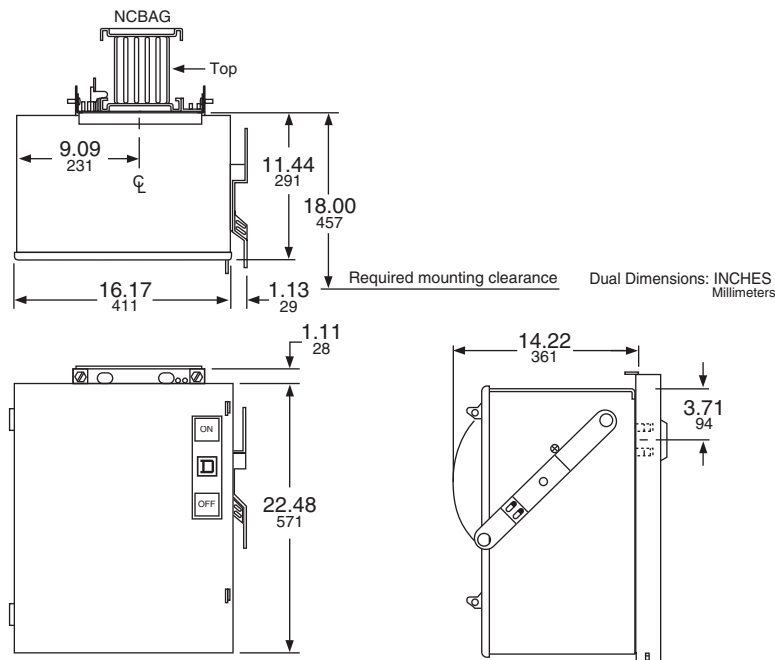


Figure 116: Fusible Switch Plug-In Unit—200 A (Type “PS”)

Table 71: Fusible Switch Plug-In Unit—200 A (Type “PS”) Specifications

Fusible Switch		Weight (Approx.)		Lugs Per Phase and Neutral		Ground Lugs	
Cat. No. Prefix	Ampere Rating	Lb	Kg	Qty.	Size	Qty.	Size
PS ¹	200	71	32	1	#6-300 kcmil	1	#10-2/0

¹ 200 A “PS” units for use on one side of vertically mounted busway only. To determine proper mounting side for this unit, position busway “TOP” marking to the right (same side as unit operating handle) and the neutral bus bar to the left as shown in top view of drawing. Refer to “PQ” units for use on horizontally mounted busway.

These units are available with the IP54 option. Contact Schneider Electric for IP54 enclosure dimensions.

Fusible Switch Plug-In Unit—400 A and 600 A (Type “PBQ”)

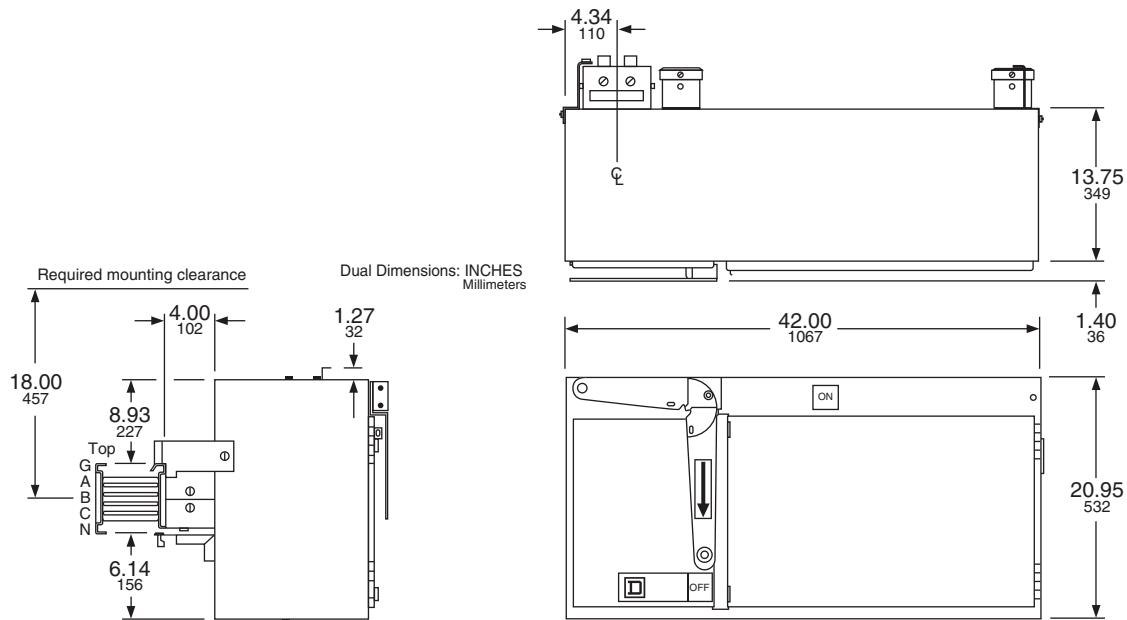


Figure 117: Fusible Switch Plug-In Unit—400 A and 600 A (Type “PBQ”)

Table 72: Fusible Switch Plug-In Unit—400 A and 600 A (Type “PBQ”) Specifications

Fusible Switch		Weight (Approx.)		Lugs Per Phase and Neutral		Ground Lugs	
Cat. No. Prefix	Ampere Rating	Lb	Kg	Qty.	Size	Qty.	Size
PBQ ¹	400 and 600	215	98	2	1/0-600 kcmil	1	#6-300 kcmil

NOTE: For vertical riser applications for I-Line II busway, order auxiliary kit catalog number PBQ-4060-RMK. This kit is not suitable for installation on I-Line™ busway from 225–600 A in a vertical riser mounting.

¹ 400 A and 600 A “PBQ” units plug into one opening, but require space equal to two plug-in openings.

These units are available with the IP54 option. Contact Schneider Electric for IP54 enclosure dimensions.

Fusible Switch Plug-In Unit—400 A (Type “PBQA”)

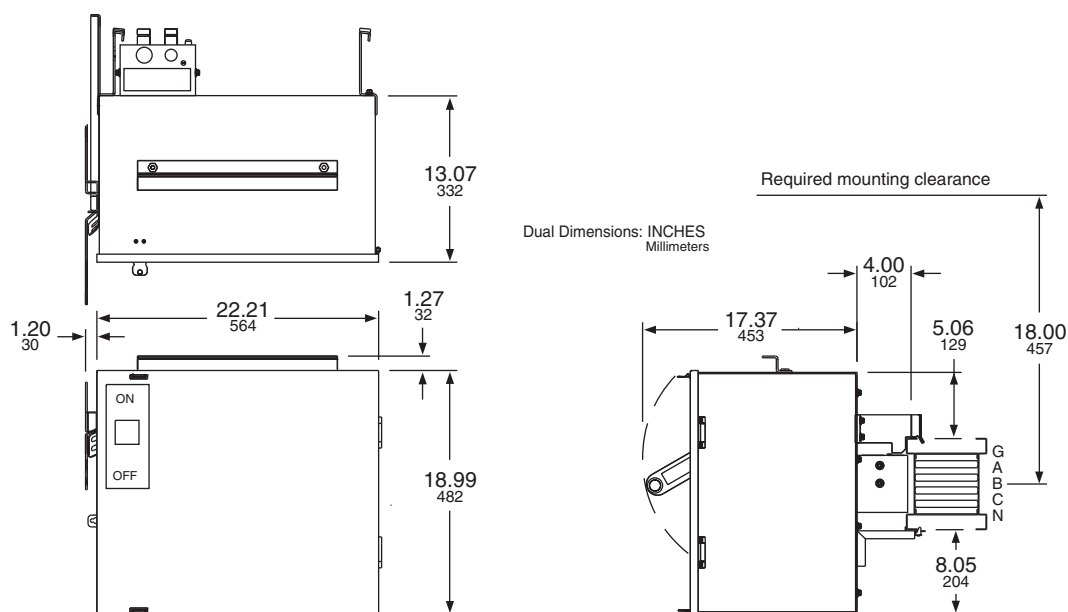


Figure 118: Fusible Switch Plug-In Unit—400 A (Type “PBQA”)

Table 73: Fusible Switch Plug-In Unit—400 A (Type “PBQA”) Specifications

Fusible Switch		Weight (Approx.)		Lugs Per Phase and Neutral		Ground Lugs	
Cat. No. Prefix	Ampere Rating	Lb	Kg	Qty.	Size	Qty.	Size
PBQA ¹	400	118	53.5	1	#1-600 kcmil	1	#6-300

¹ PBQA units for use on horizontally mounted busway only.

Lugs are mechanical type.

Busway Systems Catalog
Section 9—I-Line™ Plug-In Units—Bus Plugs

Fusible Switch Bolt-On Units—800–1200 A (Type “PTQ”)

NOTE: Bolt-on units can be used only on plug-in busway (800–4000 A—except 800 A copper I-LINE II) with the same number of poles (e.g., do not use 3-pole unit on 3Ø4W busway, or 3Ø4W unit on 3-pole busway).

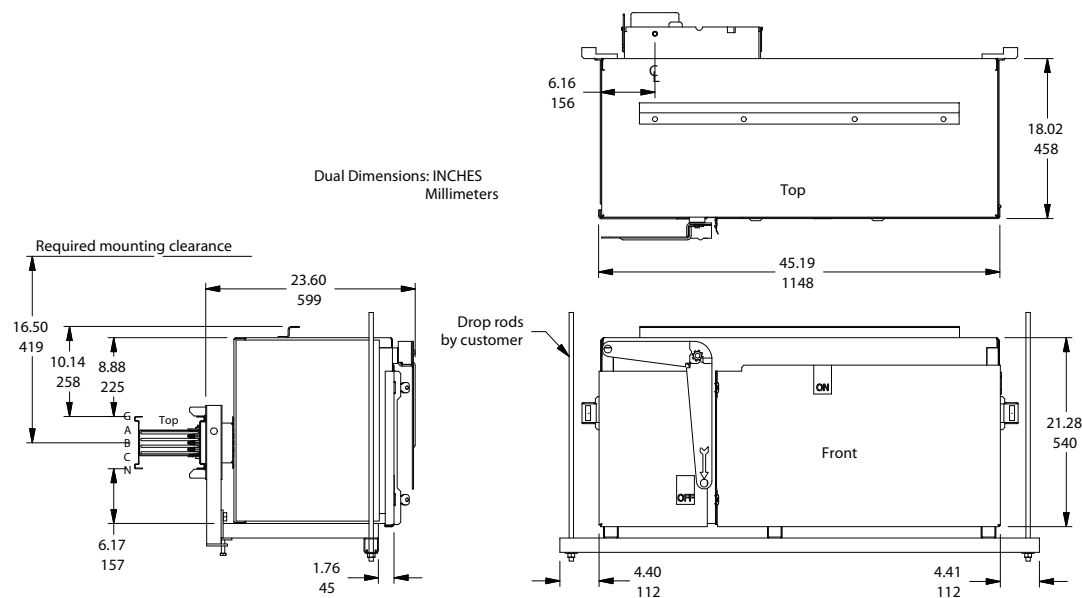


Figure 119: Fusible Switch Bolt-On Units (Horizontally Mounted)

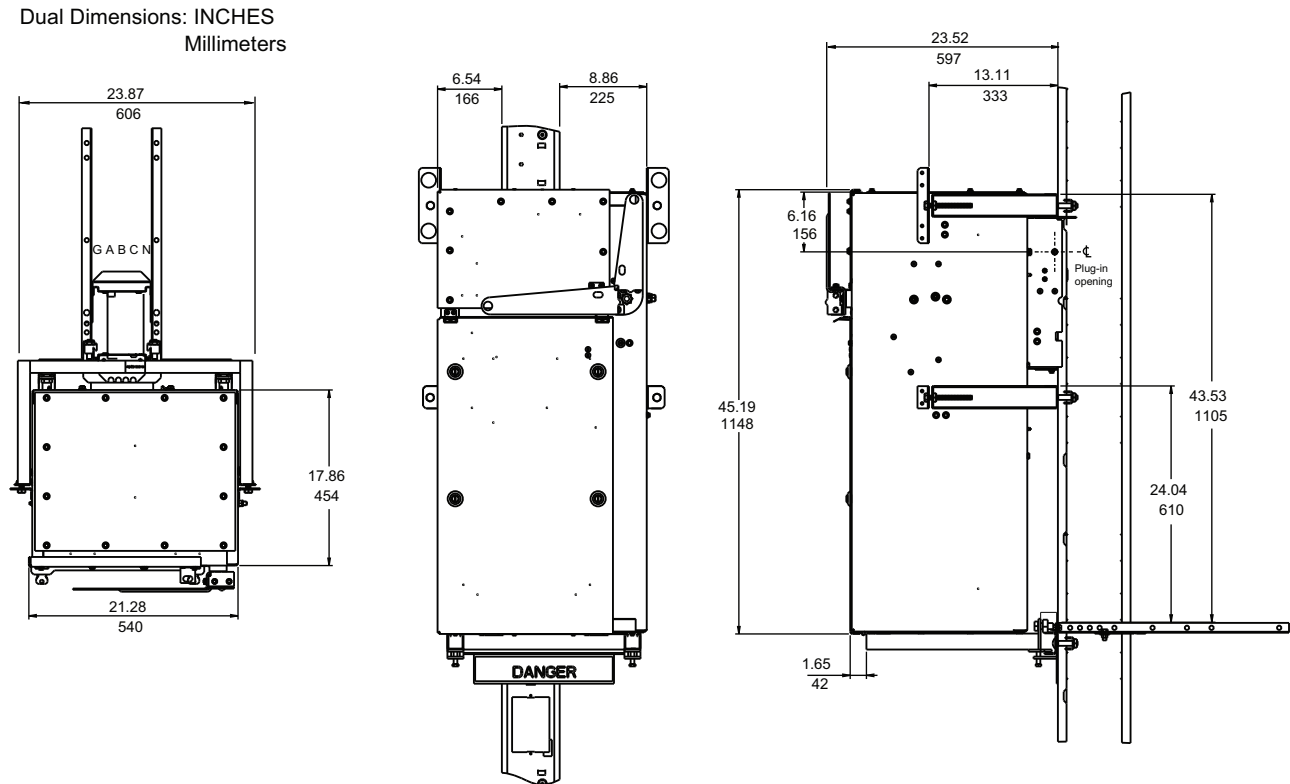


Figure 120: Fusible Switch Bolt-On Units (Vertically Mounted)

Busway Systems Catalog

Section 9—I-Line™ Plug-In Units—Bus Plugs

Table 74: Fusible Switch Bolt-On Units — 800–1200 A (Type “PTQ”) Specifications

Fusible Switch		Weight		Lugs Per Phase and Neutral		Ground Lugs	
Cat. No. Prefix	Ampere Rating	Lb	Kg	Qty.	Size	Qty.	Size
PTQ ¹	800	280.00	127	3	3/0-500	4	#6-300
	1000	310.00	140	4		4	
	1200	310.00	140	4		4	

NOTE: This unit requires a special hanger that is mounting orientation specific. Add “H” on the end of the catalog number for units that will be mounted horizontally, and “V” for units that will be mounted vertically. These mounting frames are NOT interchangeable.

¹ “PTQ” units plug into one opening, but require space equal to **two** plug-in openings.

These units are available with the IP54 option, using the same enclosure dimensions as shown above.

Busway Systems Catalog

Section 9—I-Line™ Plug-In Units—Bus Plugs

Circuit Breaker Plug-In Units—15–250 A

Table 75: Circuit Breaker Plug-In Units—15–250 A Dimensions

Circuit Breaker		A		B		C		D		E		F		G		H	
Cat No. Prefix	Trip Range (Amperes)	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm
PFA, PFH	15–100	13.00	330	8.25	210	6.62	168	8.62	219	1.12	28	1.12	28	2.00	51	10.00	254
PHD, PHG, PHJ, PHL	15–150	20.30	516	8.50	216	8.00	203	9.12	232	1.00	25	1.38	35	2.00	51	11.00	279
PJD, PJG, PJJ, PJL	175–250	20.30	516	8.50	216	8.00	203	9.12	232	1.00	25	1.38	35	2.00	51	11.00	279

Table 76: Circuit Breaker Plug-In Units—15–250 A Specifications

Circuit Breaker		Weight		Lugs Per Phase and Neutral		Ground Lugs	
Cat No. Prefix	Trip Range (Amperes)	Lb	Kg	Qty.	Size	Qty.	Size
PFA, PFH	15–30	28	13	1	#14 - 4	1	#10 - #2
PFA, PFH	35–100	28	13	1	#14 - 1/0	1	#10 - #2
PHD, PHG, PHJ, PHL	15–30	32.00	15	1	#14 - #10	1	#6 - #2/0
PHD, PHG, PHJ, PHL	35–150	32.00	15	1	#8 - #3/0	1	#6 - #2/0
PJD, PJG, PJJ, PJL	175–250	32.00	15	1	#3/0 - 350 kcmil	1	#6 - #2/0

NOTE: H and J units are available with the IP54 option. Contact Schneider Electric for IP54 enclosure dimensions.

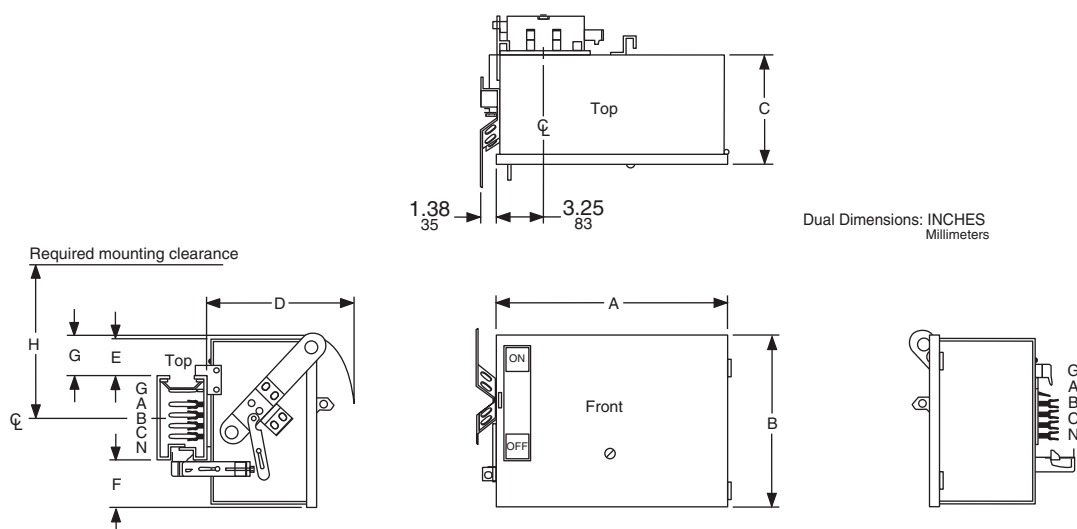


Figure 121: Circuit Breaker Plug-In Units—15–250 A

Circuit Breaker Plug-In Units—250–600 A

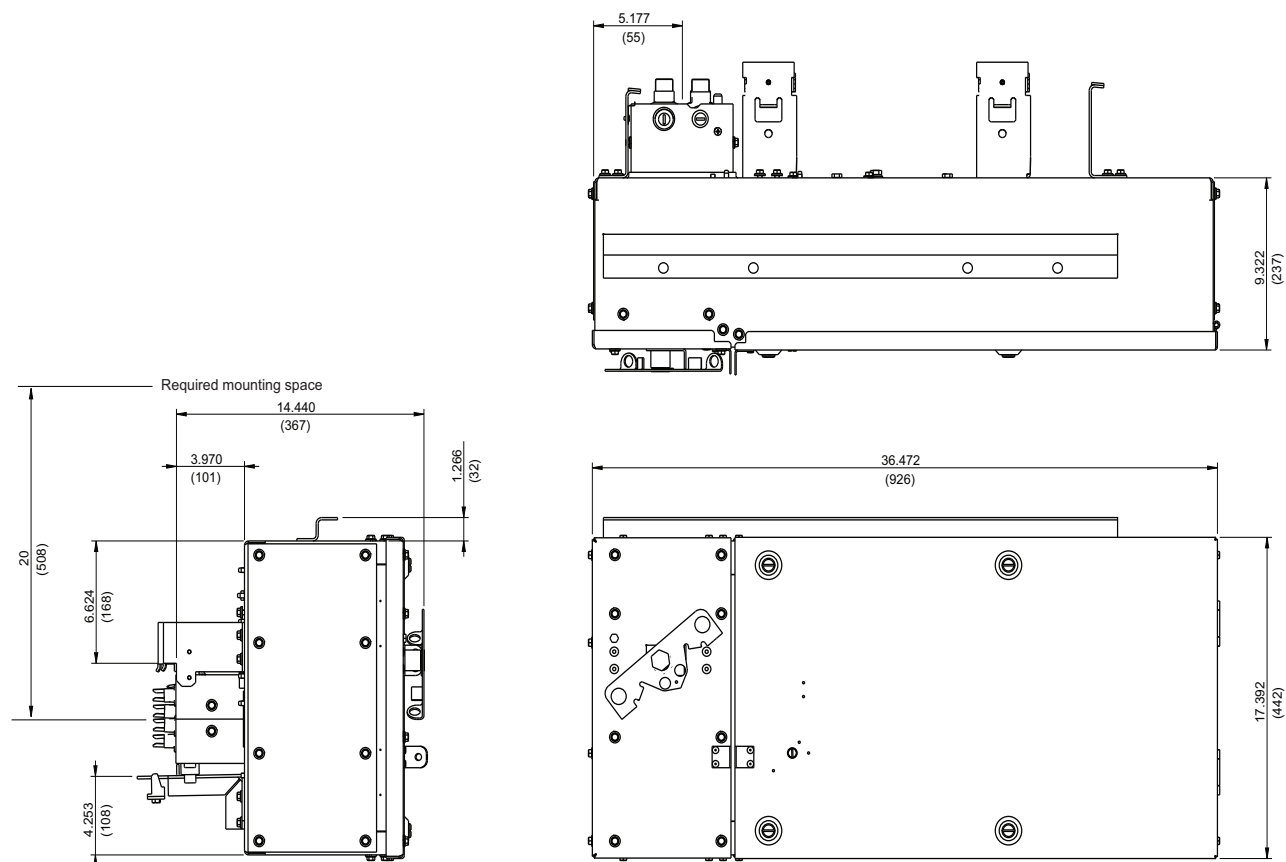


Figure 122: Circuit Breaker Plug-In Units—250–600 A

Table 77: Circuit Breaker Plug-In Units—250–600 A Specifications

Circuit Breaker		Weight (Approx.)		Lugs Per Phase		Ground Lugs		Lugs on Neutral	
Cat. No. Prefix	Trip Range (Amperes)	Lb	Kg	Qty.	Size	Qty.	Size	Qty.	Size
PBLD, PBLG, PBLJ, PBLL, PBLR	250	121	55	1	#2 – 600 kcmil	1	#6 – 300 kcmil	2	1/0 – 600 kcmil
	400–600			2	2/0 – 500 kcmil	1	#6 – 300 kcmil	2	1/0 – 600 kcmil

NOTE: These units plug into one opening, but require space equal to two plug-in openings. They are available with the IP54 option and have the same enclosure dimensions as shown above. For vertical riser applications for I-Line II busway, order auxiliary kit catalog number PBQ-4060-RMK. This kit is not suitable for installation on I-Line™ busway from 225–600 A in a vertical riser mounting.

Busway Systems Catalog

Section 9—I-Line™ Plug-In Units—Bus Plugs

Circuit Breaker Plug-In Units with Micrologic™ Electronic Trip Units and Communication

Communication hardware packages are available on Powerpact™ H-, J-, and L-Frame Plug-in Units with Micrologic™ electronic trip units. These communication hardware packages will provide access to monitor circuit breaker data from these plug-in units. Modbus and Ethernet ports are available on the enclosure for integration into any power monitoring and control system. Communication packages are housed in a separate enclosure mounted adjacent to the plug-in units.

NOTE: Communications box is not available as standalone.

Add the appropriate communication system voltage suffix to the end of the associated H-, J-, or L-Frame breaker with Micrologic electronic trip units, for example: PHD36060GNU31X**IFE4**. For the plug-in unit catalog numbering system, see page 98.

Table 78: Communication Suffix

System Voltage	Communication	Communication Type Suffix	System Voltage Suffix
Up to 480 Y/277 V	Ethernet	IFE	4
	Modbus	IFM	
480 V only	Ethernet	IFE	5
	Modbus	IFM	
600 Y/347 V, 600 V	Ethernet	IFE	6
	Modbus	IFM	

H- and J-Frame Circuit Breaker Plug-In Units with Communications Box

Table 79: H- and J-Frame Circuit Breaker Plug-In Units with Communications—60–250 A

Cat. No. Prefix	Catalog No. Suffix ¹	Trip Range (Amperes)	Weight (Approx.)	
			Lb	Kg
PHD, PHG, PHJ, PHL	IFM4 / IFE4	60–150	44	20
PHD, PHG, PHJ, PHL	IFM5 / IFM6 / IFE5 / IFE6	60–150	46	21
PJD, PJG, PJJ, PJL	IFM4 / IFE4	250	44	20
PJD, PJG, PJJ, PJL	IFM5 / IFM6 / IFE5 / IFE6	250	46	21

¹ See Table 78.

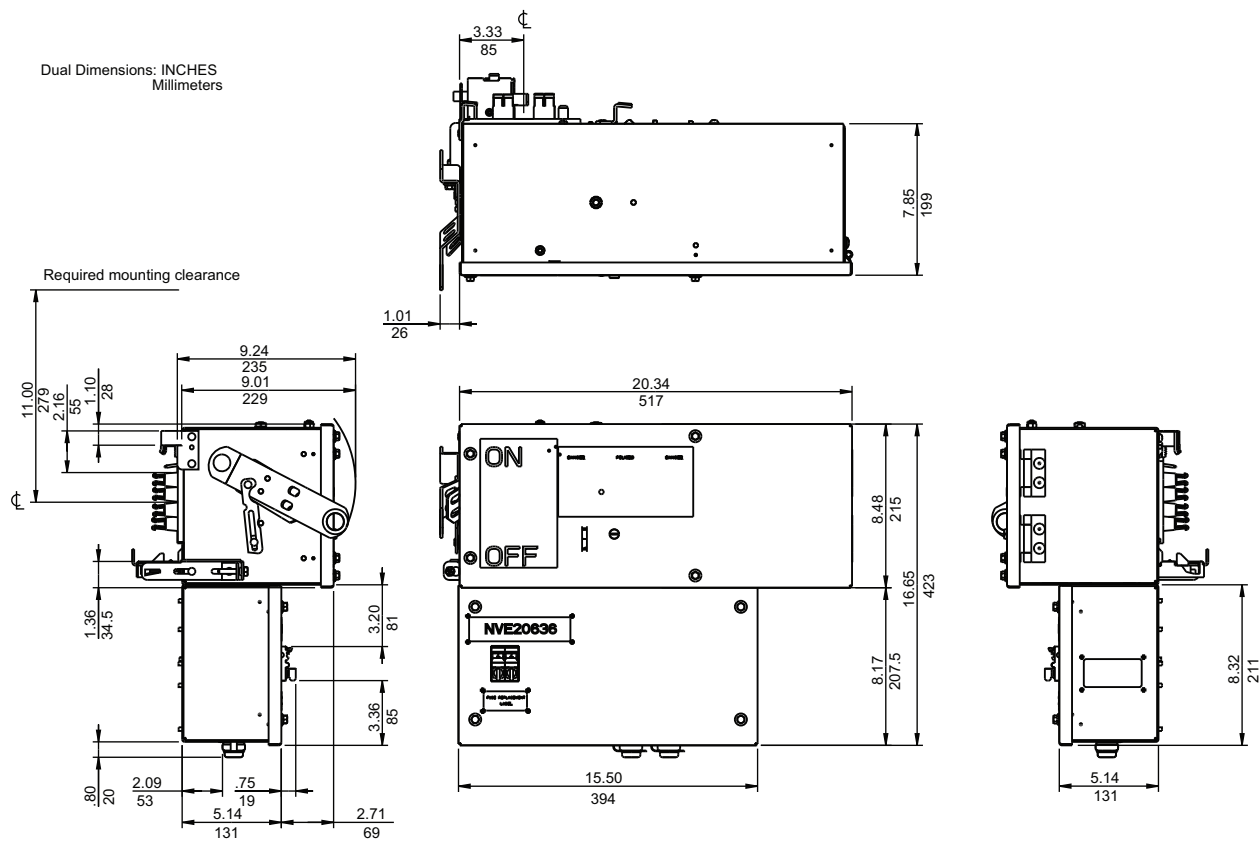


Figure 123: H- and J-Frame Plug-In Unit with Communications Box Dimensions

Section 9—I-Line™ Plug-In Units—Bus Plugs

L-Frame Circuit Breaker Plug-In Units with Communications Box

Table 80: L-Frame Circuit Breaker Plug-In Units with Communications—250–600 A

Cat. No. Prefix	Catalog No. Suffix ¹	Trip Range (Amperes)	Weight (Approx.)	
			Lb	Kg
PBLD, PBLG, PBLJ, PBLL, PBLR	IFM4 / IFE4	250–600	135	61
PBLD, PBLG, PBLJ, PBLL, PBLR	IFM5 / IFM6 / IFE5 / IFE6	250–600	138	63

¹ See Table 78 on page 114.

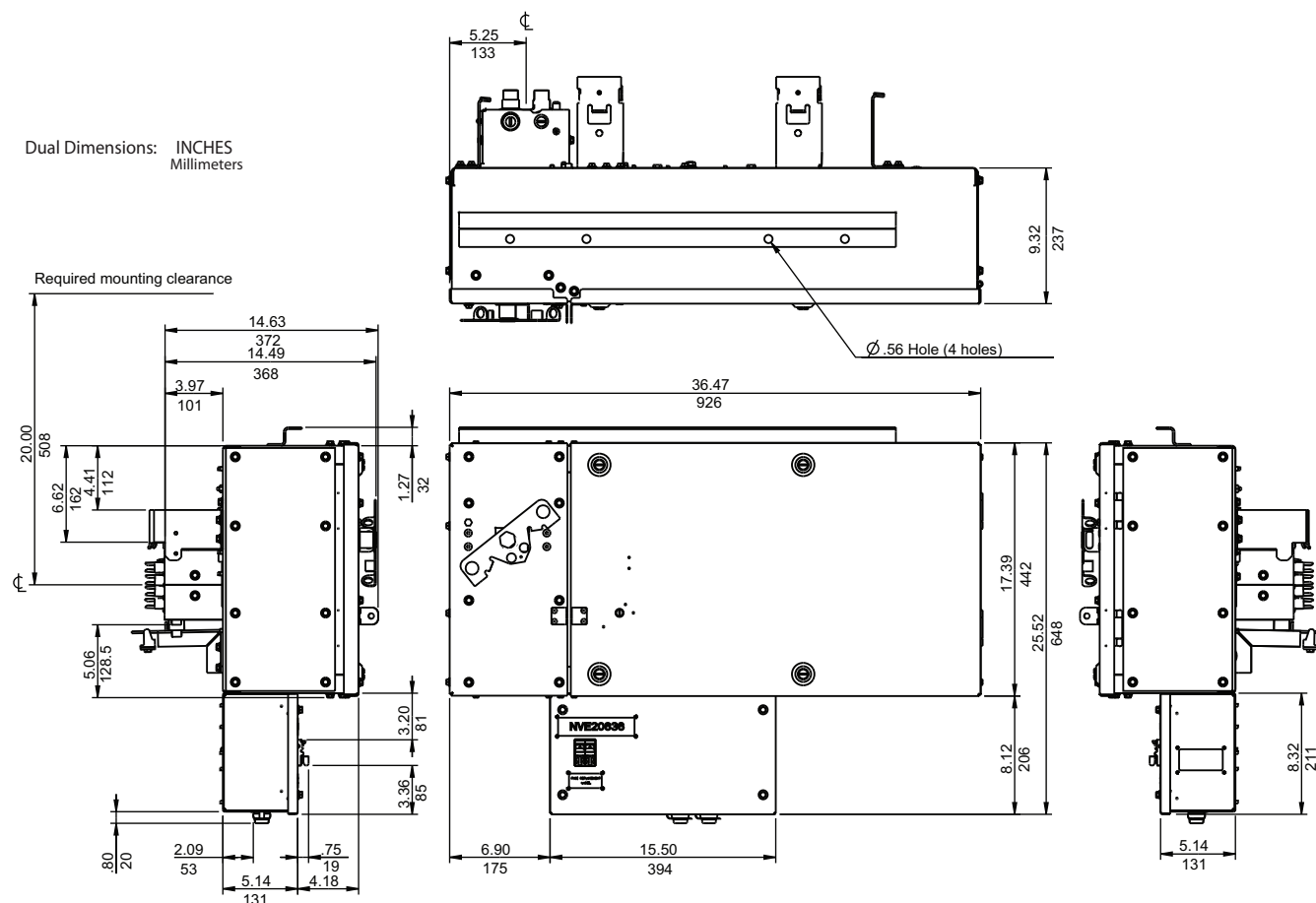


Figure 124: L-Frame Plug-In Unit with Communications Box Dimensions

Circuit Breaker Bolt-On Units—250–1200 A

NOTE: Bolt-on units to be used only on plug-in busway with the same number of poles. Not for use on 800 A copper busway.

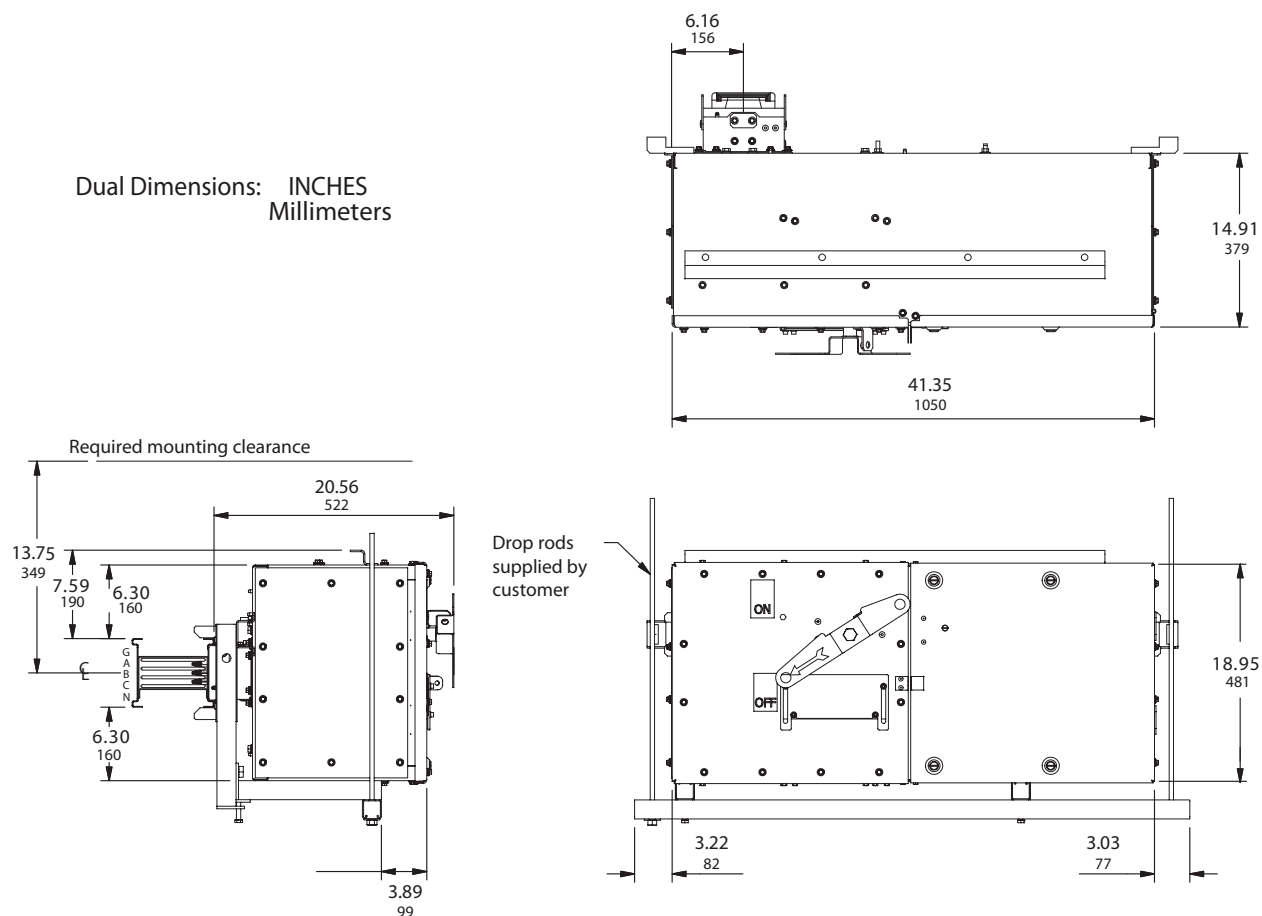


Figure 125: Circuit Breaker Bolt-On Units (Horizontally Mounted)—250–1200 A

Busway Systems Catalog
Section 9—I-Line™ Plug-In Units—Bus Plugs

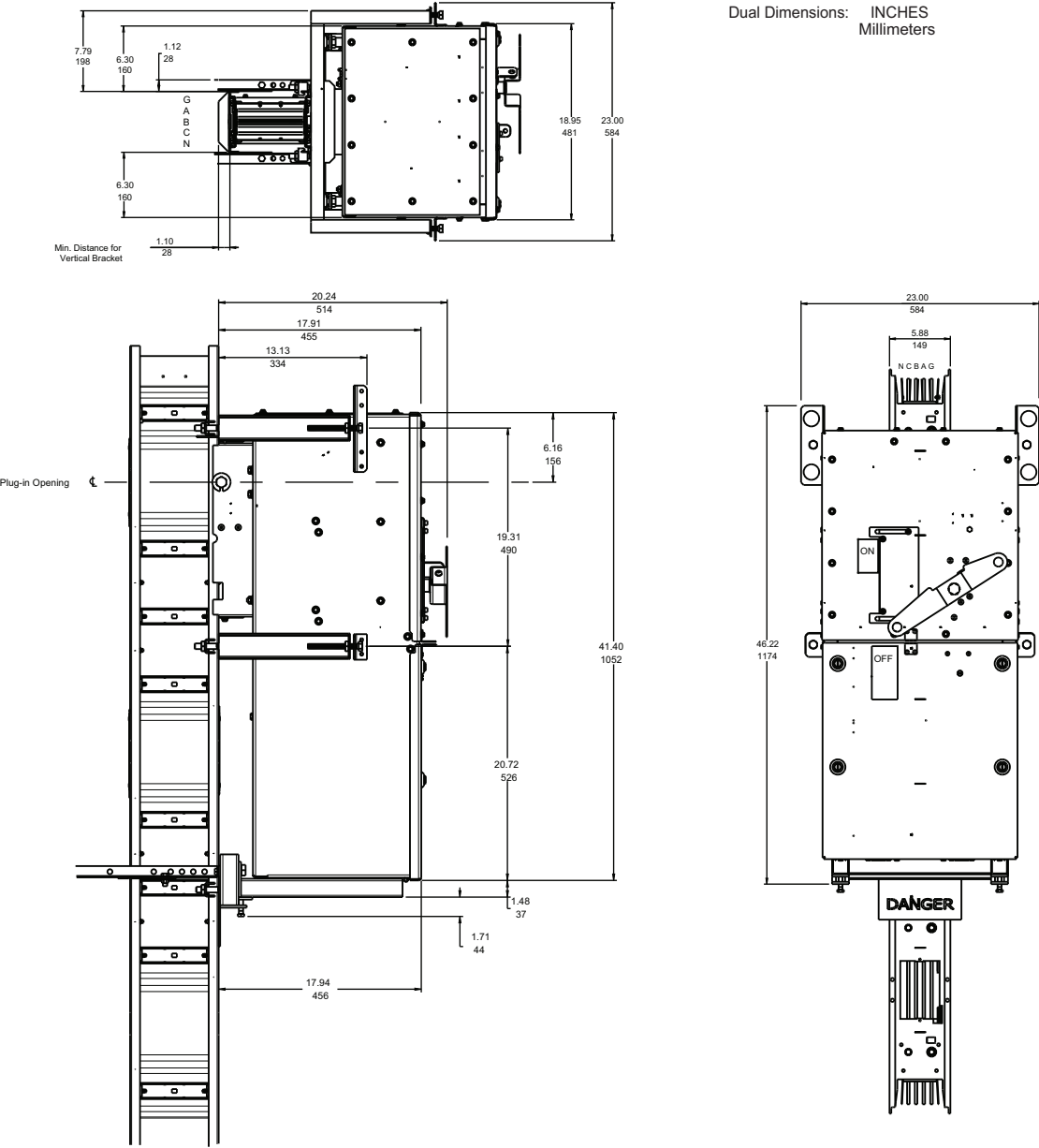


Figure 126: Circuit Breaker Bolt-On Units (Vertically Mounted)—250–1200 A

Table 81: Circuit Breaker Bolt-On Units—250–1200 A Specifications

Circuit Breaker		Weight (Approx.)		Lugs Per Phase and Neutral		Ground Lugs	
Cat. No. Prefix	Trip Range (Amperes)	Lb	Kg	Qty.	Size	Qty.	Size
PTMG, PTMJ	300-800	284	92	3	3/0 – 500 kcmil	4	6 – 300 kcmil
PTPG, PTPJ	250-800	284	92	3			
	1000-1200	304	101	4			

NOTE: These units plug into one opening, but require space equal to two plug-in openings.

NOTE: These units are available with the IP54 option and will be the same enclosure dimensions as shown above.

Circuit Breaker Bolt-On Units—600–1600 A

NOTE: Bolt-on units to be used only on plug-in busway (800–4000 A—except 800 A copper I-Line II) with the same number of poles (for example, do not use 3-pole unit on 3Ø4W busway).

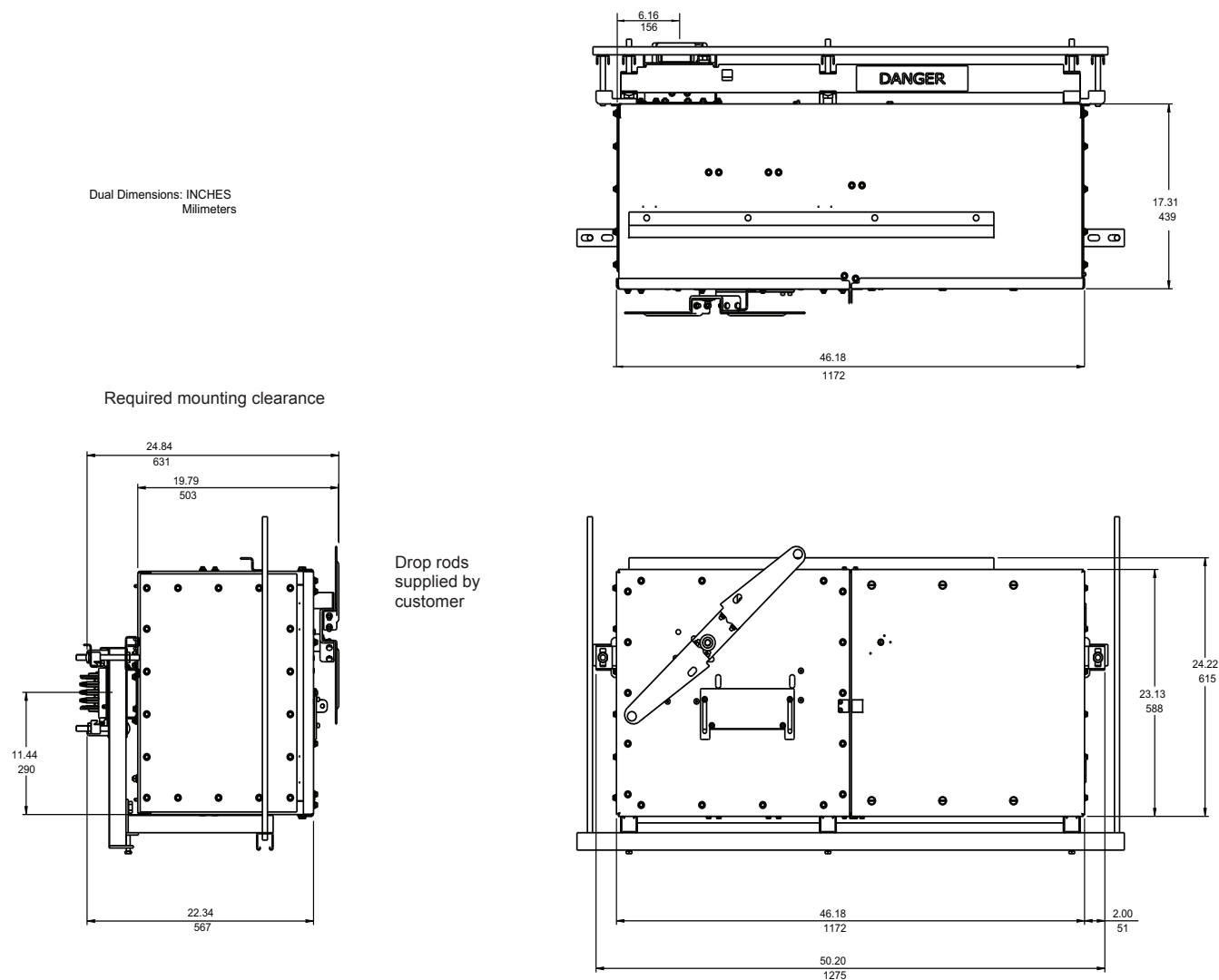


Figure 127: Circuit Breaker Bolt-On Units (Horizontally Mounted)—600–1600 A

Busway Systems Catalog
Section 9—I-Line™ Plug-In Units—Bus Plugs

Dual Dimensions: INCHES
Millimeters

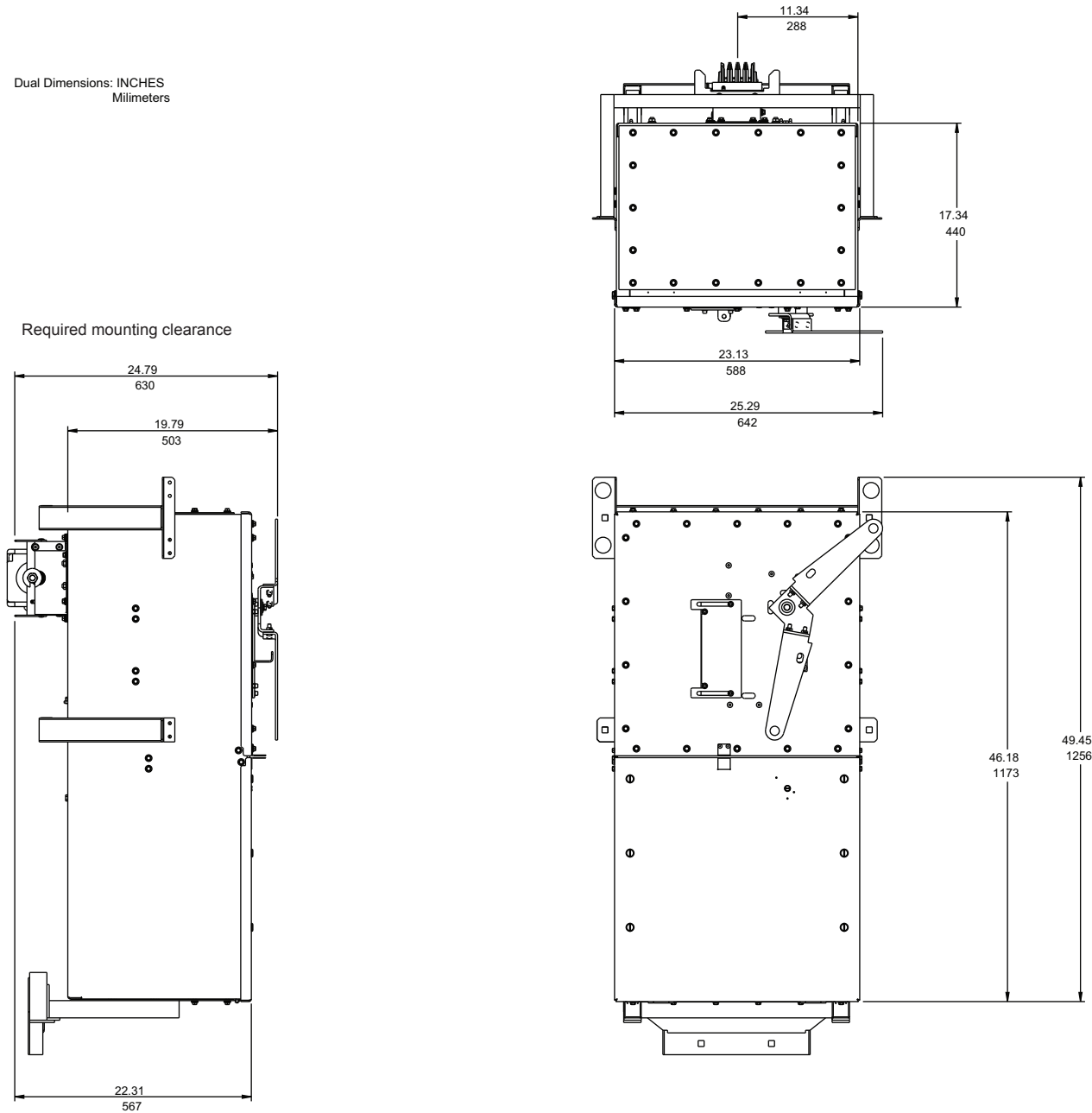


Figure 128: Circuit Breaker Bolt-On Units (Vertically Mounted)—600–1600 A

Table 82: Circuit Breaker Bolt-On Units—600–1600 A Specifications

Circuit Breaker		Weight (Approx.)		Lugs Per Phase and Neutral		Ground Lugs	
Cat. No. Prefix	Trip Range (Amperes)	Lb	Kg	Qty.	Size	Qty.	Size
PTRG, PTRJ, PTRL	600–1600	315	143	6	#1– 600 kcmil	6	#6 – 300 kcmil

NOTE: These units plug into one opening, but require space equal to two plug-in openings.

NOTE: These units are available with the IP54 option. Contact Schneider Electric for IP54 enclosure dimensions.

Surge Protective Devices

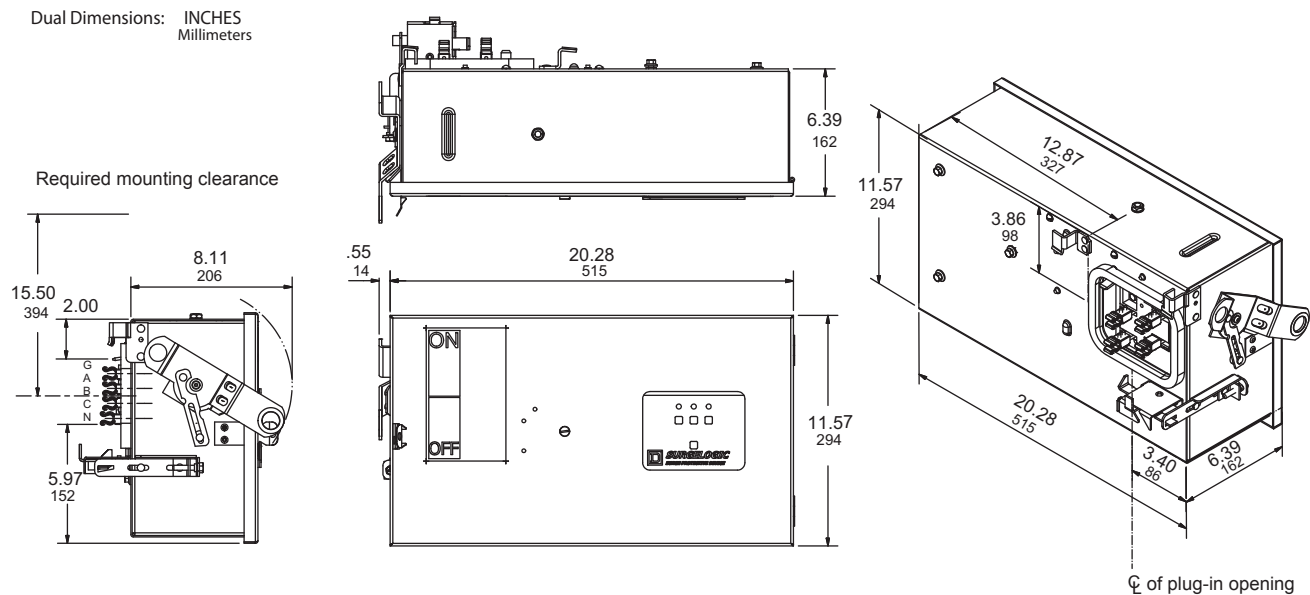


Figure 129: Surge Protective Devices-Dimensions, Required Mounting Clearance

Table 83: Surge Protective Devices—Surge Capacity

160,000 Amperes Per Phase			
Voltage Rating	Catalog Number	Weight	
		Lb	Kg
208Y/120 Vac	PIU21MA16	34	16
240Y/120 Vac	PIU31MA16	34	16
480Y/277 Vac	PIU41MA16	34	16
600Y/347 Vac	PIU81MA16	34	16
240,000 Amperes Per Phase			
Voltage Rating	Catalog Number	Weight	
		Lb	Kg
208Y/120 Vac	PIU21MA24	34	16
240Y/120 Vac	PIU31MA24	34	16
480Y/277 Vac	PIU41MA24	34	16
600Y/347 Vac	PIU81MA24	34	16

NOTE: These devices are available with the IP54 option.

Combination Fusible Switch and Starter / Lighting Contactor / Contactor

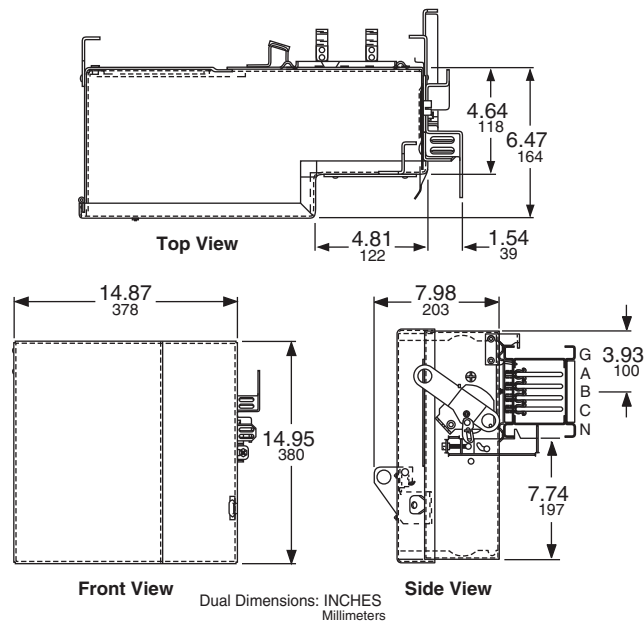


Table 84: Fusible Switch Starters / Lighting Contactors—Ratings and Dimensions

Fusible Switch Starter and Contactor			A		F		H	
Cat. No. Prefix	Starter or Contactor Size	Switch Rating	IN	mm	IN	mm	IN	mm
PSS, PSC	0 – 1	30-60 A	27.40	696	2.13	54	10.00	254
	2	60 A	29.58	751	3.38	86	10.00	254
	2	100 A	33.42	849	9.38	238	12.00	305

Table 85: Fusible Switch Lighting Contactor

Fusible Switch Lighting Contactor		A		F		H	
Cat. No. Prefix	Contactor and Switch Rating	IN	mm	IN	mm	IN	mm
PSL	30 A ¹	29.58	751	3.38	86	10.00	254
	30 ² – 60 – 100 A	33.42	849	9.38	238	12.00	305

¹ 30 A unit with electrically held contactor.
² 30 A unit with mechanically held contactor.

Combination Circuit Breaker and Starter—Contactor

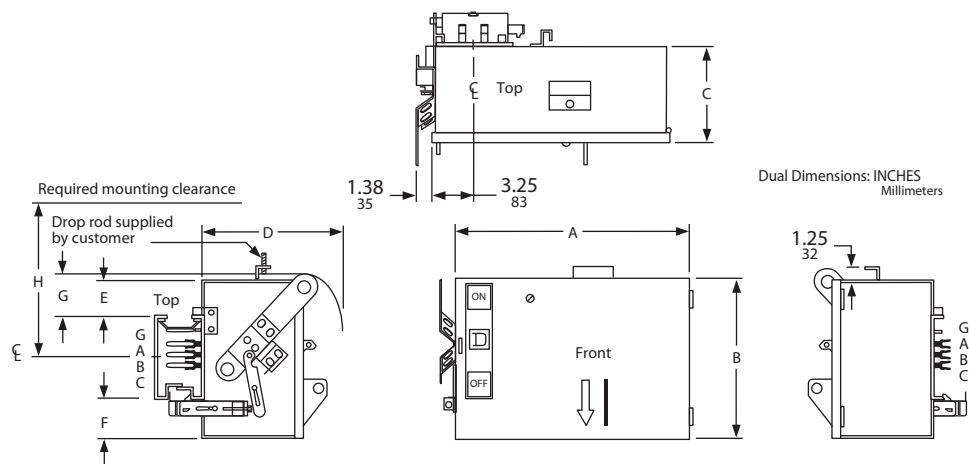
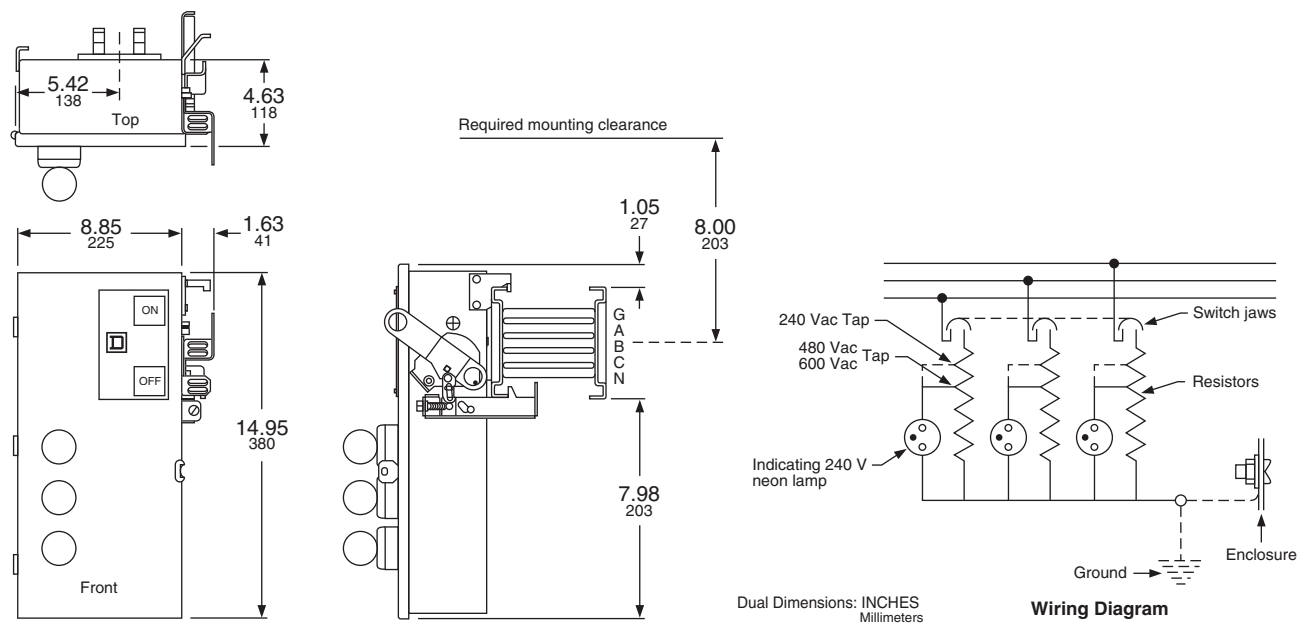


Table 86: Combination Circuit Breaker and Starter — Contactor Specifications

Circuit Breaker and Contactor			A		B		C		D		E		F		G		H	
Cat. No. Prefix	Starter or Contactor Size	Breaker Rating	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm
PBS, PBC	0, 1, 2	15-90 A	20.42	519	9.76	248	6.19	157	8.50	216	1.00	25	2.75	70	1.63	41	10.00	254

Ground Detector and Neutralizer



NOTE: The ground detector and neutralizer plug-in unit consists of a disconnect, a high resistance connection from each phase-to-ground, and neon indicating lights wired in parallel with the resistors. The resistors provide a discharge path for high transient voltages that can be impressed temporarily on the busway system.

The neon indicating lights provide visual indication of ground connections in a 3Ø3W ungrounded system. Operation of the lights is such that under normal conditions all three lights glow dimly under half voltage. If one phase goes to ground, the indicating light associated with that phase goes out while the other two assume full brilliance under full voltage conditions.

Table 87: Ground Detector and Neutralizer—Catalog Numbers and Approximate Weights

Voltage Rating	Catalog Number	Weight	
		Lb	Kg
240 Vac	PGD-3200G	16.0	35
600 Vac	PGD-3600G	16.0	35