

I-Line™ Circuit Breaker Panelboards

Catalog
2110CT9701R02/16
2016
Class 2110



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I-Line™ Circuit Breaker Panelboards

Product Description

Product Description

Square D™-brand I-Line™ circuit breaker power distribution panelboards are for use on AC or DC systems. The panels, labeled cULus (compliance to UL and CSA standards certified by UL) are also Underwriters Laboratories® (UL®) Listed under File E33139. The following are suitable for use as service entrance equipment:

- All main circuit breaker panelboards.
- All main lugs panelboards with branch-mounted, back-fed main circuit breaker. (For Canadian MLO service entrance, use HCP-SU and HCR-U only).
- All main lugs panelboards with six disconnects or less.
- A solid neutral that is insulated, but may be bonded to the box with a grounding strap.
- Service entrance panelboards meeting the requirements of CSA are available in Canada factory-assembled only.

I-Line circuit breaker panelboards are available as 400–1200 A main lugs only and 100–1200 A main circuit breakers. I-Line panelboards are designed to accept the following circuit breakers: FA, FH, BD, BG, BJ, BK, HD, HG, HJ, HL, HR, QB, QD, QG, QJ, JD, JG, JJ, JL, JR, LA, LD, LG, LJ, LH, LL, LR, MG, MJ, PG, PJ, PK, PL, RG, RJ, RK, and RL.

Standards

I-Line circuit breaker panelboards are designed, manufactured, and tested to comply with the following standards:

Standard	Description
UL 50	Standard for enclosures for electrical equipment
UL 67	Standard for panelboards
CSA C22.2, Nos. 29 and 94—1989	Standard for panelboards and enclosed panelboards
NFPA 70	National Electrical Code (NEC)
NEMA PB 1	Standard for panelboards
W-P 115C Type 1 Class 1	Specification for circuit breaker panelboards
2000 IBC	US standard for seismic requirements
1995 NBCC	Canadian standard for seismic requirements

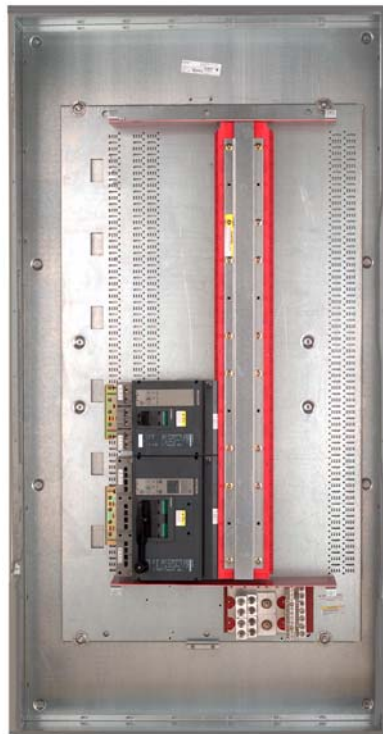
Service

I-Line circuit breaker panelboards can be used on the following system voltages:

- 120/240 VAC; 1-phase, 3-wire
- 240 VAC; 1-phase, 2-wire
- 240 VAC; 3-phase, 3-wire
- 240 VAC Ground, B-phase; 3-phase, 3-wire
- 208Y/120 VAC; 3-phase, 4-wire
- 480Y/277 VAC; 3-phase, 4-wire
- 480 VAC; 3-phase, 3-wire
- 600Y/347 VAC; 3-phase, 4-wire
- 600 VAC; 3-phase, 3-wire
- 125/250 VDC; 3-wire
- 250 VDC; 2-wire



Type HCR-U—1200 A Main Circuit Breaker



Type HCR-U—1200 A Main Circuit Breaker

I-Line™ Circuit Breaker Panelboards

Product Description



Type HCP—600 A Main Circuit Breaker

Panelboard Types

Panelboard Type	Maximum Mains Ampacity		Maximum Branch Circuit Breaker Frame Size ^a		Enclosure Dimensions ^b	
	Main Lugs	Main Circuit Breakers	Left	Right	Width IN (mm)	Depth IN (mm)
HCM	800 A	800 A	JD	JD	32 (813)	8.25 (210)/ 9.50 (241)
HCP-SU	800 A	800 A ^c	MG, PG	None	26 (600)	9.50 (241)
HCP	1200 A	800 A ^c	MG, PG	JD	42 (1067)	9.50 (241)
HCR-U	1200 A	1200 A ^c	RG	JD	44 (1118)	9.50 (241)

- ^a For a complete listing of applicable circuit breaker types, refer to the dimensions section.
- ^b Refer to the Dimensions section for standard panelboard heights.
- ^c Available as a main circuit breaker panelboard when provided with a branch mounted back-fed main circuit breaker.



Type HCP-SU
800 A Main Circuit Breaker



Type HCM—400 A Main Lugs

I-Line™ Circuit Breaker Panelboards

Product Description



Types 1 and 2 Enclosure with Optional Door



Flush Lock used on HCM, and HCP-SU Types 1 and 2 Fronts (Catalog No. PK4FL)



Sliding Vault Lock used on HCP, and HCR-U Types 1 and 2 Fronts (Catalog No. PK5FL)



Type 3R, 5, and 12 Enclosures

Enclosure Types

Types	Environments	Provides Protection Against
Type 1	Indoor	Contact with the enclosed equipment
Type 2	Indoor	Falling water and dirt
Type 3R	Outdoor	Falling rain, sleet; undamaged by ice
Type 4/4X Stainless	Indoor/Outdoor	Corrosion, hose-directed water, dust
Type 5	Indoor	Settling dust, falling dirt, dripping liquids
Type 12	Indoor	Circulating dust, falling dirt, dripping liquids

Type 1 Enclosures	Fronts:	HCM, HCP, HCP-SU, and HCR-U surface and flush trims available as four-piece construction, standard (door not included). An optional four-piece trim with door is also available.
	Boxes:	Finished with gray-baked enamel electrodeposited over cleaned phosphatized steel (ANSI 49). Directory card holders provided with all fronts. Galvanized steel in 26, 32, 42, and 44-inch (660, 813, 1067, and 1118 mm) widths. Removable endwalls without knockouts.
Type 3R, 5, and 12 Enclosures		Gasketed door with vault handle and directory card holder.
		Three-point latching.
		End and side gutter trim.
		No knockouts.
		Removable drain screw for Type 3R.
Type 4X Enclosures (Factory-Assembled Only)		Finished with gray-baked enamel electrodeposited over cleaned phosphatized steel (ANSI 49).
		Corrosion-resistant, stainless steel.
		Watertight and dusttight.
		Gasketed door.
		Directory card located on inside of door.



Type 3R, 5, and 12 Enclosures



Vault Handle used on all Type 3R, 5, and 12 Enclosures (Catalog No. PK4NVL)

I-Line™ Circuit Breaker Panelboards

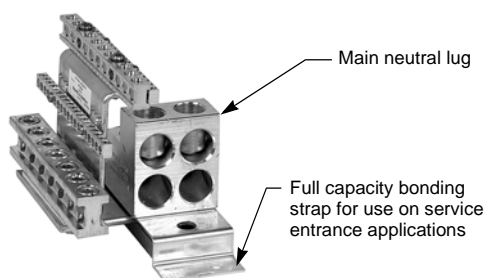
Product Description



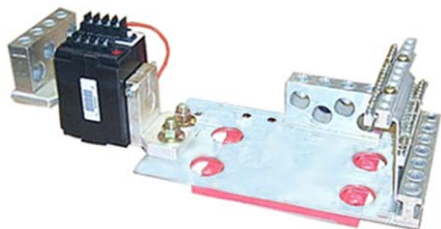
Main Circuit Breaker and Solid Neutral Compartment
(Canada service entrance not shown)



Main Lug and Solid Neutral Compartment



Typical Solid Neutral



Neutral with C/T for Use on HCR-U When Ground-Fault Protection is Required (Catalog No. HCR12SNCT)

Main Breaker Panelboards

- Accept a maximum 1200 A, 80% or 100% rated main breaker.
- Available factory-assembled or merchandised.*
- Factory-assembled main circuit breaker interiors are available bottom-feed or top-feed.
- Suitable for use as service entrance equipment with appropriate barriers, US and Canada.
- Accepts mechanically restrained I-Line circuit breakers.
- Available with a short circuit current rating (SCCR) up to 200 kA maximum (100 kA @ 600 VAC) when supplied by an I-Limiter™ circuit breaker.
- Available with a silver-plated or tin-plated copper bus, or tin-plated aluminum bus.
- Solid neutral is mounted in the mains compartment with the main circuit breaker.
- Merchandised panelboards are provided as bottom-feed.

Main Lugs Only Panelboards

- Available with main lug only interiors rated up to 1200 A.
- Available factory-assembled or merchandised.
- Suitable for use as service entrance equipment when provided with a main circuit breaker, US and Canada.
- Accepts mechanically restrained I-Line circuit breakers.
- Available with a short circuit current rating (SCCR) up to 200 kA maximum (100 kA @ 600 VAC) when supplied by an I-Limiter circuit breaker.
- Available with a silver-plated or tin-plated copper bus, or tin-plated aluminum bus.
- Solid neutral is mounted in the mains compartment with the main lugs.
- Hinged cover, isolated main lugs compartment.
- Main lug interiors are available as top-feed or bottom-feed.

Solid Neutral

- Mounts in main lug or main circuit breaker compartment.
- Does not take up interior circuit breaker mounting space.
- UL/CSA Listed for use with Al or Cu conductors.
- Copper or aluminum neutral available.
- 200% rated neutral available as a factory-assembled option.

I-Line™ Circuit Breaker Panelboards Features and Benefits

Features and Benefits

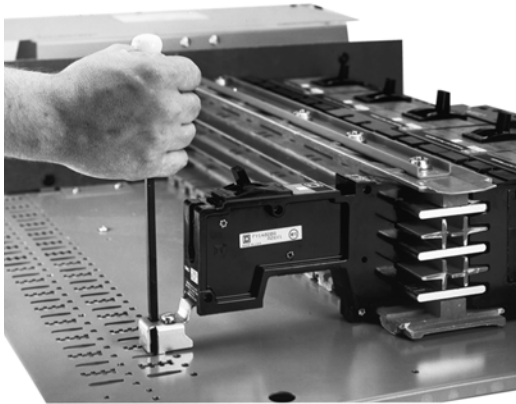
Featured below are just a few of the many features and benefits of Square D™-brand I-Line™ circuit breaker panelboards.

Circuit Breakers

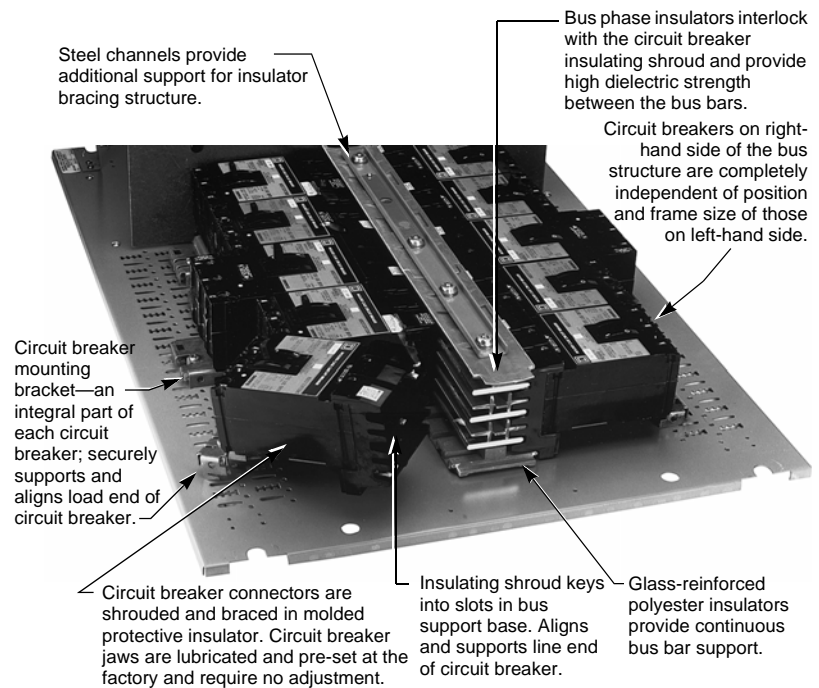
I-Line circuit breakers, with their exclusive bus connection design, provide superior reliability and performance advantages.

Circuit Breaker Mounting

- 15–1200 A frame circuit breakers require only a screwdriver and are firmly attached to the bus stack and mechanically attached to the interior assembly.
- The connectors are an integral part of the I-Line circuit breaker—eliminating the assembly of connectors to the bus bar.
- Pre-assembled hardware means reduced installation time.
- The unique line side connection requires no routine maintenance.



Ratchet-Type Mounting



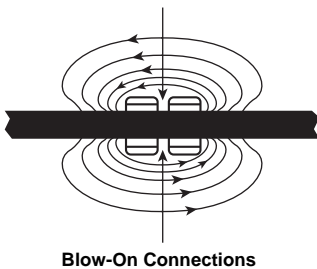
I-Line Bus Structure and Circuit Breaker Mounting

Push-to-Trip

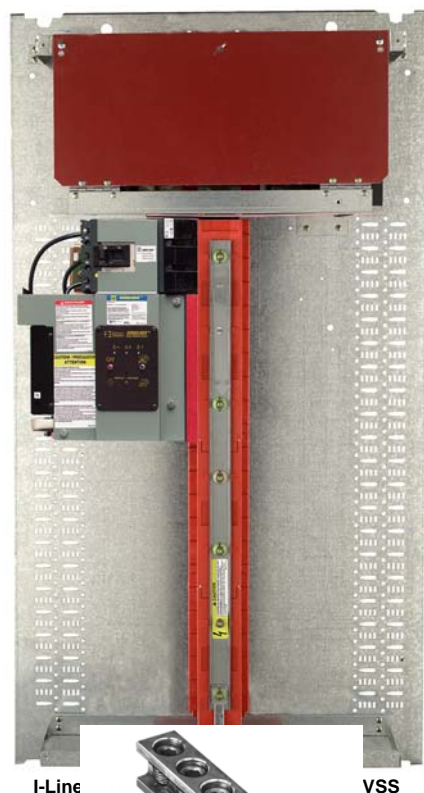
Push-to-trip is a standard feature on all I-Line circuit breakers. It is useful for checking circuit breaker operation and for testing auxiliary devices. The circuit breaker is mechanically tripped by pressing the push-to-trip button in the circuit breaker case.

Blow-On Connections

All circuit breaker connections are “blow-on” type. Under high-level short circuit conditions, the magnetic forces developed tend to draw the connector jaws together, gripping the I-Line bus bar more firmly.



I-Line™ Circuit Breaker Panelboards Accessories



I-Line

VSS



Equipment Ground Bar (Catalog No. PK32DGTA)



Typical Box Extensions



Blank Fillers (Catalog Nos. HNM4BL and HNM1BL)

Short Circuit Current Rating (SCCR)

- SCCR is equal to the lowest interrupting capacity of a branch or main circuit breaker installed in the panelboard.
- I-Line panelboards, with branch circuit breakers installed, are short-circuit tested as complete units.
- All tests are conducted in accordance with UL 67 and CSA C22.2 (Standards for Panelboards).

With I-Limiter main circuit breaker, I-Line main circuit breaker panelboards are UL/CSA Listed for use on systems with up to a 200,000 maximum RMS symmetrical amperes available fault current (100 kA @ 600 VAC).

I-Line Plug-on Unit with SurgeLogic™ SPD

- SPD requires no wiring or conduit, saving labor time and materials.
- Bus-connected design enhances performance.
- Meets the requirements of UL and CSA for retrofit applications in existing I-Line panelboards and switchboards.
- Integrated and circuit breaker disconnects feature compact design, requiring only 13.50 inches (343 mm) of branch mounting space.
- SCCR up to 200 kA rating (100 kA @ 600 VAC) meets a wide variety of customer applications.

Accessories

A wide variety of accessories are available for field or factory installation of I-Line panelboards.

Equipment Ground Bars

Equipment ground bars mount in the panelboard box to provide convenient termination of equipment grounding conductors. They are available in copper or aluminum.

Box Extensions

Box extensions provide additional end gutter for feeding cables into the end of the cabinet; they are UL/CSA Listed.

Blank Fillers

Blank fillers are required to cover unused mounting space in I-Line panelboards.

Backfed Main Breaker Barriers

Primarily for use in Canada, these barriers provide additional protection for backfed main breakers.

I-Line™ Circuit Breaker Panelboards

General and Application Information

General and Application Information

Please refer to Digest Section 9 for circuit breaker ratings information.

Circuit Breaker Frame Type	Maximum Voltage Rating	Number of Poles	Cont. Ampere Rating	UL/CSA Interrupting Rating—RMS Amperes (Symmetrical)					
				AC Volts, 50/60 Hz				DC Volts	
				120	240	480	600	125	250
FA 240 V	240	2	15–100	10 K	25 K	—	—	—	5 K
		3							
FA 480 V	277	1	35–100	25 K	25 K	18 K	—	10 K	10 K
	480	2	15–100						
		3							
FH ^a	277	1	15–30	65 K	65 K _c	25 K	—	10 K	—
	600	2, 3	35–100		25 K _c				
					15–100	—	—	—	18 K
BD	600 Y	1, 2, 3	15–125	25 K	25 K	18 K	14 K	—	—
BG	600 Y	1, 2, 3	15–125	65 K	65 K	35 K	18 K	—	—
BJ	600 Y	1, 2, 3	15–125	100 K	100 K	65 K	25 K	—	—
BK	600 Y	1, 2	15–30	100 K	100 K	65 K	65 K	—	—
HD	600	2, 3	15–150	25 K	25 K	18 K	14 K	20 K	20 K
HG	600	2, 3	15–150	65 K	65 K	35 K	18 K	20 K	20 K
HJ	600	2, 3	15–150	100 K	100 K	65 K	25 K	20 K	20 K
HL	600	2, 3	15–150	125 K	125 K	100 K	50 K	20 K	20 K
HR	600	3	15–150	200 K	200 K	200 K	100 K	—	—
QB	240	2, 3	70–225	10 K	10 K	—	—	—	—
QD	240	2, 3	70–225	25 K	25 K	—	—	—	—
QG	240	2, 3	70–225	65 K	65 K	—	—	—	—
QJ ^e	240	2, 3	70–225	100 K	100 K	—	—	—	—
JD	600	2, 3	150–250	25 K	25 K	18 K	14 K	20 K	20 K
JG	600	2, 3	150–250	65 K	65 K	35 K	18 K	20 K	20 K
JJ	600	2, 3	150–250	100 K	100 K	65 K	25 K	20 K	20 K
JL	600	2, 3	150–250	125 K	125 K	100 K	50 K	20 K	20 K
JR	600	2, 3	150–250	200 K	200 K	200 K	100 K	—	—
LA	600	2, 3	125–400	42 K	42 K	30 K	22 K	10 K	10 K
LH ^a	600	2, 3	125–400	65 K	65 K	35 K	25 K	—	50 K
LD	600	2, 3	250–600	25 K	25 K	18 K	14 K	—	—
LG	600	2, 3	250–600	65 K	65 K	35 K	18 K	—	20 K
LJ	600	2, 3	250–600	100 K	100 K	65 K	25 K	—	—
LL	600	2, 3	250–600	125 K	125 K	100 K	50 K	—	20 K
LR	600	2, 3	250–600	200 K	200 K	200 K	100 K	—	—
MG	600	2, 3	300–800	65 K	65 K	35 K	18 K	—	—
MJ	600	2, 3	300–800	100 K	100 K	65 K	25 K	—	—
PG	600	2, 3	600–1200	65 K	65 K	35 K	18 K	—	—
PJ	600	2, 3	600–1200	100 K	100 K	65 K	25 K	—	—
PK ^d	600	2, 3	600–1200	65 K	65 K	50 K	50 K	—	—
PL	480	2, 3	600–1200	125 K	125 K	100 K	25 K	—	—

Continued on next page

I-Line™ Circuit Breaker Panelboards

General and Application Information

Circuit Breaker Frame Type	Maximum Voltage Rating	Number of Poles	Cont. Ampere Rating	UL/CSA Interrupting Rating—RMS Amperes (Symmetrical)					
				AC Volts, 50/60 Hz				DC Volts	
				120	240	480	600	125	250
RG	600	2, 3	1000–1200	65 K	65 K	35 K	18 K	—	—
RJ	600	2, 3	1000–1200	100 K	100 K	65 K	25 K	—	—
RK d	600	2, 3	1000–1200	65 K	65 K	65 K	65 K	—	—
RL	600	2, 3	1000–1200	125 K	125 K	100 K	50 K	—	—

‡ 15 and 20 A are Switching Duty rated (SWD).

c 277 VAC rated.

a Separate UL rating available for 240 V and 480 V grounded B phase systems. Circuit breakers must be ordered with 5861 suffix.

c FG and FJ 600Y/347 VAC @ 15–30 A only.

d Canada Only.

e QJ 3-pole is rated 100 KA@208Y/120 VAC.

Circuit Breaker Terminal Data

Circuit Breaker	Frame Size	Ampere Rating	Terminal Lug Wire Size
FA	100 A	15–30	#14-#4 Cu or #12-#4 Al
FA	100 A	35–100	#14-1/0 Cu or #12-1/0 Al
FH	100 A	15–30	#14-#4 Cu or #12-#4 Al
FH	100 A	35–100	#14-1/0 Cu or #12-1/0 Al
BD, BG, BJ	125 A	15–125	#14-2/0 Al/Cu
BK	125 A	15–30	#14-2/0 Al/Cu
HD, HG, HJ, HL, HR	150 A	15–150	#14-3/0 Al/Cu
QB, QB, QG, QJ	225 A	70–225	#4-300 kcmil Al/Cu
JD, JG, JJ, JL	250 A	150–175	#4/0 Al/Cu
JD, JG, JJ, JL, JR	250 A	200–250	#3/0-350 kcmil Al/Cu
LA, LH	400 A	125–400	(1) #1-600 kcmil or (2) #1-250 kcmil Al/Cu
LD, LG, LJ, LL, LR	400 A	250	(1) #2-600 kcmil CU or (1) #2-500 kcmil AL
LD, LG, LJ, LL, LR	600 A	400–600	(2) #2-500kcmil AL/CU
MG, MJ	800 A	300–800	(3) 3/0-500 kcmil Al/Cu
PG, PJ, PKd, PL	1200 A	250–800	(3) 3/0-500 kcmil Al/Cu
PG, PJ, PKd, PL	1200 A	1000–1200	(4) 3/0-500 kcmil Al/Cu
RG, RJ, RKd, RL	1200 A	1000–1200	(4) 3/0-600 kcmil Al/Cu

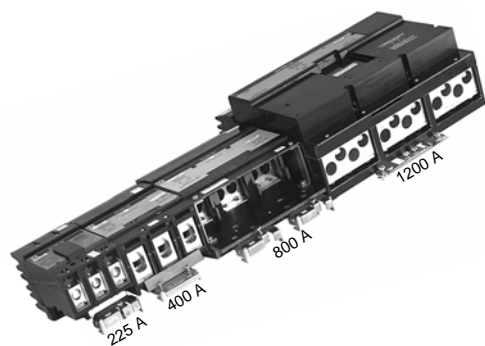
NOTE: Lugs are rated for 75 °C wire, except FA (15–30 A) and FI (20–30 A), which are rated for 60/75 °C. Torque values are listed on the circuit breaker faceplate tables.

d Canada only.

Circuit Breaker Accessories

- Shunt trip
- Undervoltage trip
- Alarm switch
- Auxiliary contacts
- Ground-fault shunt trip

I-Line™ Circuit Breaker Panelboards General and Application Information

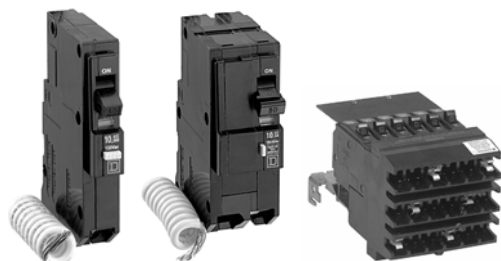


Plug-On Lugs



1-Pole 2-Pole 3-Pole

QO with Visi-Trip™ Indicator



Qwik-Gard Circuit Breaker with Ground Fault
Circuit Interrupter

NOTE: All accessories, except for the Ground-fault shunt trip are field-installable for LA, LH circuit breakers.

For detailed information on circuit breakers and accessories, refer to the Digest.

Circuit Breaker	Class
HD, HG, HJ, HL	611
QB, QD, QG, QJ	734
JD, JG, JJ, JL	611
LA, LH	660
MG, MJ	612
PG, PJ, PKd, PL	612
RG, RJ, RKd, RL	612

d Canada only.

Plug-On Lugs Terminal Data

Amperage Rating	Frame Size	Catalog No.	Terminal Lug Wire Size
250 A	250 A	SL250	(1) #4-300 kcmil Al/Cu
400 A	400 A	SL400	(1) #1-600 kcmil Al/Cu or (2) #1-250 kcmil Al/Cu
800 A	800 A	SL800M5	(3) 3/0 AWG-500 kcmil
1200 A	1200 A	SL1200P5	(4) 3/0 AWG-500 kcmil
1200 A	1200 A	SL1200P6	(3) 350-600 kcmil
1200 A	1200 A	SL1200P7	(3) 3/0 AWG-750 kcmil (750 kcmil: Compact Al only)
1200 A ‡	1200 A	S33930	(4) 3/0-600 kcmil Al/Cu

‡ For 100% rated applications ("R" frame breakers).

Plug-On QO™ Distribution Panel (Catalog No. HQO306)

- Six-pole, 240 VAC maximum
- Use with QO- QO-H, QO-VH, QH, and Qwik-Gard™ plug-on circuit breakers through 30 A. For detailed information, refer to DP Catalog Class 730 and 910.
- Mounts in all I-Line panelboards.

QO Distribution Panel Branch Circuit Breakers

Distribution Channel Type	Number of Poles & Amperages
10 k AIR, QO	1-Pole 10–30 A
	2-Pole 10–30 A
	3-Pole 10–30 A
10 k AIR, QO-GFI	1-Pole 15–30 A ‡
	2-Pole 15–30 A ‡
22 k AIR, QO-VH	1-Pole 15–30 A
	2-Pole 15–30 A
	3-Pole 15–30 A
22 k AIR, QO-VHGFI	1-Pole 15–30 A ‡
65 k AIR, QH	1-Pole 15–30 A
	2-Pole 15–30 A
	3-Pole 15–30 A

‡ Maximum of three GFI-suffix circuit breakers can be installed.

Circuit Breaker Types



BD, BG, BJ, BK
1-, 2-, and 3-Pole; 15–125 A (BK is 15–30 A)



QB, QD, QG, QJ
2- and 3-Pole; 70–225 A



HD, HG, HJ, HL
2- and 3-Pole; 15–150 A



JD, JG, JJ, JL
2- and 3-Pole; 150–250 A



MG, MJ
2- and 3-Pole; 300–800 A



PG, PJ, PK, PL
2- and 3-Pole; 250–1200 A



RG, RJ, RK, RL
2- and 3-Pole; 1000–1200 A

I-Line™ Circuit Breaker Panelboards

General and Application Information

Main Lugs and Main Circuit Breaker Ratings and Lug Sizes

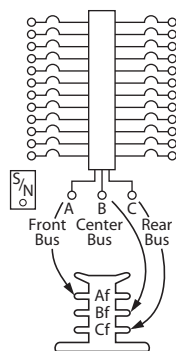
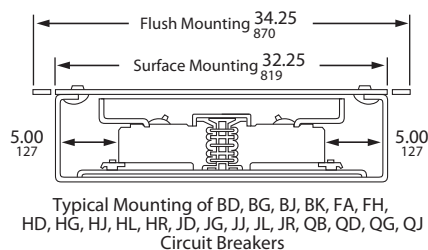
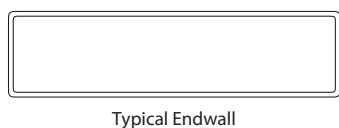
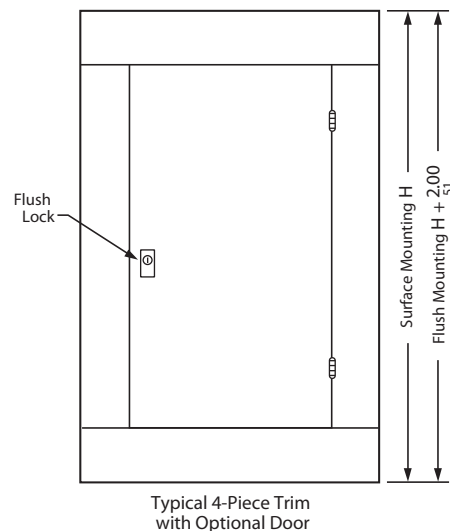
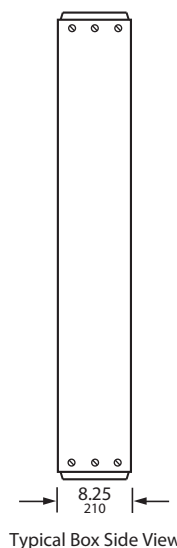
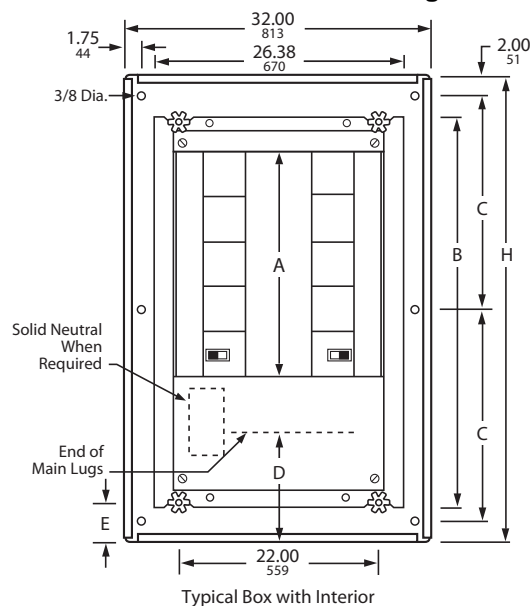
Mains Ampere Rating	Main Lugs		Main Circuit Breaker	
	Actual Lug Size	Cable Size Per UL/CSA Wire Bending Space	Actual Lug Size	Cable Size Per UL/CSA Wire Bending Space
Mechanical Lug Sizes				
100	—	—	(1) #14-1/0 Al/Cu	(1) #14-#1 Al/Cu
225	(1) #6-300 kcmil Al/Cu	(1) #6-300 kcmil Al/Cu	(1) #4-300 kcmil Al/Cu	(1) #4-300 kcmil Al/Cu
400	(2) #2-600 kcmil Al/Cu	(1) #2-600 kcmil Cu or (2) #2-500 kcmil Al/Cu	(1) #1-600 kcmil Al/Cu (2) #1-250 kcmil Al/Cu	(1) #1-600 kcmil Cu or (2) #1-250 kcmil Al/Cu
600	(2) #2-600 kcmil Al/Cu	(2) #2-500 kcmil Al/Cu	(3) 3/0-500 kcmil Al/Cu	(3) 3/0-500 kcmil Al/Cu
800	(4) 3/0-750 kcmil Al/Cu	(3) 3/0-500 kcmil Al/Cu	(4) 3/0-500 kcmil Al/Cu	(3) 3/0-500 kcmil Al/Cu
1200	(4) 3/0-750 kcmil Al/Cu	(4) 3/0-500 kcmil Al/Cu	(4) 3/0-600 kcmil Al/Cu	(4) 3/0-500 kcmil Al/Cu
VCEL Lug Sizes ^c				
100	—	—	(1) #8-1/0 Al/Cu	(1) #8-#1 Al/Cu
225	(1) #4-300 kcmil Al/Cu	(1) #4-300 kcmil Al/Cu	(1) #4-300 kcmil Al/Cu	(1) #4-300 kcmil Al/Cu
400	(1) 2/0-500 kcmil Al/Cu or (1) 500-750 kcmil Al or (2) #4-300 kcmil Al/Cu	(1) 2/0-500 kcmil Al/Cu or (1) 500-750 kcmil Al or (2) #4-250 kcmil Al/Cu	(1) 500 kcmil Cu or (1) 500-750 kcmil Al	(1) 500 kcmil Cu or (1) 500-750 kcmil Al
600	(2) 2/0-500 kcmil Al/Cu	(2) 2/0-500 kcmil Al/Cu	(2) 2/0-500 kcmil Al/Cu	(2) 2/0-500 kcmil Al/Cu
800	(3) 2/0-500 kcmil Al/Cu	(3) 2/0-500 kcmil Al/Cu	(2) 500 kcmil Cu or (2) 500-750 kcmil Al	(2) 500 kcmil Cu or (2) 500-750 kcmil Al
1200	(4) 500 kcmil Cu or (4) 500-750 kcmil Al	(4) 500 kcmil Cu or (4) 600 kcmil Al	—	—

^c Compression lugs vary depending on interior type used; contact your local Schneider Electric sales office for assistance.

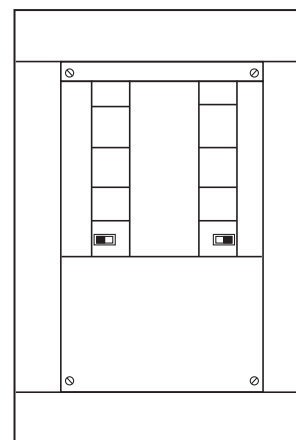
NOTE: All lugs are suitable for 75 °C wire. Torque values are included on the neutral diagram.

Dimensions

Type HCM—800 A Maximum Main Lugs



Branch connection phasing is determined by circuit breaker selection.



Dual Dimensions: INCHES
Millimeters

Main Lugs Ampere Rating	Catalog Number				H		A		B		C		D		E	
	Interior	Box	4-Piece Trim without Door ‡	4-Piece Trim with Door ‡	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
225	HCM14482N b	HC3248B	HCM48T()	HCM48T()D	48.00	1219	13.50	343	30.00	762	21.85	555	14.43	367	9.30	236
	HCM23642N	HC3264B	HCM64T()	HCM64T()D	64.00	1626	22.50	572	39.00	991	29.85	758	17.93	455	12.80	325
	HCM32732N	HC3273B	HCM73T()	HCM73T()D a	73.00	1854	31.50	800	48.00	1219	22.90	582	17.93	455	12.80	325
	HCM50912N	HC3291B	HCM91T()	HCM91T()D a	91.00	2311	49.50	1257	66.00	1676	28.90	734	17.93	455	12.80	325
400	HCM14484 b	HC3248B	HCM48T()	HCM48T()D	48.00	1219	13.50	343	30.00	762	21.85	555	14.90	378	9.30	236
	HCM23644	HC3264B	HCM64T()	HCM64T()D	64.00	1626	22.50	572	39.00	991	29.85	758	18.40	467	12.80	325
	HCM32734 b	HC3273B	HCM73T()	HCM73T()D a	73.00	1854	31.50	800	48.00	1219	22.90	582	18.40	467	12.80	325
	HCM50914	HC3291B	HCM91T()	HCM91T()D a	91.00	2311	49.50	1257	66.00	1676	28.90	734	18.40	467	12.80	325

Continued on next page

I-Line™ Circuit Breaker Panelboards

Dimensions

Main Lugs Ampere Rating	Catalog Number				H		A		B		C		D		E	
	Interior	Box	4-Piece Trim without Door ‡	4-Piece Trim with Door ‡	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
600	HCM14486 b	HC3248B	HCM48T()	HCM48T()D	48.00	1219	13.50	343	30.00	762	21.85	555	16.50	419	9.30	236
	HCM23646	HC3264B	HCM64T()	HCM64T()D	64.00	1626	22.50	572	39.00	991	29.85	758	20.00	508	12.80	325
	HCM32736 b	HC3273B	HCM73T()	HCM73T()D a	73.00	1854	31.50	800	48.00	1219	22.90	582	20.00	508	12.80	325
	HCM50916	HC3291B	HCM91T()	HCM91T()D a	91.00	2311	49.50	1257	66.00	1676	28.90	734	20.00	508	12.80	325
800	HCM14488	HC3248B	HCM48T()	HCM48T()D	48.00	1219	13.50	343	30.00	762	21.85	555	15.32	389	9.30	236
	HCM23648	HC3264B	HCM64T()	HCM64T()D	64.00	1626	22.50	572	39.00	991	29.85	758	18.82	478	12.80	325
	HCM32738	HC3273B	HCM73T()	HCM73T()D a	73.00	1854	31.50	800	48.00	1219	22.90	582	18.82	478	12.80	325
	HCM50918	HC3291B	HCM91T()	HCM91T()D a	91.00	2311	49.50	1257	66.00	1676	28.90	734	18.82	478	12.80	325

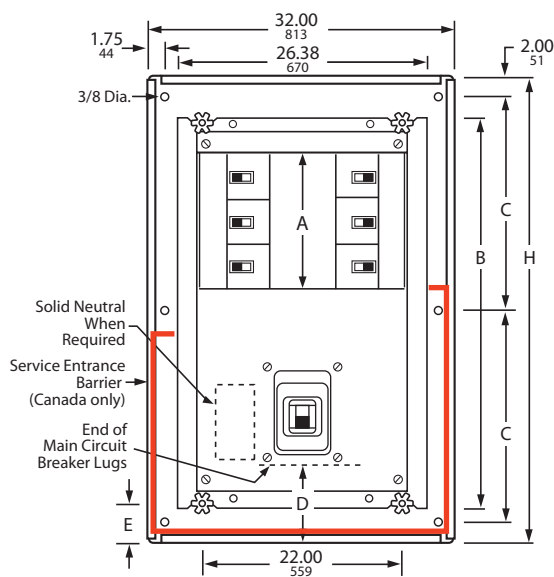
‡ Replace parentheses with "F" for flush or "S" for surface.

a Two flush locks are supplied.

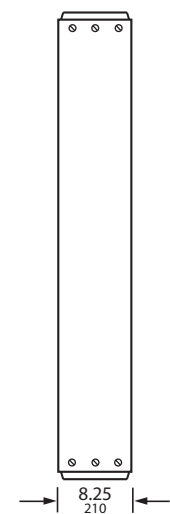
b Add Cu to suffix for copper bus.

I-Line™ Circuit Breaker Panelboards Dimensions

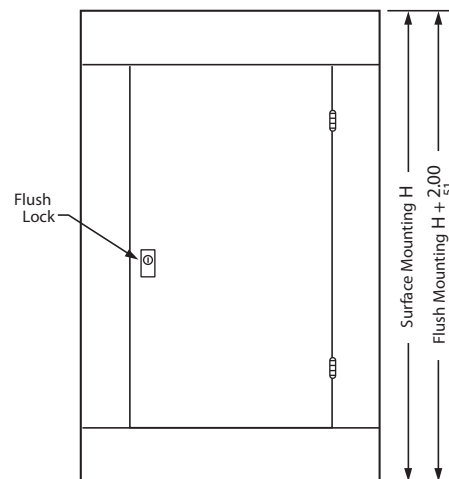
Type HCM—400 A Maximum Main Circuit Breaker



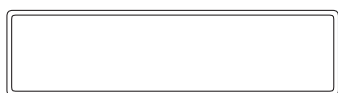
Typical Box with Interior



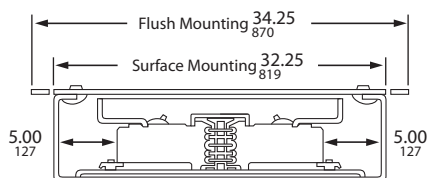
Typical Box Side View



Typical 4-Piece Trim with Optional Door



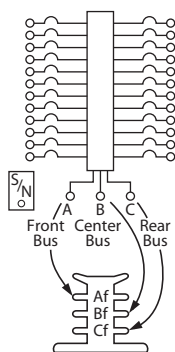
Typical Endwall



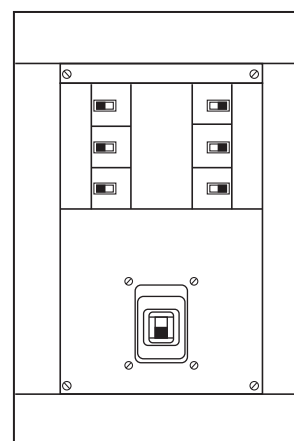
Typical Mounting of BD, BG, BJ, BK, FA, FH, HD, HG, HJ, HL, HR, JD, JG, JJ, JL, JR, QB, QD, QG, QJ

Circuit Breakers

Dual Dimensions: INCHES
Millimeters



Typical Wiring Diagram
Branch connection phasing is determined by circuit breaker selection.



Typical 4-Piece Trim without Optional Door

Main Circuit Breaker Ampere Rating	Catalog Number				H		A		B		C		D		E	
	Interior	Box	4-Piece Trim without Door ‡	4-Piece Trim with Door ‡	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
225	HCM18642MN	HC3264B	HCM64T()	HCM64T()D	64.00	1626	18.00	457	39.00	991	29.85	758	15.50	394	12.80	325
225	HCM27732MN ^b	HC3273B	HCM73T()	HCM73T()D ^a	73.00	1854	27.00	686	48.00	1219	22.90	582	15.50	394	12.80	325
400	HCM14644M	HC3264B	HCM64T()	HCM64T()D	64.00	1626	13.50	343	39.00	991	29.85	758	16.96	431	12.80	325
400	HCM23734M	HC3273B	HCM73T()	HCM73T()D ^a	73.00	1854	22.50	572	48.00	1219	22.90	582	16.96	431	12.80	325
400	HCM41914M ^b	HC3291B	HCM91T()	HCM91T()D ^a	91.00	2311	40.50	1029	66.00	1676	28.90	734	16.96	431	12.80	325

‡ Replace parentheses with "F" for flush or "S" for surface.

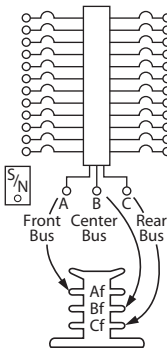
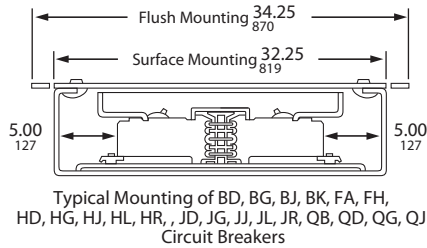
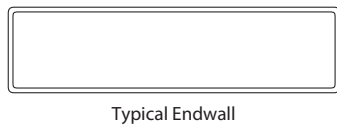
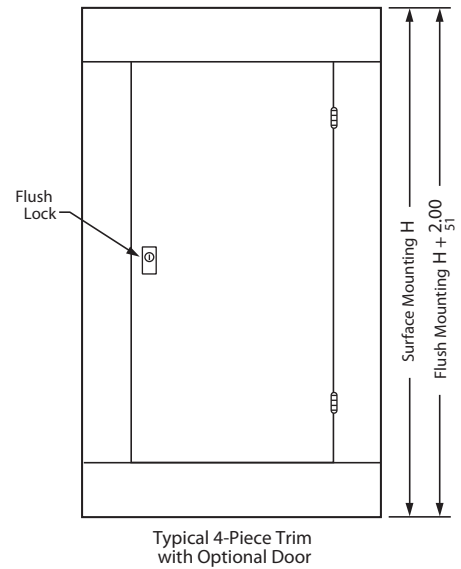
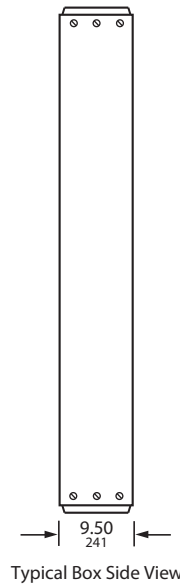
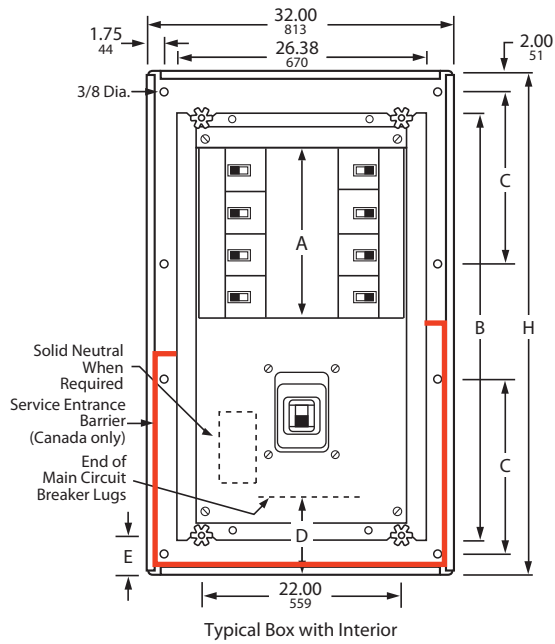
^a Two flush locks are supplied.

^b Add Cu to suffix for copper bus.

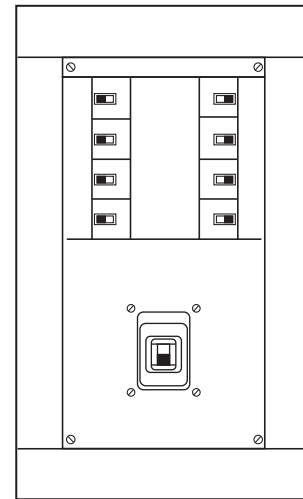
I-Line™ Circuit Breaker Panelboards

Dimensions

Type HCM—800 A Maximum Main Circuit Breaker



Branch connection phasing is determined by circuit breaker selection.



Dual Dimensions: INCHES
Millimeters

Main Circuit Breaker Ampere Rating	Catalog Number				H		A		B		C		D		E	
	Interior	Box	4-Piece Trim without Door ‡	4-Piece Trim with Door ‡ a	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
600	HCM18736MP	HC3273DB9	HCM73T()	HCM73T()D	73.00	1854	18.00	457	48.00	1219	22.90	582	18.68	474	12.80	325
	HCM36916MP	HC3291DB9	HCM91T()	HCM91T()D	91.00	2311	36.00	914	66.00	1676	28.90	734	18.68	474	12.80	325
800	HCM18738MP	HC3273DB9	HCM73T()	HCM73T()D	73.00	1854	18.00	457	48.00	1219	22.90	582	18.68	474	12.80	325
	HCM36918MP	HC3291DB9	HCM91T()	HCM91T()D	91.00	2311	36.00	914	66.00	1676	28.90	734	18.68	474	12.80	325

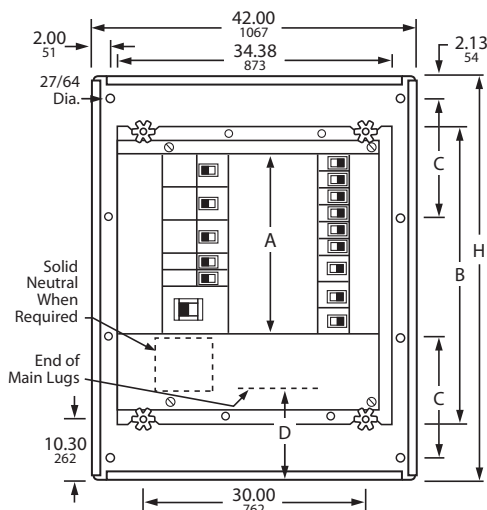
‡ Replace parentheses with "F" for flush or "S" for surface.

a Two flush locks are supplied.

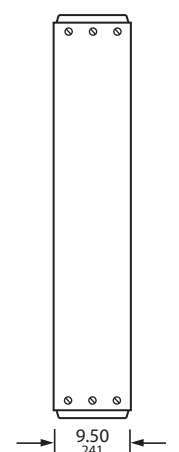
I-Line™ Circuit Breaker Panelboards

Dimensions

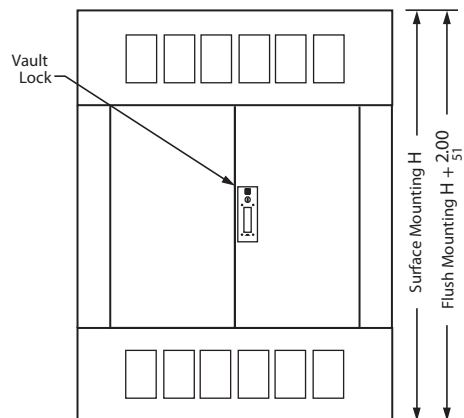
Type HCP—800 A Maximum Main Lugs



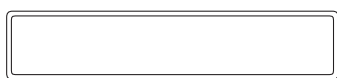
Typical Box with Interior



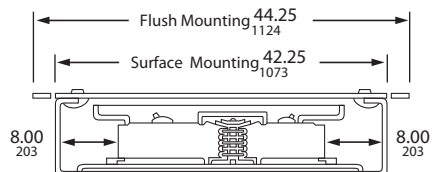
Typical Box Side View



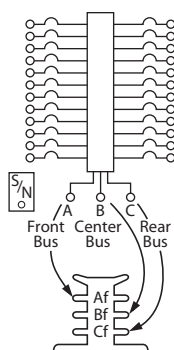
Typical 4-Piece Trim with Optional Door



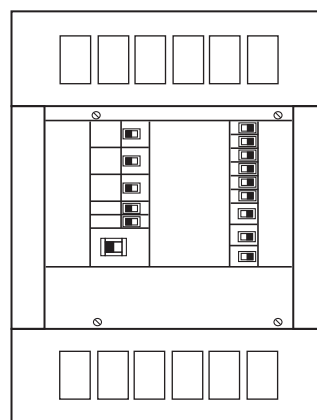
Typical Endwall



Typical Mounting of BD, BG, BJ, BK, FA, FH, HD, HG, HJ, HL, JD, JG, JJ, JL, LA, LD, LG, LJ, LL, LR, MG, MJ, PG, PJ, PK, PL, QB, QD, QG, QJ Circuit Breakers



Typical Wiring Diagram
Branch connection phasing is determined by circuit breaker selection.



Typical 4-Piece Trim without Optional Door

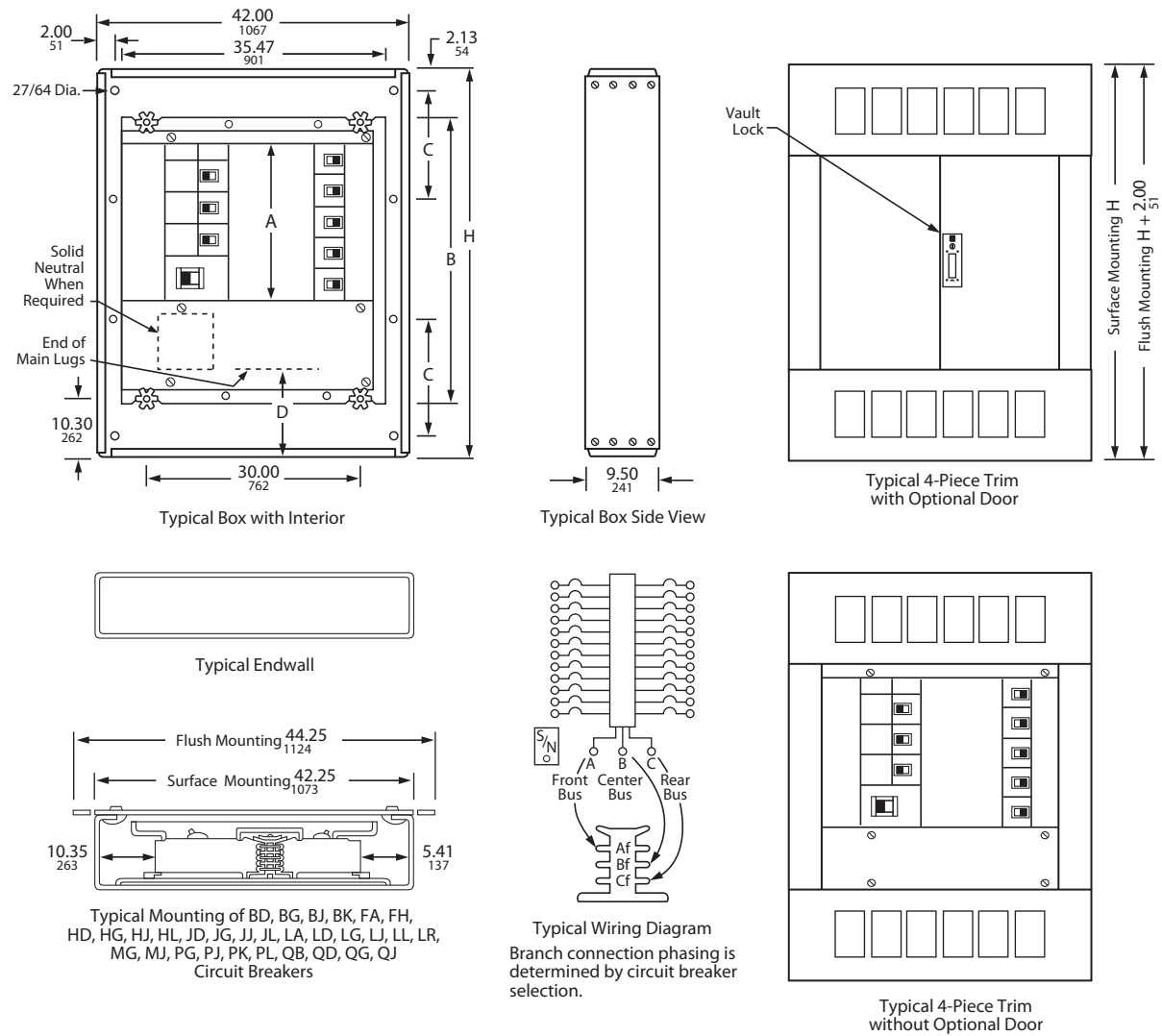
Dual Dimensions: INCHES
Millimeters

Main Lugs Ampere Rating	Catalog Number				H		A		B		C		D	
	Interior	Box	4-Piece Trim without Door ‡	4-Piece Trim with Door ‡	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
400	HCP14504	HC4250DB	HCW50T()	HCW50T()D	50.00	1270	13.50	343	30.00	762	22.85	580	17.50	445
	HCP23594	HC4259DB	HCW59T()	HCW59T()D	59.00	1499	22.50	572	39.00	991	27.35	695	17.50	445
	HCP32684	HC4268DB	HCW68T()	HCW68T()D	68.00	1727	31.50	800	48.00	1219	31.85	809	17.50	445
	HCP50864	HC4286DB	HCW86T()	HCW86T()D	86.00	2184	49.50	1257	66.00	1676	27.23	692	17.50	445
600	HCP14506	HC4250DB	HCW50T()	HCW50T()D	50.00	1270	13.50	343	30.00	762	22.85	580	17.50	445
	HCP23596	HC4259DB	HCW59T()	HCW59T()D	59.00	1499	22.50	572	39.00	991	27.35	695	17.50	445
	HCP32686	HC4268DB	HCW68T()	HCW68T()D	68.00	1727	31.50	800	48.00	1219	31.85	809	17.50	445
	HCP50866	HC4286DB	HCW86T()	HCW86T()D	86.00	2184	49.50	1257	66.00	1676	27.23	692	17.50	445
800	HCP14508	HC4250DB	HCW50T()	HCW50T()D	50.00	1270	13.50	343	30.00	762	22.85	580	16.32	415
	HCP23598	HC4259DB	HCW59T()	HCW59T()D	59.00	1499	22.50	572	39.00	991	27.35	695	16.32	415
	HCP32688	HC4268DB	HCW68T()	HCW68T()D	68.00	1727	31.50	800	48.00	1219	31.85	809	16.32	415
	HCP50868	HC4286DB	HCW86T()	HCW86T()D	86.00	2184	49.50	1257	66.00	1676	27.23	692	16.32	415

‡ Replace parentheses with "F" for flush or "S" for surface.

I-Line™ Circuit Breaker Panelboards
Dimensions

Type HCP—1200 A Maximum Main Lugs



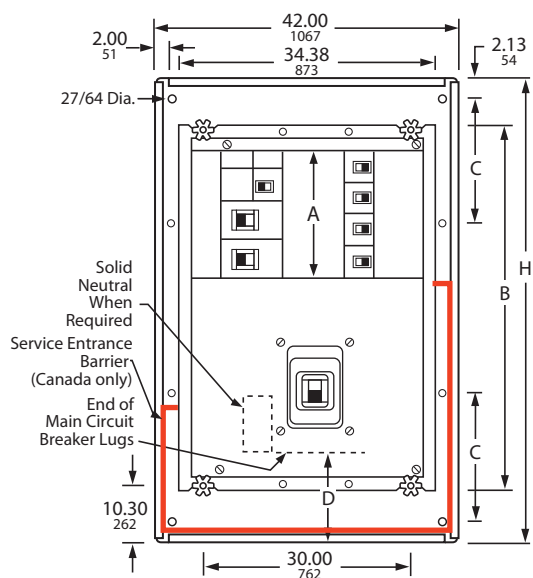
Dual Dimensions: INCHES
Millimeters

Main Lugs Ampere Rating	Catalog Number				H		A		B		C		D	
	Interior	Box	4-Piece Trim without Door ‡	4-Piece Trim with Door ‡	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
1200	HCP145012N	HC4250DB	HCW50T()	HCW50T()D	50.00	1270	13.50	343	30.00	762	22.85	580	16.32	415
	HCP235912N	HC4259DB	HCW59T()	HCW59T()D	59.00	1499	22.50	572	39.00	991	27.23	692	16.32	415
	HCP326812N	HC4268DB	HCW68T()	HCW68T()D	68.00	1727	31.50	800	48.00	1219	31.85	809	16.32	415
	HCP508612N	HC4286DB	HCW86T()	HCW86T()D	86.00	2184	49.50	1257	66.00	1676	27.23	692	16.32	415

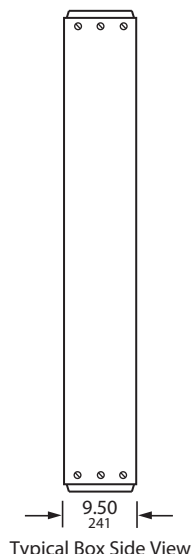
‡ Replace parentheses with "F" for flush or "S" for surface.

I-Line™ Circuit Breaker Panelboards Dimensions

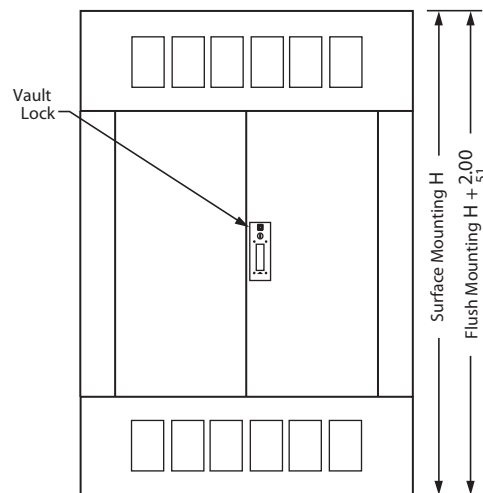
Type HCP—800 A Maximum Main Circuit Breaker



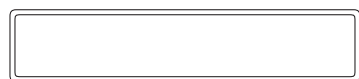
Typical Box with Interior



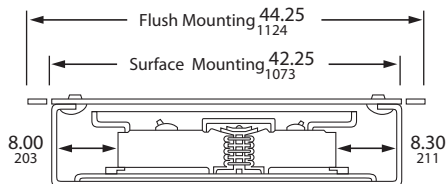
Typical Box Side View



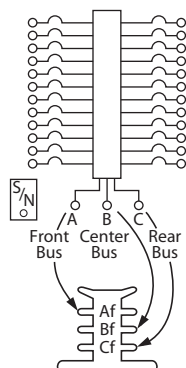
Typical 4-Piece Trim with Optional Door



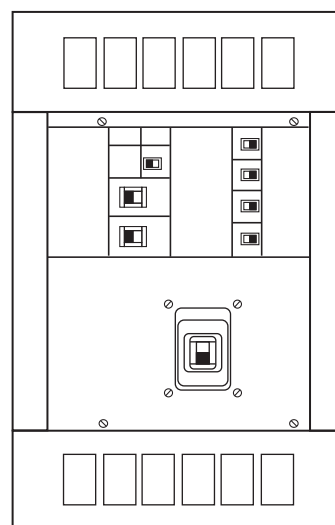
Typical Endwall



Typical Mounting of BD, BG, BJ, BK, FA, FH, HD, HG, HJ, HL, JD, JG, JJ, JL, LA, LD, LG, LJ, LL, LR, MG, MJ, PG, PJ, PK, PL, QB, QD, QG, QJ Circuit Breakers



Typical Wiring Diagram
Branch connection phasing is determined by circuit breaker selection.



Typical 4-Piece Trim without Optional Door

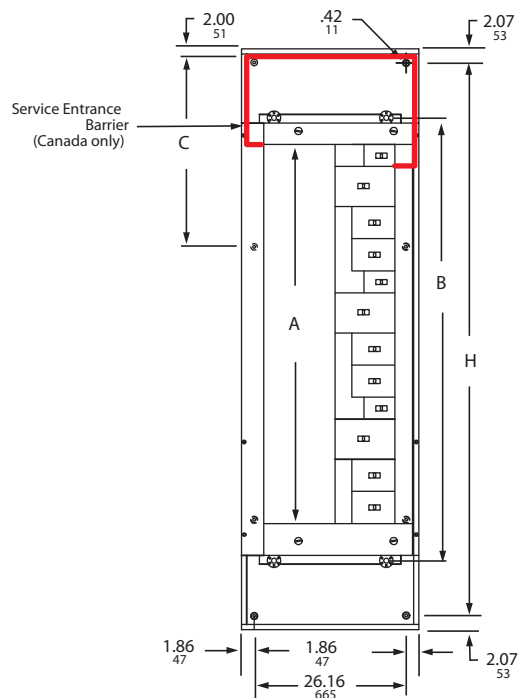
Dual Dimensions: INCHES
Millimeters

Main Circuit Breaker Ampere Rating	Catalog Number				H		A		B		C		D	
	Interior	Box	4-Piece Trim without Door ‡	4-Piece Trim with Door ‡	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
600	HCP18686M	HC4268DB	HCW68T()	HCW68T()D	68.00	1727	18.00	457	48.00	1219	31.85	809	18.68	474
	HCP36866M	HC4286DB	HCW86T()	HCW86T()D	86.00	2184	36.00	914	66.00	1676	27.23	692	18.68	474
800	HCP18688M	HC4268DB	HCW68T()	HCW68T()D	68.00	1727	18.00	457	48.00	1219	31.85	809	18.68	474
	HCP36868M	HC4286DB	HCW86T()	HCW86T()D	86.00	2184	36.00	914	66.00	1676	27.23	692	18.68	474

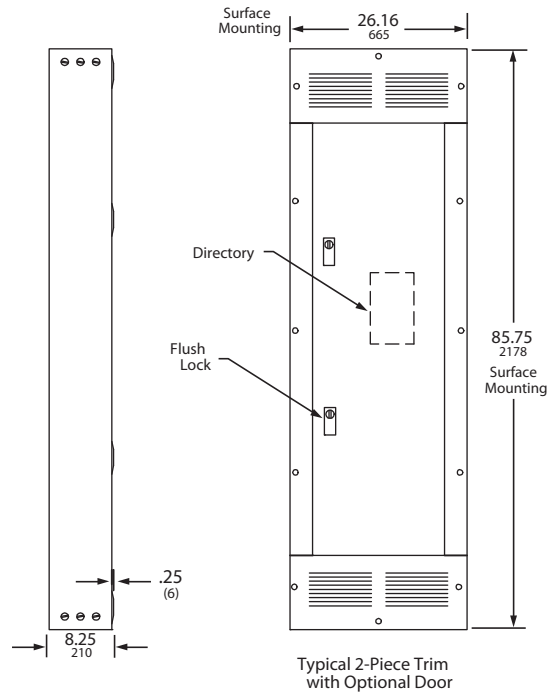
‡ Replace parentheses with "F" for flush or "S" for surface.

I-Line™ Circuit Breaker Panelboards
Dimensions

Type HCP-SU—800 A Maximum Main Circuit Breaker

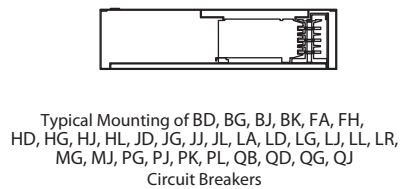


Typical Box with Interior

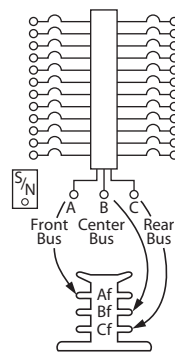


Typical Box Side View

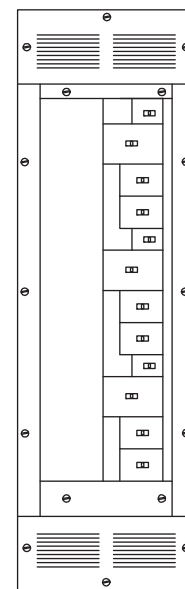
Typical 2-Piece Trim with Optional Door



Dual Dimensions: INCHES
Millimeters



Branch connection phasing is determined by circuit breaker selection.



Typical 2-Piece Trim without Optional Door

Main Circuit Breaker Ampere Rating	Catalog Number				H		A		B		C	
	Interior	Box	2-Piece Trim without Door ‡ a	2-Piece Trim with Door ‡ a	in.	mm	in.	mm	in.	mm	in.	mm
800	HCP54868SU	HC2686DB	HC2686T()	HC2686T()D	86.00	2184	54.00	1372	65.40	1661	27.23	692

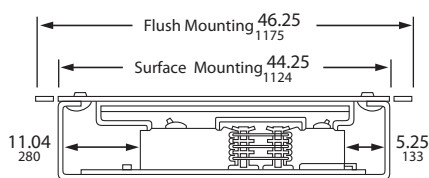
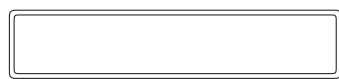
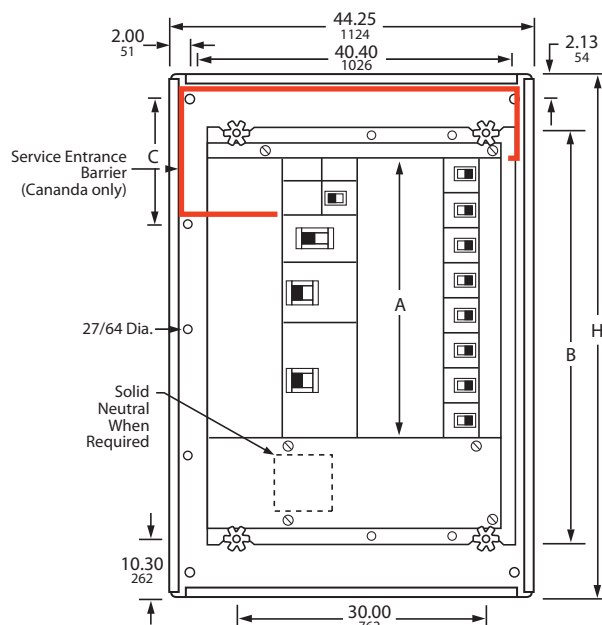
‡ Replace parentheses with "F" for flush or "S" for surface.

a Flush trims are 4-piece.

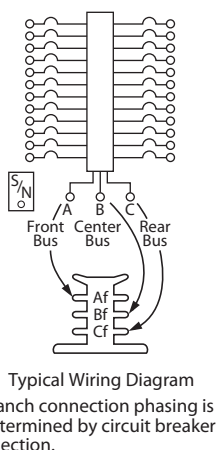
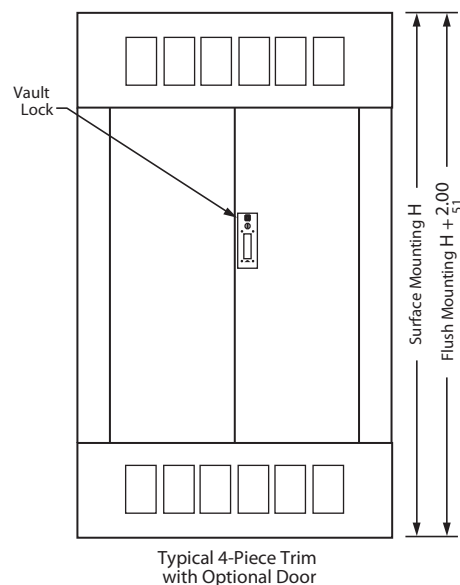
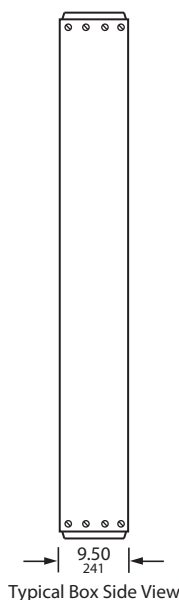
I-Line™ Circuit Breaker Panelboards

Dimensions

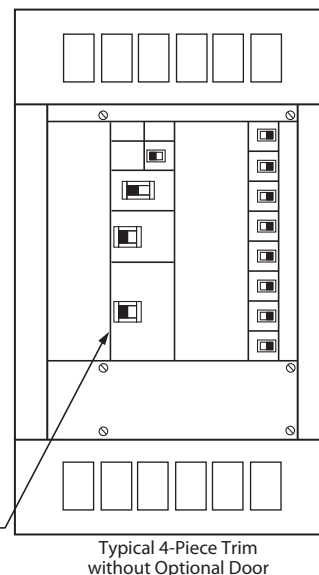
Type HCR-U—1200 A Main Lugs or Main Circuit Breaker



Dual Dimensions: INCHES
Millimeters



Back-fed PG, PJ, PL, RG RJ, and RL Main Circuit Breaker or Main Lugs Kit S33930 (see Note:)



Main Lugs or Main Circuit Breaker Ampere Rating	Catalog Number				H		A		B		C	
	Interior	Box	4-Piece Trim without Door ‡	4-Piece Trim with Door ‡	in.	mm	in.	mm	in.	mm	in.	mm
1200	HCR548612U	HC4486DB	HCR86T()	HCR86T()D	86.00	2184	54.00	1372	65.10	1654	18.00	457

‡ Replace parentheses with "F" for flush or "S" for surface.

NOTE: The back-fed RG, RJ, and RL Main Circuit Breaker or Main Lugs Kit takes up 15 in. (381 mm) of mounting space, leaving 93 in. (2362 mm) of branch circuit breaker mounting space. The back-fed PG, PJ, PL Main Circuit Breaker takes up 9 in. (229 mm) of mounting spaces, leaving 99 in. (2515 mm) of branch circuit breaker mounting space.

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