

SQUARE D PowerPacT B 1P Circuit Breakers and Automatic Switches Instruction Manual

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SQUARE D PowerPacT B 1P Circuit Breakers and Automatic Switches Instruction Manual



Before starting the installation read and understand all instructions.

Retain instructions for future use.

PLEASE NOTE

- Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel.
- The product has been designed for environment A (Class A, IEC 60947-1). Use of this product in environment B (Class B, IEC 60947-1) may cause unwanted electromagnetic disturbances in which case the user may be required to take adequate mitigation measures.
- No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.
- All pertinent state, regional, and local safety regulations must be observed when installing and using this
 product.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Apply appropriate personal protective quipment (PPE) and follow safe electrical work practices. See NFPA 70E, CSA Z462, NOM 029-STPS or local equivalent.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors, and covers before turning on power to this equipment.
- Beware of potential hazards, and carefully inspect the work area for tools and objects that may have been left inside the equipment.

Failure to follow these instructions will result in death or serious injury.

WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, and DIDP which is known to the State of California to cause birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov.

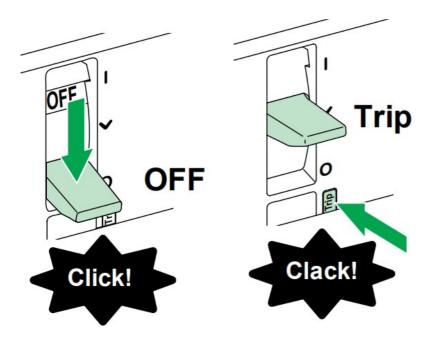
Contents

- 1 Necessary Tools
- 2 Before Working on Equipment
- 3 Safety Clearances
- **4 Minimum Clearances**
- **5 Compression Lug Safety Clearance**
 - **5.1 Live Part Minimum Safety Clearances Required**
- 6 Installation
 - **6.1 Door Cutout**
 - 6.2 DIN Rail
 - **6.3 Door Cutout**
- 7 Wiring
 - 7.1 Ever Link Lugs Connections
- **8 Mechanical Lug Connections**
- 9 Compression Lugs
- 10 PowerPacT B DC Wiring Diagrams
- 11 Circuit Breaker Removal
- 12 Documents / Resources
 - 12.1 References
- 13 Related Posts

Necessary Tools



Before Working on Equipment



- 1. Turn off all power supplying this equipment before working on or inside equipment.
- 2. Turn off or use push-to-trip button to trip circuit breaker.
- 3. Use a properly rated voltage sensing device to confirm power is off.

Safety Clearances

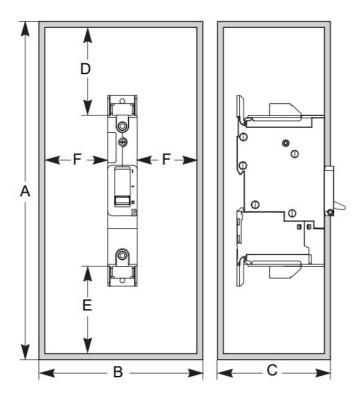


HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

Install circuit breaker so minimum clearance distance to grounded metal is maintained.

Failure to follow these instructions will result in death or serious injury

Minimum Clearances



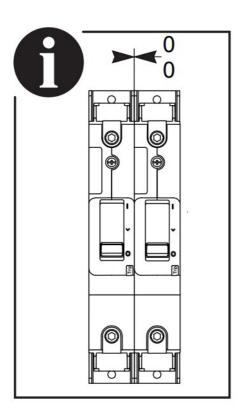
Standard (80% rated current)

Α	В	С
14.6 in. 371 mm	8.5 in. 216 mm	3.16 in. 80 mm

100% rated current /

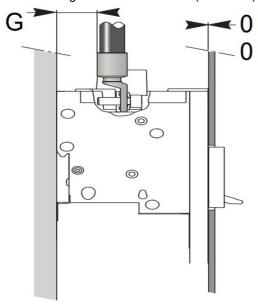
Α	В	С
18.13 in. 461 mm	8.63 in. 219 mm	4.13 in. 105 mm

Painted sheet metal			Bare sheet metal		
D	E	F	D	E	D
1.18 in. 30 mm	0.19 in. 5 mm	0 0	1.57 in. 40 mm	0.19 in. 5 mm	0.19 in. 5 mm
0 0	0 0	0 0	0 0	0 0	0.19 in. 5 mm
0 0	0 0	0 0	0 0	0 0	0.19 in. 5 mm

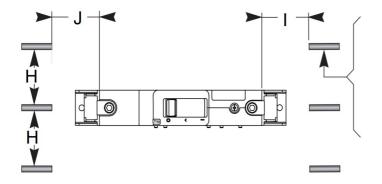


Compression Lug Safety Clearance

G must be greater than 0.50 in. (12.7 mm) between uninsulated compression lug body and grounded metal.



Live Part Minimum Safety Clearances Required

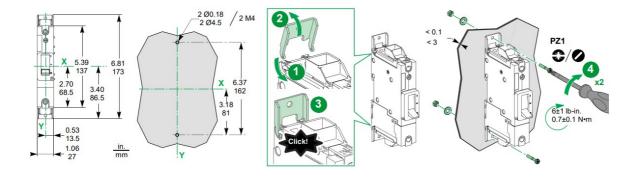


Live parts.

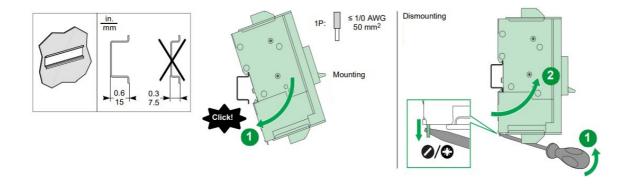
H ≤ 2.36 in. (60 mm)		H > 2.36 in. (60 mm)	
I J		I	J
7.87 in. 200 mm	3.94 in. 100 mm	4.72 in. 120 mm	2.36 in. 60 mm

Installation

Door Cutout



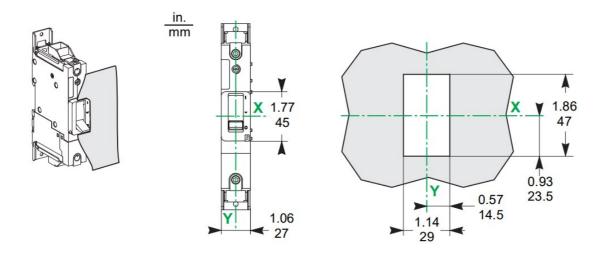
DIN Rail



PLEASE NOTE

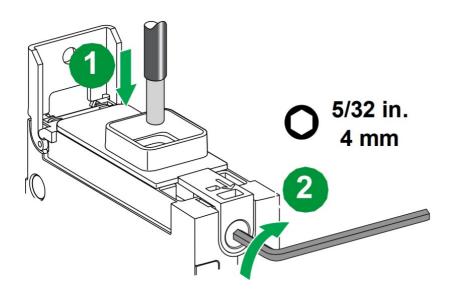
For DIN rail mounting, cable cross-sectional area should not exceed 1/0 AWG (50 mm²).

Door Cutout



Wiring

Ever Link Lugs Connections



		Al≤ 100 A1	Cu≤ 125 A	AI≤ 100 A1	G
0.78 in. 20 m m	14–8 AWG2.5–10 mm²		14–8 AWG2.5–10 mm²		44±4.4 lb-in.5±0.5 N• m
	6–3/0 AWG16–95 mm²		6–2/0 AWG16–70 mm ²		80±8 lb-in.9±0.9 N•m

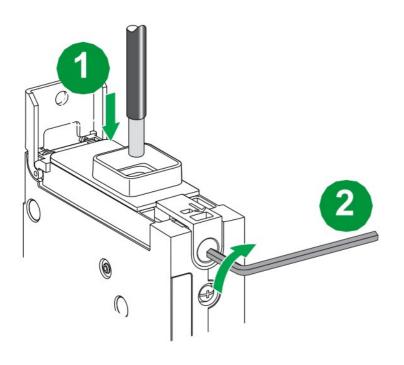
For IEC applications, only copper wires allowed

Mechanical Lug Connections

NOTICE

HAZARD OF OVERHEATING

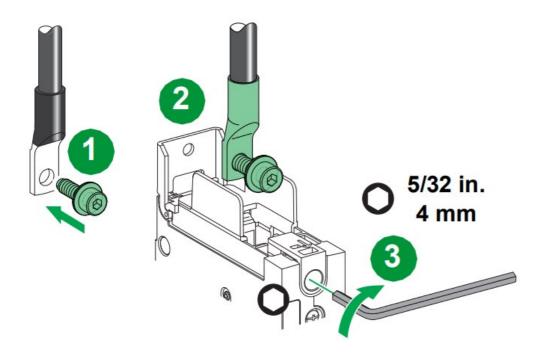
Do not allow wire strands to get caught in wire binding screw threads. Failure to follow these instructions can result in equipment damage.

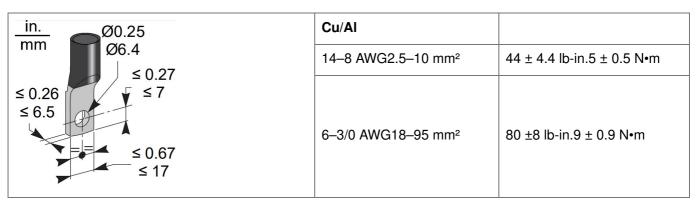


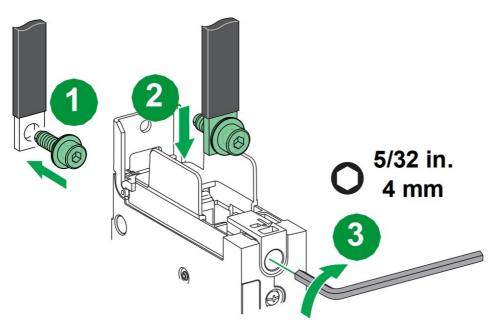
				G	
	0.63 in. 1	Cu/Al 15–125	14–10 AWG2.5– 6 mm²	35±3.5 lb-in.4± 0.4 N•m	0
6 mm	A ¹	8–2/0 AWG10–7 0 mm ²	50±5 lb-in.5.6± 0.6 N•m	5/32 in. 4 mm	
			14–10 AWG2.5– 6 mm²	35±3.5 lb-in.4± 0.4 N•m	
	0.63 in. 1 6 mm	Cu 15–125 A	8 AWG10 mm²	40±4 lb-in.4.5± 0.5 N•m	0
			6–4 AWG16–25 mm²	45±4.5 lb-in.5.1 ±0.5 N•m	5/32 in. 4 mm
			3–1/0 AWG35–5 0 mm ²	50±5 lb-in.5.6± 0.6 N•m	

For IEC applications, only copper wires allowed.

Compression Lugs



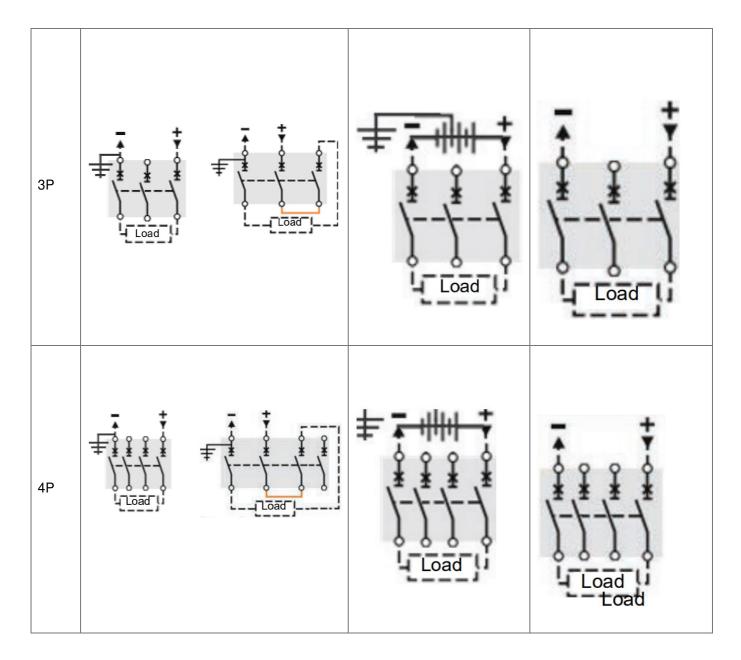






PowerPacT B DC Wiring Diagrams

	Grounded Negative	e1	Grounded Middle Point	Ungrounded Source
Туре	Load A		+ V/2 Load A	E DJ C
	125 Vdc	250 Vdc	≤ 250 Vdc	≤ 250 Vdc
1P	± Load	*		
2P	± 1		#	* Load



It is acceptable to ground the positive leg.

Circuit Breaker Removal

- 1. Turn off all power supplying this equipment before working on or inside equipment.
- Turn off or trip circuit breaker before removal.
 Make sure the circuit breaker is in the open (O) position or in the trip () position.
- 3. Use a properly rated voltage sensing device to confirm power is off.
- 4. Remove circuit breaker in reverse order of installation

Scan the QR code on the product for additional product information.



For information about other products, see our website: https://www.se.com

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Documents / Resources



SQUARE D PowerPacT B 1P Circuit Breakers and Automatic Switches [pdf] Instruction Manual

DOCA0094EN, DOCA0095EN, DOCA0094FR, DOCA0095FR, DOCA0094ES, DOCA0095ES, DOCA0094ZH, DOCA0095ZH, PowerPacT B 1P Circuit Breakers and Automatic Switches, PowerPacT B 1P, Circuit Breakers and Automatic Switches, Breakers and Automatic Switches, Automatic Switches, Switches

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- 9 Schneider Electric UK | Energy Management and Automation
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