

Product Data Sheet



PDE-22-250

Enclosed Power Distribution Block
 510 Amps, 600 Volts (AC/DC)
 1,000V AC/DC CE (IEC 60947-7-1)



Wire Range:

Line side: (2) 250kcmil - #6 AWG (120 mm² - 16 mm²)
 Load Side: (2) 250kcmil - #6 AWG (120 mm² - 16 mm²)

See tables below for SCCR wire ranges, flexible stranded and multiple wire approvals, and wire ranges to achieve IP-20 touch protection.

Electrical Ratings:

- 510A copper wire, 410A aluminum wire (Based on NEC Table 310-16, 75°C columns)
- **CE** Rated Voltage (U_i): 1,000 V AC/DC per IEC 60947-7-1
- Material Group: IIIa
- Pollution Degree: 3
- UL/CSA Voltage Rating: 600 Volts AC/DC (UL 1059 Class C, User Group - General Industrial)
- Factory and Field Wiring

Short Circuit Current Ratings (Copper wire only):

Wire Class	Suitable Conductors (kcmil/AWG)		Overcurrent Protection Fuse Required Class/Max Amp Rating						SCCR, RMS SYM Amps	Volts Max
	Line	Load	J	T	RK1	RK5	G	CC		
B, C	250 - 1/0	250 - 1/0	600	600	600				50,000	600
B, C	250 - 1/0	250 - 1/0	400	400	400	200	60	30	100,000	600
B, C	2 - 6	2 - 6	400	400	400	200	60	30	100,000	600
G, H, I, K	250 - 1/0	250 - 1/0	300	300	200	100	60	30	100,000	600

- Short Circuit Current Rating investigated in 16 x 12 x 6 enclosure. Use in smaller enclosure is subject to end-use evaluation.

Mechanical Ratings:

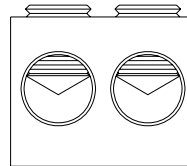
- Maximum insulator base temperature: 125°C (257°F) UL RTI
- Flammability rating of insulator base: UL 94V-0
- Touch protection: IP-20 (IEC 60529) with following conditions: Restricted wire rage. See “Wire Approvals” table below for wire ranges to achieve IP-20 rating. Safety plugs are required for unused taps. See “Accessories” below for safety plugs.
- * Use outside these ratings needs to be judged in the end-use application.

Materials:

- Connector: High conductivity aluminum, tin plated
- Insulator base: Glass filled polycarbonate (thermoplastic)
- Terminal set screws: Aluminum, tin plated
- Connector mounting screw: Steel, zinc plated

Agency Approvals:

- UL Recognized, UL 1059 Terminal Block Standard, File No. E84782
- CSA Certified, CSA C22.2 No. 158, File No. MC 249467 (Wire Classes B & C only)
- CE compliant to IEC 60947-7-1
- RoHS Compliant



Wire Approvals:

Line and Load Wire Approvals:

		Copper Wire Stranding Classes - Number of Strands						
Wire Size	Torque	Solid	Class B	Class C	Class G	Class H	Class I	Class K
250 kcmil	275 in. lbs		37	61	~ 259	~ 427	~ 637	~ 2499
4/0	275 in. lbs		19	37	~ 133	~ 259	~ 532	~ 2107
3/0	275 in. lbs		19	37	~133	~ 259	~ 418	~ 1666
2/0	275 in. lbs		19	37	~133	~ 259	~ 342	~ 1323
1/0	275 in. lbs		19	37	~133	~ 259	~ 266	~ 1064
1	275 in. lbs		19	37	~ 133	~ 259	~ 210	~ 836
2	120 in. lbs		7	19	~ 49	~ 133	~ 161	~ 665
4	120 in. lbs		7	19				
6	120 in. lbs		7	19				

		Copper Wire Stranding Classes - Number of Strands		
Wire Size	Torque	Class 1	Class 2	Class 5
120 mm ²	31.07 N·m		37	614
95	31.07 N·m		19	485
70	31.07 N·m		19	356
50	31.07 N·m		19	400
35	13.56 N·m		7	280
25	13.56 N·m		7	
16	13.56 N·m		7	

Cells highlighted in green indicate wire ranges to maintain IP-20 rating.

~ Quantity of strands for Classes G, H, I, K and 5 may vary by manufacturer.

** SCCR ratings with copper wire only.

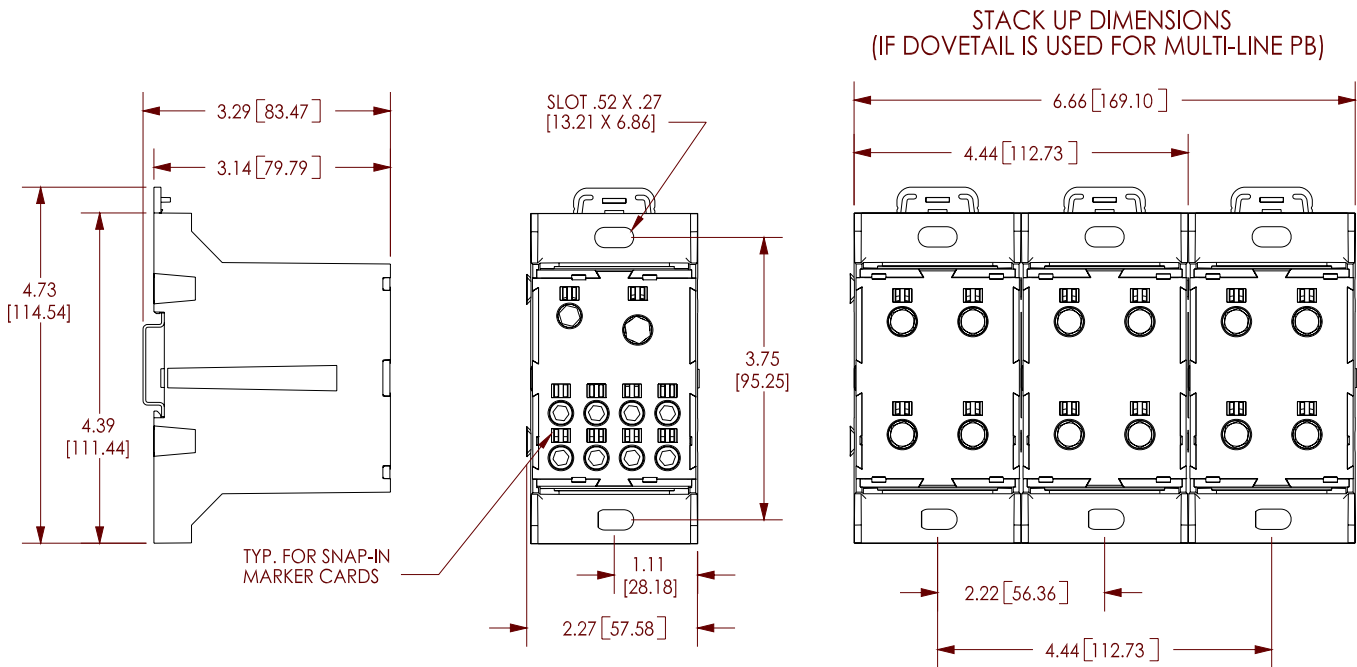
Aluminum stranded wire range: 250 – 6 AWG (120 -16 mm²)

- Wire strip length, line and load side tap – 1 1/4" (32 mm)
- 8 mm Allen hex drive for line and load side terminal set screws. See "Accessories" for Allen wrenches that are recommended for this application.
- Panel mountable: 1/4" (6 mm) fastener, torque to 30-40 in. lbs. (3.39 – 4.52 N·m).

Accessories:

- Safety plug: PDE-TSP-250
- Allen wrenches commercially available:

S & K Tools	45958
Snap-On Tools	FAML8E
MAC Tools	XDLS8MM
McMaster-Carr	8367A26
Armstrong	38-713



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