

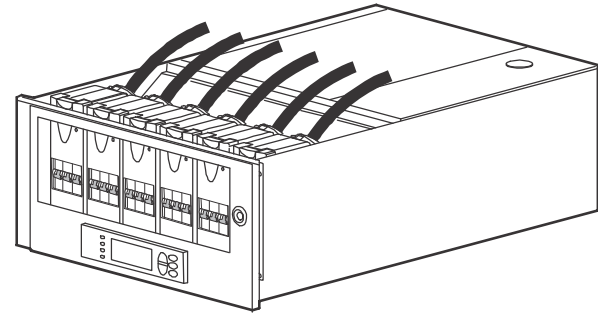


Installation

Modular Rack-Mount Power Distribution Unit

200 A 400 V 18 Pole 5U

PDPM138H-5U PDPM72F-5U



Inventory

Item	Quantity
Literature kit rack-mount PDU	1
Label kit rack-mount PDU	1
Rail stationary black	2
Rail adjustable black	2
Tray support chassis rack-mount PDU	1
Screw M6x12 Phillips flat head	6
Nut M6 flanged hex	6
Washer M6 black plastic cup	14
Screw M6x16 Phillips/slot	14
Nut cage M6 14/16 swg	6
Bracket tie-down rear rack-mount PDU	2
Plate blank cover brain PCB	1

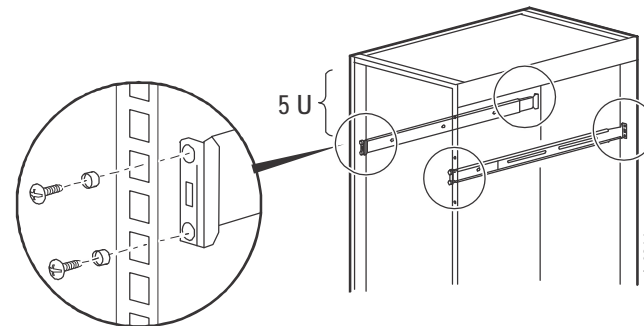
Total Power Off

- 1 Set the Power Distribution Modules (PDMs) to the OFF position.
- 2 Set the utility/mains circuit breaker to the OFF position.
- 3 If the mains is an UPS, set the UPS and its circuit breaker supplying this product to the OFF position.
- 4 Disconnect the input conductors from the mains or the UPS.

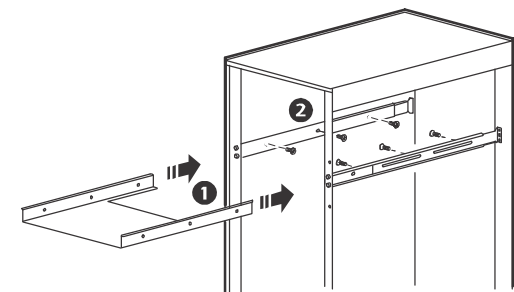
Installation

Install the PDU

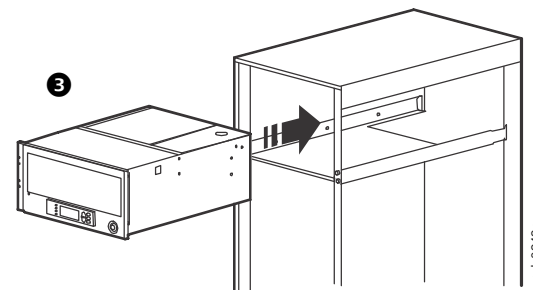
Install the mounting rails in the enclosure by using the screws provided. The PDU requires a 5U space from the top of the enclosure.



Slide the support tray **1** into the mounting rails **2** and secure it with the screws provided.



Slide the bracket tie-downs onto the guide pins on the side of the PDU **3** and secure the tie-downs to the back posts of the enclosure with the screws provided.



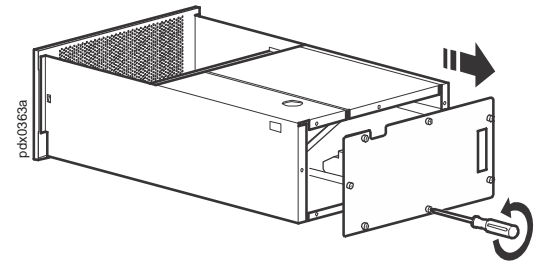
Input cables

Enlarge the knock out hole for larger conduit

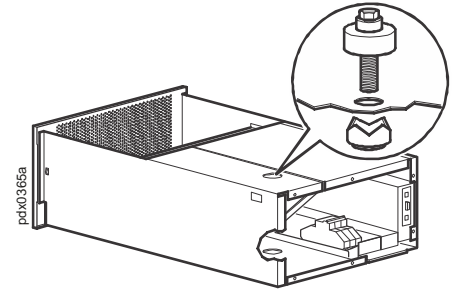
NOTE: The cutout on the top (or bottom) cover plate may need to be enlarged depending on the installation requirements.

If the conduit size for your installation is too large for the conduit access knock out, the hole must be enlarged.

Loosen the seven screws and remove the back panel.



If power is run from the bottom of the rack, enlarge the knock out hole in the bottom of the unit.



Important Safety Information

⚠️ ⚠️ DANGER

HAZARD OF ELECTRIC SHOCK

- Electrical equipment must be installed, operated, serviced, and maintained only by qualified personnel.
- Appropriate personal protection equipment (PPE) is required when performing maintenance on this equipment.
- To remove a Power Distribution Module:
 - Turn off all power supplying the equipment and perform appropriate lockout/tagout procedures before installing or removing the Power Distribution Module.
 - OR
 - If a Symmetra PX UPS is providing power to the Modular PDU, place the UPS into battery operation (to reduce fault current) before removing the Power Distribution Module. To place the UPS into battery operation, see the UPS Operation Manual.
- The PDU must be installed in accordance with the National Electrical Code or the Canadian Electrical Code and all applicable local codes.

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

06/2015

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Customer support is available at www.schneider-electric.com.

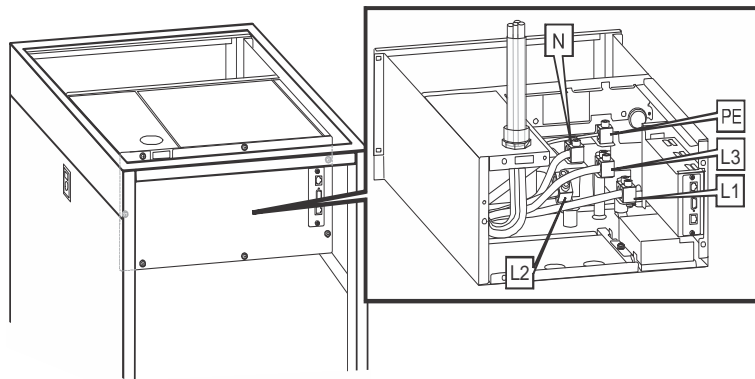
Worldwide Customer Support

Install input cables

Loosen the seven screws and remove the back panel to gain access to the compression terminals (the top and bottom cover plates can be removed if necessary for easier access).

Connect the Protective Earth/Ground (PE/G), neutral (N), and line (L1, L2, and L3) conductors to the appropriate compression terminals and conduits.

Reinstall any panels that were removed.

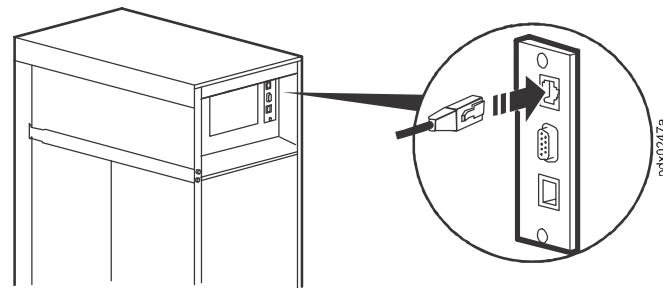


Power Distribution Modules

To install the Power Distribution Modules (PDMs), see the Installation sheet 990-3079 for detailed instructions. The Installation sheet is included with Power Distribution Modules or on the Schneider Electric website at www.schneider-electric.com.

Communication Cables

Connect one end of the communication cable to the port on the back of the unit and the other to the local area network.



Specifications

Input conductors

This product is rated 200 A. It should be supplied with a circuit breaker with a maximum rating of 200 A.

For North America, if supplied by a 200 A circuit breaker, it is recommended that conductors are sized in accordance with Table 3.

For countries outside of North America, if supplied by a 200 A circuit breaker, it is recommended that conductors are sized in accordance with Table 4.

NOTE: Input conductors are to be torqued to 31.1 N·m (275 lb-in) using an 8 mm (5/16 in) Allen (hexagonal) wrench.

Table 1

AC Input	
Nominal voltage	400 V 3 PH 208 V 3 PH
Frequency	47-63 Hz
Voltage configuration	3 W + N + PE
Maximum upstream circuit breaker	200 A
Maximum continuous current	160 A
Maximum continuous current with 100% rated circuit breaker	200A
Maximum main input conductor size	250 mcm

Table 2

AC Output	
Nominal voltage	230 V/400 V 3 PH 120 V/208 V 3PH
Maximum continuous current	200 A
Voltage configuration	3 W + N + PE or 3 x (1 W + N + PE), based on attached APC Power Distribution Modules
Full load rating	138 kW @ 400 V 3PH 72 kW @ 208 V 3 PH
Output power cable connections	Various, based on attached Power Distribution Modules
Output power cable lengths	Various, based on attached Power Distribution Modules
Maximum Power Distribution Modules	6
Maximum power distribution poles	18

Table 3

200 A, 75°C Conductors

Wiring System	Copper	Aluminum
3 CCC, 30°C Ambient	Ø&N = 3/0 AWG G = 6 AWG	Ø&N = 4/0 AWG G = 4 AWG
4 CCC, 30°C Ambient	Ø&N = 4/0 AWG G = 6 AWG	Ø&N = (2) 1/0 AWG G = (2) 4 AWG

NOTES: CCC = Current-Carrying Conductors
AWG = American Wire Gauge
kcmils = MCM = Thousands of Circular Mils
Ø = Phase conductor
N = Neutral conductor
G = Ground (Equipment Grounding) conductor
(2) = two conductors per terminal

Table 4

200 A, Conductors

Install. Method	Copper, PVC Insulation, 30°C Ambient	Copper, XLPE or EPR Insulation, 30°C Ambient	Aluminum, PVC Insulation, 30°C Ambient	Aluminum, XLPE or ERP Insulation, 30°C Ambient
B1	Ø&N = 95 mm ² PE = 50 mm ²	Ø&N = 70 mm ² PE = 35 mm ²	Ø&N = 150 mm ² PE = 95 mm ²	Ø&N = 95 mm ² PE = 50 mm ²
B2	Ø&N = 120 mm ² PE = 70 mm ²	Ø&N = 95 mm ² PE = 50 mm ²	Ø&N = 240 mm ² PE = 120 mm ²	Ø&N = 120 mm ² PE = 70 mm ²
C	Ø&N = 95 mm ² PE = 50 mm ²	Ø&N = 70 mm ² PE = 35 mm ²	Ø&N = 150 mm ² PE = 95 mm ²	Ø&N = 95 mm ² PE = 50 mm ²
E	Ø&N = 95 mm ² PE = 50 mm ²	Ø&N = 70 mm ² PE = 35 mm ²	Ø&N = 120 mm ² PE = 70 mm ²	Ø&N = 95 mm ² PE = 50 mm ²
F	Ø&N = 70 mm ² PE = 35 mm ²	Ø&N = 50 mm ² PE = 25 mm ²	Ø&N = 95 mm ² PE = 50 mm ²	Ø&N = 70 mm ² PE = 35 mm ²

NOTES: Ø = Phase conductor
N = Neutral conductor
PE = Protective Earth conductor
PVC = Polyvinyl-chloride
XLPE = Cross-linked polyethylene
EPR = Ethylene propylene rubber

Physical Dimensions, Environment and Compliance

Physical Dimensions

Dimensions (HxWxD)	Unit: 229 x 457 x 737 mm (9 x 18 x 29 in) Shipping: 406 x 610 x 889 mm (16.5 x 24 x 36 in)
Weight	Unit: 23.5 kg (52 lb) Shipping: 34 kg (75 lb)

Environment and Compliance Section

Operating Environment	Protected from water and conductive contaminants
Temperature	Operating: 0 to 30°C (32 to 86° F) Operating (derated): 0 to 40°C (32 to 104°F) Storage: 0 to 45°C (32 to 113°F)
Humidity	Operating: 0 to 95%, non-condensing Storage: 0 to 95%, non-condensing
Certification	Certified by VDE to IEC 60439-1
Conditional Short-Circuit Current Rating (I _{CC})	10 kA
Rated Impulse Withstand Voltage (U _{CC})	4 kV
Rated Diversity Factor	0.7

NOTE: The Modular Rack-Mount Power Distribution Unit is designed to operate in an environment from 0 to 40°C. Most data centers will maintain an operating temperature between 0 to 30°C. Conductor Ampacity tables of the National Electrical Code (NFPA 70) and IEC 60364-5-53 are based on an environment from 0 to 30°C. If this product is installed in an environment greater than 30°C, either this product's current rating will have to be derated, or the cross sectional area of the conductors supplying it will have to increase, in accordance with the derating factors of NFPA 70 and IEC 60364-5-53.

Regulatory Agency Approval

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference, when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the Installation Guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

*This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.*

This is a Class A Product. In a domestic environment this product may cause interference in which case the user may be required to take adequate measures.