Power Defense Molded Case Circuit Breakers—Frame Size 4

Contents

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Product Description

Frame Size 4 covers a range of 300 A through 800 A with a complete offering of trip units, including PXR electronic trip units and fixed-adjustable thermal-magnetic trip units. PD-4 is available in a single 800 A frame.

Application Description

Frame Size 4 can be used to meet a wide range of circuit protection and power distribution needs, including ground fault protection and 100% UL ratings. PXR trip units in PD-4 provide all levels of protection, including energy metering with multiple communication schemes, breaker health indication and arc flash reduction options.

Features and Benefits

Frame Size 4 breakers are modular and available as complete breakers from the factory or as modular components, including frames, trip units, accessories and terminals to provide flexibility for customers. PXR trip units are available with advanced features to provide customers unparalleled situational awareness of their electrical system.

Standards and Certifications

Power Defense breakers are designed and tested to meet stringent requirements for:

- UL
- CSA
- IEC (CE)
- CB (CCC)

Catalog Number / Product Selection

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Power Defense—Frame Size 4 (300–800 A)

Frame Size 4 covers a range of 320 A through 800 A using electronic trip units, and 300 A through 800 A using thermal-magnetic trip units. It is available in configurations of 2-pole, 3-pole and 4-pole, with the 2-pole being in the same physical size of a 3-pole variant.

Interrupting Ratings

	G		K		M	
ANSI (UL/CSA)	**kA rms**		**kA rms**		**kA rms**	
240 Vac	65		85		100	
480 Vac	35		50		65	
600 Vac	18		25		35	
250 Vdc ①	22		22		25	
IEC	**I_{cu}**	**I_{cs}**	**I_{cu}**	**I_{cs}**	**I_{cu}**	**I_{cs}**
240 Vac	55	55	85	85	100	100
380–415 Vac	36	36	50	50	70	53
440 Vac	30	22.5	35	35	50	40
480 Vac	25	20	35	22.5	50	30
525 Vac	20	16.5	25	20	30	25
660–690 Vac	8	4	10	5	15	7.5
250 Vdc ①	22	22	22	22	25	25

Power Defense—Frame Size 4 (300–800 A)

This information is presented as a tool to develop catalog numbers for selecting Power Defense circuit breakers and trip units.

Molded Case Circuit Breakers with Thermal-Magnetic Trip Units (TMTU)—Globally Rated

PD G 4 3 M 0800 TFA J

Product Series
PD = Power Defense

Certifications/ Standards
G = UL/CSA/IEC/CCC

Frame Size
4 = 4

Pole Options
2 = 2-pole
3 = 3-pole
4 = 4-pole (100% N)
0 = 4-pole (0% N)
6 = 4-pole (60% N)

Interrupting Ratings
G = 35 kA at 480 V
K = 50 kA at 480 V
M= 65 kA at 480 V

Canada
G = 18 kA at 600 V
K = 25 kA at 600 V
M= 35 kA at 600 V

Continuous Current Ratings
0300 = 300 A ②
0350 = 350 A ②
0400 = 400 A ②
0450 = 450 A ②
0500 = 500 A
0600 = 600 A
0700 = 700 A
0800 = 800 A

Trip Unit Type Options
TFA = Fixed thermal / Adjustable magnetic
VFA = 50 °C Fixed thermal / Adjustable magnetic (non UL)

Standard Terminal Options
N = No terminals
J = Line and load terminals
K = Line only terminals
L = Load only terminals

Molded Case Switches—Globally Rated ③

PD | **G** = UL/CSA/IEC/CCC | **4** = 4 | **2** = 2-pole, **3** = 3-pole, **4** = 4-pole | **G** = 35 kA at 480 V, **M**= 65 kA at 480 V; **G** = 18 kA at 600 V, **M**= 35 kA at 600 V | **0800** = 800 A | **KNS** = Molded Case Switch | **N** = No terminals, **J** = Line and load terminals, **K** = Line only terminals, **L** = Load only terminals

Notes

① DC ratings available in thermal-magnetic breakers only. 250 Vdc is achieved using 2 poles in series.
② Not available in 4-pole 60% neutral protection.
③ Molded case switch may open above 6000 A.

Molded Case Circuit Breakers with Power Xpert Release (PXR) Electronic Trip Units (ETU)

This information is presented as a tool to develop catalog numbers for selecting Power Defense circuit breakers and trip units.

Molded Case Circuit Breakers with PXR ETU—Globally Rated

PD G 4 3 M 0800 P2M J

Product Series	Certifications/ Standards	Frame Size	Pole Options	Interrupting Ratings	Continuous Current Ratings	Trip Unit Type Options	Standard Terminal Options
PD = Power Defense	**G** = UL/CSA/IEC/CCC	**4** = 4	**2** = 2-pole **3** = 3-pole **4** = 4-pole (programmable N)	**G** = 35 kA at 480 V **K** = 50 kA at 480 V **M**= 65 kA at 480 V **G** = 18 kA at 600 V **K** = 25 kA at 600 V **M**= 35 kA at 600 V	**0800** = 800 A	**B2N** = PXR 10 LSI **E##** ①=PXR 20 **D##** ①=PXR 20D **P##** ①=PXR 25	**N** = No terminals **J** = Line and load terminals **K** = Line only terminals **L** = Load only terminals

Molded Case Circuit Breakers with PXR ETU—Globally Rated (100% UL Rated)

PD	**F** = UL/CSA/IEC/CCC (100% UL Rated)	**4** = 4	**3** = 3-pole **4** = 4-pole (programmable N)	**G** = 35 kA at 600 V **K** = 50 kA at 600 V **M**= 65 kA at 600 V **G** = 18 kA at 600 V **K** = 25 kA at 600 V **M**= 35 kA at 600 V	**0800** = 800 A	**B2N** = PXR 10 LSI **E##** ①=PXR 20 **D##** ①=PXR 20D **P##** ①=PXR 25	**N** = No terminals **J** = Line and load terminals **K** = Line only terminals **L** = Load only terminals

Globally Rated Frame Only

PD-4 thermal-magnetic and electronic breakers may also be purchased as separate frames, trip units, terminals and accessories for field configuration of a final breaker. Each Frame Only device is marked with interrupting ratings and a maximum continuous current rating; each trip unit is also marked with a maximum continuous current rating, which must not exceed that of the frame. Additionally, 100% UL Rated frames are marked as such on the Frame Only device.

This information is presented as a tool to develop catalog numbers for selecting Power Defense circuit breakers and trip units.

Frame Only—Globally Rated

PD G 4 3 M 0800 FNN J

Product Series	Certifications/ Standards	Frame Size	Pole Options	Interrupting Ratings	Continuous Current Ratings	Trip Unit Type Options	Standard Terminal Options
PD = Power Defense	**G** = UL/CSA/IEC/CCC	**4** = 4	**2** = 2-pole **3** = 3-pole **4** = 4-pole	**G** = 35 kA at 480 V **K** = 50 kA at 480 V **M**= 65 kA at 480 V **Canada** **G** = 18 kA at 600 V **K** = 25 kA at 600 V **M**= 35 kA at 600 V	**0800** = 800 A	**FNN** = Frame Only	**N** = No terminals

Frame Only—Globally Rated (100% UL Rated)

PD	**F** = UL/CSA/IEC/CCC (100% UL Rated)	**4** = 4	**3** = 3-pole **4** = 4-pole	**G** = 35 kA at 480 V **K** = 50 kA at 480 V **M**= 65 kA at 480 V **G** = 18 kA at 600 V **K** = 25 kA at 600 V **M**= 35 kA at 600 V	**0800** = 800 A	**FNN** = Frame Only	**N** = No terminals

Note

① See tables and descriptions on **Page V4-T2-61** for protection type (**#(1)**) and available configured options (**#(2)**).

Trip Units

PD-4 thermal-magnetic and electronic breakers may also be purchased as separate frames, trip units, terminals and accessories for field configuration of a final breaker. For two-pole breakers using electronic trip units, three-pole trip units are used.

PDG designated trip units are for use with PDG and PDF breaker frames. The 100% rating for PDF (100% UL Rated) is marked on the frame, not the trip unit.

Trip Units Only

This information is presented as a tool to develop catalog numbers for selecting Power Defense circuit breakers and trip units.

Thermal-Magnetic Trip Units

PD G 4 X TFA 3 0800

Product Series	Certifications/ Standards	Frame Size	Separator Digit	Trip Unit Type Options	Pole Options	Continuous Current Ratings
PD = Power Defense	**G** = UL/CSA/IEC/CCC	**4** = 4	**X** = Accessory	**TFA** = Fixed Thermal / Adjustable Magnetic **VFA** = 50 °C Fixed Thermal / Adjustable Magnetic (non UL)	**2** = 2-pole **3** = 3-pole **4** = 4-pole (100% N) **0** = 4-pole (0% N) **6** = 4-pole (60% N)	**0300** = 300 A ① **0350** = 350 A ① **0400** = 400 A ① **0450** = 450 A ① **0500** = 500 A **0600** = 600 A **0700** = 700 A **0800** = 800 A

Power Xpert Release (PXR) Electronic Trip Units

Power Xpert Release (PXR) Electronic Trip Units

PD G 4 X PXR 3 0800 E2N

Product Series	Certifications/ Standards	Frame Size	Separator Digit	Trip Unit Type Designator	Pole Options	Continuous Current Ratings	Trip Unit Type and Options
PD = Power Defense	**G** = UL/CSA/IEC/CCC	**4** = 4	**X** = Accessory	**PXR** = Power Xpert Release Trip Unit	**3** = 3-pole **4** = 4-pole (programmable N)	**0800** = 800 A	**B2N** = PXR 10 LSI **E##** ②=PXR 20 **D##** ②=PXR 20D **P##** ②=PXR 25

Notes

① Not available in 4-pole 60% neutral protection.

② See tables and descriptions on **Page V4-T2-61** for protection type (**#$_{(1)}$**) and available configured options (**#$_{(2)}$**).

Power Xpert Release (PXR) Trip Unit Options—Frame Size 4

Power Xpert Release (PXR) Trip Unit Options

		#(1)—Protection Type				#(2)—Available Configured Options								
PXR	ETU	LSI	LSIG	LSI with ARMS	LSIG with ARMS	— — — —	Relays — — —	Relays Modbus — — —	Relays — ZSI —	Relays — — CAM	Relays Modbus ZSI —	Relays — ZSI CAM	Relays Modbus — CAM	Relays Modbus ZSI CAM
PXR 10	B	2	—	—	—	N	—	—	—	—	—	—	—	—
PXR 20	E	2	—	—	—	N	R	M	Z	C	W	X	—	—
		—	3	4	5	—	R	M	Z	C	W	X	—	—
PXR 20D	D	2	3	4	5	—	—	M	—	—	W	—	D	Y
PXR 25	P	2	3	4	5	—	—	M	—	—	W	—	D	Y

Descriptions of PXR Configured Options

Relays—2 Form A contacts (rated for 240 Vac, 1 A)

- Interface: 3 wires (ALM1, ALM2, ALM Common)
- Programmable to indicate breaker conditions

Modbus—Modbus RTU directly from breaker

- Interface: 3 wires (MODBA, MODBB, MODBG)
- No additional modules required

ZSI—Zone Selective Interlocking

- Interface: 3 wires (Zin, Zout, Zcomm)
- Includes ability to turn ON and OFF, and indicate signals

CAM—CAM Link connection (requires a CAM module per breaker)

- Interface: 5 wires (refer to CAM IL for details)
- Communications Adapter Modules available for Modbus TCP and PROFIBUS

ARMS—Arcflash Reduction Maintenance System, or Maintenance Mode

- Available as trip unit Protection Type 4 or 5
- Interface: Switch and LED on face of trip unit and two wires for remote switch enable option (24 Vdc required)
- A programmable relay will be factory defaulted to remote indication of ARMS

Auxiliary Power

- Connection included with all PXR 20, 20D, and 25 trip units
- Required for communications, relays, and metering accuracy
- 24 Vdc, 0.5 A
- Interface: 2 wires (Aux +24 V, Aux 0 V)

Available Continuous Current (I_r) Settings on PXR Electronic Trip Units

		Catalog Number Selection and Maximum Setting (I_n)
Option	Setting	800 A
PXR 10, PXR 20	1	320 A
	2	350 A
	3	400 A
	4	450 A
	5	500 A
	6	550 A
	7	600 A
	8	630 A
	9	700 A
	10 = I_n	800 A
PXR 20D, PXR 25		Programmable from minimum to maximum values in 10 A increments.

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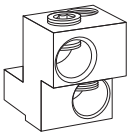
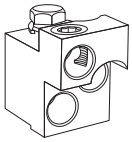
Terminals—Frame Size 4

Catalog numbers shown are for a single side of a 3-pole breaker.
For Frame Size 4, terminals are also available in single-pole kits; these are not available in 2-pole or 4-pole configurations, unless otherwise noted.
For single terminals, replace **X3** with **X1** on the catalog number.
Example: PDG4**X3**TA800 becomes PDG4**X1**TA800 for a single unit.

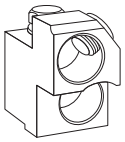
Terminal Types



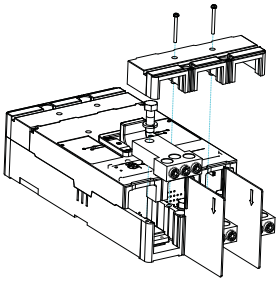
PDG4X3TA700
PDG4X3T600
PDG4X3TA700CW



PDG4X3TA800
PDG4X3TA800SW
PDG4X3TA800CW



PDG4X3TA801
PDG4X3T800
PDG4X3TA801CW



PDG4X3TA800RF

Note: Pictures are for reference only.

Terminals

Maximum Breaker Amperes	Terminal Body Type	Wire Type	Wire Class	Number of Conductors per Phase	AWG / kcmil Range per Conductor	Metric (mm^2) Range per Conductor	3-Pole Catalog Number	Included Accessories	Digit 14 Designation: Line and Load	Digit 14 Designation: Line Only	Digit 14 Designation: Load Only	Factory Config. Ampere Range
Standard Terminals												
700	Aluminum	Cu/Al	B, C	2	1–500	42.4–253	**PDG4X3TA700**	—	J	K	L	300–700
800	Aluminum	Cu/Al	B, C	3	3/0–400	85–203	**PDG4X3TA800**	—	J	K	L	800
Alternate Terminals												
800	Aluminum	Cu/Al	B, C	2	500–750	253–380	**PDG4X3TA801**	—	T	U	V	300–800
Non-Aluminum Terminals												
600	Aluminum	Cu	B, C	2	2/0–500	67.4–238	**PDG4X3T600**	—	W	Y	Z	300–600
800	Aluminum	Cu	B, C	3	3/0–300	85–152	**PDG4X3T800**	—	W	Y	Z	700–800
StrandAble Terminals												
800	Aluminum	Cu/Al	B, C	3	3/0–400	85–203	**PDG4X3TA800SW**	—	A	B	C	300–800
			D, G, H, I, K, M		3/0–300	85–152						
Control Wire Terminals												
700	Aluminum	Cu/Al	B, C	2	1–500	42.4–253	**PDG4X3TA700CW**	—	1	2	3	300–700
800	Aluminum	Cu/Al	B, C	3	3/0–400	85–203	**PDG4X3TA800CW**	—	1	2	3	800
800	Aluminum	Cu/Al	B, C	2	500–750	253–380	**PDG4X3TA801CW**	—	4	5	6	300–800
Rear Fed Terminals												
800	Aluminum	Cu/Al	B, C	3	3/0–300	85–152	**PDG4X3TA800RF**	Interphase barriers	—	—	—	300–800
Rear Connectors												
800	—	—	—	—	—	—	**PDG4X3T800RC**	—	R	—	—	300–800
End Cap Kits/Screw Terminals												
800	—	—	—	—	—	—	**PDG4X3TS800** ①	—	S	D	E	300–800

Notes

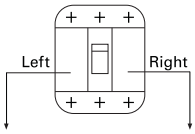
Wire capacity is based on standard imperial wire sizes; metric sizes provided in table are a direct conversion to demonstrate maximum capacity, not to denote metric wire sizes.

① End cap kits are available in 3-pole and 4-pole configurations only. For 4-pole, use catalog number **PDG4X4TS800**.

Accessories

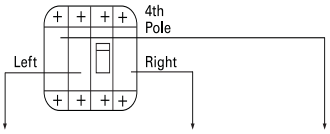
Internal Accessory Configurations—Frame Size 4

3-Pole Circuit Breakers



Tripping Accessory Options	Alarm Options (1–2 spaces) ①	Aux Options (4 spaces)
None	None	None
Shunt Trip	1NO (1 space)	1NO (1 space)
	1NC (1 space)	1NC (1 space)
	1NO/1NC (2 spaces)	1NO/1NC (2 spaces)
	2NO (2 spaces)	2NO (2 spaces)
UVR	2NC (2 spaces)	2NC (2 spaces)
		2CO (4 spaces)
		4NO (4 spaces)
		4NC (4 spaces)

4-Pole Circuit Breakers



Tripping Accessory Options	Alarm Options (1–2 spaces) ①	Aux Options (6 spaces)
None	None	None
Shunt Trip	1NO (1 space)	1NO (1 space)
	1NC (1 space)	1NC (1 space)
	1NO/1NC (2 spaces)	1NO/1NC (2 spaces)
	2NO (2 spaces)	2NO (2 spaces)
UVR	2NC (2 spaces)	2NC (2 spaces)
		2CO (4 spaces)
		4NO (4 spaces)
		4NC (4 spaces)
		3CO (6 spaces)
		6NO (6 spaces)
		6NC (6 spaces)

Note

① Frame 4 Power Defense breakers with electronic trip units and communication only have access to one alarm space. Breakers with thermal-magnetic trip units or electronic trip units without communication, have access to two alarm spaces.

Alarm and Auxiliary Contact Blocks—Frame Size 4

Power Defense breakers have designated positions for alarm and auxiliary switches in the right pole accessory cavity. For Frame 4, the two left-most positions are used for alarm switches, and the two right-most locations are used for auxiliary switches.

Power Defense breakers have secondary covers for ease of field installation of accessories, including alarm and auxiliary switches.

Power Defense alarm and auxiliary switches are available in contact blocks, in Form A (NO), Form B (NC), and Form C (NO-NC) types. Form A and Form B contacts take one position in the breaker accessory cavity, and Form C contacts take two positions in the cavity. Identical contact blocks are used for the alarm and auxiliary switch functions.

Electronic breakers with communications options (Modbus RTU or CAM Link) lose one alarm switch position, but are also able to provide trip position via communications and the PXR programmable relays.

Contact Blocks

Pigtail (29 in / 0.75 m) Contact Blocks for Alarm and Auxiliary Switch Functionality

Catalog Number	PDGXAA	PDGXAB	PDGXAC
Type	Form A / NO	Form B / NC	Form C / NO-NC

Screw Terminal Contact Blocks for Alarm and Auxiliary Switch Functionality

Catalog Number	PDGXXA	PDGXXB	PDGXXA + PDGXXB
Type	Form A / NO	Form B / NC	For NO-NC, use two separate contact blocks

Push-In Clamp Contact Blocks for Alarm and Auxiliary Switch Functionality

Catalog Number	PDGXUA	PDGXUB	PDGXUC
Type	Form A / NO	Form B / NC	Form C / NO-NC

Pigtail (118 in / 3.0 m) Contact Blocks for Alarm and Auxiliary Switch Functionality

Catalog Number	PDGXDA	PDGXDB	PDGXDC
Type	Form A / NO	Form B / NC	Form C / NO-NC

Factory Installation of Alarm and Auxiliary Switches—Frame Size 4

Alarm and auxiliary switches are plug-and-play accessories designed to be field installable. However, Eaton also offers installation service in our factories.

Breaker catalog numbers with alarm and auxiliary switch combinations require a complete 20-digit catalog number, adding the alarm and auxiliary switch functionality in digits 15–16 and adhering to the following conditions and tables:

- Digit 15 denotes the type of accessory(-ies) installed and the terminal types
- Switches may be requested for alarm only, auxiliary only or a combination of the two
- For Eaton factory installation, the same type of terminals (i.e., all pigtail 0.75 m, all screw, etc.) must be used. If a combination of alarm and auxiliary switches is selected, they must be the same type (i.e., all 1NC, all 1NO/1NC, etc.)
- Digit 16 denotes number and type (NO, NC) of switches installed
- If no other accessories are selected, use NNNN for the final 4 digits of the catalog number
- Electronic breakers with communications lose one alarm switch position in order to provide trip status via communications. They do not lose an auxiliary position for this purpose.

Pigtails—29 in / 0.75 m (A, B, C)

		Auxiliary Switch Three-Pole									Four-Pole		
		None	1NO	1NC	1NO/1NC	2NO	2NC	2NO/2NC	4NO	4NC	3NO/3NC	6NO	6NC
Alarm Switch	None	NN	AA	AB	AC	AD	AE	A1	A2	A3	A4	A5	A6
	1NO	BA	CA	—	—	—	—	—	—	—	—	—	—
	1NC	BB	—	CB	—	—	—	—	—	—	—	—	—
	1NO/1NC	BC	—	—	CC	—	—	C1	—	—	C4	—	—
	2NO	BD	—	—	—	CD	—	—	C2	—	—	C5	—
	2NC	BE	—	—	—	—	CE	—	—	C3	—	—	C6

Screw Terminals (X, Y, Z)

		Auxiliary Switch Three-Pole									Four-Pole		
		None	1NO	1NC	1NO/1NC	2NO	2NC	2NO/2NC	4NO	4NC	3NO/3NC	6NO	6NC
Alarm Switch	None	NN	XA	XB	XC	XD	XE	X1	X2	X3	X4	X5	X6
	1NO	YA	ZA	—	—	—	—	—	—	—	—	—	—
	1NC	YB	—	ZB	—	—	—	—	—	—	—	—	—
	1NO/1NC	YC	—	—	ZC	—	—	Z1	—	—	Z4	—	—
	2NO	YD	—	—	—	ZD	—	—	Z2	—	—	Z5	—
	2NC	YE	—	—	—	—	ZE	—	—	Z3	—	—	Z6

Push-In Clamps (U, V, W)

		Auxiliary Switch Three-Pole									Four-Pole		
		None	1NO	1NC	1NO/1NC	2NO	2NC	2NO/2NC	4NO	4NC	3NO/3NC	6NO	6NC
Alarm Switch	None	NN	DA	DB	DC	DD	DE	D1	D2	D3	D4	D5	D6
	1NO	EA	FA	—	—	—	—	—	—	—	—	—	—
	1NC	EB	—	FB	—	—	—	—	—	—	—	—	—
	1NO/1NC	EC	—	—	FC	—	—	F1	—	—	F4	—	—
	2NO	ED	—	—	—	FD	—	—	F2	—	—	F5	—
	2NC	EE	—	—	—	—	FE	—	—	F3	—	—	F6

Factory Installation of Alarm and Auxiliary Switches—Frame Size 4

Pigtails—118 in / 3.0 m (D, E, F)

		Auxiliary Switch Three-Pole									Four-Pole		
		None	1NO	1NC	1NO/1NC	2NO	2NC	2NO/2NC	4NO	4NC	3NO/3NC	6NO	6NC
Alarm Switch	None	NN	UA	UB	UC	UD	UE	U1	U2	U3	U4	U5	U6
	1NO	VA	WA	—	—	—	—	—	—	—	—	—	—
	1NC	VB	—	WB	—	—	—	—	—	—	—	—	—
	1NO/1NC	VC	—	—	WC	—	—	W1	—	—	W4	—	—
	2NO	VD	—	—	—	WD	—	—	W2	—	—	W5	—
	2NC	VE	—	—	—	—	WE	—	—	W3	—	—	W6

Pigtails—29 in / 0.75 m (A, B, C)

		Auxiliary Switch Three-Pole									Four-Pole		
		None	1NO	1NC	1NO/1NC	2NO	2NC	2NO/2NC	4NO	4NC	3NO/3NC	6NO	6NC
Alarm Switch	None	NN	AA	AB	AC	AD	AE	A1	A2	A3	A4	A5	A6
	1NO	BA	CA	—	CF	CG	—	CP	CQ	—	CT	CU	—
	1NC	BB	—	CB	CH	—	CJ	CR	—	CS	CV	—	CW

Tripping Accessories—Frame Size 4

Power Defense breakers have designated positions for shunt trips and undervoltage releases (UVRs) in the left pole accessory cavity. Each breaker has space for one tripping accessory only.

Power Defense breakers have secondary covers for ease of field installation of tripping accessories.

Shunt Trips

Voltage	Screw Terminals	Pigtail (29 in / 0.75 m)	Pigtail (118 in / 3.0 m)
12 Vdc	**PDG4XST12DCT**	**PDG4XST12DCS**	**PDG4XST12DCR**
48 Vdc	**PDG4XST48DCT**	**PDG4XST48DCS**	**PDG4XST48DCR**
60 Vdc	**PDG4XST60DCT**	**PDG4XST60DCS**	**PDG4XST60DCR**
24 Vac/Vdc	**PDG4XST24ACDCT**	**PDG4XST24ACDCS**	**PDG4XST24ACDCR**
110–130 Vac/125 Vdc	**PDG4XST130ACDCT**	**PDG4XST130ACDCS**	**PDG4XST130ACDCR**
200–240 Vac/250 Vdc	**PDG4XST250ACDCT**	**PDG4XST250ACDCS**	**PDG4XST250ACDCR**
380–440 Vac	**PDG4XST440ACT**	**PDG4XST440ACS**	**PDG4XST440ACR**
480–525 Vac	**PDG4XST525ACT**	**PDG4XST525ACS**	**PDG4XST525ACR**
600 Vac	**PDG4XST600ACT**	**PDG4XST600ACS**	**PDG4XST600ACR**

Undervoltage Releases (UVRs)

Voltage	Screw Terminals	Pigtail (29 in / 0.75 m)	Pigtail (118 in / 3.0 m)
12 Vdc	**PDG4XUV12DCV**	**PDG4XUV12DCU**	**PDG4XUV12DCW**
24 Vdc	**PDG4XUV24DCV**	**PDG4XUV24DCU**	**PDG4XUV24DCW**
48 Vdc	**PDG4XUV48DCV**	**PDG4XUV48DCU**	**PDG4XUV48DCW**
60 Vdc	**PDG4XUV60DCV**	**PDG4XUV60DCU**	**PDG4XUV60DCW**
125 Vdc	**PDG4XUV125DCV**	**PDG4XUV125DCU**	**PDG4XUV125DCW**
250 Vdc	**PDG4XUV250DCV**	**PDG4XUV250DCU**	**PDG4XUV250DCW**
24 Vac	**PDG4XUV24ACV**	**PDG4XUV24ACU**	**PDG4XUV24ACW**
130 Vac	**PDG4XUV130ACV**	**PDG4XUV130ACU**	**PDG4XUV130ACW**
240 Vac	**PDG4XUV240ACV**	**PDG4XUV240ACU**	**PDG4XUV240ACW**
440 Vac	**PDG4XUV440ACV**	**PDG4XUV440ACU**	**PDG4XUV440ACW**
525 Vac	**PDG4XUV525ACV**	**PDG4XUV525ACU**	**PDG4XUV525ACW**
600 Vac	**PDG4XUV600ACV**	**PDG4XUV600ACU**	**PDG4XUV600ACW**

Note: Use PDG4XUV18DCW when using Time Delay UVR.

Factory Installed Tripping Accessories—Frame Size 4

Shunt trips and undervoltage releases (UVRs) are plug-and-play accessories designed to be field installable. However, Eaton also offers the service of installation in our factories.

Breaker catalog numbers with shunt trips or UVRs require a complete 20-digit catalog number, adding the tripping accessory functionality in digits 17 and 18 and adhering to the following conditions and tables.

- Digit 17 denotes the type of accessory installed and the terminal type
- Digit 18 denotes the voltage of the accessory
- If no additional accessories are selected, use NN for digits 15-16 and 19-20 of the catalog number
- Each breaker has space for one shunt trip or UVR tripping accessory only

Shunt Trips

Voltage	Screw Terminals	Pigtail (29 in / 0.75 m)	Pigtail (118 in / 3.0 m)
12 Vdc	TH	SH	RH
48 Vdc	TJ	SJ	RJ
60 Vdc	TK	SK	RK
24 Vac/Vdc	TN	SN	RN
110–130 Vac/125 Vdc	TP	SP	RP
200–240 Vac/250 Vdc	TR	SR	RR
380–440 Vac	TC	SC	RC
480–525 Vac	TD	SD	RD
600 Vac	TE	SE	RE

Undervoltage Releases (UVRs)

Voltage	Screw Terminals	Pigtail (29 in / 0.75 m)	Pigtail (118 in / 3.0 m)
12 Vdc	VH	UH	WH
24 Vdc	VG	UG	WG
48 Vdc	VJ	UJ	WJ
60 Vdc	VK	UK	WK
125 Vdc	VL	UL	WL
250 Vdc	VM	UM	WM
24 Vac	VF	UF	WF
130 Vac	VA	UA	WA
240 Vac	VB	UB	WB
440 Vac	VC	UC	WC
525 Vac	VD	UD	WD
600 Vac	VE	UE	WE

Note: Use suffix **US** for 18 Vdc when using Time Delay UVR.

Handle Mechanisms—Frame Size 4

Direct Rotary Handle Mechanism ①

Description	NEMA 1/12 Catalog Number	Factory Installed Digits 19–20
Standard lockable handle and mechanism	**PDG4XHMCS**	HA
Standard lockable handle and mechanism with door interlock	**PDG4XHMCSN**	HB
Standard lockable handle and mechanism with mechanical padlock	**PDG4XHMCSP**	HC
Standard lockable handle and mechanism with door interlock and mechanical padlock	**PDG4XHMCSNP**	HE
Emergency lockable handle and mechanism	**PDG4XHMCE**	H1
Emergency lockable handle and mechanism with door interlock	**PDG4XHMCEN**	H2
Emergency lockable handle and mechanism with mechanical padlock	**PDG4XHMCEP**	H3
Emergency lockable handle and mechanism with door interlock and mechanical padlock	**PDG4XHMCENP**	H5

Variable Depth Rotary Handle Mechanism ①

Description	NEMA 1/3R/12/4/4X Catalog Number	Factory Installed Digits 19–20
Standard lockable handle and mechanism	**PDG4XHMDS**	DA
Standard lockable handle and mechanism with mechanical padlock	**PDG4XHMDSP**	DC
Emergency lockable handle and mechanism	**PDG4XHMDE**	D1
Emergency lockable handle and mechanism with mechanical padlock	**PDG4XHMDEP**	D3
9 in (245 mm) handle mechanism shaft	**PDG34XHMS245**	—
17 in (445 mm) handle mechanism shaft	**PDG34XHMS445**	—
Standard NFPA79-compliant shaft handle	**PDG34XHM79S**	—
Emergency NFPA79-compliant shaft handle	**PDG34XHM79E**	—

Flex Shaft Handle Mechanism

Cable Length (ft)	Metal Handle, NEMA 1/3R/12 Catalog Number	High Performance Handle, NEMA 1/3R/12 Catalog Number	Metal Handle, NEMA 4/4X Catalog Number	High Performance Handle, NEMA 4/4X Catalog Number
4	**PDG4XFS04**	**PDG4XFS04HP**	**PDG4XFS04X**	**PDG4XFS04HPX**
5	**PDG4XFS05**	**PDG4XFS05HP**	**PDG4XFS05X**	**PDG4XFS05HPX**
6	**PDG4XFS06**	**PDG4XFS06HP**	**PDG4XFS06X**	**PDG4XFS06HPX**
10	**PDG4XFS10**	**PDG4XFS10HP**	**PDG4XFS10X**	**PDG4XFS10HPX**

Note

① Standard handles are black and gray; Emergency handles are red and yellow.

Accessories—Frame Size 4

External Accessories

Description	Fit Type	Catalog Number	Factory Installed Digits 19–20
Padlockable hasp	Top	**PDG4XPLKT**	L4
Padlockable hasp, OFF only	Top	**PDG4XPLKTOFF**	L1
Padlockable handle block	On handle	**PDG4XPHB**	—
Kirk lock provision—left side ①	Left side	**PDG4XKLKPSF**	L8
Kirk lock provision—right side ①	Right side		L9
Walking beam interlock ②③	Two-, three-, and four-pole	**PDG4XWBI234P**	—
Electrical operator	24 Vdc	**PDG4XROP24DC**	RG
	48–60 Vdc	**PDG4XROP60DC**	RJ or RK
	125 Vdc	**PDG4XROP125DC**	RL
	250 Vdc	**PDG4XROP250DC**	RM
	110–130 Vac	**PDG4XROP130AC**	RA
	200–240 Vac	**PDG4XROP240AC**	RB
	380–440 Vac	**PDG4XROP440AC**	RC
Interphase barriers	Single-pole	**PDG4XIB**	—
	Three-pole	**PDG4XIB3P**	—
	Four-pole	**PDG4XIB4P**	—
Neutral CTs for ground fault (PXR)	Bus bar Type	**PDG4XNCTB0800**	—
Service entrance barrier kit	Three-pole	**PRLSEBPD4**	—

Base Mounting Hardware

Description	Catalog Number
Two-, three-, four-pole metric	**BMH4M**
Two-, three-, four-pole English	**BMH4**

Note: Base mounting hardware is included with a circuit breaker or molded case switch.

Dimensions and Weights—Frame Size 4

Approximate Dimensions in Inches (mm)

Number of Poles	Width	Height	Depth
2	8.25 (209.6)	16 (406.4)	4.38 (111.2)
3	8.25 (209.6)	16 (406.4)	4.38 (111.2)
4	11.0 (279.4)	16 (406.4)	4.38 (111.2)

Approximate Shipping Weight in lb (kg)

Breaker Type	2-Pole	3-Pole	4-Pole
PDG4 800 A	30 (13.6)	30 (13.6)	39.9 (18.08)

Notes

① Provision only. For use with Type F Kirk keylock (sold separately). Bolt projection in withdrawn position is 0.375 in (9.525 mm).

② Breaker must be ordered with walking beam interlock ready modification from plant (factory suffix **WB**).

③ Requires two breakers.