

Eaton PDG23G0050TFFL

Catalog Number: PDG23G0050TFFL

Eaton Power Defense molded case circuit breaker, Globally Rated, Frame 2, Three Pole, 50A, 35kA/480V, T-M (Fxd-Fxd) TU, Standard Terminals Load Only (PDG2X3T100)

Photo is representative



General specifications

Product Name	Catalog Number
Eaton Power Defense molded case circuit breaker	PDG23G0050TFFL
	UPC
	786679911525
Product Length/Depth	Product Height
88.9 mm	152.4 mm
Product Width	Product Weight
104.6 mm	1.82 kg
Warranty	Compliances
Eaton Selling Policy 25-000, one (1) year RoHS Compliant from the date of installation of the Product or eighteen (18) months from the date of shipment of the Product, whichever occurs first.	Certifications
	IEC 60947-2
	CCC Marked
	CSA
	UL 489

Delivery program

Amperage Rating

50 A

Circuit breaker frame type

Complete breaker

Frame

2

Number of poles

Three-pole

General information

Circuit breaker type

PD2 Global

Class

Class A

Trip Type

T298

Technical data - Electrical

Voltage rating

600 Vac

Voltage rating - max

600 V

Technical data - Mechanical - Terminals

Terminals

Standard Terminals Load Only

Technical information

Interrupt rating

35 kAIC at 480 Vac

Interrupt rating range

35 kAIC @480V (UL)

10 kAIC Icu @125 Vdc

20 kAIC Icu/ 15/13 kAIC Ics/ 42 kAIC Icm @525V South Africa (IEC)

55 kAIC Icu/ 55 kAIC Ics/ 121 kAIC Icm @240V (IEC)

25 kAIC Icu/ 20 kAIC Ics/ 52.5 kAIC Icm @480V Brazil (IEC)

30 kAIC Icu/ 22.5 kAIC Ics/ 63 kAIC Icm @440V (IEC)

18 kAIC @600V (UL/CSA)

10 kAIC Icu @250 Vdc

8 kAIC Icu/ 4 kAIC Ics/ 16.8 kAIC Icm @690V (IEC)

36 kAIC Icu/ 36 kAIC Ics/ 75.6 kAIC Icm @380-415V (IEC)

65 kAIC @240V (UL)

Resources

3D CAD drawing package

[Eaton Power Defense PDG23G0050TFFL 3D drawing](#)

Application notes

[Consulting application guide - molded case circuit breakers](#)

Brochures

Power Defense technical selling booklet

Power Defense molded case circuit breaker selection poster

Power Defense brochure

Brochures

Power Defense molded case circuit breakers - Frame 2 product aid

Catalogs

Molded case circuit breakers catalog

Certification reports

PDG4 CB report

PDG4 CCC certification

PDG2 CB report

EU Declaration of Conformity - Power Defense molded case circuit breakers

Power Defense Declaration concerning California's Proposition 65

Installation instructions

Power Defense Frame 1 IEC and Frame 2 Rotary Mechanism with NFPA Handle Attachment Instructions (IL012260EN).pdf

Power Defense Frame 2 tunnel terminal (aluminum), 150A, 3 pole instructions - IL012238EN H03

Power Defense Frame 2 tunnel terminal kits - PDG2X1TA225K instructions- IL012239EN H01

Power Defense Frame 2 global terminal shield, 3 pole - IL012330EN

Power Defense Frame 2 clamp terminal (steel), 20A, 3 pole instructions - IL012246EN H03

Power Defense Frame 2 locking devices and handle block instructions - IL012149EN

Power Defense Frame 2 multi wire connector kit - PDG2X3(2)(4)TA2256W instructions - IL012242EN H01

Power Defense Frame 2 handle mech direct rotary handle instructions - IL012134EN

Power Defense Frame 2 box terminal (steel), 100A, 3 pole instructions - IL012234EN H03

Power Defense Frame 2 tunnel terminal (aluminum), 50A, 3 pole instructions - IL012236EN H03

Power Defense Frame 2 terminal kit - PDG2X3(2)(4)TA150RF instructions - IL012244EN H01

Power Defense Frame 2 tunnel terminal (aluminum), 100A, 3 pole instructions - IL012237EN H03

Power Defense Frame 1-2-3-4 IP door barrier assembly instructions - IL012278EN

Power Defense Frame 2 multi wire connector kit -

PDG2X3(2)(4)TA2253W instructions - IL012243EN H01

Power Defense Frame 2 handle mech variable depth rotary handle instructions - IL012136EN

Power Defense Frame 2 box terminal (aluminum), 225A, 3 pole instructions - IL012235EN H03

Power Defense Frame 2 Direct Rotary Handle Assy With Interlock Version Instructions (IL012138EN).pdf

Power Defense Frame 2 PDG2 and PDC(E)9 breaker instructions - IL012106EN

Power Defense Frame 2 terminal kit - PDG2X3(2)(4)TA225RF instructions - IL012245EN H01

Power Defense Frame 2 screw terminal_end cap kit, 225A, 3 pole instructions - IL012258EN H01

Power Defense Frame 2/3/4/5/6 voltage neutral sensor module wiring instructions – IL012316EN

Power Defense Frame 2 shunt trip UVR instructions - IL012130EN

Installation videos

Power Defense Frame 2 Handle Mech Variable Depth Rotary Handle Animated Instructions.rh

Power Defense Frame 2 Bell Alarm with PXR Animated Instructions.pdf.rh

Power Defense Frame 2 withTMTU, Shunt Trip_UVR Animated Instructions.rh

Power Defense Frame 2 TMTU Aux, Alarm, ST and UVR Animated Instructions.rh

Power Defense Frame 2 Locking Devices and Handle Block Animated Instructions.pdf.rh

Multimedia

Power Defense Frame 2 Variable Depth Rotary Handle Mechanism Installation How-To Video

Power Defense Frame 3 Variable Depth Rotary Handle Mechanism Installation How-To Video

Power Defense Frame 2 Aux, Alarm, Shunt Trip, and UVR How-To Video

Power Defense Frame 2 Direct Rotary Handle Mechanism Installation How-To Video

Power Defense molded case circuit breakers

Eaton Power Defense for superior arc flash safety

Power Defense Frame 6 Trip Unit How-To Video

Power Defense Breakers

Power Defense Frame 5 Trip Unit How-To Video

Specifications and datasheets

Eaton Specification Sheet - PDG23G0050TFFL

Time/current curves

Power Defense time current curve Frame 2 - PD2

White papers

Molded case and low-voltage power circuit breaker health

Making a better machine

Intelligent circuit protection yields space savings

Single and double break MCCB performance revisited

Safer by design: arc energy reduction techniques

Molded case and low-voltage breaker health



Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

© 2025 Eaton. All Rights Reserved.

Eaton is a registered trademark.

All other trademarks are property of their respective owners.



Eaton.com/socialmedia

Eaton PDG23G0050TFFL

Catalog Number: PDG23G0050TFFL

Eaton Power Defense molded case circuit breaker, Globally Rated, Frame 2, Three Pole, 50A, 35kA/480V, T-M (Fxd-Fxd) TU, Standard Terminals Load Only (PDG2X3T100)

Photo is representative



General specifications

Product Name	Catalog Number
Eaton Power Defense molded case circuit breaker	PDG23G0050TFFL
	UPC
	786679911525
Product Length/Depth	Product Height
88.9 mm	152.4 mm
Product Width	Product Weight
104.6 mm	1.82 kg
Warranty	Compliances
Eaton Selling Policy 25-000, one (1) year RoHS Compliant from the date of installation of the Product or eighteen (18) months from the date of shipment of the Product, whichever occurs first.	Certifications
	IEC 60947-2
	CCC Marked
	CSA
	UL 489

Delivery program

Amperage Rating

50 A

Circuit breaker frame type

Complete breaker

Frame

2

Number of poles

Three-pole

General information

Circuit breaker type

PD2 Global

Class

Class A

Trip Type

T298

Technical data - Electrical

Voltage rating

600 Vac

Voltage rating - max

600 V

Technical data - Mechanical - Terminals

Terminals

Standard Terminals Load Only

Technical information

Interrupt rating

35 kAIC at 480 Vac

Interrupt rating range

35 kAIC @480V (UL)

10 kAIC Icu @125 Vdc

20 kAIC Icu/ 15/13 kAIC Ics/ 42 kAIC Icm @525V South Africa (IEC)

55 kAIC Icu/ 55 kAIC Ics/ 121 kAIC Icm @240V (IEC)

25 kAIC Icu/ 20 kAIC Ics/ 52.5 kAIC Icm @480V Brazil (IEC)

30 kAIC Icu/ 22.5 kAIC Ics/ 63 kAIC Icm @440V (IEC)

18 kAIC @600V (UL/CSA)

10 kAIC Icu @250 Vdc

8 kAIC Icu/ 4 kAIC Ics/ 16.8 kAIC Icm @690V (IEC)

36 kAIC Icu/ 36 kAIC Ics/ 75.6 kAIC Icm @380-415V (IEC)

65 kAIC @240V (UL)

Resources

3D CAD drawing package

[Eaton Power Defense PDG23G0050TFFL 3D drawing](#)

Application notes

[Consulting application guide - molded case circuit breakers](#)

Brochures

Power Defense technical selling booklet

Power Defense molded case circuit breaker selection poster

Power Defense brochure

Brochures

Power Defense molded case circuit breakers - Frame 2 product aid

Catalogs

Molded case circuit breakers catalog

Certification reports

PDG4 CB report

PDG4 CCC certification

PDG2 CB report

EU Declaration of Conformity - Power Defense molded case circuit breakers

Power Defense Declaration concerning California's Proposition 65

Installation instructions

Power Defense Frame 1 IEC and Frame 2 Rotary Mechanism with NFPA Handle Attachment Instructions (IL012260EN).pdf

Power Defense Frame 2 tunnel terminal (aluminum), 150A, 3 pole instructions - IL012238EN H03

Power Defense Frame 2 tunnel terminal kits - PDG2X1TA225K instructions- IL012239EN H01

Power Defense Frame 2 global terminal shield, 3 pole - IL012330EN

Power Defense Frame 2 clamp terminal (steel), 20A, 3 pole instructions - IL012246EN H03

Power Defense Frame 2 locking devices and handle block instructions - IL012149EN

Power Defense Frame 2 multi wire connector kit - PDG2X3(2)(4)TA2256W instructions - IL012242EN H01

Power Defense Frame 2 handle mech direct rotary handle instructions - IL012134EN

Power Defense Frame 2 box terminal (steel), 100A, 3 pole instructions - IL012234EN H03

Power Defense Frame 2 tunnel terminal (aluminum), 50A, 3 pole instructions - IL012236EN H03

Power Defense Frame 2 terminal kit - PDG2X3(2)(4)TA150RF instructions - IL012244EN H01

Power Defense Frame 2 tunnel terminal (aluminum), 100A, 3 pole instructions - IL012237EN H03

Power Defense Frame 1-2-3-4 IP door barrier assembly instructions - IL012278EN

Power Defense Frame 2 multi wire connector kit -

PDG2X3(2)(4)TA2253W instructions - IL012243EN H01

Power Defense Frame 2 handle mech variable depth rotary handle instructions - IL012136EN

Power Defense Frame 2 box terminal (aluminum), 225A, 3 pole instructions - IL012235EN H03

Power Defense Frame 2 Direct Rotary Handle Assy With Interlock Version Instructions (IL012138EN).pdf

Power Defense Frame 2 PDG2 and PDC(E)9 breaker instructions - IL012106EN

Power Defense Frame 2 terminal kit - PDG2X3(2)(4)TA225RF instructions - IL012245EN H01

Power Defense Frame 2 screw terminal_end cap kit, 225A, 3 pole instructions - IL012258EN H01

Power Defense Frame 2/3/4/5/6 voltage neutral sensor module wiring instructions – IL012316EN

Power Defense Frame 2 shunt trip UVR instructions - IL012130EN

Installation videos

Power Defense Frame 2 Handle Mech Variable Depth Rotary Handle Animated Instructions.rh

Power Defense Frame 2 Bell Alarm with PXR Animated Instructions.pdf.rh

Power Defense Frame 2 withTMTU, Shunt Trip_UVR Animated Instructions.rh

Power Defense Frame 2 TMTU Aux, Alarm, ST and UVR Animated Instructions.rh

Power Defense Frame 2 Locking Devices and Handle Block Animated Instructions.pdf.rh

Multimedia

Power Defense Frame 2 Variable Depth Rotary Handle Mechanism Installation How-To Video

Power Defense Frame 3 Variable Depth Rotary Handle Mechanism Installation How-To Video

Power Defense Frame 2 Aux, Alarm, Shunt Trip, and UVR How-To Video

Power Defense Frame 2 Direct Rotary Handle Mechanism Installation How-To Video

Power Defense molded case circuit breakers

Eaton Power Defense for superior arc flash safety

Power Defense Frame 6 Trip Unit How-To Video

Power Defense Breakers

Power Defense Frame 5 Trip Unit How-To Video

Specifications and datasheets

Eaton Specification Sheet - PDG23G0050TFFL

Time/current curves

Power Defense time current curve Frame 2 - PD2

White papers

Molded case and low-voltage power circuit breaker health

Making a better machine

Intelligent circuit protection yields space savings

Single and double break MCCB performance revisited

Safer by design: arc energy reduction techniques

Molded case and low-voltage breaker health



Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

© 2025 Eaton. All Rights Reserved.

Eaton is a registered trademark.

All other trademarks are property of their respective owners.



Eaton.com/socialmedia