

DEHN EZ50 Enclosed Surge Protectors



908168

The DEHNguard EZ50-S surge protection device is designed to handle the most challenging outdoor conditions, ensuring uninterrupted protection.

Features

- Available for 3-phase wye 208Y/120 VAC, 480Y/277 VAC, and 600Y/347 VAC; 3-phase delta 480 VAC; split-phase 120/240 VAC; and single-phase 120 VAC
- Equipped with clear and reliable visual indicators (green for proper function and red for replacement) for each line
- Prewired with 10 AWG, 36in-long stranded wires for straightforward connection
- Can be mounted directly on panels via gasketed 1/2in NPSM chase nipple and included locknut
- External brackets included for panel/wall mounting
- High-performance surge protection with a 50 kA I_{MAX} and a 200 kA SCCR
- Field-replaceable plug-in modules
- Includes a NEMA 4X enclosure

Applications

- Electric vehicles
- Energy supply
- Process technology
- Battery storage systems
- Water/wastewater plants
- Commercial and industrial buildings
- Data centers
- Mobile phone sites

Approvals

- UL1449 Type 1 SPD
- UL50E Type 4X Outdoor enclosure
- NEMA 4X and UL 508A



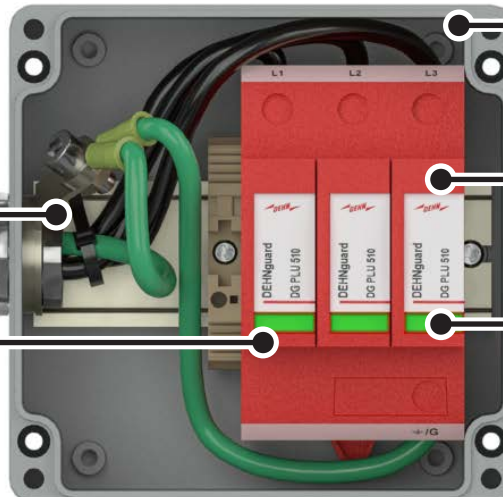
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Dehn EZ50 Enclosed Surge Protective Devices Selection Guide

Part Number	Price	Description	Nominal Voltage (VAC)	Maximum Continuous Operating Voltage (MCOV) (VAC)	Voltage Protection Rating (VPR) (V_{PK})	System Type	Replacement Plug-In Module	Weight (g [oz])	Drawing
908166	\$203.00	DG EZ50-S 120/240V 3W+G	120/240	180 (L-N, N-G) 370 (L-G, L-L)	700 (L-N, N-G) 1200 (L-G, L-L)	Split phase 3W+G	DG PLU 180 908011	616 [21.7]	PDF
908167	\$206.00	DG EZ50-S 120/208V 4W+G	208Y/120	180 (L-N, N-G) 360 (L-G, L-L)	700 (L-N, N-G) 1200 (L-G, L-L)	3 phase wye 4W+G	DG PLU 180 908011	698 [24.6]	PDF
908168	\$208.00	DG EZ50-S 277/480V 4W+G	480Y/277	385 (L-N) 565 (L-G), 770 (L-L) 180 (N-G)	1200 (L-N) 2500 (L-L) 1800 (L-G) 700 (N-G)	3 phase wye 4W+G	DG PLU 385 908014 DG PLU 180 908011 (N)	735 [25.9]	PDF
908169	\$204.00	DG EZ50-S 480V 3W+G	480	550 (L-G) 1100 (L-L)	1800 (L-G) 3000 (L-L)	3 Phase delta 3W+G	DG PLU 550 908015	685 [24.2]	PDF
908170	\$220.00	DG EZ50-S 600V 3W+G	600Y/347	510 (L-G), 1020 (L-L)	1800 (L-G) 3000 (L-L)	3 phase wye 3W+G	DGU PLU 510 908013	675 [23.8]	PDF
908171	\$190.00	DG EZ50-S 120V 2W+G	120	230 (L-N)	800 (L-N)	Single phase 2W+G	DGU PLU 230 908012	425 [15.0]	PDF

Prewired with 10 AWG, 36-in stranded wires and can be mounted directly on panels via gasketed 1/2-in NPSM chase nipple and included locknut.

Available for various power systems



50 kA I_{max} and 200 kA SCCR

Field-replaceable plug-in modules

Clear visual indicators for easy monitoring and upkeep of each line

DEHN EZ50

Enclosed Surge Protectors



Dehn EZ50 Enclosed Surge Protective Devices Specifications

SPD as per UL 1449	Type 1 SPD
Maximum Discharge Current Per Phase (8/20) (I_{MAX})	50 kA
Nominal Discharge Current (8/20 μs) I_N	20 kA
Short Circuit Current Rating (SCCR)	200 kA
Frequency	50/60 Hz
Maximum Mains-Side Overcurrent Protection ¹	Not needed
Conductor Type	#10 AWG Stranded CU Type MTW/THWN-2/THHN
Conductor Length	36in [914mm]
Operating State / Fault Indication	Green: Good Red: Replace module
Environmental Protection	NEMA 4X ² , IP66, UL 50E Type 4X Outdoor
Operating Temperature	-40 to 85 °C [-40 to 185 °F]
Enclosure Material	Polycarbonate V0 enclosure
Mounting Method	1/2in NPSM or panel/wall mounting with external brackets
Approval Standard ³	UL 1449 5th Edition File E319777, UL 50E, UL 508A

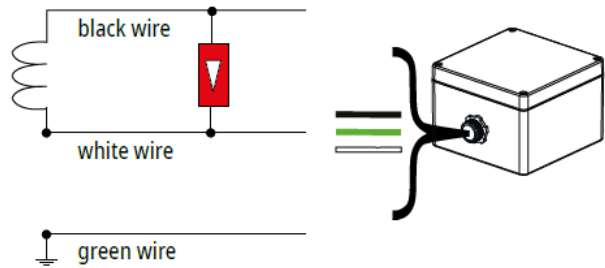
Notes:

1. The DEHNguard EZ50-S is designed to be installed without fuses. It is suitable for use on a circuit with maximal SCCR and Nominal Voltage according to the technical data. If a disconnecting means or OCPD is required by the NEC for the installation or is desired for service, ensure that the conductors are kept as straight and short as possible to minimize circuit impedance. A properly sized and coordinated OCPD will not impact SPD performance.
2. For NEMA 4x installation use appropriate customer supplied gasket, fittings and/or conduit to maintain rating.
3. To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

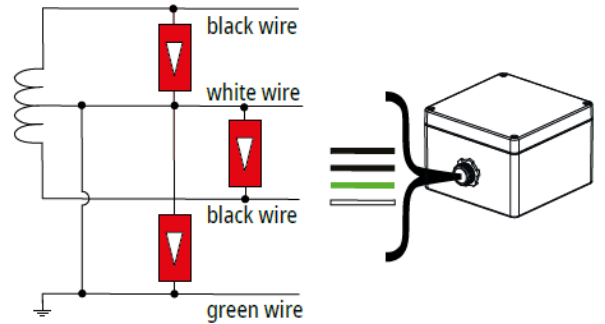
DEHN EZ50 Enclosed Surge Protectors Wiring Diagrams



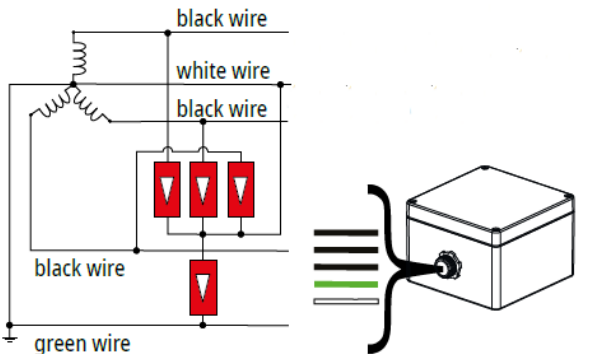
EZ50-S 120V
2W+G
908171



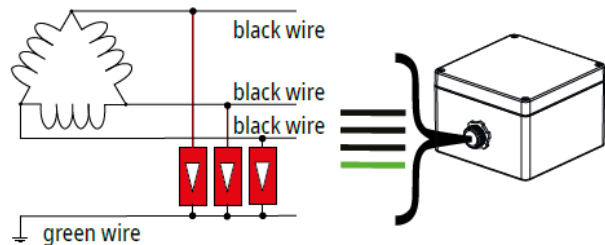
EZ50-S 120/240V
3 W+G
908166



EZ50-S 120/208 V
4 W+G
908167

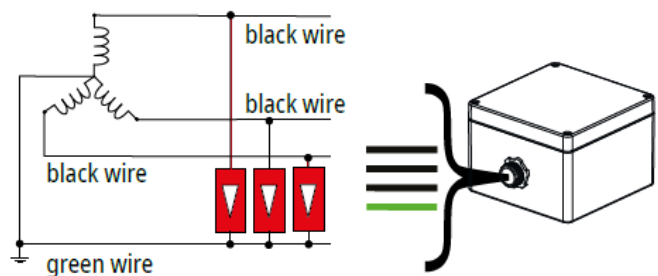


EZ50-S 277/480 V
4 W+G
908168



EZ50-S 480 V
3W+G
908169

EZ50-S 347/600 V
3W+G
908170

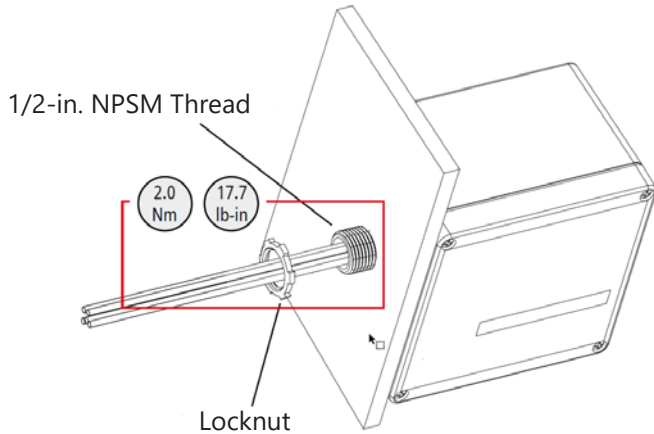


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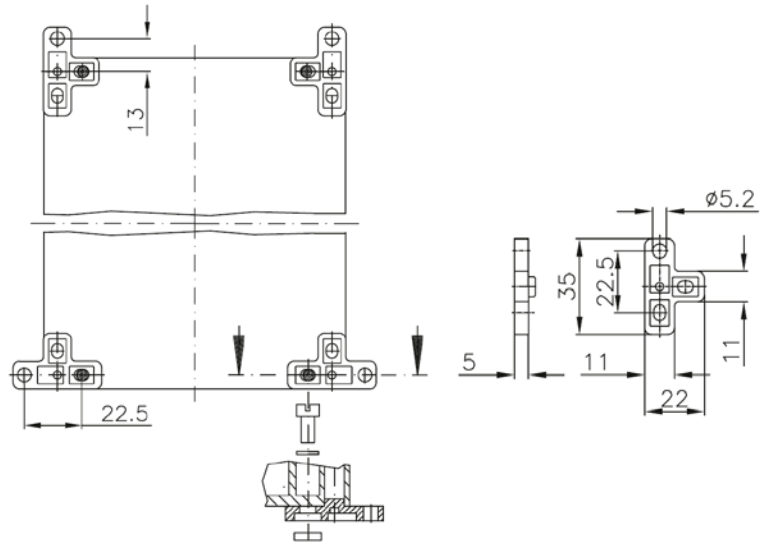


Mounting

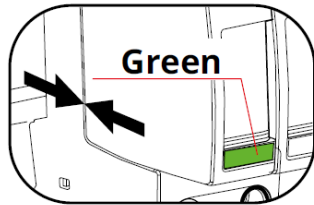
Direct Panel Mounting



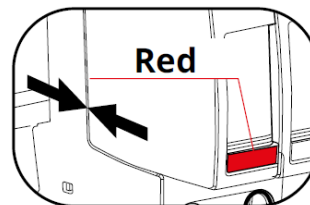
Wall/Panel Mounting With External Brackets (Dimensions [mm])



Fault Indication

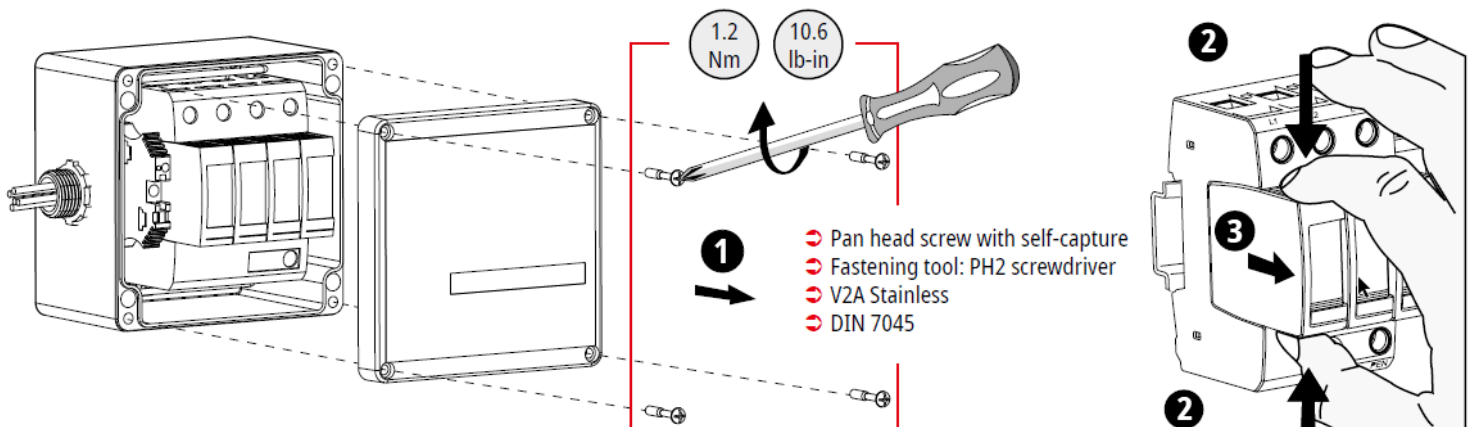


Green = OK



Red = Replace

Replacement of Plug-In Module In Case of a Red Visual Indication



DEHN Surge Protectors Accessories Replacement Modules



Red / Line Surge Arrester

Protection Modules for DEHNguard M UL Series

The varistor based protection modules of the DEHNguard SU/MU surge arresters distinguish themselves through their outstanding performance and sophistication.

The compact protection modules incorporate the complete protective circuit as well as the monitoring and disconnection device. A green flag in the inspection window indicates the

availability of the protection modules.

All protection modules are mechanically coded to ensure against installing an incorrect module. The protection modules can be easily replaced without tools by simply pressing the user-friendly module release button.

Features

- High discharge capacity due to heavy-duty zinc oxide varistors (I_{max} 50 kA, $8 \times 20 \mu s$)
- ANSI / UL 1449 – 4th Ed. Open-Type 1 SPD (908xxx)
- High reliability due to "Thermo Dynamic Control" SPD monitoring device



UL file numbers:
E319777
CSA file number: 215727

DEHNguard M UL Series Replacement Module Selection Chart

Part Number	Price	Type	Nominal Discharge Current (8/20 μs) (I_n)	Max. Discharge Current (I_{max})	Max. Continuous Operating Voltage (AC) (UC)	Dimensional Drawing
908011	\$65.00	DG PLU 180	20 kA	50 kA	180V	PDF
908012	\$62.00	DG PLU 230	20 kA	50 kA	230V	PDF
908010	\$65.00	DG PLU 275	20 kA	50 kA	275V	PDF
908014	\$65.00	DG PLU 385	20 kA	50 kA	385V	PDF
908013	\$65.00	DG PLU 510	20 kA	50 kA	510V	PDF
908015	\$65.00	DG PLU 550	20 kA	50 kA	550V	PDF



DEHnrail M 2P Series Replacement Module Selection Chart

Part Number	Price	Type	Nominal Discharge Current (8/20 μs) (I_n)	Total Discharge Current (8/20 μs) [L+N-PE] (I_{total})	Max. Continuous Operating Voltage (AC) (UC)	Dimensional Drawing
953011	\$47.00	DR MOD 30	1 kA	2 kA	30V	PDF
953012	\$47.00	DR MOD 60	1 kA	2 kA	60V	PDF
953014	\$47.00	DR MOD 150	2 kA	4 kA	150V	PDF
953010	\$47.00	DR MOD 255	3 kA	5 kA	255V	PDF

