US

UL 1449 Type 1 SPD CSA C22.2 Type 4-1 Component Assembly

DEHNguard MU 3P _ _ _ 3W+G (R)
Modular Multipole Surge Arrester



Figure without obligation

DG MU 3P ... 3W+G (R)

Surge Protection
Lightning Protection
Safety Equipment
DEHN protects.

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Type - DG M YPV FM		**1200**	**1500**
Mode		DC+ - DC-; DC+/--G	DC+ - DC-; DC+/--G
Maximum System Voltage [V dc]		1170	1500
VPR [V]		3000	– 4000
In [kA]		20	10
max. Ambient Temp.		+85°C	
Conductors	AWG	2-14 Cu Solid or Stranded	
	Torque	35 - 45 Lbs-in	
Remote Indicator	AWG	14 - 22 Cu	
	Torque	3 Lbs-in	
SPD classifiaction		Type 1 Component Assembly	
		For Use in Photovoltaic Systems only	

2. Safety Instructions

Warning: Risk of Electric Shock - Disconnect power before servicing. Service to be performed by qualified personnel only.
Attention: Risque de choc.
Suitable for use on a circuit capable of delivering not more than 200 kA rms symmetrical amperes.
Convient à des circuits produisant au plus 200 kA eff.
The SPD is intended for Installation within a NEMA Type 1 enclosure in accordance with the National Electrical Code, ANSI/NFPA 70.

- The DEHNguard MU series SPD is to be installed only by qualified personnel and to be done so in compliance with all local and National Electrical Code requirements.
- For proper system protection and safety, coordination with other SPDs within the facility must be considered. Contact our application engineer for assistance if in doubt.
- Installation and connection to service must be done only when the system is de-energized.
- The arrester's installation is to be compliant with its rating and therefore must not be installed in a more severe environment subjecting it to higher voltages, currents or energy levels than for which its technica specifications provide.
- These devices must be provided with a suitable end-product enclosure having adequate strength and thickness and with acceptable spacings being provided.
- The arrester is designed for indoor applications and must be placed in a suitable rated NEMA enclosure if the system is to be in a harsher environment.
- Opening or tampering with the thermoplastic enclosure may damage the effective operation of the SPD and is inadvisable and will void the warranty.

3. General Installation Instructions

Sections 250 and 285 of the NEC (NFPA 70) and the IEEE Green Book-Std. 142 should be consulted. Local electrical codes and/or the Canadian Electrical code also have to be considered.
System voltage: Make sure that the SPD is correctly rated for the system where the SPD should be applied. **The maximum continuous operating voltage (MCOV) must not be exceeded.**
Mounting: Make sure that the SPD is installed as close as possible to the device to be protected. The conductor length for these connections must be kept as short and as straight as possible. The SPDs are to be mounted on the 35 mm DIN rail. The rail is to be securely mounted to the back of the interior of the panel or flat surface using ¼ inch bolts every 8 inches (200 mm). The SPDs can either be slid on the rail from open end or put on the rail by compressing the spring loaded clamping device on the lower back of each unit. The SPDs shall permit sufficient clearance for conductor power and signaling connections.
Conductor Connections: Phase connections to the SPD and ground side connections from the SPD to the ground bus must be of the wire size indicated in the technical specifications before. Insulation should be stripped back as described on the previous page. All conductor terminal screws shall be tightened to the torque indicated in the technical data. If the SPDs are installed more than six conductor feet (two meters) from the neutral to ground bond point (usually service entrance) than an additional SPD should be installed between neutral and ground (at the service entrance).
Grounding: Make sure that the grounding of the SPD is as short and straight as possible with the specified wire size according to the technical data. Use a local equipotential bonding bar if possible. For proper operation the SPD must be connected to a low impedance ground. Recommend using the largest diameter (high strand count) wire possible without exceeding the technical data for maximum wire size.
Remote Contact Signaling: In case of a device with remote contact signaling make sure that the torque is as indicated in the technical data.
Non Fusing: The DEHNguard MU is designed to be installed without fuses. It is suitable for use on a circuit with maximal SCCR and Nominal Voltage according to Technical Data. This device features an internal protection that will disconnect the surge protective component at the end of its useful life but will maintain power to load - now unprotected. If this situation is undesirable for the application, the arrester plug-in module must be replaced.
Problem Diagnostics: If there should be any problem please contact your local DEHN representative.