

# SurgeFree™



**Data Line Protection**

**DLP-25 with DIN Rail Mount**

## Critical Circuit Protection

MCG's DLP-25 series is designed to protect critical control circuits from lightning induced transients. The DLP-25 series comes in three offerings – light duty, standard duty, and heavy duty and protects up to five wires. The DLP-25 uses a compact aluminum DIN rail mount enclosure. If a DIN rail does not exist in your application, a DIN rail bracket is provided for mounting to any flat surface.



**WARRANTY**

**20-Year Warranty.**

## Light Duty Protection

**DLP-25-xxV** – New “Light Duty” DIN rail mount protector protects up to five wires. A typical model buildup is DLP-25- 6V where 6V is the voltage of the system. This protector's capacity is 5kW (10 x 1000 microsecond waveform) per wire. Although it is rated as a light duty protector, it is only light duty relative to the other, heavier duty model types in this family. Voltages available: 6V, 12V, 25V, 36V, 55V, 100V, 150V, 180V.

**Application:** There is no series resistance specified on this model. This is intentional and makes this product geared towards applications with high nominal system currents. For example, some irrigation systems use 1 or 2 amps of nominal system current. This would damage the series resistor in our other hybrid DLPs. It can also be used on systems where no series resistance is permitted.

## Standard Duty Protection

**DLP-25-xxV2** – New “Standard Duty” DIN rail mount protector. A typical model buildup is DLP-25- 6V2 where 6V is the voltage of the system and 2 is the series resistance. This is a hybrid protector with 10kA (8 x 20 microsecond waveform) per wire capacity. Voltages available: 6V, 12V, 25V, 36V, 55V, 100V, 150V, 180V.

**Application:** Used to protect equipment with a system current no more than 350mA and bandwidth of no more than 10Mbps. The unit comes in a small, DIN rail mount package and protects five wires.

## Heavy Duty Protection

**DLP-25-xxV5** – New “Heavy Duty” DIN rail mount protector. A typical model buildup is DLP-25- 6V5 where 6V is the voltage of the system and 5 is the series resistance. This is a hybrid protector with 20kA (8 x 20 microsecond waveform) per wire capacity. This unit is mostly hand built due to the physically large components that are used. Voltages available: 6V, 12V, 25V, 36V, 55V, 100V, 150V, 180V.

**Application:** Used to protect the most critical systems from transients, designed specifically for use in high exposure applications. Protects equipment with a system current no more than 350mA, except for high-speed data systems. The unit comes in a small, DIN rail mount package and protects five wires. This model is designed for to 4-20mA loops, I/O ports, sensors, mainframes, process controllers, and other complex instrumentation applications.

# Specifications

## Ordering Information

<b>Model Name (Light Duty)</b>	<b>Model Name (Standard Duty)</b>	<b>Model Name (Heavy Duty)</b>	<b>Max. Applied Voltage, L-Gnd (DC or Peak)</b>
DLP-25-6V	DLP-25-6V2	DLP-25-6V5	6.9
DLP-25-12V	DLP-25-12V2	DLP-25-12V5	16
DLP-25-25V	DLP-25-25V2	DLP-25-25V5	30
DLP-25-36V	DLP-25-36V2	DLP-25-36V5	39
DLP-25-55V	DLP-25-55V2	DLP-25-55V5	57
DLP-25-100V	DLP-25-100V2	DLP-25-100V5	113
DLP-25-150V	DLP-25-150V2	DLP-25-150V5	161
DLP-25-180V	DLP-25-180V2	DLP-25-180V5	188

Number of Protected Circuits: 5  
 Protection Modes: L-L, L-G  
 Connection: Series Connected. (Note: Light Duty models may be shunt connected.)  
 Rated Voltage: Various (See Table Above.)  
 Certification: UL497B Listed  
 Series Resistance Per Circuit: 5.6 Ohms (Heavy Duty Models)  
 2.4 Ohms (Standard Duty Models)  
 0 Ohms (Light Duty Models)  
 Rated System Current Per Circuit (Std/Heavy Duty): 350 mADC Maximum  
 Rated System Current Per Circuit (Lt. Duty): 5 ADC (Series Connected)  
 Rated System Current Per Circuit (Lt. Duty): Unlimited (Shunt Connected)  
 Surge Capacity per Circuit, Light Duty Model: 5000 Watts (10x1000 microsecond)  
 Surge Capacity per Circuit, Standard Duty Model: 10kA (8x20 microsecond)  
 Surge Capacity per Circuit, Heavy Duty Model: 20kA (8x20 microsecond)  
 Temperature (Operating/Storage): -55° to +65°C / -55° to +75°C,  
 0% to 95% non-condensing RH  
 Protection Type: Bidirectional  
 Connection: Touch-Safe Screw Terminals  
 (Stripping Length 0.315"/8mm)  
 Wire Gauge Range: 22 - 12 AWG  
 Dimensions, Protector, Overall: 2.95" x 2.83" x 1.86 (L x W x D)  
 74.9mm x 71.9mm x 47.3mm (L x W x D)  
 Dimensions, DIN-Rail section (provided): 3.0" L (76.2mm)  
 Mounting: DIN-Rail Mount (DIN 35 Type)  
 Enclosure: Aluminum  
 Warranty: 20 Years