



## DC Surge Protective Device

### LY1-C40PV Series

Class II • Type 2

Location of Use: String box, Inverter

Mode of Protection: (DC+/-) - PE, (DC-/-) - PE

Surge Ratings:  $I_n = 10 \text{ kA} - 15 \text{ kA} (8/20 \mu\text{s})$

$I_{\text{Total}} = 20 \text{ kA} (8/20 \mu\text{s})$

IEC/EN Category: Class II / Type 2

Protective Elements: High Energy MOV

Housing: Pluggable Design

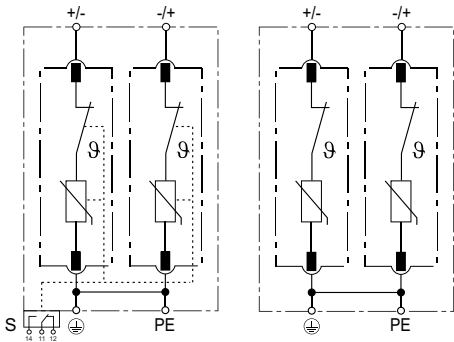
Compliance: IEC/EN 61643-41



## Technical Data

IEC Electrical		12	24
Rated Operational DC Voltage	$U_o/U_n$	12 V	24 V
Maximum Continuous Operating DC Voltage (DC+) - PE, (DC-) - PE	$U_c$	24 V	38 V
Nominal Discharge Current (8/20 $\mu\text{s}$ )	$I_n$	10 kA	10 kA
Total Discharge Current (8/20 $\mu\text{s}$ )	$I_{\text{Total}}$	20 kA	
Maximum Discharge Current (8/20 $\mu\text{s}$ )	$I_{\text{max}}$	20 kA	
Voltage Protection Level (DC+) - PE, (DC-) - PE	$U_p$	250 V	250 V
Residual Current at $U_c$	$I_{\text{PE}}$	< 0.5 mA	
Response Time	$t_A$	< 25 ns	
Number of Ports		1	
Mechanical & Environmental			
Operating Temperature Range	$T_a$	-40 °F to + 158 °F [-40 °C to + 70 °C]	
Permissible Operating Humidity	RH	5%...95%	
Atmospheric pressure and altitude		80k Pa ... 106k Pa / -500 m ... 2000 m	
Terminal Screw Torque	$M_{\text{max}}$	39.9 lbf-in [4.5 Nm]	
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm <sup>2</sup> (Solid, Stranded) / 25 mm <sup>2</sup> (Flexible)	
Mounting		35 mm DIN Rail, EN 60715	
Degree Of Protection		IP 20 (built-in)	
Housing Material		Thermoplastic: Extinguishing Degree UL 94V-0	
Thermal Protection		Yes	
Operating State / Fault Indication		Green ok / Red defect	
Remote Contacts (RC)		Optional	
RC Switching Capacity		AC: 250 V / 0.5 A; DC: 250 V / 0.1 A; 125 V / 0.2 A; 75 V / 0.5 A	
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm <sup>2</sup> (Solid)	

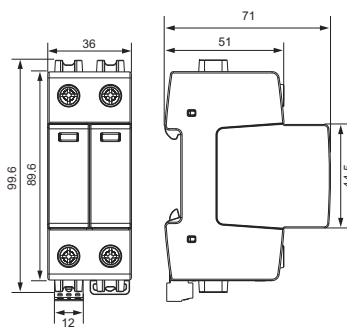
## Internal Configuration



### Legend

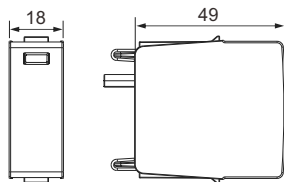
- ⊕/PE PE/G Conductor Terminal
- S Signalling Contacts Optional

## Dimensions & Packaging



Complete Unit		[mm]
Item code	12	24
DIN 43880 Dimension	1 CTN	
Packaging Dimensions (H x W x L)	[260 × 220 × 330 mm]	
Standard Order Quantity	48 Units	

## Spare Plug



Single Unit		
Item code	12	24
DIN 43880 Dimension	1 CTN	
Packaging Dimensions (H x W x L)	[260 × 220 × 330 mm]	
Standard Order Quantity	120 Units	

## Connection Diagram

