



Selection guide

Surge protection

SURGYS surge protection devices

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Which application?

What type of mains?

Which model?

Which level of protection?

Which characteristics?

Applications	PV sites	Sites equipped with lightning conductors					Sites exposed to frequent lightning strikes or industrial mains subject to operating voltage surges		Sensitive loads or electrical receivers	Strategic facilities subject to lightning strikes		
Type of protected mains	PV DC mains	Installation incomers		Main switchboard equipped with sensitive devices						Protection of RS422/485, T2 digital phone and Ethernet 10baseT links	Protection of field bus (Profibus, Fieldbus, LONworks, Interbus, etc.)	Protection of analogue, modem, autocom, telephone alarm and ADSL lines
												
Which model?	<i>G51-PV</i>	<i>G140-F</i>	<i>G100-F</i>	<i>G50-FE</i>	<i>G40-FE</i>		<i>G70</i>	<i>D40</i>	<i>E10</i>	<i>RS-3</i>	<i>mA-3/mA-3x2</i>	<i>TEL-3</i>

Protection												
Type	Type 2	Type 1	Types 1 and 2	Types 1 and 2	Types 1 and 2		Type 2	Type 2	Types 2 and 3	Low currents	Low currents	Low currents
Mode	MC / MD ⁽¹⁾	MC / MD ⁽¹⁾	MC	MC / MD ⁽¹⁾	MC / MD ⁽¹⁾		MC	MC / MD(*)	MC / MD(*)			

Specifications												
Nominal voltage U _n	500 - 600 - 800 - 1000 - 1500 VDC ⁽¹⁾	230 / 400 VAC	230 / 400 VAC	230 / 400 VAC	230 / 400 VAC		230 / 400 VAC	230 / 400 VAC	230 / 400 VAC ⁽¹⁾	12 V	48 V	150 V
Neutral system		TT, TN, IT ⁽¹⁾	TN, IT ⁽¹⁾	TT, TN, IT ⁽¹⁾	TT, TN, IT ⁽¹⁾		TT, TN, IT ⁽¹⁾	TT, TN, IT ⁽¹⁾	TT, TN, IT ⁽¹⁾			
Tension U _c	600 - 720 - 960 - 1200 - 1500 VDC ⁽¹⁾	440 VAC	440 VAC	440 VAC	255 VAC		400 VAC	255 - 400 VAC ⁽¹⁾	255 - 400 VAC ⁽¹⁾	15 V	53 V	170 V
Level of protection U _p	2.2 - 2.8 - 2 - 2.2 - 3.2 kV	2.5 kV	2 kV	1.3 kV	1.5 kV		1.8 kV	1.25 - 1.8 kV ⁽¹⁾	0.9 - 1.5 kV ⁽¹⁾	30 V	75 V	220 V
Nominal discharge current I _n	15 kA	25 kA	25 kA	12.5 kA	20 kA		30 kA	20 kA	5 kA	5 kA	5 kA	5 kA
Maximum discharge current I _{max}	40 kA	140 kA	100 kA	50 kA	40 kA		70 kA	40 kA	10 kA	20 kA	20 kA	20 kA
Discharging current I _{imp} (per pole)		25 kA	25 kA	12.5 kA	15 kA							
Plug-in modules.	•		•	•			•	•	•	•	•	•
Remote signalling	⁽¹⁾	•	•	•	•		•	•	•			
Admissible short-circuit current I _{scst}	1000 A	50 kA	25 kA	25 kA	50 kA		25 kA	25 kA	25 kA			
Recommended disconnectors	not applicable	gG 315 A fuses	gG 315 A fuses	gG 125 A fuses	gG 125 A fuses		gG 100 A fuses	gG 50 A fuses	gG 20 A fuses			

MC: Common mode to earth
MD: Differential mode between live conductors.
(1) As per reference.