



SURGYS® E10

Surge arrester - Types 2 and 3
for terminal receivers and sensitive loads

Electronic protection



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SURGYS E10 - 2 pole MC/MD

The solution for

- > Industry
- > Infrastructure
- > All types of building (critical, non-critical)
- > OEM



Strong points

- > Monobloc design
- > Plug-in module
- > Remote signalling

Compliance with standards

- > NF EN 61643-11
- > IEC 61643-11



Function

SURGYS® E10 surge arresters are designed to ensure protection of installations connected to single-phase, three phase or DC networks against industrial operation surges. They act against transient surges owing to lightning.

Advantages

Monobloc design

Easy to install.

Plug-in module

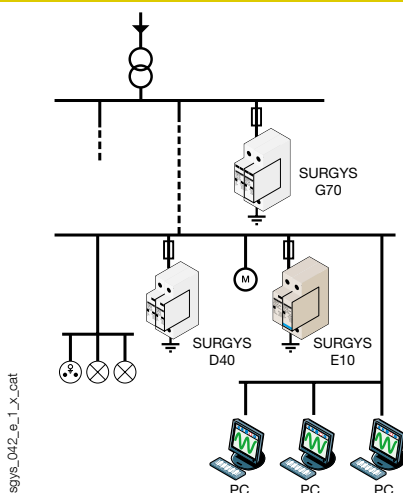
Quick maintenance on end-of-life modules.

Remote signalling

With the remote signalling contact (plug-in) you can upload the alert to a supervisory device.

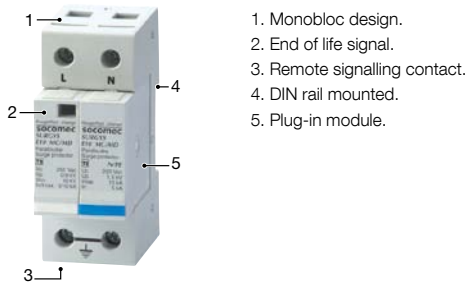
Applications

- AC or DC distribution board (downstream of a main switchboard).
- Protection of electrotechnical equipment such as motors, switching devices, control devices...



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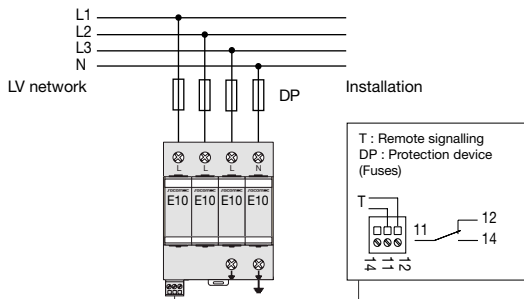
Front panel



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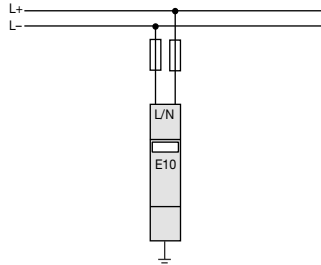
Connection

AC version - Common mode (MC) and differential mode (MC/MD) protection



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DC version



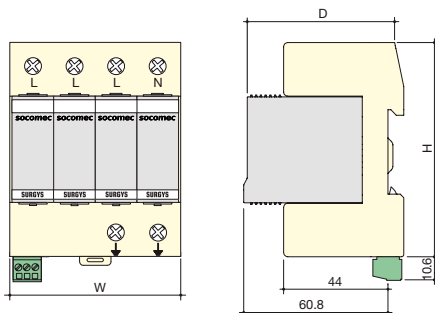
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Specifications

Mains		
Mains type	230 / 400 VAC	
Neutral arrangement (see table)	TT, TN, IT	
Connection mode	MC ⁽¹⁾	MC ⁽¹⁾ / MD ⁽²⁾
Nominal voltage U _n	400 VAC	230 VAC
Max. voltage U _c	440 VAC	255 VAC
Protection characteristics		
Temporary overvoltage withstand @ 5 sec (U _T)	580 VAC withstand	335 VAC withstand
Temporary overvoltage withstand @ 120 sec (U _T)	770 VAC disconnection	440 VAC disconnection
Temporary overvoltage from a HV mains, between N & PE in a TT arrangement		1200 V / 30 A / 200 ms withstand
Level of protection U _p	1.3 kV	1.5 / 0.9 kV
Max. current discharge (1 impulse 8/20 μs) I _{max}	10 kA	10 kA
Nominal discharge current (15 impulses 8/20 μs) I _n	5 kA	5 kA
Associated characteristics		
Residual current I _{pe}	< 1 mA	
Response time t _r	< 5 ns	
Follow current I _f	None	
Admissible short-circuit current I _{scor}	25 kA	
Recommended disconnector	gG 20 A fuses	
Type of mechanical disconnection indicator	Mechanical	
Number of disconnection indicators	1	
Remote signalling contact		
Number of contacts per pole	1	
Contact type	NO/NC	
AC making capacity	0.5 A	
DC making capacity	3 A	
AC nominal voltage	250 VAC	
DC nominal voltage	30 VDC	
Sustained current	2 A	
Connection type	Through terminal block	
Max. cross-section of terminal connections	1.5 mm ²	
Operating conditions		
Operating temperature range	-40 ... +85°C	
Storage temperature range	-40 ... +85°C	

(1) MC: Common mode. (2) MD: Differential mode.

Case



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Type	plug-in module
Dimensions W x H x D - DC version device	17.5 x 90 x 67 mm
Dimensions W x H x D - 2 pole device	36 x 90 x 67 mm
Dimensions W x H x D - 3 pole device	54 x 90 x 67 mm
Dimensions W x H x D - 4 pole device	72 x 90 x 67 mm
Case degree of protection IP20	IP20
Terminal block degree of protection IP20	IP20
Case material	thermoplastic UL94-V0
Mains connection cross-section	2.5 ... 25 mm ²
Earthing connection cross-section	2.5 ... 25 mm ²

References

No. of poles	No. of adjacent boxes	Neutral arrangements	Protection mode	I total (8/20μs)	SURGYS E10 Reference
2	2	IT	MC ⁽¹⁾	20 kA	4983 1125
3	3	TNC-IT	MC ⁽¹⁾	30 kA	4983 1135
4	4	TNS-IT	MC ⁽¹⁾	40 kA	4983 1145
2	2	TT-TN	MC ⁽¹⁾ / MD ⁽²⁾	20 kA	4983 1126
4	4	TT-TNS	MC ⁽¹⁾ / MD ⁽²⁾	40 kA	4983 1146
Spare plug-in module for AC application					SURGYS® E10-AC
Mode of protection					Reference
MC ⁽¹⁾ / MD ⁽²⁾					4983 0198
MC ⁽¹⁾					4983 0199

Applications DC		SURGYS® E10-DC
No. of poles	Network voltage	Reference
2	12 VDC	4983 2601
2	24 VDC	4983 2602
2	48 VDC	4983 2604
Spare module for DC application		SURGYS® E10-DC
Network voltage		Reference
12 VDC		4983 9901
24 VDC		4983 9902
48 VDC		4983 9904

(1) MC: Common mode. (2) MD: Differential mode.