

SURGYS® E10

Surge arrester - Types 2 and 3

for terminal receivers and sensitive loads



sgys_070_a_1_cat

***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

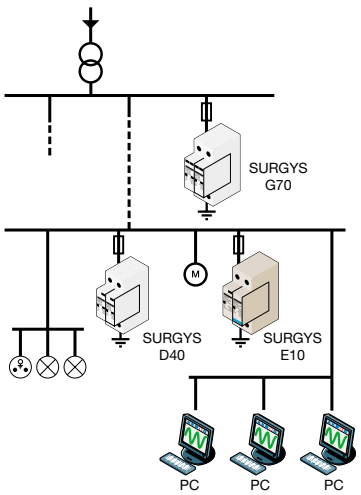
Monobloc design
Easy to install.

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

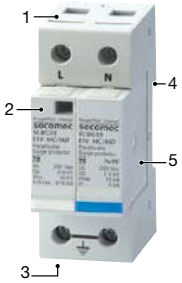
- AC or DC distribution board (downstream of a main switchboard).
- Protection of electrotechnical equipment such as motors, switching devices, control devices...



sgys_042_e_1_x_cat

socomec
Innovative Power Solutions

Front panel

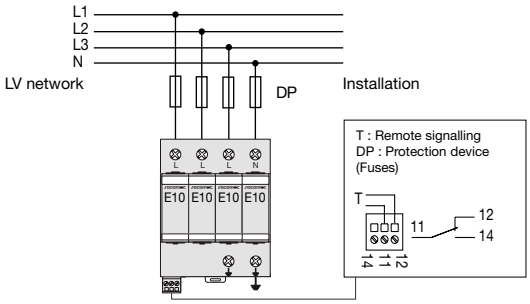


1. Monobloc design.
2. End of life signal.
3. Remote signalling contact.
4. DIN rail mounted.
5. Plug-in module.

sgys_070x_a_1_cat

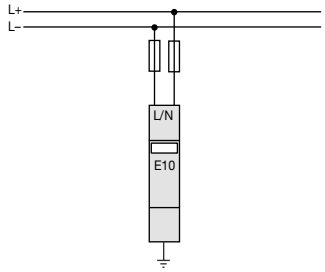
Connection

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



sgys_071_a_1_gb_cat

DC version



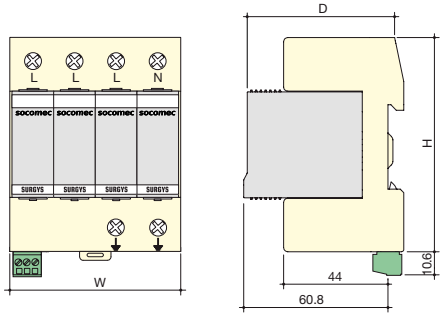
sgys_041_a_1_x_cat

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 Isccr	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 mm²	
Operating conditions		
Operating temperature range	-40 … +85°C	
Storage temperature range	-40 … +85°C	

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

Case



sgys_043_d_1_gb_cat

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 mm²
Earthing connection cross-section	2.5 … 25 mm²

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 Mode of protection	SURGYS® E10-AC Reference
MC(1) / MD(2)	4983 **0198**
MC(1)	4983 **0199**

Applications DC No. of poles	Network voltage	SURGYS® E10-DC Reference
2	12 VDC	4983 **2601**
2	24 VDC	4983 **2602**
2	48 VDC	4983 **2604**

Spare module for DC application Network voltage	SURGYS® E10-DC Reference
12 VDC	4983 **9901**
24 VDC	4983 **9902**
48 VDC	4983 **9904**

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