

SURGYS® D40

Surge arrester - Type 2
for distribution boards



***SURGYS D40** 2 poles*

Function

The **SURGYS® D40** surge arrester is designed to ensure protection of LV distribution circuits and equipment against transient surges. It acts against industrial operation surges and 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.

End of life indicator
Indicates internal components' end-of-life.

The solution for

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



Strong points

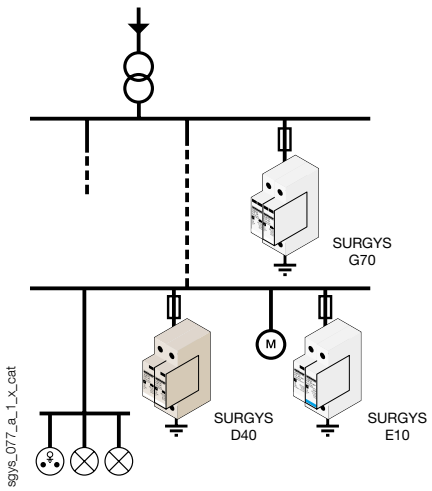
- Monobloc design
- Plug-in module
- Remote signalling
- End of life indicator

Compliance with standards

- NF EN 61643-11
- IEC 61643-11

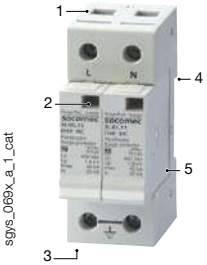
Applications

- Distribution board (downstream of a main switchboard).
- Autonomous power supply units such as generator sets or medium power UPS.
- Machine control panel.



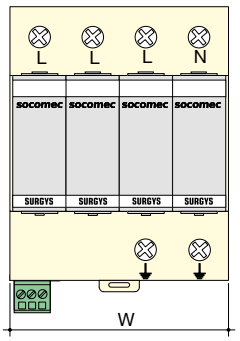
socomec
Innovative Power Solutions

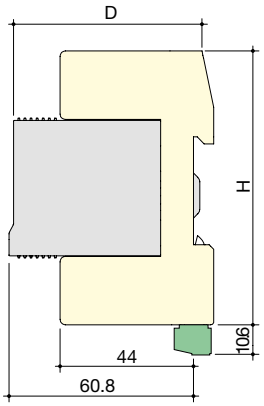
Front panel



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

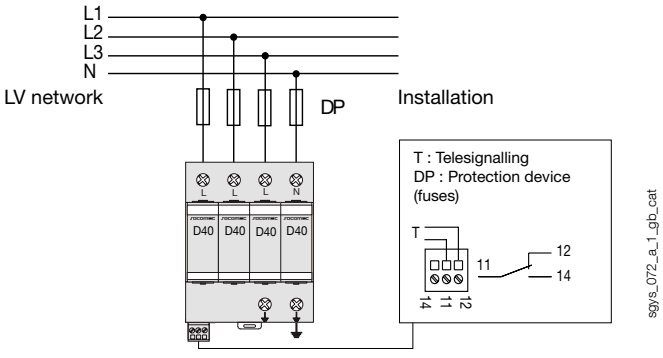
Switch body





Type	plug-in module
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

Connection



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 / 200ms withstand
Level of protection U_p	1.8 kV	1.5 / 1.25 kV
Max. current discharge (1 impulse 8/20 µs) I_{max}	40 kA	40 kA
Nominal discharge current (15 impulses 8/20 µs) I_n	20 kA	20 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_{sccr}	25 kA	
Recommended disconnector	gG 50 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	Screw 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.

References

No. of poles	No. of adjacent boxes	Neutral arrangements	Protection mode	I total (8/20µs)	SURGYS D40 Reference
2	2	IT	MC (1)	80 kA	4982 **1422**
3	3	TNC-IT	MC (1)	120 kA	4982 **1432**
4	4	TNS-IT	MC (2)	160 kA	4982 **1442**
2	2	TT-TN	MC (1) / MD (2)	80 kA	4982 **1424**
4	4	TT-TNS	MC (1) / MD (2)	160 kA	4982 **1444**

Description of accessories	Protection mode	Reference
Spare plug-in module m-D40	MC(1)	4982 **0419**
Spare plug-in module m-D40	MC(1) / MD(2)	4982 **0418**

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