



# SURGYS® D40

Surge arrester - Type 2  
for distribution boards

Electronic  
protection



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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

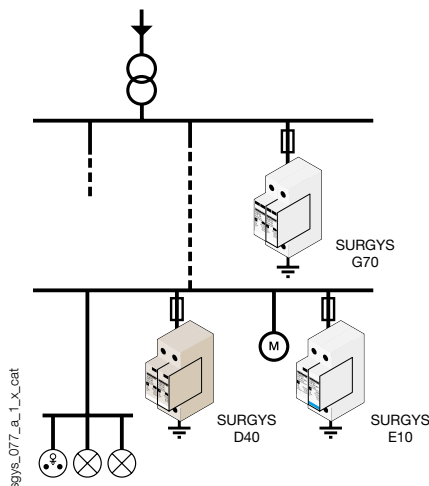
## Compliance with standards

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



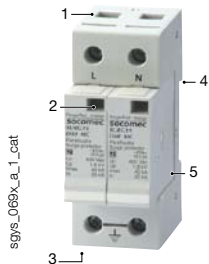
## Applications

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



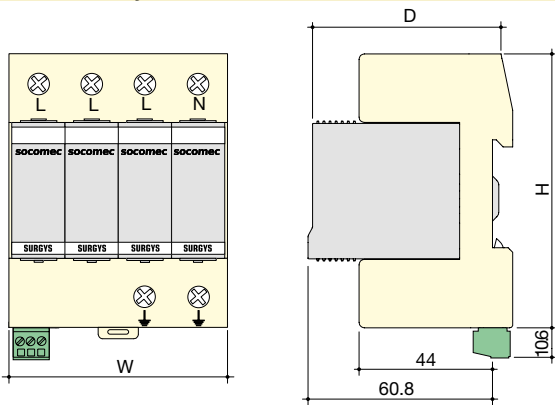
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## Front panel



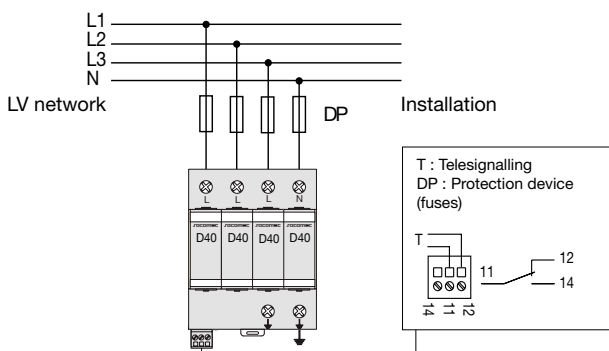
1. Monobloc design.
2. End of life signal.
3. Remote signalling contact.
4. DIN rail mounted.
5. Plug-in module.

## 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 mm <sup>2</sup>
Earthing connection cross-section	2.5 ... 25 mm <sup>2</sup>

## Connection



## Specifications

Mains		
Mains type	230 / 400 VAC	
Neutral arrangement (see table)	TT, TN, IT	
Connection mode	MC <sup>(1)</sup>	MC <sup>(1)</sup> / MD <sup>(2)</sup>
Nominal voltage U <sub>n</sub>	400 VAC	230 VAC
Max. voltage U <sub>c</sub>	440 VAC	255 VAC
Protection characteristics		
Temporary overvoltage withstand @ 5 sec (U <sub>T</sub> )	580 VAC withstand	335 VAC withstand
Temporary overvoltage withstand @ 120 sec (U <sub>T</sub> )	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 <sub>p</sub>	1.8 kV	1.5 / 1.25 kV
Max. current discharge (1 impulse 8/20 μs) I <sub>max</sub>	40 kA	40 kA
Nominal discharge current (15 impulses 8/20 μs) I <sub>n</sub>	20 kA	20 kA
Associated characteristics		
Residual current I <sub>pe</sub>	< 1 mA	
Response time t <sub>r</sub>	< 5 ns	
Follow current I <sub>f</sub>	None	
Admissible short-circuit current I <sub>scor</sub>	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 mm <sup>2</sup>	
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 <sup>(1)</sup>	80 kA	4982 1422
3	3	TNC-IT	MC <sup>(1)</sup>	120 kA	4982 1432
4	4	TNS-IT	MC <sup>(2)</sup>	160 kA	4982 1442
2	2	TT-TN	MC <sup>(1)</sup> / MD <sup>(2)</sup>	80 kA	4982 1424
4	4	TT-TNS	MC <sup>(1)</sup> / MD <sup>(2)</sup>	160 kA	4982 1444
Description of accessories			Protection mode	Reference	
Spare plug-in module m-D40			MC <sup>(1)</sup>	4982 0419	
Spare plug-in module m-D40			MC <sup>(1)</sup> / MD <sup>(2)</sup>	4982 0418	

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