

SURGYS® D40

Type 2 surge arrester
for distribution boards



The solution for

- > Data centre
- > Healthcare
- > Energy
- > Infrastructure & Transport
- > Industry
- > Building

Strong points

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

Conformity to standards

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



Function

The SURGYS D40 surge arrester is designed to protect LV distribution circuits and equipment from transient surges. It acts against the surges of industrial movements and those due 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.

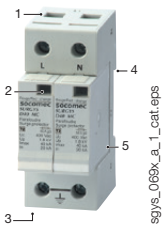
End of service life indicator

Indicates internal components' end-of-life.

General characteristics

- Type 2 surge arrester.
- 2, 3 or 4 poles
- For distribution boards
- In: 20 kA.
- Imax: 40 kA.
- Common/differential mode.
- Monobloc base.
- Plug-in module.
- Remote signalling.
- End of service life indicator on front.

Front panel



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

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 _{scorr}	25 kA	
Recommended disconnecter	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 ²	
Operating conditions		
Operating temperature range	-40 ... +85°C	
Storage temperature range	-40 ... +85°C	

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

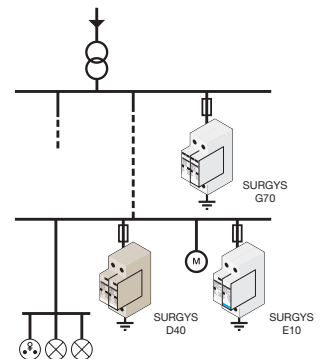
References

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	

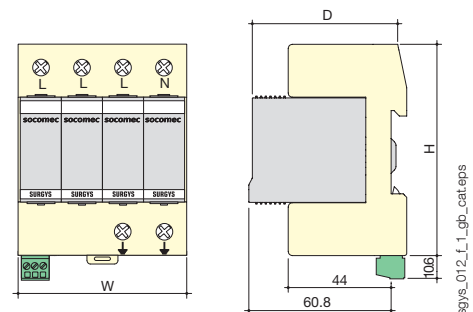
(1) MC: Common mode. (2) MD: Differential mode.

Applications

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



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 ²
Earthing connection cross-section	2.5 ... 25 mm ²

Connection

