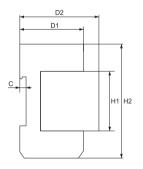
Documents corresponding to the product:

Standard EN61 643-1

The breakers are in accordance with the directives of EC "Low voltage directives (LVD) no. 2006/95/EC and "Electromagnetic Compatibility Directives (EMC) no. 2004/108/EC.



Type AC for AC current



Dimensions	(mm)

C	H1	H2	D1	D2	
5	90	45	43,5	58	

Surge arresters SPD type

The surge arrester consists of a semi-conductor valve element that opens at certain conditions. At normal conditions of the system, the surge arrester has infinitely high resistance between the protected conductors and earthing circuit. At voltage increase due to atmospheric nature or system failure, the valve element opens and leads the excessive voltage to the grounded circuit.

After reversion of the normal voltage the valve element closes. The arrester can endure high momentary overloading.

Functions:

- protection of heavy-loaded electrical circuits from overload
- used to protect not only particular consumers/ circuits, but also the whole panel
- remarkable with high reliability of current charac-
- control: automatic switching off at exit failure and recovery after eliminating the danger

Technical data:

- Rated operating voltage Uc: the operating voltage of the surge arrester 275/440V; 50Hz
- Surge voltage Up: the voltage created in surge arrester terminals at rated discharge current running: according to the tables

- Rated discharge current In the rated value of discharge current with a sinusoid 8/20µs, which can be repeatedly led to the ground: according to the tables
- Full discharge current Imax the peak value of the discharge current with a sinusoid 8/20µs, which the surge arrester can bear once: according to the table
- Constant operating current: up to 800µA for 1P, 2P and 3P; up to $600\mu A$ for 1P + N, 3P + N
- Indication for damaged surge arrester
- Offered in types: 1P; 1P + N; 3P; 3P + N

Connecting:

 flexible or rigid conductors with corresponding section

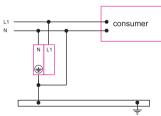
Mounting:

- on DIN-rail
- mounting position: vertical
- mounting in the distribution box on the front or right before the breaker according to the attached schemes
- Breakers plastic material of UV rays and nonflammable
- Ambient temperature: -10°C + 65°C
- Installation altitude: up to 2000m

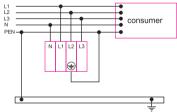
COLOUR CODE for all types 5kA - yellow; white – 10kA; green – 20 kA and red 40kA

Three phase protection TN-C system consumer

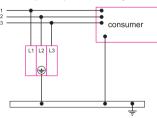
Monophase protection TT system







Three phase protection IT system



The surge arrester selection is made according to the overload risk level or atmosphere activity, named B, C or D (from high to low risk level).

The company offers the following models of arresters:

Model SPD – Bxxxx – for systems with exceptionally high risk level. Mounted mainly in the beginning of the installation or in the main panel.

Model SPD – Cxxxx – for systems with high or average risk level. Mounted in the beginning of the installation or before the breaker.

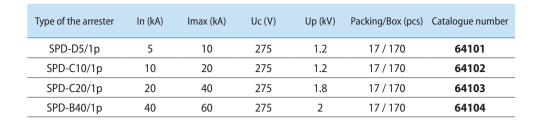
Model SPD – Dxxxx – for systems with low risk level. Suitable for secondary protection of consumers in combination with SPD - Bxxxx/SPD - Cxxxx

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ELMARK





Type of the arrester	In (kA)	Imax (kA)	Uc (V)	Up (kV)	Packing/Box (pcs)	Catalogue number
SPD-D5/1pN	5	10	275	1.2	8 / 80	64201
SPD-C10/1pN	10	20	275	1.2	8 / 80	64202
SPD-C20/1pN	20	40	275	1.8	8 / 80	64203
SPD-B40/1pN	40	60	275	2	8 / 80	64204



Type of the arrester	In (kA)	Imax (kA)	Uc (V)	Up (kV)	Packing/Box (pcs)	Catalogue number
SPD-D5/3p	5	10	440	1.2	5 / 50	64301
SPD-C10/3p	10	20	440	1.2	5 / 50	64302
SPD-C20/3p	20	40	440	1.8	5 / 50	64303
SPD-B40/3p	40	60	440	2	5 / 50	64304



Type of the arrester	In (kA)	Imax (kA)	Uc (V)	Up (kV)	Packing/Box (pcs)	Catalogue number
SPD-D5/3pN	5	10	440	1.2	4 / 40	64401
SPD-C10/3pN	10	20	440	1.2	4 / 40	64402
SPD-C20/3pN	20	40	440	1.8	4 / 40	64403
SPD-B40/3pN	40	60	440	2	4 / 40	64404

