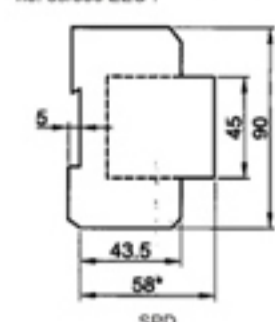


SPD/HHG3 Surge Arrester



Documents corresponding to the product:
Standard EN61643-1 EN 61643-1

The breakers are in accordance with the directives of EC "Low voltage directives (LVD) no. 73/23 EEC" and "Electromagnetic Compatibility Directives (EMC) no. 89/336 EEC".



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 characteristics
- control: automatic switching off at exit failure and recovery after eliminating the danger

Technical data

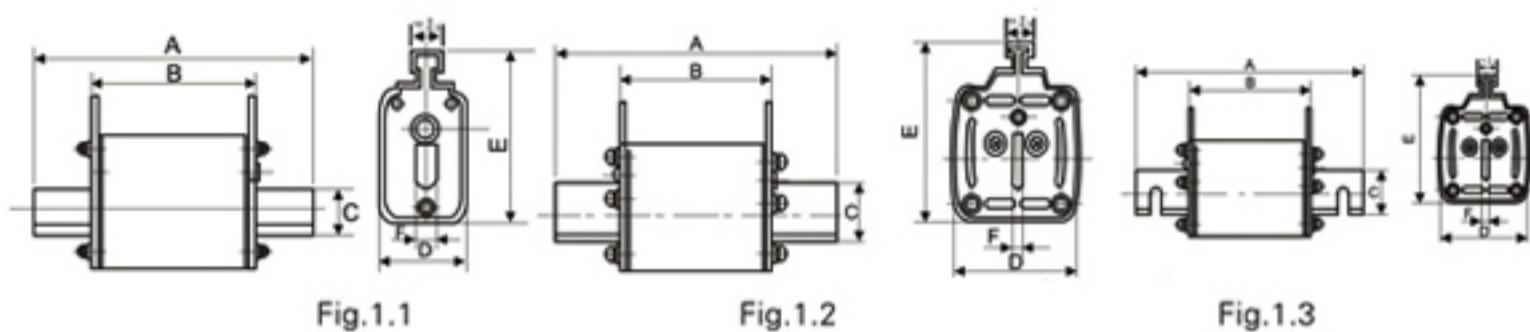
- * Rated operating voltage U_c : the operating voltage of the surge arrester 275/440V/50Hz
- * Surge voltage U_p : the voltage created in surge arrester terminals at rated discharge current running according to the tables
- * Rated discharge current I_n : the rated value of discharge current with a sinusoid 8/20 μs , which can be repeatedly led to the ground according to the tables
- * Full discharge current I_{max} : the peak value of the discharge current with a sinusoid 8/20 μs , which the surge arrester can bear once according to the table
- * Constant operating current: up to 800 μA for 1p, 2p, 3p, up to 600 μA 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 non-flammable
- * Ambient temperature: $-10^{\circ}C$ $+45^{\circ}C$
- * Installation altitude: up to 2000m



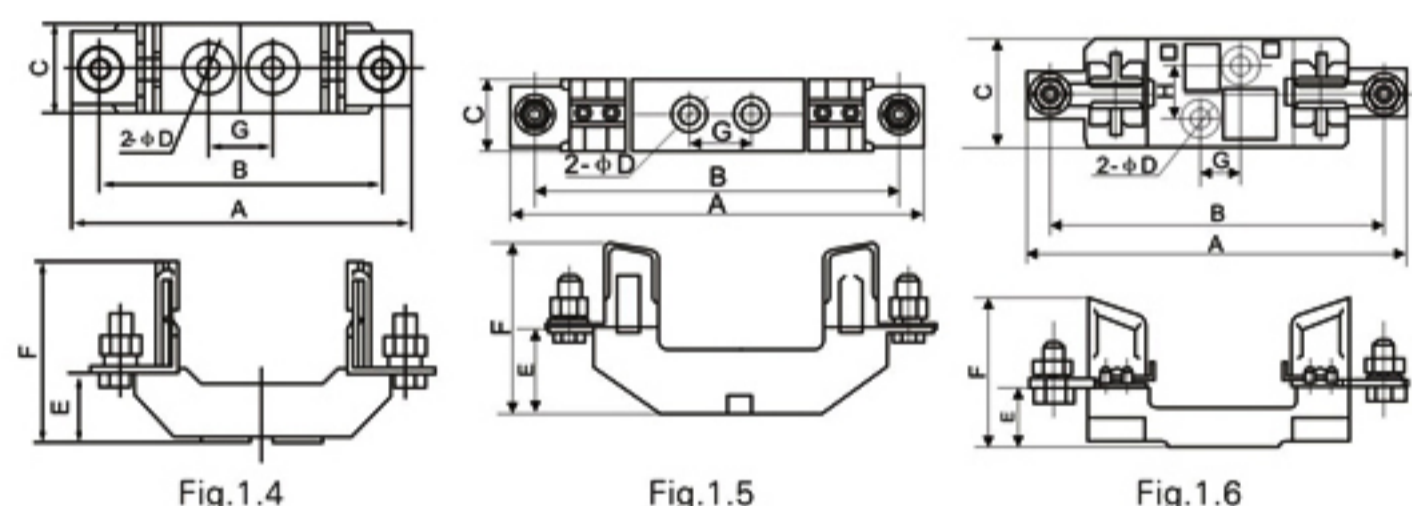
The surge arrester selection is made according to the overload risk level or atmosphere activity, named B, C or D (from high to low risk level).

The company offers the following models of arresters:

Model SPD-Bxxxx and HHG3-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.



Type of the arrester	I_n (kA)	I_{max} (kA)	U_c (V)	U_p (kV)
SPD-D5/1P	5	10	275	1.2
SPD-C10/1P	10	20	275	1.2
SPD-C20/1P	20	40	275	1.8
SPD-B40/1P	40	60	275	2
SPD-B60/1P	60	80	275	2.5
SPD-D5/1PN	5	10	275	1.2
SPD-C10/1PN	10	20	275	1.2
SPD-C20/1PN	20	40	275	1.8
SPD-B40/1PN	40	60	275	2
SPD-B60/2P	60	80	275	2.5
SPD-D5/3P	5	10	440	1.2
SPD-C10/3P	10	20	440	1.2
SPD-C20/3P	20	40	440	1.8
SPD-B40/3P	40	60	440	2
SPD-B60/3P	60	80	440	2.5
SPD-D5/3PN	5	10	440	1.2
SPD-C10/3PN	10	20	440	1.2
SPD-C20/3PN	20	40	440	1.8
SPD-B40/3PN	40	60	440	2
SPD-B60/4PN	60	80	440	2.5

Type of the arrester	I_n (kA)	I_{max} (kA)	U_c (V)	U_p (kV)
HHG3-B60	60	100	440	2.8
HHG3-B80	80	100	440	3
HHG3-B100	100	150	440	3.2