

Order Code

Max. release current:		10kA class D		20kA class D		
Poles	Max. continuous working voltage(V)	Voltage protection level Up (kV)	Type Code	Max. continuous working voltage(V)	Voltage protection level Up (kV)	Type Code
1P	140	1.0	SL-CP14-10D1P/140	140	1.5	SL-CP1420D1P/140
	275	1.0	SL-CP1410D1P/275	275	1.5	SL-CP1420D1P/275
	320	1.0	SL-CP1410D1P/320	320	1.5	SL-CP1420D1P/320
	385	1.0	SL-CP1410D1P/385	385	1.5	SL-CP1420D1P/385
	400	1.0	SL-CP1410D1P/400	400	1.5	SL-CP1420D1P/400
	420	1.0	SL-CP1410D1P/420	420	1.5	SL-CP1420D1P/420
	440	1.0	SL-CP1410D1P/440	440	1.5	SL-CP1420D1P/440
1P+NPE	140	1.0	SL-CP1410D1P+N/140	140	1.5	SL-CP1420D1P+N/140
	275	1.0	SL-CP1410D1P+N/275	275	1.5	SL-CP1420D1P+N/275
	320	1.0	SL-CP1410D1P+N/320	320	1.5	SL-CP1420D1P+N/320
	385	1.0	SL-CP1410D1P+N/385	385	1.5	SL-CP1420D1P+N/385
	400	1.0	SL-CP1410D1P+N/400	400	1.5	SL-CP1420D1P+N/400
	420	1.0	SL-CP1410D1P+N/420	420	1.5	SL-CP1420D1P+N/420
	440	1.0	SL-CP1410D1P+N/440	440	1.5	SL-CP1420D1P+N/440
2P	140	1.0	SL-CP1410D2P/140	140	1.5	SL-CP1420D2P/140
	275	1.0	SL-CP1410D2P/275	275	1.5	SL-CP1420D2P/275
	320	1.0	SL-CP1410D2P/320	320	1.5	SL-CP1420D2P/320
	385	1.0	SL-CP1410D2P/385	385	1.5	SL-CP1420D2P/385
	400	1.0	SL-CP1410D2P/400	400	1.5	SL-CP1420D2P/400
	420	1.0	SL-CP1410D2P/420	420	1.5	SL-CP1420D2P/420
	440	1.0	SL-CP1410D2P/440	440	1.5	SL-CP1420D2P/440
2P+NPE	140	1.0	SL-CP1410D2P+N/140	140	1.5	SL-CP1420D2P+N/140
	275	1.0	SL-CP1410D2P+N/275	275	1.5	SL-CP1420D2P+N/275
	320	1.0	SL-CP1410D2P+N/320	320	1.5	SL-CP1420D2P+N/320
	385	1.0	SL-CP1410D2P+N/385	385	1.5	SL-CP1420D2P+N/385
	400	1.0	SL-CP1410D2P+N/400	400	1.5	SL-CP1420D2P+N/400
	420	1.0	SL-CP1410D2P+N/420	420	1.5	SL-CP1420D2P+N/420
	440	1.0	SL-CP1410D2P+N/440	440	1.5	SL-CP1420D2P+N/440
3P	140	1.0	SL-CP1410D3P/140	140	1.5	SL-CP1420D3P/140
	275	1.0	SL-CP1410D3P/275	275	1.5	SL-CP1420D3P/275
	320	1.0	SL-CP1410D3P/320	320	1.5	SL-CP1420D3P/320
	385	1.0	SL-CP1410D3P/385	385	1.5	SL-CP1420D3P/385
	400	1.0	SL-CP1410D3P/400	400	1.5	SL-CP1420D3P/400
	420	1.0	SL-CP1410D3P/420	420	1.5	SL-CP1420D3P/420
	440	1.0	SL-CP1410D3P/440	440	1.5	SL-CP1420D3P/440
3P+NPE	140	1.0	SL-CP1410D3P+N/140	140	1.5	SL-CP1420D3P+N/140
	275	1.0	SL-CP1410D3P+N/275	275	1.5	SL-CP1420D3P+N/275
	320	1.0	SL-CP1410D3P+N/320	320	1.5	SL-CP1420D3P+N/320
	385	1.0	SL-CP1410D3P+N/385	385	1.5	SL-CP1420D3P+N/385
	400	1.0	SL-CP1410D3P+N/400	400	1.5	SL-CP1420D3P+N/400
	420	1.0	SL-CP1410D3P+N/420	420	1.5	SL-CP1420D3P+N/420
	440	1.0	SL-CP1410D3P+N/440	440	1.5	SL-CP1420D3P+N/440
4P	140	1.0	SL-CP1410D4P/140	140	1.5	SL-CP1420D4P/140
	275	1.0	SL-CP1410D4P/275	275	1.5	SL-CP1420D4P/275
	320	1.0	SL-CP1410D4P/320	320	1.5	SL-CP1420D4P/320
	385	1.0	SL-CP1410D4P/385	385	1.5	SL-CP1420D4P/385
	400	1.0	SL-CP1410D4P/400	400	1.5	SL-CP1420D4P/400
	420	1.0	SL-CP1410D4P/420	420	1.5	SL-CP1420D4P/420
	440	1.0	SL-CP1410D4P/440	440	1.5	SL-CP1420D4P/440

Max. release current:				20kA class D		
Poles	Max. continuous working voltage(V)	Voltage protection level Up (kV)	Type Code	Max. continuous working voltage(V)	Voltage protection level Up (kV)	Type Code
1P	140	1.8	SL-CP1440C1P/140	140	2.0	SL-CP1460C1P/140
	275	1.8	SL-CP1440C1P/275	275	2.0	SL-CP1460C1P/275
	320	1.8	SL-CP1440C1P/320	320	2.0	SL-CP1460C1P/320
	385	1.8	SL-CP1440C1P/385	385	2.0	SL-CP1460C1P/385
	400	1.8	SL-CP1440C1P/400	400	2.0	SL-CP1460C1P/400
	420	1.8	SL-CP1440C1P/420	420	2.0	SL-CP1460C1P/420
	440	1.8	SL-CP1440C1P/440	440	2.0	SL-CP1460C1P/440
1P+NPE	140	1.8	SL-CP1440C1P+N/140	140	2.0	SL-CP1460C1P+N/140
	275	1.8	SL-CP1440C1P+N/275	275	2.0	SL-CP1460C1P+N/275
	320	1.8	SL-CP1440C1P+N/320	320	2.0	SL-CP1460C1P+N/320
	385	1.8	SL-CP1440C1P+N/385	385	2.0	SL-CP1460C1P+N/385
	400	1.8	SL-CP1440C1P+N/400	400	2.0	SL-CP1460C1P+N/400
	420	1.8	SL-CP1440C1P+N/420	420	2.0	SL-CP1460C1P+N/420
	440	1.8	SL-CP1440C1P+N/440	440	2.0	SL-CP1460C1P+N/440
2P	140	1.8	SL-CP1440C2P/140	140	2.0	SL-CP1460C2P/140
	275	1.8	SL-CP1440C2P/275	275	2.0	SL-CP1460C2P/275
	320	1.8	SL-CP1440C2P/320	320	2.0	SL-CP1460C2P/320
	385	1.8	SL-CP1440C2P/385	385	2.0	SL-CP1460C2P/385
	400	1.8	SL-CP1440C2P/400	400	2.0	SL-CP1460C2P/400
	420	1.8	SL-CP1440C2P/420	420	2.0	SL-CP1460C2P/420
	440	1.8	SL-CP1440C2P/440	440	2.0	SL-CP1460C2P/440
2P+NPE	140	1.8	SL-CP1440C2P+N/140	140	2.0	SL-CP1460C2P+N/140
	275	1.8	SL-CP1440C2P+N/275	275	2.0	SL-CP1460C2P+N/275
	320	1.8	SL-CP1440C2P+N/320	320	2.0	SL-CP1460C2P+N/320
	385	1.8	SL-CP1440C2P+N/385	385	2.0	SL-CP1460C2P+N/385
	400	1.8	SL-CP1440C2P+N/400	400	2.0	SL-CP1460C2P+N/400
	420	1.8	SL-CP1440C2P+N/420	420	2.0	SL-CP1460C2P+N/420
	440	1.8	SL-CP1440C2P+N/440	440	2.0	SL-CP1460C2P+N/440
3P	140	1.8	SL-CP1440C3P/140	140	2.0	SL-CP1460C3P/140
	275	1.8	SL-CP1440C3P/275	275	2.0	SL-CP1460C3P/275
	320	1.8	SL-CP1440C3P/320	320	2.0	SL-CP1460C3P/320
	385	1.8	SL-CP1440C3P/385	385	2.0	SL-CP1460C3P/385
	400	1.8	SL-CP1440C3P/400	400	2.0	SL-CP1460C3P/400
	420	1.8	SL-CP1440C3P/420	420	2.0	SL-CP1460C3P/420
	440	1.8	SL-CP1440C3P/440	440	2.0	SL-CP1460C3P/440
3P+NPE	140	1.8	SL-CP1440C3P+N/140	140	2.0	SL-CP1460C3P+N/140
	275	1.8	SL-CP1440C3P+N/275	275	2.0	SL-CP1460C3P+N/275
	320	1.8	SL-CP1440C3P+N/320	320	2.0	SL-CP1460C3P+N/320
	385	1.8	SL-CP1440C3P+N/385	385	2.0	SL-CP1460C3P+N/385
	400	1.8	SL-CP1440C3P+N/400	400	2.0	SL-CP1460C3P+N/400
	420	1.8	SL-CP1440C3P+N/420	420	2.0	SL-CP1460C3P+N/420
	440	1.8	SL-CP1440C3P+N/440	440	2.0	SL-CP1460C3P+N/440
4P	140	1.8	SL-CP1440C4P/140	140	2.0	SL-CP1460C4P/140
	275	1.8	SL-CP1440C4P/275	275	2.0	SL-CP1460C4P/275
	320	1.8	SL-CP1440C4P/320	320	2.0	SL-CP1460C4P/320
	385	1.8	SL-CP1440C4P/385	385	2.0	SL-CP1460C4P/385
	400	1.8	SL-CP1440C4P/400	400	2.0	SL-CP1460C4P/400
	420	1.8	SL-CP1440C4P/420	420	2.0	SL-CP1460C4P/420
	440	1.8	SL-CP1440C4P/440	440	2.0	SL-CP1460C4P/440



SL-CP14 surge protector

		SL-CP14
According to IEC61643-11		T1+T2 (B+C)
Max. continuous operation AC voltage	Uc	275V AC
Normal discharge current (8/20μs)	In	20kA
Maximum discharge current (8/20μs)	Imax	40kA
Voltage protection level (L-N)	Up	1.8kV
Response time (L-N)	tA	25ns
Environment temperature	Tu	-40 C~80 C
Status indicator		Green / red
Mounting		36mm Standard Guide
Cross section of wire (Min.)		4mm²
Cross section of wire (Max.)		35mm²
Casing material		Thermoplastic UL94-V0
Degree of protection		IP20
Remote Signalling		Optional
Dimension (LxWxH)		90x70x54mm

Main structure and working principle

In a three-phase four-wire system, protectors are connected between three phase lines and a zero line to the ground (Figure 1). Under normal circumstances, the protector is in a high resistance state. When surge overvoltage occurs in the power grid due to lightning or other reasons, the protector is turned on quickly in nanosecond time, and the surge overvoltage is introduced into the earth, thus protecting the electrical equipment on the power grid. When the surge voltage passes through the protector and disappears, the protector returns to the high resistance state again, thus not affecting the normal operation of the power grid. The electrical principle of surge protector is shown in Figure 2.

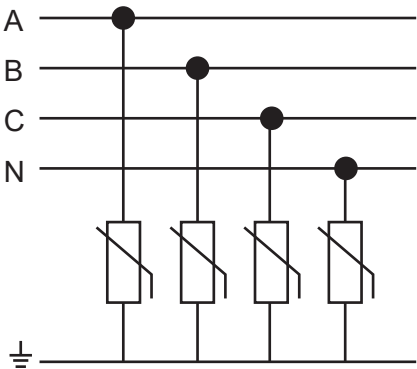


Figure 1 380V network

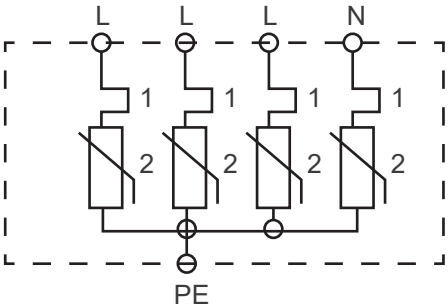


Figure 2 Note: 1.Thermal failure release
2.Varistor

Installation and Maintenance

- The protector is connected by copper wire, with a cross-sectional area of: Soft wire: 2.5-16mm² Hard wire: 2.5-25mm².
- The grounding wire shall be applied with double-color wires over 4 mm.
- In order to prevent the surge protector from being damaged due to various factors or burned out due to transient overvoltage, each SPD must be protected by fuse or circuit breaker (MCB), and the breaking capacity of the circuit breaker must be greater than the short-circuit current at that place. The characteristic curve is C curve, and it can withstand the impact of SPD surge current without action or damage.
- See Figure 3, Figure 4, Figure 5 and Figure 6 for wiring diagram of low voltage system.
Wiring diagram of low voltage system.
- After the protector is installed as required, it can automatically protect the Internet without adjustment.
- During the operation, it is necessary to regularly check whether the module signs are red, observe whether the fuse signs are red, and replace the failed components in time.

a)TN-C System

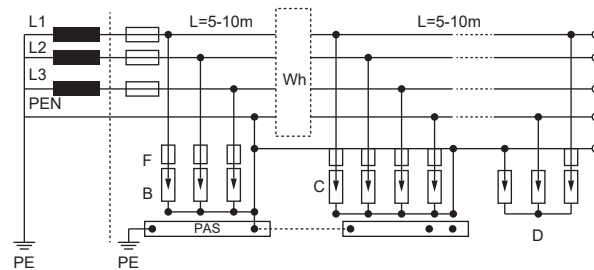


Figure 3

b)TN-S System

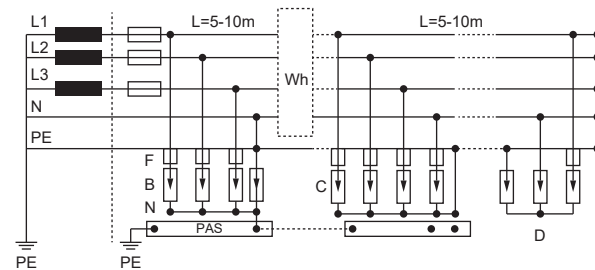


Figure 4

c)TT System

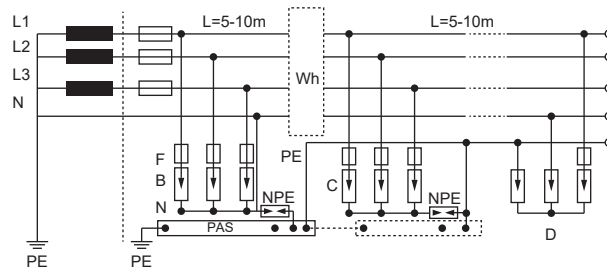


Figure 5

d)IT System

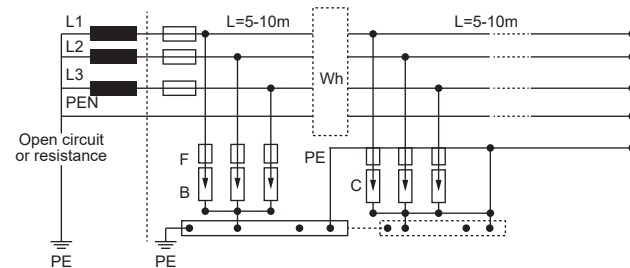
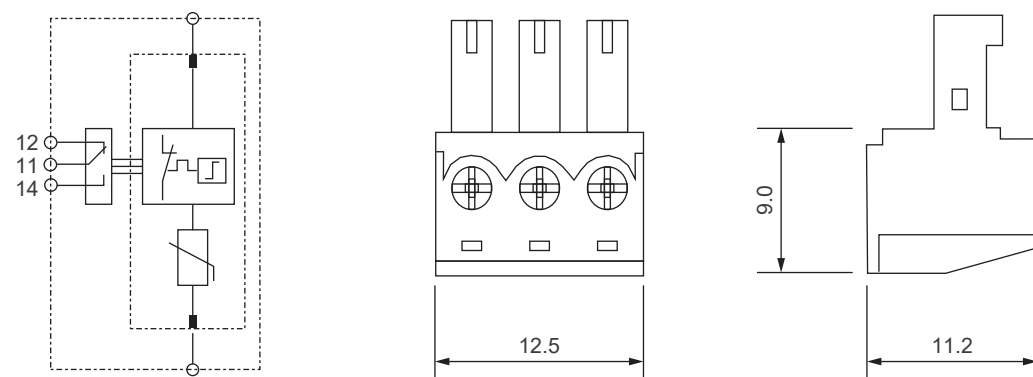


Figure 6



Application Schematic Selection of Surge Protective Device

