

SPD II and SPD III AC Surge Protector

NEW



The SPD II range of surge protectors are used for transient surge protection of single and multi-phase power circuits at the main electrical panel. SPD IIIs are for the protection of individual electrical devices. They provide common-mode protection (between each Line and Ground), with impulse discharge capacity (I_{max}) 40kA for SPD II and 20kA for SPD III.

The SPD design is based on high-energy varistors (MOVs) equipped with thermal disconnects and integral failure indicators. A remote signaling contact for disconnection indication is standard on each unit. For ease of replacement, varistors are housed in pluggable modules with connections that are mechanically keyed to the base to prevent incorrect arrestor module replacement. Typical applications include low voltage distribution, or protection of industrial control systems, equipment assemblies and devices.

For transient voltage protection of single and multi-phase circuits, in the main electrical panel, downstream of the main circuit breaker, or in control panels.

SPD II 120V/40kA



SPD II 230V/40kA



Technical data

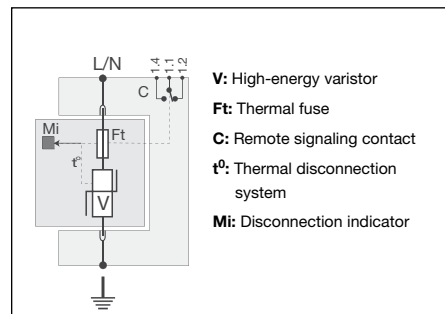
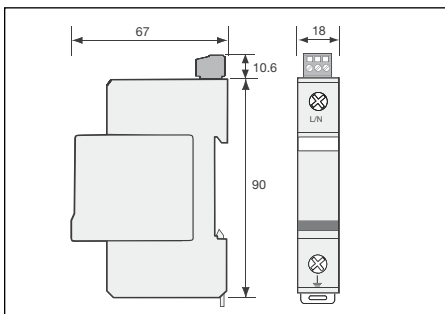
AC Network	120/240V, 120/208V	220/380V, 240/415V
Connection Mode	1 Pole, L-N or L-G	1 Pole, L-N or L-G
Max. Operating Voltage (MCOV)	150VAC	275VAC
TOV Withstand	150VAC	275VAC
Leakage Current at Uc	<1mA	<1mA
Follow Current	none	none
UL Nominal Discharge Current (In), 15 impulses 8/20 µs	20kA	20kA
Max. Discharge Current (Imax), 1 impulse 8/20 µs	40kA	40kA
UL Voltage Protection Rating (VPR)	500V	900V
Protection Level (Up)	0.9kV	1.25kV
UL Short-Circuit Current Rating (SCCR)	25kAIC	25kAIC
AC System	Single-phase	Single-phase
Thermal Disconnect	UL 60691	UL 60691
Overcurrent Protection	Time Delay - 125A Max.	Time Delay - 125A Max.
Dimensions (mm)	90 x 18 x 67	90 x 18 x 67
Connection	Screw terminals, #4 AWG Max.	Screw terminals, #4 AWG Max.
Remote Signal Indicator	250VAC Max, 2A	250VAC Max, 2A
Mounting	Din-rail, TS35	Din-rail, TS35
Operating Temp	-50°C to +85°C	-50°C to +85°C
Operating Altitude (Max.)	13,000 ft (4,000m)	13,000 ft (4,000m)
Relative Humidity	5 to 95% non-condensing, up to 100% external	5 to 95% non-condensing, up to 100% external
Enclosure Material	Thermoplastic UL94-V0	Thermoplastic UL94-V0
Environmental Rating	IP20	IP20
Weight	3.4 oz	3.4 oz

Approvals

IEC 61643-1 - INTERNATIONAL	Class I, Class II	Class I, Class II
EN 61643-11 - EUROPE	Class I, Class II	Class I, Class II
NF EN 61643-11 - FRANCE	Class I, Class II	Class I, Class II
UL1449 3rd Edition - USA and CANADA	Low Voltage SPD	Low Voltage SPD
RoHS	Directive 2002/95/EC	Directive 2002/95/EC

Ordering Data

Surge Protector	Type	Part No.	Type	Part No.
	SPD II 120V/40kA	6720005410	SPD II 230V/40kA	6720005411
Bus bars	Type	Part No.	Type	Part No.
	SPD 2P LINK	6720005417	SPD 2P LINK	6720005417
	SPD 3P LINK	6720005418	SPD 3P LINK	6720005418
	SPD 4P LINK	6720005419	SPD 4P LINK	6720005419



SPD II bus bars

For transient voltage protection of single and multi-phase circuits, in the main electrical panel, downstream of the main circuit breaker, or in control panels.

SPD II 277V/40kA



SPD II 480V/40kA



Technical data

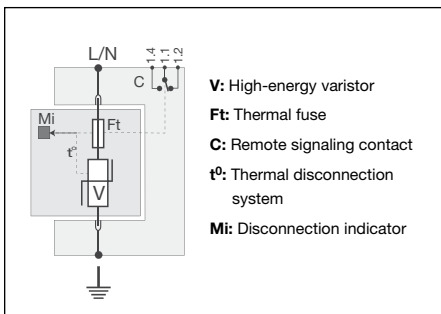
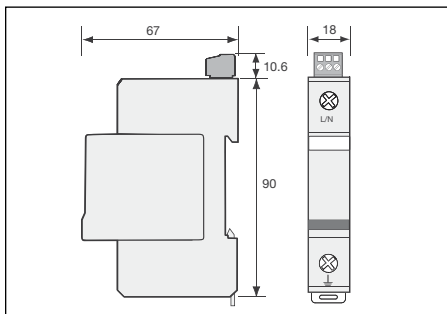
	SPD II 277V/40kA	SPD II 480V/40kA
AC Network	220/380V, 277V	347/600V, 480V
Connection Mode	1 Pole, L-N or L-G	1 Pole, L-N or L-G
Max. Operating Voltage (MCOV)	400VAC	550VAC
TOV Withstand	400VAC	550VAC
Leakage Current at Uc	<1mA	<1mA
Follow Current	none	none
UL Nominal Discharge Current (In), 15 impulses 8/20 µs	20kA	20kA
Max. Discharge Current (Imax), 1 impulse 8/20 µs	40kA	40kA
UL Voltage Protection Rating (VPR)	1500V	1800V
Protection Level (Up)	1.8kV	2.5kV
UL Short-Circuit Current Rating (SCCR)	25kAIC	25kAIC
AC System	Single-phase	Single-phase
Thermal Disconnect	UL 60691	UL 60691
Overcurrent Protection	Time Delay - 125A Max.	Time Delay - 125A Max.
Dimensions (mm)	90 x 18 x 67	90 x 18 x 67
Connection	Screw terminals, #4 AWG Max.	Screw terminals, #4 AWG Max.
Remote Signal Indicator	250VAC Max, 2A	250VAC Max, 2A
Mounting	Din-rail, TS35	Din-rail, TS35
Operating Temp	-50°C to +85°C	-50°C to +85°C
Operating Altitude	13,000 ft (4,000m)	13,000 ft (4,000m)
Relative Humidity	5 to 95% non-condensing, up to 100% external	5 to 95% non-condensing, up to 100% external
Enclosure Material	Thermoplastic UL94-V0	Thermoplastic UL94-V0
Environmental Rating	IP20	IP20
Weight	3.4 oz	3.4 oz

Approvals

Approvals	SPD II 277V/40kA	SPD II 480V/40kA
IEC 61643-1 - INTERNATIONAL	Class I, Class II	Class I, Class II
EN 61643-11 - EUROPE	Class I, Class II	Class I, Class II
NF EN 61643-11 - FRANCE	Class I, Class II	Class I, Class II
UL1449 3rd Edition - USA and CANADA	Low Voltage SPD	Low Voltage SPD
RoHS	Directive 2002/95/EC	Directive 2002/95/EC

Ordering Data

Surge Protector	Type	Part No.	Type	Part No.
	SPD II 277V/40kA	6720005412	SPD II 480V/40kA	6720005413
Bus bars	Type	Part No.	Type	Part No.
	SPD 2P LINK	6720005417	SPD 2P LINK	6720005417
	SPD 3P LINK	6720005418	SPD 3P LINK	6720005418
	SPD 4P LINK	6720005419	SPD 4P LINK	6720005419



SPD II bus bars

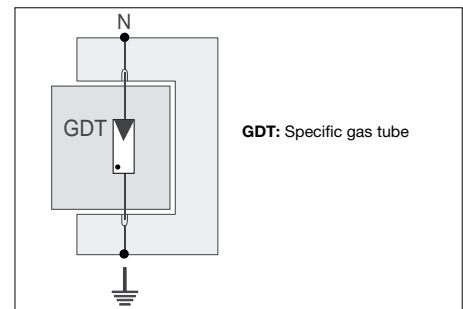
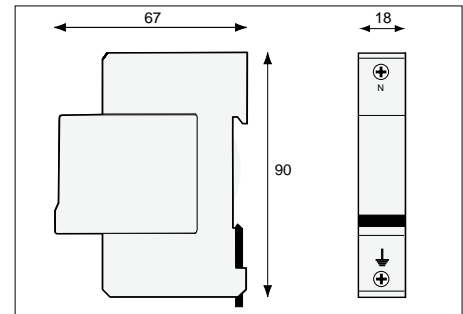
For transient voltage protection of multi-phase circuits with TT grounding systems.

SPD II N/PE



Technical data

Network	230/400V, 120/208V
Max. Operating Voltage (MCOV)	255VAC
TOV Withstand	400VAC
Leakage Current at Uc	none
Follow Current	100A
Nominal Discharge Current (In), 15 impulses 8/20 μs	20kA
Max. Discharge Current (Imax), 1 impulse 8/20 μs	40kA
Protection Level (Up)	1.5kV
UL Short-Circuit Current Rating (SCCR)	25kAIC
Dimensions (mm)	90 x 18 x 67
Connection	Screw terminals, #4 AWG Max.
Mounting	Din-rail, TS35
Operating Temp	-40°C to +85°C
Enclosure Material	Thermoplastic UL94-V0
Environmental Rating	IP20



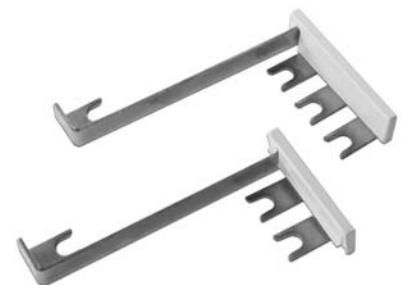
Approvals

IEC 61643-1 - INTERNATIONAL	Class II
EN 61643-11 - EUROPE	Class II
NF EN 61643-11 - FRANCE	Class II
UL1449 3rd Edition - USA	Low Voltage SPD

Ordering data

Surge Protector	Type	Part No.
	SPD II N/PE	6720005414

Bus bars	Type	Part No.
	SPD S LINK 1/3	6720005416



SPD II bus bars

For transient voltage protection of single-phase circuits with TT grounding systems.

SPD II 120V/G/40kA



Technical data

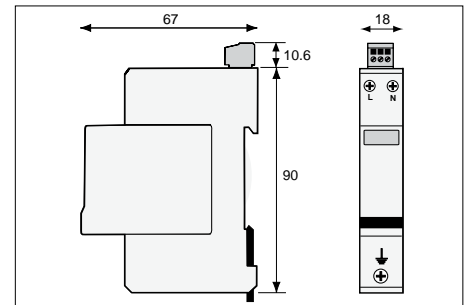
AC Network	120V
Connection Mode	TN-TT
Max. Operating Voltage (MCOV)	150VAC
TOV Withstand	150VAC
Leakage Current at Uc	<1mA
Protection Mode	MC/MD
Nominal Discharge Current (In), 15 impulses 8/20 µs	20kA
Max. Discharge Current (Imax), 1 impulse 8/20 µs	40kA
Protection Level (Up)	1.5/0.9kV
Residual Voltage @ 5k	0.6kV
Short-Circuit Current Rating (SCCR)	10kAIC
AC System	Single-phase
Thermal Disconnecter	Internal
Overcurrent Protection	Fuses type gG 50A Max.
Dimensions (mm)	90 x 18 x 58
Connection	Screw terminals, #4AWG Max.
Disconnection Indicator	2 mechanical indicators
Installation Ground Fault Breaker	Type S or delayed
Mounting	Din-rail, TS35
Operating Temp	-40°C to +85°C
Operating Altitude	13,000 ft (4,000m)
Relative Humidity	5 to 95% non-condensing, up to 100% external
Enclosure Material	Thermoplastic UL94-V0
Environmental Rating	IP20
Weight	3.4 oz

Approvals
IEC 61643-1 - INTERNATIONAL
EN 61643-11 - EUROPE
NF EN 61643-11 - FRANCE
UL1449 3rd Edition

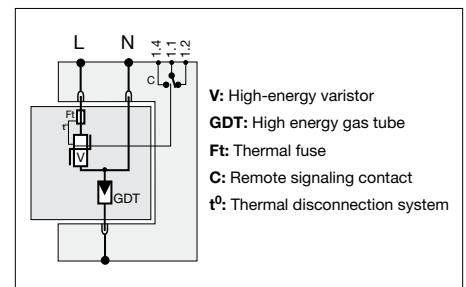
Ordering Data
Surge Protector
Bus bars

Low Voltage SPD - Test Class II
Low Voltage SPD - Test Class II
Low Voltage SPD - Test Class II
Approval in process

Type	Part No.
SPD II 120V/G/40kA	6720005415
Type	Part No.
SPD 2P LINK	6720005417
SPD 3P LINK	6720005418
SPD 4P LINK	6720005419



SPD II bus bars



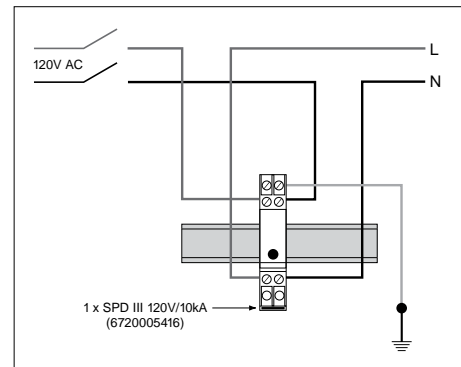
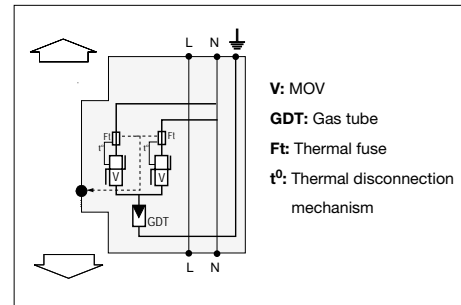
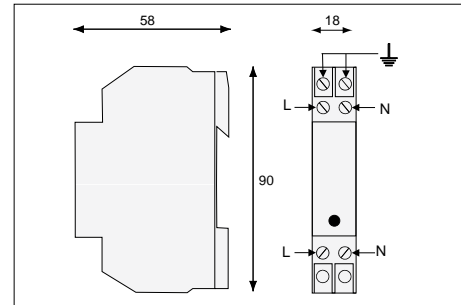
For transient voltage protection of single-phase devices.
Local indicator (red LED) warns replacement is needed.

SPD III 120V/10kA



Technical data

AC Network	120V
Connection Mode	TN-TT
Max. Operating Voltage (MCOV)	150VAC
TOV Withstand	150VAC
Max load current	16A
Leakage Current at Uc	none
Follow Current	none
Nominal Discharge Current (In), 15 impulses 8/20 μs	5kA
Max. Discharge Current (Imax), 1 impulse 8/20 μs	10kA
Protection Level (Up)	0.7kV
Short-Circuit Current Rating (SCCR)	10kAIC
AC System	Single-phase
Thermal Disconnecter	UL 60691 Internal
Overcurrent Protection	Time Delay - 125A Max.
Dimensions (mm)	90 x 18 x 58
Connection	Screw terminals, #4 AWG Max.
Remote Signal Indicator	250VAC Max, 2A
Mounting	Din-rail, TS35
Operating Temp	-40°C to +85°C
Operating Altitude	13,000 ft (4,000m)
Relative Humidity	5 to 95% non-condensing, up to 100% external
Enclosure Material	Thermoplastic UL94-V0
Environmental Rating	IP20
Weight	3.4 oz



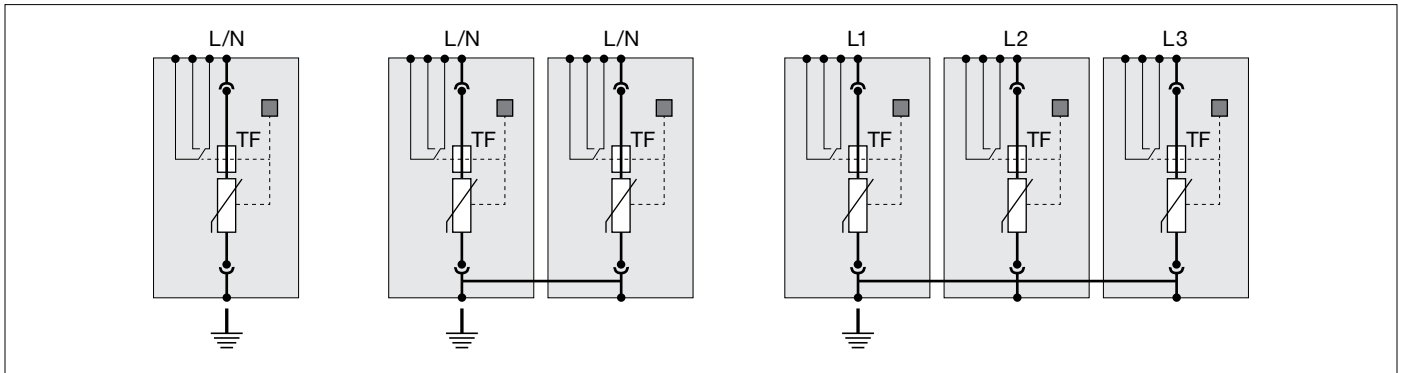
Approvals
IEC 61643-1 - INTERNATIONAL
EN 61643-11 - EUROPE
NF EN 61643-11 - FRANCE

Class II, Class III
Class II, Class III
Class II, Class III

Ordering data
Surge Protector

Type	Part No.
SPD III 120V/10kA	6720005416

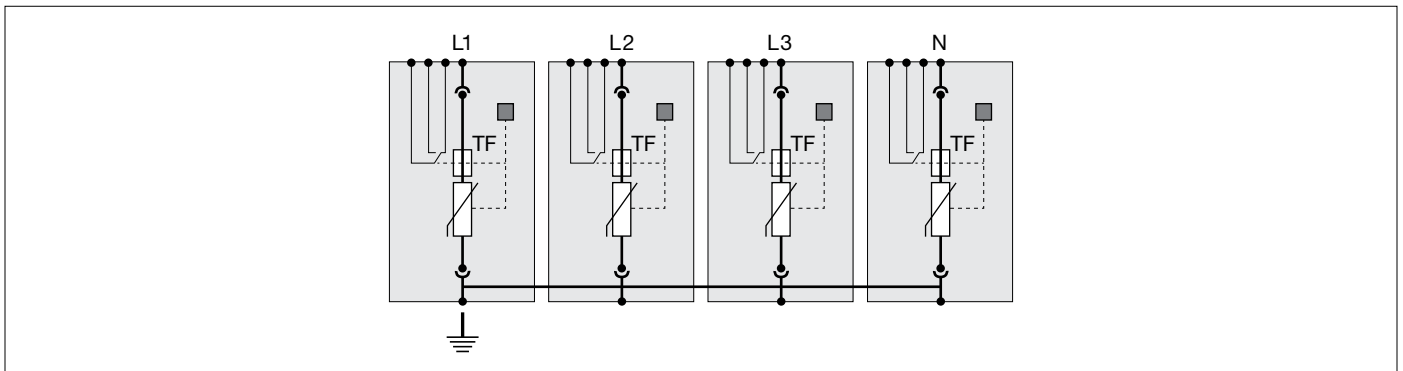
Basic configurations 1



SPD parts needed:

Nom. V	Description	Part Number	Qty	Qty	Qty
110/120V	SPD II 120V/40kA	6720005410	1	2	3
230/240V	SPD II 230V 40kA	6720005411	1	2	3
277V	SPD II 277V 40kA	6720005412	1	2	3
480V	SPD II 480V 40kA	6720005413	1	2	3
All	SPD 2P Link	6720005417	0	1	0
All	SPD 3P Link	6720005418	0	0	1

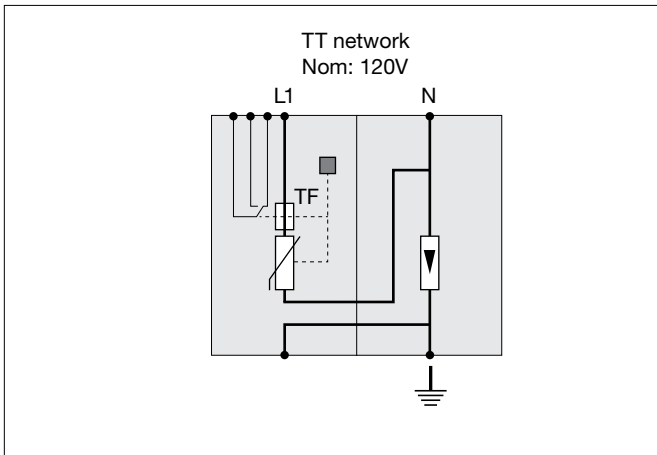
Basic configurations 2



SPD parts needed:

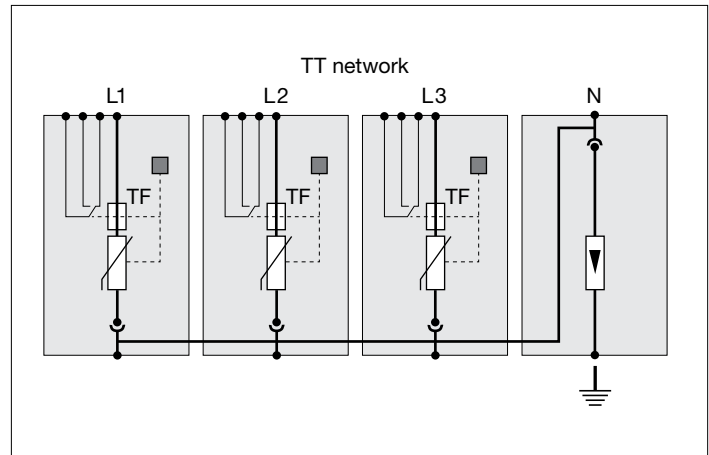
Nom. V	Description	Part Number	Qty
110/120V	SPD II 120V/40kA	6720005410	4
230/240V	SPD II 230V 40kA	6720005411	4
277V	SPD II 277V 40kA	6720005412	4
480V	SPD II 480V 40kA	6720005413	4
All	SPD 4P Link	6720005419	1

Basic configurations 3



SPD parts needed:

Nom. V	Description	Part Number	Qty
120V	SPD II 120V/G/40kA	6720005415	1



SPD parts needed:

Nom. V	Description	Part Number	Qty
110/120V	SPD II 120V/40kA	6720005410	3
230/240V	SPD II 230V 40kA	6720005411	3
277V	SPD II 277V 40kA	6720005412	3
480V	SPD II 480V 40kA	6720005413	3
All	SPD II N/PE	6720005414	1
All	SPD S Link 1/3	6720005416	1