

New range of Surge protection devices



Protect your installations

Surge protection devices are strongly recommended in areas and sites exposed to lightning, to protect sensitive and expensive receivers.

:hager

Surge protection devices type 1

For main protection - type 1. SPDs with higher discharge current (Imax. 10/350), to evacuate overvoltages, associated with lightning strikes.

Connection capacity

- rigid conductors: 50mm²
- flexible conductors: 35mm²

Surge protection devices type 1+2

The combined surge protection devices offer as an "all-in-one solution" protection against lightning and surge-voltage in one device.

They are in accordance with the requirement class type 1.

- 2 versions available, with or without auxiliary contact:
- SPA800 for TNC-Networks, 75kA (lighting impulse current)
 - SPA801 for TT, TNS-Networks, 100kA (lighting impulse current)

Product features

- Lightning and surge-voltage protection in one device
- Compliance with to EN 61643-11, requirement class type 1+2
- Replaceable plug-in modules
- Integrated fault indicator in the plug-in modules
- SPDs with separate auxiliary contact

Installation

The main protection SPDs are installed directly after the main incoming device. SPD's can be used in any supply system e.g. TNC, TNCS, TNS, TT

Connection capacity

- rigid conductors: 25mm²
- flexible conductors: 16mm²



Comply with NF EN 61643-11
Comply with IEC61643-1



SPA800



SPA801



SPA412A



SPA001N

| Description | Characteristics | Width | Cat. ref. |
|---|---------------------|-----------|-----------|
| Surge protection device, type 1+2, for TNC-networks limp. 25 kA (L ⇒ PEN) limp. 75 kA (L1, L2, L3 ⇒,PEN) wave 10/350 μs Up : ≤ 1,5 kV | 3 Ph | 6 ■ | SPA800 |
| | 3 Ph + N | 6 ■ | SPA801 |
| Surge protection device, type 1+2, for TT, TNS-networks limp. TT 25 kA (L ⇒ N) limp. TT 100 kA (N ⇒ PE) limp. TT 25 kA (L ⇒ N ⇒ PE) limp. 100 kA (L1, L2, L3, N ⇒,PE) wave 10/350 μs Up : ≤ 1,5 kV | | | |
| | | | |
| Surge protection device, type 1 | 1 Ph + N | 4 ■ | SPA212A |
| limp. 12,5 kA wave 10/350 ms Up : 2,5 kV | 3 Ph + N | 8 ■ | SPA412A |
| Description | Characteristics | Cat. ref. | |
| Plug-in cartridges, for replacement | phase for: SPA80X | SPA081 | |
| | neutral for: SPA80X | SPA001N | |

Surge protection devices type 2

For main protection - type 2 SPDs with higher discharge current (I_{max}: 8/20), to evacuate as much of the transient to earth as possible.

Installation

The main protection SPDs are installed directly after the main incoming device.

SPD's can be used in any supply system e.g. TNC, TNCS, TNS, TT

Version without remote

signaling contact with end of life indicator.

Version with remote

signaling contact and with end of life indicator.

Connection capacity

- rigid conductors: 25mm²
- flexible conductors: 16mm²

Surge protection device self-protected, type 2

- plug-in cartridge,
- end of life indicator
- built-in disconnection device in case of a short circuit, avoiding protection of surge protection device by circuit breaker or fuse.

Particularly suitable for limited power connection installations in residential and commercial premises.

Connection capacity

- rigid conductors: 16mm²
- flexible conductors: 10mm²



Comply with NF EN 61643-11
Comply with IEC61643-1



SPB265R



SPB415R



SPN715D



SPB065R



SPB065N

| Description | Characteristics | Width | Cat. ref. without aux. contact | with aux. contact |
|---|--|--|----------------------------------|-------------------------------|
| Surge protection devices type 2 | 1 Ph + N | 2 | - | SPB265R |
| | I _{max} : 65 kA wave 8/20 ms I _n : 20 kA U _p : ≤ 1,45 kV | 3 Ph + N | 4 | SPB465R |
| Surge protection devices self-protected, type 2 | I _{max} : 40 kA wave 8/20 ms I _n : 20 kA U _p : ≤ 1,35 kV | 1 Ph | SPB140D | - |
| | | 1 Ph + N | 2 | SPB240D SPB240R |
| | | 3 Ph + N | 4 | SPB440D SPB440R |
| | I _{max} : 15 kA wave 8/20 ms I _n : 5 kA U _p : ≤ 1,0 kV | 1 Ph + N | 2 | SPB215D SPB215R |
| | 3 Ph + N | 4 | SPB415D SPB415R | |
| Surge protection devices self-protected, type 2 | 1 Ph + N | 2 | SPN715D | - |
| I _{max} : 15 kA wave 8/20 ms I _n : 5kA U _p : ≤ 1,5 kV | | | | |
| Description | Characteristics | Cat. ref.: | | |
| Plug-in cartridges, for replacement | Ph. for : | SPB265R, SPB465R, SPB140D, SPB240D, SPB240R, SPB440D, SPB440R, SPB215R, SPB415R, SPB215D, SPB415D, SPN715D | SPB065R SPB040D | |
| | N. for : | SPB265R, SPB465R, SPB240R, SPB440R, SPB215R, SPB415R, SPB240D, SPB440D, SPB215D, SPB415D, | SPB065N SPB040N | |
| | for : SPV340 | SPV040 | | |

Surge protection devices type 2, with low let through voltage levels

To protect very sensitive electronic equipment. This fine protection complements the main protection and can protect 1 or several electronic devices.

Optimal coordination is obtained when cascaded with type 2 surge arrester (lower Up).

Discharge current: I_{max}. 8kA (8/20 wave)

A green LED on the front face indicates the status of the SPD

Protection is ensured in both common and differential modes



Comply with NF EN 61643-11 and -21



SPB208D



SPV340



SPB008D



SPK602

| Description | Characteristics | Width | Cat. ref. |
|--|---|---------------|----------------|
| Surge protection device type 2 with low let through voltage levels, pluggable | with end-of-life indicator | | |
| | 1 Ph + N | 2 ■ | SPB208D |
| I _{max} . 8 kA, wave 8/20 ms In : 2 kA, UC : 275 V | 3 Ph + N | 4 ■ | SPB408D |
| Surge protection device type 2 for Photovoltaic applications, pluggable | 3 Ph | 3 ■ | SPV340 |
| I _{max} . 40 kA, In : 15 kA Up 3,7 kV, UC pv 1170 V | | | |
| Cartridge for pluggable SPD | Phase | | SPB008D |
| | Neutral | | SPB040N |
| | for : SPV340 | | SPV040 |
| Description | Characteristics | | Cat. ref.: |
| Surge protection device for ADSL2 + phone lines | | 1 ■ | SPK602 |
| I _{max} . / I _{total} . 18 kA In : 10 kA, UC : 185 DC | | | |
| Surge protection device for data signal networks and multimedia applications | SPD for : | | |
| | Ethernet RJ45 | 25mm | SPK900 |
| | coaxial TV/satellite | 114,9mm | SPK700 |
| | weather stations and 4-20 mA loop lines, 1 pair | 6,2mm | SPK802 |
| industrial buses (Modbus, ...) | 6,2mm | SPK806 | |

New range of Surge Protection Devices

Correspondence list

| Previous market reference | New market reference | Description new reference |
|---------------------------|-------------------------|--|
| SPN080N | SPA001N | Cartridge N-PE, Uc 350V Iimp 100kA, Up 1.5kV for SPA80x |
| SPN080 | SPA081 | Cartridge L-N/PEN, Uc 350V Iimp 25kA, Up 1.5kV for SPA80x |
| SPN800 | SPA800 | Combined Surge protection T1+T2 3P, TNC, Uc 350V Iimp 25kA, Up 1.5kV, with remote contact |
| SPN800R | | |
| SPN801 | SPA801 | |
| SPN801R | | |
| SPN802 | | |
| SPN802R | | Combined Surge protection T1+T2 4P, TNS/TT, Uc 350V Iimp 25kA, Up 1.5kV, with remote contact |
| SPN008D | SPB008D | |
| SPD015D | SPB015D | |
| SPN015D | | |
| SPN015R | | |
| SPD040D | SPB040D | Cartridge L-N, Uc 275V In 20kA, I _{max} 40kA, Up 1,35kV |
| SPN040D | | |
| SPN040R | | |
| SPN008N | SPB040N | |
| SPN015N | | Cartridge N-PE, Uc 260V In 20kA, I _{max} 40kA, Up 1.5kV |
| SPN040N | | |
| SPN065N | SPB065N | |
| SPN065R | SPB065R | Cartridge L-N, Uc 320V In 20kA, I _{max} 65kA, Up 1,35kV |
| SPD140D | SPB140D | Surge protection 1P T2 TNC, Uc 275V In 20kA, I _{max} 40kA |
| SPN115D | | |
| SPN140D | | |
| SPN208D | SPB208D | |
| SPD215D | SPB215D | Surge protection 2P T2 TNS/TT, Uc 275V In 5kA, I _{max} 15kA |
| SPN215D | | |
| SPN215R | SPB215R | Surge protection 2P T2 TNS/TT, Uc 275V In 5kA, I _{max} 15kA, remote contact |
| SPD240D | SPB240D | Surge protection 2P T2 TNS/TT, Uc 275V In 20kA, I _{max} 40kA |
| SPN240D | | |
| SPN240R | SPB240R | |
| SPN265R | SPB265R | Surge protection 2P T2 TNS/TT, Uc 320V In 20kA, I _{max} 65kA, remote contact |
| SPN408D | SPB408D | Surge protection 4P T2 TNS/TT, Uc 275V In 5kA, I _{max} 15kA |
| SPD415D | SPB415D | |
| SPN415D | | Surge protection 4P T2 TNS/TT, Uc 275V In 5kA, I _{max} 15kA, remote contact |
| SPN415R | SPB415R | |
| SPD440D | SPB440D | Surge protection 4P T2 TNS/TT, Uc 275V In 20kA, I _{max} 40kA |
| SPN440D | | |
| SPN440R | SPB440R | |
| SPN465R | SPB465R | Surge protection 4P T2 TNS/TT, Uc 320V In 20kA, I _{max} 65kA, remote contact |
| SPK102 | SPK602 | Surge protection 2P, for ADSL DIN-Rail |
| SPK300 | SPK700 | Surge protection IT, for satellite TV |
| SPK402 | SPK802 | Surge protection 2P, for 4-20mA weather station |
| SPK502 | SPK806 | Surge protection 2P, for industrial bus networks |
| SPK200 | SPK900 | Surge protection RJ45, for Ethernet and VoIP networks |
| SPV025 | SPV040 | Cartridge T2 1P photovoltaïque +/- for SPV340 |
| SPV025E | | |
| SPV325 | SPV340 | Surge protection T2 3P, pluggable 40kA, photovoltaic |

References, unchanged:

| | | |
|---------|-------------------------|--|
| SPA212A | SPA212A | Surge protection 2P T1 monobloc, 12,5kA, with light indicator TT |
| SPA412A | SPA412A | Surge protection 4P T1 monobloc, 12,5kA, with light indicator TT |
| SPN715D | SPN715D | Surge protection 2P auto-protected, 15kA |

References at End Of Life (after stock run out):

| | | |
|--------|----|---|
| SPK404 | // | Surge protection T3, IT 4P for 4-20mA weather station |
| SPN504 | // | Surge protection T3, for numerical phone line |
| SPN505 | // | Surge protection T3, for analogical phone line |



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