# Surge Protection

Hager Surge Protection Devices (SPDs) protect electrical and electronic equipment against transients, originating from lightning, switching of transformers, lighting and motors. These transients can cause premature ageing of equipment, downtime, or complete destruction of electronic components and materials. SPDs are strongly recommended for installations that are exposed to transients, to protect sensitive and expensive electrical equipment such as TVs, washing machines, PCs, alarms etc.

Surge Protection Devices are classified according to their functions:

**Type 1 SPD** which can discharge partial lightning current with a typical waveform 10/350 ?s. Usually employs spark gap technology.

**Type 2 SPD** which can prevent the spread of overvoltages in the electrical installations and protects equipment connected to it. It usually employs metal oxide varistor (MOV) technology and is characterised by an 8/20 ?s current wave.

**Type 3 SPD** have a low discharge capacity. They must therefore only be installed as a supplement to Type 2 SPD and in the vicinity of sensitive loads.

Type 3 SPD s are characterised by a combination of voltage waves (1.2/50 ?s) and current waves (8/20 ?s).

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Trade Price

Trade Price

145,95 £/prt.

841,35 £/prt.

373,92 £/prt.

267,08 £/prt.

201,29 £/prt. 175,01 £/prt.

Trade Price

97,29 £/prt.

84,65 £/prt.

97,29 £/prt.

84,65 £/prt.

102,89 £/prt.



SPN140D



SPN208D

## SPD Four Pole

**Spare Cartridge Phase** 

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Description

SPD Single Pole

SPD Double pole

Description

SPD 1P pluggable 40kA class 2 with end of life indicator

SPD 2P pluggable 8kA class 2 with indicator

SPD 2P pluggable 65kA class 2 with reserve + remote contact

SPD 2P pluggable 40kA class 2 with reserve + remote contact

SPD 2P pluggable 15kA class 2 with reserve + remote contact

SPD 2P pluggable 40kA class 2 with end of life indicator

SPD 2P pluggable 15kA class 2 with end of life indicator

Cartridge 40kA 275V for pluggable SPD with reserve

Cartridge 15kA 275V for pluggable SPD with reserve

Cartridge 40kA 275V for pluggable SPD

Cartridge 15kA 275V for pluggable SPD

Description

Description	Cat ref.	Trade Price
SPD 4P pluggable 65kA class 2 with reserve + remote contact	SPN465R	1.288,95 £/prt.
SPD 4P pluggable 40kA class 2 with reserve + remote contact	SPN440R	420,56 £/prt.
SPD 4P pluggable 40kA class 2 with end of life indicator	SPN440D	398,31 £/prt.
SPD 4P pluggable 15kA class 2 with reserve + remote contact	SPN415R	394,66 £/prt.
SPD 4P pluggable 15kA class 2 with end of life indicator	SPN415D	350,15 £/prt.

Cat ref.

Cat ref.

SPN208D

SPN265R

SPN240R

SPN240D

SPN215R

SPN215D

Cat ref.

SPN040R

SPN040D

SPN015R

SPN015D

SPN140D

SPN465R



SPN040R



Trade Price
103,13 £/prt.

### SPN040N





## **Cartridge for Photovoltaic SPDs**

Description	Cat ref.	Trade Price
Cartridge +/- for SPV325	SPV025	144,01 £/prt.
Cartridge earth for SPV325	SPV025E	138,66 £/prt.

SPV025

# Consumer Unit Kit Type 2 SPD with SPN215D (with lifetime indicator)

Description	Cat ref.	Trade Price
Consumer Unit Surge Protection Kit Type 2	VM02SPD	187,50 £/prt.





SPN208D

## **Double Pole Fine Protection SPDs**

Description	Cat ref.	Trade Price
SPD 2P pluggable 8kA class 2 with indicator	SPN208D	145,95 £/prt.



Trade Price

Trade Price

841,35 £/prt.

373,92 £/prt.

267,08 £/prt.

201,29 £/prt. 175,01 £/prt.

Trade Price

1.288,95 £/prt.

420,56 £/prt.

398,31 £/prt.

394,66 £/prt.

350,15 £/prt.

102,89 £/prt.

Cat ref.

Cat ref.

SPN265R

SPN240R

SPN240D

SPN215R

SPN215D

SPN140D





SPN265R

#### SPD Four Pole

SPD Single Pole

SPD Double pole

Description

SPD 1P pluggable 40kA class 2 with end of life indicator

SPD 2P pluggable 65kA class 2 with reserve + remote contact

SPD 2P pluggable 40kA class 2 with reserve + remote contact

SPD 2P pluggable 15kA class 2 with reserve + remote contact

SPD 2P pluggable 40kA class 2 with end of life indicator

SPD 2P pluggable 15kA class 2 with end of life indicator

Description



Description Cat ref. SPD 4P pluggable 65kA class 2 with reserve + remote contact SPN465R SPD 4P pluggable 40kA class 2 with reserve + remote contact SPN440R SPD 4P pluggable 40kA class 2 with end of life indicator SPN440D SPD 4P pluggable 15kA class 2 with reserve + remote contact SPN415R SPD 4P pluggable 15kA class 2 with end of life indicator SPN415D

SPN465R

SPN140D





SPN040R



SPN040N



**Spare Cartridge Phase** 

Spare Cartridge Neutral

Description	Cat ref.	Trade Price
Cartridge 40kA 275V for pluggable SPD with reserve	SPN040R	97,29 £/prt.
Cartridge 40kA 275V for pluggable SPD	SPN040D	84,65 £/prt.
Cartridge 15kA 275V for pluggable SPD with reserve	SPN015R	97,29 £/prt.
Cartridge 15kA 275V for pluggable SPD	SPN015D	84,65 £/prt.

Description	Cat ref.	Trade Price
Cartridge neutral 40kA 255V for pluggable SPD without reserve	SPN040N	103,13 £/prt.

Cartridge for PhotoVoltaic SPDs

Description	Cat ref.	Trade Price
Cartridge +/- for SPV325	SPV025	144,01 £/prt.
Cartridge earth for SPV325	SPV025E	138,66 £/prt.

SPV025





SPN208D

## **Double Pole Fine Protection SPDs**

DescriptionCat ref.Trade PriceSPD 2P pluggable 8kA class 2 with indicatorSPN208D145,95 £/prt.





## Class 3 (Fine Protection) (with lifetime indicator)

Description	Cat ref.	Trade Price
SPD 1P+N pluggable 3kA class 3 with end of life indicator	SPN203N	74,62 £/prt.





SPV325

# PV Applications (DC side) (with lifetime indicator)

Description	Cat ref.	Trade Price
SPD pluggable photovoltaic 25kA class 2	SPV325	417,82 £/prt.



Trade Price

103,13 £/prt.



# **Phase Replacement Cartridges**

**Neutral Replacement Cartridges** 

Replacement Cartridges (SPN8\* Range)

Cartridge neutral 40kA 255V for pluggable SPD without reserve

Description

Description	Cat ref.	Trade Price
Cartridge 15kA 275V for pluggable SPD	SPN015D	84,65 £/prt.
Cartridge 15kA 275V for pluggable SPD with reserve	SPN015R	97,29 £/prt.
Cartridge 40kA 275V for pluggable SPD	SPN040D	84,65 £/prt.
Cartridge 40kA 275V for pluggable SPD with reserve	SPN040R	97,29 £/prt.

Cat ref.

SPN040N

SPN015D





Description Trade Price Cat ref. Cartridge 25kA class 1 for SPN8xxx SPN080 301,26 £/prt. SPN080N 372,40 £/prt. Cartridge neutral 25kA class 1 for SPN802 and SPN802R

SPN080

SPN040N

2 Pole

Description



Cat ref.

SPA201

Trade Price

279,60 £/prt.



SPA201

SPA401

	4 Pole		
L1 L2 L3 N	Description	Cat ref.	Trade Price
1008 (04.401	SPD 4P monobloc 12.5kA class 1 with light indicator TT + TNS	SPA401	491,10 £/prt.
	SPD 4P pluggable 100kA class 1 with end of life indicator TNS	SPN801	1.259,39 £/prt.
	SPD 4P pluggable 100kA class 1 with end of life indicator TT	SPN802	1.300,60 £/prt.
	SPD 4P pluggable 100kA class 1 with end of life indicator and remote contact TNS	SPN801R	1.410,43 £/prt.
0-0	SPD 4P pluggable 100kA class 1 with end of life indicator and remote contact TT	SPN802R	1.437,91 £/prt.

SPD 2P monobloc 12.5kA class 1 with light indicator TT + TN





SPN215R



SPN415R

# 2 Pole

Description	Cat ref.	Trade Price
SPD 2P pluggable 15kA class 2 with reserve + remote contact	SPN215R	201,29 £/prt.
SPD 2P pluggable 40kA class 2 with reserve + remote contact	SPN240R	373,92 £/prt.

4 Pole		
Description	Cat ref.	Trade Price
SPD 4P pluggable 15kA class 2 with reserve + remote contact	SPN415R	394,66 £/prt.
SPD 4P pluggable 40kA class 2 with reserve + remote contact	SPN440R	420,56 £/prt.