



SPN802



SPN240D



SPN440R



SPN040D



ECP180D



ECP310D



ECP300C

Modular surge protection devices

SANS/IEC 61643-11

For the protection of low voltage equipment against transient voltages and current surges from atmospheric origins (*lightning*) as well as transients produced by switching characteristics such as switching of distribution networks, transformers, motors, etc.

type	poles	Up	limp 10/350 µs	I _{max} 8/20 µs	description	width in 17.5 mm
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Class 1 and class 2 combined surge protection device

- Lightning and surge-voltage protection in one device
- Replaceable plug-in cartridges

SPN802	3ph + N	≤ 1.5kV	100kA	–	class 1+2 surge protector	8
SPN802R*	3ph + N	≤ 1.5kV	100kA	–	class 1+2 surge protector	8

* With remote signalling contact for monitoring

Class 2 surge protection (modular plug-in)

Suitable for second level protection in distribution panels where type 1 protectors are installed or areas not exposed to direct lightning strikes and with no external lightning protection system.

- Protection for domestic, industrial and commercial buildings
- Replaceable plug-in cartridges

I_{max} 40kA (8/20µs)

SPN140D	1P	≤ 1.5kV	–	40kA	class 2 surge protector	1
SPN140R*	1P	≤ 1.5kV	–	40kA	class 2 surge protector	1
SPN240D	1ph + N	≤ 1.5kV	–	40kA	class 2 surge protector	2
SPN240R*	1ph + N	≤ 1.5kV	–	40kA	class 2 surge protector	2
SPN440D	3ph + N	≤ 1.5kV	–	40kA	class 2 surge protector	4
SPN440R*	3ph + N	≤ 1.5kV	–	40kA	class 2 surge protector	4

* With remote signalling contact for monitoring

Replacement cartridges for above surge protection devices

SPN040D	phase	replacement cartridge	for protectors	SPN240/440	1
SPN040N	neutral	replacement cartridge	for protectors	SPN2/4	1

Energy meters (kWh meters) (modular DIN rail mounting)

- Accuracy: 1%
- Impulse output
- Backlit LCD display
- "Total" counter and "Partial" (*resettable*) counter
- Class 1 according to IEC 62 053-21 and EN 50470
- LED indication blinks according to consumption (1 pulse = 100wh)

type	current	operation	description	width
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Single-phase kWh meter 80A (direct reading)

- Displays consumption of active energy and instantaneous power consumption

ECP180D	80A	direct	single-phase kWh meter	2
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Three-phase kWh meters 80/125A (direct reading)

- Protected against phase/neutral inversion
- Adaptable to three phase with or without neutral, 230V or 400V between lines
- Displays consumption of active energy and instantaneous power consumption

ECP380D	80A	direct	three-phase kWh meter	4
ECP310D	125A	direct	three-phase kWh meter	6

Three-phase kWh meters up to 6000A (connection via CT)

- Displays instantaneous power consumption
- Displays consumption of active energy and reactive energy
- Adaptable to three phase with or without neutral, 230V or 400V between lines

ECP300C	6000A	CT / 5A	three-phase kWh meter	4
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* For CT's, see **Section E-Metering**