

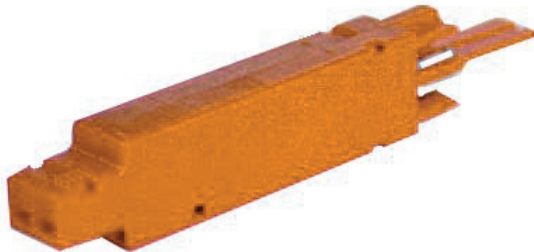


Quante™

STG 2000 single pair protection plug SOR PU 1C / SOR PU 2C



Quante™ STG 2000 - Single pair protection module SOR PU 1C



Quante™ STG 2000 - Single pair protection module SOR PU 2C

Quante™ STG 2000 **S**ingle **P**air **P**rotection plugs (SPP) SOR PU are designed for use with Quante™ STG 2000 modules to provide protection to individual copper pairs of most voice and data, fixed and wireless network applications, against high voltage surge due to lightning and overcurrent, generated by induction or direct contact with power lines.

The SPP's increase flexibility in network management. They can be removed separately for replacement on faulty lines alone without disturbing adjacent working lines.

Function

SOR PU SPP's are five-pin terminal device.

The SPP houses the three-pole gas discharge tube (GDT) with fail-safe. When a surge voltage affects the line due to lightning, ionization of gas inside the GDT takes place draining the high voltage. In case a residual current due to this voltage persists, the fail-safe in the three-pole GDT melts and drains the current to ground.

The SOR PU 2C SPP also houses two series-element positive temperature coefficient thermistors (PTCR) which limit the current by increasing its resistance from a low to a very high value, resulting in an open circuit. When the voltage surge passes, the resistance will decrease and the line will be active again.

Testing and disconnection of individual lines is possible without removing the SPP's from the STG 2000 modules.

Mounting

The SOR PU2C module is usually mounted on the line/vertical side (usually on 100 pair blocks) at the MDF. If required on the exchange/horizontal side, then it is mounted on 128 pair blocks instead.

SOR PU2C can be mounted only in one direction, as it is polarized.

Features

- Integrated test access
- Protection of individual copper pairs
- Front pluggable single pair protection plug

Benefits

- Removal of the SPP is not necessary for testing or disconnecting the line
- Application oriented solution
- Replacement on faulty line without disturbing the adjacent operating lines

Specifications

Technical characteristics

Electrical features

Gas Discharge Tube (GDT)

DC Spark-over voltage:	100V/s	180-300V
Insulation resistance:	100V DC>	1,000 MΩ
Impulse spark-over voltage line to ground:	1KV/μs	<900 V
Impulse life:	10/1,000μs, 100A	300 times
AC discharge current:	50Hz 1s, 5 Ax2	5 times
Capacitance:	1KHz	<3pF
Fail-Safe operation:	AC 5 Ax2	<5sec

Positive temperature coefficient thermistor (PTCR)

Operating voltage:	60 V DC
Max operating voltage (Vmax):	245Vrms
Rated voltage:	220Vrms
Rated current at 25°C:	145mA
Switching current:	250mA
Response time @ 1 Amp rms:	<2.5sec
Max permissible switching current at Vmax:	3 Arms

Material

Casing:	Self-extinguishing glass-filled polycarbonate
Contact:	Phosphor bronze with tin lead coating
Printed circuit board:	FR4

Overall Dimensions

Width:	10 mm
Depth:	14 mm
Height:	82.15 mm

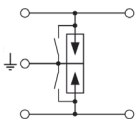
Ordering Information

Ref.-No.



Quante™ SOR PU 1C

Single pair protection plugs for STG with earthing grid (STG PU) with test and disconnection facility
Overvoltage protection
grey

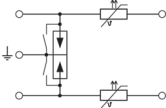


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Quante™ SOR PU 2C

Single pair protection plugs for STG with earthing grid (STG PU) with test and disconnection facility
Overvoltage and overcurrent protection (PTCR's)
orange



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