

Data and signal protection

OVR Q series



The ABB OVR Q series data and signal surge protective devices are designed to protect sensitive equipment connected to data and telephone lines. These devices complement the OVR power SPD units for a complete and effective system protection solution against surges on data and power lines.

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01 OVR Q series

Application

OVR Q series UL 497B listed surge protective devices (SPDs) are specifically designed for where installation space is at a premium and large numbers of lines require protection. For installations, connect in series with the signal or data line either near where it enters or leaves the building or close to the equipment being protected. Install in a cabinet/cubicle close to the system's ground star to protect against lightning flashover (typically the service entrance location) and internal transient voltage activity.

Technical specifications and standards

Key features

Protection mode	Normal and common
Status indicator	No
Technology	Multi-stage hybrid
Installation	DIN rail

Electrical specification

	OVR Q series
Nominal voltage ⁽¹⁾	30 V
Maximum working voltage U _c (RMS/DC) ⁽²⁾	26 V/ 37.8 V
Current rating (signal)	-
In-line resistance (per line ±10%)	-
Bandwidth (-3 dB, 50 Ω system)	-

Transient specification

Let-through voltage (all conductors)⁽³⁾ Up

C2 test 4 kV 1.2/50 μs, 2 kA 8/20 μs to EN/IEC 61643-21	53.0 V
C1 test 1 kV, 1.2/50 μs, 0.5 kA 8/20 μs to EN/IEC 61643-21	48.0 V
B2 test 4 kV 10/700 μs to EN/IEC 61643-21	43.5 V
5 kV, 10/700 μs ⁽⁴⁾	44.3 V

Maximum discharge surge current (Imax)		OVR Q series
D1 test 10/350 μs to	- Per signal wire	2.5 kA
BS EN/EN/IEC 61643-21	- Per pair	5 kA
8/20 μs to ITU-T K.45:2003,	- Per signal wire	10 kA
IEEE C62.41.2:2002:	- Per pair	20 kA

- (1) Nominal voltage (RMS/DC or AC peak) measured at < 5 μA
- (2) Maximum working voltage (RMS/DC or AC peak) measured at < 5 mA leakage (OVR 30Q)
- (3) The maximum transient voltage let-through of the protector throughout the test (±10%), line to line and line to ground, both polarities. Response time < 10 ns
- (4) Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45, Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 formerly FCC Part 68)

Mechanical specification		OVR Q series
Temperature range		-40 to +80 °C
Installation location	Connect in series with the signal or data line either near where it enters or leaves the building or close to the equipment being protected. Install in a cabinet/cubicle close to the system's ground star point.	
Connection type	Pluggable 12-way screw terminal - maximum torque 0.6 Nm/ PT version: Pluggable 12-way screwless push terminal	
Conductor size (stranded)		2.5 mm ²
Ground connection	Via DIN rail or M5 threaded hole in base of unit	
Case material	FR polymer UL 94 V-0	
Weight:		
- Unit		0.1 kg
- Packaged (each)		0.12 kg
Dimensions	See diagram below	

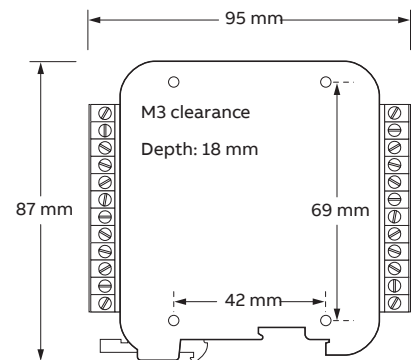
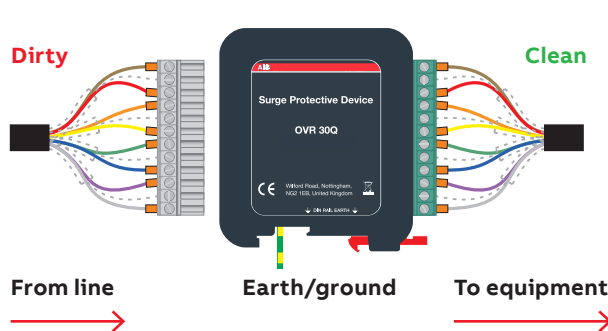
Available configurations

Catalog number	Voltage	Description	Global ID
OVR30QUL	30 V	Data SPD for 4 pair signal w/ screw terminals	7TCA085400R0568
OVR30QPTUL	30 V	Data SPD for 4 Pair Signal w/ push terminals	7TCA085400R0575



OVR Q series has UL 497B approval under UL file QVGO:E240341

OVR RS485Q installed in series (in-line)



* Q/PT width is 106 mm