

## DATASHEET

# Mains power protection

## OVR 240-16A



Combined Type 2 and 3 tested protector (to BS EN 61643) for use on low current (up to 16 A) single phase systems to protect connected electronic equipment from transient overvoltages on the mains supply, e.g. CCTV systems, fire/intruder alarm panels.



### Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all sets of conductors (phase to neutral, phase to earth, neutral to earth - Full Mode protection) allowing continuous operation of equipment
- Repeated protection in lightning intense environments
- Compact size for easy incorporation in the protected system
- Removable DIN rail foot for simple clip-on mounting to top hat DIN rails
- Colour coded terminals give a quick and easy installation check - grey for the dirty (line) end and green for the clean end
- Robust housing and substantial earth stud fixing holes ready for flat mounting
- Maintenance free

### Application

Use these protectors on low current mains power supplies, e.g. CCTV cameras, alarm panels and telemetry equipment.

### Installation

Connect in-line with the power supply usually either within the equipment panel (or for CCTV cameras, in an enclosure close by), or on the fused connection that supplies equipment

To protect equipment inside a building from transients entering on an outgoing feed (e.g. to CCTV cameras or to site lighting) the protector should be installed as close to where the cable leaves the building as possible. Protectors should be installed either within an existing cabinet/cubicle or in a separate enclosure.

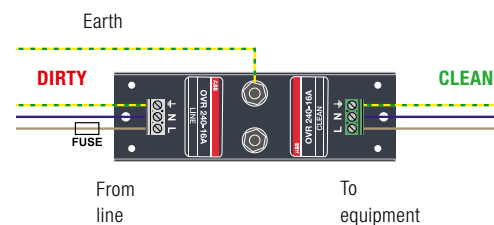
### Accessories

If several OVR 240-16A protectors are to be installed together, or if one is in use alongside OVR SPDs for video or signal lines, these can be simultaneously mounted and earthed on a OVR CME kit and housed in a suitable OVR WBX enclosure.



Connect in-line on supplies fused up to 16 A.

Note how the protector can also be earthed from its earth stud.



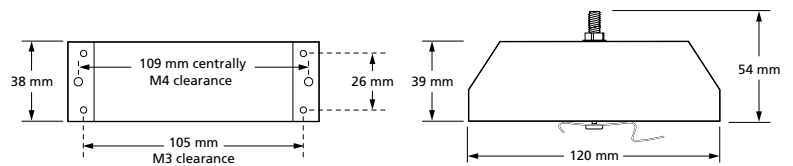
**OVR 240-16A - Technical specification**

Electrical specification	OVR 240-16A
<b>ABB order code</b>	7TCA085460R0361
Nominal voltage - Phase-Neutral $U_o$ (RMS)	240 V
Maximum voltage - Phase-Neutral $U_c$ (RMS)	280 V
Working voltage (RMS)	200-280 V
Frequency range	47-63 Hz
Current rating (supply)	16 A or less
Max. back-up fuse (see installation instructions)	≤ 16 A
Leakage current (to earth)	< 0.5 mA
Transient specification	OVR 240-16A
Type 2 (BS EN/EN), Class II (IEC)	
Nominal discharge current 8/20 $\mu$ s (per mode) $I_n$	5 kA
Let-through voltage $U_p$ at $I_n(1)$	750 V
Maximum discharge current $I_{max}$ (per mode)(2)	10 kA
Type 3 (BS EN/EN), Class III (IEC)	
Let-through voltage at $U_{oc}$ of 6 kV 1.2/50 $\mu$ s and $I_{sc}$ of 3 kA 8/20 $\mu$ s (per mode)(1,3)	600 V
Electrical specification	OVR 240-16A
Temperature range	-40 to +80 °C
Connection type	Screw terminal - maximum torque 0.5 Nm
Conductor size (stranded)	4 mm <sup>2</sup>
Earth connection	Via M6 stud or earth terminal -maximum torque 0.5 Nm
Degree of protection (IEC 60529)	IP20
Case material	Steel
Weight: – Unit	0.23 kg
– Packaged	0.25 kg
Dimensions	See diagrams below

<sup>(1)</sup> The maximum transient voltage let-through of the protector throughout the test ( $\pm 10\%$ ), phase to neutral, phase to earth and neutral to earth

<sup>(2)</sup> The electrical system, external to the unit, may constrain the actual current rating achieved in a particular installation

<sup>(3)</sup> Combination wave test within IEC/BS EN 61643, IEEE C62.41-2002 Location Cats C1 & B3, SS 555:2010, AS/NZS 1768-2007, UL 1449 mains wire-in

**ABB order codes**

Part	ABB order code	Part	ABB order code
OVR CME4	7TCA085400R0414	OVR WBX4	7TCA085410R0048
OVR CME8	7TCA085400R0415	OVR WBX4/GS	7TCA085410R0049
OVR CME16	7TCA085410R0045	OVR WBX8	7TCA085410R0050
OVR CME32	7TCA085410R0046	OVR WBX8/GS	7TCA085410R0051
OVR 240-16A	7TCA085460R0361	OVR WBX16/2/G	7TCA085410R0047