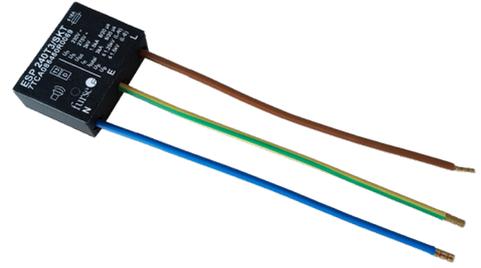
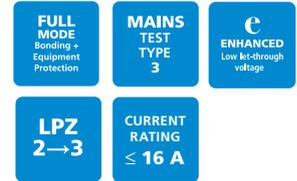


# Mains power protection

## ESP 240T3/SKT



Type 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. fire/intruder alarm panels. Available for supplies up to 275V. For use at boundaries LPZ 2 through to LPZ 3 to protect sensitive electronic equipment.



### Features & benefits

- 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
- Adhesive double-sided pad supplied, to secure in position within the application
- Colour coded wires make for simple connection
- Thermal protection technology, for safe disconnection under fault conditions
- Audible buzzer warns of loss of protection due to fault
- Maintenance free

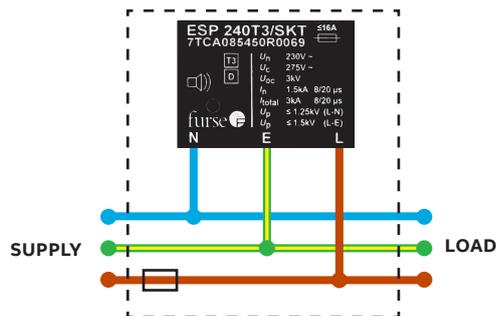
### Installation

Connect in parallel (spur) with the power supply usually either within the equipment panel, or behind the socket-outlet.

To protect localised equipment inside the building from transients that could disrupt operation the protector should be installed directly at the socket-outlet.

### Application

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



**NOTE:** If your supply is fused at more than 16 Amps the ESP 120D(S)-32A, ESP 240D(S)-32A or ESP 277D(S)-32A are suitable, or above 32A then consider the parallel-connected ESP120M1, ESP240M1 or ESP277M1 series.

**ESP 240T3/SKT - Technical specification**

Electrical specification	ESP 240T3/SKT
<b>ABB order code</b>	7TCA085450R0069
Nominal voltage - Phase-Neutral $U_0$ (RMS)	230 V
Maximum voltage - Phase-Neutral $U_c$ (RMS)	275 V
Temporary overvoltage (TOV) withstand 5s	335 V
Working voltage (RMS)	200-275 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)	Zero
Transient specification	ESP 240T3/SKT
<b>Type 3 (BS EN/EN), Class III (IEC)</b>	
Let-through voltage $U_P$ at $U_{OC}$ of 3 kV 1.2/50 $\mu$ s and $I_{sc}$ of 1.5 kA 8/20 $\mu$ s (per mode) <sup>(1,3)</sup>	<1.25, 1.5 kV
Total discharge current 8/20 $\mu$ s $I_{total}$ (L+N-PE) <sup>(2)</sup>	3 kA
Mechanical specification	ESP 240T3/SKT
Temperature range	-40 to +80 °C
Connection type	Via 115 mm long cables, coloured brown, blue and green/yellow
Conductor size (stranded)	1 mm <sup>2</sup> / 17 AWG
Earth connection	Via 115 mm long cable coloured green/yellow
Degree of protection (IEC 60529)	IP20
Fault indication	Acoustic (buzzer)
Case material	FR Polymer UL-94 V-0
Weight: – Unit	0.20 kg
– Packaged	0.25 kg
Dimensions	See diagrams below

<sup>(1)</sup> The maximum transient voltage let-through of the protector throughout the test, L-N , L/N-PE

<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

