

ESP D1 Series

(Three Phase) System Protection



Combined Type 1, 2 and 3 tested protector (to BS EN 61643) for use on single phase mains power distribution systems primarily to protect connected electronic equipment from transient over-voltages on the mains supply, e.g. computer, communications or control equipment. For use at boundaries up to LPZ 0 to protect against flashover (typically the main distribution board location, with multiple metallic services entering) through to LPZ 3 to protect sensitive electronic equipment.

ESP D1 (Three Phase)

- Very low let-through voltage (enhanced protection to BS EN 62305) between all sets of conductors (phase to neutral, phase to earth, neutral to earth – Full Mode protection)
- Full mode design capable of handling partial lighting currents as well as allowing continual operation of protected equipment
- Repeated protection in lighting intense environments
- Innovative multiple thermal disconnect technology for safe disconnection from faulty or abnormal supplies (without compromising protective performance)
- Three way visual indication of protection status and advanced pre-failure warning so you need to be unprotected
- ESP XXX D1R or ESP XXX D1R/LCD units (where XXX = 208, or 415, or 480) have a remote display that allows the protector to be mounted close to the incoming feed or distribution board with the display being mounted in a visible position e.g. at the front of the panel
- ESP XXX D1/LCD or ESP XXX D1R/LCD units have a backlit LCD intelligent display offering clear status information that can be rotated for the side mounting to facilitate short connecting leads
- Remote indication facility allows pre-failure warning to be linked to a building management system, buzzer or light
- Changeover active volt-free contact enables the protector to be used to warn of phase loss(i.e. power failure, blown fuses etc)
- Flashing warning of potentially fatal neutral to earth supply faults (due to incorrect earthing, wiring errors or unbalanced conditions)
- Through terminal facility allows series connection on low current supplies to eliminate high additive voltage associated with the connecting leads on units installed in parallel
- Compact space saving DIN housing

Short Circuit Withstand Capability: 25 kA, 50 Hz

Frequency Range: 47-63 Hz

Max. Back-up Fuse: 125 A

Leakage Current (to earth): <250 µA

Indicator Circuit Current: <10 mA

Volt Free Contact²: Screw Terminal / Current rating 1 A / Nominal Voltage (RMS) 250 V

Temperature Range: -40°C to +80°C

Connection Type: Screw Terminal (Max Torque 4.5Nm)

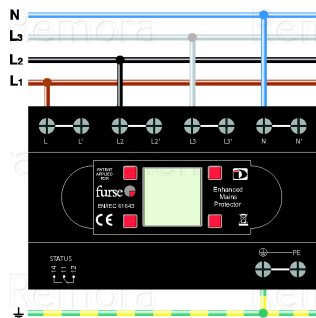
Conductor Size (stranded): 25mm²

Earth Connection: Screw Terminal (Max Torque 4.5Nm)

Volt Free Contact: Connect via screw terminal with conductor up to 1.5mm² (stranded)

Display (D1R & D1R/LCD Version): HD-D Type 1 Metre Interconnection Cable 2 Metre Cable (ESP RLA HD-2) or 4 Metre Cable Interconnection Cable (ESP RLA HD-4) optional

Protection: IP20



- Parallel Connection ESP 415 D1 (fuses not shown for clarity)

Code	Description	Nom Voltage	Max Voltage	Temporary	Working Voltage (RMS)	WBX Enclosure Size	Weight (Kg)
		Phase Neutral Uo (RMS)	Phase Neutral Uc (RMS)	Overvoltage TOV U ¹			
ESP415D1	Three phase, full mode	240 V	280 V	350 V	200 - 280 V	WBX D4	0.85
ESP415D1R	Three phase, full mode with remote display	240 V	280 V	350 V	200 - 280 V	WBX D4	1.10