



AIR-CONDITIONING
CATALOGUE

LIGHTNING AND SURGE PROTECTION

SINGLE PHASE TRIP-CONNECT

Air conditioning and refrigeration systems are susceptible to damage due to over voltages, under voltages and mains supply surges. The Clearline 40R and 3F controller units are the ideal protection system for stand-alone and distributed air conditioning systems. These devices provide cycle-by-cycle RMS voltage measurement, and disconnect the equipment when the voltage is outside specified limits. Automatic re-connection occurs after a pre-set time delay which is sufficient to prevent compressor damage.

Features:

- Compact size
- Easy installation
- Status indication

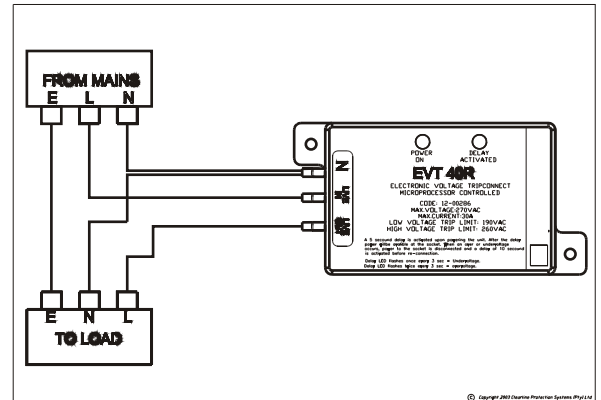
The 40R Trip-connect has been designed to be fitted inside the air conditioner unit as an OEM or retrofit installation of up to 5 minutes randomly.



Order code: 12-00286

Specifications	12-00286
Phase	Single
Low Voltage trip	180V
Low voltage connect	190V
Nominal Voltage	230V
High voltage trip	260V
High voltage connect	250V
Connect delay	3-5 minutes, randomly defined (EVT 40 R only)

Wiring Diagram



THREE PHASE TRIP-CONNECT

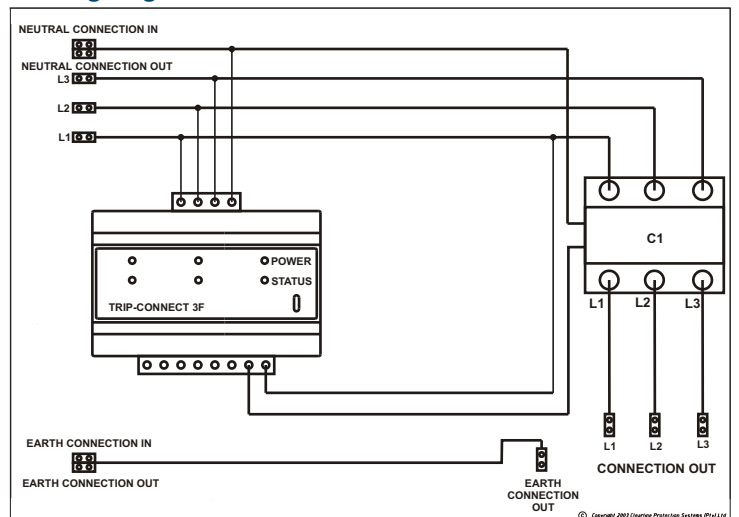
The 3F Trip-connect device is suitable for all three phase 380/400V systems. Use is made of an external contactor matched to the load requirement and may be housed in the distribution board or separate enclosure next to the equipment. Full status indication is provided and a bypass switch is included for testing in case of unit failure.

Features:

- Easy installation
- Din rail mount
- Supports all makes of contactors
- Full status indication

Specifications	12-00408
Phase	Single
Low Voltage trip	180V
Low voltage connect	190V
Nominal Voltage	230V
High voltage trip	260V
High voltage connect	250V
Connect delay	10 sec or 5 min

Wiring Diagram



Surge Protectors
Fitted as optional

CLEARSTART - SINGLE & THREE PHASE SOFT STARTER

Start up currents on airconditioners used in cellular base stations can be very high and can cause trippouts and current overloads. When the power supply to these units is interrupted briefly, the compressor motor can stall, allowing high currents to flow for a short period of time causing circuit breaker tripping. On shared sites where the power source is minimal the problem becomes worse. By the installation of the Clearstart soft starter, the inrush current is limited and a time delay prevents circuit breaker tripping.

Features:

- Reduces inrush current
- Built-in Delay
- Easy installation
- Small size

Specifications	12-00990
Nominal input voltage range	230VAC
Nominal current	10A
Max. motor size	2200W
Low Voltage trip	190V
High voltage trip	250V
Overload Current trip	15A for 30sec
Current trip delay (default)	3 min
Over/under voltage trip delay	30 sec
Start Delay	20 sec



Order Code: 12-00990

PLUG AND PLAY TRIP-CONNECT

The refrigeration Trip-connect is designed for equipment that has cooling compressors such as air conditioners and refrigeration equipment. The re-connect time has been extended to 5 minutes to allow the compressor to exhaust before applying power thus removing additional stress on the motor. The units have zero-crossing detection to ensure orderly power connection.

Features:

- Economical protection
- Compact design
- Status monitoring
- Automatic operation

Specifications	12-00602
Phase	Single
Low Voltage trip	180V
Low voltage connect	190V
Nominal Voltage	230V
High voltage trip	260V
High voltage connect	250V
Connect delay	5min



12-00602 (16A)



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