

**SINGLE PHASE
ISOLATION TRANSFORMERS
SAFETY INSTRUCTIONS
CCM RANGE
Manufactured to BSEN 61558**



1. Read all of these instructions before you use the transformer
2. These transformers are designed to provide mains isolation
3. Check the transformer for signs of damage before use. Do not use if any damage is discovered
4. These transformers **MUST** be installed into some form of enclosure or panel to prevent physical contact with live electrical parts. They will have mains voltages present which could prove lethal on contact
5. Check the transformer rating against the power usage of the load you are going to supply. Take particular care when supplying motors or discharge lighting systems where the KVA required is greater than the KW load specification
6. These transformers are fully rated for continuous operation at their maximum listed power capability. They may be used at higher ratings for a duty cycle provided the RMS power usage does not exceed the transformer rating.
7. During normal operation these units will become hot. Ensure the transformer will not damage any floor covering it is standing on or cause overheating of components in its vicinity. Ensure there is adequate ventilation of the enclosure or panel to prevent overheating of the unit during normal operation.
8. Ensure proper protection against the occurrence of fault currents exists in the supply to the unit
9. **WARNING** Before commencing any work on the transformer ensure the mains supply to the unit has been isolated
10. Ensure connecting leads are suitably rated for both the voltages and currents of the input and output
11. Follow the wiring colour code schemes appropriate for the installation
12. Ensure both the input and output earth leads are connected to the transformer earth terminal for complete safety
13. Ensure all terminal connections to the transformer are properly secured before switching on the supply
14. Transformers have an inherent high in-rush current at switch on. Ensure all fuses, MCB's and MCCB's used in the protection of the supply lines to the transformer are of types suitable to withstand these surge currents. e.g. Motor rated fuses, Type "C" or "D" curve MCB's.
15. Ensure that the wiring and installation is carried out by suitably qualified personnel
16. At the end of the service life of the unit arrange for disposal in accordance with the environmental legislation current at the time for the recovery and recycling of materials

Connection

These units have been designed to operate from most of the common UK and European mains supplies, they have connection options on the primary input for 230V and 400V supplies as well as $\pm 15V$ taps to make them suitable for use with 220V, 240V, 380V and 415V supplies.

With the exception of the 230V output models these transformers have been manufactured with a centre tap on the output. This terminal has not been grounded allowing the units to be used for 0 – 24V, 0 – 48V or 0 -110V applications. Connection of the centre tap to earth converts the units to 12 – 0 –12V, 24 – 0 – 24V or 55 – 0 – 55V operation. **Never connect any of the output voltage terminals together.**

Input connections		
Supply Voltage	Connection 1	Connection 2
220V	-15	230V
230V	0V	
240V	+15	
380V	-15	400V
400V	0V	
415V	+15	

24V / 48V / 110V applications not using centre tap

