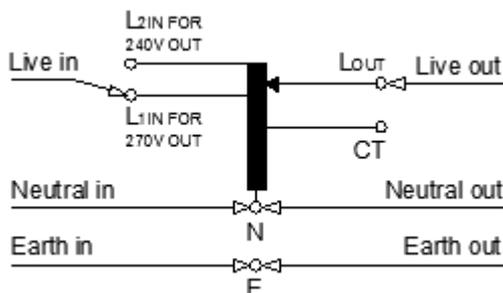


Models: MVT single phase enclosed range
12A and above

ENCLOSED SINGLE-PHASE VARIABLE AUTOTRANSFORMERS INSTALLATION AND SAFETY INSTRUCTIONS

Manufactured to BS7452 / IEC60989

1. Read all of these instructions before you use the transformer.
2. This variable autotransformer **DOES NOT** provide mains isolation.
3. Variable autotransformers operate at mains voltages.
DO NOT EXCEED THE MAXIMUM VOLTAGE AND CURRENT RATINGS
4. Installation connection and maintenance should only be carried out by suitably qualified personnel.
5. An input lead can be connected to the stud terminals behind the terminal cover, ensure it is suitably glanded through the terminal cover to prevent damage to the sleeve. The lead should then be hard wired into the supply or fitted with a suitably rated plug (these units can carry current in excess of 13A, therefore a UK domestic plug is not recommended)
6. An output lead can be connected to the stud terminals behind the terminal cover, ensure it is suitably glanded through the terminal cover to prevent damage to the sleeve. The lead should then be hard wired inside the equipment to be operated or a suitable socket. Alternative small outlet sockets, such as 4mm test sockets, can be fitted.
7. The terminal marked "N" is a common neutral for both the supply input and the load output.
8. The load must always be connected across the output, "N" and "L_{OUT}" terminals, **NEVER** connect the load in series with the transformer.
9. The centre tap "CT" terminal is for operation in a buck-boost configuration, not 110 - 120V supply applications.
For buck-boost wiring instructions see <http://carroll-meynell.com/technical-buckboost>
10. Carbon brushes should be inspected for damage and wear periodically, especially after an overcurrent event. A faulty and worn brush **will** result in damage to the transformer winding.
11. These units are Class 1 insulated and must not be tested on Portable Appliance Testers (PAT) as Class 2 double insulated products. Flash test only at 2.0kV. Flash test only between Earth and Live. **DO NOT** flash test between input and output.
12. The variac can be wired for two types of output configuration,
Output 0 – 112% of input voltage typically used in testing applications where the over-voltage to maximum mains tolerance is required,
Output 0 – 100% of input voltage typically used in control applications where the voltage needs to be varied without over-volting the equipment.
These conditions are achieved by connecting the supply live line to either L_{1IN} or L_{2IN}



Input "L_{2IN}" and "N" Output 0 – 100% of input
Input "L_{1IN}" and "N" Output 0 – 112% of input
Input/output Neutral "N"
Wiper arm contact, "L_{OUT}"
Centre tap "CT" is for buck-boost applications.