

# Auto Transformer Speed Controls 1 Phase Installation Guide

## Important

Installation must be carried out by qualified personnel in accordance with the appropriate authority and conforming to all statutory and governing regulations eg. IEE, CIBSE, COHSE etc.

## Isolation

Before commencing work ensure the electrical supply is disconnected. NOTE: A fused spur isolator (not included) must be provided in the supply fitted with a suitably rated fuse.

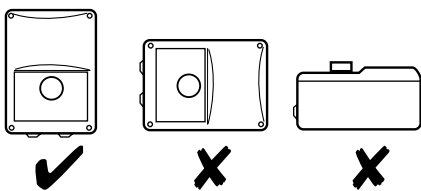
## Electrical information

Voltage: 230V 1ph 50Hz

Model	Max. current	Fuse
SPCON1.5	1.5A	2.5A
SPCON3.5	3.5A	5A
SPCON7.5	7.5A	10A
SPCON10	10A	14A

## Installation

Mounting the control  
**ISOLATE ELECTRICAL SUPPLY.**  
Fig. 1. Correct mounting.



Note: the unit must be mounted on a secure, vibration free vertical surface away from direct heat sources or water spray. The maximum permissible ambient temperature is 40°C.

Turn the front knob to the OFF position. Remove the front cover (4 screws). Select a suitable flat surface. Note the unit must be mounted vertically with the cable entry at the bottom (see figure 1). Mark through the casing rear fixing holes (cable access at bottom).

Drill and plug the mounting surface as necessary. Mount the case using suitable fixing screws (not supplied). Bring the motor and mains cables (these must be of a correct diameter size for the purpose) through the case glands or grommets and connect to the controls

terminal block as shown. Restore mains supply and switch control on.

## Control application

This control is only for use with single phase fans that are suitable for speed control.

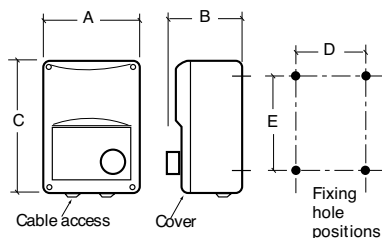
The fan motor used should be internally protected from overheating.

## In case of faulty operation

Check that the correct voltage is applied and that all connections are correct.  
Check the fan to be regulated is functional.  
Check the fuse at the fusebox.  
Check the fuse in the control.

## Dimensions (mm)

Fig. 2

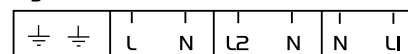


Unit Code	A	B	C	D	E
SPCON1.5	115	85	180	98	182
SPCON3.5	200	140	280	139	233
SPCON7.5	200	140	280	139	233
SPCON10	300	300	170	250	250

Unit Code	Weight kg
SPCON1.5	1.7
SPCON3.5	3.6
SPCON7.5	6.0
SPCON10	9.5

## Connection Diagram

Fig. 3 Control terminals.



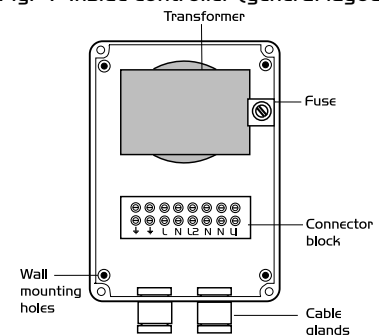
- ⏏ ..... EARTH
- ⏏ ..... EARTH
- L ..... Mains LIVE supply connection.
- N ..... Mains NEUTRAL supply connection
- L2 ..... Unregulated 230V output  
(Or switch live to eg. damper)
- N ..... NEUTRAL
- N ..... Motor NEUTRAL
- U ..... Regulated output to Motor

## Changing the fuse

The fuse is located near the internal transformer (see figure 4). Remove cover, lift out the fuse holder with a screwdriver. Use only the correct value fuse, fast ceramic with a high breaking capacity. Use of incorrect fuse will void warranty.

Note that the fuse is designed for short circuit protection only.

Fig. 4 Inside controller (general layout)



## Maintenance

The control requires no maintenance other than cleaning. Disconnect supply and clean with a damp cloth. Do not spray any cleaning fluids onto the control.

## Warranty

The 3 year warranty starts from the date of delivery and includes parts and labour for the first year. The remaining 2 years covers replacement parts only. This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled, or not installed, commissioned and maintained in accordance with the details contained in this manual and general good practice. The product warranty applies to the UK mainland and in accordance with Clause 14 of our Conditions of Sale. Customers purchasing from outside of the UK should contact Nuair International Sales office for further details.

## After Sales Enquiries

For technical assistance or further product information, including spare parts and replacement components, please contact the After Sales Department.

**Telephone 02920 858 400**