

NALSC 1.5A & 2.5A

Speed Control for Single Phase Motors Installation and Maintenance



1.0 Introduction

The installation must be carried out by qualified personnel in accordance with the appropriate authority and conforming to all statutory and governing regulations e.g. IEE, CIBSE etc.

1.1 Electrical information

Voltage: 230Vac 1ph 50Hz

| Unit | Current Range | Fuse |
|------------|---------------|-------|
| NALSC1-1.5 | 0.1 - 1.5 A | 2A |
| NALSC1-2.5 | 0.2 - 2.5A | 3.15A |

2.0 Installation

IMPORTANT

Isolation - Before commencing work ensure the electrical supply is disconnected.

2.1 Surface Mounting (IP54)

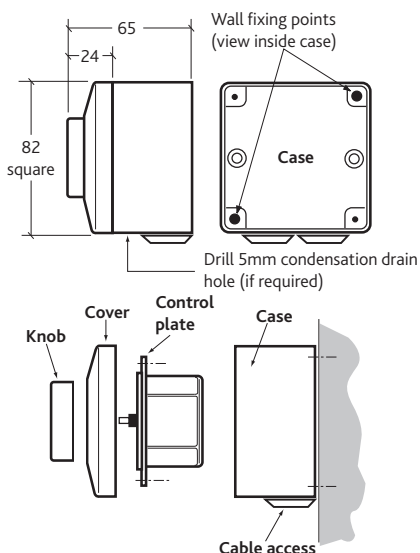
Note: the unit must be mounted on a secure, vibration free vertical surface away from direct heat sources or water spray. The maximum permissible ambient temperature is 35°C.

Pull off the front knob. Remove the cover. Separate the control casing and the control plate (2 screws).

Mark through the casing rear and mount the case onto the wall (cable access at bottom). Bring the cable through the grommets and connect to the control block as shown in Figure 3 (connections facing down). Restore mains supply and switch control on.

Adjust the minimum speed and switch off control. Fit the cover and push on the adjusting knob in the OFF position. If required, drill a 5mm Ø condensation drain hole in the bottom of the case.

Figure 1. Surface Mounting



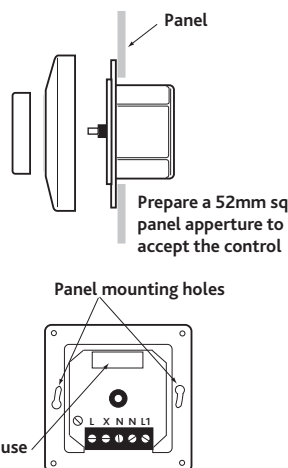
2.2 Panel Mounting

Prepare a 52mm sq. aperture in the panel. Pull off the front knob. Remove the cover. Separate the control casing and the control plate (2 screws).

Mark through the two plate side fixings and mount the plate into the panel with the connections facing down. Connect as shown in diagram (Figure 3).

Restore mains supply and switch control on. Adjust the minimum speed and switch off control. Fit the cover and push on the adjusting knob in the OFF position.

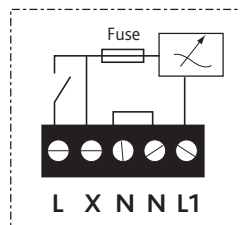
Figure 2. Panel Mounting



3.0 Wiring

NOTE: Connection L2 is provided as an extra connection to for example a damper or as an input to the control without bypassing the front controlling knob.

Figure 3. Wiring



L = Mains LIVE connection
X = Unregulated 230V output (or switch live to damper etc.)
N = Mains NEUTRAL
N = Motor NEUTRAL
L1 = Regulated output to motor

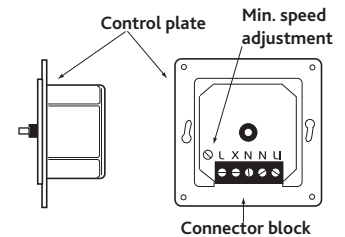
4.0 Controls

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.

4.1 Adjusting the control

The minimum speed adjuster screw (Figure 4) should be set so that the motor does not stop due to variations in mains voltage, and that it restarts following a power failure.

Figure 4. Control Adjustment



4.2 Changing the Fuse

The fuse is located on the internal control plate (Figure 2). Remove knob and 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.

5.0 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.

6.0 Troubleshooting

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 fuse box and in the control.

7.0 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.

