

# MON-CONT MON-CONH

Installation and Wiring Instructions



PLEASE READ INSTRUCTIONS IN CONJUNCTION WITH ILLUSTRATIONS. PLEASE SAVE THESE INSTRUCTIONS.



## IMPORTANT: READ THESE INSTRUCTIONS BEFORE COMMENCING THE INSTALLATION

DO NOT install this product in areas where the following may be present or occur:

- Excessive oil or a grease laden atmosphere.
- Corrosive or flammable gases, liquids or vapours.
- Ambient temperatures higher than 40°C or less than –5°C.
- Possible obstructions which would hinder the access or removal of the Fan.

#### SAFETY AND GUIDANCE NOTES

- **A.** All wiring to be in accordance with the current I.E.E. Regulations, or the appropriate standards of your country and **MUST** be installed by a suitably qualified person.
- **B.** The Fan should be provided with a local isolator switch capable of disconnecting all poles, having a contact separation of at least 3mm.
- **C.** Ensure that the mains supply (Voltage, Frequency, & Phase) complies with the rating label.
- **D.** The Fan should only be used in conjunction with the appropriate products.
- **E.** The fan should only be used in conjunction with fixed wiring.
- **F.** When the Fan is used to remove air from a room containing a fuel-burning appliance, ensure that the air replacement is adequate for both the fan and the fuel-burning appliance.
- **G.** The Fan should not be used where it is liable to be subject to direct water spray for prolonged periods of time.
- H. Where ducted Fans are used to handle moisture-laden air, a condensation trap should be fitted in any vertical exhaust ducts. Horizontal ducts should be arranged to slope slightly downwards away from the Fan. Ducts passing through cold voids must be suitably insulated.
- I. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- **J.** Young children should be supervised to ensure that they do not play with the appliance.

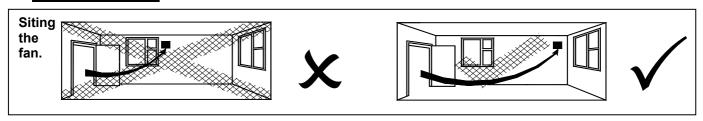


This product should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority for recycling advice

#### **DESCRIPTION**

The MON-CON 100mm fan is a continuously running extract fan for kitchens, utility rooms, bathrooms and toilets. The fan can be wall or panel/ceiling mounted.

### A. INSTALLATION



**IMPORTANT:** The fan should only be used in conjunction with fixed wiring.

#### **PANEL/CEILING MOUNTING**

- 1. For panel/ceiling mounting the fan should be installed into a closed duct system of at least 1.2m long or protected by an exterior air grille that must comply with the standard requirements of your country to prevent access to the fans impeller.
- 2. Cut a 105mm diameter hole.
- 3. Loosen the screw at the bottom of the grille and remove the front grille. Mark the screw centres through the holes in the fan back plate. Drill, plug and screw into position.
- 4. Attach ducting as required for the installation.
- 5. Wire the fan as described in the Wiring section. Adjust any settings as required (see Setup section).
- 6. Replace the grille and tighten the retaining screw.
- 7. After installation, ensure impeller rotates freely.

#### **WALL MOUNTING**

- 1. For wall mounting cut a 115mm diameter hole through the wall and insert the wall sleeve. Slope the sleeve slightly downwards away from the fan. Cut to length and cement both ends into position flush with the wall faces.
- 2. Loosen the screw in the bottom of the grille and remove the front grille. Mark the screw centres through the holes in the fan back plate. Drill, plug and screw into position.
- 3. Fix exterior grille into position with the louvres positioned downwards. (Note:- The grille must comply with the standard requirements of your country to prevent access to the fans impeller).
- 4. Wire the fan as described in Section B-Wiring. Adjust any settings as required (see Section C-Setup).
- 5. Replace the grille and tighten the retaining screw.
- 6. After installation, ensure impeller rotates freely.

#### **B. WIRING.**



WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT <u>MUST</u> BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE.

#### **IMPORTANT**

- The fan should only be used in conjunction with fixed wiring.
- The cross sectional area of supply cord used should be ranged from 1 -1.5mm<sup>2</sup>.
- Cable entry can only be made from the rear of the fan.
- The extraction fan is suitable for connection to 220-240V 50Hz supply.
- The fan is a class II double insulated product and <u>MUST NOT</u> be earthed.
- 1. Select and follow the appropriate wiring diagram. (Fig. 1, 2 or 3)
- 2. Check all connections have been made correctly and ensure all terminal connections and cable clamps are securely fastened.
- 3. Ensure the impeller rotates and is free from obstructions.

#### C. SETUP



WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT <u>MUST</u> BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE.

#### ACCESSING THE CONTROL SETTINGS - (Fig. 4 and 5)

- 1. Loosen the screw in the bottom of the grille and remove the front grille.
- 2. Carefully pull the inner cap from the centre of the fan away from the chassis.
- 3. Adjust the settings as outlined below.

### BEFORE SETTING THE SPEED, SWITCH OFF THE MAINS SUPPLY. SPEED SHOULD ONLY BE SET BEFORE OR DURING INSTALLATION.

#### TRICKLE SPEED SELECTION (61/s or 91/s) - (Fig. 7)

In normal running mode the fan can extract at either 6l/s (22m³/h) or 9l/s (32m³/h) flow rate. The fan will boost to 15l/s (54m³/h) when the LS connection is switched.

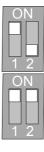
- Factory set at 6l/s (22m³/h).
- Remove jumper connector (JP1) if **9l/s** (32m<sup>3</sup>/h) extract flow rate is required.

#### **BOOST SPEED SELECTION (Fig. 8):**

The fan has two boost speed settings for different installation requirements:

- 1) Max speed: Dip switch 2 in the 'OFF' position.
- 2) 15l/s speed: Dip switch 2 should be in the 'ON' position. (Factory set)

Dip switch 1 should be in the 'ON' position for constant trickle mode.



#### TIMER ADJUSTMENT (T & H MODELS) (FIG. 7)

### BEFORE ADJUSTING THE TIMER, SWITCH OFF THE MAINS SUPPLY. TIMER SHOULD ONLY BE ADJUSTED BEFORE OR DURING INSTALLATION

IMPORTANT NOTE:- ON **T** & **H** MODELS THE TIMER IS ACTIVATED VIA THE LS CONNECTION.

- 1. Remove the fan grille. The overrun timer is factory set to approximately 15 minutes. This timer period can be adjusted between approximately 3-30 minutes by altering the adjuster on the control PCB.
- 2. To REDUCE the operating time, use a small screwdriver to turn the adjuster Fig.7. CLOCKWISE.
- 3. To INCREASE the operating time, use a small screwdriver to turn the adjuster Fig.7. ANTI-CLOCKWISE.
- 4. Replace the fan grille.

#### **HUMIDITY SET-POINT ADJUSTMENT (H MODELS) (FIG. 7)**

BEFORE ADJUSTING THE CONTROLLER, SWITCH OFF THE MAINS SUPPLY. HUMIDISTAT SHOULD ONLY BE ADJUSTED BEFORE OR DURING INSTALLATION.

- 1. Remove the fan grille. The controller is factory set to switch on at about 70% RH. The humidity set point can be adjusted from 65-95%RH by altering the adjuster on the control PCB.
- 2. To LOWER the set-point use a small screwdriver to turn the adjuster Fig.7. ANTI-CLOCKWISE. This makes the controller MORE sensitive.
- 3. To RAISE the set-point use a small screwdriver to turn the adjuster Fig.7. CLOCKWISE. This makes the controller LESS sensitive.
- 4. Replace the fan grille.

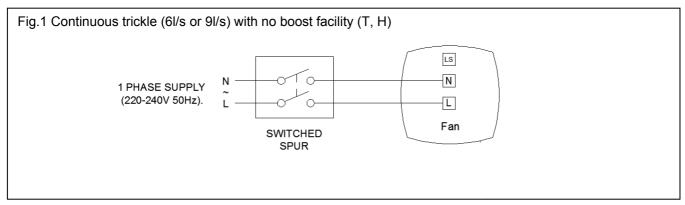
#### D. <u>SERVICING AND MAINTENANCE.</u>

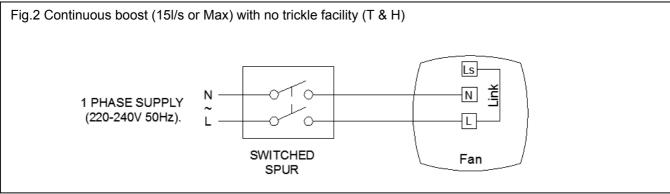


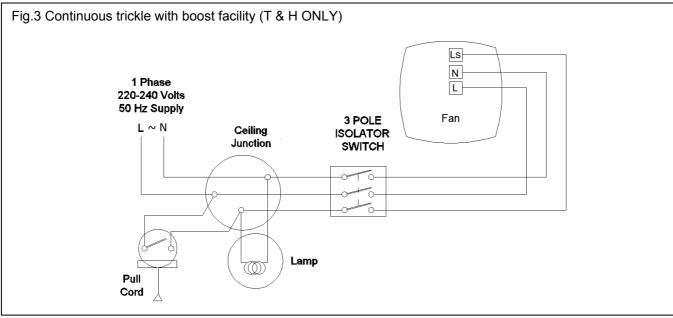
### WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT <u>MUST</u> BE ISOLATED FROM THE POWER SUPPLY DURING MAINTENANCE.

- At intervals appropriate to the installation, the fan should be inspected and cleaned to ensure there is no build up of dirt or other deposits.
   Ensure that the fan is switched off from the supply mains before removing the grille.
- 2. Carefully pull the front panel of the grille away from the base part of the grille (fig. 6).
- 3. Wipe the inlets and front face with a damp cloth until clean.

The fan has sealed for life bearings, which do not require lubrication.







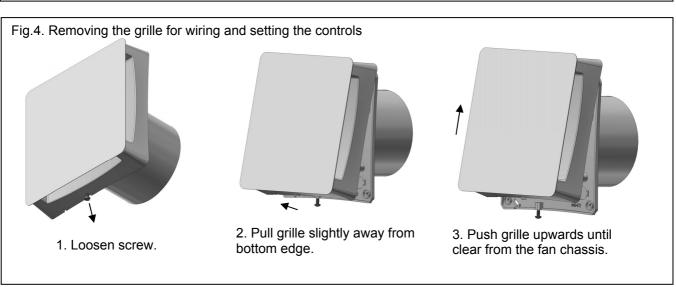


Fig.5. Accessing the control settings

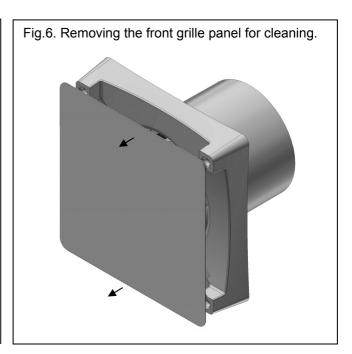
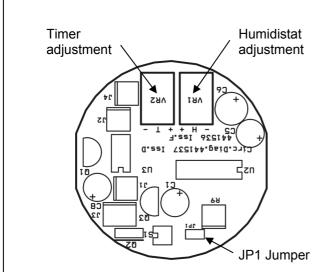


Fig.7. Trickle speed selection and T/H adjuster pots



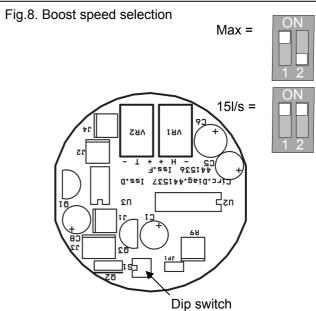
91/s = Remove Jumper Connector

**6l/s** = Replace Jumper Connector (factory set)

(For **15l/s**, permanently link terminal connections L to LS)

Flow rate conversion:

$$6l/s = 22m^3/h$$
  
 $9l/s = 32m^3/h$ 



**Max speed boost:** Dip switch 2 in the 'OFF' position.

**15l/s speed boost:** Dip switch 2 should be in the 'ON' position.

Dip switch 1 should be in the 'ON' position for constant trickle mode.





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