



# Fan Controller

## Cat 300F, XL300F and 300FM

### Specification (at 25°C)

Supply voltage:	230-240Vac
Frequency:	50Hz
Max current:	1.25A
Max load:	300VA
Approval no:	CS6971N

### Features:

The HPM 300F, XL300F and 300FM Fan Controllers are compact solid state devices which allow smooth-action speed control of most fans. This is achieved by allowing only a portion of every current cycle to flow. The controllers are fitted with suppressors to minimise the level of radio frequency interference generated. The mechanism is designed to fit the entire range of HPM 770 series plates.

### Installation:

If architrave mounting is required, an architrave plate (HPM Cat A770/1PL, Standard style, or XLA770/1PL, Excel style) may be purchased separately. The switch and controller mechanisms are simply remounted onto the architrave plate. To change plates, first turn the knob of the controller mechanism fully anticlockwise and pull it off. Remove the controller and switch mechanisms as shown in Fig 1. Then press the controller mechanism and switch mechanism into the new plate. See 'Setting minimum speed' before replacing the knob.

### Wiring:

The controller and its associated switch are wired in series with the fan, on the active side of the circuit as shown in Fig 2.

If two-way switching is required, then Fig 3 should be used.

Fig 4 shows a detailed drawing of the actual wiring connections to be made to the switch and controller. As can be seen, the active wire is placed in the '1' terminal of the switch. The red wire from the controller is placed in the 'C' terminal of the switch. The white wire from the controller and the switched active wire of the fan are joined together and connected to the 'loop' terminal of the switch.

### Setting minimum speed:

The minimum speed must be set before the controller knob is put into place. When the controller unit is wired and mounted as required, switch on the power.

Turn the potentiometer carefully by hand until the desired minimum speed is obtained.

Then insert the controller knob so that the ridge on the knob lines up with the slot on the controller body (see Fig 5). Once this process is complete, the knob can be removed when turned fully anticlockwise.

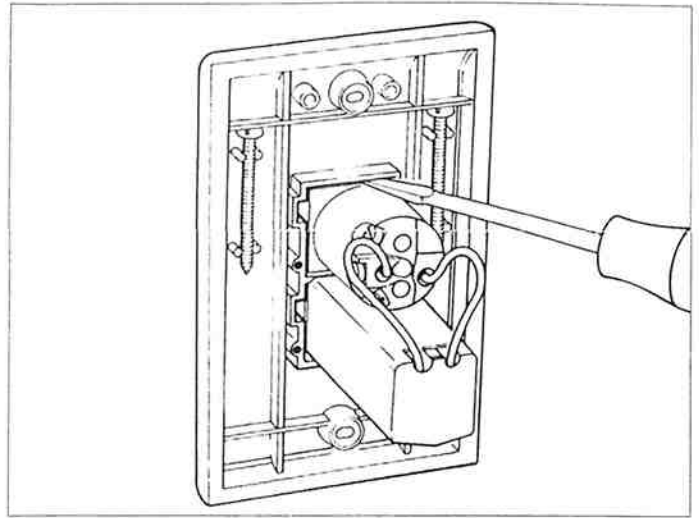


Fig 1. To remove switch and controller, lever up with screwdriver.

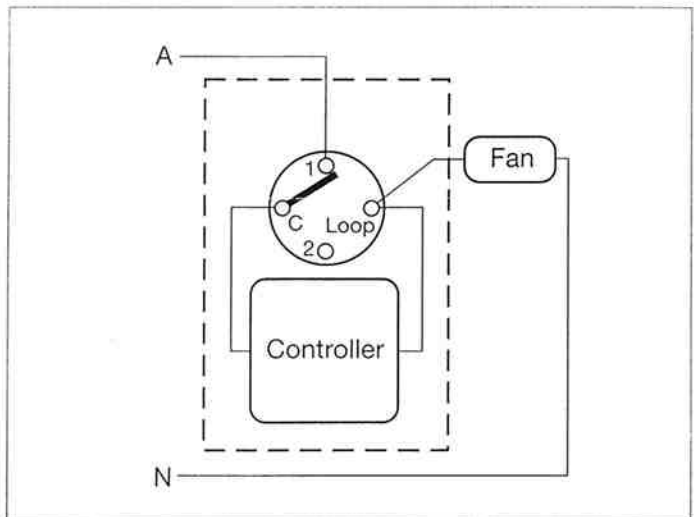


Fig 2. One-way wiring diagram.

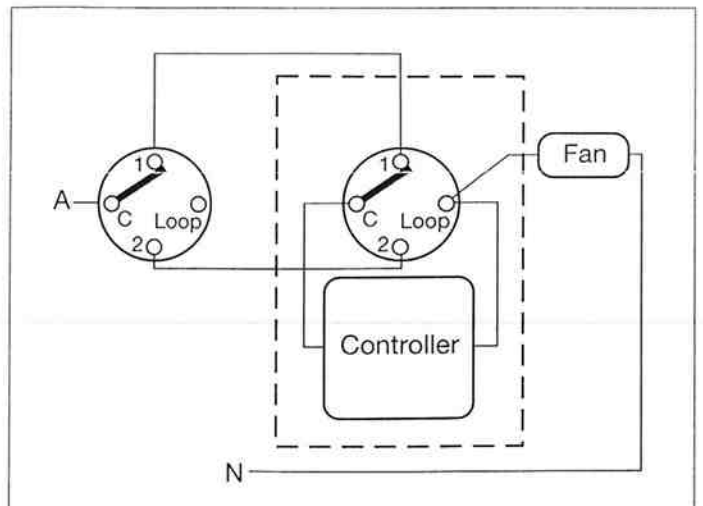


Fig 3. Two-way wiring diagram.

**Note:**

1. Fans may be connected in parallel but speeds may vary between fans. Select similar fans to minimise variation, and set minimum speed to ensure all fans will start at the minimum position.
2. Not suitable for fans with solenoid operated shutters or centrifugal switched start capacitors.
3. Suitable for two-speed fans by controlling the fast setting only. The low speed connection is not required.
4. Motors vary with different brands and some will exhibit hum at controlled speed. This is caused by lamination vibration and will not cause damage to the fan. Fans with tightly riveted and lacquered laminations and windings are less noisy.
5. Also suitable for use as a light dimmer, either independently or in parallel with a fan.
6. When installing more than one controller on the same plate, they must be derated as follows:

No. of controllers	Max load
2	200VA
3	150VA

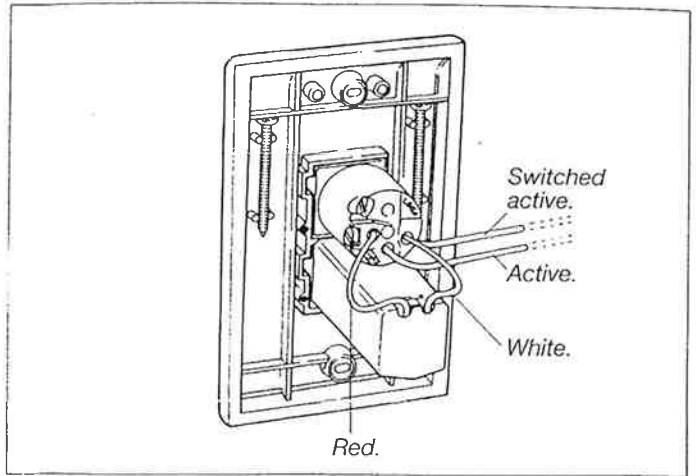


Fig 4. Wiring to switch and controller.

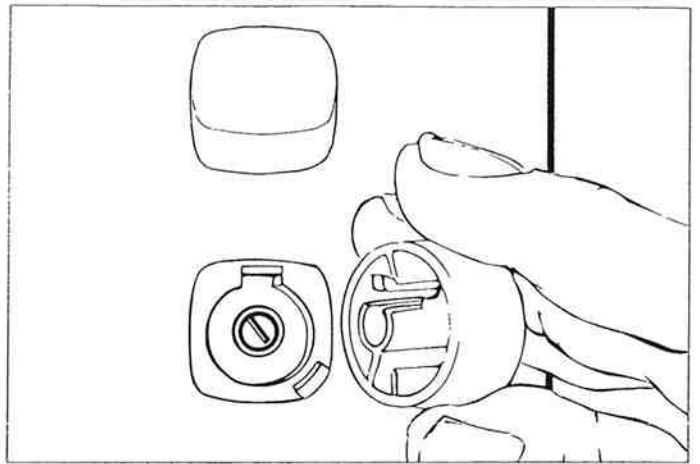


Fig 5. Setting minimum speed.

**Warranty**

HPM Cat 300F, XL300F and 300FM are warranted as here and after appears, against faulty material and/or workmanship for a period of one year from date of purchase.

The obligation of the manufacturer, under this warranty, is limited to servicing and replacing defective parts when the unit is returned to HPM Industries, or the distributors in your state, freight pre-paid.

This warranty becomes void on any unit which has been tampered with or damaged by accident, short circuited, loaded beyond rating or damaged otherwise by improper operation.

The warranty is also conditional on the unit being installed by a licensed electrical contractor.

All other warranties, whether expressed or implied, and whether arising by operation of law or otherwise are hereby excluded.

HPM Industries Pty Ltd.

**THIS PRODUCT SHOULD  
BE INSTALLED BY AN ELECTRICAL  
CONTRACTOR OR SIMILARLY  
QUALIFIED PERSON**



Manufactured in Australia by  
HPM Industries Pty. Ltd.

PATENT PENDING - REGISTERED DESIGN