

# INSTALLATION AND OPERATING INSTRUCTIONS FOR AUTO TRANSFORMER FAN SPEED CONTROLLERS ATC RANGE

## Specification

Model no.	Electrical Supply	Rating	Dimensions (H x W x D)	Mounting
Single Phase Auto Transformer Controllers				
ATC1-1.5	230v 1Ph 50Hz	1.5 Amps	190mm x 125mm x 90mm	Surface
ATC1-4	230v 1Ph 50Hz	4 Amps	315mm x 235mm x 130mm	Surface
ATC1-8	230v 1Ph 50Hz	8 Amps	315mm x 235mm x 130mm	Surface
ATC1-10	230v 1Ph 50Hz	10 Amps	315mm x 235mm x 130mm	Surface
ATC1-12	230v 1Ph 50Hz	12 Amps	315mm x 235mm x 130mm	Surface
ATC1-16	230v 1Ph 50Hz	16 Amps	400mm x 300mm x 200mm	Surface
Three Phase Auto Transformer Controllers				
ATC3-3	400v 3Ph 50Hz	3 Amps	300mm x 300mm x 150mm	Surface
ATC3-5	400v 3Ph 50Hz	5 Amps	300mm x 300mm x 150mm	Surface
ATC3-7	400v 3Ph 50Hz	7 Amps	400mm x 300mm x 150mm	Surface
ATC3-10	400v 3Ph 50Hz	10 Amps	400mm x 300mm x 200mm	Surface

## Installation

Check that the speed controller supplied is compatible with the fan motor.  
Install in a dry sheltered position. Do not install in close proximity to a heat source.  
Allow 150mm of free space around the controllers ventilation grilles for airflow.

All wiring must be carried out by a suitably qualified and competent person and comply with current applicable regulations.

PLEASE NOTE THAT ON THE 3 PHASE AUTO TRANSFORMERS THE OUTPUT TO THE FAN IS TAKEN FROM THE MCB WITHIN THE CONTROLLER I.E. THE ELECTRICAL SUPPLY IS WIRED INTO TERMINALS L1,L2,L3 AND THE FAN IS WIRED TO THE MCB.

## Operation

Single phase auto transformer controller ATC1-1.5

Switch the ON/OFF switch (on the side of the enclosure) to the ON position (so the switch is illuminated)  
The speed is set using the 5 position (4 speeds and off) rotary switch. 1= minimum speed, 4= maximum speed

ATC1-1.5 Trickle & boost operation

The ATC1-1.5 has the option of connecting a switch device e.g thermostat to terminals 1 & 2. When the switching device operates the fan will change from trickle speed (as set of rotary switch) to full speed.

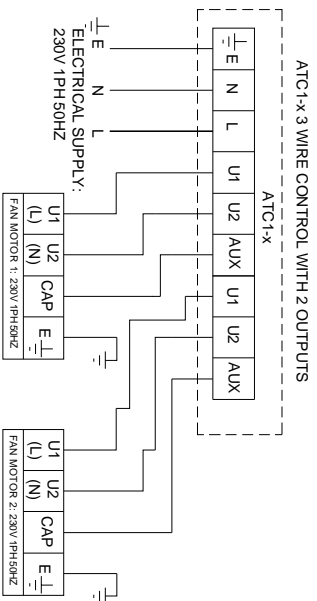
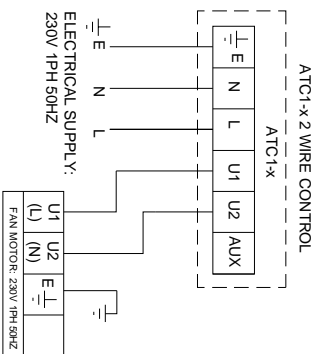
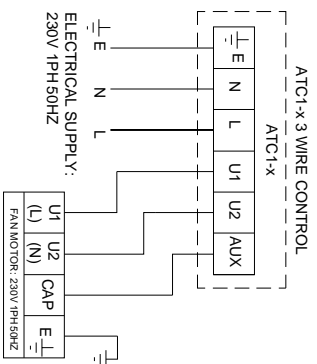
Single phase auto transformer controllers ATC1-4,8,10,12

Switch the ON/OFF switch to the ON position (I)  
The speed of the fan can now be set using the 5 position rotary switch. 1= minimum speed, 5= maximum speed

Three phase auto transformer controllers & ATC1-16

The speed is set using the 6 position combined on/off /speed setting switch. 0=Off, 1= minimum speed, 5= maximum speed

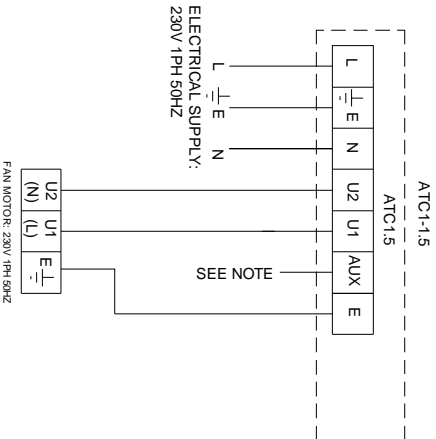
WIRING DIAGRAMS FOR ATC1 RANGE  
(CONTROLLERS FOR 230V 1PH 50HZ FAN MOTORS)



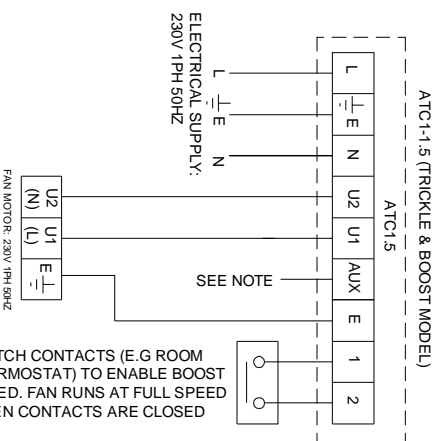
**NOTE**  
Connections from controller to fan motor  
U1: Controlled (variable) live out to fan motor  
U2: Neutral out to fan motor  
AUX: Maintained live (230V) to fan motor capacitor  
**IF IN DOUBT WHETHER FAN MOTOR IS TO BE WIRED FOR 2 OR 3 WIRE CONTROL CONSULT FAN MANUFACTURER**

If fan motor is 2 wire control omit connection between AUX and fan motor capacitor  
if in doubt seek fan manufacturers advice

WIRING DIAGRAMS FOR ATC3 RANGE  
(CONTROLLERS FOR 400V 3PH 50HZ FAN MOTORS)



NOTE: AUX CONNECTION (230V) CAN BE USED TO OPERATE AUXILIARY EQUIPMENT E.G DAMPER MOTOR.



SWITCH CONTACTS (E.G ROOM THERMOSTAT) TO ENABLE BOOST SPEED. FAN RUNS AT FULL SPEED WHEN CONTACTS ARE CLOSED

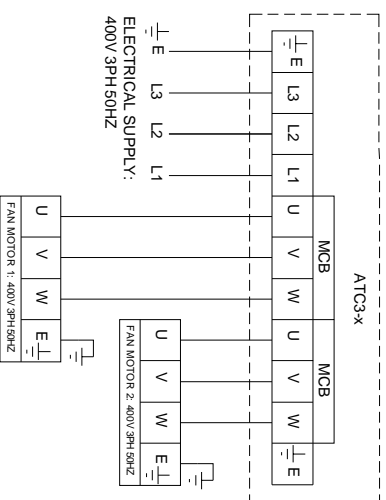
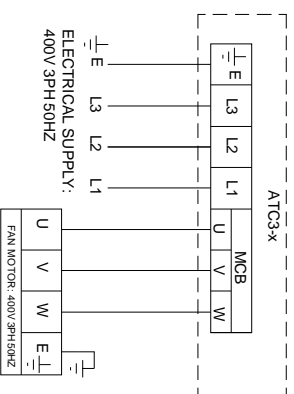
NOTE: AUX CONNECTION (230V) CAN BE USED TO OPERATE AUXILIARY EQUIPMENT E.G DAMPER MOTOR.

When using CADAMP PIR4 sensor to facilitate trickle to boost operation connect as follows:

Neutral on PIR4 to neutral

Live on PIR4 to terminal 1 (L)

Switched live on PIR4 to terminal 2 (LR)



ATC3-x WITH CONNECTIONS FOR 2 FAN MOTORS VIA INDIVIDUAL MCB'S

PLEASE NOTE THAT ON THE 3 PHASE AUTO TRANSFORMERS THE OUTPUT TO THE FAN IS TAKEN FROM THE MCB WITHIN THE CONTROLLER I.E. THE ELECTRICAL SUPPLY IS WIRED INTO TERMINALS L1,L2,L3 AND THE FAN IS WIRED TO THE MCB.