



INSTALLATION AND OPERATING INSTRUCTIONS FOR

6 Amp Manual Motor Speed Controller

Model 1PH-ACVR-6A – Single Phase

WARNING

Mains voltage is present. Care must be exercised when adjusting pre-set potentiometer. It is the responsibility of the user to ensure compliance with the Health and Safety at Work Act.

GENERAL

The controller utilises phase cutting techniques. Thus, by manual adjustment of the rotary control knob on the front of the controller, variable power may be applied to most permanent split capacitor, shaded pole and steinmetz motors.

Control is best achieved by propeller, axial, or centrifugal fan loads, when absorbed power at full load corresponds to at least 90% of the motor's capacity.

SPECIFICATIONS

Model	Run Current (Amps)	Maximum Start Current (Amps)	Fuse Size (Amps/Length)
1PH-ACVR-6A	6.0	18.0	10.0/32mm

The controller is designed for continuous operation at 6.0 Amp maximum load at 40° C ambient, on a single phase 230V, 50/60Hz supply.

MOTOR PROTECTION

Fuses in the unit are for protection of the controller. Should this current rating exceed that of the wiring of the fans, individual fan protection should be provided. If overload protection for each fan is to be used, then this should be situated in each common line (UZ) only.

INSTALLATION

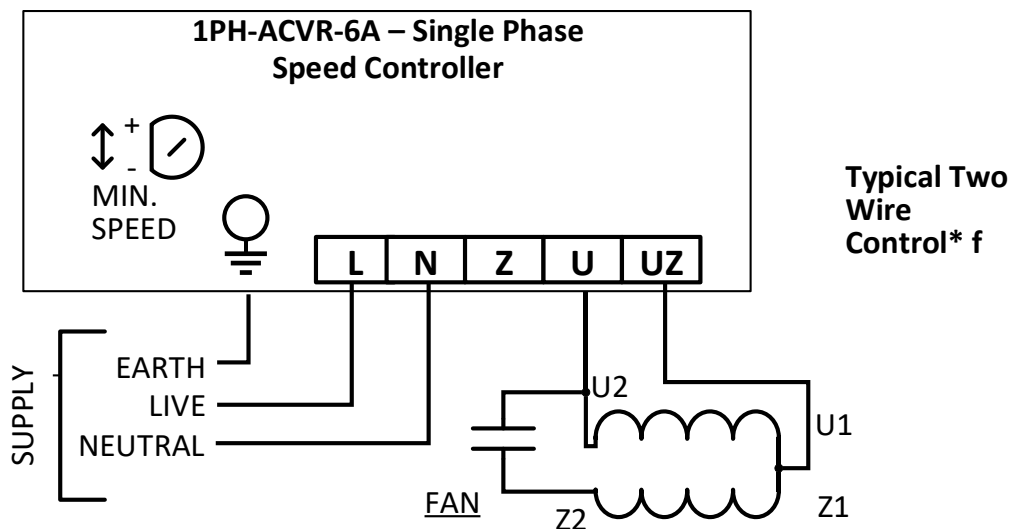
Install in a dry sheltered position. Leave an airspace of not less than 150 mm around the controller to allow cooling air to flow freely. Do not install in close proximity to other heat sources. The maximum ambient temperature must not exceed 40° C.

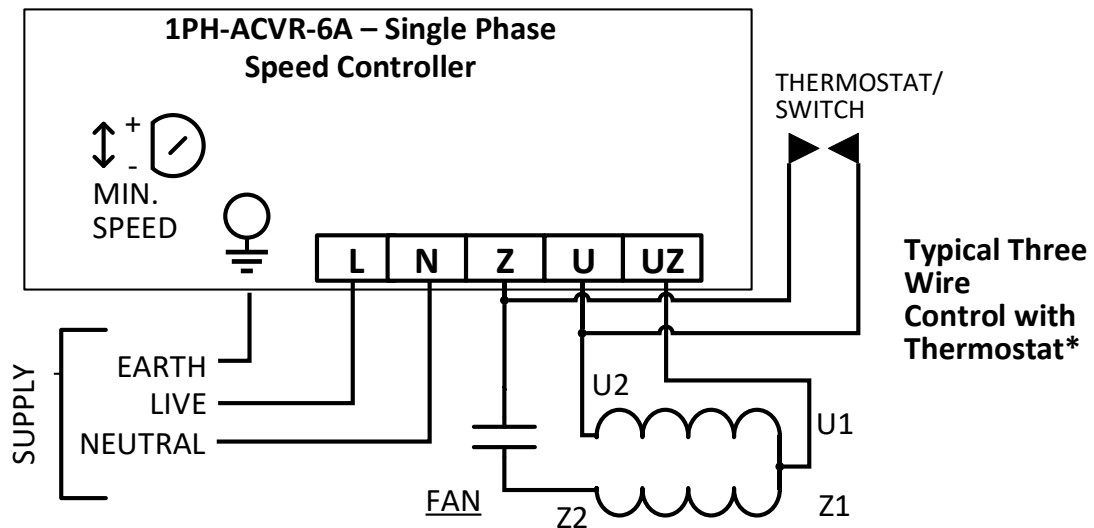
Removing the front cover fixing screws allows access to mounting holes and terminals. If more fans need to be controlled, a junction box can be used to parallel the various connections.

Controller terminal connections wiring to various manufacturers fans/motors:

Controller Terminal	Oxberg (Sold by eZone Trading Ltd)	Vent Axia	Woods	S&P	Elta SCP SCD	Elta SLC SMB SMC	Nuaire	EBM- Ziehl	Systema ir
EARTH	E	E	E	E	E	E	E	E	E
L: LIVE IN	L	L	L	L	L	L	L	L	L
N: NEUTRAL IN	N	N	N	N	N	N	N	N	N
Z: Neutral Out		U	P*	AUX	4	Z2		CAP.	
U: Variable Neutral Out (Control)	N	V	U	U1	5	U1	N	U2	N
UZ: Live Out	L	W	UZ	U2	6	U2	L	U1/Z 1	L

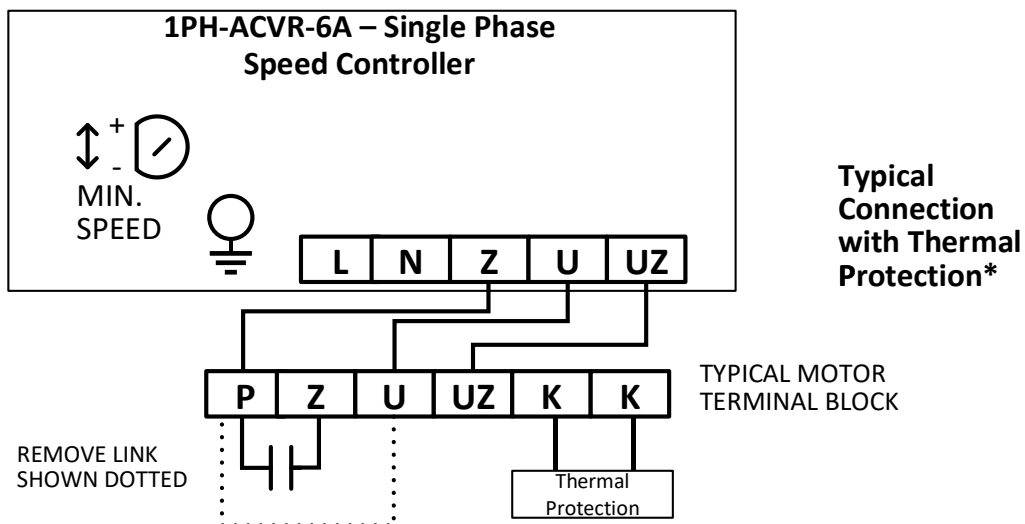
Remove link between P and U (if fitted)





An external thermostat or switch can be fitted to enable the fan to run at a pre-set speed adjusted by the controller and a maximum speed set by temperature of the thermostat or operation of the switch. Connect the thermostat or switch to the U and Z of the controller as shown in the circuit diagram.

Certain fans have inbuilt thermal protection labelled K.K (or TL.TK). If this facility is to be utilised then the wiring from controller UZ should only be connected to one of the thermal protection contacts, the other contact connected to the appropriate motor contact.



***Always consult the original fan/motor manufacturer before installation.**

CONTROLS

The controllers have separate ON/OFF switches. Rotating the control knob clockwise will increase the speed of the fan(s) from a pre-set minimum to full speed with infinitely variable control.

An internal mounted pre-set potentiometer sets the minimum speed of the fan(s). If this required adjustment, rotate the main control knob fully anti-clockwise and adjust the pre-set to required speed. Do not set this control too low since this will increase the risk of stall conditions.

EC DECLARATION OF CONFORMITY

Herewith we declare that the fan speed controller designated below, on the basis of its design and construction in the form brought into the market by us is, in accordance with the relevant EC Council Directives on Electromagnetic Compatibility. If alterations are made to the apparatus without prior consultations with us, this declaration becomes invalid. We further declare that the equipment identified below may be intended to be assembled with other equipment/machines to constitute machinery, which shall not put into service until the assembled machinery has been declared in conformity with the provisions of these relevant EC Council Directives.

DESIGNATION OF EQUIPMENT

eZone Trading Ltd Model: 1PH-ACVR-6A