X10870

Fan Speed Controllers

700W / 1.5kW Fan Speed Controller

Up to 6A, 110V, 230V, IP44 rated.
Variable Phase-Angle Regulator.



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KEY FEATURES:

- ✓ IP44 protection – suitable for outdoor environments
- ✓ Variable output control: 0–98% adjustment range
- ✓ Simple in-line installation using 3-core cables
- ✓ Supplied with IP44-rated 16A C-Form plugs and sockets
- ✓ Wall-mountable with 4 x M3.5 holes on 97x82mm centres

APPLICATIONS:

Ideal for use with:

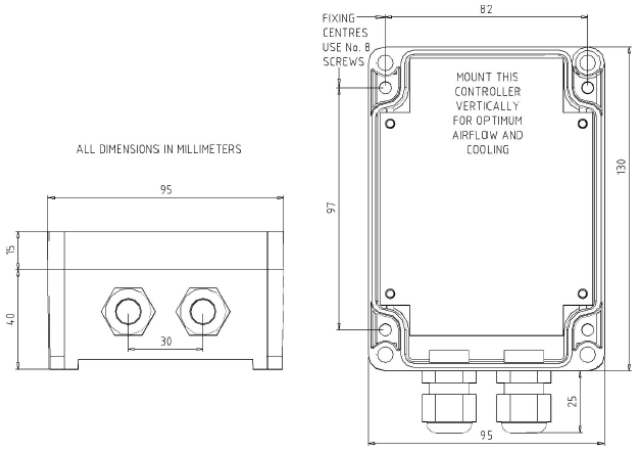
- ➢ **FP5005, FP5006, and FP5007** 110V and 230V/50Hz fan products
- ➢ General HVAC applications requiring motor speed control
- ➢ Industrial ventilation and pump control systems.

The **700W / 1.5kW Fan Speed Controller** is a robust and compact phase-angle regulator designed to provide fully adjustable voltage output for single-phase mains-driven inductive loads such as fans, pumps, and induction motors. Housed in an IP44-rated enclosure, it's suitable for both indoor and outdoor applications, offering efficient control for equipment running at 110V or 240V.

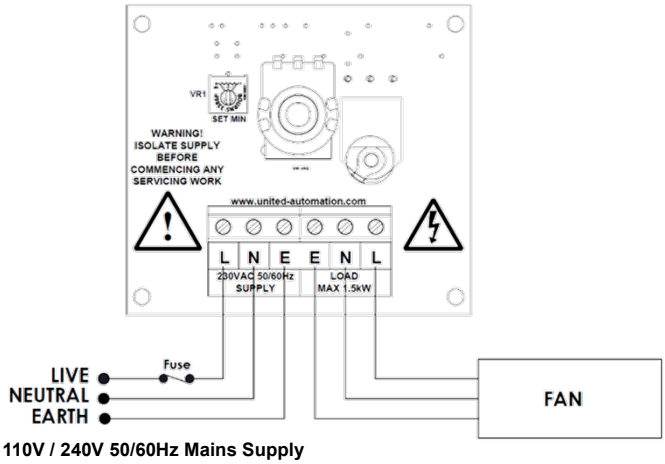
TECHNICAL SPECIFICATIONS

SKU	A72299	A72295
Supply Voltage	110V ±10%	240V ±10%
Load Rating (maximum)	Up to 700W @ 110V	Up to 1.5KW @ 240V
Maximum Load Current	6A	
Supply Frequency	50/60hz	
Output Levels	Fully Variable with *Switched Potentiometer*	
Recommended Fuse Rating	20 Amps max	
IP Rating (minimum)	IP44	
Operating Temperature	-20°C to 50°C	
Maximum Ambient Temperature	30°C	
Fixing Method (wall)	4 x M3.5 holes (on 97 x 82mm centres)	
Cable Rating (Supply & Load)	1.5mm² 300VAC (Minimum Rating)	
Terminal Capacity	2.5mm²	
Terminal Torque Settings	0.5 Nm max	
Terminations	Prewired with commando plug (Line + Load)	
Weight	950g	

INSTALLATION DIMENSIONS



WIRING DIAGRAM



110V / 240V 50/60Hz Mains Supply

INSTRUCTIONS

Mechanical Fixing

ISOLATE MAINS SUPPLY BEFORE COMMENCING ANY INSTALLATION WORK.

Warning: Do not drill any additional holes in the enclosure as this will jeopardise the IP rating of the controller and invalidate the warranty.

Avoid locating the controller in areas where it may be subject to falling water or direct sunlight.

YOU MUST READ THIS BEFORE INSTALLATION

ELECTRICAL SAFETY	INSTALLATION REQUIREMENTS	USER RESTRICTIONS	USAGE ENVIRONMENT	HOT SURFACE WARNING
WARNING: RISK OF ELECTRIC SHOCK Always consult the Installation & Maintenance Instructions before connecting this product to the power supply. **WARNING: Disconnect Power Before Servicing** Ensure the electrical supply is safely disconnected before connecting to any supply, load, or control terminals.	**WARNING: Installation by Qualified Personnel Only** This product must only be installed or fitted by a competent, qualified installer familiar with the relevant electrical standards and installation practices.	**WARNING: Not for Use by Vulnerable Individuals** This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or instructed by a person responsible for their safety.	**WARNING: Industrial Use Only** This is an industrial-grade product and is not intended for household use.	**WARNING: Hot Surfaces** On certain models, surfaces marked with this symbol become hot during use. Avoid direct contact and follow all thermal safety precautions.

700W / 1.5kW Fan Speed Controller

Up to 6A, 110V, 230V | **Variable Phase-Angle Regulator**

Ensure that a sufficient air-gap is maintained around the metal heatsink/plate at the rear of the controller to allow adequate cooling of the unit.

Fusing/Protection

It is recommended to use semiconductor (fast-acting) type fuses or circuit breakers (Semiconductor - MCB) for unit protection. On initial 'switch on' some loads may need an increased Factor of Safety (F of S) for unit and/or device protection.

Wiring

Do not use more than one single 3-core cable via each cable gland. Use a separate cable for the Supply connection and one for the Load. Loosen the cable-glands and ensure each has the internal sealing washer fitted, to maintain the IP rating of the enclosure. Strip back the outer insulation of the 3-core cable to approximately 40mm, making sure the individual cable insulation is not damaged in the process. Leave the Earth cable at approximately 40mm and cut the remaining two cables back to 30mm. Strip each individual cable end back about 6mm, and feed the whole cable through the correct cable gland connect the cables to the correct terminals as marked on the printed circuit board, making sure that the earth wire is at least 10mm longer than the other wires.

Tighten the cable-glands, making sure that the rubber seal is tightly gripping the outer insulation of the cables. The front cover should be replaced ensuring; the seal is seated properly in the groove on the lid.

Warning: Only attempt to alter the wiring if you are competent and qualified to do so.

Commissioning

With the cover securely fitted to the unit connect the speed controller to the mains supply and to the fan. Turn on the speed controller and increase the speed to maximum. Reduce the speed to the desired level. Should the fan overheat and cut out wait for the fan to cool and increase the speed on the fan to increase the airflow over the motor and to reduce the current drawn.

RECOMMENDATIONS

FUSING

It is recommended to use semiconductor (fast acting) type fuses or circuit breakers (Semiconductor - MCB) for unit protection. On initial 'switch on' some loads may need an increased Factor of Safety (F of S) for unit and/or device protection. (See the SRA Datasheet for further information).

DOCUMENTS

Other documents available on request, which may be appropriate for your application:

Code	Identity	Description
X10229	RFI	Filtering Recommendations: Addressing the EMC Directive
X10213	ITA	Interaction: Uses for phase angle and for burst fire control
X10255	SRA	Safety Requirements: Addressing the Low Voltage Directive (LVD) including Thermal Data/Cooling, Live Parts Warning, Earthing Requirements and Fusing Recommendations
P01.1	COS	UAL Conditions of Sale

It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding the safety of electrical equipment. For International standards refer STANDARDS on D of C.

Warning: This device operates at 'Mains Potential (Voltage)'. All installation work (if required) and servicing must be performed, with the power supply switched off at source.

CE MARKING:

This product carries a "CE marking". This type of phase angle controller requires a suitable remote filter. For information see recommendation section and contact our sales desk. (See the Declaration of Conformity).

PRODUCT CODE AND RELATED PRODUCT CODE

Product Code	Product Description
A72299-UA	Fan Speed Controller 700W 6A 110V
A72295-UA	Fan Speed Controller 1.5kW 6A 240V