## Variable AC Voltage Regulators | Stand Alone Power Controller

# **AVR - 25A**

25A, 110V / 230V Variable Phase Angle AC Regulator

### **CONTACT US:**

- © 0044 (0) 1704-516 501
- □ enquiries@united-automation.com
- www.united-automation.com





### **KEY FEATURES:**

- Integrated High-Speed Fuse: Provides immediate protection against overcurrent.
- **Built-In Heatsink: Ensures** efficient cooling and prolonged operation in high-temperature environments.
- High In-Rush Capability: Handles large current surges without compromising performance.
- Single-Entry Cable Gland: Simplifies wiring and installation.
- **Control Knob and Dial Supplied:** Allows for easy manual adjustment and precise control.

### **APPLICATIONS:**

Ideal for a diverse range of applications, including:

- Ovens
- Quartz lamps and heat lamps.
- Moulding machines.
- Drvers.
- Inductive loads such as transformers and motors.

This fully-variable, powerful, phase-angle regulator is a robust, compact, and enclosed unit designed for direct or transformer-coupled single-phase loads. Featuring a high-current TRIAC, integrated fuse terminals, and all main components mounted on an integral heatsink, this regulator ensures long life and reliable operation even in high ambient temperatures. The large TRIAC enables the unit to handle high in-rush currents with ample safety margin, making it ideal for industrial installations.

Ensure your industrial and commercial electrical systems operate smoothly with this reliable, high-performance phase-angle regulator. Perfect for a wide range of applications, this unit offers robust protection and easy manual control for optimal performance.

# **TECHNICAL SPECIFICATIONS**

CHINIOAL OF LOW TOATION	
Mains Voltage	110 or 230V AC ± 10% @ 50/60Hz
Min. load current	200mA
Max. rms current	25A
Man control	$220k\Omega$ potentiometer
Peak one cycle surge	250A
Heatsink	1.3°C/W
Max. operating temp	65°C
Replacement fuse	30A 660V SCR type
Isolation Classification	Class II
Isolation voltage	2500V rms
I 2 t for SCR fusing	250A <sup>2</sup> s
Off-state dv/dt	500V/µs
Storage temp.	-20°C to +85°C
Max. cable entry	2.5mm <sup>2</sup>
Min. level set	0-50% Via cermet

#### YOU MUST READ THIS BEFORE INSTALLATION



**ELECTRICAL SAFETY** 

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



INSTALLATION REQUIREMENTS

INSTALLATION REQUIRE
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.



USER RESTRICTIONS

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 by a person responsible for their safety.



USAGE ENVIRONMENT

WARNING: Industrial Use Only This is an industrial-grade product and is not intended for household



HOT SURFACE WARNING

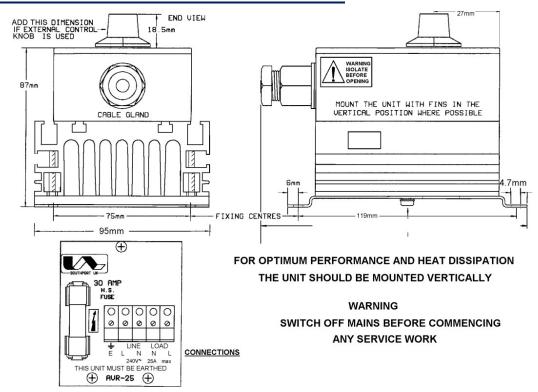
WARNING: Hot Surfaces On certain models, surfaces marked with this symbol become hot during use. Avoid direct contact and follow all



# AVR - 25A

25A, 110V / 230V Variable Phase Angle AC Regulator

# **INSTALLATION - DIMENSIONS & CONNECTIONS**



# **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 SRA datasheet for information.

### **DOCUMENTS**

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

Code	Identity	Description
X10229	RFI	Filter 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

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.

### **OPTIONAL EXTRAS**

<u></u>	
Product Code	Product Description
Z01062	Heatsink Compound Syringe (Must be applied while fitting)
A-EN2010-30-S*	30A 10 series EMI Single phase Chassis Mount filter
*Note: When ordering a filter, the current at which the AVR is to be used at will be required.	

### PRODUCT CODE AND RELATED PRODUCT CODE

Product Code	Product Description
A15101	25A 110V Phase Angle AC Regulator
A15201	25A 230V Phase Angle AC Regulator



BMF House - Wight Moss Way, Southport Business Park Southport PR8 4HQ ENGLAND, UNITED KINGDOM Contact Us:

① 0044 (0) 1704-516 501

⊠ enquiries@united-automation.com

www.united-automation.com





