X10461

Variable AC Voltage Regulators | Stand Alone Power Controller

PAC2

25A, 230V
Phase Angle Power Control Module

CONTACT US:
0044 (0) 1704-516 501
enquiries@united-automation.com
www.united-automation.com

KEY FEATURES:

- ✓ Solid-state reliability for long-lasting performance
- ✓ Surface-mount technology for compact design
- ✓ Wide supply range: 50 - 250V AC
- ✓ Rugged and compact construction
- ✓ 25A current capability with additional heatsink
- ✓ Internal snubber to eliminate nuisance switching

APPLICATIONS:

Ideal for a diverse range of applications, including:

- ➢ Ovens
- ➢ Commercial kitchens (e.g., Fish & Chips, Restaurants, Hospitality)
- ➢ Quartz and Heat Lamps
- ➢ Moulders
- ➢ Dryers
- ➢ Inductive loads, such as transformers and motors

The **PAC2 Phase Angle Firing Module** is a robust, high-power, full-wave AC phase angle controller, designed to deliver precise power regulation in a compact form factor. Capable of managing up to 6kW (25A) at 230V, this module controls the phase angle of the AC supply to modulate the power delivered to your load. With its low thermal impedance and high electrical isolation, the PAC2 offers exceptional flexibility for equipment designers across various applications.

Optimise your power regulation with the PAC2 Phase Angle Firing Module—reliable, versatile, and built to meet the demanding needs of modern industrial applications.

TECHNICAL SPECIFICATIONS

AC Line Voltage Range		**50 – 250V @ 50/60Hz**
Unit Limiting RMS Current		25A
Peak One-cycle Surge (10ms)		250A
Minimum Operating Current		50mA
Isolation Voltage		3.5kV RMS
Recommended Potentiometer		5kΩ
Storage Temperature		0 – 65°C
AC Aux Input Supply		10V AC ±2V @ 50mA
I^2t for Fusing		250A2 s
Max. Peak Voltage		600V AC
Leakage Current		5mA
Control Signal (3-way 0.1" header)		0-5V or 5V Aux O/P (for pot.)
Power Consumption		1.2W
Max. Operating Temperature		65°C
Weight		63g
Further Dimensions		
Dimensions		57mm (D) x 44mm (W) x 28mm(H)
Fixing Centre's		48mm pitch with 2@ 4.5mm Ø (M4 clearance) holes
Connections	AC AUX Input Supply Terminals	(2x) M3 x 10mm pozi set screws (for use with spade or eyelet crimp connectors)
	AC Line Voltage Terminals	(2x) M5 x 10mm pozi set screws (for use with spade or eyelet crimp connectors)

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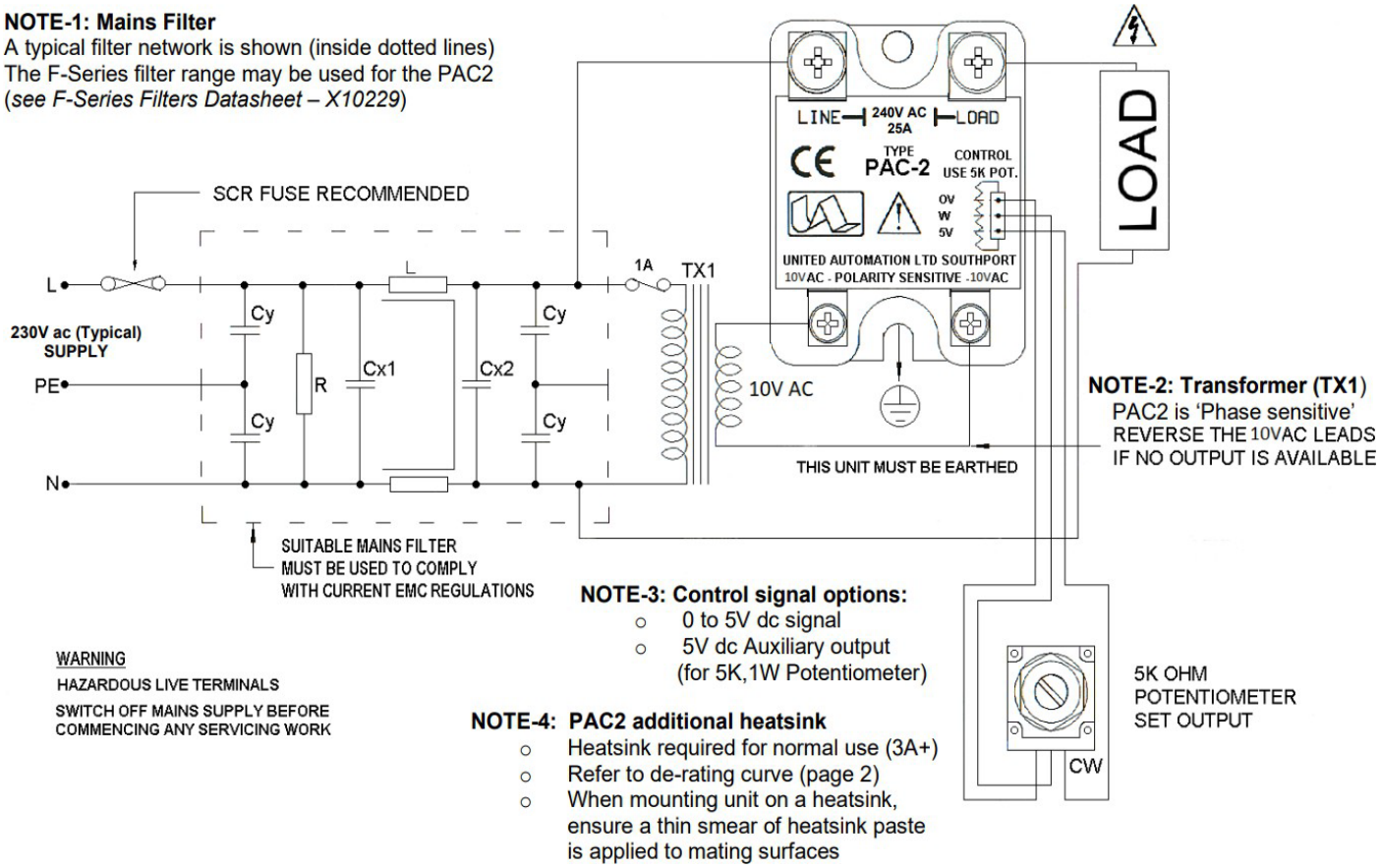
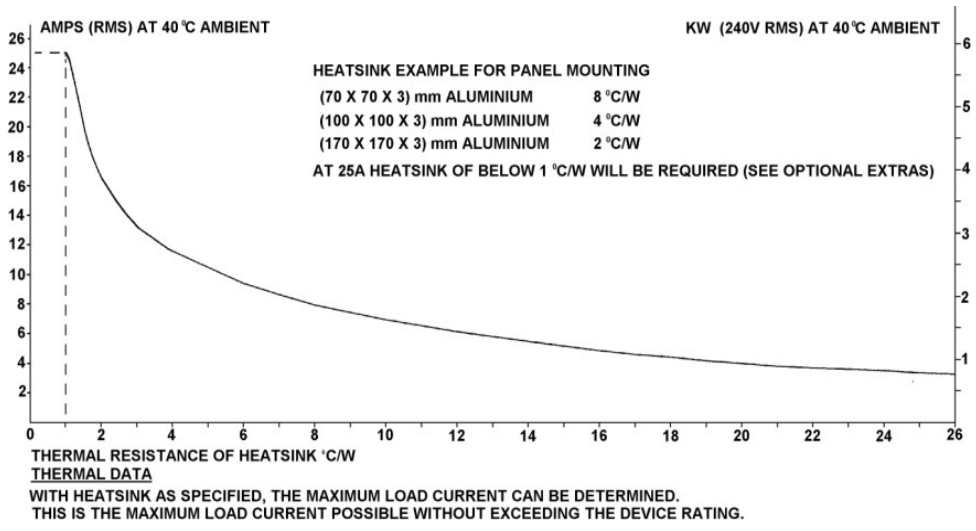
INSTALLATION

DIMENSIONS & CONNECTIONS



De-rating Curve (to determine the heatsink requirements)

Stainless Steel is typically 15 times less thermally conductive and mild steel is typically 5 times less thermally conductive.



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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

Product Code	Product Description
A403001	Manual (5K) Potentiometer Knob and Leads
Z01062	Heatsink Compound Syringe (Must be applied while fitting)
A15217	KA100 Din Rail mount Heatsink up to 25A with thermal paste
A80030	SSR Cover Kit
Available on request*	EMI Filter

*When ordering a filter match the current rating to the load size. Note: The filter must always be rated above the load rating.

PRODUCT CODE AND RELATED PRODUCT CODE

Product Code	Product Description
A72210	PAC2, 25A, 230V High Power Phase Angle AC Regulators

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

Contact Us:
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enquiries@united-automation.com
www.united-automation.com

unitedautomationltd UA_Limited