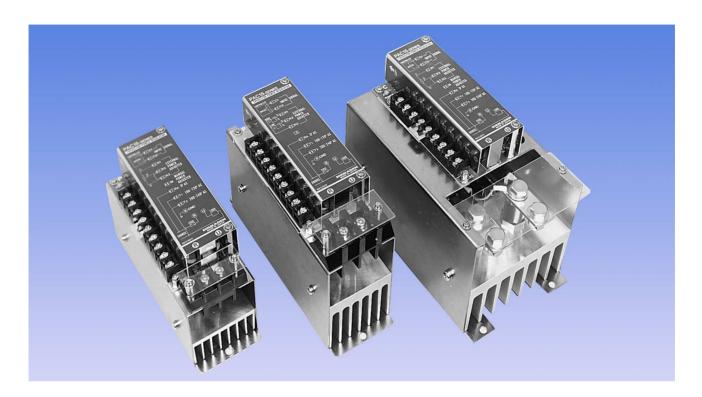
°C %RH

SHIMADE

SERIES PAC15

SINGLE PHASE POWER REGULATOR



BASIC FEATURES

☐ Phase Angle or Zero Voltage Switching

☐ Current Capacity: 20~100 Amperes

☐ Power Supply: 100~120 / 200~240V AC

SPECIFICATIONS

Control Mode: Phase angle (PAC15P)

Zero voltage switching (PAC15C)
Possible Loads:
All resistance loads (PAC15P)
Constant resistance loads (PAC15C)

Power Supply Cycle: 50/60Hz. (internally selectable-PAC15P)

50/60Hz. common (PAC15C)

Output Voltage Control Range: 0~95% min. 50/60Hz. of inut voltage (PAC15P)

0~95% min. of load power (PAC15C)

Power Lamp: Green LED lamp (PAC15P)

Output Indication: Green LED lamp (when load 'ON'-PAC15C)

Current Capacity: 20, 30, 45, 60, 80 and 100 Amps. Power Supply: 100~120V/200~240V AC ± 10%

Control Input: Current = 4~20mA DC (Receiving impedance: 100 ohms)

Contact = Zero voltage contact

Power Adjuster: Current input = Internal installation as standard (External installation as option)

Contact input = External installation as standard Only current input type is available - optional

Auto/Manual Power Adjuster: Only curre Thyristor Element Cooling: Natural air

Over-Current Protection: None available (Use a fuse for semiconductor)
Minimum Load: 10% min. of current capacity (no operation at no load)

Operating Ambient
Temperature and Humidity: -10~50°C, 90%RH maximum

Insulation Resistance: 500V DC 20M ohms between power supply terminals and chassis

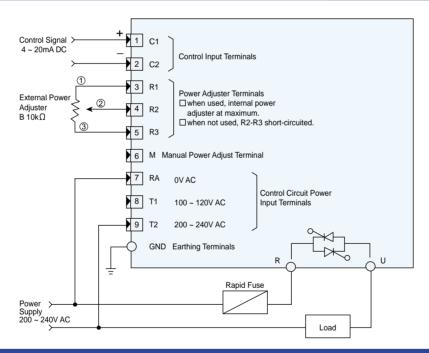
500V DC 20M ohms between power supply terminals and input terminals

Dielectric Strength: 1 min. at 2000V AC between power supply terminals and chassis

Dimensions and Weight: See page 4.

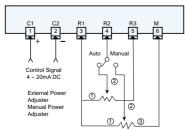
ITEMS		CODE					SPECIFICATIONS					
SERIES	P					Phase Angle Single Phase Power Regulator						
SERIES	PAC15C						Cycle Base Zero Voltage Switching Single Phase Power Regulator					
0					4~20mA DC, Receiving impedance: 100Ω							
CONTROL INPUT		2					Non-voltage contact					
9							Others (Please consult before ordering.)					
020 030 045 060 080					20A							
						30A						
						45A						
			060	60			60A					
			080	080			80A					
100							100A					
DOWED 9	BOWED CLIPPLY					100~120V / 200~240V AC ±10%, 50 / 60Hz						
POWER SUPPLY 99-					Others (Please consult before ordering.)							
l N			N		None (Internal installation as standard)							
				Р		External power adjuster						
EXTERNAL POWER ADJUSTER W Y P B					М		Manual power adjuster	Current				
					В		Base power adjuster inp					
				TER	W		External power adjuster + manual power adjuster					
					Υ		External power adjuster + base power adjuster					
					Р		High power adjuster (standard) Contact					
					В		High power adjuster (standard) + Low power adjuster input					
X					Χ		Others (Please consult before ordering.)					
REMARKS 0						0	Without					
KLIMAKKS				9	With (Please consult before ordering.)							

TERMINALS & WIRING (CURRENT INPUT TYPE)



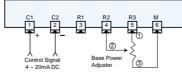
POWER ADJUSTER CONNECTIONS (CURRENT INPUT TYPE)

Auto / Manual Selectable



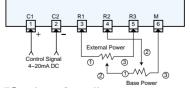
☐ Internal power adjuster = maximum

Base Power Control



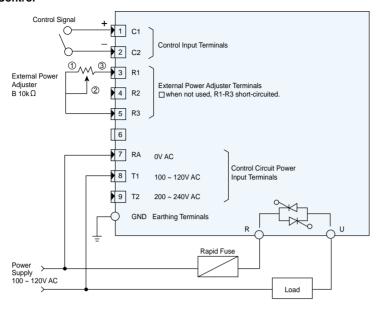
Power adjustment can be done with Internal power adjuster.

External Power Adjust / Base Power Adjust

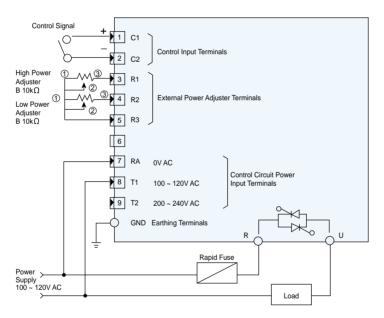


■ External power adjuster and base power adjuster correspond with each other.
■ Internal power adjuster = at maximum

1. Normal Control



2. High/Low Control



$\hfill \square$ Output when high power adjust/contact (C1-C2=ON) 0~100% power output control available by high power adjuster. Output when low power adjust/contact=OPEN

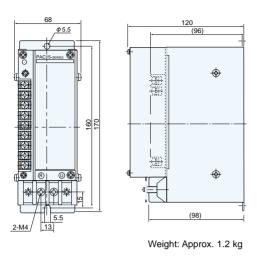
- Low Power Output=
 High Power Value+Low Power Value-100% (When output of low power is (-), low power output is zero.)

CONTROL MODES & WAVE FORM

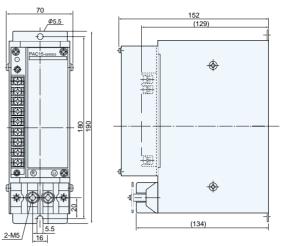
Item	Noise	Moving Coil Deflection		Heating Ele-		Output Wave Form						
Control Mode	inoise			ment Capa	acity	10% Output		50% Output		90% Output		
Phase Angle Control (P)	Little	Continuous		Very Small						*		
Zero-voltage Switching Control (C)		Low Output/ Large Deflection Mid ~ High Output/Almost Continuous		Small		1 cycle ON and 9 cycle OFF		1 cycle ON and 1 cycle OFF continuously		9 cycle ON and 1 cycle OFF		
PAC15 Series Total Heating Value Recommended mounting †												
Capacity		0 A 30 A	45 A	60 A	80 A	100 A 100 W		100mm minimum				
Heating Value 2		4 W 36 W	48 V	W 60 W	84W							
*Care must be tak *Vertical mounting When mounting h	is reco	ommended.		f the curre	nt cap	acity.			100mm	minimum		

→ ← 30mm minimum

□ 20A & 30A Types

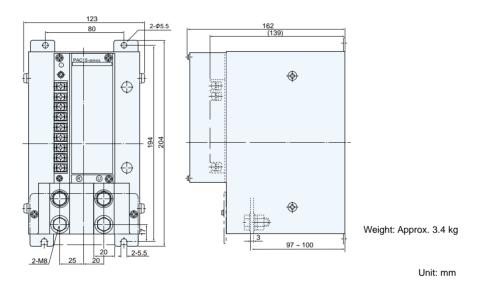


□ 45A & 60A Types



Weight: Approx. 2.0 kg

□ 80A & 100A Types



⚠ Warning

• The PAC15 series is designed for controlling the power of a heater or similar equipment used in a general industrial facilities. (It is not to be used for any purpose which regulates the prevention of serious effects on human life or safety.)

Caution

• If the possibility of loss or damage to your system or property as a result of failure of any part of the process exists, proper safety measures must be made before the instrument is put into use so as to prevent the occurrence of trouble.



ISO 9001

(The contents of this brochure are subject to change without notice.)

Temperature and Humidity Control Specialists

SHIMADEN CO., LTD.

Head Office: 2-30-10 Kitamachi, Nerima-Ku, Tokyo 179-0081 Japan Phone: +81-3-3931-7891 Fax: +81-3-3931-3089 E-MAIL: exp-dept@shimaden.co.jp URL: http://www.shimaden.co.jp