°C %RH shimaden

# Series PAC03B PAC03B SERIES SOLID STATE RELAY



# PRODUCT FEATURE

- DIN rail mountable (Mounting Plate : Option)
- Current Capacity: 10A / 20A / 40A
- Terminal Cover for greater safety
- LED indicator turns on when control
- Internal Barister absorbs external surge current
- Separate heat sink available (Option) for maximum performance
- RoHS Compliance

#### **SPECIFICATIONS**

■ Power Supply : 100 to 240V 50 / 60Hz ■ Operational Load Voltage Range : 35 to 264V 50 / 60Hz

■ Current Capacity : 10A, 20A, 40A (With Heat Sink, Ambient Temperature below 40°C)

**■** Control Input

Control Voltage : 3.5 to 30V DC
Off Voltage : 1.0V DC max
Input Current : 10mA max

■ Control Element: : Triac

■ Control Mode: : Zero voltage switching

■ Output Characteristics:

Leakage Current (when output 'OFF') : 12mA max (Power Apply=200V AC)

Voltage Drop (when output 'ON'): : 1.5V max (Operational Ambient Temperature=25°C)

Minimum Load Current : 1.0Arms (Ampere root mean square)

■ Output Protection : Internal Barister (430V)

■ Operational Lamp : Red LED lamp

■ Applicable standard : UL-C / US (File No. E195882)

: RoHS Compliance

■ Operating environment conditions

Temperature : -20 to 80°C

Humidity : 90% RH max. (no dew condensation)
Elevation : 2000 m above sea level or lower

Pollution class : 2 (IEC 60664)

■ Insulation Resistance : Between input/output terminals and housing case 500V DC 100 MΩ min
■ Dielectric strength : Between input/output terminals and housing case 3000V AC 1 minute

■ Storage temperature : -30 to 100°C

■ Weight : Without heat sink With heat sink

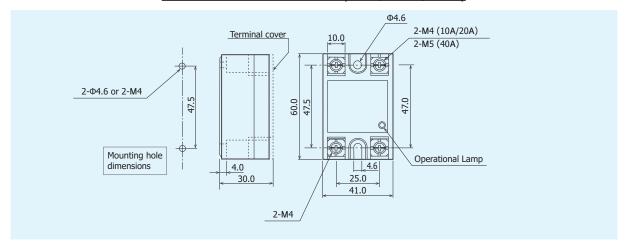
65g (10A/20A) Approx. 260g (10A/20A) 95g (40A) Approx. 390g (40A)

# ORDERING INFORMATION

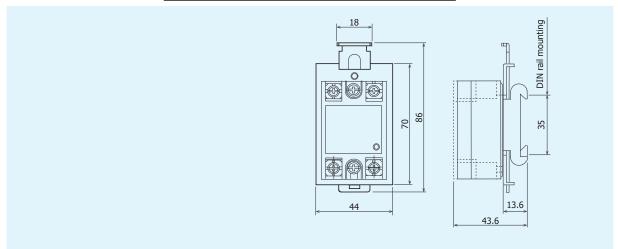
ITEM	CODE				SPECIFICATIONS	
SERIES	PAC03B-	Zero Voltage Switching Control, Solid State Relay				
CURRENT CAPACITY		010- 10A				
		020- 20A				
		040-	040- 40A			
0			0	None		
Heat Sink or 1			1	With heat sink (10A/20A)		
DIN rail mounting plate 2			2	With heat sink (40A)		
3			3	DIN	DIN rail mounting plate	
REMARKS				0	Without	
				9	With (Please consult before ordering.)	

# **EXTERNAL DIMENSIONS**

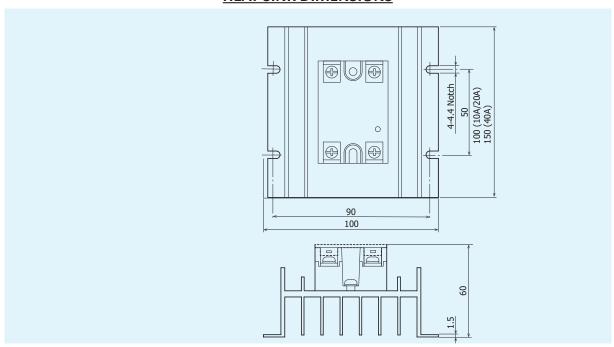
# MAIN UNIT DIMENSIONS (10A / 20A / 40A)



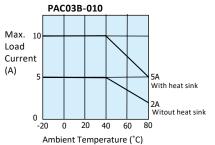
# **DIN RAIL MOUNTING PLATE DIMENSIONS**

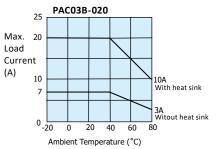


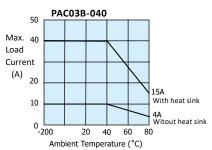
### **HEAT SINK DIMENSIONS**



# **AMBIENT TEMPERATURE & LOAD CURRENT CHARACTERISTIC**







Be sure to provide enough ventilation to prevent the temperature increase.

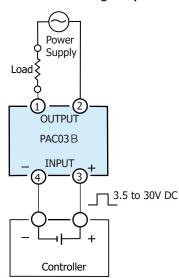
Heat generated by PAC03B is lead from following equation:

Heat Value (W) = 1.5 (V) x Load Current (A)

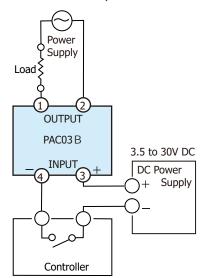
- \* Voltage Drop (when output 'ON'): 1.5V max
- \* Vertical mounting is recommended.

### **WIRING EXAMPLE**

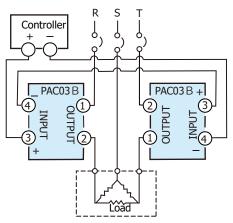
1. In case of with controller with SSR drive voltage output



2. In case of with controller with contact output



3. Three phase circuit Control of Delta or Star circuit with 2 units of PAC03B



In case of with Shimaden "SR" Series controller, please configure it in series shown as above

Warning

\* The PAC03B Series is designed for the control of temperature, humidity and other physical values of general industrial equipment. It is not be used for any purpose which regulates the prevention of the serious effect on human life or safety.



\* 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.

Head Office & Saitama Factory
ISO 9001/ISO 14001 Certification Obtained

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

**Temperature and Humidity Control Specialists** 

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