

Potter & Brumfield Potter & Brumfield OAC-5 3A 240VAC 3.8VDC current A 3

## **OAC Series**

# AC Output Modules

cNus File E29244

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

#### Features

- .6" (15.2mm) thick package.
- 4000V rms optical isolation.
- High immunity to false operation.
- Series compatible.
- Output modules can be controlled from sinking or sourcing logic.
- Compatible with 2IOM series mounting boards.

#### **Engineering Data**

Switch Form: 1 Form A (SPST-NO) Duty: Continuous. Operating Temperature: -30°C to +80°C. Storage Temperature: -30°C to +100°C. Potting Compound Flammability: UL94V-0. Solderability: 260°C for 5 seconds, maximum. Approximate Weight: 1.38 oz. (35g).

Ordering Information				
	Typical Part Number >	OAC	-5	Α
1. Basic Series: OAC = AC output module — black case		-		
<b>2. Input Voltage:</b> 5 = 5VDC 15 = 15VDC 24 = 24VDC				
<b>3. Output:</b> Blank = 3A, 12-120VAC, zero voltage turn-on output $A = 3A$ , 24-280VAC, zero voltage turn-on output $H = 5A$ , 24-280VAC, zero voltage turn-on output $R = 24$ -280VAC, Random Turn-On				

#### Our authorized distributors are more likely to maintain the following items in stock for immediate delivery.

OAC-5 OAC-5H OAC-24 OAC-5A OAC-15 OAC-24A

### **Input Specifications**

Parameter	Conditions	Units	OAC-5 OAC-5A OAC-5H OAC-5R			OAC-15 OAC-15A OAC-15H OAC-15R			OAC-24 OAC-24A OAC-24H OAC-24R		
			Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.
Control Voltage Range VIN		VDC	3	5	8	9	15	18	18	24	32
Must Operate Voltage VIN(OP) (Min.)		VDC			3			9			18
Must release Voltage VIN(REL) (Min.)		VDC	1			1			1		
Input Current	@ViN=Nominal	mADC		2 - 10			6 - 12	)		4 - 12	
Input Resistance RIN		Ohms				Curr	ent Regi	ulator			

PIN-3 must be positive with respect to PIN-4 for correct operation.

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Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at <a href="http://relays.te.com/definitions">http://relays.te.com/definitions</a>

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change.



## **OAC Series** (Continued)

# **AC Output Modules**

### Output Specifications (47 to 63 Hz.,@+25°C unless otherwise specified)

Parameter	Conditions	Units		OAC-5 OAC-15 OAC-24			OAC-5A OAC-15/ OAC-24/	-		0AC-5H 0AC-15H 0AC-24H			OAC-5R OAC-15R OAC-24R	
			Min.	Тур.	Max	Min.	Тур.	Max	Min.	Тур.	Max.	Min.	Тур.	Max.
Load Voltage VL		V rms	12		120	24		280	24		280	24		280
Repetitive Blocking Voltage		V peak			400			600			600			600
Load Current I∟*		A rms	.05		3	.05		3	.05		5	.05		5
Single Cycle Surge Current		A peak		208			208			300			300	
Leakage Current (Off-State)	VL=280VAC	mA rms			5			5			5			5
On-State Voltage Drop	I∟=Max.	V rms			1.8			1.8			1.6			1.6
Static dv / dt (Off-State)		V/µs		475			475			300			300	
Turn-On Time		ms		8.3 / 10			8.3 / 10	1		8.3 / 10			0.1	
Turn-Off Time	@f=60/50 Hz.	ms		8.3 / 10			8.3 / 10	1		.3 / 10			8.3	
HP / Rating	@ 240VAC	HP		1/4			1/4			1/2			1/2	

5 Amps DEVICE

coolin

70 80

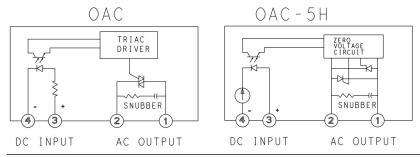
th Force CFM FAN

10 20 30 40 50 60

AMBIENT TEMPERATURE (°C)

\* See Derating curve

### **OAC Operating Diagram**



CURRENT (Amps)

LOAD

5.0 4.0

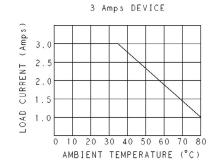
3.0

2.0

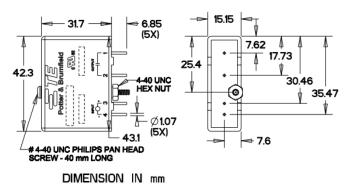
1.0

0

### **OAC Derating Diagram**



**Outline Dimensions** 



Note : Extra nut and washer will be provided on the screw, which will goes under PCB to fix the relay. Hex Nut S= 6.35 (width across flats), Thickness = 2.40; Washer = OD :  $\Phi$ 485±0.25, ID :  $\Phi$ 2.75±0.15, Thickness : 0.55

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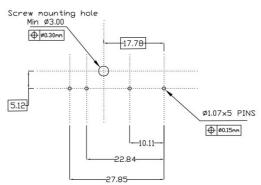
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# OAC Series (Continued)

### PCB Layout



Product Code	Part Number
OAC-5	6-1393028-9
OAC-15	2-1393028-3
OAC-24	2-1393028-4
OAC-5A	2-1393028-8
OAC-15A	6-1393028-7
OAC-24A	2-1393028-5
OAC-5H	2-1393028-9
OAC-5R	2319263-2

### To view the Solid-State relay application notes click here

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