



**DIN Rail Mounting
Four Solid State Relay Channels
Each Channel Individually Isolated
Can Use AC & DC Solid State Relays**

OAC Mounting Base Details

The OAC 4 is a 4 channel solid state relay mounting base.

- Can be fitted with up to 4 solid state relays (see below).
- Connection by 2 part screw terminals (aiding replacement and testing).
- DIN rail mounting (can be mounted on all standard DIN rail profiles)
- Dimensions: 58.5mm x 98.5mm x 86.9mm.
- All channels individually isolated from each other.
- AC and DC type relay modules can be mixed on one mounting base

Please Note: Relays are not included with the module but are available separately (see below).

Order Code: OAC4



**Plug in solid state relay
module (by Grayhill)**

Solid State Relay Module Brief Details

There are two types of solid state relay available. These offer 4000Vac isolation and are single pole single throw (SPST) normally open types.

The nominal logic (switching) voltage is 24Vdc.

- The AC type solid state relay is rated at 24 to 240Vac, 0.03 to 3.5 Amp (rms) and offers zero crossing turn on. (This type has a black coloured case).
- The DC type solid state relay is rated at 3 to 60Vdc, 0.02 to 3.5 Amp. (This type has a red coloured case).
- UL Recognition and CSA certification
- Green Status LED - illuminated when relay switched on
- Fused Output (replaceable, 5A 20 x 5mm, Littlefuse p/n 217005 or equivalent)
- Transient protection: meets the requirements of IEEE 472, "Surge withstanding Capability Test"

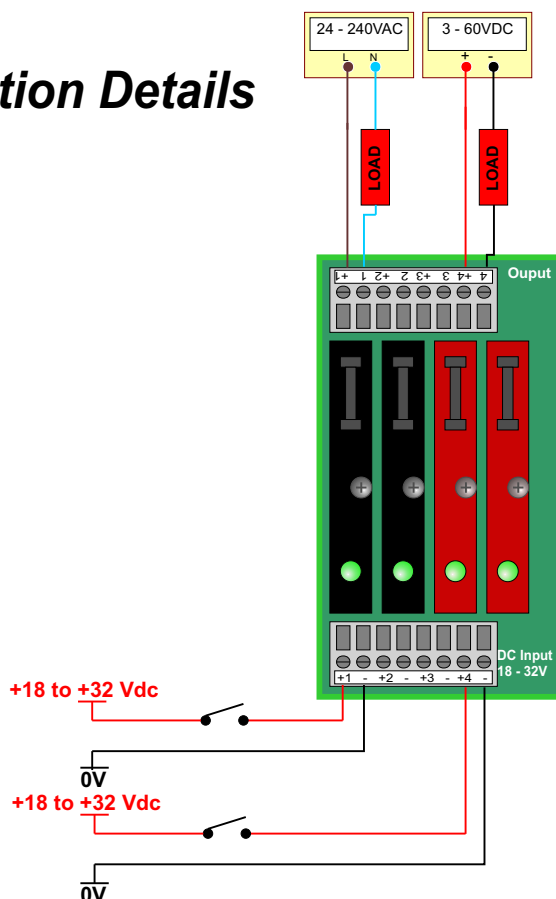
Order Codes: 70G-OAC24A (AC version) or 70G-ODC24B (DC version).



Solid State Relays Specifications

Specification	Units	70G-OAC24A (AC type)	70G-ODC24B (DC type)
Nominal Line Voltage	Vac	240	N/A
Maximum Line Voltage	Vdc	N/A	60
Load Voltage Range	Volts	24-280Vac	3-60Vdc
Min peak blocking voltage	Volts	600	N/A
Clamping Voltage	Vdc	N/A	80 max.
Maximum Off-state leakage	mA	4mA, rms @ 60Hz	0.01mA @ 60Vdc
Max Turn-on time		8.3 mSec @ 60Hz	75 μSec
Max Turn-off time		8.3 mSec @ 60Hz	500 μSec
On State Voltage Drop	Volts	1.5 V max. (peak)	1.2V max.
Max Surge current	A	80 A (peak) @ 60Hz for 1 cycle, 25 A (peak) @ 60Hz for 60 cycles	5 A max. for 1 second
Power dissipation		1 Watt / Amp typical	1 Watt / Amp typical
Thermal Resistance (R _{JA})		25°C / Watt	20°C / Watt
Frequency Range	Hz	25 to 70	N/A
Transient Power Dissipation	Watts	N/A	400W at 1mS non-recurring
Insulation Resistance (Input to Output; Input or Output to Case)		10 ¹⁰ Ohms	10 ¹⁰ Ohms
Dielectric Strength Input to Output	V	4000Vac (rms) minimum	4000Vac (rms) minimum
Nominal Logic Voltage (Vcc)			
Logic Voltage Range	Vdc	24	24
Max logic supply current at	Vdc	18 -32	18 - 32
Nominal Vcc	mA	8	9
Nominal Input Resistance			
Minimum Drop Out Voltage		2.7K	2.7K
Maximum Reverse Logic Voltage	Vdc	1	1
	Vdc	-5	-5

Connection Details



Shown in this diagram are connections for the module. Note that two of the solid state relays are AC types and two are DC types

Connections and Packaging

Signals and power are connected via LMI Pluggable PCB Male and female connectors allowing side entry of connection wires. Suitable for wire sizes 0.2-2.5mm, 22-14 AWG. Connection type rising clamp. Maximum recommended tightening Torque is 0.4mN.

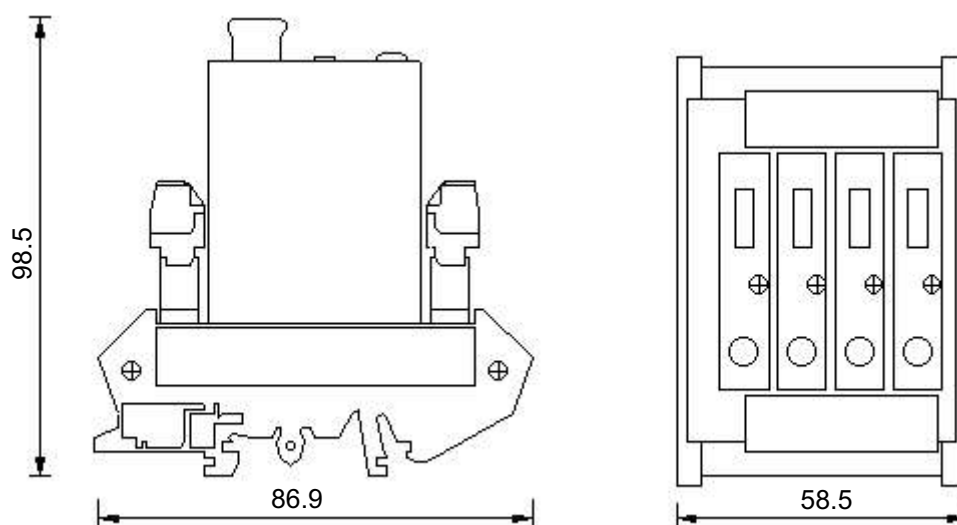
Each Solid state output module plugs into PCB mounted sockets and is secured to the board with the modules integral fixing screw.

Logic Signals to switch the AC modules are supplied to the appropriate input connections labeled +1 -, +2 -, +3 -, or +4 -. These connections are on the side nearest to the module LEDs.

Each output is equivalent to a Normally open contact and the connections are marked +1 1, For the first output, +2 2, +3 3, +4 4, etc. These connections are on the side nearest to the module Fuse. For each channel the output load is connected as per the example. If using the DC type relay then ensure that the load supply being switched is connected the correct way around. If using the AC type relay then the load supply can be connected either way around. The load being switched can be in either the neutral line or negative line of the load supply (depending on whether you are using AC or DC supply).

Dimensions

The overall size is 60mm wide, 96mm high and 90mm deep. The unit can be mounted on all standard DIN rail profiles. The weight is approximately 290g when fitted with a full compliment of AC output modules.





Data Sheet Issue: 2.10
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Order Codes

<u>Part Number</u>	<u>Description</u>
OAC4	4 Channel relay module mounting base
70G-OAC24A	Solid state relay (AC type)
70G-ODC24B	Solid state relay (DC type)

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