#### Gross Automation (877) 268-3700 · www.carlogavazzisales.com · sales@grossautomation.com

# **Solid State Relays** PCB, 1-Phase DCS Type RP1D

#### • DC Solid State Relay for PCB mounting

- Rated operational current: Up to 8 ADC
- Rated operational voltage: Up to 350 VDC
- Surface mount technology
- Flexible encapsulation for extended life
- Control voltage: 4.25 to 32 VDC

Insulation (Input - Output): 4000 VACrms

### **Product Description**

The DC switching relay for PCB mounting is used in applications where there is a need for fast switching of small DC loads with a high input/output insulation of

more than 4000 VACrms. The DC switching relay always switches on and off in accordance with the applied control voltage.

Ordering Key	RP 1 D 060 D 8
Solid State Relay (PCB) — Number of poles —	
Switching mode ————————————————————————————————————	
Control voltage — — — — — — — — — — — — — — — — — — —	

### **Type Selection**

Switching mode	Rated operational voltage	Control voltage	Rated operational current
D: DC switching	060: 60 VDC 350: 350 VDC	D: 4.25 to 32 VDC	1: 1 ADC 4: 4 ADC 8: 8 ADC
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#### Selection Guide

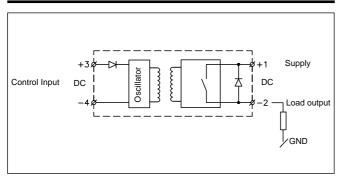
Rated operational voltage	Control voltage	Rated operational current		
	Ū	1 ADC	4 ADC	8ADC
60 VDC	4.25 to 32 VDC		RP1D060D4*	RP1D060D8*
350 VDC	4.25 to 32 VDC	RP1D350D1		

\* add suffix 'M1' to part no. for DIN rail mountable module, example: RP1D060D4M1

### **General Specifications**

	RP1D060	RP1D350
Operational voltage range	1 to 60 VDC	1 to 350 VDC
Off-state blocking voltage	60 VDC	350 VDC
CE-marking	Yes	Yes
Approvals	UL, cUL	UL, cUL

### Wiring Diagram



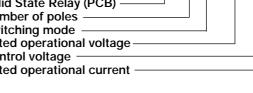
Specifications are subject to change without notice (30.09.2005)

### **Housing Specifications**

Weight	Approx. 20 g
Housing material	PBT, grey
Terminals	Copper alloy, tin-plated
Potting compound	Flame-retardant flexible
	silicone rubber

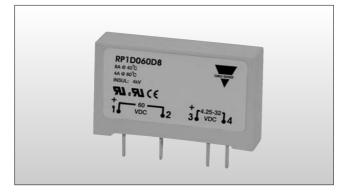
### **Thermal Specifications**

Operating temperature	-20° to +80°C (-4° to +176°F)
Storage temperature	-40° to +100°C (-40° to +212°F)





1



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## **Output Specifications**

	RP1D350D1	RP1D060D4	RP1D060D8
Rated operational current @ Ta=40 <sup>·</sup> C DC	1 1 ADC	4 ADC	8 ADC
DC		4 ADC 4 ADC 4 ADC	8 ADC 8 ADC 8 ADC
Minimum operational current	1 mADC	1 mADC	1 mADC
Rep. overload current t=1 s	20 ADC	15 ADC	60 ADC
Off-state leakage current @ rated voltage	< 0.01 mADC	< 0.01 mADC	< 0.01 mADC
On-state voltage drop @ rated current	< 0.5 VDC	< 0.5 VDC	< 1.0 VDC

## **Input Specifications**

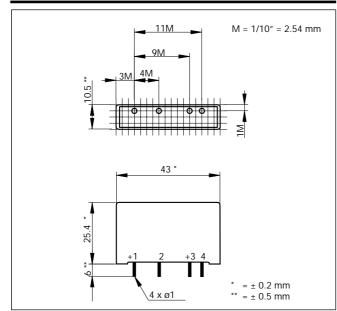
Control voltage range	4.25 to 32 VDC
Pick-up voltage @ Ta=25°C	3.3 VDC
Drop-out voltage	1 VDC
Reverse voltage	32 VDC
Switching frequency	< 100 Hz
Response time pick-up @ Vin $\ge$ 5 VDC	< 100 µs
Response time drop-out	
@Vin ≤ 24 VDC max.	< 250 µs
Input current	15mA

## **Insulation Input - Output**

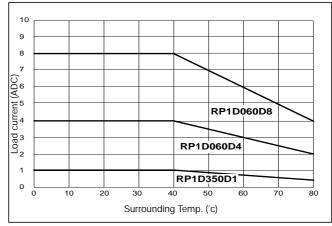
Rated insulation voltage

> 4000 VACrms

## Dimensions



## **Derating Curve**



## Accessories



M1 Din-rail adaptor (photo) Fuses

For further information refer to "General Accessories".