



## D1 SERIES

### D SIZE FORM C (CHANGEOVER) RELAY



The D1 series is a reed relay with changeover contacts which are often used in safety critical applications.

The switching is achieved through the use of high vacuum reed switches with tungsten contacts. These relays suitable for high reliability applications, such as test equipment and high voltage power supplies.

These are PCB mount relays, although custom options may be available on request.

#### Features

- 100W switching power
- Changeover contacts
- UL Approved
- PCB Mount
- Available with or without magnetic screen



## SPECIFICATIONS

Contact	Units	Condition			
Switch Action			SPCO		
Contact Material			Tungsten		
Isolation Across Contacts	kV	DC or AC peak	0.75		
Isolation Contact to Coil	kV	DC or AC peak	3		
Switching Power Max.	VA	resistive	100 (at 33.3Vdc switching voltage)		
Switching Voltage Max.	V	DC	240 (at 20VA switching power)		
Switching Current Max.	A	DC	3 (at 100VA switching power and 33Vdc switching voltage)		
Carry Current Max	A	DC	4		
Capacitance Across Contacts	pF	coil to screen grounded	2.3		
Contact Resistance	mΩ max (typical)		500		
Insulation Resistance	Ω min (typical)		(10 <sup>8</sup> )		
Coil			<b>5V</b>	<b>12V</b>	<b>24V</b>
Must Operate Voltage	V	DC	3.75	9	18
Must Release Voltage	V	DC	0.5	1.2	2.4
Resistance	Ω (± 10%)		50	340	900

Note. The operate / release voltage and coil resistance will change at a rate of 0.4% per degree C. Values are stated at room temperature (20 degrees C)

Environmental Conditions	Units	Condition	
Operating Temperature Range	°C		-40 to +65
Storage Temperature Range	°C		-40 to +100



## STANDARD PARTS

	Coil Voltage Vdc	Magnetic Screen
<b>D1-05-C</b>	5	No
<b>D1-05-CM</b>	5	Yes
<b>D1-12-C</b>	12	No
<b>D1-12-CM</b>	12	Yes
<b>D1-24-C</b>	24	No
<b>D1-24-CM</b>	24	Yes

Please refer to this document for circuit design notes:  
<https://www.cynergy3.com/blog/reed-relay-application-notes>