

# 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 and make these relays suitable for high reliability applications, such as test equipment and high voltage power supplies.

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

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



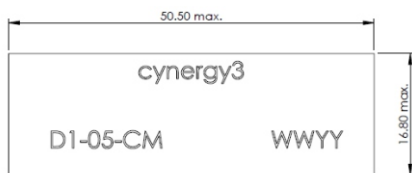
Contact Specification	Unit	Condition
Switch Action		SPCO
Contact Material		Tungsten
Isolation across contacts	kV DC or AC peak	0.75
Isolation contact to coil	kV Dc or AC peak	3
Switching Power Max.	VA resistive	100 (at 33.3Vdc switching voltage)
Switching Voltage Max.	V DC	240 (at 20VA switching power)
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	Ωmin (typical)	(10 <sup>9</sup> )
Coil Specification		5V 12V 24V
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)

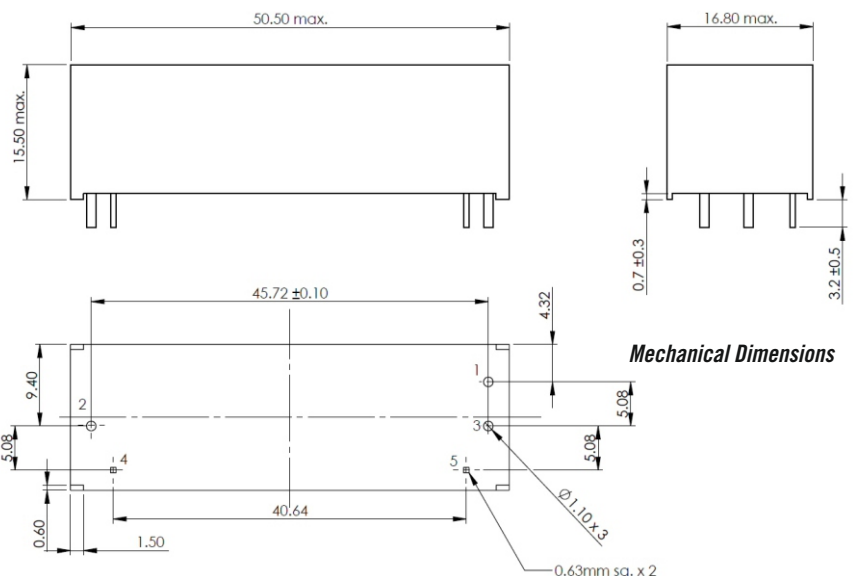
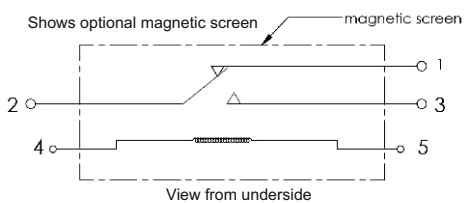
Environmental Conditions	
Operating Temperature Range	°C -40 to +65
Storage Temperature Range	°C -40 to +100

Standard Parts	Coil Voltage Vdc	Magnetic Screen
D1-05-C	5	No
D1-05-CM	5	Yes
D1-12-C	12	No
D1-12-CM	12	Yes
D1-24-C	24	No
D1-24-CM	24	Yes

Please refer to this document for circuit design notes:- <http://www.cynergy3.com/blog/application-notes-reed-relays-0>



### Circuit Diagram



### Mechanical Dimensions

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### \*Consult factory for UL ratings

These products have been UL approved for use as per pollution degree 2 classification.  
If you require further information as to how this may affect product usage, please contact sales@cynergy3.com.



ISO9001 CERTIFIED  
D1 2019

[www.cynergy3.com](http://www.cynergy3.com)