# **D1** Series

# D Size Form C (Changeover) Relay





The D1 series is a reed relay with

in safety critical applications.

changeover contacts which are often used

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

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

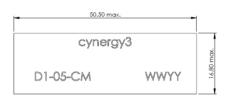
- 100W switching power
- Changeover contacts
- UL Approved
- PCB Mount
- Available with or without magnetic screen



| <b>Contact Specification</b>   |            | Unit                       | Co               | ndition    |             |   |
|--------------------------------|------------|----------------------------|------------------|------------|-------------|---|
| Switch Action                  |            |                            |                  | SPC0       |             |   |
| Contact Material               |            |                            |                  | Tungs      | ten         |   |
| Isolation across contacts      | s kV       | DC or AC peak              |                  | 0.75       |             |   |
| Isolation contact to coil      | kV         | Dc or AC peak              |                  | 3          |             |   |
| Switching Power Max.           | VA         | resistive                  |                  | 100 (a     | t 33.3V     | dc switching voltage)                               |
| Switching Voltage Max.         | ٧          | DC                         |                  | 240 (a     | t 20VA      | switching power)                                    |
| Switching Current Max.         | Α          | DC                         |                  | 3 (at 1    | LOOVA sv    | witching power and 33Vdc switching voltage)         |
| Carry Current Max              | Α          | DC                         |                  | 4          |             |   |
| Capacitance across contacts    | pF         | coil to screen<br>grounded |                  | 2.3        |             |   |
| Contact Resistance             | mΩ         | max (typical)              |                  | 500        |             |   |
| Insulation Resistance          | $\Omega$ m | iin (typical)              |                  | $(10^8)$   |             |   |
| Coil Specification             |            |                            | 5V               | 12V        | 24V         |   |
| Must Operate Voltage           | ٧          | DC                         | 3.75             | 9          | 18          |   |
| Must Release Voltage           | ٧          | DC                         | 0.5              | 1.2        | 2.4         |   |
| Resistance                     | Ω(         | ± 10%)                     | 50               | 340        | 900         |   |
|                                | ~          | coil resistance will chan  | ge at a rate of  | 0.4% per d | legree C. V | alues are stated at room temperature (20 degrees C) |
| <b>Environmental Conditio</b>  | ns         |                            |                  |            |             |   |
| Operating Temperature Range °C |            |                            | -40 to +65       |            |             |   |
| Storage Temperature Range °C   |            |                            | -40 to +100      |            |             |   |
| Standard Parts                 |            |                            | Coil Voltage Vdc |            |             | Magnetic Screen                                     |

| Storage reinperature Kange C | -40 (0 +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             |  |

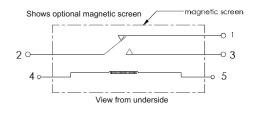
Please refer to this document for circuit design notes:- http://www.cynergy3.com/blog/application-notes-reed-relays-0



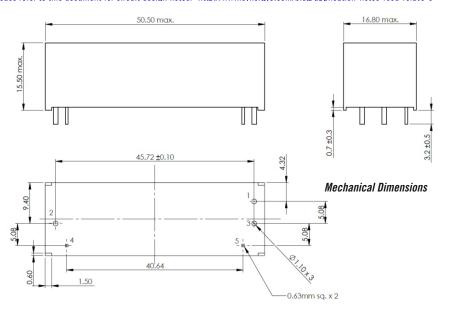
#### Circuit Diagram

power supplies.

request.



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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.



www.cynergy3.com

### ISO9001 CERTIFIED