



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 ⁸)		
Coil			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	Units	Condition	
Operating Temperature Range	°C		-40 to +65
Storage Temperature Range	°C		-40 to +100



STANDARD PARTS

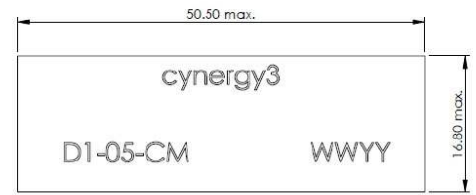
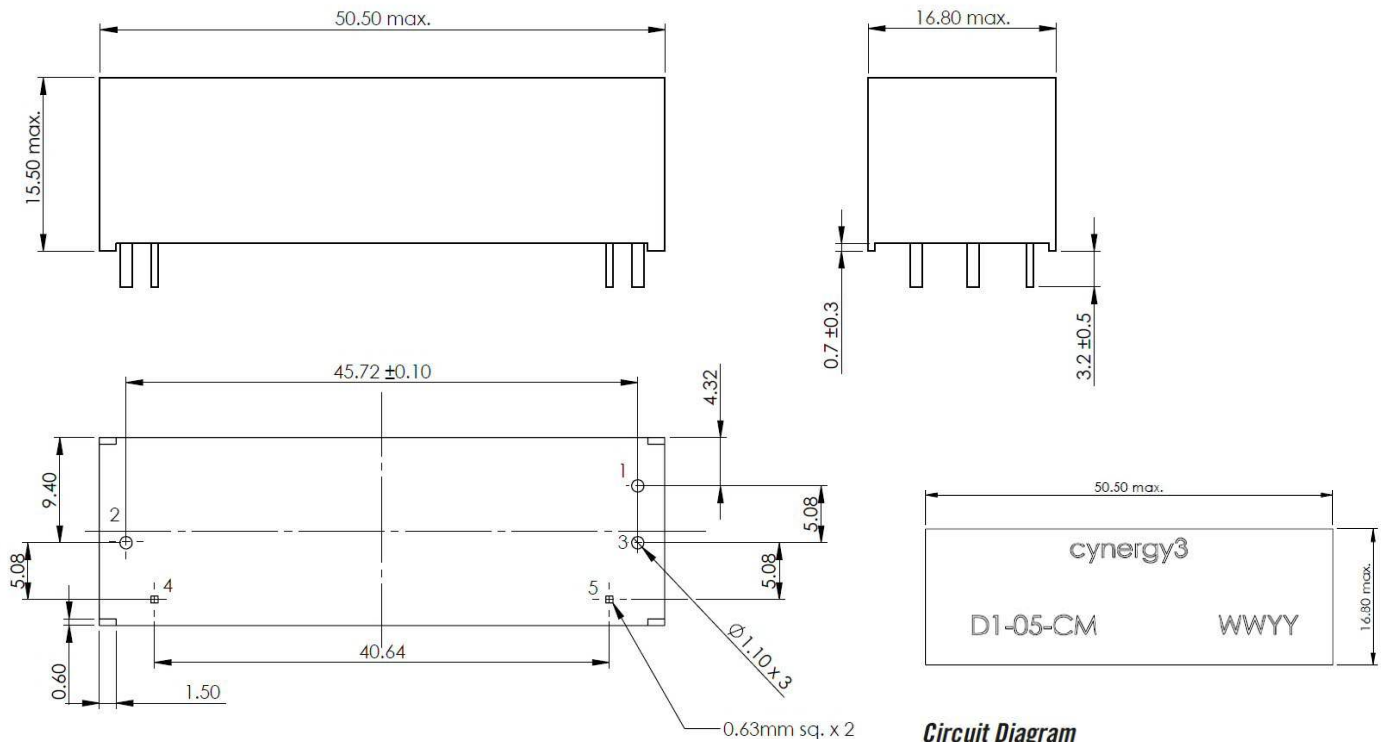
	Coil Voltage Vdc	Magnetic Screen
D1-05-C	5	No
D1-05-CM	5	Yes
D1-12-C	12	No
D1-12-CM	12	Yes
D1-24-C	24	No
D1-24-CM	24	Yes

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

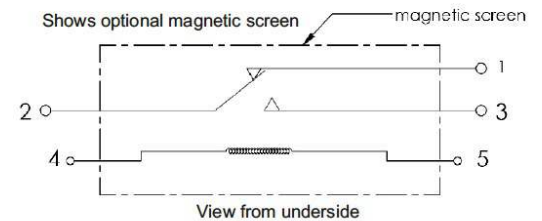


DIMENSIONS

All dimensions are in millimeters.



Circuit Diagram



*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 c3w_sales@sensata.com.

Made in the UK

Page 3

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

+44 (0)1202 897969
c3w_sales@sensata.com
 Cynergy3 Components Ltd.
 7 Cobham Road,
 Ferndown Industrial Estate,
 Wimborne, Dorset,
 BH21 7PE, United Kingdom