DA(UL) Series

UL Approved *, Normally Open, High Voltage Relays - 10kV



Recently approved by UL, very high isolation voltages (up to 10kV) are achieved through the use of high vacuum reed switches with either Rhodium or Tungsten contacts and make these relays suitable for high reliability applications, such as cardiac defibrillators, test equipment and high voltage power supplies.

The Rhodium contact relays have low contact resistance, while the Tungsten contact relays can switch higher voltages.

PCB or Panel Mount, via Nylon studs, versions are available.

Connection options, for the HV, include PCB, solder turret(wire wrap), flying lead and 0.25" spade terminals.

- 10kV Isolation
- Low Contact Resistance
- PCB or Panel Mount
- HV connections via Flying Leads, Solder Turret (wire wrap), or 1/4" Spade Terminals
- **Excellent AC characteristics**



Contact Specification	Unit Condition	10kV SPNO	10kV SPNC
Contact Type		N/O (normally open)	N/O (normally open)
Contact Material		Rhodium Tungsten	Rhodium Tungsten
Isolation across contact	s kV DC or AC peak	10 10	10 10
Switching Power Max.	W	50 50	50 50
Switching Voltage Max.	V DC or AC peak	1000 7000	1000 7000
Switching Current Max.	A DC or AC peak	3 2 3	2
Carry Current Max	A DC or AC peak	4 3 4	3
Capacitance across	pF coil to screen	<0.2 <0.2	<0.2 <0.2
contacts	grounded		
Lifetime operations	dry switching	10° 10°	10° 10°
	50W switching	10 ⁶ 10 ⁶	10 ⁶ 10 ⁶
Contact Resistance	$m\Omega$ max (typical)	50 (15) 250(100)	50 (15) 250(100)
Insulation Resistance	Ωmin (typical)	10 ¹⁰ (10 ¹³)	10 ¹⁰ (10 ¹³)
Coil Specification	(-)	5V 12V 24V	5V 12V 24V
Must Operate Voltage	V DC	3.7 9 20	3.7 9 20
Must Operate Voltage Must Release Voltage	V DC	0.5 1.25 4	0.5 1.25 4
Operate Time	ms diode fitted	3.0 3.0 3.0	2.0 2.0 2.0
Release Time	ms diode fitted	2.0 2.0 2.0	3.0 3.0 3.0
Resistance	Ω	28 150 780	38 240 925
Relay Specification	75	28 130 780	36 240 323
Isolation contact/coil	kV	17	17
Insulation resistance co		10 12	10 12
to all terminals	Ω min (typical)	10 ¹⁰ (10 ¹³)	10 ¹⁰ (10 ¹³)
Environmental Operating Temp range	°C	-20 to +70	-20 to +70

^{*}Consult factory for UL ratings

Part Numbering System

T 7 12 10 F U **Reed Switch Size** Contact Form A=n/o - "**U**" indicates UL approved **Contact Material** R=Rhodium, **Mounting or Connection Style** T=Tungsten No suffix indicates PCB mount F=PCB mount & coil connection with Moulding Ref. No. Flying lead HV connection **Coil Voltage** P=Panel mount with wire wrap 05=5Vdc, 12=12Vdc, terminals 24=24Vdc S=PCB mount & coil connection with Isolation between stud fixing & 1/4" spade HV **Contacts** connection 10=10kV T=PCB mount & coil connection with stud fixing & wire wrap HV connection

Cynergy3 Components Ltd. 7 Cobham Road Ferndown Industrial Estate Wimborne. Dorset BH21 7PE Telephone +44 (0) 1202 897969

Email:sales@cynergy3.com

ISO9001 CERTIFIED

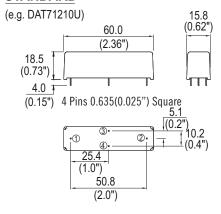
DA(UL) 2016

www.cynergy3.com

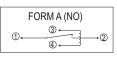


MECHANICAL

STANDARD



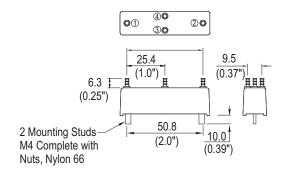
CIRCUIT DIAGRAMS (ALL VARIANTS)



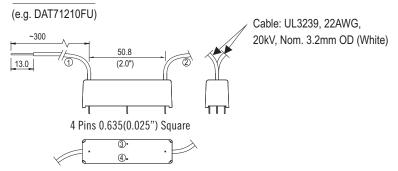
NOTE: COIL POLARITY IS NOT SIGNIFICNAT

PANEL MOUNT

(e.g. DAT71210PU)



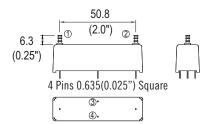
FLYING LEAD



NOTE: PINS WHICH ARE NOT NUMBERED HAVE NO ELECTRICAL CONNECTION.

TURRET (Wire Wrap)

(e.g. DAT71210TU)

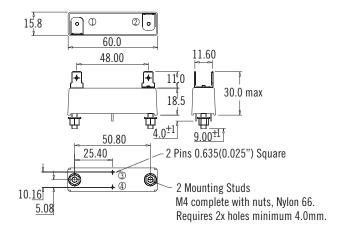


NOTE: PINS WHICH ARE NOT NUMBERED HAVE NO ELECTRICAL CONNECTION.

SPADE TYPE

(e.g. DAT71210SU)

'S' Suffix denotes the 0.250" 'Push On' blade connectors, M4 fixing bolts and Epoxy potting.



Cynergy3 Components Ltd. 7 Cobham Road Ferndown Industrial Estate Wimborne, Dorset BH21 7PE Telephone +44 (0) 1202 897969

Email:sales@cynergy3.com

www.cynergy3.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Reed Relays category:

Click to view products by Cynergy3 manufacturer:

Other Similar products are found below:

CUPE001A624 CUPE004A605 8000-0217 922A06C4C PRMA1A24B HGS1021 HGS1048 HGZM1C24 HGZM2C05 HGZM2C12

HGZM2C48 134MPCX-3 MSS62A05 MSS71A05 MSS71A05B MSS71A12 MSS71A12B MSS71A24 HYR2001-1520 9000-0153 26000308 2653-12-310 2610-12-310 2611-05-310 PRMA1B05B 2653-05-310 HGP1005 HGS1019 HGS2M5114 HGZM1C05 HGZM1C12

HGZM1C48 3-1393771-5 3432-12-91 CUPV50020 HYR2031-1520 V23100V4305C11 W107DIP-43 W193RE1C3-12G W193RE2A3-12G

W193RE2C3-24G W193RE3A3-24G W193RE3C3-24G W193RE4C3-12G 5000-0242 W193RE4C3-24G W193RE4A3-24G W193RE4A312G W193RE2C3-12G W193RE2A3-24G