



Very high isolation voltages, up to 15kV, 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 contacts have low contact resistance while the Tungsten contacts can switch higher voltages.



Printed Circuit Board (PCB) or Panel mount, via nylon studs, versions are available.

Connection options include PCB, solder turret tag, flying lead and Faston* style Spade Terminals.



Available as Form A (SPNO) or Form B (SPNC) contact configurations.



- **15kV Isolation**
- **Low Contact Resistance**
- **High Power Switching**
- **PCB or Panel Mount**
- **Flying Lead, Solder and Faston* Style Spade Terminal Options**

Contact	Units	Conditions	10kV Form A			10kV Form B			15kV Form A		
			Rhodium	Tungsten		Rhodium	Tungsten		Tungsten		
Contact Materials											
Isolation Across Contacts	kV	DC or AC peak	10	10		10	10		15		
Max. Switching Power	W		50	50		50	50		50		
Max. Switching Voltage	V	DC or AC peak	1000	7000		1000	7000		10000		
Max. Switching Current	A	DC or AC peak	3	2		3	2		2		
Max. Current Carry	A	DC or AC peak	4	3		4	3		2		
Capacitance Across Contacts	pF	Coil/Screen Grounded	<0.2	<0.2		<0.2	<0.2		<0.2		
Lifetime	Operations	Dry Switching	10 ⁹	10 ⁹		10 ⁹	10 ⁹		10 ⁹		
Lifetime	Operations	50W Switching	10 ⁶	10 ⁶		10 ⁶	10 ⁶		10 ⁸		
Contact Resistance	mOhms	Maximum (Typical)	50 (15)	250 (100)		50 (15)	250 (100)		250 (100)		
Insulation Resistance	Ohms	Minimum (Typical)	10 ¹⁰ (10 ¹³)	10 ¹⁰ (10 ¹³)		10 ¹⁰ (10 ¹³)	10 ¹⁰ (10 ¹³)		10 ¹⁰ (10 ¹³)		
Coil at 20°C			5V	12V	24V	5V	12V	24V	5V	12V	24V
Must Operate	V	DC	3.7	9	20	3.7	9	20	3.7	9	20
Must Release	V	DC	0.5	1.25	4	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	3.0	3.0	3.0
Release Time	ms	Diode Fitted	2.0	2.0	2.0	3.0	3.0	3.0	2.0	2.0	2.0
Resistance	Ohms		28	150	780	38	240	925	16	95	350
Construction											
Isolation Contact to Coil	kV	DC or AC peak	17			17			17		
Insulation Resistance Contact											
to All Other Terminals	Ohms	Minimum (Typical)	10 ¹⁰ (10 ¹³)			10 ¹⁰ (10 ¹³)			10 ¹⁰ (10 ¹³)		
Environmental											
Operating Temperature Range	°C		-20 to +70			-20 to +70			-20 to +70		
Weight	Version	Standard	Panel			Spade			Flying Lead		
	Form A	gm	23			28			29		
	Form B	gm	31			36			37		

Part Numbering System

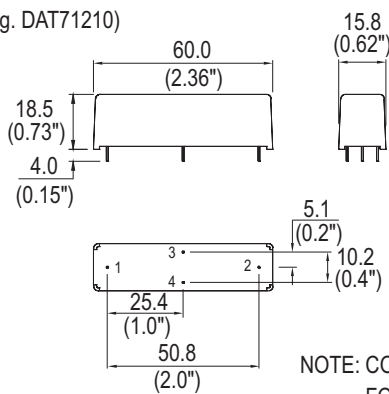
Reed Switch size: **D**
 Contact Form - **A**: Form A **B**: Form B
 Contact Material **R**: Rhodium **T**: Tungsten
 Moulding Ref. Number
 Coil Voltage **05**: 5V **12**: 12V **24**: 24V
 Isolation Between Contacts - **10**: 10kV, **15**: 15kV (dat only)

Mounting Style:

No suffix: Standard PCB mount
F: Flying Lead Contact Terminals
P: Panel Mount via nylon studs, turret contact/coil terminals
S: Panel Mount via nylon studs, Faston* style spade terminals

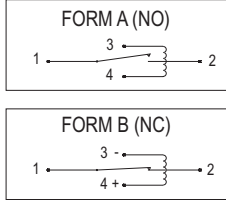
STANDARD

(e.g. DAT71210)



CIRCUIT DIAGRAMS (ALL VARIANTS)

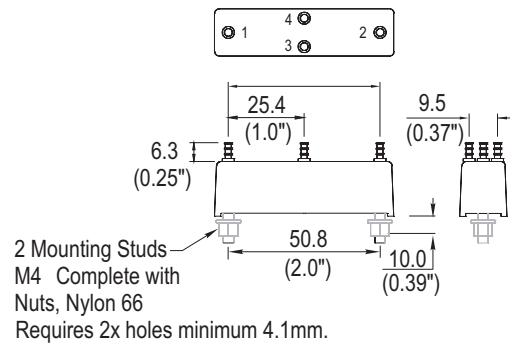
Viewed from underside



NOTE: COIL POLARITY IS IMPORTANT FOR FORM B VARIANT ONLY.

PANEL MOUNT

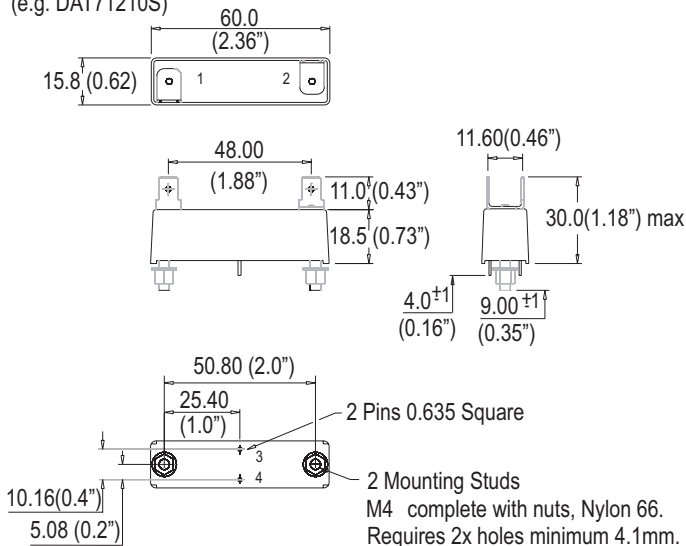
(e.g. DAT71210P)



SPADE TYPE

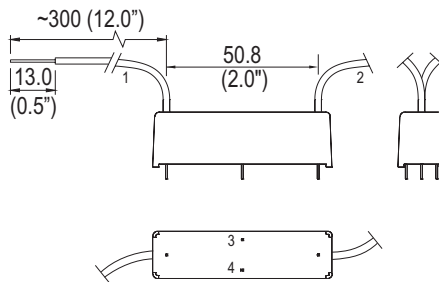
(e.g. DAT71210S)

'S' Suffix denotes the 6.3 'Push On' blade connectors, M4 fixing bolts and Epoxy potting.



FLYING LEAD

(e.g. DAT71210F)



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

ISO9001 Certified

USA
 Sales & Tech Support(866) 258-5057
 Email: sales@cynergy3.com
 Cynergy3 Components
 2320 Paseo de las Americas, Suite 104
 San Diego, CA 92154

EUROPE - UK
 Telephone +44 (0) 1202 897969
 Fax +44 (0) 1202 891918
 Email:sales@cynergy3.com
 Cynergy3 Components Ltd.
 7 Cobham Road
 Ferndown Industrial Estate
 Wimborne, Dorset BH21 7PE

ASIA - Thailand
 Telephone +66 (0)2 665 2517
 Fax +66 (0)2 665 2588
 Cynergy 3 Components, Asia
 18/8 Fico Place 12th Floor
 Soi Sukhumvit 21 (Asoke)
 Klongtoey Nua, Wattana
 Bangkok, Thailand 10110