



- Up to 40A /240VAC continuous rating
- 110VDC maximum switching voltage
- Industry standard style
- Cost effective



### Contacts

Contact arrangement	SPST-NO (1 NO); SPDT ( 1 C/O)
Contact material	AgSnO <sub>2</sub>
Max. switching voltage	AC/DC 250VAC, 110VDC
Min. switching current / voltage	500mA / 12VDC
Max. continuous current	SPST-NO: 40A / SPDT: 40A (NO), 30A (NC)
Max. switching current	SPST-NO: 40A / SPDT: 40A (NO), 30A (NC)
Max. switching power	7200VA / 1100W
Initial resistance	≤100mΩ max. at 0.1A/6VDC

### Coil

Nominal voltage	3...110VDC; 12...220VAC
Must release voltage	DC ≥ 0.1U <sub>n</sub> ; AC ≥ 0.3U <sub>n</sub>
Operating range	See tables 1 & 2
Rated power consumption	0.93W (DC), 1.2VA (AC)

### Insulation

Insulation resistance	>100MΩ at 500VDC, 50%RH	
Dielectric strength	coil to contact	4000Vrms, 1min (50Hz)
	between open contacts	1500Vrms, 1min (50Hz)

### General Data

Operating time	typ.	15ms
Release time	typ.	10ms
Electrical life	ops.	1 x 10 <sup>5</sup>
Mechanical life (no load)	ops.	1 x 10 <sup>6</sup>

### Environmental

Ambient temperature	operating	-40 to +125°C
	storage	-40 to +155°C
Shock resistance	functional	10g 11ms
	destructive	100g
Vibration resistance		DA 1.5mm 10-55Hz
Drop resistance		1M height drop on to concrete (sealed type only)
Dimensions	L x W x H	32.5 x 27.6 x 20.2mm (covered)
Weight	approx.	≤ 36g

### Ordering Code

D G 3 8 B - 3 0 2 1 - 3 0 - 1 0 1 2

#### Series

#### Contact material

30: AgSnO<sub>2</sub> (40A/30A)

#### Contact arrangement

11: SPDT (1 C/O)

21: SPST-NO (1 NO)

#### Environmental protection

3: In cover, sealed - IP67

7: Covered, dust cover

#### Mounting & terminations

0: PCB + QC Terminals for contacts

#### Coil code:

See tables

1 & 2

#### Notes:

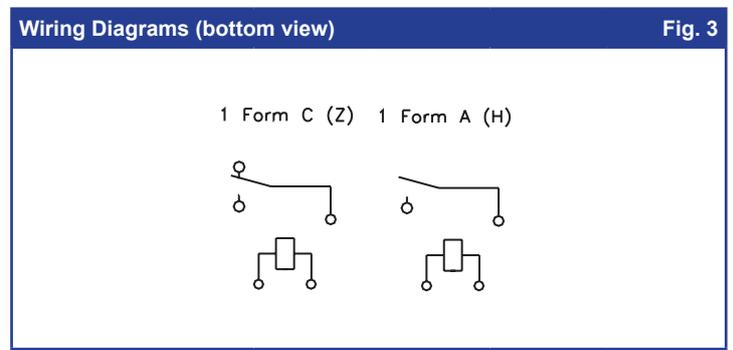
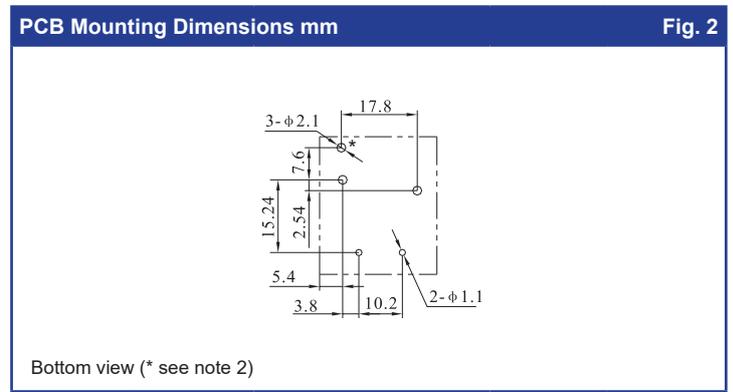
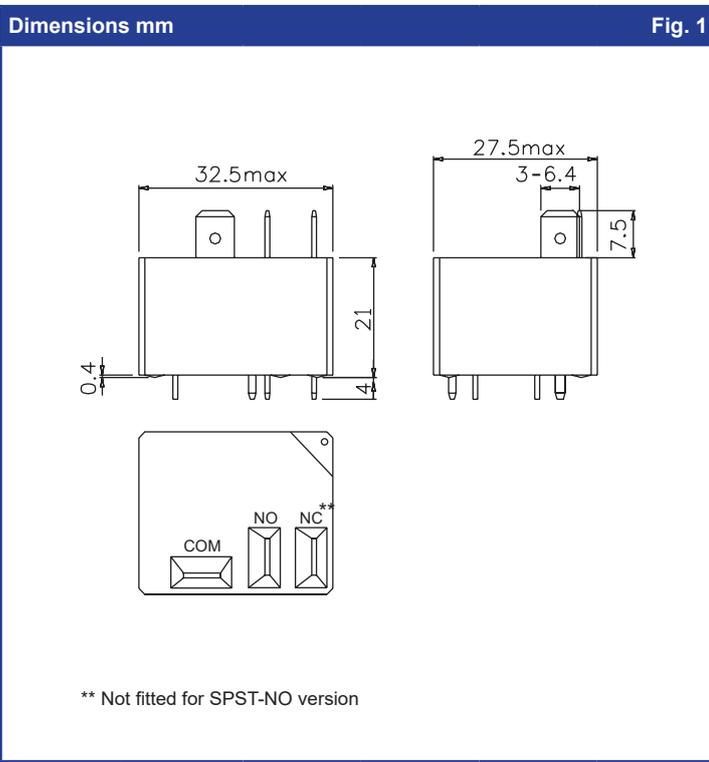
For AC loads this relay is designed for 50-60Hz standard industrial power and was tested according to AC1 category as defined by the IEC 60947-1 standard, covering low-frequency switchgear (typically 50-60 Hz). Operating at higher frequencies, places the component outside its certified utilisation category, invalidating all safety certifications (CE, UL, etc.) and manufacturer performance guarantees.

DC Coil Data							Table 1
Coil code	Nominal voltage (VDC)	Coil resistance $\Omega$ $\pm 10\%$	Nominal operating power	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Max. allowable voltage (VDC)	
1003	3	10	0.93W	2.25	0.30	130% of nominal	
1005	5	28		3.75	0.50		
1006	6	40		4.50	0.60		
1009	9	90		6.75	0.90		
1012	12	160		9.00	1.20		
1018	18	360		13.50	1.80		
1024	24	640		18.00	2.40		
1048	48	2,560		36.00	4.80		
1110	110	13,445		82.50	11.00		

UL Class F insulation standard.

AC Coil Data							Table 2
Coil code	Nominal voltage (VAC)	Coil resistance $\Omega$ $\pm 10\%$	Nominal operating power	Must operate voltage max. (VAC)	Must release voltage min. (VAC)	Max. allowable voltage (VAC)	
5012	12	27	1.2VA	9.00	3.60	130% of nominal	
5024	24	120		18.00	7.20		
5110	110	2,360		82.50	33.00		
5120	120	3,040		90.00	36.00		
5220	220	13,490		165.00	66.00		

UL Class F insulation standard.



**Notes:**

- 1) All parameters, unless otherwise specified, are measured at an ambient temperature of 23°C.
- 2) PCB Mounting Holes - the "\*" hole is not needed for the SPST-NO version.
- 3) At an ambient temperature of 85°C, the maximum allowable coil voltage should be reduced to 72%.
- 4) Electrical life obtained at resistive or inductive load at 30A/15VDC with suitable arc suppression attached and with an operating frequency of 1 op/sec.