

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

### Contacts

Contact arrangement	SPST-NO (1NO); SPST-NC (1NC); SPDT (1C/O)
Contact material	AgSnO <sub>2</sub> ; AgSnOInO
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)
creepage / clearance - coil to contact	≥ 3mm

### General Data

Operating time	typ.	15ms
Release time	typ.	10ms
Electrical life	ops.	1 x 10 <sup>5</sup> (1s on / 1s off, 20A 250VAC/30VDC)
Mechanical life (no load)	ops.	1 x 10 <sup>6</sup> (300 ops per minute)

### Environmental

Ambient temperature	operating	-40 to +125°C
	storage	-40 to +155°C
Shock resistance	functional	20g 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	various - see dimensional drawings. (Figs 1 & 4)
Weight	approx.	≤ 36g



ROHS Compliant ✓

### Ordering Code

D G 3 4 - 3 0 2 1 - 3 5 - 1 0 1 2

#### Series

#### Contact material

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

#### Contact arrangement

11: SPDT (1 C/O)  
21: SPST-NO (1NO)  
31: SPST-NC (1NC)

#### Environmental protection

1: No cover (open frame) PCB only\*\*  
3: In cover, sealed - IP67  
7: Covered, dust cover

#### Mounting & terminations

5: PCB only  
6: Chassis mounting\*\*, QC terminals for contacts and coil.

\*\* Not available with no cover (Option 1 above)

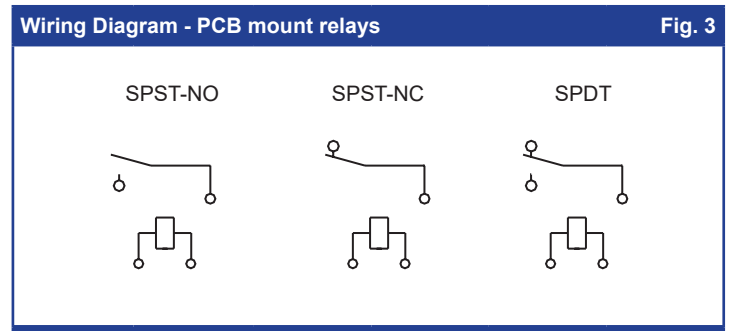
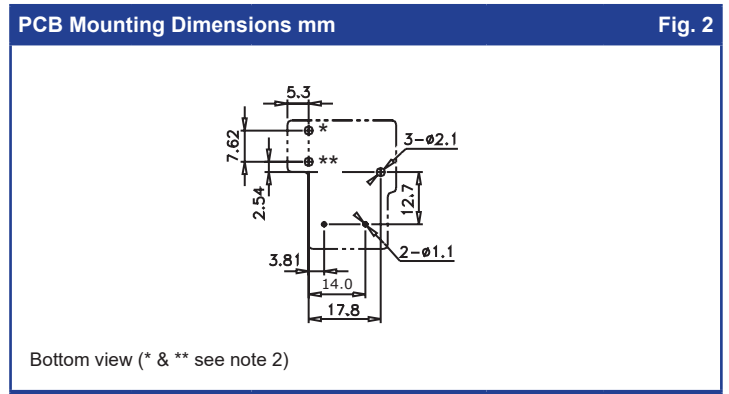
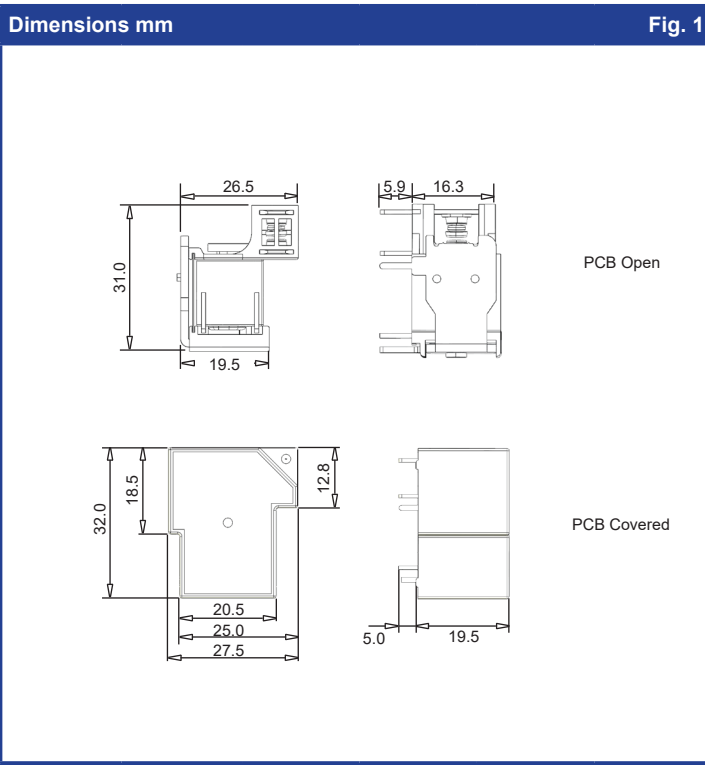
Coil code:  
See tables  
1 & 2

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 Coil insulation standard. (Others to special order)

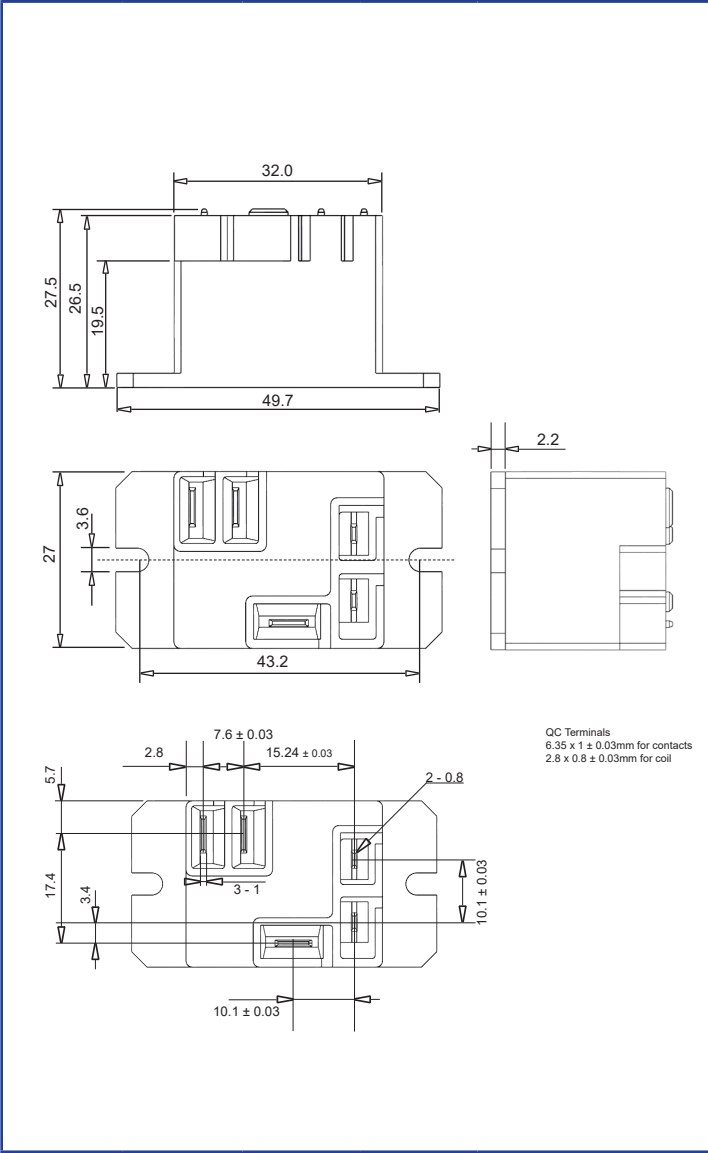
AC Coil Data						Table 2
Coil code	Nominal voltage (VAC)	Coil resistance $\Omega$ $\pm 10\%$	Nominal operating power	Must operate voltage max. (VAC)	Must release voltage min. (VAC)	Max. allowable voltage (VAC)
5012	12	27	1.2VA	9.00	3.60	130% of nominal
5024	24	120		18.00	7.20	
5110	110	2,360		82.50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

UL Class F Coil insulation standard. (Others to special order)



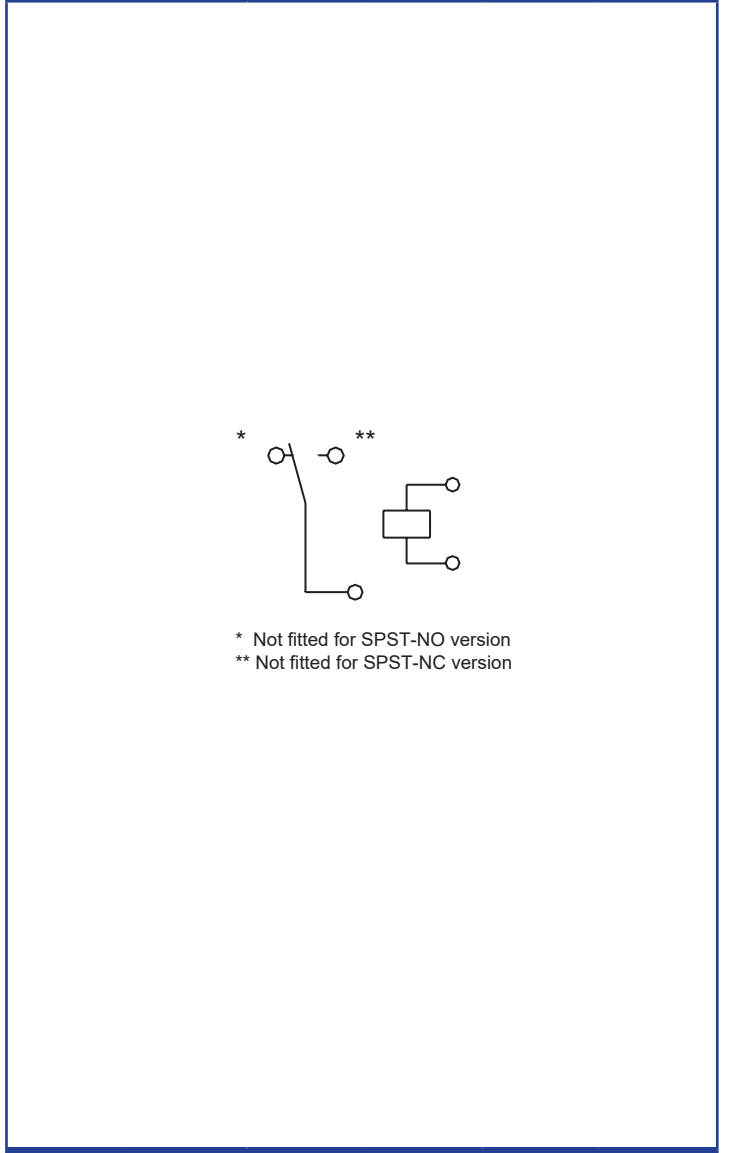
Overall Dimensions mm - chassis mount relays

Fig. 4



Wiring Diagram - chassis mount relays

Fig. 5



- 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 and the "\*\*" hole is not needed for the SPST-NC version.
  - 3) At an ambient temperature of 85°C, the maximum allowable coil voltage should be reduced to 72%.