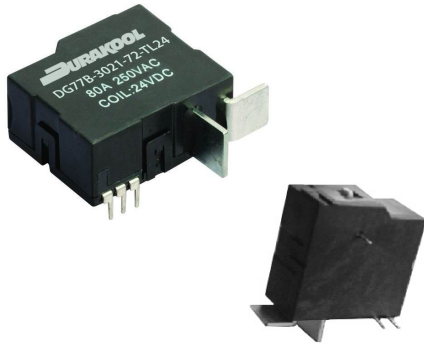


DG77A / B

industrial bistable (latching) power relay

DURAKOOL



- Up to 80A /240VAC continuous rating
- 30VDC maximum switching voltage
- Single Coil & Twin Coil Latching
- Manual test lever
- Utility meters
- Automotive / Electric Vehicle Battery

Contacts

Contact number & arrangement	SPST-NO (1 Normally Open)
Contact material	AgSnO ₂
Max. switching voltage	250VAC / 30VDC
Min. switching current / voltage	500mA/12VDC
Max. continuous current	60A, 80A
Max. switching current	60A, 80A
Max. switching power	60A: 15000VA / 1680W 80A: 20000VA / 2240W
Initial resistance	≤ 100mΩ, max. at 0.1A/6VDC

Coil

Rated voltage	9...48VDC
Operating range of supply voltage	See coil table 1
Rated power consumption	Single coil 60A: 1.2W / 80A: 1.5W Twin coil 60A: 2.4W / 80A: 3W

Insulation

Insulation resistance	>1000MΩ at 500VDC, 50%RH
Dielectric strength	
coil to contact	4000Vrms, 1min (50Hz)
between open contacts	1500Vrms, 1min (50Hz)
Creepage & Clearance	8mm

General Data

Operating time (max.)	mS	20
Release time (max.)	mS	20
Electrical Life	ops	1 x 10 ⁴
Mechanical life	ops	1 x 10 ⁶
Dimensions	L x W x H	38.6 x 33 x 17mm (see drawings for detail)
Weight		≤ 45g
Ambient temperature	storage	-40 to 70°C
	operating	-40 to 70°C (Class F)
Shock resistance		Functional: 100m/s ² 11mS; Destructive: 1000m/s ²
Vibration resistance		10-55Hz: DA 1.5mm
Humidity		98%RH, 40°C

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Coil Data

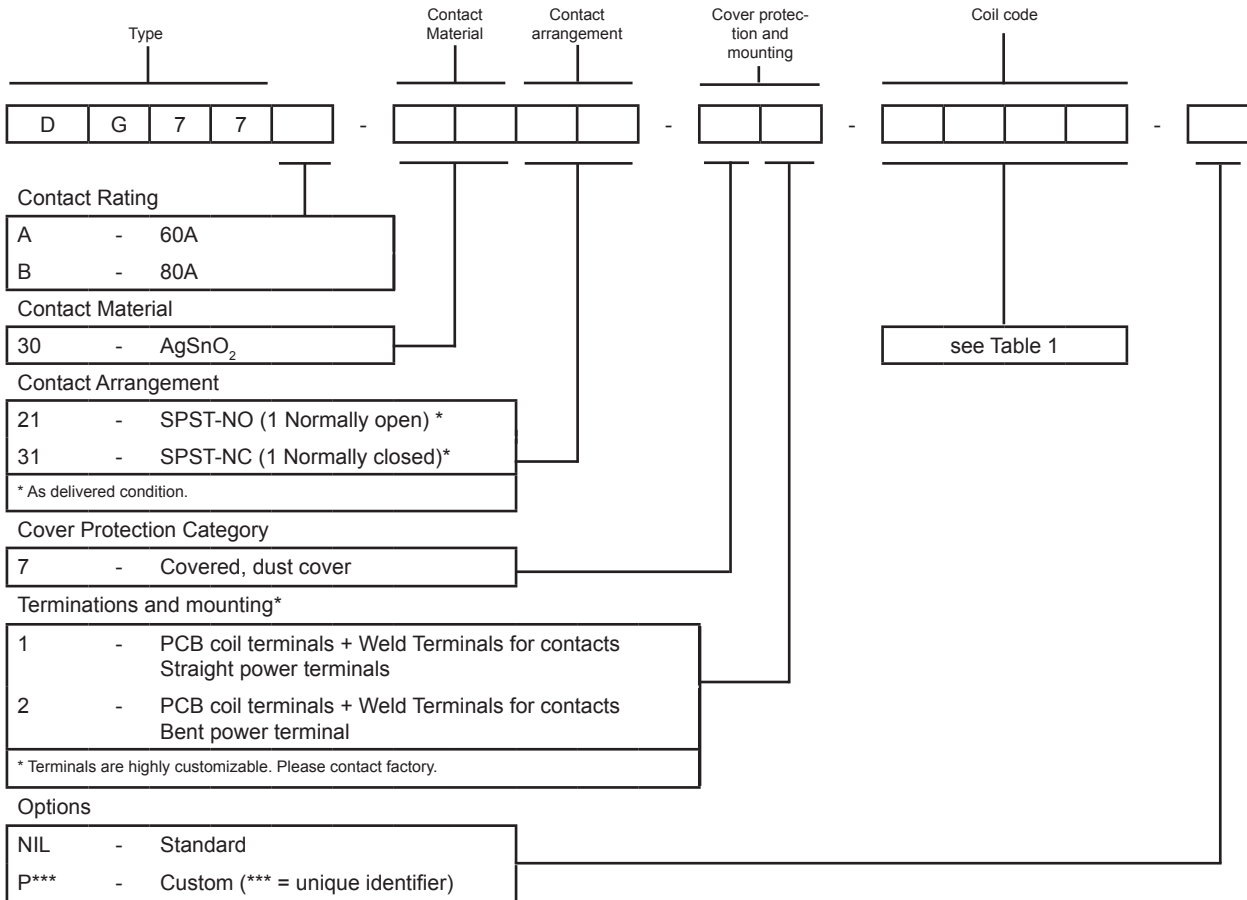
Table 1

DC Coil

Coil Voltage Code		Nominal Voltage (VDC)	Coil Resistance (Ω) $\pm 10\%$		Must operate voltage (VDC)	Operate pulse length
Single Coil	Twin Coil*		Single Coil (1.5W)	Twin Coil* (3W)		
SL09	TL09	9	54	27.0 + 27.0	≥ 6.75	50ms
SL12	TL12	12	96	48.0 + 48.0	≥ 9	
SL24	TL24	24	384	192 + 192	≥ 18	
SL48	TL48	48	1536	768 + 768	≥ 36	

* NB: Latch & Reset coils must not be powered simultaneously.

Ordering codes



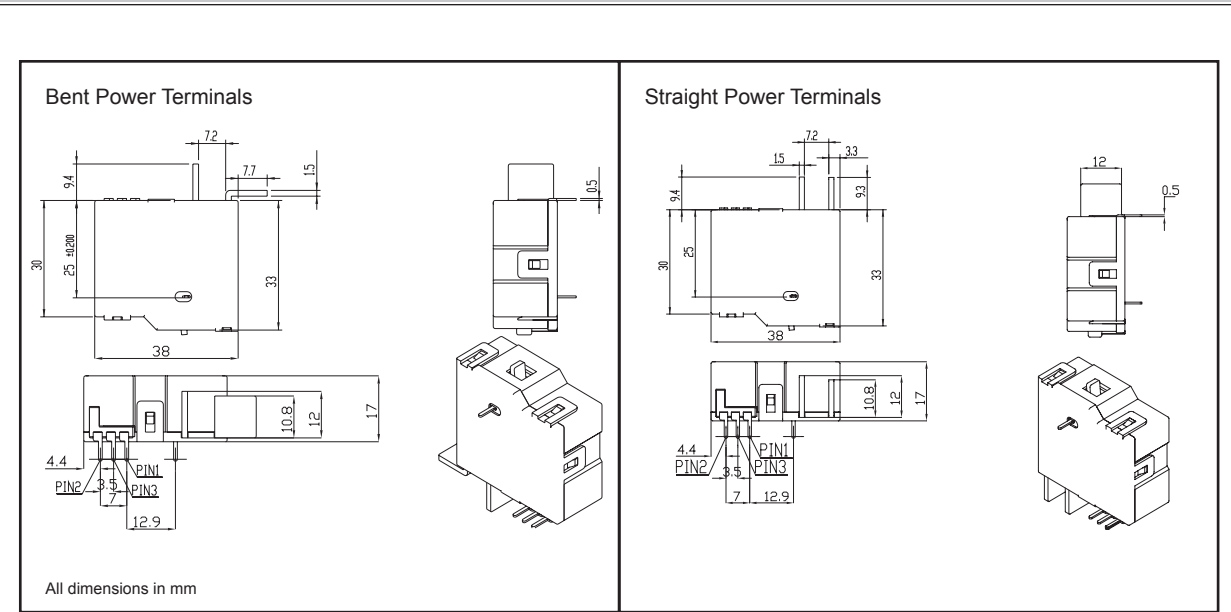
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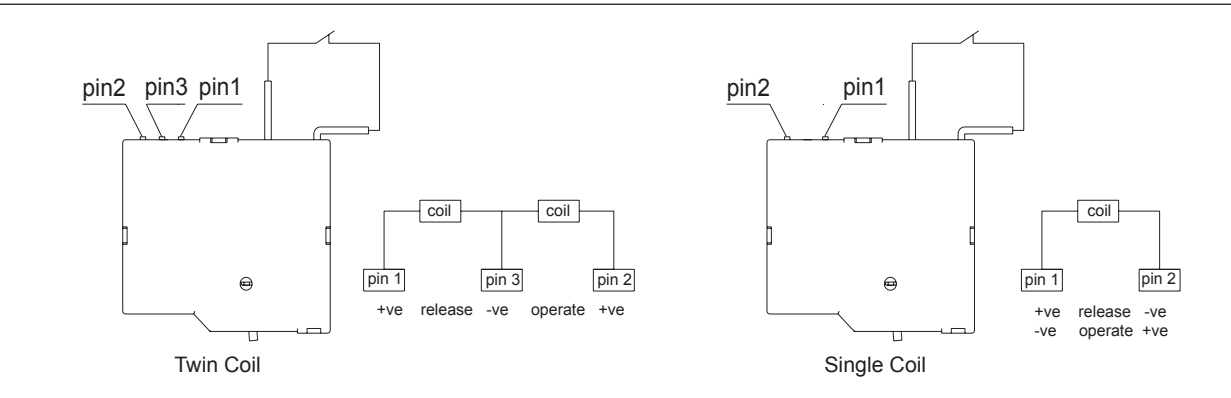
Overall Dimensions

Fig. 1



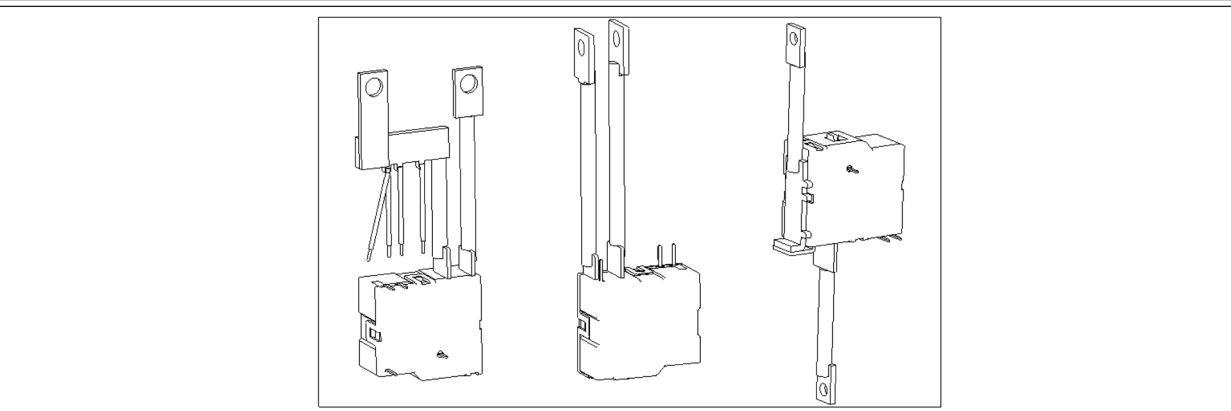
Wiring Diagrams

Fig. 2



Custom connection options: Illustrative examples showing with optional shunt or without.

Fig. 3



Notes:

1) All parameters, unless otherwise specified, are measured at an ambient temperature of 23°C.

