

NOT FOR NEW DESIGN



- Up to 90A 250VAC continuous rating
- PCB mounting
- Twin coil latching
- UC2 for utility meters & power conditioning
- Automotive / small electric vehicle battery
- Highly customisable terminals

RoHS
Compliant ✓

Contacts

Contact arrangement	SPST Bistable (shipped in NC state)
Contact material	AgSnO ₂
Rated current	AC1 90A / 250VAC
Max. switching voltage	250VAC
Min. switched load	500mA / 12VDC
Initial contact resistance	≤ 100mΩ at 0.1A/6VDC
Short circuit current	UC2 2700A for 10ms (IEC62055-31)
Max. operating frequency	rated load 360 cycles/hour

Coil

Operating range	DC 6... 48VDC See Table 1
Rated power consumption	DC Twin:3W; Single: 1.5W
Operate / Release time	≤ 30ms to fully stable*

* In order for the contacts to be stable the coil voltage should reach the rated voltage.
The pulse width should be 5 times the operating time to ensure proper change of state.

Insulation

Insulation resistance	>100 MΩ at 500VDC
Dielectric strength	coil to contact 4000V _{rms} (50/60Hz, 1min, <1mA leakage)
	open contacts 3500V _{rms} (50/60Hz, 1min, <1mA leakage)
Contact Gap	≥ 1.25mm
Creepage & Clearance distance (coil to contact)	≥ 8mm

General Data

Electrical life at full rated load	cycles	1 x 10 ⁴
Mechanical life	cycles	> 1 x 10 ⁶

Environmental

Ambient temperature	operating	-40 to +85°C
	storage	0 to +40°C (RH = 20% ~ 80%)
Solder temperature		260°C ±5°C / 10s ±1s
Relative humidity	operating	5% ~ 98% RH @ 40°C
Mechanical shock	endurance	98m/s ² (10g)
Vibration resistance		10 ~ 55Hz, 1.5mm double amplitude
Dimensions	L x W x H	38 x 16.5 x 30mm
Weight	approx.	45g varies according to options

Ordering Code

D G 7 6 C - 5 0 3 1 - 3 0 V - S L 1 2 -

Series

Coil code:
See table 1

Contact material

50: AgSnO₂

Contact arrangement

31: SPST-NC *

* As shipped

Mounting & terminations

30V: Straight weld terminals for power terminals

35V: PCB mounting, coil & power terminals

Reserved for custom modifications

P*** Unique identifier - 3 digits assigned

P001: UL V0 flammability rating

DC Coil Data

Table 1

Coil 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)		
SL05	TL05	5	16	8.0 + 8.0	≥ 3.5	$\geq 50\text{ms}$
SL06	TL06	6	24	12.0 + 12.0	≥ 4.2	
SL09	TL09	9	54	27.0 + 27.0	≥ 6.3	
SL12	TL12	12	96	48.0 + 48.0	≥ 8.4	
SL24	TL24	24	384	192.0 + 192.0	≥ 16.8	
SL48	TL48	48	1536	768.0 + 768.0	≥ 33.6	

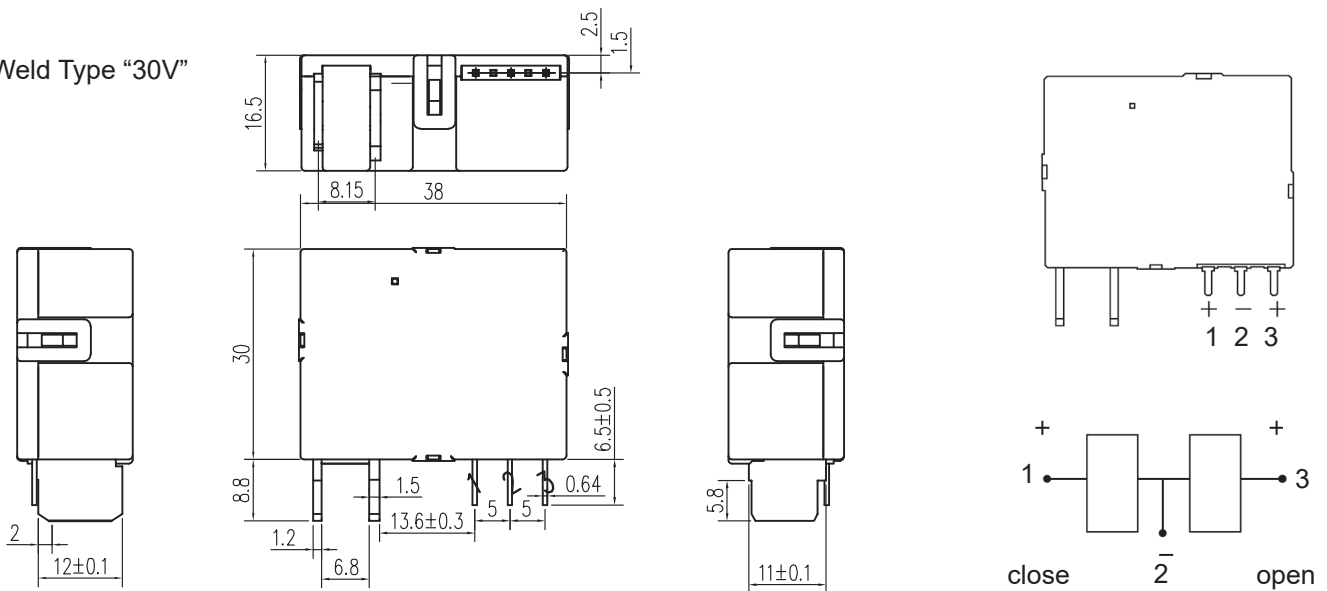
Single coil types: Reverse polarity through coil to change state. (Terminals 1 & 3 only)

*NB. Twin coil types: Latch & Reset coils must not be powered simultaneously. Do not energize the coil for longer than 1 minute to avoid possible damage to the coil.

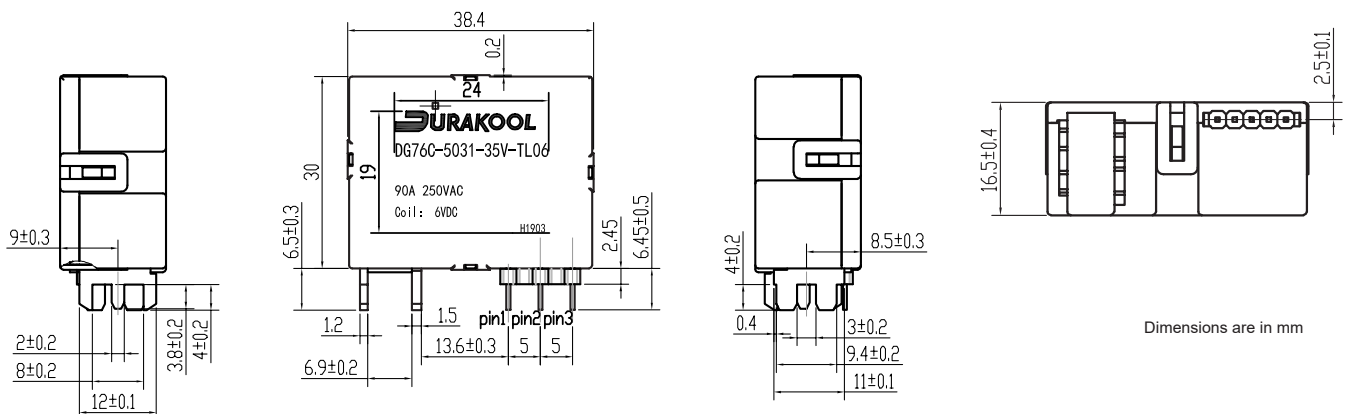
Dimensions

Fig. 1

Weld Type "30V"



PCB Type "35V"



Dimensions are in mm