

NOT FOR NEW DESIGN



shown without supplied terminal screws

- Up to 120A / 250VAC Continuous rating
- Single coil & twin coil latching
- Utility meters
- Automotive / Electric vehicle battery

RoHS
Compliant ✓

Contacts

Contact arrangement	SPST
Contact material	AgSnO ₂
Max. switching voltage	250VAC / 30VDC
Min. switching current / voltage	500mA/12VDC
Max. continuous current	120A
Max. switching current	120A
Max. switching power	30000VA
Initial resistance	≤ 10mΩ, max. at 0.1A/6VDC

Coil

Rated voltage	9...48VDC
Operating range of supply voltage	See table 1
Rated power consumption	single coil 1.8W
Rated power consumption	twin coil 3.6W

Insulation (EN 60664-1)

Insulation resistance	>1000MΩ at 500VDC, 50%RH
Dielectric strength	coil to contact 4000Vrms, 1min (50Hz)
	between open contacts 1800Vrms, 1min (50Hz)
Creepage & Clearance	8mm

General Data

Operating time	max.	30ms
Release time	max.	30ms
Electrical life (resistive)	ops.	6 x 10 ³
Mechanical life	ops.	5 x 10 ⁵

Environmental

Ambient temperature	operating	-40 to 70°C (Class F)
	storage	-40 to 70°C
Humidity		98%RH, 40°C
Shock resistance	functional	100m/s ² 11ms
	destructive	1000m/s ²
Vibration resistance		DA 1.5mm 10-55Hz
Dimensions	L x W x H	76 x 43 x 25mm
Weight	approx.	≤ 180g

Ordering Code

D G 7 8 - 3 0 2 1 - 7 8 - T L 1 2 -

Series

Coil code:

See table 1

Contact material

30: AgSnO₂

Contact arrangement

21: SPST*

* Delivered with contacts
in the closed position

Environmental protection

7: Covered, dust cover

Mounting & terminations*

8: PCB / wire coil terminals +
+screw terminals for contacts

* Terminals are highly customizable.
Please contact factory.

Options

Blank: Standard

P*** : Custom (***) = unique identifier

DC Coil Data

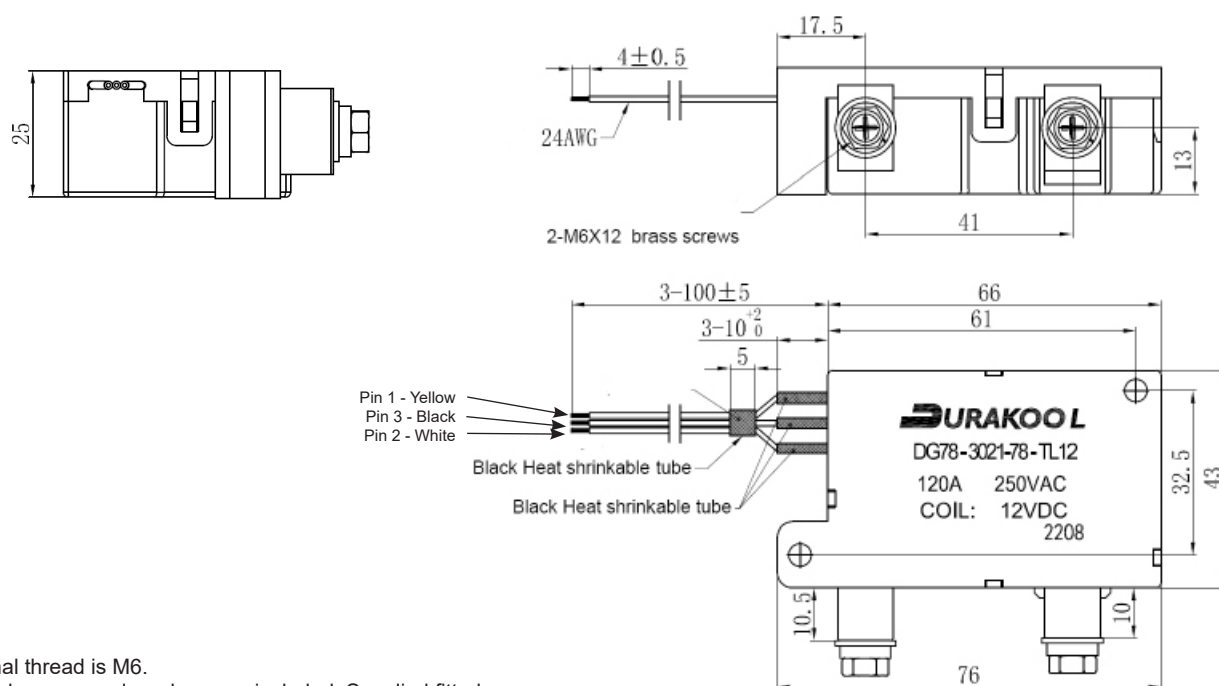
Table 1

Coil voltage code		Nominal voltage (VDC)	Coil resistance (Ω) $\pm 10\%$		Must operate voltage (VDC)	Recommended operate pulse length
Single coil	Twin coil*		Single coil (1.8W)	Twin coil* (3.6W)		
SL09	TL09	9	45	22.5 + 22.5	≥ 6.75	100ms
SL12	TL12	12	80	40 + 40	≥ 9	
SL24	TL24	24	320	160 + 160	≥ 18	
SL48	TL48	48	1280	640 + 640	≥ 36	

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

Overall Dimensions mm

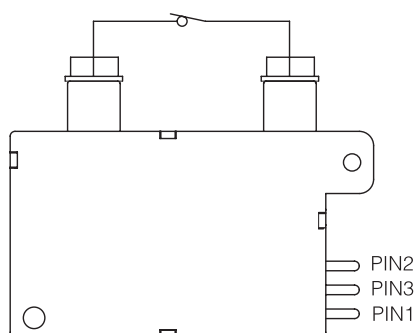
Fig. 1



Power terminal thread is M6.
Brass terminal screws and washers are included. Supplied fitted.
Pin 3 not fitted for single coil type.

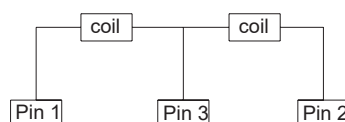
Wiring Diagrams

Fig. 2



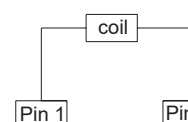
Pin 3 not fitted for single coil latch

Twin Coil



Pin 1 +ve, Pin 3 -ve: contacts close
Pin 2 +ve, Pin 3 -ve: contacts open

Single Coil



+ve contacts open -ve contacts close +ve

Notes:

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