



- Up to 120A / 250VAC Continuous rating
- Custom termination options inc shunts
- Single coil & twin coil latching
- Utility / Prepayment meters
- Automotive / Electric vehicle battery
- IEC 62055-31UC3

RoHS
Compliant ✓

Contacts

Contact arrangement	SPST-NO, SPST-NC (as delivered condition)
Contact material	AgSnO ₂
Max. switching voltage	250VAC / 20VDC
Min. switching current / voltage	500mA/12VDC
Max. continuous current	100A
Short circuit carrying capacity	3000A (Utilization Category UC3)
Max. switching power	DG79: 25000VA
Initial resistance	≤100mΩ, max. at 0.1A/6VDC (typ. 0.25 to 0.5mΩ)

Coil

Rated voltage	5...48VDC
Operating range of supply voltage	See table 1
Rated power consumption	single coil 2.3W
Rated power consumption	twin coil 4.6W

Insulation (EN 60664-1)

Insulation resistance	>1000MΩ at 500VDC, 50%RH
Dielectric strength	coil to contact 4000Vrms, 1min (50Hz)
	between open contacts 2000Vrms, 1min (50Hz)
Creepage & Clearance	>8mm

General Data

Operating time	max.	20ms
Release time	max.	20ms
Electrical life (resistive)	ops.	1 x 10 ⁴
Mechanical life	ops.	5 x 10 ⁵

Environmental

Ambient temperature	operating	-40 to 85°C (Class F)
	storage	-40 to 85°C
Humidity		95%RH, 40°C
Shock resistance	functional	98m/s ² (10g)
	destructive	980m/s ² (100g)
Vibration resistance		DA 1.5mm 10-55Hz
Dimensions	L x W x H	52 x 43 x 22mm
Weight	approx.	80g (depending on options)

Ordering Code

D G 7 9 - 3 0 2 1 - 7 0 V - T L 1 2 - P 0 0 1

Series

Model Type

DG79: 100A rating

Contact material

30: AgSnO₂

Contact arrangement

21: SPST-NO (1NO)*

31: SPST-NC (1NC)*

* As delivered condition

Environmental protection

7: Covered, dust cover

Mounting & terminations*

0H: PCB coil terminals + horizontal power terminals.

0V: PCB coil terminals + vertical power terminals.

1V: PCB coil terminals + vertical power terminals.

2V: PCB coil terminals + vertical power terminals with integral shunt. (Use with 'P' custom option to define shunt).

* Custom terminations available. Please contact factory.

Options

Blank: Standard

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

Coil code:
See table 1

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 (2.3W)	Twin coil* (4.6W)		
SL05	TL05	5	11	5.5 + 5.5	≥ 3.75	50ms
SL09	TL09	9	35	17.5 + 17.5	≥ 6.75	
SL12	TL12	12	63	31 + 31	≥ 9.0	
SL24	TL24	24	250	125 + 125	≥ 18.0	
SL48	TL48	48	1000	500 + 500	≥ 36.0	

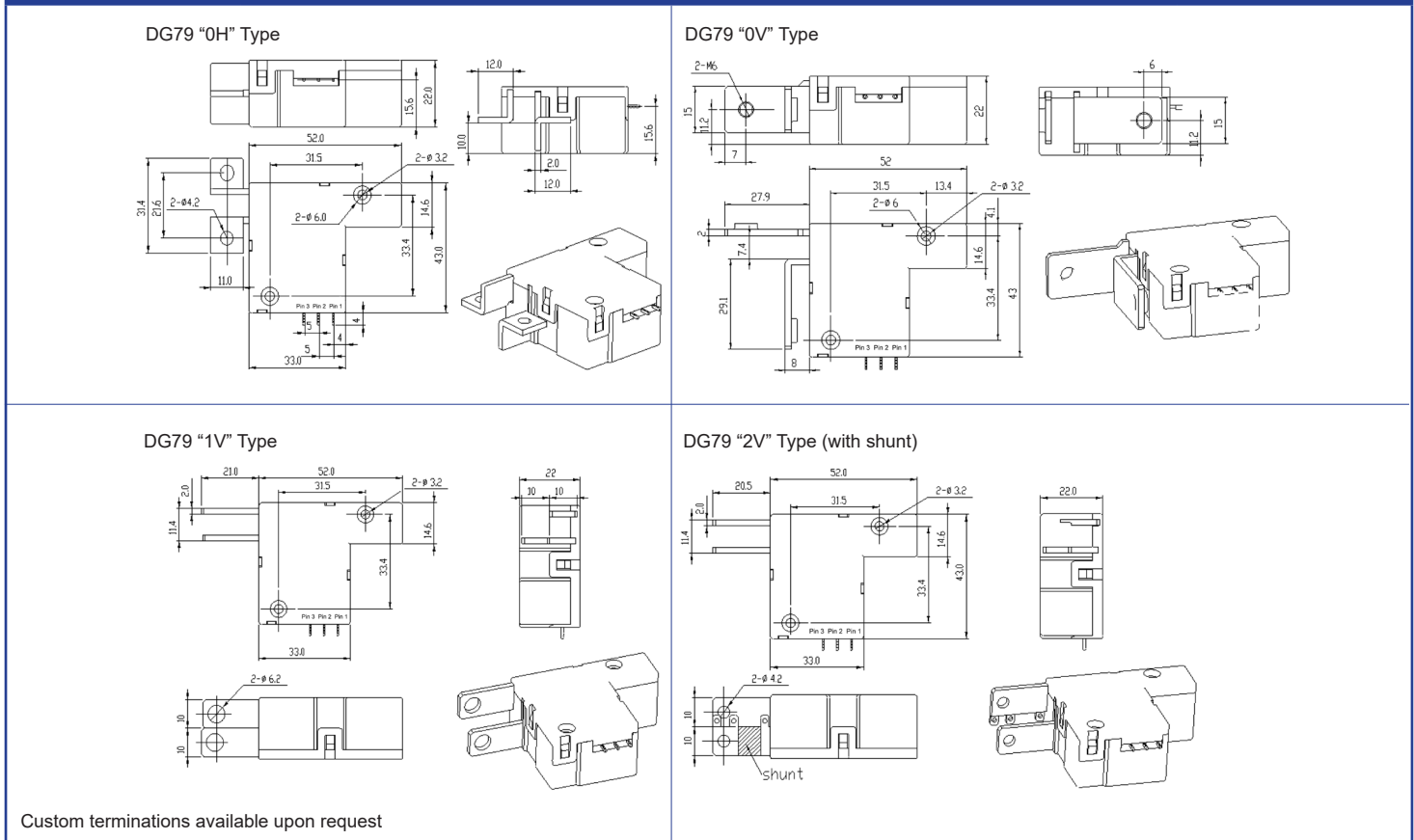
* NB: Latch & Reset coils must not be powered simultaneously.

Twin Coil type can be used as single coil type by ignoring centre connection (Pin 2 - see Wiring Diagram, Fig. 3).

Other coil voltages available to special order, subject to minimum order quantity.

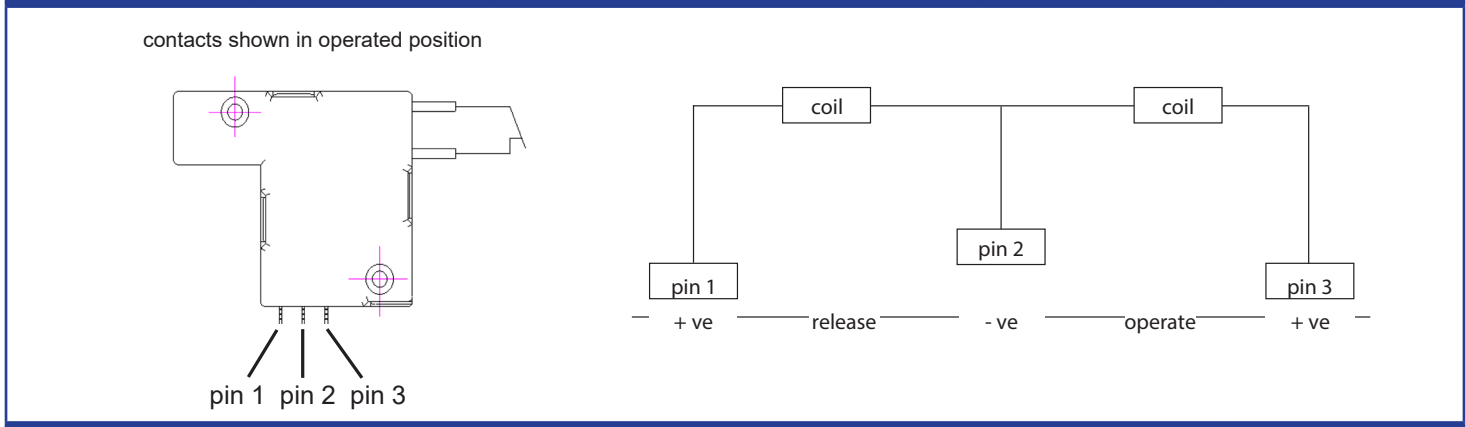
Overall Dimensions mm

Fig. 1



Wiring Diagrams

Fig. 2



Notes:

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