

NOT FOR NEW DESIGN



- 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)

DC Coil Data

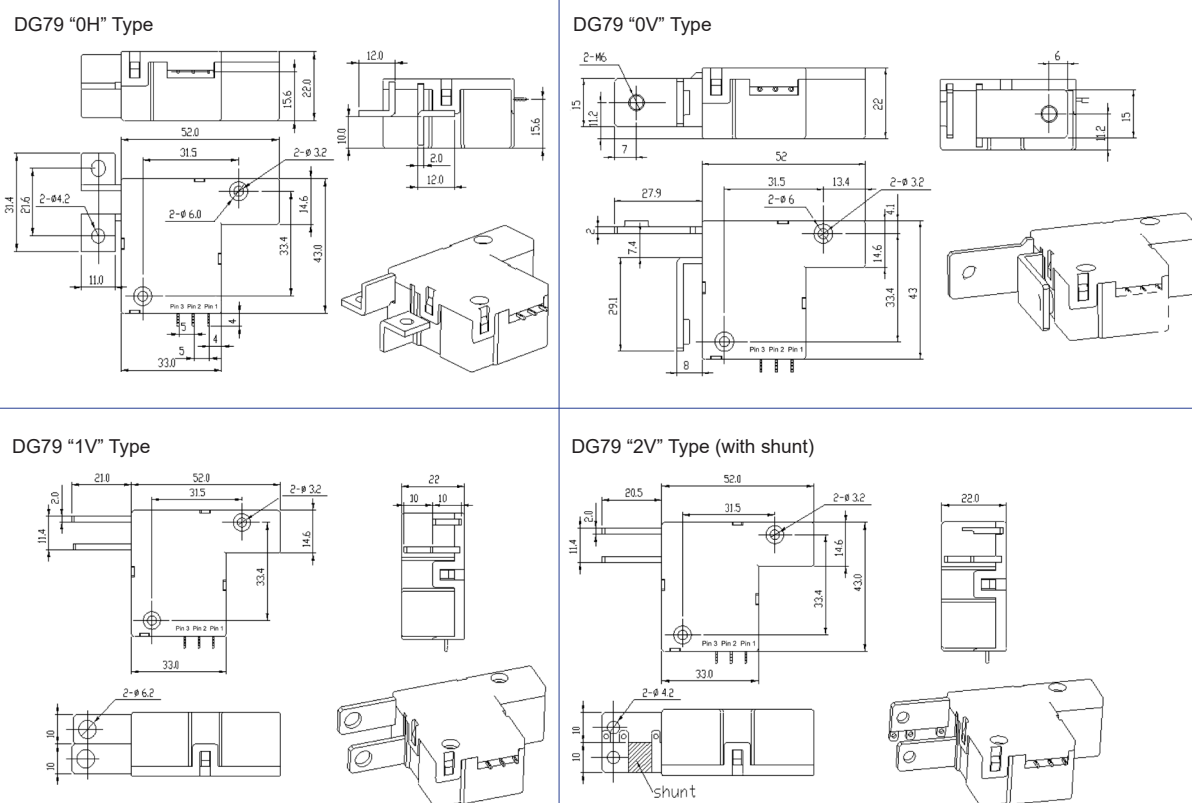
Coil voltage code		Nominal voltage (VDC)	Coil resistance (Ω) $\pm 10\%$		Must operate voltage (VDC)	Recommended operate pulse length
Single coil	Twin coil*		Single coil (2.3W)	Twin coil* (4.6W)		
SL05	TL05	5	11	5.5 + 5.5	≥ 3.75	50ms
SL09	TL09	9	35	17.5 + 17.5	≥ 6.75	
SL12	TL12	12	63	31 + 31	≥ 9.0	
SL24	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.

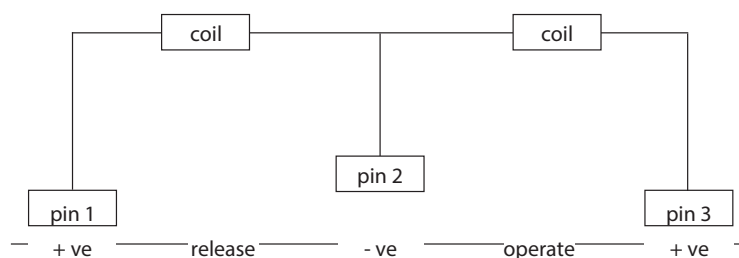
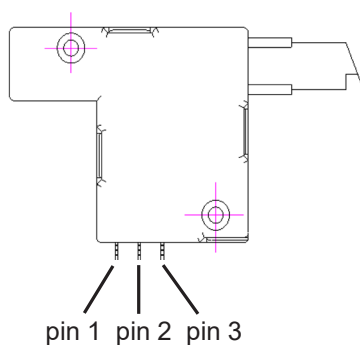
Overall Dimensions mm



Custom terminations available upon request

Wiring Diagrams

contacts shown in operated position



Notes:

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

Specifications are subject to change without notice. E&OE.

See website for contact details: www.durakool.com