

DG79 / DG79B

industrial bistable (latching) power relay

DURAKOOL



- Up to 120A /240VAC continuous rating
- Custom Termination options inc shunts
- Single Coil & Twin Coil Latching
- Utility / Prepayment meters
- Automotive / Electric Vehicle Battery
- IEC 62055-31UC3

Contacts

Contact number & arrangement	SPST-NO, SPST-NC (as delivered condition)
Contact material	AgSnO ₂
Max. switching voltage	250VAC / 30VDC
Min. switching current / voltage	500mA/12VDC
Max. continuous current	DG79: 100A / DG79B: 120A
Short circuit carrying capacity	3000A (Utilization Category UC3)
Max. switching power	DG79: 25000VA / DG79B: 30000VA
Initial resistance	≤ 100mΩ, max. at 0.1A/6VDC (typically 0.25 to 0.5mΩ)

Coil

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

Insulation

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.)	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	52 x 43 x 22mm (see drawings for detail)
Weight		approx. 80g (depending on options)
Ambient temperature	storage	-40 to 85°C
	operating	-40 to 85°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 (mS)
Single Coil	Twin Coil*		Single Coil (2.3W)	Twin Coil* (4.6W)		
SL05	TL05	5	22	11 + 11	≥ 3.75	100
SL09	TL09	9	35	18 + 18	≥ 6.75	
SL12	TL12	12	63	31 + 31	≥ 9.0	
SL24	TL24	24	250	125 + 125	≥ 18.0	
SL48	TL48	48	1002	501 + 501	≥ 36.0	

* NB: For twin coil, 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.

Ordering codes

Type	Contact Material	Contact arrangement	Cover protection and mounting	Coil code
D G 7 9				
Model type DG79 100A Rating DG79B 120A Rating				
Contact Material 30 - AgSnO₂				
Contact Arrangement 21 - SPST-NO (1 Normally open) * 31 - SPST-NC (1 Normally closed) * * As delivered condition.				
Cover Protection Category 7 - Covered, dust cover				
Terminations and mounting (refer to Dimensional Drawings)* 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 NIL - Standard P*** - Custom (*** = unique identifier)				

see Table 1

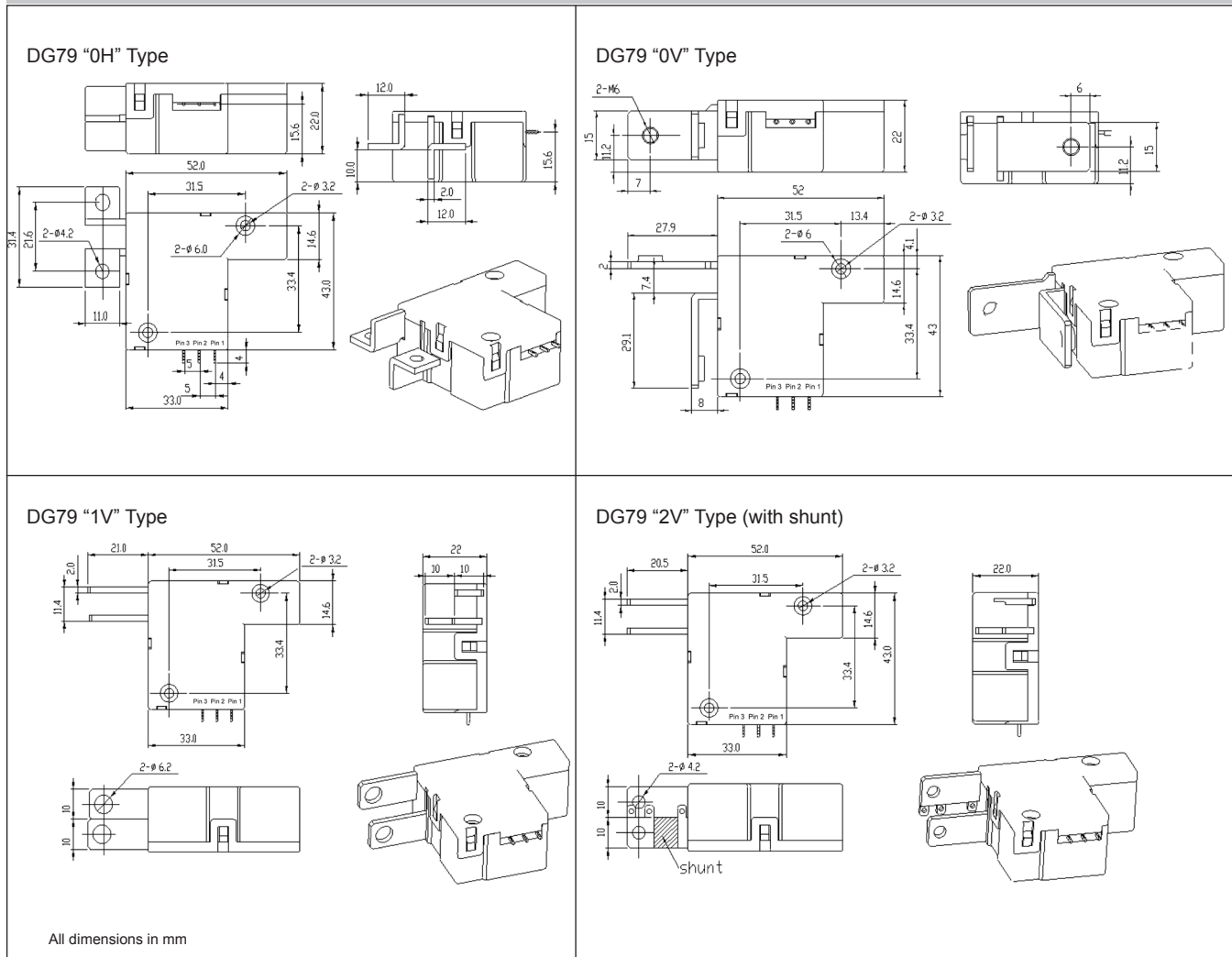
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Overall Dimensions

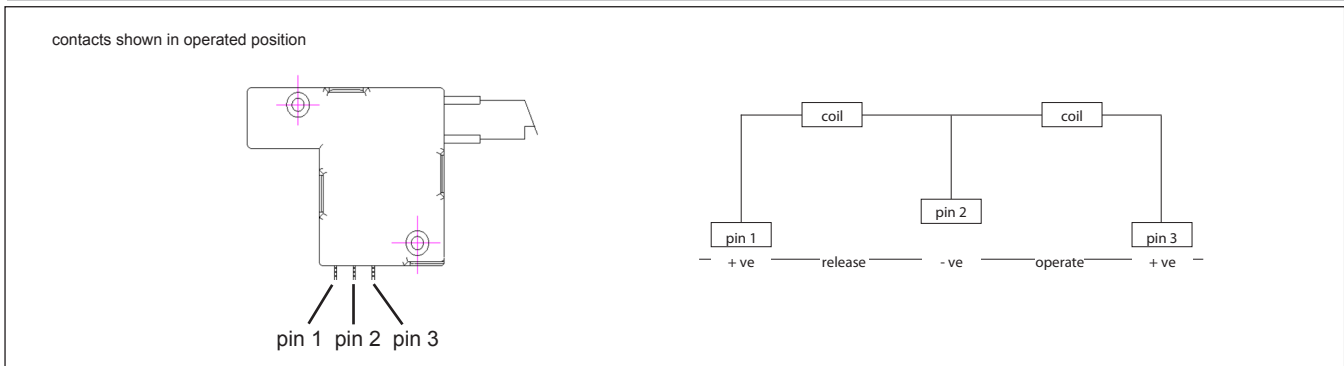
Fig. 1



Custom terminations available upon request

Wiring Diagram

Fig. 3



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.