



- General purpose automotive or industrial relays.
- Ideal for DC motor control or lights, vehicle alarms, heated windows, sunroof motors.
- Sn plated, copper terminals for high continuous DC current capacity.
- Industry standard Mini-ISO terminals.
- PCB versions available.

ROHS
Compliant

Contacts

Contact arrangement	SPST-NO (1 Form A), SPDT (1 Form C), SPST-NC (1 Form B), SPST-DM (1 Form U)				
Contact material	AgSnO ₂				
Max. switching voltage	DC	75VDC -current dependent. >24VDC Contact factory			
Contact rating (resistive)		SPST-NO	SPST-NC	SPDT	SPST-DM
		40A (14VDC), 20A (24VDC)	30A (14VDC), 20A (24VDC)	40A / 30A (14VDC), 20A / 15A (24VDC)	2x20A (14VDC), 2x15A (24VDC)
Max. switching current (inrush)	make	120A	45A	120A / 45A	40A
Rated power	630W				
Min. switching current	100mA/6VDC				
Initial contact resistance	≤30mΩ, max. at 0.1A/6VDC (IEC 61810-7 / 4.12)				

Coil

Rated voltage	DC	6V, 12V, 24V
Operating range of supply voltage	See coil table 1	
Rated power consumption	1.6W (1.8W with resistor)	

Insulation

Insulation resistance	100MΩ at 500VDC, 50%RH, 25°C (IEC60255-5 / Item 7)	
Dielectric strength	coil to contact	750Vrms / 1 min (IEC 60255-5 Item 6)
	contact to contact	500Vrms / 1 min (IEC 60255-5 Item 6)

General Data

Operating time	ms	≤7
Release time	ms	≤5
Electrical life	ops.	1 x 10 ⁵ (IEC61810-7 / Item 4.30)
Mechanical life	ops.	1 x 10 ⁷ (IEC61810-7 / Item 4.31)

Environmental

Environmental protection	IP54 Dust cover, IP67 Fully sealed (optional)	
Ambient temperature	operating	-40 to 125°C (Derate above 85°C - consult factory)
	storage	-40 to 155°C
Shock resistance	functional	98m/s ² (10g)
	destructive	196m/s ² (20g)
Vibration resistance	1.5mm, 10 to 40Hz	
Dimensions	L x W x H	26.5 x 26.5 x 24.5mm (excluding terminals)
Weight	approx.	31 - 36g depending on style and mounting

Ordering Code

D G 5 6 A - 7 0 2 1 - 9 6 - 1 0 2 4 - M 1 D R

Series

Coil code:

See table 1

Contact material

70: AgSnO₂

Contact configuration

11: SPDT (1C/O, 1 Form C)

21: SPST-NO (1N/O, 1 Form A)

31: SPST-NC (1N/C, 1 Form B)

8U: SPST-DM (1 Form U)

Environmental protection

3: Sealed cover IP67

7: Dust cover IP54

9: Dust cover with plastic mounting bracket unless M1 or S1 specified

Mounting & terminations

5: For PCB

6: Flat blades

D: Double 87 flat blades

Options 1

Blank: No options

M1: Metal bracket (with cover type 3 or 9)

S1: Metal bracket & skirt (with cover 3 or 9)

Options 2

Blank: No options

R: Parallel resistor

D: Parallel diode +85, -86

DR: Parallel diode -85, +86 (standard for diode)

DD: Double diodes +86 (see fig. 2 for detail)

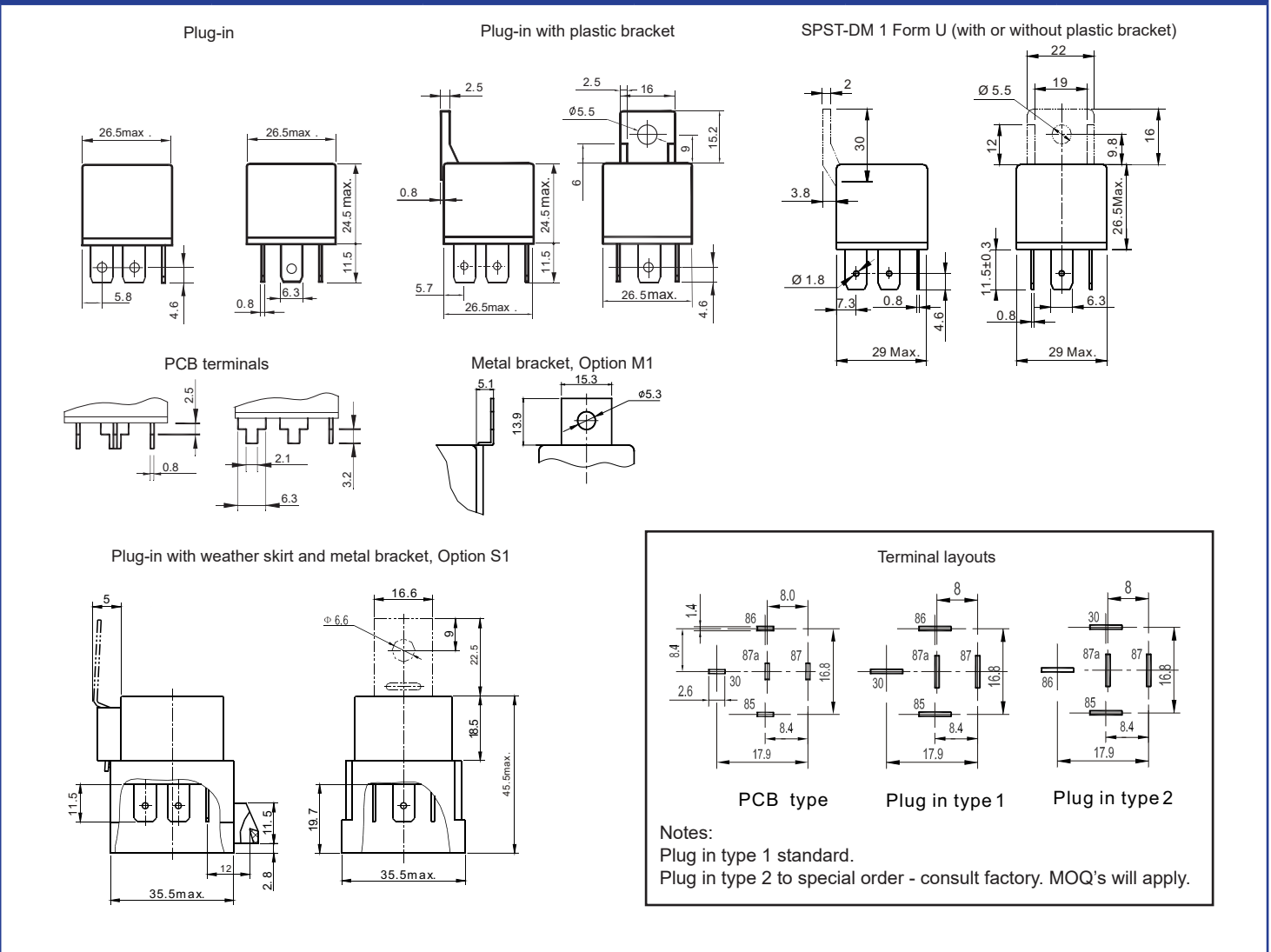
DC Coil Data

Table 1

Coil code	Nominal voltage (VDC)	Coil resistance (Ω) ± 10%	Must operate voltage max. (VDC)	Maximum Allowable voltage (VDC)		Must release voltage min. (VDC)	Parallel Resistor (Ω) ± 5% (when fitted)
				23 °C	85 °C		
1006	6	22.5	3.9	10.1	7.6	0.6	180
1012	12	90	7.8	20.2	15.6	1.2	680
1024	24	360	15.6	40.5	31.5	2.4	2700

Dimensions mm

Fig. 1



Connection diagrams

Fig. 2

