



- Rated load: 250A at 60VDC
- Auxiliary contact option
- Bi-stable (Latching) option
- Busbar terminations



Contacts

Contact arrangement	SPST-NO-DM	
Contact material	AgCu Alloy	
Max. switching voltage	DC	60V
Rated load (resistive, $\cos \phi=1$)	DC1	250A 60VDC
		400A for 10s with 100mm ² conductors
		300A for 30s with 100mm ² conductors
Terminal temperature rise above ambient	<70°C. IEC EN60947, GB14/14048.4	
Contact voltage drop	max	≤ 80mV @ 100A
Auxiliary Contact (when fitted)	Arrangement	SPST-NO (1 Form A)
	Max. Current	5A @ 24VDC / 2A @ 48VDC
	Min. Current	100mA @ 5V

Coil

Nominal Voltage (see page 2)	DC	12 ~ 120VDC (Tables 1 & 2)
Rated power consumption	10~20W hold (non-latch), pulse 15~30W (latch)	
Working duty	Continuous (non-latching types)	
Minimum pulse length (latch coil)	500ms	

Insulation

Insulation resistance	Initial	100MΩ (Min.) @ 500VDC
Dielectric strength	coil to contact	1000V _{rms} (50/60Hz) / <1mA / 1 min (at sea level)
	contact to contact	1000V _{rms} (50/60Hz, 1min, <1mA leakage)

General Data

Operate / bounce time at 20°C	max.	30ms / 3ms
Release time	max.	30ms
Electrical life	at rated load	20,000 ops
Mechanical life	no load	100,000 ops

Environmental

Ambient temperature	operating	-25°C to +65°C (Latching), +85°C (non-Latching)
Shock resistance	20g peak, 11ms 1/2 sine	
Vibration resistance	3g sine peak (1-50Hz 0.5mm amplitude)	
Relative humidity	RH	20% ~ 90%
Dimensions	L x W x H	89 x 38 x 80 mm (approx.)
Weight	approx.	480g (varies according to options and coils)

Ordering Code

D S C 2 5 - 4 0 2 1 - 2 8 - 1 0 2 4 - S D

DSC Series

25: Standard

Coil codes

See tables 1 & 2

Contact arrangement

4021: SPST-NO-DM

Body style

28: Open frame, busbar terminations

Accessory options

Blank: No option

S: Auxiliary switch

D: Parallel back emf diode suppression (standard coils)

T: Parallel TVS back emf suppression diode (bi-stable coils)

Mounting & terminations

Blank: No bracket

1L: One "L" shaped mounting bracket

2L: Two "L" shaped mounting brackets

2P: Two "P" shaped mounting brackets

Magnetic latching types:

For latching types, ensure square wave pulse length between 500ms and 1s to allow contacts to settle and magnetic circuit to be fully established. Operating frequency should be no more than 6 ops/min. Continuous energisation is not allowed.

Coil Data - Standard (monostable) coil

Table 1

Coil code	Nominal voltage U_s (VDC)	Recommended coil operating range (V)	Must operate max. voltage (VDC)	Must release voltage min. (VDC)	Starting current (A)	Coil power (W)
1012	12	0.85 U_s ~ 1.2 U_s	≤ 8.4	≥ 1.2	≤ 1.00	10 ~ 20W
1024	24		≤ 16.8	≥ 2.4	≤ 0.60	
1030	30		≤ 21.0	≥ 3.0	≤ 0.60	
1036	36		≤ 25.2	≥ 3.6	≤ 0.50	
1048	48		≤ 33.6	≥ 4.8	≤ 0.30	
1060	60		≤ 42.0	≥ 6.0	≤ 0.25	
1072	72		≤ 50.4	≥ 7.2	≤ 0.20	
1080	80		≤ 56.0	≥ 8.0	≤ 0.15	
1096	96		≤ 67.2	≥ 9.6	≤ 0.15	
1120	120		≤ 84.0	≥ 12.0	≤ 0.15	

Coil Data - Single coil latch (bi-stable). Reverse polarity through coil to unlatch.

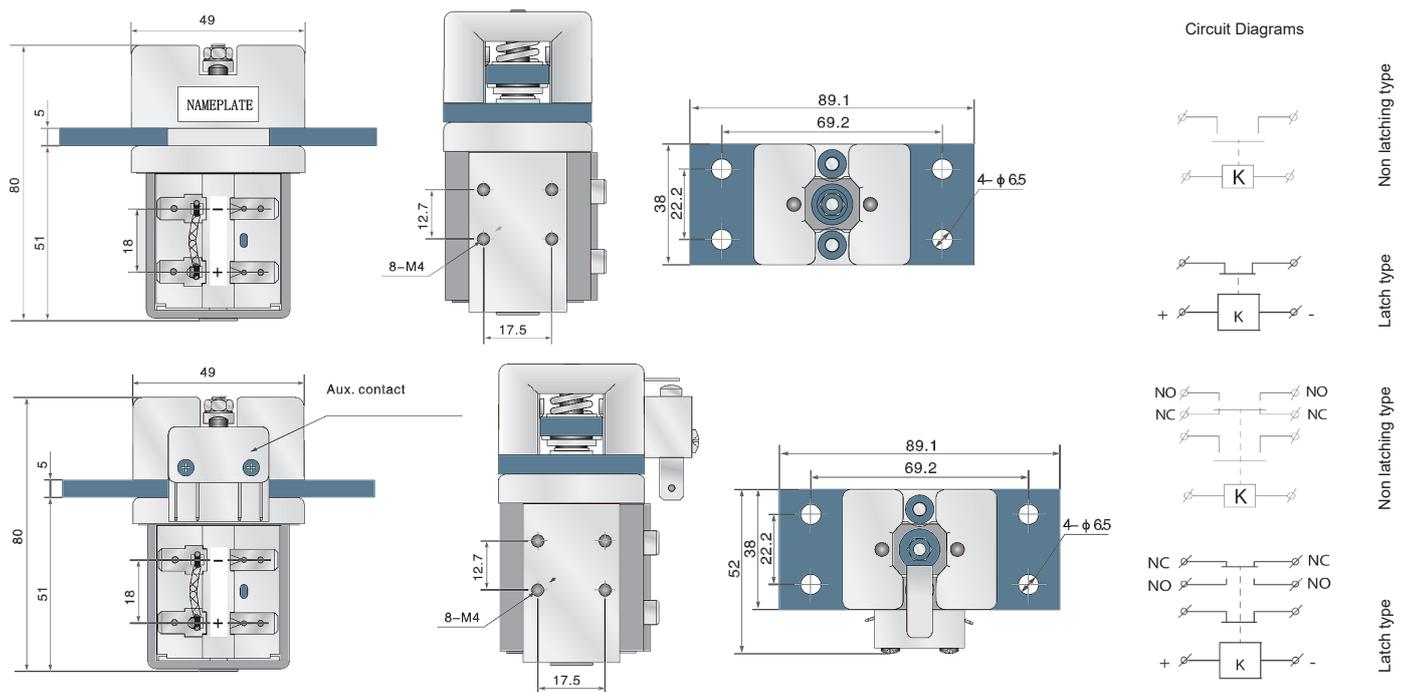
Table 2

Coil code	Nominal voltage U_s (VDC)	Recommended coil operating range (V)	Must operate max. voltage (VDC)	Must release voltage min. (VDC)	Starting current (A)	Coil power (W)
SL12	12	0.85 U_s ~ 1.2 U_s	≤ 9.6	≤ 9.6	≤ 2.00	Initial 15 ~ 35W Pulse length 0.5 ~ 1 sec. Continuous operation not permitted
SL24	24		≤ 19.2	≤ 19.2	≤ 1.00	
SL30	30		≤ 24.0	≤ 24.0	≤ 0.75	
SL36	36		≤ 28.8	≤ 28.8	≤ 0.70	
SL48	48		≤ 38.4	≤ 38.4	≤ 0.50	
SL60	60		≤ 48.0	≤ 48.0	≤ 0.40	
SL72	72		≤ 57.6	≤ 57.6	≤ 0.40	
SL80	80		≤ 64.0	≤ 64.0	≤ 0.35	
SL96	96		≤ 76.8	≤ 76.8	≤ 0.30	
SL120	120		≤ 96.0	≤ 96.0	≤ 0.25	

Other coils available upon special request. MOQ's will apply.

Dimensions (mm)

Fig 1



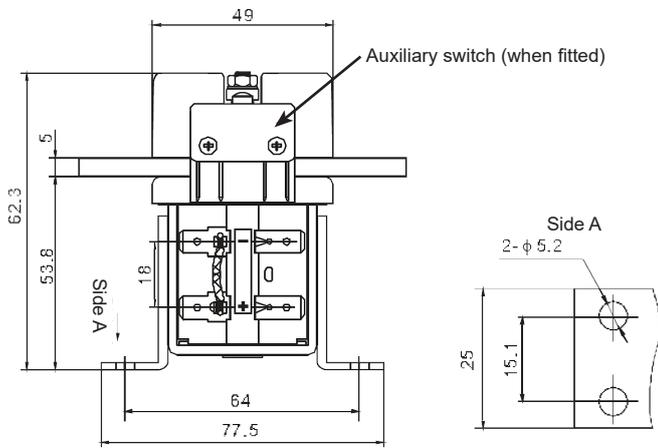
Notes:

- Note coil polarity for latching operation.
- Observe contact polarity as indicated.
- Tolerances (nominal), <10mm: ± 0.3mm, 10 ~ 50mm: ± 0.6mm, >50mm: ± 1.0mm.

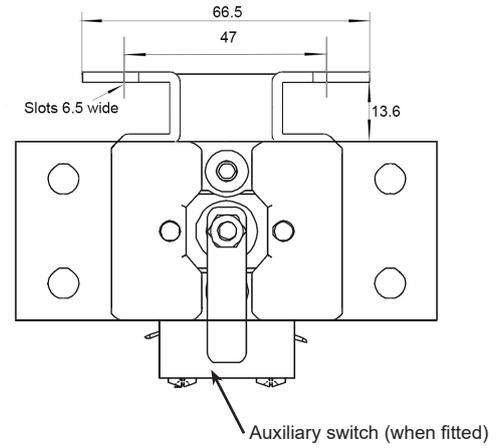
Top: Without auxiliary switch, Bottom: with auxiliary switch

Mounting bracket dimensions (mm)

Fig 2



"L" Brackets
(2L brackets shown, 1L bracket is fitted on Side A only)



"2P" Brackets