



- Rated load: 1800A at 60VDC
- Auxiliary contact option
- Bi-stable (Latching) option
- Busbar power terminations
- For battery storage applications



Contacts

Contact arrangement	SPST-NO-DM
Contact material	AgCu Alloy
Max. switching voltage	DC 60VDC
Rated load (resistive, $\cos \phi=1$)	DC1 1800A 60VDC
Max. continuous thermal current	1800A
Fault current breaking capacity (resistive)	3000A @ 60VDC (UL508)
Terminal temperature rise above ambient	<70°C. IEC EN60947, GB14/14048.4
Contact voltage drop	max. $\leq 50\text{mV}$ @ 1800A
Auxiliary contact (when fitted)	arrangement SPST-NO + SPST-NC
	max. current 5A @ 24VDC / 2A @ 48VDC
	min. current 100mA @ 5V

Coil

Nominal Voltage (see Table 1)	DC 12, 24, 48, 60VDC
Rated power consumption	15~25W hold (non-Latch), 50~70W pulse (Latch)
Working duty	Continuous (non-latching)

Insulation

Insulation resistance	initial	100M Ω (Min.) @500VDC
	life end	50M Ω (Min.)
Dielectric strength	coil to contact	2500V _{rms} (50/60Hz) / <1mA / 1 min (at sea level)
	contact to contact	1500V _{rms} (50/60Hz) / <1mA / 1 min (at sea level)

General Data

Operate / bounce time at 20°C	max.	60ms / 5ms
Release time		60ms
Electrical life	at rated load	6000 operations
Mechanical life	operations	1 x 10 ⁵

Environmental

Ambient temperature	operating	-25°C to +65°C (Latching), +85°C (non-Latching)
Shock resistance		$\leq 4\text{g}$, (60 ~ 100ops/min)
Vibration resistance		$\leq 3.5\text{g}$ sine peak (10 to 200Hz)
Relative humidity	RH	20 to 90%
Dimensions	L x W x H	153 x 102 x 174.8mm (over busbar terminations)
Weight	approx.	4.37kgs

Ordering Code

DSC180 - 4 0 2 1 - 2 8 - 1 0 2 4 - S

DSC Series

180: Standard

Coil codes

See table 1

Contact arrangement

4021: SPST-NO-DM

Body style

28: Open frame, busbar connections

Accessory options

Blank: No option

S: Auxiliary switch

Fitted with varistor for coil surge suppression as standard

Mounting & terminations

Blank: No bracket

NB: Mounting orientation:

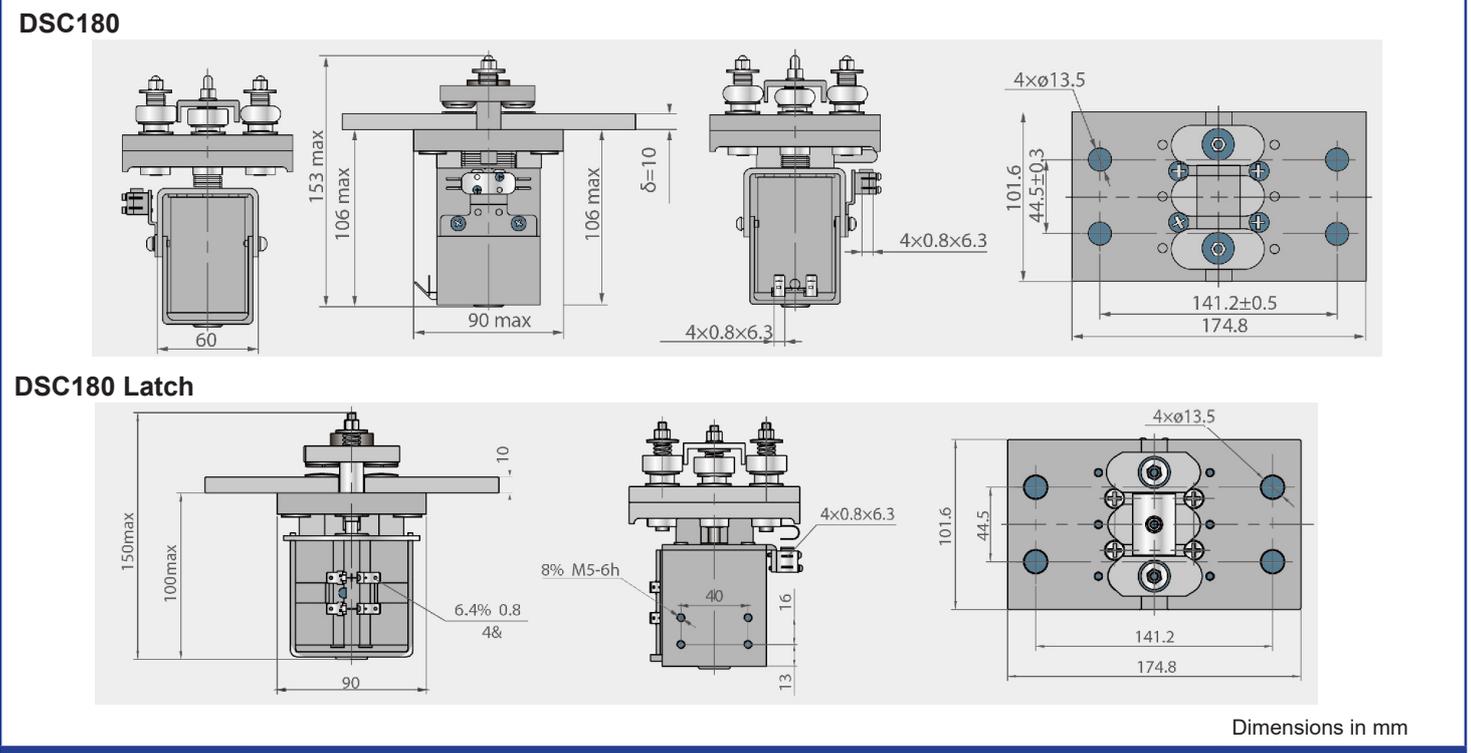
The DSC180 may be mounted horizontally, but if mounted vertically, the coil should be positioned downwards.

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						Table 1
Coil code	Nominal voltage (VDC) U_s	Coil working voltage range (V)	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Coil power dissipation (W)	Holding current (A)
DSC180 Standard (Mono-stable, non latching)						
1012	12	0.85 U_s ~ 1.1 U_s	8.4	1.2	15 ~ 30	≤1
1024	24		16.8	2.4	15 ~ 30	≤1
1048	48		33.6	4.8	15 ~ 30	≤0.7
1060	60		42.0	6.0	15 ~ 30	≤0.5
DSC180 Bi-stable, magnetic latching						
SL12	12	0.85 U_s ~ 1.1 U_s	2.4 ~ 9.6	2.4 ~ 9.6	50 ~ 70	
SL24	24		4.8 ~ 19.2	4.8 ~ 19.2	50 ~ 70	
SL48	48		9.6 ~ 38.4	9.6 ~ 38.4	50 ~ 70	
SL60	60		12.0 ~ 48.0	12.0 ~ 48.0	50 ~ 70	
Other coils available upon special request. MOQ's will apply.						

Dimensions



Connections

