



\*Image is for illustrative purposes only. Please refer to datasheet for detail.

- HVDC 10A at 1000VDC
- Max. switching current = 300A
- Contacts sealed in inert gas
- Magnet arc blowout
- Pre-charge relay
- Female M4 power terminals
- Non-polarised (bi-directional) design



#### Contacts

Contact arrangement	SPST-NO-DM
Contact material	T2+Ag
Max. switching voltage	AC/DC 1000VDC
Rated load (resistive, $\cos \varphi=1$ )	DC1 10A 1000VDC
Max. continuous thermal current	600s 18A
	30s 45A
Max switching current	1 time only 300A 450VDC
Initial contact resistance	max. 30mΩ (at 1A)
	typ. 1mΩ (at 1A)

#### Coil

Rated voltage (see page 2)	DC 12~48VDC
Rated power consumption	hold 3.2W @ 12VDC

#### Insulation

Insulation resistance	initial 100MΩ (min.)
	life end 50MΩ (max.)
Dielectric strength	coil to contact 3500Vrms / 10mA / 1 min (at sea level)
	contact to contact 3500Vrms / 10mA / 1 min (at sea level)

#### General Data

Operate time at 23°C	max. 30ms
Bounce time at 23°C	max. 7ms
Release time at 23°C	max. 12ms
Electrical life	Voltage and current dependent - see fig. 1
Mechanical life	2 x 10 <sup>5</sup>

#### Environmental

Environmental Seal	IP67
Ambient temperature	operating -40 to +85°C
Relative humidity	5 to 95%RH
Shock resistance	20G peak, 11ms 1/2 sine
Vibration resistance	20G sine peak (80 to 2000Hz)
Dimensions	L x W x H 37.2 x 51.26 (over flanges) x 47.82 (approx.)
Weight	approx. 120g ±5g

#### Ordering Code

D E V R 0 1 - 5 0 8 1 - S 8 - 1 0 2 4 - R 1 / 1

##### Series

##### Coil code:

See table 1

##### Contact material

50: T2+Ag

##### Contact arrangement

81: SPST-NO (no polarity)

##### Mounting & terminations

Bottom flange mounting base  
S8: M4 Female power terminals  
Coil by flying leads

##### Coil wire length

R: 400mm (standard)  
T: 5.9" (150mm)

##### Coil wire & auxiliary contact termination

1: None  
2: Yazaki 7282-5558-10 Male, fitted to coil wires only.  
Other terminations to special order

##### Version:

/1: Version 1

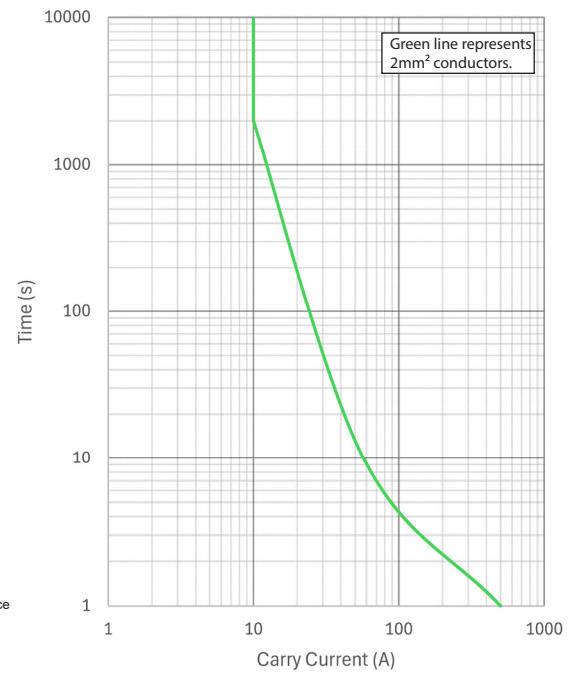
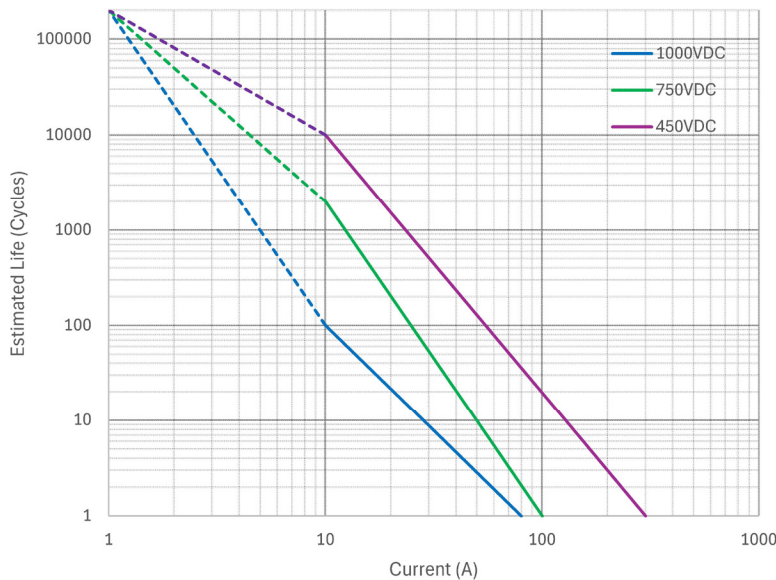
Coil Data

Table 1

Coil code	Nominal voltage (VDC)	Must operate voltage max. (VDC at 23°C)	Max. allowable voltage (VDC)	Must release voltage min. (VDC)	Coil resistance $\Omega \pm 10\%$ (at 23°C)	Coil Current (mA)	Coil power (W at 23°C)
1012	12.0	9.0	14.4	1.2	45.0	266.7	3.2
1024	24.0	18.0	28.0	2.4	167.0	143.7	3.5
1048	48.0	36.0	55.0	4.8	630.0	76.2	3.7

Electrical Performance

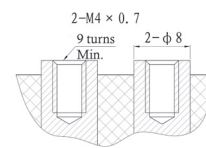
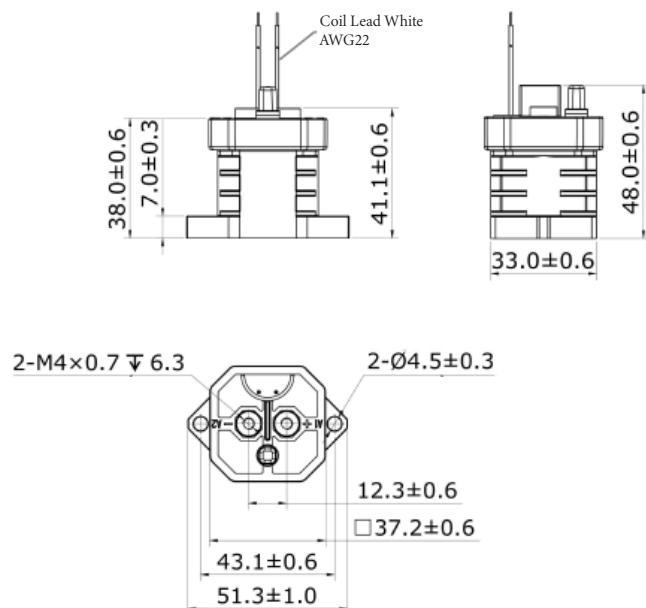
Fig. 1



- Estimates are based on test and extrapolated data (extrapolated data can be seen with dotted line). The user is advised to confirm performance in their application.
- Recommended conductor size and terminal temperature rise maximum in accordance with ISO (EN) 60947.1 70°C.
- Estimated electrical life is based on make and break current.
- All data is based on resistive data.

Dimensions (mm)

Fig. 2



Recommended Terminal Screws (not supplied):  
M4 x 0.7 x 8mm  
M4 spring washer  
M4 flat washer.

Recommended Conductor  
2mm²

Torque settings  
Terminals: 1.8 - 2.5Nm  
Base Mounting: 1.8 - 2.5Nm

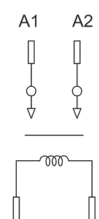
- Notes:
- Note coil is not polarised.
  - Nominal dimensions in mm.
  - Tolerances (nominal), <10mm:  $\pm 0.3$ mm, 10 ~ 50mm:  $\pm 0.6$ mm, >50mm:  $\pm 1.0$ mm.
  - Coil wire length and terminations can be customised upon request.

Circuit Diagram

Fig. 3

Power Terminals

Non Polarised



Coil is not polarised