



- SPST-NO Rated 20A / 450VDC
- Will carry 25A @ 450VDC (PCB type)
- Magnetic arc blowout
- Miniature case size
- PCB mounting & chassis mounting
- >3mm Contact gap



RoHS Compliant ✓

Contacts

Contact arrangement	SPST-NO-DM (1 Form X)
Contact material	AgSnO ₂
Rated current	DC1 20A / 450VDC (25A PCB Version)
Max. switching voltage	450VDC
Max. breaking current	100A (450VDC>1 cycle)
Max. breaking power	45kW
Initial contact resistance	10mΩ at 20A
Min. switched load	1A / 12VDC
Max. operating frequency	rated load 360 cycles/hour

Coil

Operating range	DC 12VDC, 24VDC See Table 1
Rated power consumption	DC: 1.6W @ 23°C

Insulation

Coil insulation system	IEC 31, CLASS F 155°C
Insulation resistance	>100 MΩ at 500VDC, 50%RH
Dielectric strength	
coil to contact	3000V _{rms} (50/60Hz, 1min, <1mA leakage)
open contacts	2000V _{rms} (50/60Hz, 1min, <1mA leakage)

General Data

Electrical life at full rated load	cycles	1.5 x 10 ⁵ 10A 450VDC
		7.5 x 10 ⁴ 20A 450VDC
		2 x 10 ⁵ 20A 72VDC
Mechanical life	cycles	>1 x 10 ⁶

Environmental

Environmental protection	IP67
Ambient temperature	operating -40 to +85°C
	storage -40 to +125°C
Mechanical shock	20g, 11ms
Vibration resistance	10-40Hz: DA1.27mm, 40-70Hz 5g
	70-100Hz: DA0.5mm, 100-500Hz: 5g
Dimensions	L x W x H 41 x 30 x 31.6mm approx.(excluding flanges)
Weight	approx. 60g (flange mounting type)

Ordering Code

D E 2 0 - 5 0 2 1 - 3 5 - 1 0 1 2

Series

Coil code:

See table 1

Contact material

50: AgSnO₂

Contact arrangement

21: SPST-NO-DM (1 Form X)

Mounting & terminations

35: Plain cover - PCB Mounting IP67 Sealed

S6: Flanged cover - chassis mount

DC Coil Data

Table 1

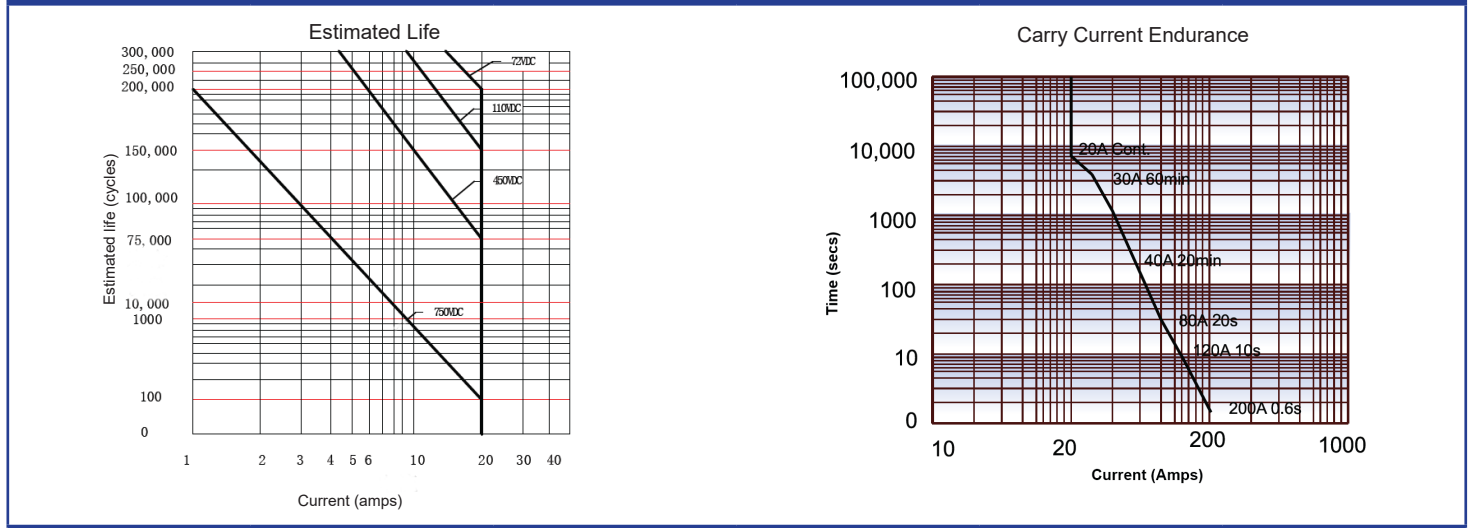
Coil code	Nominal voltage (VDC)	Must operate voltage max. (VDC@ 23°C)	Max. allowable voltage (VDC)	Must release voltage min. (VDC)	Coil resistance $\Omega \pm 10\%$ (at 30°C)	Coil current (mA)
1012	12.0	9.0	18.0	1.0	90.0	133.3
1024	24.0	18.0	35.0	2.0	360.0	66.7

Operate time (at nominal voltage)	typ. 30ms
Release time	typ. 10ms

Performance

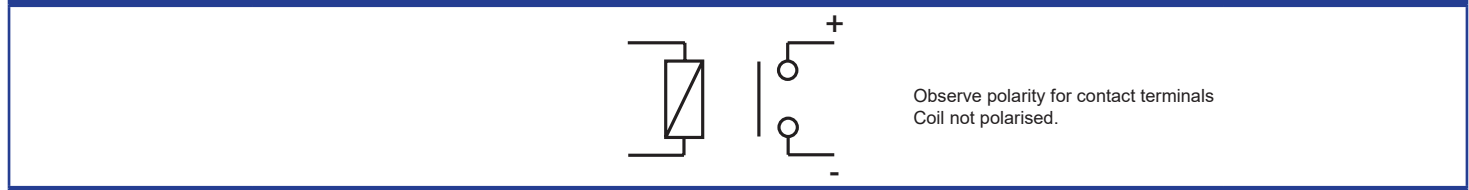
Fig 1

Fig 2



Circuit Diagram

Fig 3



Dimensions

Fig 4

