



- 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 capacity | 9000W | |
| 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

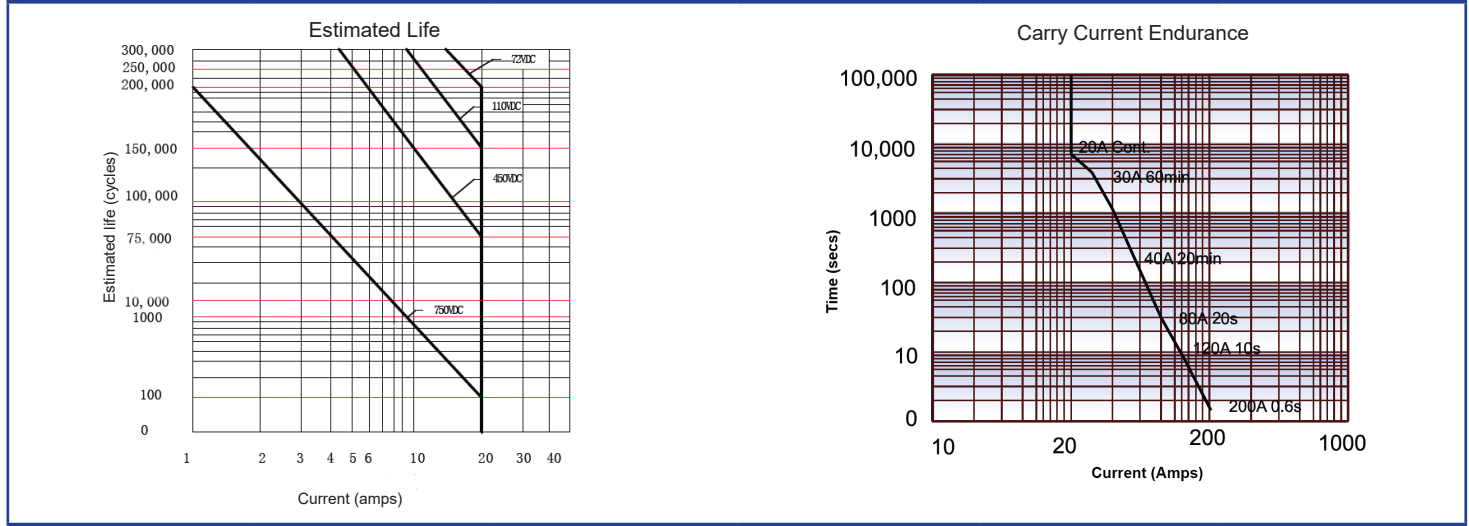
| Coil code | Nominal voltage (VDC) | Must operate voltage max. (VDC@ 23°C) | Max. allowable voltage (VDC) | Must release voltage min. (VDC) | Coil resistance $\Omega \pm 10\%$ (at 30°C) | Coil current (mA) |
|-----------|-----------------------|---------------------------------------|------------------------------|---------------------------------|---|-------------------|
| 1012 | 12 | 9.00 | 18.0 | 1.0 | 90 | 133.3 |
| 1024 | 24 | 18.0 | 35.0 | 2.0 | 360 | 66.7 |

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

Performance

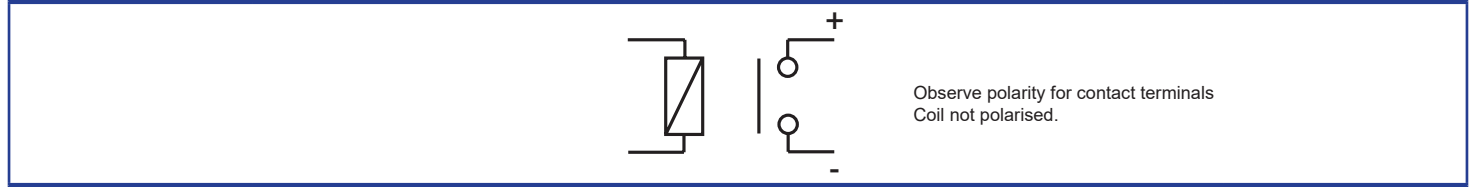
Fig 1

Fig 2



Circuit Diagram

Fig 3



Dimensions

Fig 4

