

O/E/N 54

HEAVY DUTY AUTOMOTIVE POWER RELAY

FEATURES

- Limiting continuous current upto 70A
- Unique twin contact
- Direct PCB mountable

APPLICATION

- Glow plug timers
- Start stop
- Starter safely
- Engine cooling fan
- Heating elements
- Heavy duty direction indicators

TECHNICAL DATA FOR CONTACT SIDE :

| Areas of Application | Resistive / Inductive/capacitive Load |
|---|---|
| Contact Configuration | : 1 Form A (1 NO) |
| Contact Material | : Silver Alloy |
| Limiting Current - 13.5 VDC | : 70A at 23°C, 50A at 85°C |
| 24 VDC | : 35A at 23°C, 25A at 85°C |
| Electrical Life in No. of Operations Min. | |
| Silver Nickel Alloy | : 5×10^4 cycles at 13.5 VDC/50A (4 glow plugs) |
| Silver Tin Alloy | : 100 Hrs at 24 VDC/5A (Flasher load at 90cpm) |
| | 1 x 10^5 cycles at 13.5 VDC/60A (Res. load) |
| | 1 x 10^5 cycles at 24 VDC/30A (Res. load) |
| Mechanical Life in No. of Operations Min. : | 1 x 10^6 |
| Contact Voltage drop at 10 A (Max.) : | 50mV |
| Max. Switching Current | |
| @ 12VDC For 1 Sec. : | Make - 300A, Break - 70A (Make break ratio 1:10) |

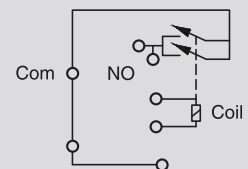
GENERAL DATA FOR COIL SIDE

| | |
|--------------------|--------------------------|
| Nominal Coil Power | : 2.25W (Approx) |
| Operate Time | : 10 milli Seconds (Typ) |
| Release Time | : 5 milli Seconds (Typ) |

OPERATING CONDITIONS

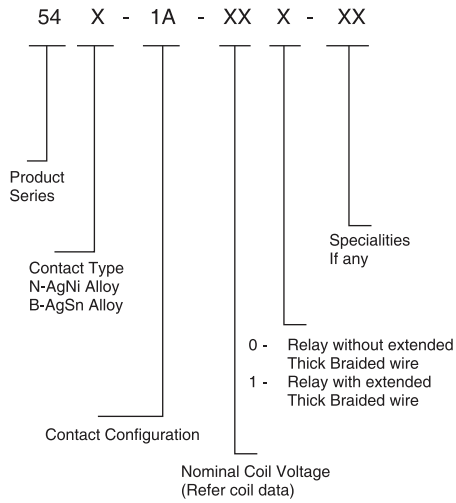
| | |
|-----------------------|--|
| Ambient Temperature | : -40°C to +85°C |
| Dielectric Strength | |
| Between open contacts | : 500 VRMS |
| Insulation Resistance | : 100 MegaOhms Min. at 500 VDC, 25°C RH 50 |
| Vibration Resistance | : 10 - 55Hz, 4.4g |
| | (Change in switching state not more than 10μS) |
| Shock Resistance | : 30g, 11mS |
| | (Change in switching state not more than 10μS) |
| Weight | : 25 gms Max. |

WIRING DIAGRAM



Relays with Pre-contact

HOW TO ORDER



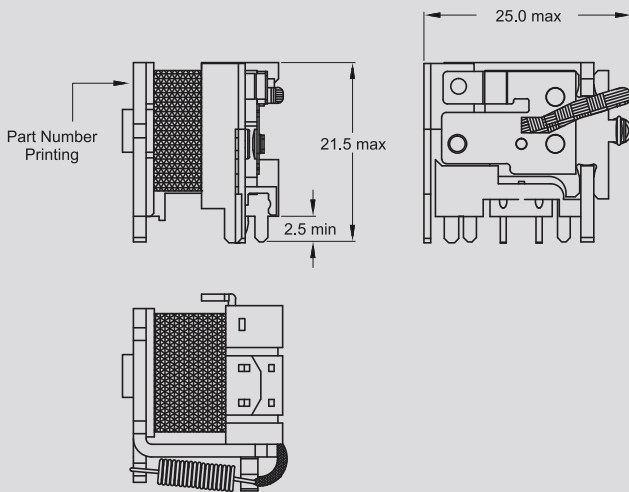
COIL DATA

| Nominal Voltage VDC | *Pick-up Voltage VDC (Max) | Drop - Out Voltage VDC (Min) | Coil Resistance Ohms $\pm 10\%$ |
|---------------------|----------------------------|------------------------------|---------------------------------|
| 12 | 8.0 | 1.5 | 64 |
| 24 | 16.0 | 2.4 | 260 |

*Lower pick-up voltages available on request

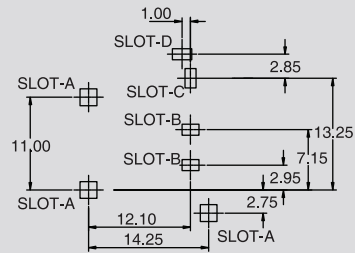
DIMENSIONS

WITHOUT EXTENDED BRAIDED WIRE



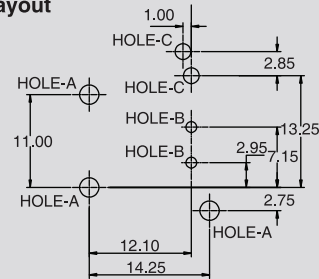
DRILLING PATTERN

PC Slot Layout



| SLOT - A | SLOT - B | SLOT - C | SLOT - D |
|--|--|---|---|
| SQ 2.0 ^{+0.1} _{-0.0} | SQ 1.3 ^{+0.1} _{-0.0} | 1.3 ^{+0.1} _{-0.0} x 2.3 ^{+0.1} _{-0.0} | 2.3 ^{+0.1} _{-0.0} x 1.3 ^{+0.1} _{-0.0} |

PC Hole Layout



| HOLE - A | HOLE - B | HOLE - C |
|------------------------------------|--------------------|--------------------|
| $\phi 2.30^{+0.1}$ _{-0.0} | $\phi 1.3 \pm 0.1$ | $\phi 2.1 \pm 0.1$ |

Note : General Tolerance : ± 0.1

AVAILABLE ON REQUEST

- For custom solutions consult factory