



O/E/N 53

HEAVY DUTY RELAY

FEATURES

- High performance
- Limiting continuous current upto 70A
- 6.3mm Flat terminals
- Suitable couplers available
- Dual contacts
- PC Version available

APPLICATION

- A/C Blower
- A/C Compressor
- Engine cooling fan
- Radiator fan
- Starter motors
- Rear window defogger
- Battery disconnection

TECHNICAL DATA FOR CONTACT SIDE :

| Model | : 53S | 53D | 53T |
|---|-------------------|--|---------------------------|
| Areas of Application | | Resistive / Inductive / Capacitive Load | |
| Contact Configuration | : 1 Form A (1 NO) | 1 Form A (1 NO) [Dual] | 1 Form A (1 NO) [Dual] |
| Contact Material | : Silver Nickel | Silver Nickel | Silver Nickel / Tungsten* |
| Contact Rating at 23°C - 13.5 VDC (Res.) | : 40A | 50A | 70A |
| 28 VDC (Res.) | : 20A | 25A | 35A |
| Electrical Life in No. of Operations Min. | : 1×10^5 | 1×10^5 | 1×10^5 |
| Mechanical Life in No. of Operations Min. | : 1×10^6 | 1×10^6 | 1×10^6 |
| Contact Voltage Drop at 10 A (Max.) | : 30mV | 30mV | 30mV |
| Maximum Switching Current @ 12.8 VDC For 3 Sec. | : 120A | 150A | 240A |

*Dual Contact with Tungsten pre-contact / Silver Nickel main contact

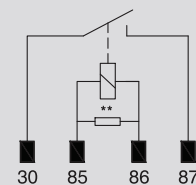
GENERAL DATA FOR COIL SIDE

| | |
|--------------------|--------------------------|
| Nominal Coil Power | : 1.92W (Approx) |
| Operate Time | : 15 milli Seconds (Typ) |
| Release Time | : 15 milli Seconds (Typ) |

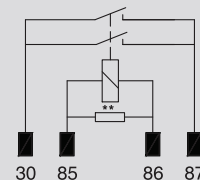
OPERATING CONDITIONS

| | |
|------------------------|---|
| Ambient Temperature | : -25°C to +85°C |
| Maximum Temperature | : 155°C |
| Dielectric Strength | |
| Between open contacts | : 500 VRMS |
| Between coil & contact | : 750 VRMS |
| Insulation Resistance | : 100 MegaOhms Min. at 500 VDC, 25°C RH 50 |
| Vibration Resistance | : 10-50Hz, 4.4g (Change in switching state not more than 10μS) |
| Shock Resistance | : 30g, 8mS (Change in switching state not more than 10μS) |
| Weight | : 45 gms Max. |

WIRING DIAGRAM



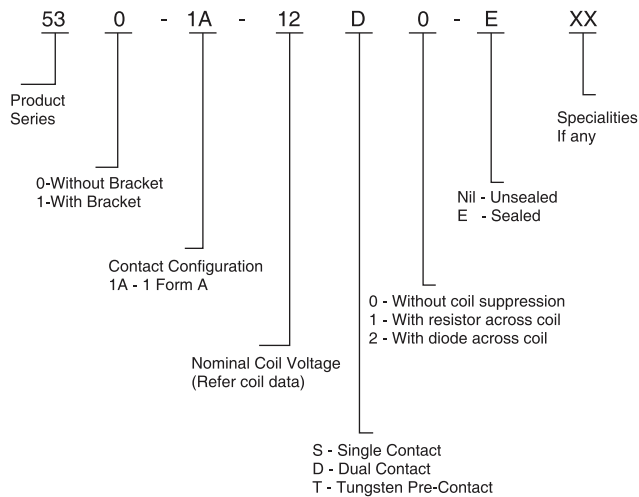
Single Contact



Dual Contact

** Parallel resistor or Diode Optional

HOW TO ORDER



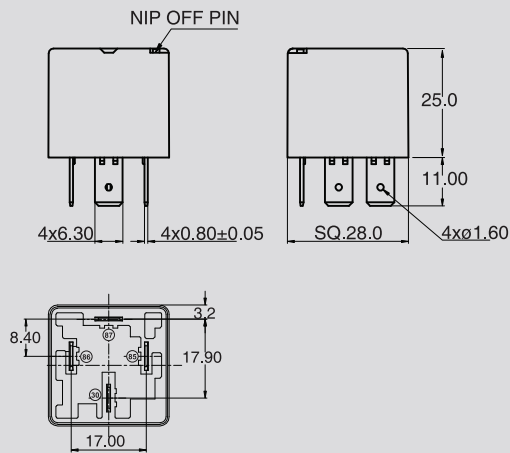
COIL DATA

| Nominal Voltage VDC | ***Pick-up Voltage VDC Version D | Pick-up Voltage VDC Version T | Coil Resistance without parallel resistor in Ohms $\pm 10\%$ |
|---------------------|----------------------------------|-------------------------------|--|
| 6 | 4.8 | 5.2 | 20 |
| 9 | 6.8 | 7.2 | 45 |
| 12 | 9.0 | 9.6 | 75 |
| 18 | 13.5 | 14.4 | 165 |
| 24 | 18.0 | 19.2 | 250 |
| 48 | 36.0 | 38.4 | 1100 |
| 100 | 82.5 | 88.0 | 5500 |

***Lower pick-up voltages available on request

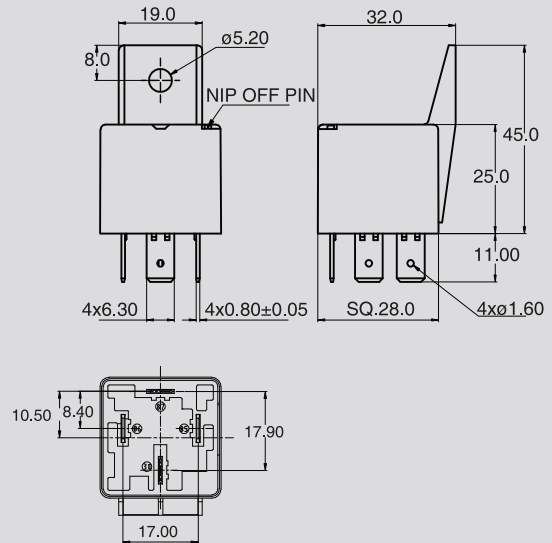
DIMENSIONS

RELAY WITHOUT BRACKET



Note : Nip - off pin may be removed after soldering and cleaning for ventilation.

RELAY WITH BRACKET



MECHANICAL DATA

COVER RETENTION

Pull : 20KgF

Push : 20KgF

TERMINAL STRENGTH

Pull : 10KgF

Push : 10KgF

AVAILABLE ON REQUEST

- For other custom solutions consult factory