



# O/E/N 53 PT

## HEAVY DUTY RELAY

### FEATURES

- High performance
- Limiting continuous current upto 100A
- 9.5mm Flat contact terminals
- PCB version available
- Dual contacts

### 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-PT                                       | 53T-PT                    |
|-------------------------------------------------|------------------------------------------------|---------------------------|
| <b>Areas of Application</b>                     | <b>Resistive / Inductive / Capacitive Load</b> |                           |
| Contact Configuration                           | : 1 Form A (1 NO)                              | 1 Form A (1 NO)           |
| Contact Material                                | : Silver Nickel                                | Silver Nickel / Tungsten* |
| Contact Rating at 23°C - 12 VDC (Res.)          | : 70A                                          | 100A                      |
| 24 VDC                                          | : 35A                                          | 50A                       |
| Electrical Life in No. of Operations Min.       | : $1 \times 10^5$                              | $1 \times 10^5$           |
| Mechanical Life in No. of Operations Min.       | : $1 \times 10^6$                              | $1 \times 10^6$           |
| Contact Voltage drop (Max.)                     | : 50mV @ 10A                                   | 200mV @ 20A               |
| Maximum Switching Current @ 12.8 VDC For 3 Sec. | : 150A                                         | 350A                      |

\*Dual contact with Tungsten pre-contact and Silver Nickel Main Contact

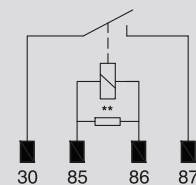
### GENERAL DATA FOR COIL SIDE

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

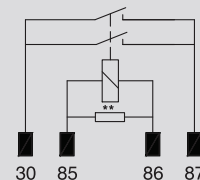
### OPERATING CONDITIONS

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

### WIRING DIAGRAM



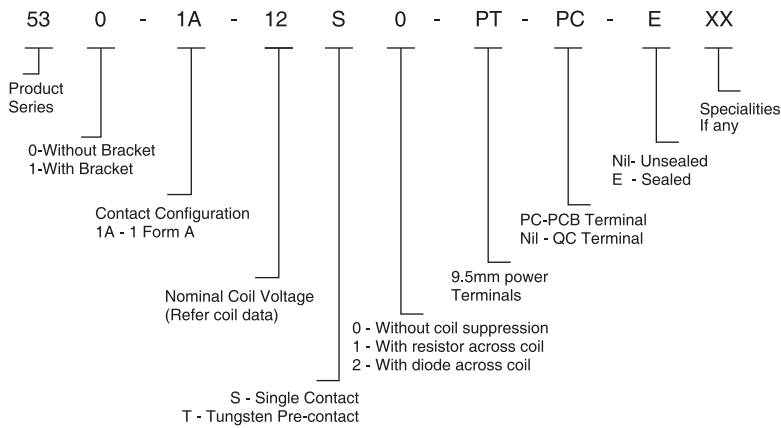
Single Contact



Dual Contact

\*\* Parallel resistor or Diode Optional

## HOW TO ORDER



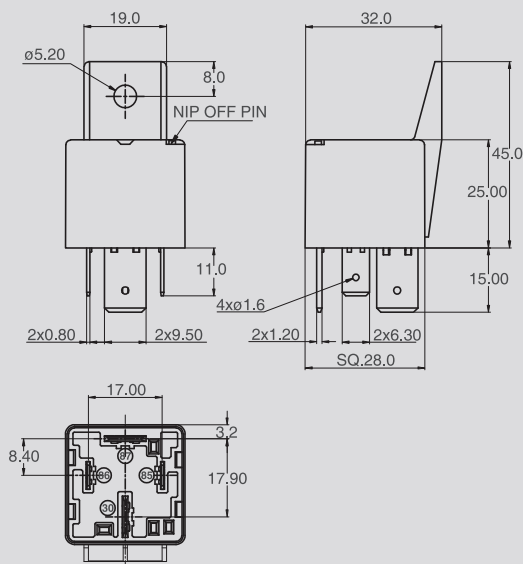
## COIL DATA

| Nominal Voltage VDC | ***Pick-up Voltage VDC (Max) Version S | Pick-up Voltage VDC (Max) Version T | Coil Resistance without parallel resistor in Ohms $\pm 10\%$ |
|---------------------|----------------------------------------|-------------------------------------|--------------------------------------------------------------|
| 12                  | 7.2                                    | 9.6                                 | 75                                                           |
| 24                  | 14.4                                   | 19.2                                | 250                                                          |
| 48                  | 38.4                                   | 36.0                                | 1100                                                         |
| 110                 | 88.0                                   | 82.5                                | 5500                                                         |

\*\*\*Lower pick-up voltages available on request

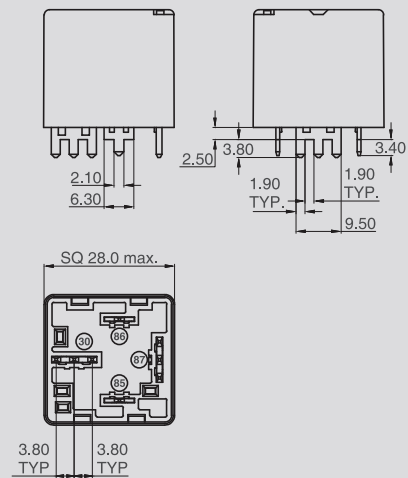
## DIMENSIONS

### RELAY WITH QUICK CONNECT TERMINALS



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

### RELAY WITH PCB TERMINAL



## MECHANICAL DATA

### COVER RETENTION

Pull : 20KgF  
Push : 20KgF

### TERMINAL STRENGTH

Pull : 10KgF  
Push : 10KgF

## AVAILABLE ON REQUEST

- For custom solutions consult factory

## DRILLING PATTERN

