



# 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
<b>Areas of Application</b>	<b>Resistive / Inductive / Capacitive Load</b>		
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.	$1 \times 10^5$	$1 \times 10^5$	$1 \times 10^5$
Mechanical Life in No. of Operations Min.	$1 \times 10^6$	$1 \times 10^6$	$1 \times 10^6$
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

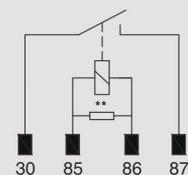
### GENERAL DATA FOR COIL SIDE

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

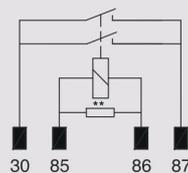
### OPERATING CONDITIONS

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



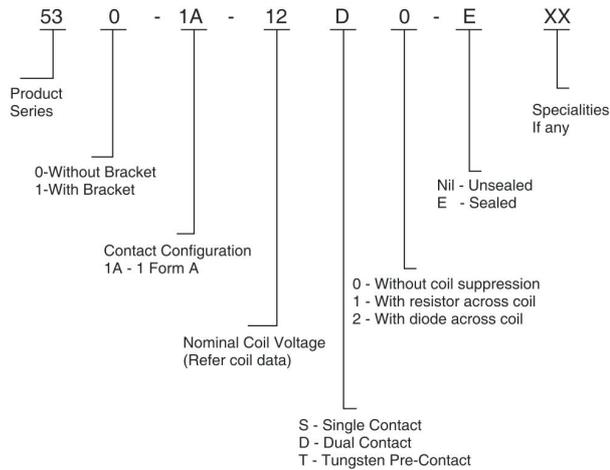
Single Contact



Dual Contact

\*\* Parallel resistor or Diode Optional

## HOW TO ORDER



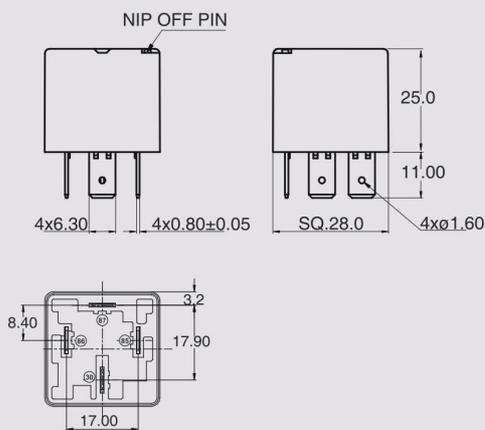
## COIL DATA

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

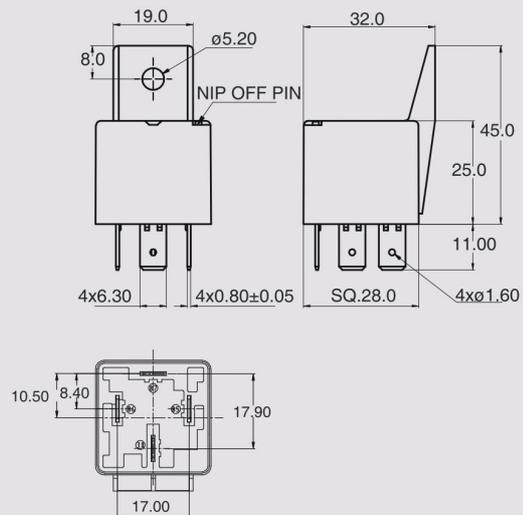
## DIMENSIONS

### 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