



# O/E/N 53H

## HEAVY DUTY POWER RELAY

### FEATURES

- High performance
- High voltage switching
- 9.5mm Flat contact terminals
- PCB version available

### APPLICATION

- Electric vehicles
- Battery chargers

### TECHNICAL DATA FOR CONTACT SIDE :

| Areas of Application                      | Resistive / Inductive / Capacitive Load |
|-------------------------------------------|-----------------------------------------|
| Contact Configuration                     | : 1 Form A (1 NO)                       |
| Contact Material                          | : Silver Alloy                          |
| Contact Rating at 23°C - 60 VDC           | : 40A                                   |
| 72 VDC                                    | : 25A                                   |
| 110 VDC                                   | : 10A                                   |
| 145 VDC                                   | : 5A                                    |
| Electrical Life in No. of Operations Min. | : $1 \times 10^5$                       |
| Mechanical Life in No. of Operations Min. | : $1 \times 10^6$                       |
| Contact Voltage drop at 10 A (Max.)       | : 50mV                                  |
| Maximum Switching Current                 |                                         |
| @ 12.8 VDC For 3 Sec.                     | : 150A                                  |

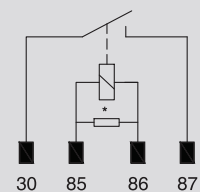
### GENERAL DATA FOR COIL SIDE

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

### OPERATING CONDITIONS

|                        |                                                                   |
|------------------------|-------------------------------------------------------------------|
| Ambient Temperature    | : -40°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<br>(Change in switching state not more than 10μS) |
| Shock Resistance       | : 30g, 8mS<br>(Change in switching state not more than 10μS)      |
| Weight                 | : 65 gms Max.                                                     |

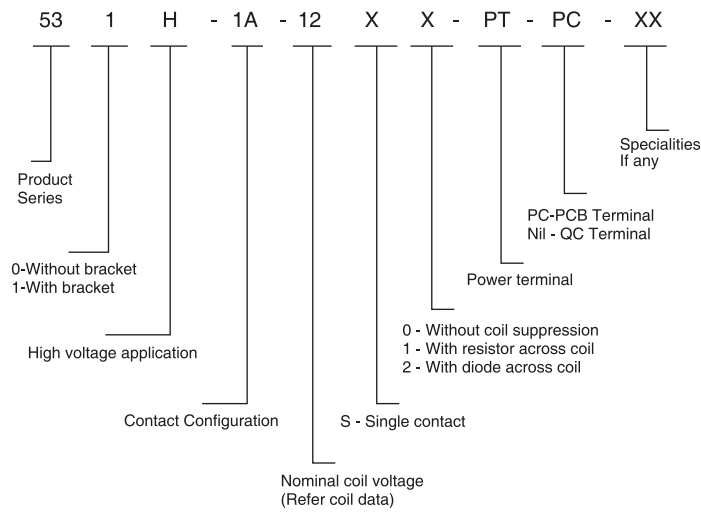
### WIRING DIAGRAM



1 Form A

\* Parallel resistor or Diode Optional

## HOW TO ORDER



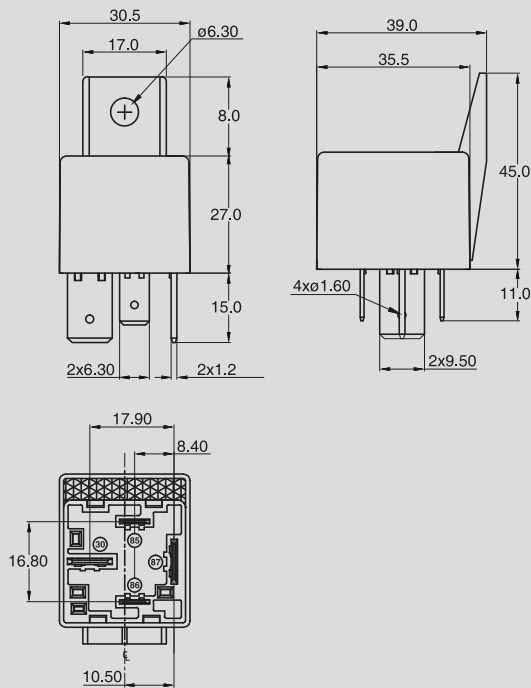
## COIL DATA

| Nominal Voltage<br>V DC | **Pick Up Voltage<br>V DC (Max) | Drop- Out Voltage<br>V DC (Min) | Coil Resistance<br>Ohms $\pm 10\%$ |
|-------------------------|---------------------------------|---------------------------------|------------------------------------|
| 6                       | 4.0                             | 0.6                             | 20                                 |
| 9                       | 6.0                             | 0.9                             | 45                                 |
| 12                      | 8.0                             | 1.2                             | 75                                 |
| 18                      | 12.0                            | 1.8                             | 165                                |
| 24                      | 16.0                            | 2.4                             | 250                                |
| 36                      | 24.0                            | 3.6                             | 650                                |
| 48                      | 32.0                            | 4.8                             | 1100                               |
| 110                     | 73.2                            | 11                              | 5500                               |

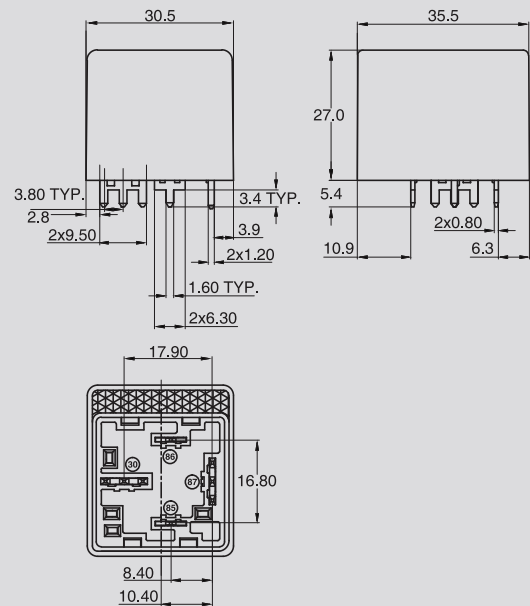
\*\*Lower pick-up voltages available on request

## DIMENSIONS

### RELAY WITH QUICK CONNECT TERMINALS



### RELAY WITH PCB TERMINAL



## AVAILABLE ON REQUEST

- For custom solutions consult factory

## DRILLING PATTERN

