

# O/E/N 93

## AUTOMOTIVE POWER RELAY

### FEATURES

- High Performance
- 2.8mm Quick Connect Terminals
- Medium Duty
- 1 Form A & 1 Form C contacts

### APPLICATION

- Head Lamp Control
- Starter Motor
- Horn Control
- Radiator Fan
- A/C Controls

## TECHNICAL DATA FOR CONTACT SIDE :

### Areas of Application

Contact Configuration	:	1A/1C
Contact Material	:	Silver Tin Oxide
Contact Rating at 23°C - 12VDC	:	20A / 10A
Maximum break current at 12 VDC	:	30A/15A
Electrical Life Operations Min.	:	1 x 10 <sup>5</sup>
Mechanical Life Operations Min.	:	1 x 10 <sup>6</sup>
Contact Voltage Drop at 10 A (Min)	:	30mV
Maximum Switching Current @ 12.8 VDC For 3 Sec.	:	100A

### RESISTIVE / INDUCTIVE / LAMP LOADS

## GENERAL DATA FOR COIL SIDE

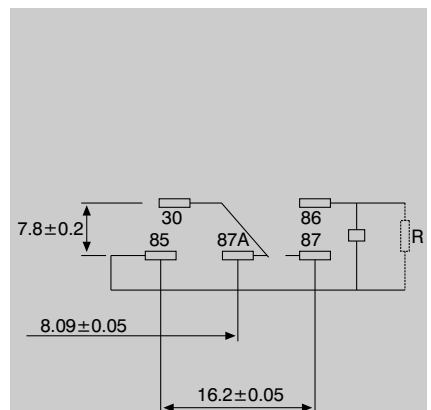
Nominal Coil Power	:	1.3W (Approx)
Operating Power	:	0.7W (Approx)
Operate Time*	:	10 milli Seconds
Release Time*	:	7 milli Seconds

\* At nominal voltage without coil suppression (excluding bounce)

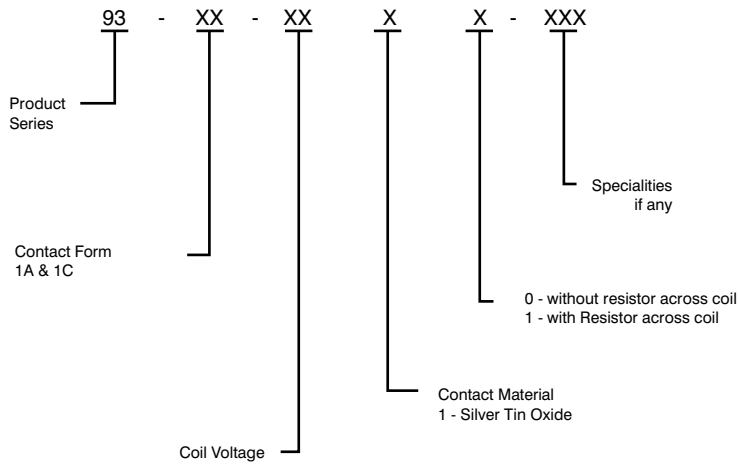
## OPERATING CONDITIONS

Ambient Temperature	:	-40°C to +85°C
Maximum Temperature	:	125°C
Dielectric Strength	:	500VRMS
Insulation Resistance	:	100 Meg. Ohms Min. At 500 VDC, 25°C RH 50
Vibration Resistance (without change in the switching state > 10μS)	:	10-500Hz 5g
Shock Resistance (without change in the switching state > 10μS)	:	20g, 8mS

## CIRCUIT DIAGRAM



## HOW TO ORDER

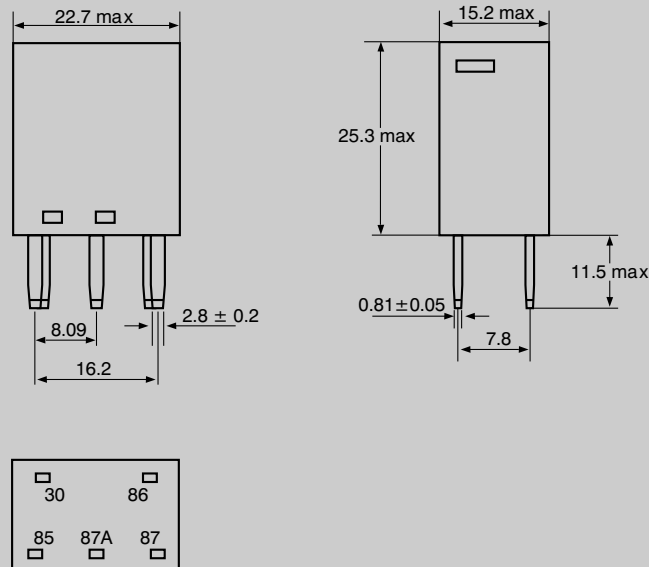


## COIL DATA

Nominal Voltage VDC	Coil Resistance at 20°C Ohms ± 10%	P/U Voltage	D/O Voltage
12	110	7.2	1.2

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

## DIMENSIONS



## MECHANICAL DATA

### COVER RETENTION

Pull : 20KgF  
Push : 20KgF

### TERMINAL STRENGTH

Pull : 10KgF  
Push : 10KgF  
Plug-in Force : 12.25KgF  
Removal Force : 11.35KgF

## WATER RESISTANCE TEST

Horizontal Plane: 23rev. / Min.

Water Pressure: 0.03 Mpa

Test time: 10 Min

Inference : No water ingress

## AVAILABLE ON REQUEST

- Resistor / diode across coil
- For other custom solutions consult factory