

O/E/N 54

HEAVY DUTY AUTOMOTIVE POWER RELAY

FEATURES

- Limiting continuous current 70A
- Unique twin contact
- Direct PCB mountable

APPLICATION

- Glow plug timers
- Start stop
- Starter safely
- Engine cooling fan
- Heating elements
- Heavy duty direction indicators

TECHNICAL DATA FOR CONTACT SIDE :

Areas of Application		Resistive / Inductive/capacitive Load
Contact Configuration	:	1 Form A, 1 NO
Contact Material	:	Silver Alloy
Limiting Current	13.5 VDC :	70A at 23 ⁰ C, 50A at 85 ⁰ C
	24 VDC :	35A at 23 ⁰ C, 25A at 85 ⁰ C
Electrical Life Operations Min.		
Silver Nickel Alloy	:	5 x 10 ⁴ cycles @ 13.5 VDC/15A (4 Glow Plugs) 1 x 10 ⁴ cycles @ 24 VDC/18A (Starter Solenoid)
Silver Tin Alloy	:	100 Hrs @ 24 VDC @ 5A (Flasher load at 90cpm) 1 x 10 ⁵ cycles @ 13.5 VDC/30A (Res. Load) 1 x 10 ⁵ cycles @ 24 VDC/30A (Res. Load)
Mechanical Life Operations Min.	:	1 x 10 ⁶
Contact Voltage drop at 10 A (Max.)	:	≤50mV
Max. Switching Current @ 12VDC For 1 Sec.	:	ON - 300A, OFF - 70A

GENERAL DATA FOR COIL SIDE

Nominal Coil Power	:	2.25W (Approx.)
Operating Power	:	1.0W (Approx.)
Operate Time*	:	10 milli Seconds (Max.)
Release Time*	:	5 milli Seconds (Max.)

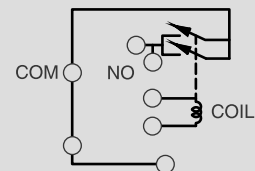
*At nominal voltage without coil suppression (excluding bounce)

OPERATING CONDITIONS

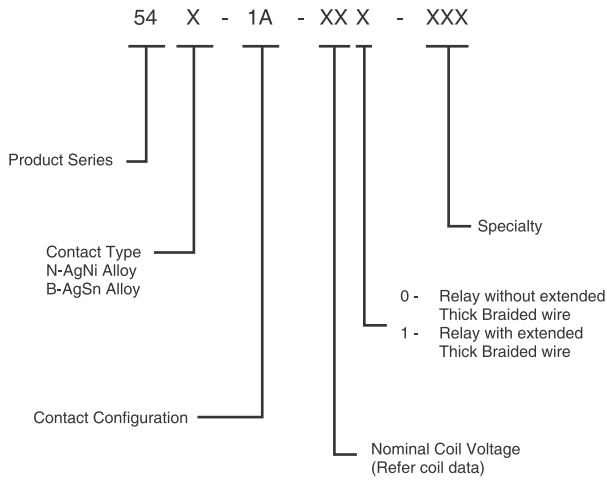
Ambient Temperature	:	-40°C to +85°C
Dielectric Strength	:	500VRMS
Insulation Resistance	:	100 Ohms Min. At 500 VDC, 25°C RH 50
Vibration Resistance (without change in the switching state>10μS)	:	10 to 55Hz Min 4.4g
Shock Resistance	:	30g, 11mS
Type of Mounting	:	PCB Mounting
Weight	:	25gms

CIRCUIT DIAGRAM

Relays with Pre-contact



HOW TO ORDER



COIL DATA

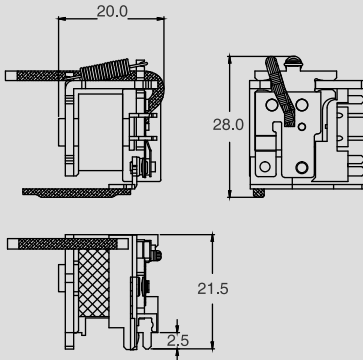
Nominal Voltage VDC	*Pick-up Voltage VDC (Max)	Drop - Out Voltage VDC (Min)	Coil Resistance Ohms $\pm 10\%$
12	8.0	1.5	64
24	16.0	2.4	260

*Lower pick-up voltages available on request

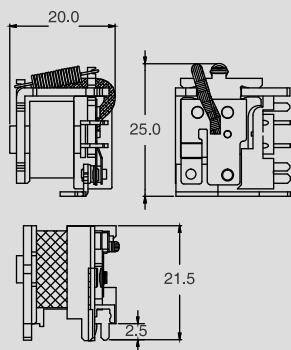
DIMENSIONS

DIMENSIONS

WITHOUT EXTENDED BRAIDED WIRE

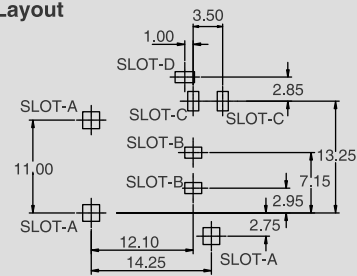


WITH EXTENDED BRAIDED WIRE



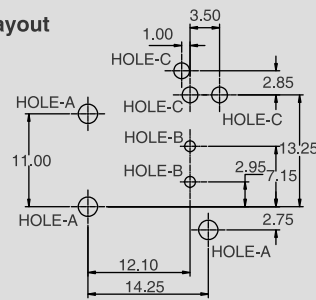
DRILLING PATTERN

PC Slot Layout



SLOT - A	SLOT - B	SLOT - C	SLOT - D
SQ $2.0^{+0.1}_{-0.0}$	SQ $1.3^{+0.1}_{-0.0}$	$1.3^{+0.1}_{-0.0} \times 2.3^{+0.1}_{-0.0}$	$2.3^{+0.1}_{-0.0} \times 1.3^{+0.1}_{-0.0}$

PC Hole Layout



HOLE - A	HOLE - B	HOLE - C
$\phi 2.30^{+0.1}_{-0.0}$	$\phi 1.3 \pm 0.1$	$\phi 2.1 \pm 0.1$

Note : General Tolerance : ± 0.1

AVAILABLE ON REQUEST

- For other custom solutions consult factory