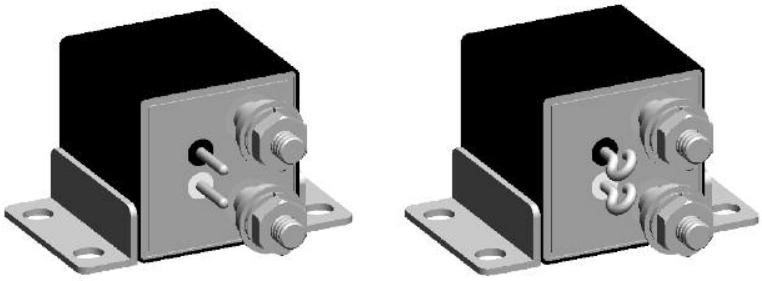
FCA-150NC Series, 50 Amps, 1PST/NC (DB) Relay

Product Facts

- **Non latching hermetically sealed relay**
- **Balanced force design**
- **Hermetically sealed, corrosion protected metal can**
- **All welded construction**
- **6, 12 and 28Vdc coils available.**
- **Weight 90 grams**
- **Designed and built in accordance to MIL-PRF-6106**



Specifications

General Characteristics				
Temperature range			-70° C to +125° C	
Altitude			300,000 feet	
Dielectric strength at sea level - Contacts to ground and between contacts - Coil to ground			 1250 Vrms / 60 Hz 1000 Vrms / 60 Hz	
Dielectric strength at altitude 25000 m (80,000 ft) (all points)			500 Vrms / 60 Hz	
Initial insulation resistance at 500 Vdc			100 MΩ min.	
Initial insulation after life or environmental test			50 MΩ min.	
Sinusoidal vibration			20g / 75 to 3000 Hz	
Shock			50g / 11 ms	
Operate time at nominal voltage			15 ms max.	
Release time			15 ms max.	
Bounce time			1 ms max.	
Contact voltage drop at nominal current -initial value -after life			 150 mV max. 175 mV max.	
Coil Data				
Coil Code	1	2	3	4(A)
Nominal Operating Voltage (Vdc)	6	12	28	28
Maximum Operating Voltage (Vdc)	7.3	14.5	29	29
Maximum Pick-Up Voltage at +125°C	4.5	9	18	18
Maximum Pick-Up Voltage at +125°C, continuous current test (Vdc)	5.7	11.25	22.5	22.5
Drop-Out Voltage at OTR	0.3 – 2.5	0.75 – 4.5	1.5 – 7.0	1.5 – 7.0
Maximum Coil Current at +25°C (mA)	.50	.26	.15	.15
Back EMF Suppressed to (Vdc)	N/A	N/A	N/A	-42
Coil Resistance	18Ω	70Ω	290Ω	290Ω

For other coil voltages, consult factory.

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

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Contact Electrical Characteristics

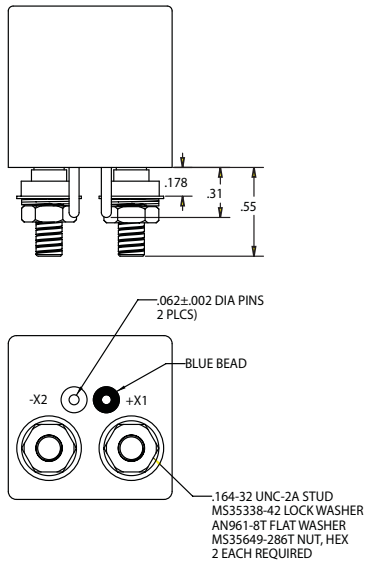
Contact Type	Rated Current	Rated Voltage
Main Contact	50A	28Vdc
Minimum Operating cycles	**Contact rating per pole and load type MAIN Contact**	**Load Currents in Amps**
50,000 cycles	Resistive load	50
20,000 cycles	Inductive load (L/R=5ms)	20
20,000 cycles	Motor load	20
50 cycles	Resistive overload	200
100,000 cycles	No Load	

All endurance ratings are subject to validation - consult factory

Terminals

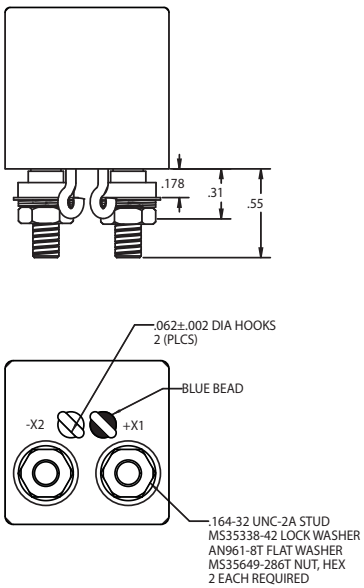
CODE "B"

Solder Pin Terminals
Tin/Lead Plated



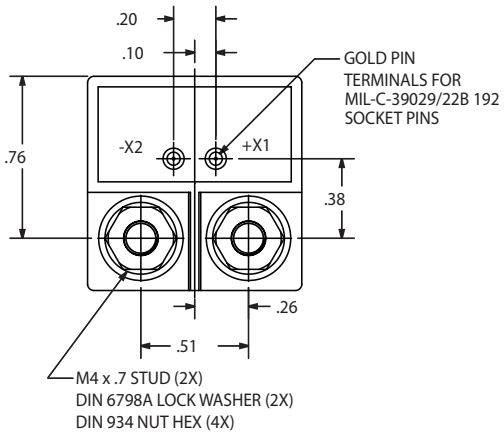
CODE "C"

Solder Hook Terminals
Tin/Lead Plated



CODE "K"

Terminal Shield



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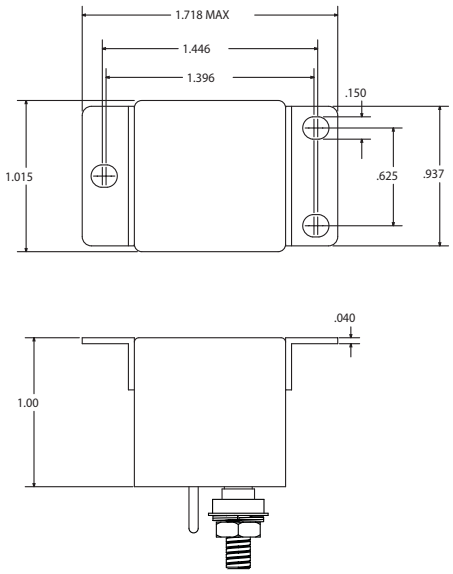
Outline Dimensions

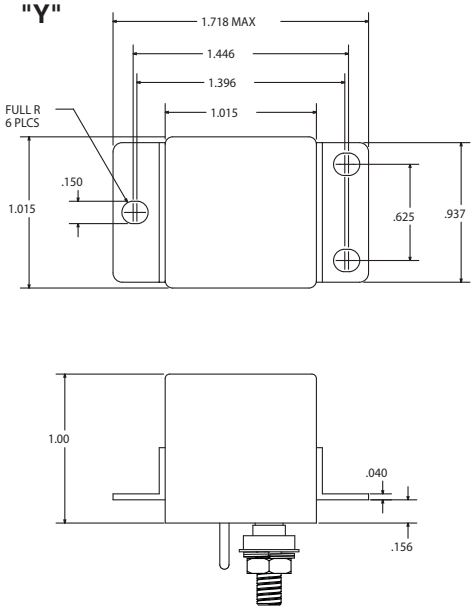
The standard terminal types and enclosures are illustrated below with dimensions in inches ± 0.010 and (millimeters ±0.25).

Enclosures

CODE "U"



CODE "Y"



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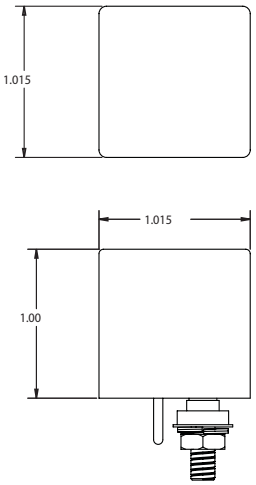
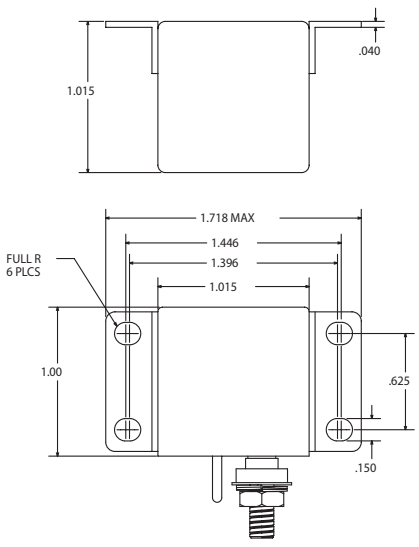
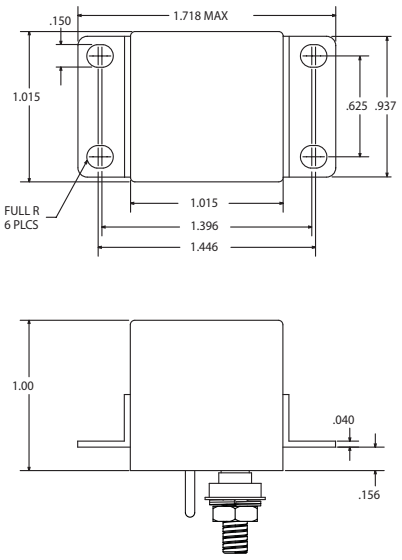


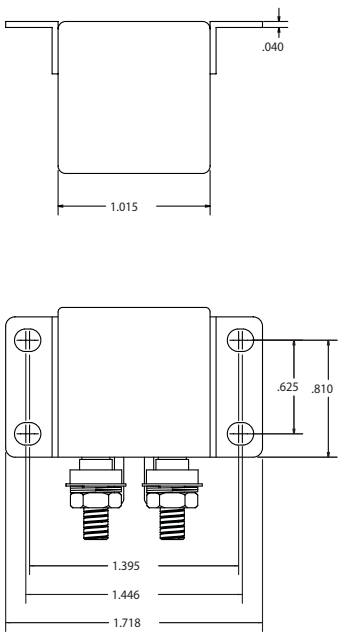
CODE "X"



CODE "V"



CODE "R"



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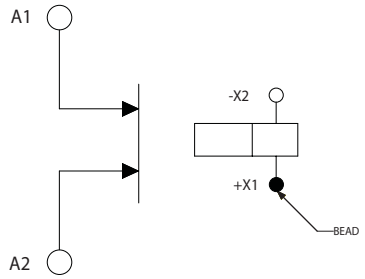
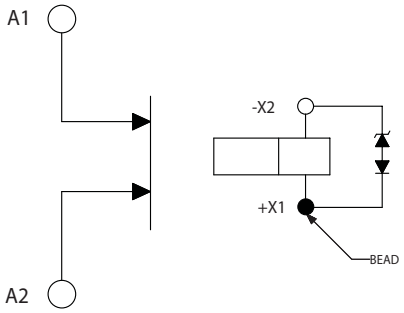
Terminal Wiring

DC Coils



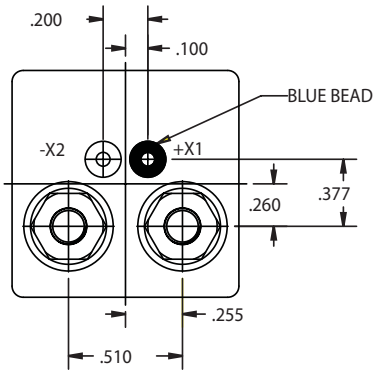
DC Coils with Transient Suppression



NOTE: Polarity must be observed with DC coil supply. Relay is polarized with a permanent magnet and will not operate or be damaged by reverse polarity.

Diodes used in transient suppression and in AC rectifier circuits have peak inverse voltage rating of 600 VDC minimum. Zener diodes have a minimum rating of 1 watt.

Terminal designations are for reference only and do not appear on the header.



TERMINAL VIEW

PART NUMBERING SYSTEM

FCA - 150NC	B	Y	4

RELAY TYPE

TERMINALS

ENCLOSURE

COIL

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