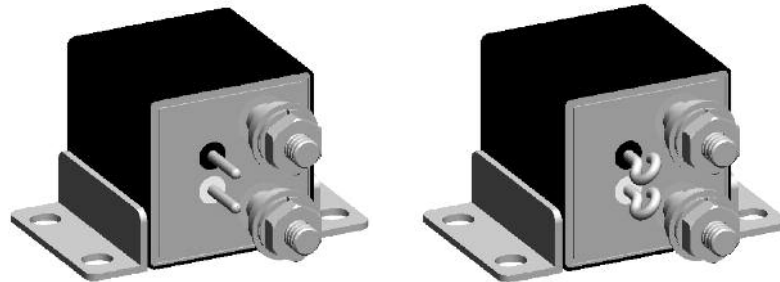


FCA-150NC Series, 50 Amps, 1PST/NC (DB) Relay

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	1250 Vrms / 60 Hz
- Coil to ground	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	150 mV max.
-after life	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.

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

Contact Electrical Characteristics

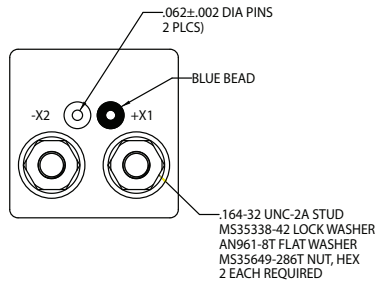
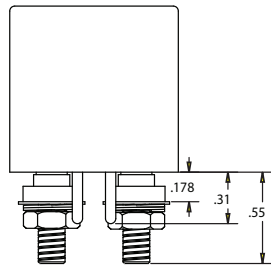
Contact Type	Rated Current	Rated Voltage
Main Contact	50A	28Vdc
Minimum Operating cycles	Contact rating per pole and load type MAIN Contact	Load Currents in Amps
50,000 cycles	Resistive load	50
20,000 cycles	Inductive load (L/R=5ms)	20
20,000 cycles	Motor load	20
50 cycles	Resistive overload	200
100,000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

All endurance ratings are subject to validation - consult factory

Terminals

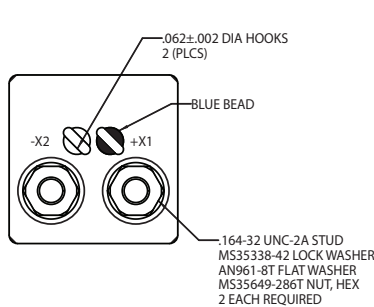
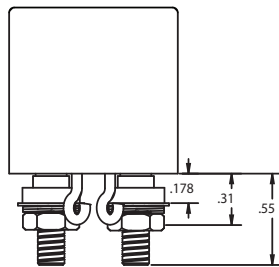
CODE "B"

Solder Pin Terminals
Tin/Lead Plated



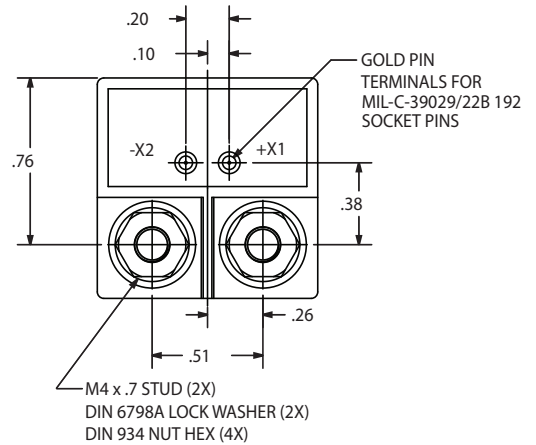
CODE "C"

Solder Hook Terminals
Tin/Lead Plated



CODE "K"

Terminal Shield



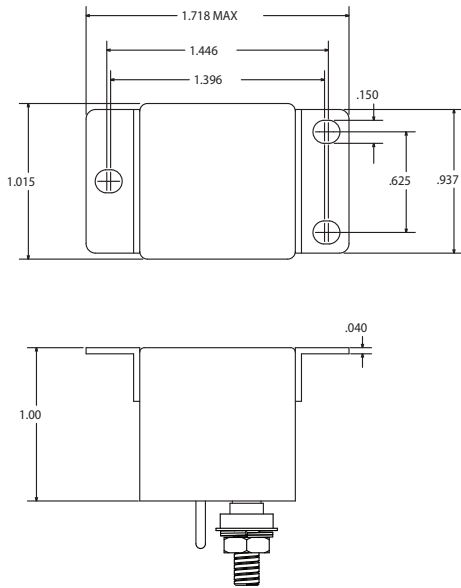
FCA-150NC Series, 50 Amps, 1PST/NC (DB) Relay (Continued)

Outline Dimensions

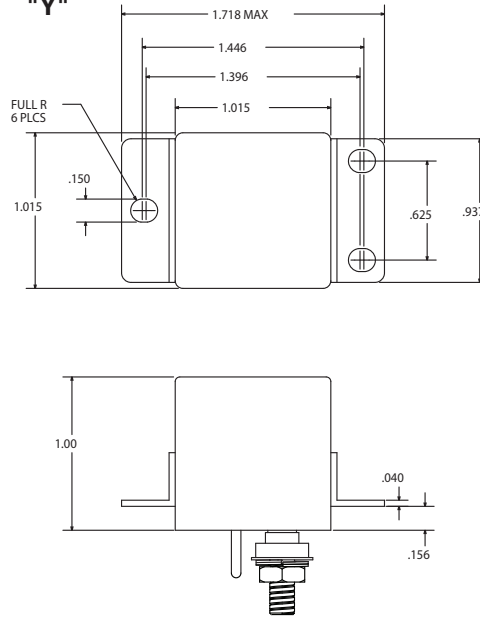
The standard terminal types and enclosures are illustrated below with dimensions in inches ± 0.010 and (millimeters ± 0.25).

Enclosures

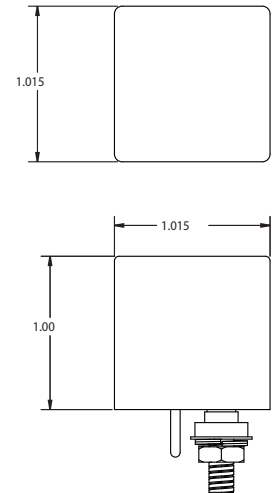
CODE "U"



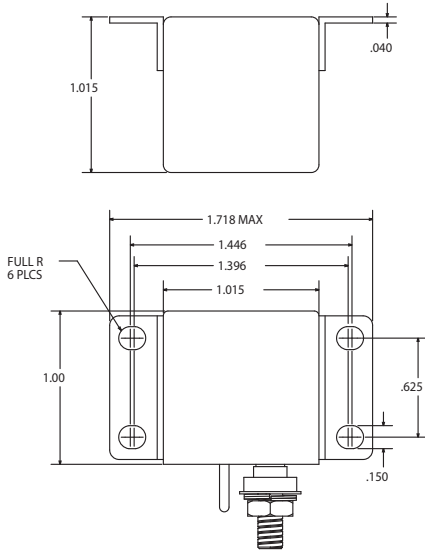
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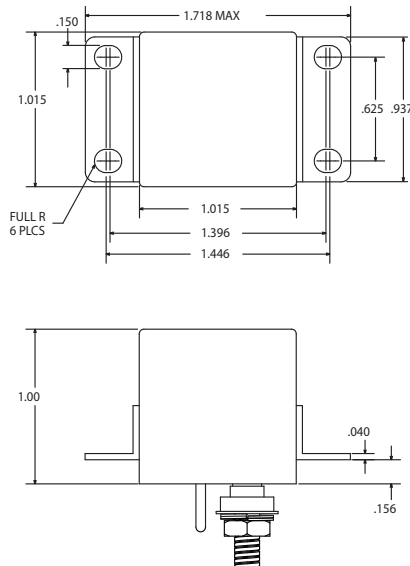
CODE "Z"



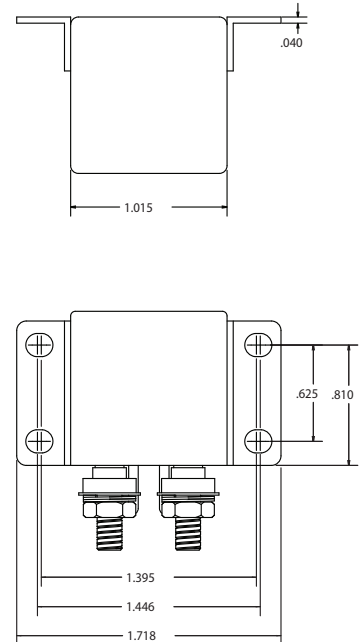
CODE "X"



CODE "V"



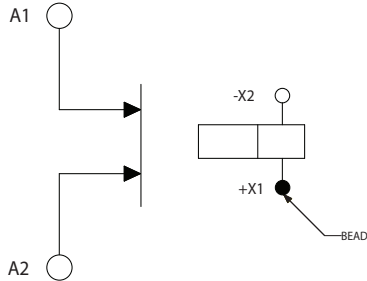
CODE "R"



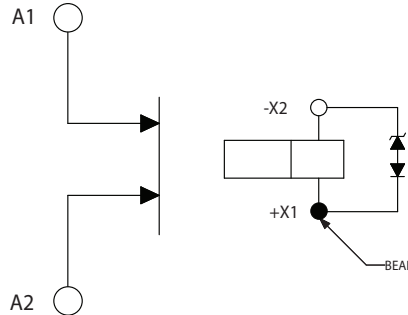
FCA-150NC Series, 50 Amps, 1PST/NC (DB) Relay (Continued)

Terminal Wiring

DC Coils



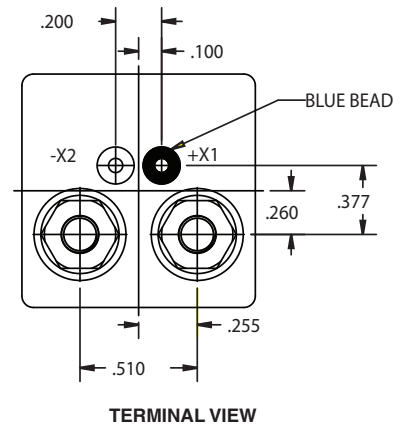
DC Coils with Transient Suppression



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.



PART NUMBERING SYSTEM

