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REVISIONS

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P	LTR	DESCRIPTION	DATE	DWN	APVD
	A	INITIAL DRAWN	30OCT2019	RV	MB

General Specifications

Temperature Rating —

-70°C TO +125°C

Altitude — 300,000 Feet

Shock* —

Z & Y Enclosures —

200 g for 6 mS

W, X & M Enclosures —

100 g for 6 mS

Vibration, Sinusoidal* —

Z & Y Enclosures —

0.12 DA 10 to 70Hz

30 g 70 to 3000Hz

W, X & M Enclosures —

0.12 DA 10 to 57Hz

20 g 57 to 3000Hz

Vibration, Random* —

Z & Y Enclosures —

0.4 g²/Hz 50-2000Hz

W, X & M Enclosures —

0.2 g²/Hz 50-2000Hz

Dielectric Strength —

At Sea Level —

All circuits to ground and circuit to circuit — 1250 V rms

Coil to ground — 1000 V rms

At 80,000 Feet — 350 V rms

Insulation Resistance —

Initial (500 VDC) — 100 MΩ Min.

After Life or Environmental Tests —

50 MΩ Min.

Operate Time at Nominal Voltage —

DC Relays — 15 ms or less

AC Relays — 20 ms or less

Release Time at Nominal Voltage —

DC Relays — 15 ms or less

AC Relays — 50 ms or less

* Max. contact opening under vibration or shock 10 microseconds

Coil Data

Coil Code	Nominal Voltages	Freq. Hz	Over Temperature Range			
			DC Res. AC Amps(B)	Pick up or Below Volts	Dropout or above Volts	Must Hold voltage (C)
1	6	DC	18 Ohms	4.5	0.3	2.5
2	12	DC	70 Ohms	9.0	0.75	4.5
3	28	DC	290 Ohms	18.0	1.5	7.0
4(A)	28	DC	290 Ohms	18.0	1.5	7.0
5	48	DC	865 Ohms	32.0	2.5	14.0
6	28 VAC	400 Hz	225 mA	22.0	1.25	10.0
7	28 VAC	50/400 Hz	120 mA	22.0	1.25	10.0
8	115 VAC	400 Hz	40 mA	90.0	5.0	40.0
9	115 VAC	50/400 Hz	30 mA	95.0	5.0	40.0

Contact Rating — Amperes Ratings Are Continuous Duty

Type of Load	Life (Min.) Cycles x 10 ³	28 VDC	120VAC 400Hz	120/200VAC	
				400Hz-3Ø	60Hz-3Ø*
Resistive	100	10	10	10	2.5
Inductive	20	8	8	8	2.5
Motor	100	4	4	4	2.0
Lamp	100	2	2	2	1.0

*60 Hz loads rated for 10,000 operations

Overload Current — 40 AMPS DC, 60 AMPS 400Hz

Rupture Current — 50 AMPS DC, 80 AMPS 400Hz

Contact Make Bounce — 1 MILLISECOND AT NOMINAL VOLTAGE

Max. Contact Drop at 10 Amps — INITIAL 0.100 VOLTS

End of Life — 0.125 VOLTS

PRODUCT FACTS:

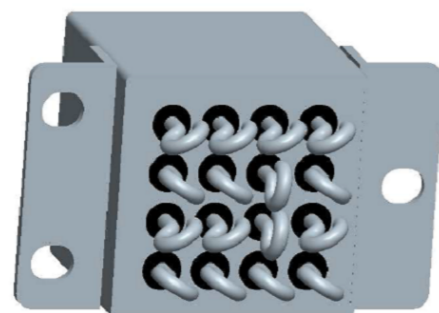
- Non latching Hermetically Sealed Relay.
- Balanced force design.
- All welded construction.
- Permanent Magnet drive. Polarized single side stable design.
- Contacts: Silver Cadmium Oxide with Gold Plating.
- Coils available:
DC: 6, 12, 28 & 48 Vdc.
AC: 28, 115 VAC (50/400Hz).
- Designed and built in accordance with MIL-PRF-83536.
- 4PDT Switching in One Inch Cube Housing.
- Weight 77.2 grams (2.72 ounces) Max.

CONTACT ELECTRICAL CHARACTERISTICS

Type of Load	Life(Min.) Cycles X10 ³	28 VDC	120VAC 400 Hz	230VAC 400 Hz	120/200 VAC 3Ø	
					400 Hz	60 Hz*
Resistive	100	10	10	5	10	2.5
Inductive	20	8	8	-	8	2.5
Motor	100	4	4	-	4	2.0
Lamp	100	2	2	-	2	1

* 60 Hz Loads rated for 10000 operations

- A. Overload Current 40 Amps DC, 60 Amps 400 Hz.
- B. Rupture Current 50 Amps DC, 80 Amps 400 Hz.
- C. Contact Make Bounce 1 Millisecond at Nominal Voltage.
- D. Max. Contact drop at 10 Amps: initial 0.100 Volts.
- E. End of Life 0.125 Volts.



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN RV 30OCT2019				
DIMENSIONS: INCHES		CHK RV 30OCT2019				
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD MB 30OCT2019	NAME C-FCAV-410-SERIES			
		PRODUCT SPEC	-			
0 PLC ± - 1 PLC ± - 2 PLC ± - 3 PLC ± - 4 PLC ± - ANGLES ± -		APPLICATION SPEC	-			
MATERIAL		WEIGHT	SIZE A3	CAGE CODE	DRAWING NO C-FCAV-410-SERIES	RESTRICTED TO
-		-	SCALE NTS		SHEET 1 OF 2	REV A

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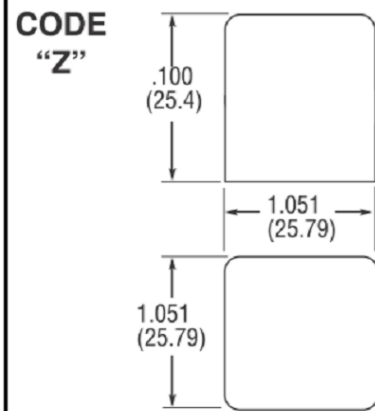
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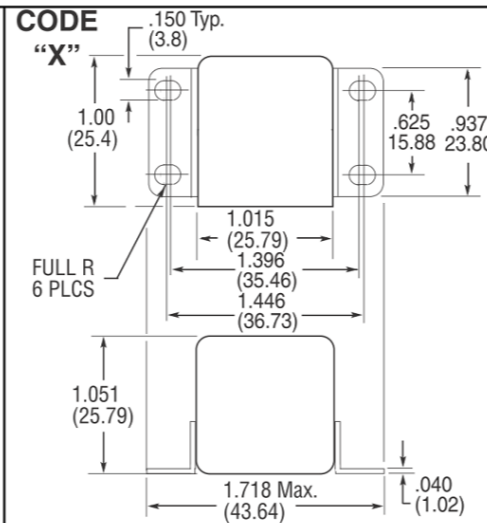
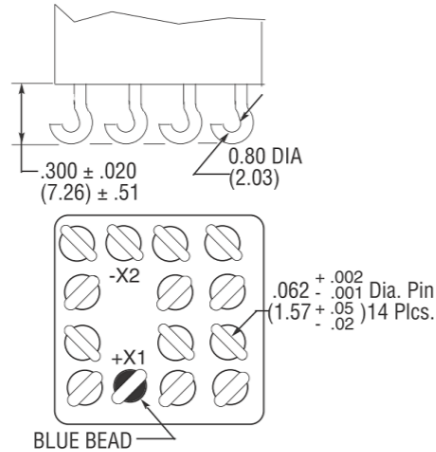
P	LTR	DESCRIPTION	DATE	DWN	APVD
-	-	SEE SHEET 1	-	-	-

Enclosures

All Enclosures have cupro-Nickel cans bright acid tin/lead plated after assembly to terminal headers.



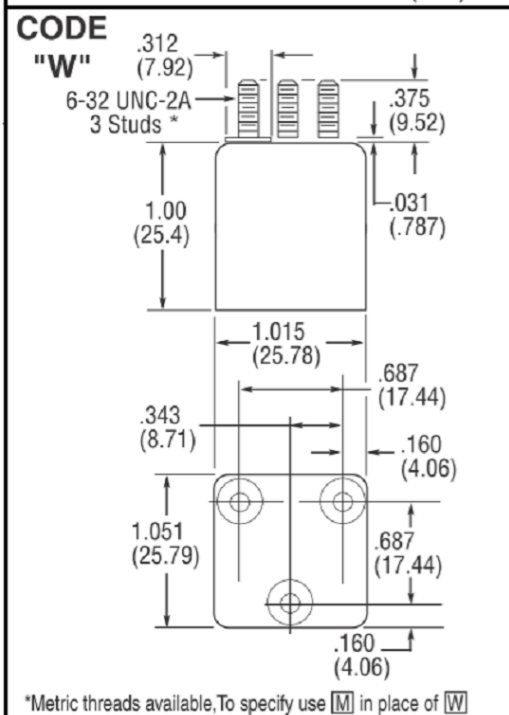
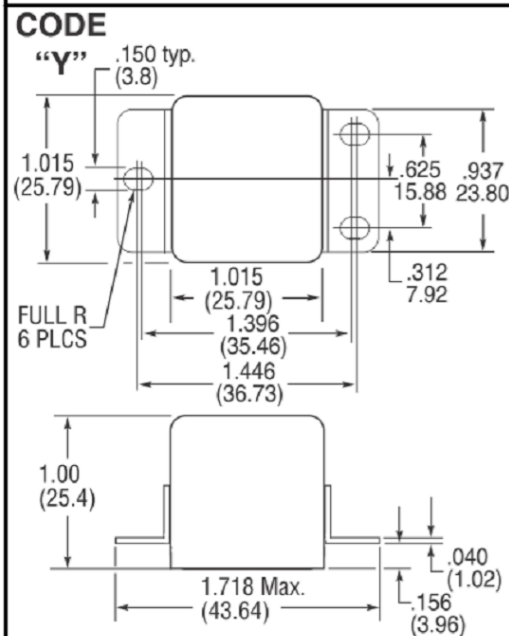
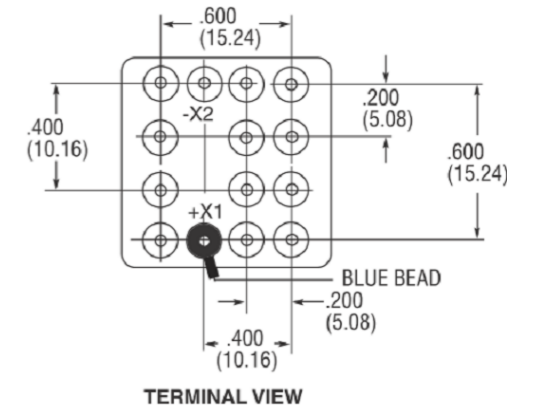
CODE "C" Solder Hooks-AC or DC Coils



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.



HOW TO ORDER

RELAY TYPE _____

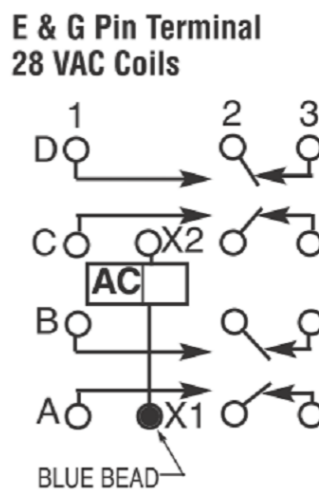
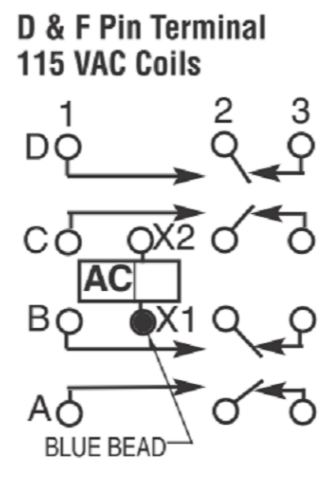
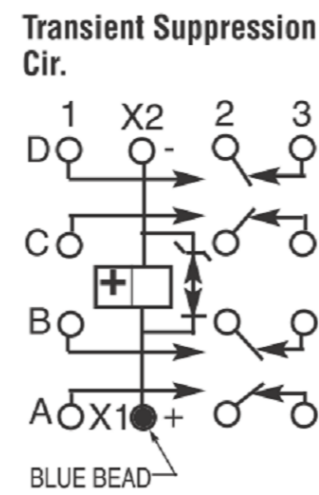
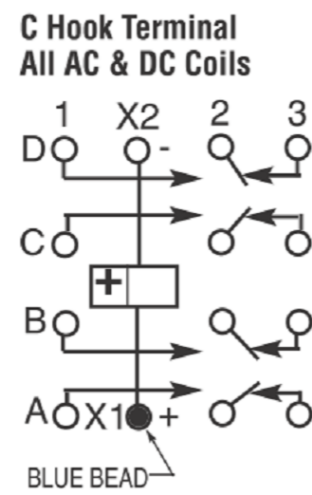
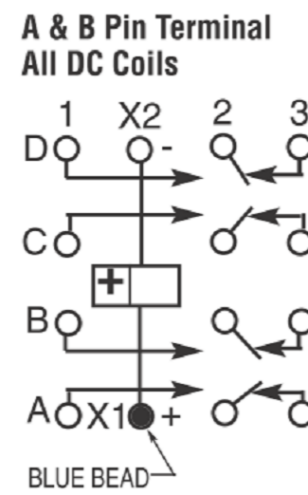
SOLDER HOOK _____

ENCLOSURE (With Flanges) _____

COIL (28 VDC With Transient Suppression). _____

FCAV-410 A Y 4

Terminal Wiring



ALL DIMENSIONS ARE IN INCHES(MM)

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		CHK RV	30OCT2019		
DIMENSIONS: INCHES		APVD MB	30OCT2019	NAME	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		PRODUCT SPEC		C-FCAV-410-SERIES	
0 PLC ± -		APPLICATION SPEC		-	
1 PLC ± -		WEIGHT		-	
2 PLC ± -		CUSTOMER DRAWING		SCALE NTS	
3 PLC ± -		MATERIAL		SHEET 2 OF 2	
4 PLC ± -		FINISH		REV A	
ANGLES ± -		WEIGHT		-	
-		-		-	