

P	LTR	DESCRIPTION	DATE	DWN	APVD
	A	INITIAL DRAWN	25OCT2019	RV	MB

### General Specifications

**Temperature Rating** —  
-70°C TO + 125°C

**Altitude** — 300,000 Feet

**Shock\*** —  
Z, Y, & V Enclosures —  
200 g for 6 mS  
W, X & M Enclosures —  
100 g for 6 mS

**Vibration, Sinusoidal\*** —  
Z, Y, & V Enclosures —  
30 g 33-3000Hz  
W, X & M Enclosures —  
20 g 33-3000Hz

**Vibration, Random\*** —  
Z, Y, & V Enclosures —  
0.4 g<sup>2</sup>/Hz 50-2000Hz  
W, X & M Enclosures —  
0.2 g<sup>2</sup>/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	DC Res. AC Amps (B)	Over Temperature Range		
				Pickup or Below Volts	Dropout or Above Volts	Must Hold Voltage (C)
1	6	DC	18 Ω	4.5	0.3	2.5
2	12	DC	70 Ω	9.0	0.75	4.5
3	28	DC	290 Ω	18.0	1.5	7.0
4 (A)	28	DC	290 Ω	18.0	1.5	7.0
5	48	DC	865 Ω	32.0	2.5	14.0
6	28	400Hz	225 mA	22.0	1.25	10.0
7	28	50/400Hz	120 mA	22.0	1.25	10.0
8	115	400 Hz	40 mA	90.0	5.0	40.0
9	115	50/400 Hz	30 mA	95.0	5.0	40.0

- A. CODE 4 COILS HAVE BACK EMF SUPPRESSION TO 42 VOLTS MAX.
- B. DC COIL RESISTANCE ± 10% AT 25°C; AC COIL MAX. CURRENT AT NOMINAL VOLTAGE.
- C. RELAY WILL STAY IN PICKED-UP STATE DOWN TO MUST HOLD VOLTAGES SHOWN.
- D. MAX. OVER-VOLTAGE: 6 & 12 VDC COILS 120% OF NOMINAL; ALL OTHERS 110% OF NOMINAL.
- E. COILS AVAILABLE FOR OTHER VOLTAGES AND FOR AC 50/60HZ.

**NOTE:** Only DC Coil Models are QPL Approved.

### CONTACT ELECTRICAL CHARACTERISTICS

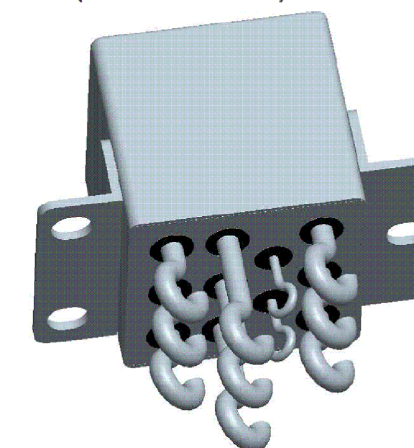
Type of Load	Life(Min.) Cycles X10 <sup>3</sup>	28VDC	115VAC 400 Hz	230VAC 400Hz	115/200 VAC 3φ	
					400Hz	60Hz*
Resistive	50	25	25	10	25	2.5
Inductive	10	12	-	-	-	2.5
Motor	50	10	10	-	10	2
Lamp	50	5	5	-	5	1

\* 60 Hz Loads rated for 10000 operations

- A. Overload Current 50 Amps DC, 80 Amps 400 Hz.
- B. Rupture Current 60 Amps DC, 100 Amps 400 Hz.
- C. Contact Make Bounce 1 Millisecond at Nominal Voltage.
- D. Max. Contact drop at 25 Amps: initial 0.150 Volts.
- E. End of Life 0.175 Volts.

### PRODUCT FACTS:

- o Non latching Hermetically Sealed Relay.
- o Balanced force design.
- o Permanent magnet drive. Polarized single side stable design.
- o All welded construction.
- o Coils available:  
DC: 6, 12, 28, 48 VDC.  
AC: 28, 115 VAC (50/400 Hz).
- o Contacts: Silver Cadmium oxide with Gold plating.
- o Designed and built in accordance to MIL-PRF-83536.
- o Weight 82 grams (2.89 ounces) Max.



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN RV 25OCT2019	TE Connectivity			
DIMENSIONS: INCHES		CHK RV 25OCT2019				
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD MB 25OCT2019	NAME C-FCAV-325-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-325-SERIES	RESTRICTED TO
			CUSTOMER DRAWING		SCALE NTS	SHEET 1 OF 2
					REV A	



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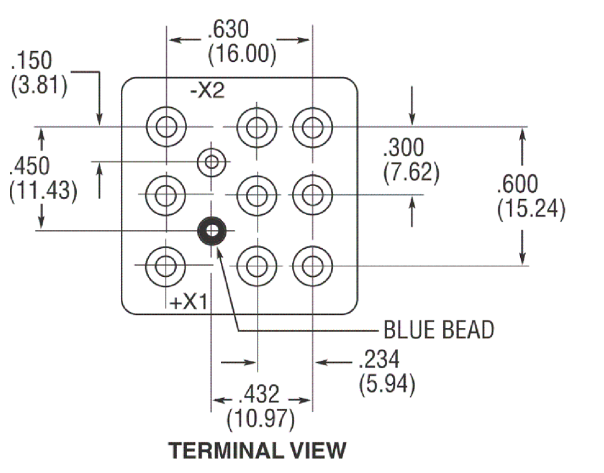
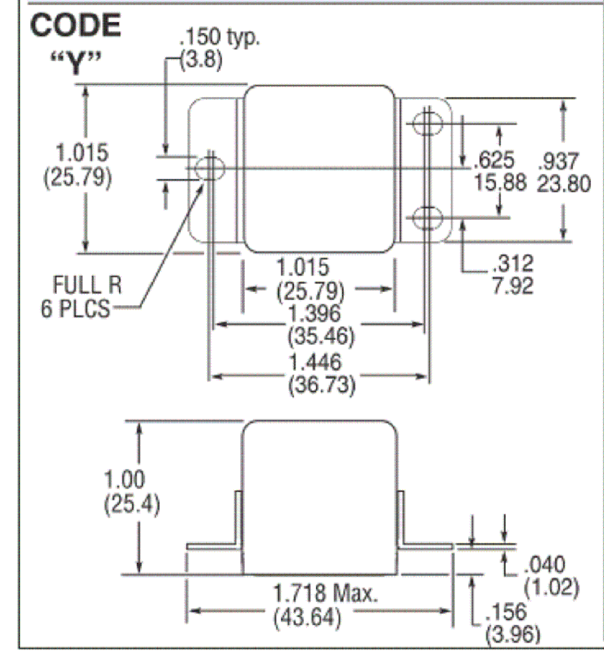
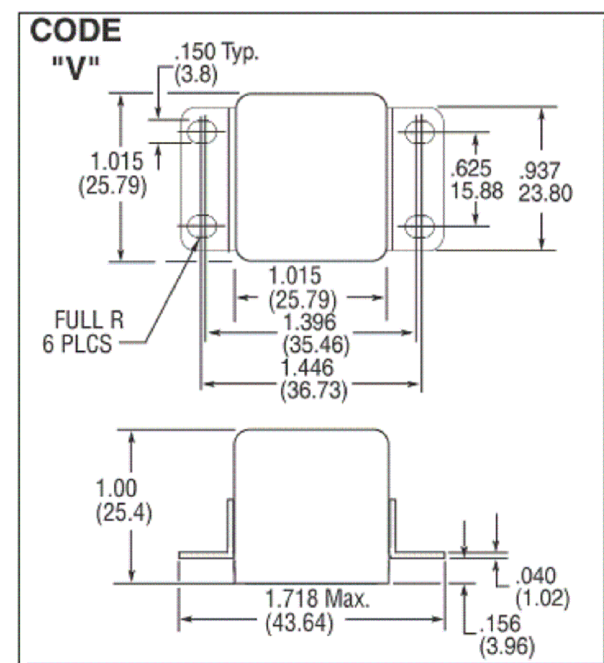
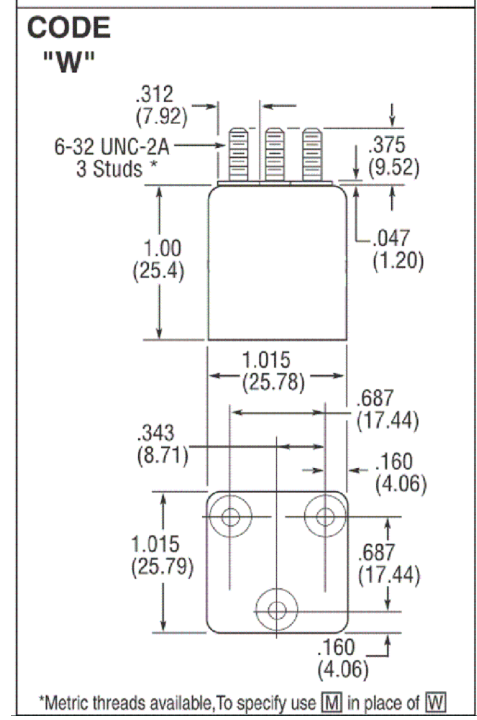
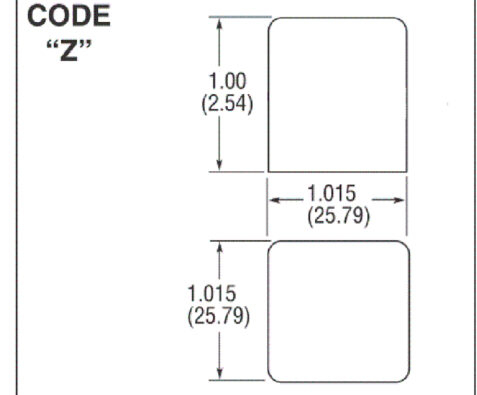
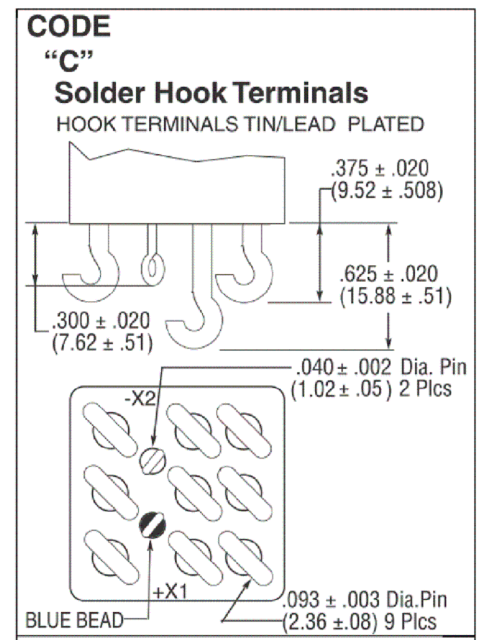
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REVISIONS

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

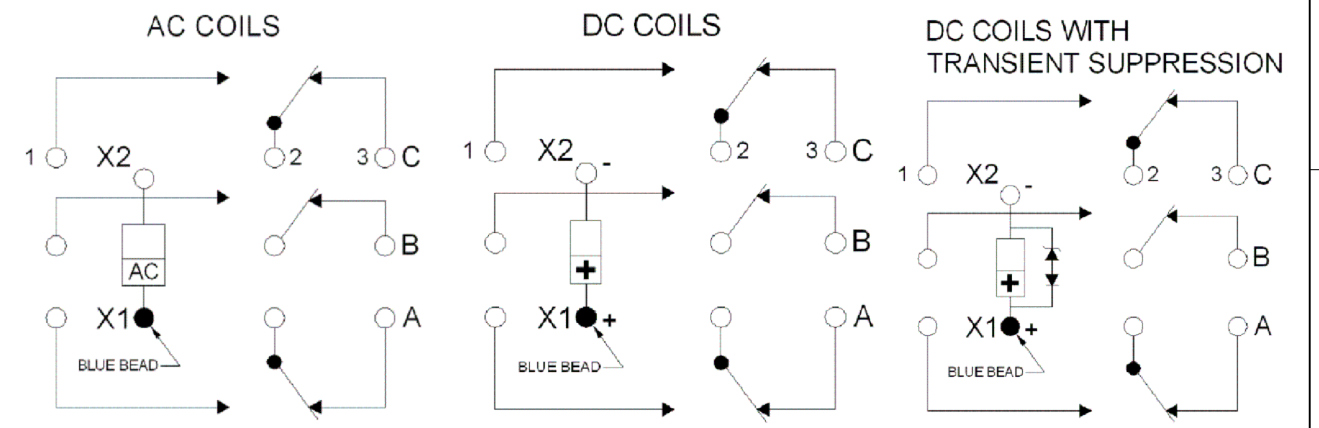
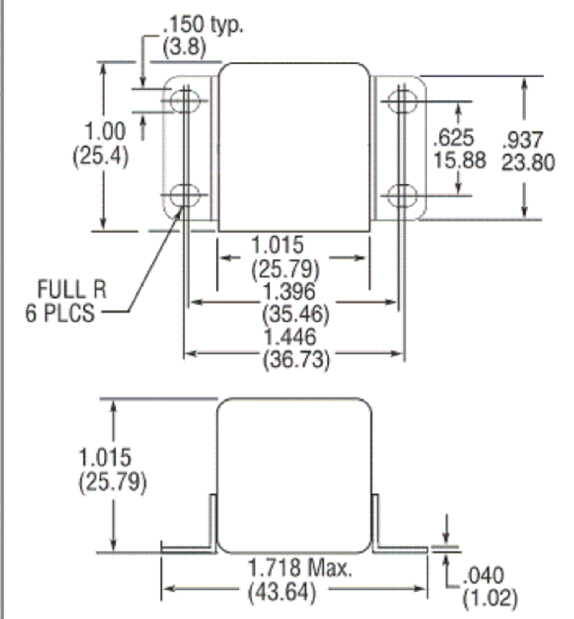


**Enclosures**

All Enclosures have cupro-Nickel cans bright acid tin/lead plated after assembly to terminal headers.  
Dimensions: Inches ± .010 (mm ± .25)

**For socket pin terminals: specify "Y" enclosures with DC coils and "V" enclosures with AC coils.**

**CODE "X"**



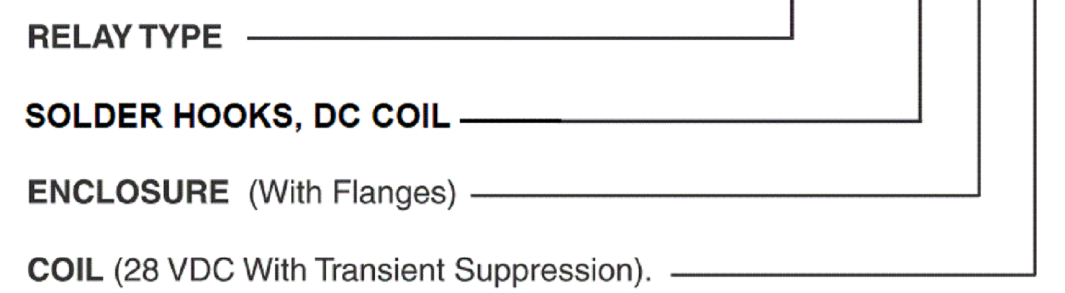
**NOTE:** Polarity must be observed with DC coil supply. Relay is polarized with a permanent magnet and will not operate or be damaged by reverse polarity.

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**

**FCAV-325-A Y 4**



**NOTE: Only DC coil models are QPL Approved**

ALL DIMENSIONS ARE IN INCHES(MM)

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DIMENSIONS: INCHES		CHK RV 25OCT2019			
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD MB 25OCT2019	PRODUCT SPEC		
0 PLC ± -		APPLICATION SPEC			
1 PLC ± -		SIZE A3			
2 PLC ± -		CAGE CODE -			
3 PLC ± -		DRAWING NO C-FCAV-325-SERIES			
4 PLC ± -		RESTRICTED TO -			
ANGLES ± -		SCALE NTS			
MATERIAL -		SHEET 2 OF 2			
FINISH -		REV A			
CUSTOMER DRAWING					