Р	LTR	DESCRIPTION	DATE	DWN	APVD
	Α	INITIAL RELEASE	280CT2019	RV	МВ

### **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 T Enclosure (In Track) —

Vibration, Sinusoidal\* —

Z & Y Enclosures — 30 a 70-3000Hz

50 g for 11 mS

W, X & M Enclosures —

20 g 70-3000Hz

T Enclosure (Socket Mounted in Track) — 20 g 500-3000 Hz

Vibration, Random\* —

Z & Y Enclosures — 0.4 g<sup>2</sup>/Hz 50-2000Hz T, W, X & M Enclosures —

 $0.2~g^2/Hz~50-2000Hz$ 

Dielectric Strength —

At Sea Level —
All circuits to ground and circuit to circuit — 1000 V rms
Coil to ground — 1000 V rms
At 80.000 Feet — 250 V rms

Insulation Resistance — Initial (500 VDC) — 100 M $\Omega$  Min. After Life or Environmental Tests — 50 M $\Omega$  Min

Operate Time at Nominal Voltage — 6 ms or less

Release Time at Nominal Voltage — 6 ms or less

\* Max. contact opening under vibration or shock 10 microseconds

### **Coil Data**

Coil	Nominal	Eros	DC Res.	Over Temperature Range				
Code	Voltages	Freq. Hz	(B)	Pickup or Below Volts	Dropout or Above Volts	Must Hold Voltage (C)		
1	6	DC	25 Ω	4.5	0.3	2.5		
2	12	DC	78 Ω	9.0	0.75	4.5		
3	28	DC	400 Ω	18.0	1.5	7.0		
4 (A)	28	DC	400 Ω	18.0	1.5	7.0		
5	48	DC	1275 Ω	36.0	2.5	14.0		

- A. CODE 4 COILS HAVE BACK EMF SUPPRESSION TO 42 VOLTS MAX.
- B. DC COIL RESISTANCE ± 10% AT 25°C
- C. RELAY WILL STAY IN PICKED-UP STATE DOWN TO MUST HOLD VOLTAGES SHOWN.
- D. MAX. OVERVOLTAGE: 6 & 12 VDC COILS 120% OF NOMINAL; ALL OTHERS 110% OF NOMINAL.

# Contact Rating — Amperes Ratings Are Continuous Duty

Type of Load	Life (Min.) Cycles x 10 <sup>3</sup>	28 VDC	115VAC 400Hz	115/200VAC 400Hz-3Ø
Resistive	100	5	5	5
Inductive	20	3	5	5
Motor	100	2	3	3
Lamp	100	1	1	1

Low Level Switching Capability: With contacts operating a load of 10 to 50 microamperes at 10 to 50 millivolts, the contact resistance miss detection level shall be 100 ohms max. Cycling rate is 1 to 12 per second, for 100,000 operations.

Overload Current — 20 AMPS DC, 30 AMPS 400Hz

Rupture Current — 25 AMPS DC, 40 AMPS 400Hz

Contact Make Bounce — 1.0 MILLISECOND AT NOMINAL VOLTAGE

Max. Contact Drop at 5 Amps — INITIAL 0.100 VOLTS

End of Life — 0.125 VOLTS

The Series FCB-405 relay is a polarized single-side stable design, where the flux from a permanent magnet provides the armature holding force in the deactivated state, and its flux path is switched and combined with the coil flux in the operated state. This results in appreciably



#### **Product Facts**

- **■** Hermetically Sealed
- All Welded Construction
- **■** Balanced Force
- **■** Permanent Magnet Drive
- Contacts rated low level to 5 Amps 28 VDC and 115/200 VAC 400 Hz, 3 Phase

 $\mathbb{C}$ 

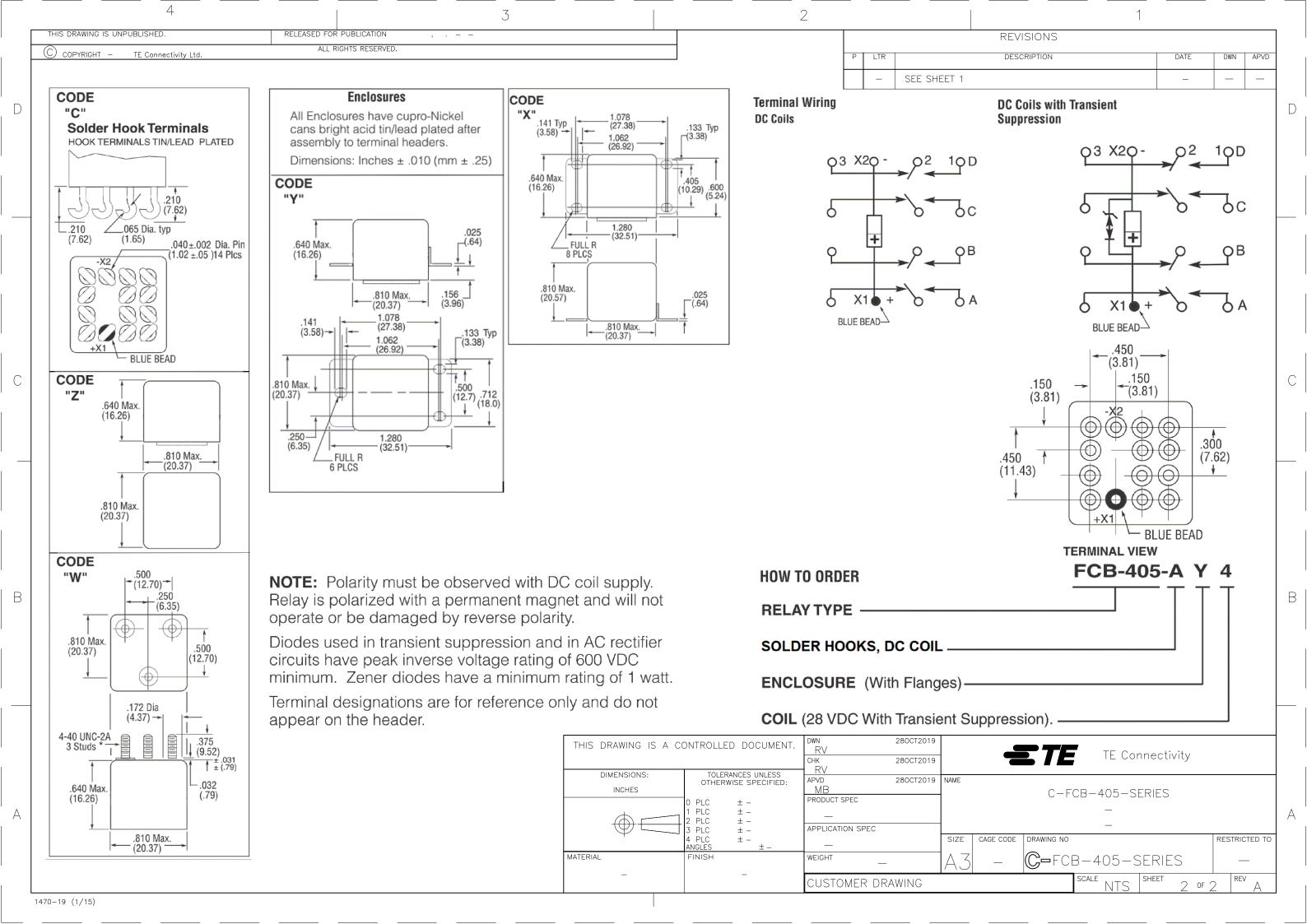
В

- Weight .93 ounces max. (26.4 grams)
- Qualified to M83536/5 & /6

increased contact pressure in both states over that of a spring return nonpolar design. We also manufacture other versions of this relay:

**FCB-205** — 5 Amp DPDT Relay

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DIMENSIONS:	DIMENSIONS: TOLERANCES UNLESS OTHERWISE SPECIFIED:		280CT2019	NAME					
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_	1 PLC ± -						_		
2 PLC ± -		APPLICATION SPEC		_					
	] 3 PLC ± - 4 PLC ± -	AFFLICATION SFEC		SIZE	CAGE CODE	DRAWING NO			RESTRICTED TO
	ANGLES ±-	-		SIZL	CAGE CODE	DIVAWING NO			INESTRICTED TO
MATERIAL	FINISH	WEIGHT		<b>A</b> 3	_	C-FC	B-405-9	SERIES	_
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TE Connectivity: M83536/5-026M