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REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	A	INITIAL RELEASE	18OCT2019	RV	MB

RUGGED
- Hermetically sealed
- Corrosion protected metal can
- All welded construction. No solder sealing

SPACE AND WEIGHT SAVING
- 1.5 inch cube enclosure
- 0.452 lbs

CAPABLE
- Excellent for switching harsh inductive, motor, and lamp loads
- -70°C to +125°C temperature range
- 80,000 feet altitude rating

VERSATILE
- 28 Vdc or 115 Vac coils
- Solder hook or terminal block configurations

QUALIFIED
- Qualified to MS27418 specifications
- Higher current ratings than standard M83536 mid-range relays

APPLICATIONS
- Launch Systems
- Power Distribution
- Fuel Pumps
- Guidance and Navigation Systems
- Aircraft Galley/Cabin Equipment
- Weapons Systems
- Ground Support Equipment

MECHANICAL/ENVIRONMENTAL
- **Temperature Range:** -70°C to +125°C
- **Altitude:** 80,000 feet
- **Sinusoidal Vibration:** 10 g/5 to 1000 Hz
- **Shock:** 50 g/11 ms

ELECTRICAL
- **Dielectric Strength at Sea Level:**
  Coil to Case: 1250 V_{rms}
  All Other Points: 1500 V_{rms}
- **Dielectric Strength at 80,000 ft (25,000 m):** 500 V_{rms} (all points)
- **Insulation Resistance at 500 Vdc:**
  Initial: 100 MΩ min.
  After Life or Environmental Test: 50 MΩ min.
- **Contact Voltage Drop at Nominal Current:**
  Initial Value: 150 mV max.
  After Life: 175 mV max.

OPERATIONAL
- **Operate Time at Nominal Voltage:**
  AC: 25 ms max.
  DC: 20 ms max.
- **Release Time at Nominal Voltage:**
  AC: 50 ms max.
  DC: 10 ms max.
- **Bounce Time at Nominal Voltage:** 2 ms max.

COIL CHARACTERISTICS

CODE	115 Vac 50/60 Hz	115 Vac 400 Hz	28 Vdc	28 Vdc (Suppressed)
Nominal operating voltage	115	115	28	28
Maximum operating voltage	122	122	32	32
Maximum pick-up voltage over temperature range	95	95	18	18
Maximum pick-up voltage over temperature range (Continuous Current test)	108	108	22.5	22.5
Drop-out voltage over temperature range	5.0	5.0	1.5	1.5
Coil current at +25° C (amperes)	.06	.055	-	-
Coil Resistance - DC Coils (*)	-	-	160	160
Back emf Suppresses to (Vdc)	-	-	-	42

Contact Characteristics

Load Type	Life Cycles	Current Rating (A)				
		28 Vdc	115 Vac, 1 Phase Power		115/200 Vac, 3 Phase Power	
			400 Hz	50/60 Hz	400 Hz	50/60 Hz
Resistive	50,000	25	25	25	25	25
Inductive	10,000	15	25	25	25	25
Motor	50,000	20	20	12	20	12
Lamp	50,000	10	10	10	10	10
Mechanical Life, Reduced Current	200,000	6.3	6.3	6.3	6.3	6.3

Part Numbers

Coil	Terminal	Mounting	Mil Spec	MS Part No.	Comml Part No.
28 Vdc	Solder Hook	Stud	MS27418-1B	FC-325-2	FC-325-CW3
	Screw	Bracket	MS27418-2B	FC-325-5	FC-325-SY3
28 Vdc (Suppressed)	Solder Hook	Stud	MS27418-1D	FC-325-7	FC-325-CW4
	Screw	Bracket	MS27418-2D	FC-325-8	FC-325-SY4
115 Vac, 50/60 Hz	Solder Hook	Stud	MS27418-1C	FC-325-3	FC-325-CW9
	Screw	Bracket	MS27418-2C	FC-325-6	FC-325-SY9
115 Vac, 400 Hz	Solder Hook	Stud	MS27418-1A	FC-325-1	FC-325-CW8
	Screw	Bracket	MS27418-2A	FC-325-4	FC-325-SY8

Custom configurations are available. Consult TE.

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DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± –
1 PLC ± –
2 PLC ± –
3 PLC ± –
4 PLC ± –
ANGLES ± –

MATERIAL –
FINISH –

DWN	RV	18OCT2019
CHK	RV	18OCT2019
APVD	MB	18OCT2019
PRODUCT SPEC	—	
APPLICATION SPEC	—	
WEIGHT	—	

TE Connectivity

NAME: FC–325–SERIES – –

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	–	C–FC–325–SERIES	—

CUSTOMER DRAWING | SCALE NTS | SHEET 1 OF 2 | REV A

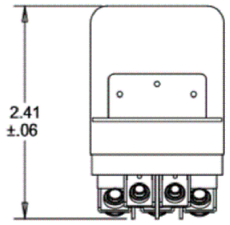
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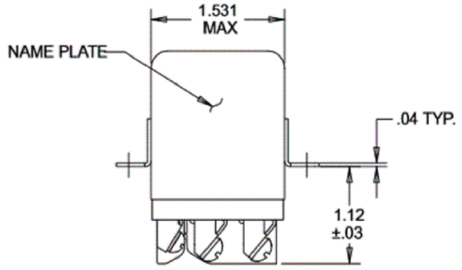
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REVISIONS

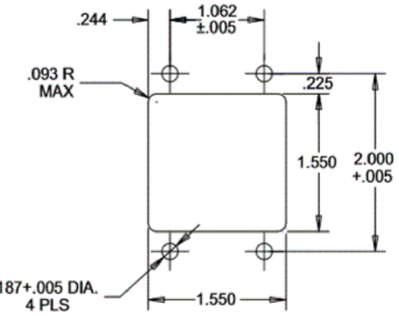
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	–	SEE SHEET 1	–	—	—

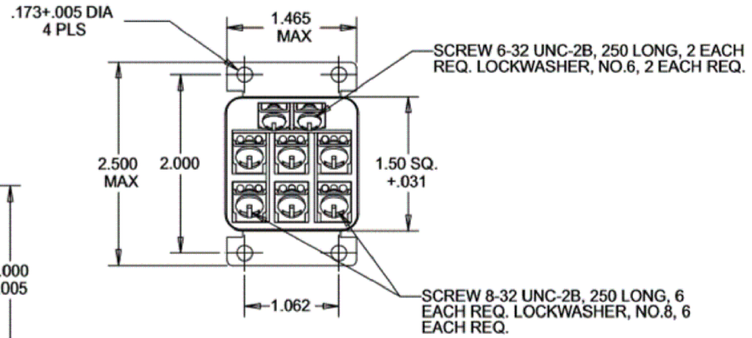
Screw Terminals
(Shown with Mounting Bracket)





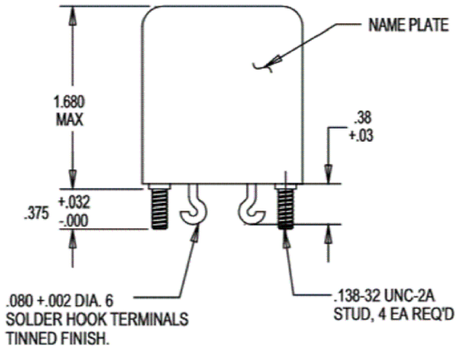
Mounting Layout



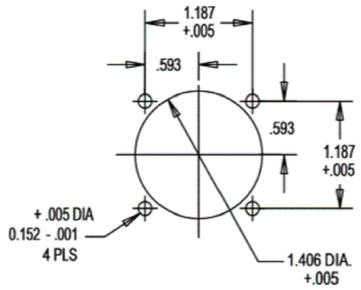


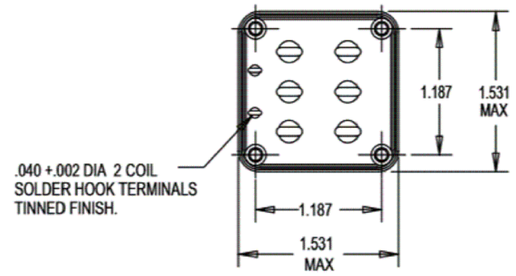
Tolerances are ±.010 unless otherwise noted.

Dimensions
Solder Hook Terminals
(Shown with Mounting Studs)

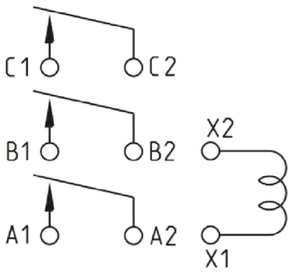


Mounting Layout

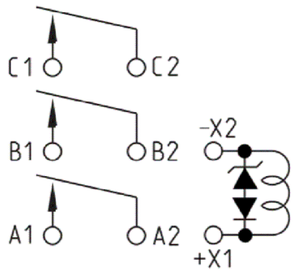




Circuit Diagram



DC Nonsuppressed and AC Coils



DC Suppressed Coils

ALL DIMENSIONS ARE IN INCHES

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DIMENSIONS: INCHES

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MATERIAL –

FINISH –

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CUSTOMER DRAWING | SCALE NTS | SHEET 2 OF 2 | REV A

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