

# BR235

Miniature, 25 Amps, 3PDT, To MIL-PRF-83536



## General

- Contact Arrangement
  - 3PDT (3 Form C)
- Weight
  - 3.0 oz approx.
  - Designed to meet the requirements of MIL-PRF-83536

## Performance

### Contact Rating (Note 1):

- Resistive
  - 25 Amps @ 28 VDC or 115/208V 400 Hz (Case Grounded)
- Inductive
  - 15 Amps @ 115/208V 400 Hz
  - 12 Amps @ 28 VDC
  - (Case Grounded)
- Motor
  - 10 Amps @ 28 VDC or 115/208V 400 Hz (Case Grounded)
- Lamp
  - 5 Amps @ 28 VDC or 115/208V 400 Hz (Case Grounded)
- Life
  - 50,000 operations minimum @ rated resistive load, 125°C
- Pull In Power
  - 500 mw approx

### Operate/Release Time:

- DC Coil: 15 ms max
- AC Coil: 50 ms max
  - Excluding bounce time at nominal coil voltage

### Contact Bounce Time

- 1 ms max
- @ rated contact load, 28 VDC

### Contact Voltage Drop:

- Before Life
  - 150 mv max @ 25 Amps and 6 VDC
- After Life
  - 175 mv max @ 25 Amps and 6 VDC

## Environmental

- Temperature Range
  - -70°C to +125°C
- Vibration (Note 2)
  - 0.12" DA 10 - 70 Hz
  - 30 G's 70 - 3,000 Hz
- Shock (Operating) (Note 2)
  - 200 G's 6 ms

## Electrical Characteristics

- Duty Cycle
  - Continuous
- Insulation Resistance
  - 100 megohms @ 500V 25°C

### Dielectric Strength:

#### Sea Level:

- Contact to Case
  - 1,250 VRMS
- Contact to Coil
  - 1,250 VRMS
- Coil to Case
  - 1,000 VRMS
- Across Open Contacts
  - 1,250 VRMS

#### 80,000 Feet:

- All Points
  - 350 VRMS

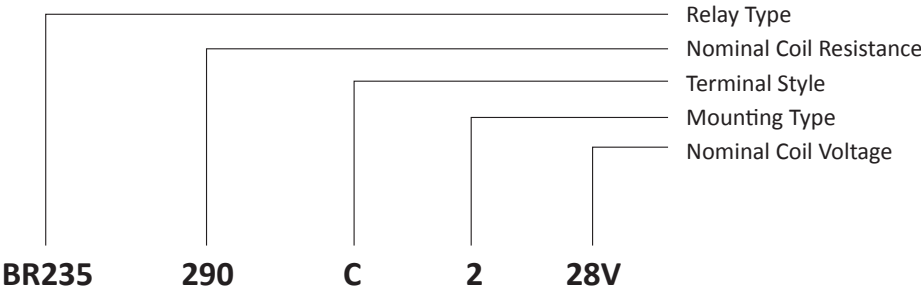
## Notes:

1. For other ratings consult the factory
2. For applications requiring higher shock and vibration, consult the factory
3. AC coil line frequency 50 to 400 Hz

**BABCOCK**

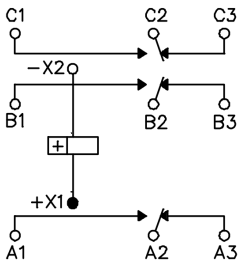
Coil Data:

Model BR235 Part Number	BR235-20()-6V	BR235-78()-12V	BR235-290()-28V	BR235-890()-48V	BR235AC-()-115V (Note 3)
Nominal Coil Voltage	6 VDC	12 VDC	28 VDC	48 VDC	115 VAC
Maximum Coil Voltage	8 VDC	15 VDC	29 VDC	59 VDC	122 VAC
Pull In Voltage (Max @ +125°C)	4.5 VDC	9 VDC	18 VDC	36 VDC	90 VAC
Drop Out Voltage (Max)	1.8 VDC	3.5 VDC	5.1 VDC	11 VDC	5 - 30 VAC
Coil Resistance ± 10% @ 25°C	20 OHMS	78 OHMS	290 OHMS	890 OHMS	I = 0.04 AMPS

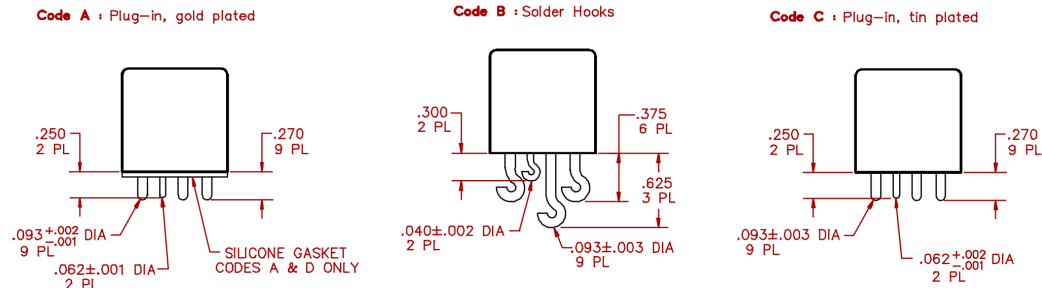


Schematic

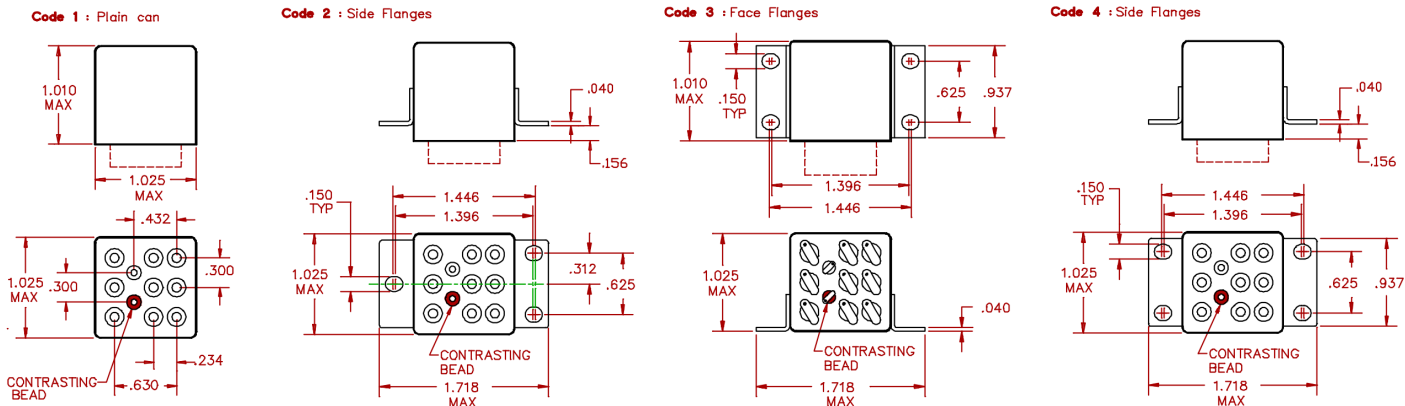
Terminal View



Terminal Styles



Mounting Codes



General Notes

- Unless otherwise specified, all tests made at nominal coil voltages, @ 25°C
- For special coil variations, switching configurations, terminals styles and mounting types, consult the factory
- Unless otherwise specified, tolerances on decimal dimensions are ± .010"
- Specifications contained herein are subject to change without notice