



## Remote Power Controllers Up to 200 Amps • Form X Magnetic Latching For DC only applications

## **SPECIFICATIONS**

### **GENERAL**

| <b>Contact Arrangement</b> SPST (1 Form X) <b>Weight</b> 15 oz max.   |  |  |  |  |
|---|--|--|--|--|
| Designed to meet the requirements of MIL-C-83383  |  |  |  |  |
| PERFORMANCE   |  |  |  |  |
| Contact Ratings (Note 1):   |  |  |  |  |
| Power Contacts: All loadsUp to 200 Amps @ 28 VDC  |  |  |  |  |
| Current Trip PointsTrip Time1000% of Rated Current1.0 Sec. max.400% of Rated Current10.0 Sec. max.200% of Rated Current60.0 Sec. max.138% of Rated Current1.0 Hour max.Up to 115% of Rated CurrentNo Trip |  |  |  |  |
| Tolerances:         Current   |  |  |  |  |
| Auxiliary Contacts:   |  |  |  |  |
| Configuration   |  |  |  |  |
| <b>Life</b> 50,000 cycles @ rated Res. and Ind. load 25,000 cycles @ rated Motor load   |  |  |  |  |

| Response Time:                                     | 12 ms nom.  |
|--|---|
| Contact Bounce Time                                | 2 ms max @ rated contact load, 28 VDC                   |
|  | 225 mv @ Rated Current250 mv @ Rated Current            |
| Operating Voltage:                                 | 18 to 32 VDC  |
| ENVIRONMENTAL Temperature Range                    | 54°C to +71°C   |
| Vibration (Note 2)<br>Shock (Operating)(Note 2     | 10 G'S 50 - 2000 Hz<br>)25 G's 11 ms<br>15 G            |
| ELECTRICAL CHARA                                   | CTERISTICS  |
|  | Intermittent<br>100 megohms<br>@ 500V 25°C              |
| Dielectric Strength:<br>Sea Level:                 | _   |
| Contact to Case<br>Contact to Coil<br>Coil to Case | 1,500 VRMS<br>1,500 VRMS<br>1,500 VRMS<br>sts1,350 VRMS |

Rupture (main contacts) ......3600 Amperes

### Notes:

1. For other ratings or calibrations consult the factory.

2. For applications requiring higher shock and vibration, consult the factory.

All Points ......500 VRMS

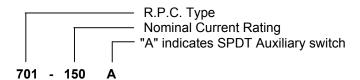
50,000 Feet:

100,000 cycles mechanical



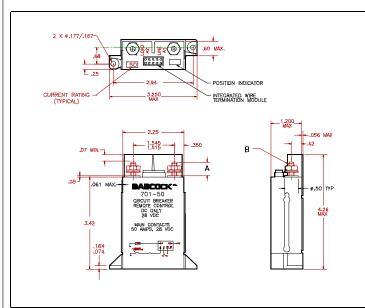
The 701 Remote Power Controllers are designed to sense the current level flowing through their contacts, and to open the circuit when the current exceeds the specified current rating. These units use our unique magnetic latching motor design to minimize power consumption. These units are fully temperature compensated for accurate operation over the full temperature range.

The 701 circuitry has 1500 watts of Peak Power Dissipation transient suppression built in so it can withstand the rigors of even the noisiest of supply voltages. Utilizing all space age approved materials, the 701 Remote Power Controllers are ideal for demanding applications.



### **OVERALL DIMENSIONS**

### SELECTION TABLE



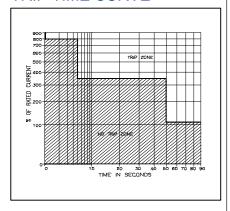
| Catalog<br>Number | Continuous<br>Ampere Contact<br>Rating | Thread "B" | Dimension "A" |
|-------------------|--|------------|---------------|
| 701-5( )          | 5                                      | 10-32 UNF  | .500          |
| 701-7.5( )        | 7.5                                    | 10-32 UNF  | .500          |
| 701-10()          | 10                                     | 10-32 UNF  | .500          |
| 701-15( )         | 15                                     | 10-32 UNF  | .500          |
| 701-20( )         | 20                                     | 10-32 UNF  | .500          |
| 701-25( )         | 25                                     | 10-32 UNF  | .500          |
| 701-35()          | 35                                     | 1/4-28 UNF | .610          |
| 701-40( )         | 40                                     | 1/4-28 UNF | .610          |
| 701-50( )         | 50                                     | 1/4-28 UNF | .610          |
| 701-60( )         | 60                                     | 1/4-28 UNF | .610          |
| 701-75( )         | 75                                     | 1/4-28 UNF | .610          |
| 701-100( )        | 100                                    | 1/4-28 UNF | .610          |
| 701-125( )        | 125                                    | 1/4-28 UNF | .610          |
| 701-150( )        | 150                                    | 1/4-28 UNF | .610          |
| 701-175( )        | 175                                    | 1/4-28 UNF | .610          |
| 701-200( )        | 200                                    | 1/4-28 UNF | .610          |

### **SCHEMATIC**

### TYPICAL WIRING DIAGRAM

# LOAD O A2 A1 O LINE 3 4 5A 5B O ONTROL UNIT BACKUP POWER

### TRIP TIME CURVE



### **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.



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