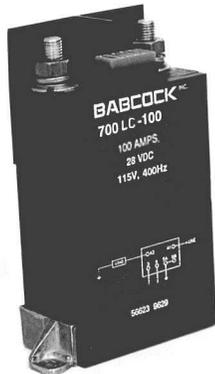


# Load Controllers Up to 200 Amps • Form X Magnetic Latching



## Load Controllers Up to 200 Amps • Form X Magnetic Latching

### SPECIFICATIONS

#### GENERAL

**Contact Arrangement** ..... SPST (1 Form X)  
**Weight** ..... 15 oz max.

#### PERFORMANCE

##### Contact Ratings (Note 1):

Resistive ..... Up to 200 Amps @ 28 VDC or  
 115/208V 400 Hz

Inductive ..... 60% of rated resistive @ 28 VDC or  
 115/208V 400 Hz

Motor ..... 40% of rated resistive @ 28 VDC or  
 115/208V 400 Hz

Lamp ..... 15% of rated resistive @ 28 VDC or  
 115/208V 400 Hz

**Life** ..... 50,000 cycles @ rated Resistive load  
 25,000 cycles @ rated Motor load  
 100,000 cycles mechanical

##### Coil Data: (@ 28 VDC and 25°C)

Nominal Coil Voltage ..... 28 to 32 VDC  
 Latch/Reset Voltage (@ 71°C) ..... 18 VDC max  
 Coil Resistance ..... 10 Ohms

**Rupture** ..... 3600 Amperes  
**Response Time:** ..... 12 ms nom.  
**Contact Bounce Time** ..... 2 ms max  
 @ rated contact load

##### Contact Voltage Drop:

Initial ..... 225 mv @ Rated Current  
 End of Life ..... 250 mv @ Rated Current

#### ENVIRONMENTAL

**Temperature Range** ..... -54°C to +71°C  
**Vibration (Note 2)** ..... 10 G'S 50 - 2000 Hz  
**Shock (Operating)(Note 2)** ..... 25 G's 11 ms  
**Acceleration** ..... 15 G

#### ELECTRICAL CHARACTERISTICS

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

##### Dielectric Strength:

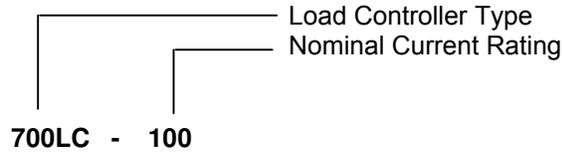
Sea Level:  
 Contact to Case ..... 1,500 VRMS  
 Contact to Coil ..... 1,500 VRMS  
 Coil to Case ..... 1,500 VRMS  
 Across Open Contacts ..... 1,350 VRMS  
 50,000 Feet:  
 All Points ..... 500 VRMS

#### Notes

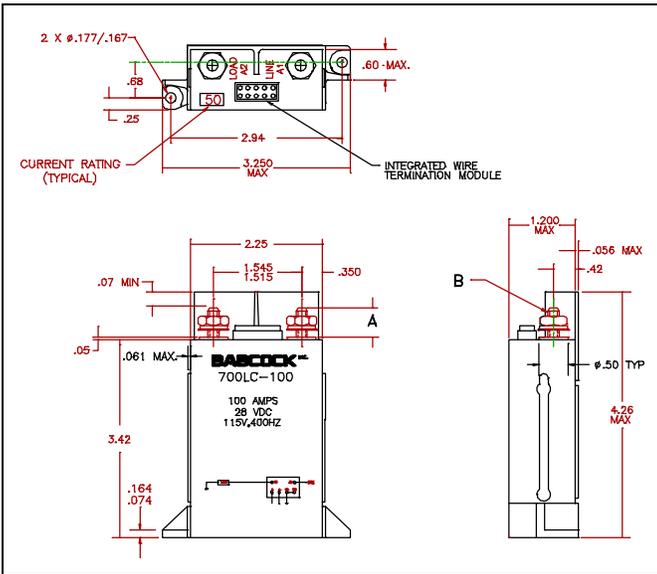
- For other ratings or calibrations consult the factory.
- For applications requiring higher shock and vibration, consult the factory.

The 700LC Load Controllers are designed to handle even the toughest loads with exceptional current spike handling characteristics. The contact system utilizes the proven design in our RPC Current Sensors. The magnetic latching motor is designed to minimize power consumption.

The 700LC contact system can handle up to 3,600 Amperes of rupture current without any problem. The 700LC can withstand the rigors of even the noisiest of supply voltages. Utilizing all space age approved materials, the 700LC Load Controllers are ideal for demanding applications.



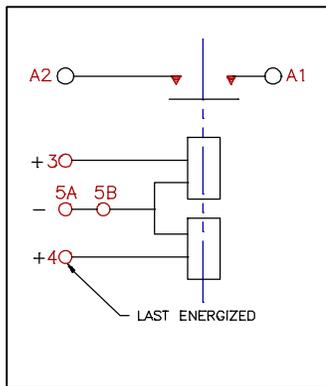
### OVERALL DIMENSIONS



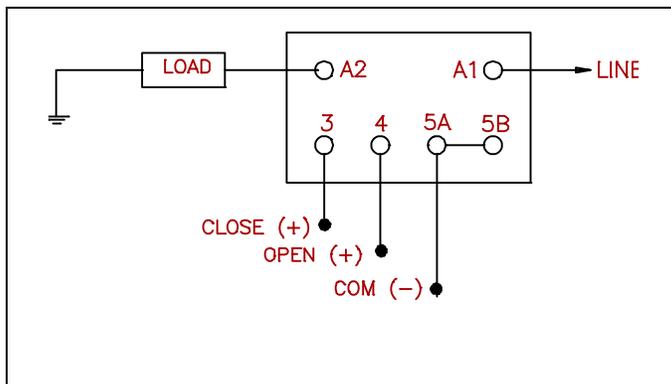
### SELECTION TABLE

Catalog Number	Continuous Ampere Contact Rating	Thread "B"	Dimension "A"
700LC-5	5	10-32 UNF	.500
700LC-7.5	7.5	10-32 UNF	.500
700LC-10	10	10-32 UNF	.500
700LC-15	15	10-32 UNF	.500
700LC-20	20	10-32 UNF	.500
700LC-25	25	10-32 UNF	.500
700LC-35	35	1/4-28 UNF	.610
700LC-40	40	1/4-28 UNF	.610
700LC-50	50	1/4-28 UNF	.610
700LC-60	60	1/4-28 UNF	.610
700LC-75	75	1/4-28 UNF	.610
700LC-100	100	1/4-28 UNF	.610
700LC-125	125	1/4-28 UNF	.610
700LC-150	150	1/4-28 UNF	.610
700LC-175	175	1/4-28 UNF	.610
700LC-200	200	1/4-28 UNF	.610

### SCHEMATIC

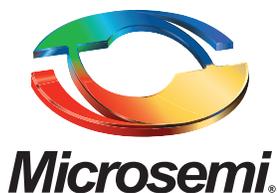


### TYPICAL WIRING DIAGRAM



### 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.



**Microsemi Corporate Headquarters**  
One Enterprise, Aliso Viejo,  
CA 92656 USA

**Within the USA:** +1 (800) 713-4113  
**Outside the USA:** +1 (949) 380-6100  
**Sales:** +1 (949) 380-6136  
**Fax:** +1 (949) 215-4996

**E-mail:** [sales.support@microsemi.com](mailto:sales.support@microsemi.com)

© 2015 Microsemi Corporation. All rights reserved. Microsemi and the Microsemi logo are trademarks of Microsemi Corporation. All other trademarks and service marks are the property of their respective owners.

Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for communications, defense & security, aerospace and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; security technologies and scalable anti-tamper products; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, Calif., and has approximately 3,400 employees globally. Learn more at [www.microsemi.com](http://www.microsemi.com).

Microsemi makes no warranty, representation, or guarantee regarding the information contained herein or the suitability of its products and services for any particular purpose, nor does Microsemi assume any liability whatsoever arising out of the application or use of any product or circuit. The products sold hereunder and any other products sold by Microsemi have been subject to limited testing and should not be used in conjunction with mission-critical equipment or applications. Any performance specifications are believed to be reliable but are not verified, and Buyer must conduct and complete all performance and other testing of the products, alone and together with, or installed in, any end-products. Buyer shall not rely on any data and performance specifications or parameters provided by Microsemi. It is the Buyer's responsibility to independently determine suitability of any products and to test and verify the same. The information provided by Microsemi hereunder is provided "as is, where is" and with all faults, and the entire risk associated with such information is entirely with the Buyer. Microsemi does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other IP rights, whether with regard to such information itself or anything described by such information. Information provided in this document is proprietary to Microsemi, and Microsemi reserves the right to make any changes to the information in this document or to any products and services at any time without notice.