

KILOVAC LEV100H Rugged 1000 VDC, 150 A Hermetically Sealed,

Extended Performance DC Contactor

KILOVAC LEV100H Contactors

The new KILOVAC LEV100H extended performance contactors with auxiliary contacts from TE Connectivity (TE) are designed for harsh environment and load applications. This version of our popular EV and LEV series contactors offers extremely high performance for its small size and low weight. Hermetically sealed, KILOVAC LEV100H contactors are capable of operating in harsh, explosive environments without oxidation or contamination of contacts, even after long periods of non-operation.





HERMETICALLY SEALED

- Safe for application in harsh, explosive, and corrosive environments
- No contact oxidation over periods of non-use

VERSATILE

- Not position sensitive; available in side and bottom mount configurations
- 8 kV isolation between open contacts permits use for high voltage isolation and carry
- 12, 24, and 48 VDC coils available

EFFICIENT

• Small 1000 VDC, 150 A contactor saves weight and space

APPLICATIONS

- Energy Storage/Battery Storage
- Power Distribution
- Alternative Energy
- Hybrid Electric Vehicles (Military and Commercial)
- Test Equipment

MECHANICAL/ENVIRONMENTAL

- Contact Arrangement:
- Main Contacts: SPST-NO (Form X) Auxiliary Contact: SPST-NO (Form A) (Note 1)
- **Dimensions:** See drawings
- Weight: 6.70 oz. (190 g)
- Hermetically Sealed
- Safe for Harsh/Corrosive Environments
- Contact Oxidation: None over periods of non-use
- **Shock:** 11 ms ¹/₂ sine (operating, 20 g Peak)
- Sine Vibration: 20 g peak: 55-2000 Hz
- Operating Temperature Range: -40°C to +80°C
- Noise Emission (at 100 mm distance): 70 dBa

ELECTRICAL DATA

- Mechanical Life: 1,000,000 cycles
- Voltage Rating: Main Contacts Switching (max.): 1000 VDC Continuous (Note 2) 100 A Short Term (3 minutes) (Note 3): 200 A
- Contact Voltage Drop: Main Contacts: 0.05 max. @ rated current
- Resistive Load Performance (polarity sensitive):
 50 A make/break @ +1000 VDC: 50 cycles
 100 A make/break @ +400 VDC: 1000 cycles
 200 A make/break @ +400 VDC: 500 cycles
 1000 A break only @ +400 VDC: 2 cycles
 600 A make only: 10 cycles
 50 A @ 400 VDC make only: 25,000 cycles
- Maximum Short Circuit Current (1/2 cycle, 60 Hz) (through closed contacts): 1250 A
- Dielectric Withstanding Voltage: Between Open Contacts (Note 4): 5600 Vrms Contacts to Coil: 2200 Vrms
- Insulation Resistance @ 500 VDC, Terminal to Terminal/ Terminals to Coil: New: 100 MΩ min.
 End of Life: 50 MΩ min.

PART NO. 1618408-2

Note 1: Auxiliary contact ratings: 3 A, 125 VAC to 10,000 cycles Min.;
3A, 24 VDC to 10,000 cycles Min.; 100 mA,
10 VDC to 1M cycles. Auxiliary contact is mechanically linked to the main power contacts. Minimum Aux Contact Load 10 mA/12 VDC
Note 2: 100 A with 4 AWG at 85°C and 150 A with 2 AWG at 40°C ambient. Current rating depends upon conductor size. Keep terminals below
175°C max. continuous.
Note 3: 3 minutes at +40°C ambient, 1 minute at +80°C ambient with (8 AWG) conductor.
Note 4: 2200 Vrms minimum under all conditions, until end of life.



Operate and Release Time

Coil Voltage, Nominal/Max.		12/16 VDC	24/28 VDC	48/52 VDC
Coil Resistance (20°C)		26 Ω	96 Ω	392 Ω
Pic	k Up Voltage (20°C)	8 VDC	16 VDC	33 VDC
Dro	pout Voltage (20°C)	≤1.2 VDC	≤2.4 VDC	≤4.8 VDC
Coil Curre	ent (Nom. at 20°C, 12 VDC)	0.46 A	0.25 A	0.12 A
Coil Pow	ver (Nom. at Vnom, 20°C)	5.5	6.0	6.0
	Operate Time (Max.)		25 ms	
Main Contacts:	Operate Bounce (Max.)		6 ms	
	Release Time		10 ms	

Part Numbering System

Typical Part Number	<u>LEV100</u>	<u>H</u>	5	<u>C</u>	Ņ	G
SERIES						
LEV100 1000 VDC, 150 A Contactor						
H NO with 1PST NO Aux						
4 12 VDC						
5 24 VDC						
6 48 VDC						
C 10″ [.25 m]						
None – Stripped Wires						

G Bottom Mount, 2 x #8, M5 x 10 Mains

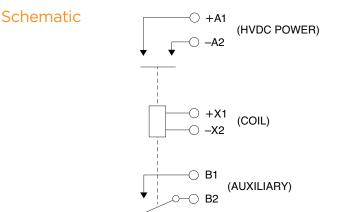
H Side Mount, 2 x #8, M5 x 10 Mains

TE Components ... TE Technology ... TE Know-how ... AMP | AGASTAT | CII | HARTMAN | KILOVAC | MICRODOT | NANONICS | POLAMCO | Raychem | Rochester | DEUTSCH

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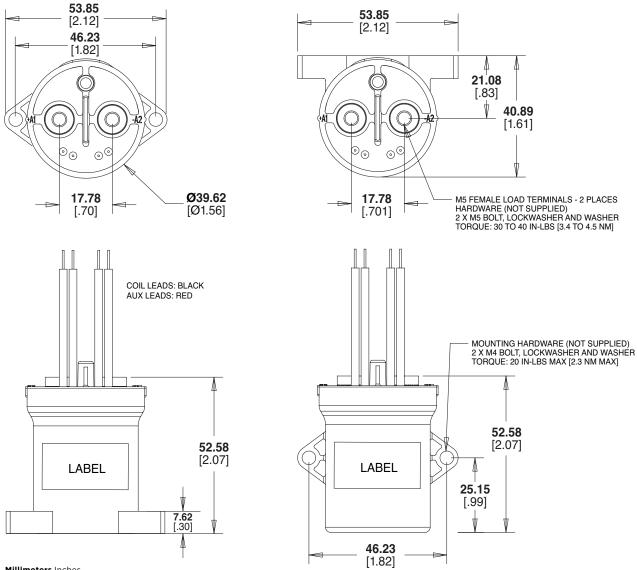
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Note: Contactors should be installed so that current flows from A1 (+) to A2 (-)

PART DRAWING



Millimeters Inches

LET'S CONNECT

We make it easy to connect with our experts and are ready to provide all the support you need. Just call your local support number or visit www.te.com/industrial to chat with a Product Information Specialist.

Technical Support

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Consult TE for the latest dimensions and design specifications.

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1-1773918-1 04/17

