

LEV100 Extended Performance Contactor with Aux Contact 150A/1000Vdc Power Switching SPST-NO Auxiliary Contact (Form X)

Features

- Lowest cost, 150A hermetically sealed contactor with Normally Open (NO) auxiliary contact.
- Great for HV isolation and Carry-8kVdc isolation between open main contacts
- Available in both side and bottom mount configurations – not position sensitive.
- Hermetically Sealed – Suitable for use in explosive/harsh environments without oxidation or contamination of contacts, including long periods of non-operation.
- Typical applications include automotive battery switching and backup, power/motor control circuit isolation, circuit protection and safety.
- 12, 24 and 48Vdc coils available.
- High voltage coil and auxiliary leads rated at 15kV (UL 3239) wire option “C” or rated at 1kV (UL 3557) wire option “F”.
- UL 508 Recognized
File No. E208033



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TITLE

LEV100H Extended Performance w/ Aux Contact Data Sheet

PREP. BY	J. Reyes	9/28/2016	DWG NO.	SD-LEV100H EP		
CHKD. BY	M. Priest	9/28/2016	CAGE CODE	18741	SCALE	none
ENG APRVL	J. Reyes	9/28/2016			SHEET	1 of 4

General Specifications

REV.
G

Physical Data

Units

Contact Arrangement: Main Contacts		SPST-NO (Form X)
Auxiliary [Note 1]		SPST
Dimensions		See Sheet 4
Weight, Nominal	kg	0.190

Environmental Data

Shock, 11ms 1/2 sine (operating)	G peak	20
Sine Vibration, 20 G pk	Hz	55-2000
Operating Temperature Range	°C	-40 to +85
Noise Emission (at 100 mm distance)	dB(a)	70

Electrical Data

Voltage Rating: Main Contacts Switching (max)	Vdc	1000
Current Rating, Continuous: Main Contacts [Note 2]	A	100
[Note 2]		150
Short Term Current (3 min) [Note 3]		200
Contact Voltage Drop: Main Contacts	V	0.05 max @ rated current
		UL Recognized
		Internal Qualification
Hot Switching performance (polarity sensitive):	Cycles	
50A make/break @+1000Vdc		50
100A make/break @ -400Vdc		1000
200A make/break @ +400Vdc		500
1000A break only @ +400Vdc		2
600A make only		10
50A @+400Vdc		25000
Maximum Short Circuit Current (1/2 cycle, 60 Hz) (through closed contacts)	A	1250
Mechanical Life	Cycles	1,000,000
		UL Recognized
		Internal Qualification
Dielectric Withstand Voltage:		
Between Open Contacts [Note 4]	Vrms	4250
Contacts to Coil	Vrms	2200
Insulation resistance		
Terminal to Terminal/ Terminals to Coil	MΩ	100 min @ 500Vdc new 50 min @ 500Vdc end of life

Coil Data

Coil Voltage, Nominal/ Max	Vdc	12/16	24/28	48/52
Coil Resistance (20°C)	Ω	26	96	392
Pick Up Voltage (20°C)	Vdc	8	16	33
Dropout Voltage (20°C)	Vdc	≤1.2	≤ 2.4	≤ 4.8
Coil Current (nominal at 20°C)	A	0.46	0.25	0.12
Coil Power (nom @ Vnom, 20°C)	W	5.5	6.0	6.0
Main Contacts: Operate Time (max)	ms	25		
Operate Bounce (max)	ms	6		
Release time	ms	10		



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THIRD ANGLE PROJECTION



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Notes:

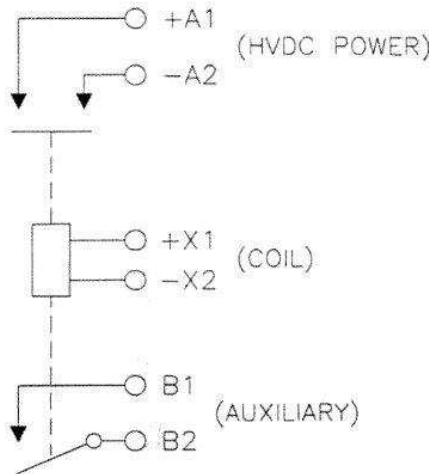
- [1] Auxiliary contact ratings: 3A, 125Vac to 10,000 cycles Min; 3A, 24Vdc to 10,000 cycles Min.; 100mA, 10Vdc to 1M cycles. Auxiliary contact is mechanically linked to the main power contacts. **Minimum Aux Contact Load 10mA/12Vdc**
- [2] 100A with 4 AWG at 85C and 150A with 2 AWG at 40C ambient. Current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

Part Numbering System

Typical PN	LEV100	H	5	C	N	G
Series: LEV100=100A, 1000 Vdc Contactor						
Contact Form: H = NO with 1PST NO Aux						
Coil Voltage: 4 = 12Vdc 5 = 24 Vdc 6 = 48 Vdc						
Wire Lengths: A = 15.3" [.39m], 600V Coil and Aux Wires C = 10" [.25m], 15KV Coil and Aux Wires F = 15.3" [.39m], 1000V Coil and Aux Wires						
Coil Termination: N = None – Stripped Wires						
Mounting: G = Bottom Mount 2x #8, M5x10 Mains	H = Side Mount 2x #8, M5x10 Mains					

Schematic

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



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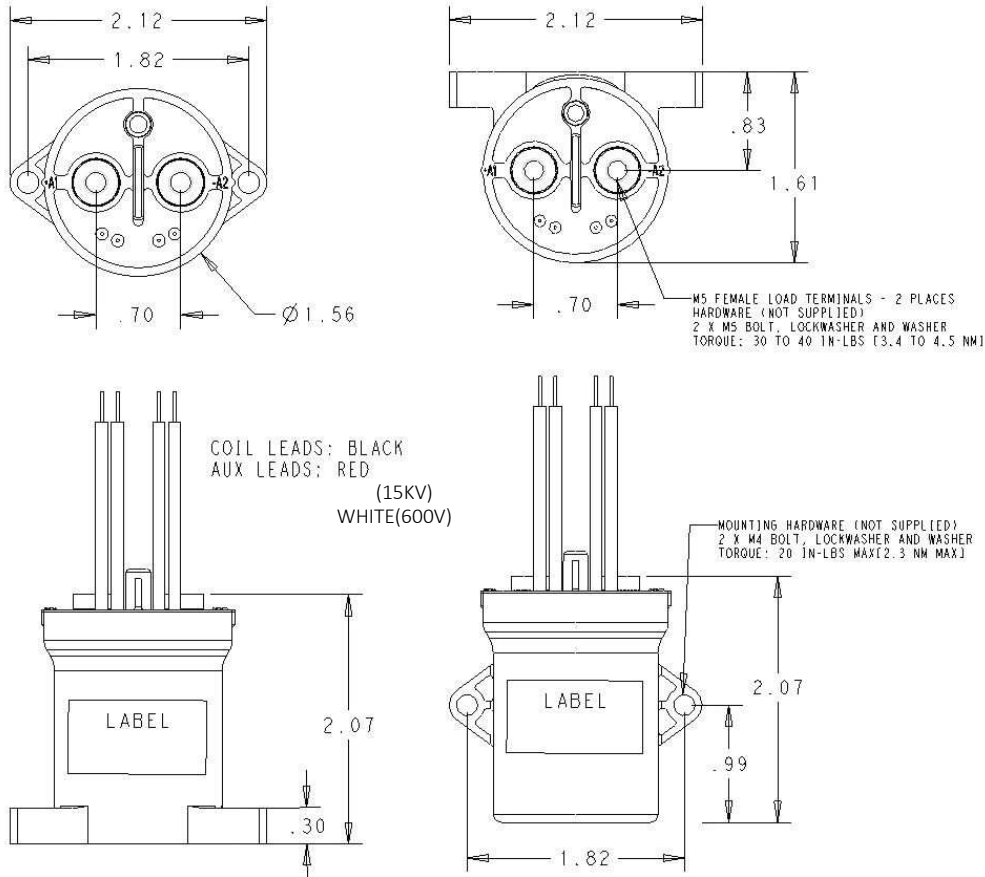
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Part Drawing



Revisions

REV	DESCRIPTION	DCO	APPROVAL AND DATE
A	INITIAL RELEASE	16366	JR 08/03/2016
B	CLARIFICATION PAGE 1, REVISE NOTES 1-3	16371	JR 09/26/2016
C	ADD 'EP' DESCRIPTION TO SD	16377	JR 11/15/2016
D	ADD 1000VDC TO TITLE. ADD TO NOTE 1 "MINIMUM AUX CONTACT LOAD 10 mA/12VDC	16378	JR 12/08/2016
E	ADD WIRE OPTION 'A'	16421	JR 01/04/2018
F	ADD WIRE OPTION 'F'	16533	DM 04/30/2020
G	UPDATE TEMPERATURE DATA	16535	JR 06/03/2020



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