



Introducing
KILOVAC LEV100 Series
900 Vdc Contactor
with 1 form X contacts rated 100A continuous

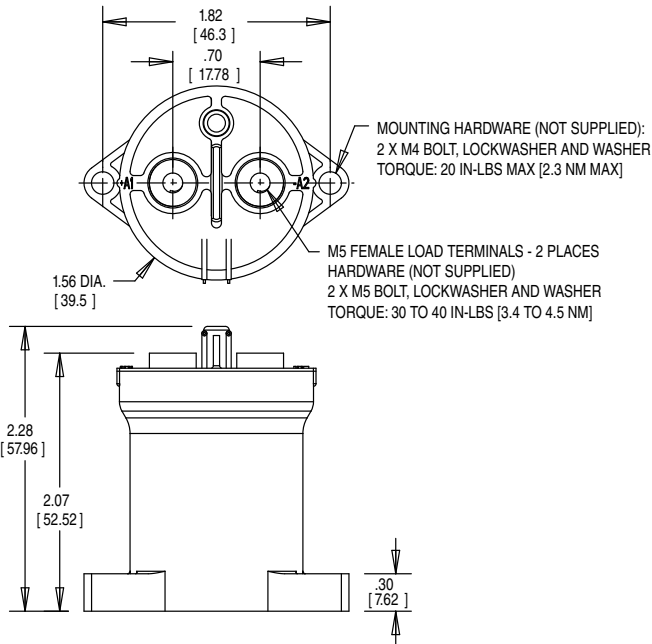
KILOVAC LEV100 Series 900 Vdc Contactor

Tyco Electronics
Kilovac Division
LEV100A4ANG
PN 3-1618389-7 Rev. A
Coil: 12 Vdc

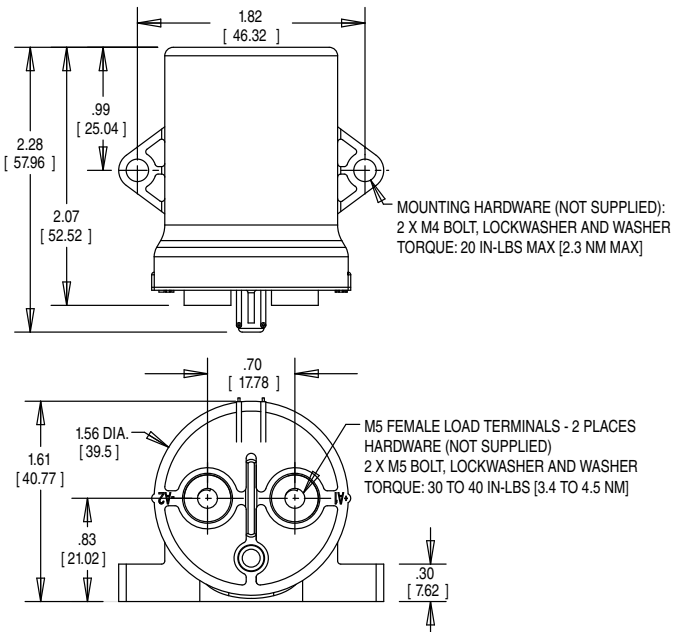
PERFORMANCE DATA



Bottom Mount



Side Mount



KILOVAC LEV100 Series 900 Vdc Contactor

KEY FEATURES

Hermetically sealed — intrinsically safe. Operates in explosive/harsh environments without oxidation or contamination of contacts, including long periods of non-operation

8kV isolation between open contacts permits use for high voltage isolation and carry

12, 24 and 48 Vdc coils

Designed and built in accordance to AIAG QS9000



DESCRIPTION

Lowest cost, 900 Vdc 100 amp, hermetically sealed DC contactor in the industry

Compact package available in side- or bottom-mount configurations, not position sensitive

APPLICATIONS

Power/motor control circuit isolation, circuit protection and safety in industrial machinery

Automotive battery switching and backup

MECHANICAL

Compact epoxy-sealed resin enclosure occupies only about 4 in³ (65.5 cm³)

Robust integral mounting plate on either bottom or side of enclosure accepts two M4 screws

Inert gas filled contact chamber

Flying leads for coil connections

Load terminals threaded for M5 bolts (not included)

LOAD LIFE VS. RESISTIVE POWER SWITCHING



KILOVAC LEV100

Series 900 Vdc

Contactors

PERFORMANCE DATA

Physical Data

Contact Arrangement: Main Contacts	SPST-NO-DM (1 Form X)
Dimensions	See drawings on page 4
Weight	6.7 oz (190g)

Contact Data

Contact Arrangement: Main Contacts	SPST-NO-DM (1 Form X)
Voltage Rating: Main Contacts Switching (max)	900VDC
Current Rating: Main Contacts Switching	
Continuous (Note 1)	100A
Short Term -- 3 Minutes (Note 2)	200A

Hot Switching Performance (Polarity sensitive)

50A make/break @ +400Vdc	50,000 cycles
100A make/break @ +400Vdc	6,000 cycles
100A make/break @ -400Vdc	1,000 cycles
200A make/break @ +400Vdc	500 cycles
1,000A break only @ +400Vdc	25 cycles
600A make only	25 cycles

Maximum Short Circuit Current (1/2 cycle, 60 Hz) 1,250A
(through closed contacts)

Dielectric Withstand Voltage (Note 3)

Between Open Contacts	5,600Vrms/8,000Vdc
Contacts to Coil	2,000Vrms/4,000Vdc

Insulation Resistance, Terminal to Terminal / Terminals to Coil

When New	100 megohms, min. @ 500Vdc
At End of Life	50 megohms, min. @ 500Vdc

Mechanical Life 1 million cycles

Coil Operating Voltage (valid over temperature range)

Nominal Voltage	12Vdc	24Vdc	48Vdc
Maximum Voltage	16Vdc	28Vdc	52Vdc
Pick Up Voltage (20°C)	8Vdc	16Vdc	33Vdc
Drop Out Voltage (20°C)	1.2Vdc	2.4Vdc	4.8Vdc
Coil Current (nominal at 20°C, 12vdc)	461mA	250mA	122mA
Coil Power			
Nominal @ Vnom, +20°C	5.5W	6.0W	6.0W
Pickup (close)			
Voltage Max.@85 ° C	9.6Vdc	19.2Vdc	38.4Vdc
Coil Resistance			
Nominal @ +20°C ± 5% (ohms)	26	96	392

Operate & Release Time

Operate Time Max.	25ms
Operate Bounce Max.	5ms
Release Time	10ms

Environmental Data

Shock, 11ms 1/2 sine (operating)	20G peak
Sine Vibration, 20G peak	55-2,000 Hz.
Operating Temperature Range	-40°C to +85°C
Noise Emission (at 100 mm distance)	70dB(a)

Notes

Note 1: 8.4 mm² conductor. Current rating depends upon conductor size. Keep terminals below 175°C max continuous.

Note 2: 3 minutes at +40°C ambient with 8.4 mm² (#8 AWG) conductor.

Note 3: 2,000Vrms minimum under all conditions, until end of life.

FOR MORE INFORMATION

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