

# 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

Low cost, 900 Vdc 100 amp, hermetically sealed DC contactor

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 in<sup>3</sup> (65.5 cm<sup>3</sup>)

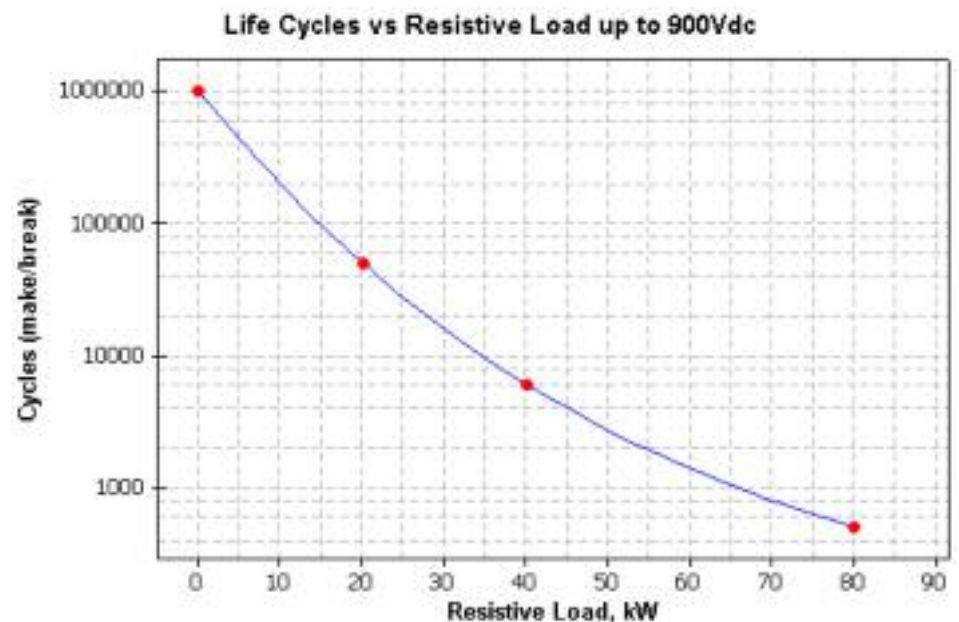
Robust integral mounting plate on either bottom or side of enclosure accepts two M4 screws

Inert gas filled contact chamber

Flying leads for coil connections

Load terminals threaded for M5 bolts (not included)

## LOAD LIFE VS. RESISTIVE POWER SWITCHING



## FOR MORE INFORMATION

### Technical Support

Internet: [www.tycoelectronics.com](http://www.tycoelectronics.com)  
E-mail: [newproducts@tycoelectronics.com](mailto:newproducts@tycoelectronics.com)  
USA: 1-800-522-6752  
Canada: 1-905-470-4425  
Mexico: 1-800-733-8926  
C. America: 52-55-1106-0803  
South America: 55-11-2103-6000  
Hong Kong: 852-2735-1628  
Japan: 81-44-844-8013  
UK: 44-208-420-8341

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[relays.tycoelectronics.com/kilovac](http://relays.tycoelectronics.com/kilovac)

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

## PART NUMBERING

Typical Part Number		LEV100	A	4	A	N	G
<b>Series:</b> LEV100 = 100A Contactor							
<b>Contact Arrangement:</b> A = 1 Form X (SPST-NO-DM)							
<b>Coil Voltage:</b> 4 = 12VDC                      5 = 24VDC                      6 = 48VDC							
<b>Coil Wire Length:</b> A = 15 inches [.4M]							
<b>Coil Termination:</b> N = None - Stripped Wires							
<b>Mounting and Power Terminals:</b> G = Bottom Mount (2 x #8); M5 x 10                      H = Side Mount (2 x #8); M5 x 10							

NOTE: All part numbers are RoHS compliant.  
Specifications are subject to change without notice.

## PRODUCT OFFERING

• Bottom Mount Models			
3-1618389-7	LEV100A4ANG	12Vdc coil	15" [.4m] leads
9-1618389-8	LEV100A5ANG	24Vdc coil	15" [.4m] leads
3-1618391-7	LEV100A6ANG	48Vdc coil	15" [.4m] leads
• Side Mount Models			
4-1618391-0	LEV100A4ANH	12Vdc coil	15" [.4m] leads
4-1618391-1	LEV100A5ANH	24Vdc coil	15" [.4m] leads
4-1618391-2	LEV100A6ANH	48Vdc coil	15" [.4m] leads

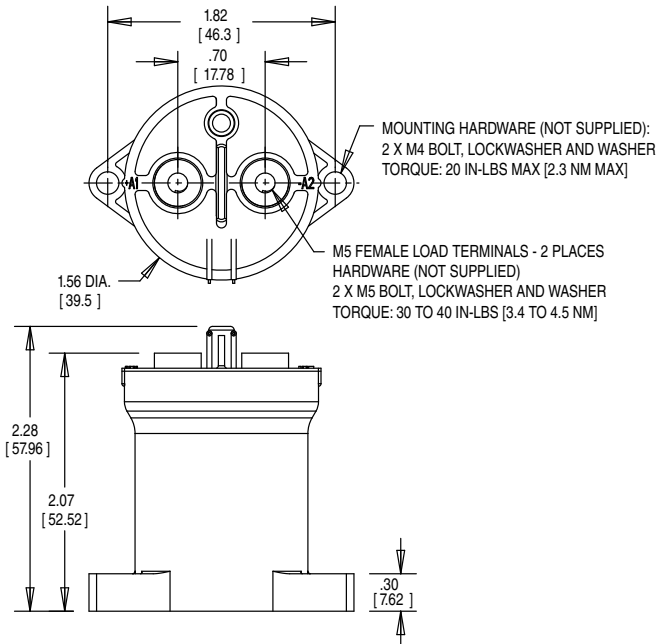
# KILOVAC LEV100 Series 900 Vdc Contactor

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

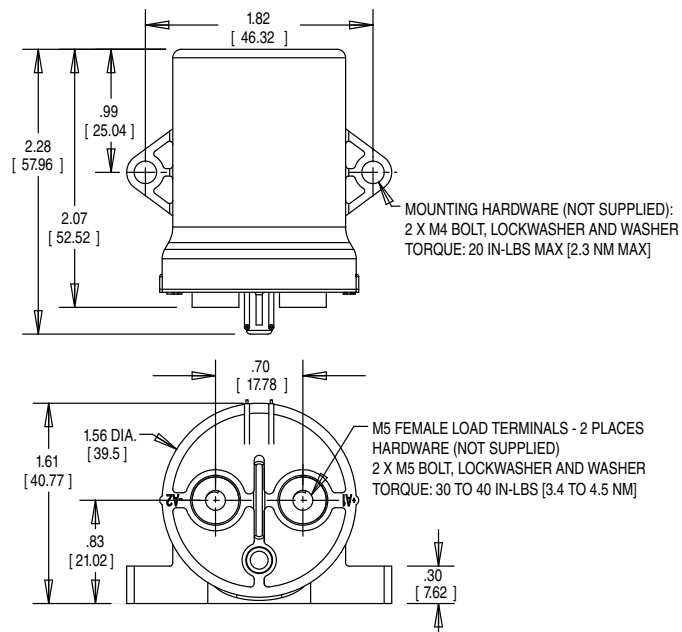
## PERFORMANCE DATA



### Bottom Mount



### Side Mount



# KILOVAC LEV100

## Series 900 Vdc

### 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	10 cycles
600A make only	25 cycles

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

### 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 mm<sup>2</sup> 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 mm<sup>2</sup> (#8 AWG) conductor.

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