



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

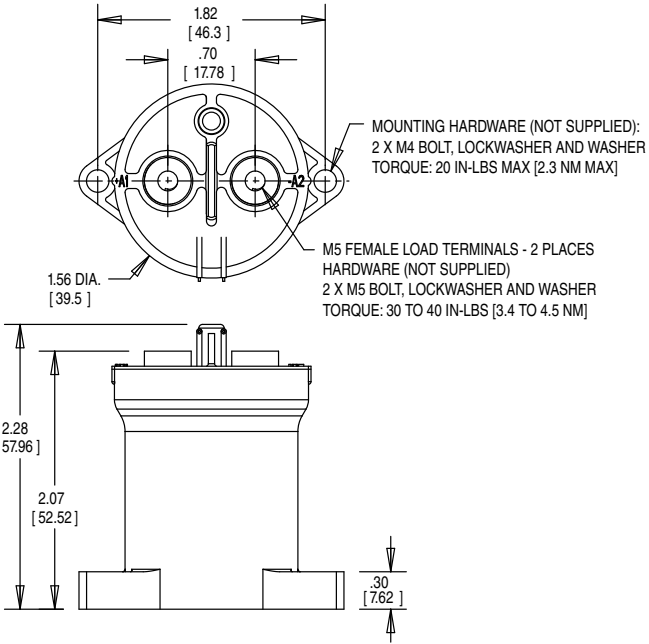
KILOVAC LEV100 Series 900 Vdc Contactor

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

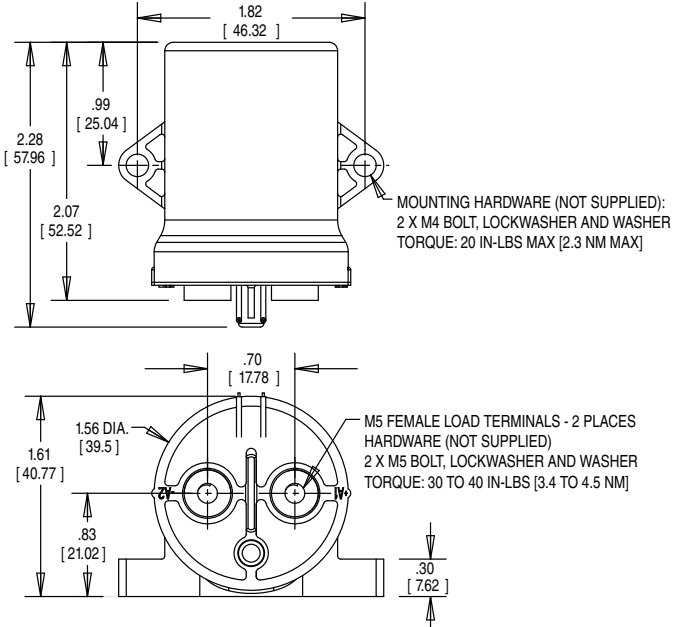
PERFORMANCE DATA



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)

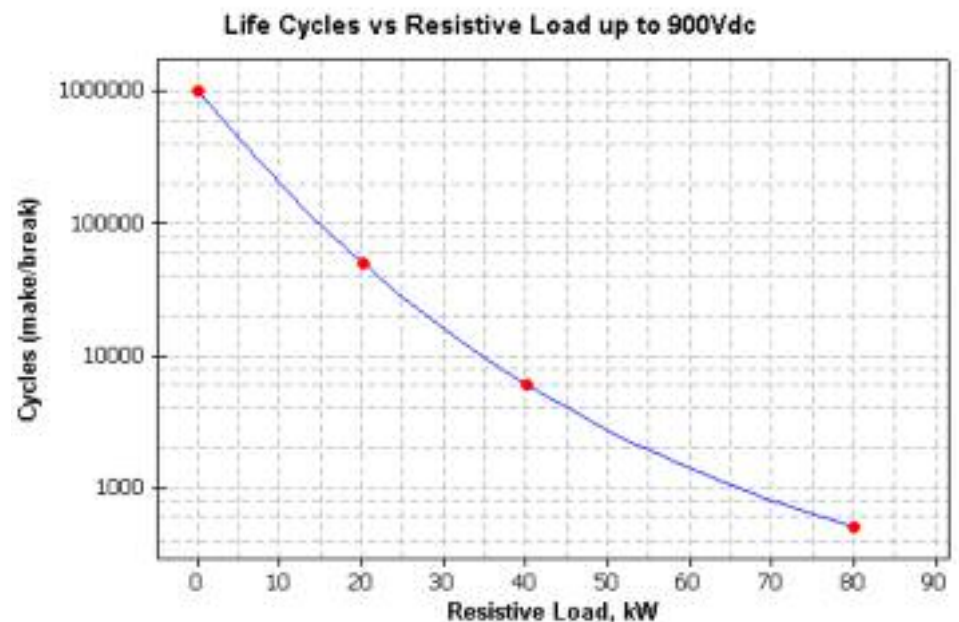
Robust integral mounting plate on either bottom or side of enclosure accepts two M4 screws

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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