



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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KILOVAC EV100 Series Contactor With 1 Form X Contacts Rated 100 Amps Continuous, 600 Vdc

Product Facts

- Hermetically sealed
- Operates in explosive/ harsh environments without oxidation or contamination of contacts, during long periods of non-operation
- 8kV isolation between open contacts permits use for high voltage isolation and carry
- Coil economizer allows for operation between 9-36 VDC
- Designed and built in accordance with AS 9100



Description

Low cost, 600 Vdc, 100 amp, hermetically sealed DC contactor

Economized coil for low power consumption between 9-36 VDC

Bottom mount, not position sensitive

One million cycle mechanical life

Applications

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

Automotive battery switching and backup

Solar inverter switching

Automotive pre-charge

Test Equipment

Power distribution

Electrical

Contact arrangement: SPST-NO (Form X., Double Make)

Voltage rating:
5-600 Vdc at 100 Amps

50K cycles Make/Break:
50 Amps at 400 Vdc

25K cycles Make/Break:
50 Amps at 600 Vdc

Holding current:
0.15 Amps at 24 Vdc

Operate time: 30 ms max.

Physical or Other Properties

Hermetically sealed

Safe for harsh/corrosive environments

No contact oxidation over periods of non-use

Mechanical

Small size: 1.5" x 1.5" approximately

Weight: 130 grams

Performance Data

Physical Data

Contact Arrangement, Main Contacts — SPST-NO (Form X)

Dimensions — See drawings on next page

Weight — 4.58 oz (130g)

Electrical Data

Voltage Rating, Main Contacts Switching (Max) — 750VDC

Current Rating, Main Contacts Switching —

Continuous 1 — 100A
Short Term, 3 Minutes 2 — 200A

Contact Voltage Drop, Main Contacts — 0.05 max @ rated current

Resistive Load Performance (polarity sensitive) —

50A make/break @ +400Vdc — 50,000 cycles

50A make/break @ +600Vdc — 25,000 cycles

100A make/break @ +400Vdc — 6,000 cycles

100A make/break @ +600Vdc — 5,000 cycles

100A make/break @ -400Vdc — 1,000 cycles

100A make/break @ -600Vdc — 25 cycles

200A make/break @ +400Vdc — 500 cycles

200A make/break @ +600Vdc — 200 cycles

1,000A break only @ +400Vdc — 5 cycles

600A break only @ +600Vdc — 5 cycles
600A make only — 10 cycles

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

Dielectric Withstand Voltage —
Between Open Contacts — 2,200Vrms
Contacts to Coil — 1,500Vrms/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 — 106

Operate & Release Time

Operate Time Max. — 30ms

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

¹ 8.4mm² conductor. Current rating is affected by conductor size. Keep terminals below 150°C max. continuous.

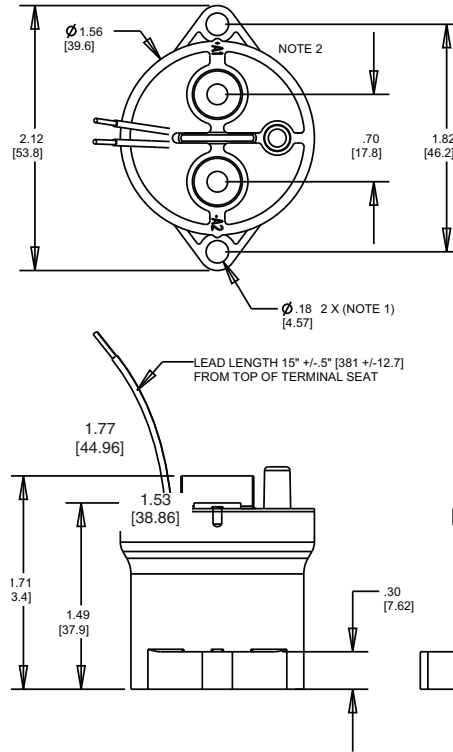
² 3 minutes at +40°C ambient, 1 minute at -80°C ambient with 8.4mm² (#8 AWG) conductor.

For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.

KILOVAC EV100 Series (Continued)

Outline Dimensions

Bottom Mount



NOTE 1. MOUNTING HARDWARE (NOT SUPPLIED)
2 X M4 BOLT, LOCKWASHER AND WASHER
TORQUE: 20 IN-LBS (2.3 NM) MAX

NOTE 2. LOAD TERMINALS-2 PLCS
HARDWARE NOT SUPPLIED
2 X M5 BOLT, LOCKWASHER AND WASHER
TORQUE: 30-40 IN-LBS (3.4 TO 4.5 NM)
DEPTH: 7 THREADS MAX

Coil Data (Internal Coil Economizer)	
Coil Voltage Range	9-32 Vdc
Maximum Pickup Current (20°C)	1.5A
Average Holding Current (20°C)	0.25A@12Vdc/0.15A@24Vdc
Pickup Voltage (20C)	≥ 9Vdc
Dropout Voltage	≤ 8Vdc
Pickup Pulse (max.)	100 ms
Coil Resistance +/-5% (20°C)	8.0 Ω
Coil Economizer Frequency	19.6 kHz
Coil Power Typ. (over temp range)	3-4W

Ordering Information

Typical Part Number ▶

EV100 A A A N A

Series: EV100 = 100A, 600 Vdc Contactor

Contact Form: A = Normally Open

Coil Voltage: 9-36 Vdc

Coil Wire Length: A = 15 inches [.4M]

Coil Termination: N = None – Stripped Wires

Mounting: A = Bottom Mount 2X #8, M5X10 Mains

Specifications are subject to change without notice.

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