



# Jennings Technology®

## JEV400 series DC contactors

### Engineered to exceed expectations.

With the ever increasing acceptance of environment-friendly technology such as renewable energy and electric vehicles, one product is critical to the safety of the electrical circuit: the DC contactor. With the consumer now adapting to this new green technology, quality and reliability are paramount in today's emerging markets where performance needs to be optimal.

Jennings research has once again enhanced the DC contactor by enabling this new technology to aid in lowering the world's carbon footprint. Its innovative and compact design reduces the weight of the device but still allows for very high mechanical life. Minimizing power consumption creates higher power efficiencies for all controlling circuitry, reducing load consumption. All of this allows the Jennings DC contactor to operate in critical circuits and applications with the highest reliability and performance. As with all Jennings products, these high power DC switching devices are built in accordance with all military, industrial and commercial standards.

The contactor's rugged design allows for endless applications: from cars, trucks and trains using DC power systems to energy-saving devices like solar inverters and DC charge stations. Additionally, these units are designed well for military aerospace, ground vehicle and naval applications because of their total value proposition as a small, lightweight device with high voltage and current ratings.

- UL508 Listed for the U.S. and Canada
- RoHS compliant
- Hermetically sealed, intrinsically safe, operates in explosive/harsh environments with no oxidation or contamination of coils or contacts during long periods of nonoperation
- Rugged, compact contactor for switching voltages from 50 VDC to 1000+ VDC
- High-efficiency DC coils — very low 12 and 24 VDC continuous power coils with no EMI emissions or cross-talk on your system control power



### Specifications

#### Contact ratings

Contact arrangement	1 Form A, SPST-NO
Max. continuous current	500A
Max. switching current	400A @ 450 VDC (UL) 80A @ 1200 VDC (UL) 90A @ 1000 VDC (UL) 100A @ 1000 VDC (CE)
Contact rating switching voltages	12–1200 VDC
Max. switching capacity @ max. voltage	200A @ 1000 VDC
General aux. contact current, max.	2A 30 VDC/3A 125 VAC
General aux. contact current, min.	100mA 8 VDC
Gold alloy aux. contact current, max.	0.1A 30 VDC/0.1A 30 VAC
Gold alloy aux. contact current, min.	1mA 5 VDC/1mA 5 VAC
Operating time at nominal voltage	30ms
Release time at nominal voltage	10ms

#### Coil ratings

Nom. voltage	12	24
Inrush coil current 100ms (max.)	1.2A	0.6A
Holding coil current (mA)	0.27A	0.13A
Pick-up voltage (V) max.	9 VDC	18 VDC
Drop-out voltage (V) min.	6 VDC	12 VDC
Holding voltage (V) min.	7.5 VDC	13.5 VDC
Max. voltage (V)	18 VDC	32 VDC

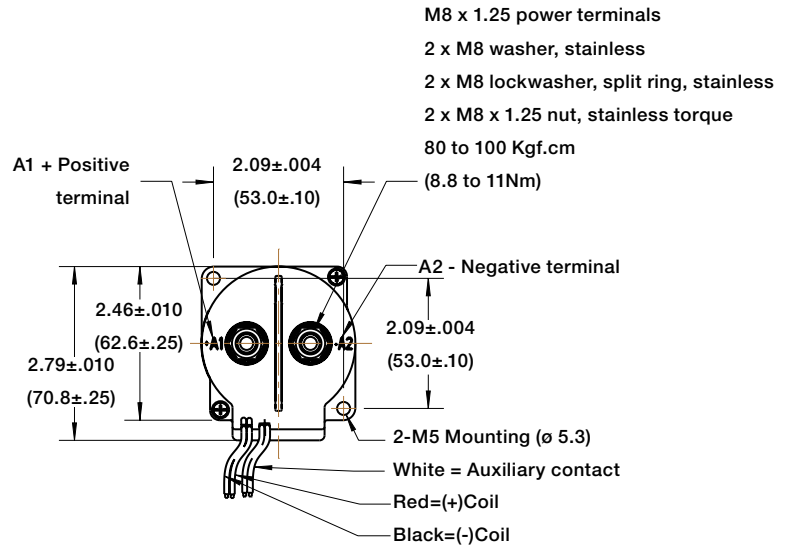
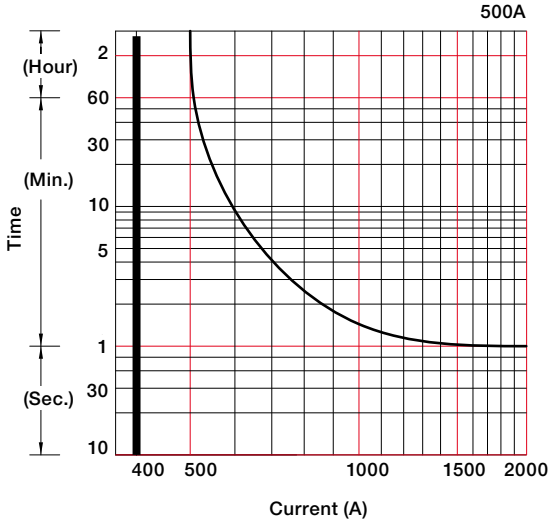
#### Expected life

Mechanical life (min.)	2,000,000 operations
Electrical life (min.)	3,000 @ 450 VDC, 400A; 100,000 @ 250 VDC, 400A; 100,000 @ 1,000 VDC, 100A

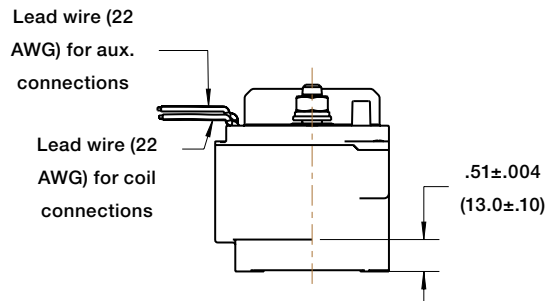
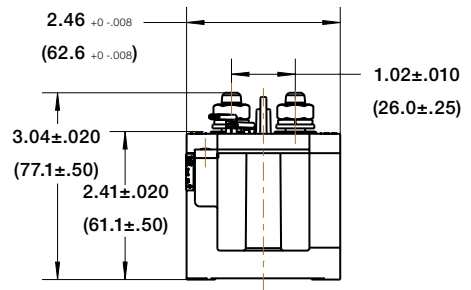
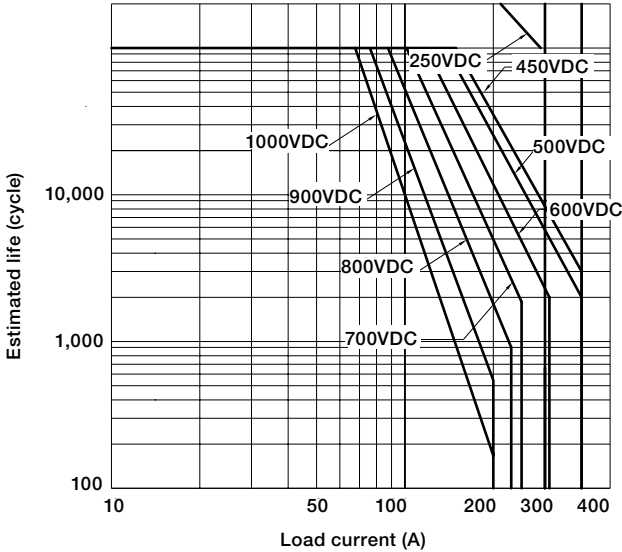
#### Other

Weight	660g (1 lb.)
Operating and storage temperature	-40° C ~ 85° C (-40° F ~ 185° F)
Relative humidity	5–85%

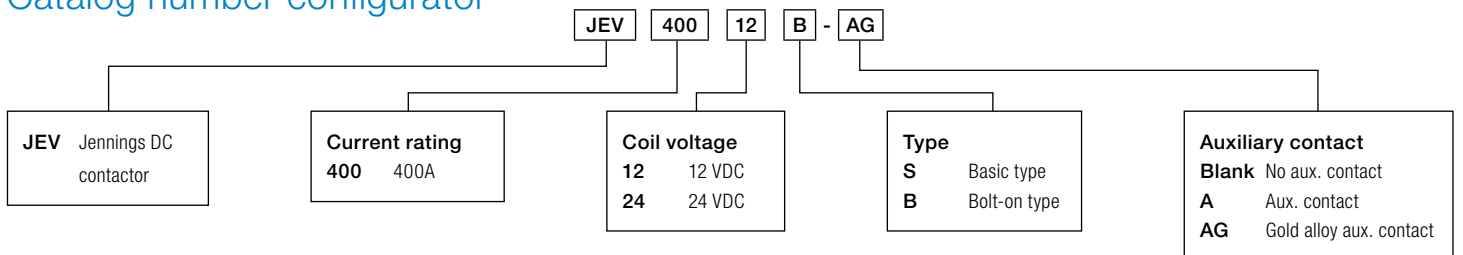
## Continuous carrying current



## Make and break switching rating (resistive load)



## Catalog number configurator



Example: Catalog No. JEV40012B-AG is a 400 amp, bolt-on type contactor with 12 volt coil and gold alloy auxiliary contact.

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IEEE ANSI IEC

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