PUBLIC PRODUCT DATASHEET

EVM-400 High voltage DC Relay

EVM-400 is part of the High Voltage DC Contactor range from SHR MiRelay. This English public datasheet has been rebuilt under the current SHR AUTOSENSOR TECH LIMITED identity for customer selection, sample purchase and RFQ support.

Product Family High Voltage DC Contactor	**Model** EVM-400	**Purchase Path** Sample order or RFQ confirmation
Manufacturer SHR AUTOSENSOR TECH LIMITED	**Website** www.reed-relay.com	**Sales Contact** sales@reed-relay.com
Contact Form 1 Form A	**Rated Load** 400	**Contact Resistance** ≤1@20A
Insulation Resistance reaches 1000MΩ(1000VDC)	**Release Time** 10Max.	**Operating Temperature** deg C -40-+85

Key Features

- Special Epoxy seal,No arc leakage, Make sure no fire an burst
- Compact structure,low noise
- The mixed gas mainly filled with hydrogen can prevent the
- contact from oxidation and burning
- 400A 85 deg C long time current carrying capacity
- The insulation resistance reaches 1000MΩ(1000VDC)
- an
- d meets the requirements of IEC60664-1

Technical Specifications

Parameter	Value
Contact Form	1 Form A
Rated Load	400
Contact Resistance	≤1@20A
Insulation Resistance	reaches 1000MΩ(1000VDC)
Release Time	10Max.
Operating Temperature	deg C -40-+85
Mechanical Durability	3×105
Electrical Endurance	2)

Specification Notes

EVM-400 High voltage DC Relay

1 Product Features

Special Epoxy seal,No arc leakage, Make sure no fire an burst

Compact structure,low noise

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contact from oxidation and burning

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2 Performance Data

Contact Form / 1 Form A

Contact Rated Load A 400

Mechanical Durability Ops 3×105

Max. Switching Voltage VDC 1000

Max. Breaking Current / 2500A(320V DC) 1 times

Current Tolerance 1) / 600A: 20min; 1200A: 30s; 3000A: 0.6s

Contact Resistance mΩ ≤1@20A

Operating Time (at rated voltage) ms 30Max.

Release Time (at rated voltage) ms 10Max.

Insulation Resistance MΩ 1000 (1000VDC)

Dielectric

Withstand

Voltage

Between Open Contacts / 3000VAC 50 Hz/60 Hz

Between Contacts and Coil / 4000VAC 50 Hz/60 Hz

Electrical Endurance 2)

400A 450VDC (DC-1) Ops 2×103

400A 750VDC (DC-1) Ops 1×103

Impact

Stability / 196m/s2

Strength / 490 m/s2

Vibration / 10Hz-500Hz 49 m/s2

Operating Temp deg C -40-+85

Fumidity / 5%-85%RH

Form Of Load Outlet / Internal Thread/External Thread

Weight g 700

Outline Dimensions / Reference outline drawing

Remark: 1) please refer to the attached figure "tolerance curve". 2) The on-off ratio is 0.6s: 5.4s. Please note that if the coil parallel diode is used, the release time of the relay will be greatly prolonged and the service life will be reduced.

SHR SENSOR & RELAY

sales@reed-relay.com

3 Coil Parameters

Nominal Voltage(Us) 12V DC 24V DC

Operating Voltage Range ±20%Us ±20%Us

Pickup Voltage 9Vmax 18Vmax

Dropout Voltage (2-5)V (3-9)V

Coil Power When switched on:45W, When holding:3.8W When switched on: 45W, When holding: 3.8W

4 Example of order marking

EV M–400 A■750 –A C F 5 (XXX)

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

① Product Model: EV

② Product Type: M: Ceramic Sealed Type

③ Contact form: A: 1 Form A

④ Series Code: 400: 400A

⑤ Load Voltage: Blank: 450VDC; 750: 750VDC

⑥ Nominal coil voltage: 12: 12VDC; 24: 24VDC……..

⑦ Coil Lead-out Mode: Blank: None – Stripped Wires; C: Connector

⑧ With Auxiliary Contact Or Not: Blank: Without; F: With Normally Open Auxiliary Contacts

⑨ Form Of Load Outlet: 4: Internal Thread; 5: External Thread

Ordering & Engineering Support

For production projects, confirm coil voltage, contact form, switching voltage/current, load type, operating environment, target quantity and required approvals before release. Contact sales@reed-relay.com or +86 137 6157 1029 for datasheet confirmation, sample availability and cross-reference support.

Address: Room 311, No. 18 Hangchuan Road, Pudong New District, Shanghai, China

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