

SHALCO

DC HIGH VOLTAGE RELAY

"100" SERIES



Features

- ◆ The Contact Rating: 12~900VDC
- ◆ Switching Current: 100A
- ◆ Contact and Coil Instantaneous Voltage: Up to 2.5KV
- ◆ Permanent Magnet Transverse Magnetic Field, Realization HV DC cut-off.
- ◆ Small Size, Light Weight.

P.O. Box 1089, 308 Components Drive, Smithfield, North Carolina 27577

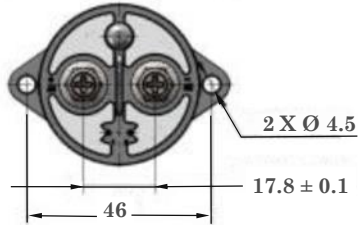
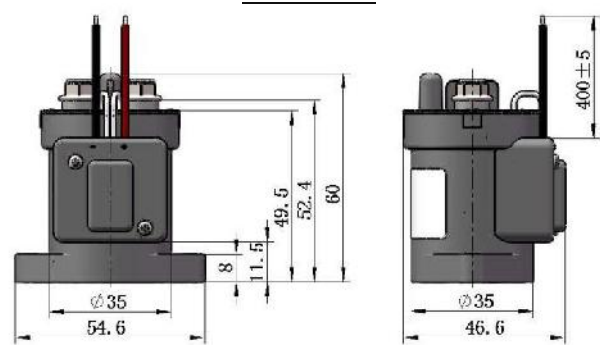
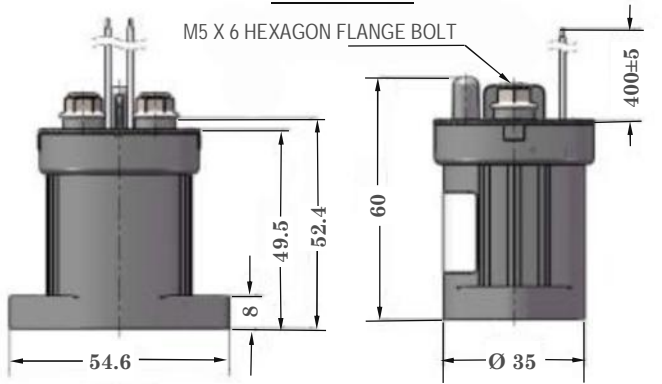
Phone: 800-876-3135 Fax: 919-934-3298

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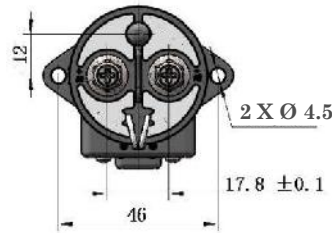
Outline Drawing:

HV 100A□

HV 100AA

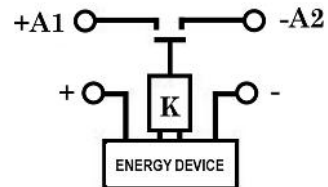
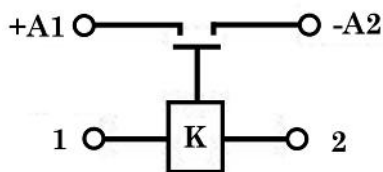


SIZE (mm)	Deviation (mm)
0 ~ 30	± 0.3
30 ~ 60	± 0.5
> 60	± 1



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0 ~ 30	± 0.3
30 ~ 60	± 0.5
> 60	± 1

Circuit diagram



Performance Parameters:

Parameter	Unit	Value
Main contact form	/	Normally open
Rated operating voltage	VDC	12~900
Rated control capacity	/	100A 450V (DC-1)
Rated short-time withstand current and duration	/	150A 300s
		200A 30s
Contact voltage drop	mV	80@100A
Close (includes bounce)	ms	25 Max.
Release time	ms	12 Max.
Contact bounce time	ms	6 Max.
Load life	times	See load life diagram
Mechanical life	times	1,000,000
Insulation resistance	M	100 (at 500VDC)
Breakdown voltage	VAC	2500VAC 50 Hz/60 Hz (1 minute)
Operating temperature	°C	-40~+85
Operating humidity	/	5%~90%
Shock, 11ms, 1/2 Sine, peak value	G	20
Vibration, Sine, 80~2000Hz, peak value	G	20
Rated working form	/	Uninterrupted
Weight (Approx.)	g	160 (Not Energy saving) /170 (Energy saving type)
Installing mode	/	Any

Coil Parameters:

Coil Type	Normal			Energy Saving	
Rated coil voltage (Us)	12V DC	24V DC	48V DC	12	24
Range of operating voltage (@20 °C)	85%Us~110%Us			(11~32)VDC	
Pull-in voltage (VDC) @20 °C	9Max	18Max	36Max	9Max	9Max
Drop-out voltage (VDC) @20 °C	1Min	2Min	4Min	6Min	6Min
Inrush current (Max.) (A)	/	/	/	3.8	3.8
Inrush time (Max.) (ms)	/	/	/	110	110
Holding current (A) @20 °C	≤0.6	≤0.3	≤0.15	0.27	0.13
Power consumption (W)@20 °C	6	6	6	3.2	3.2

Estimated Make & Break Power Switching Ratings

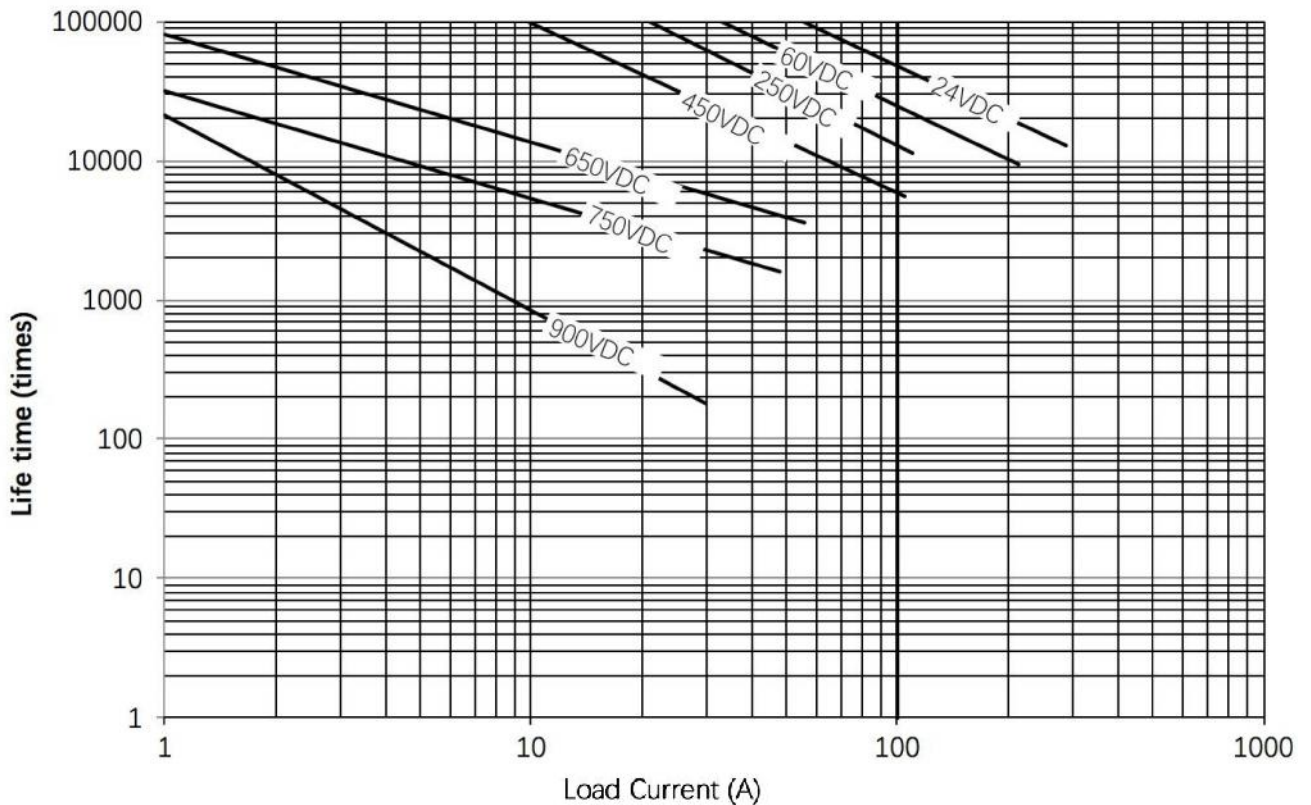


Figure 1

Notes:

1. The rated life of the product is based on a resistive load test. The maximum inductance of the load is not more than 27μH; Contact us for more information about inductive load.
2. The above figure is based on the test and inferred data to estimated. We advise product to be tested according to the actual use.
3. Contact terminal force (M5): 3.5-4.5 N.m
4. Installation torque: 2.3 N.m Max

ORDERING INFORMATION:

HV 100 □ □ □ □ □

① ② ③ ④ ⑤ ⑥ ⑦

- ① Series Designation
- ② Rated Operating Current: "100" = 100A
- ③ "A" One set Normally Open; "H" One set Normally open with Auxiliary Contact
- ④ Rated Coil Voltage: "6" = 6VDC; "12" = 12VDC; "24" = 24VDC; "48" = 48VDC;
- ⑤ Terminal Connect Method: "-" : Stud Type; "A" : Screw Type
- ⑥ Installation Mode - Base Install
- ⑦ Customization Code: 01~99

Example: "HV100A24" means: High Voltage Relay, Rated current under load 100A (resistance), main contact form is set normally open (screw type), coil voltage is DC 24V. Base install.



Established 1967



CERTIFICATE



This is to certify that

Shalco Inc

398 Components Drive
Smithfield, NC 27577
United States of America

has implemented and maintains a **Quality Management System**

Scope

The design, manufacture and distribution of standard and custom: manually operated rotary switches, electrically operated rotary switches, lock-out relays, speed controllers, rotary audio attenuators, Automotive style switches - including Bi-Stable relays, Mono-Stable relays and Battery Disconnect switches.

This organization documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2008

Certificate registration no: 10001877 QM08
Date of original certification: 2003-09-06
Date of certification: 2015-09-06
Valid until: 2018-09-07



UL DQS Inc.


Kenneth Rao
Managing Director



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