

### FEATURE

- Ceramic brazing sealed technology guarantees no risk of arc leaking and ensures no fire or explosion
- Filled with gas (mostly hydrogen) to prevent contact oxidation and damage from arcing; contact resistance is low and stable; contact part can meet IP67 protection level.
- current 200A continuously at 85°C
- Insulation resistance is 1000MΩ( 1000Vd.c.), and dielectric strength between the coil and contacts is 4.0kV, which meets the requirements of IEC 60664-1.



### APPLICATIONS

New energy vehicle , Charging point, Photovoltaic , Energy storage , Industrial power

### CONTACT DATA

Contact Arrangement	1 Form A
Contact Resistance	≤40 mV at 200 A
Rated Load Current	200 A (@ 60 mm <sup>2</sup> wire)
Rated Switching Voltage	450 Vd.c. or 750 Vd.c.
Rated Switching Power	90 kW(450Vd.c.)or150kW(750Vd.c.)
Min. Applicable Load	6 Vd.c., 1 A
Max. Switching Voltage	1000 Vd.c.
Max. Switching Power	150kW(750 Vd.c.)
Max. Breaking Current	2000 A (450 Vd.c.) 1op

### CHARACTERISTICS

Dielectric strength	Between coil & contacts	3000 Va.c 1 min
	Between open contacts	4000 Va.c 1 min
Insulation resistance		1000 MΩ at 1000 Vd.c.
Operate time(at nomi. volt.)		≤50 ms
Release time (at nomi. volt.)		≤30 ms
Vibration resistance		10Hz ~ 500Hz, 49 m/s <sup>2</sup>
Shock resistance	Functional	Functional Open:98m/s <sup>2</sup> Functional Close:196 m/s <sup>2</sup>
	Destructive	490 m/s <sup>2</sup>
Ambient temperature		-40°C~85°C
Humidity		5% RH ~85% RH
Termination		M6 Screw terminal male
Mounting		M5 Screw
Unit weight		Approx.570g
Outline Dimensions		Standard Type: 95.0mmx45.0mmx85.0mm
		Horizontal Type: 97.0mmx45.5mmx84.7mm

### COIL

Coil power W	Nominal Voltage Vd.c.	Pick-up Voltage Vd.c.	Drop-out Voltage Vd.c.
6.0	12	≤9	≥1
	24	≤18	≥2

Notes: The values above are conservative values within the temperature range(-40°C to 85°C),

### ENDURANCE

Project		450 Vd.c.	750 Vd.c.
Electrical Endurance	Capacitive Load	Making:2.5×10 <sup>4</sup> ops (22.5Vd.c.,τ=1ms, Impact 400A, Steady200A)	Making:1×10 <sup>4</sup> ops (37.5Vd.c.,τ=1ms, Impact 400A, Steady200A)
		Making:1op(300Vd.c.,C =1100μF,τ=1ms, Impact 1350A, Steady200A)	Making:1op(300Vd.c.,C =1100μF,τ=1ms, Impact 1350A, Steady200A)
	Resistive Load	Switching:3000ops (450 Vd.c. ,200A)	Switching:500ops (750 Vd.c. ,200A)
		Switching:100ops (450 Vd.c. ,-200A)	Switching:10ops (750 Vd.c. ,-200A)
Current Endurance	Breaking:50ops (450 Vd.c. ,300A)	Breaking:5ops (450 Vd.c. ,300A)	
	Breaking:1op (450 Vd.c. ,2000A)	Breaking:1op (750 Vd.c. ,1500A)	
Mechanical endurance		200A, Cont.	
		300A, 15min	
		400A, 4min	
		800A, 30s	
		2000A, 0.6s	

Notes: (1) Until special statement, the temperature of electrical endurance is at 23°Cand the on-off ratio is 0.6s:5.4s.

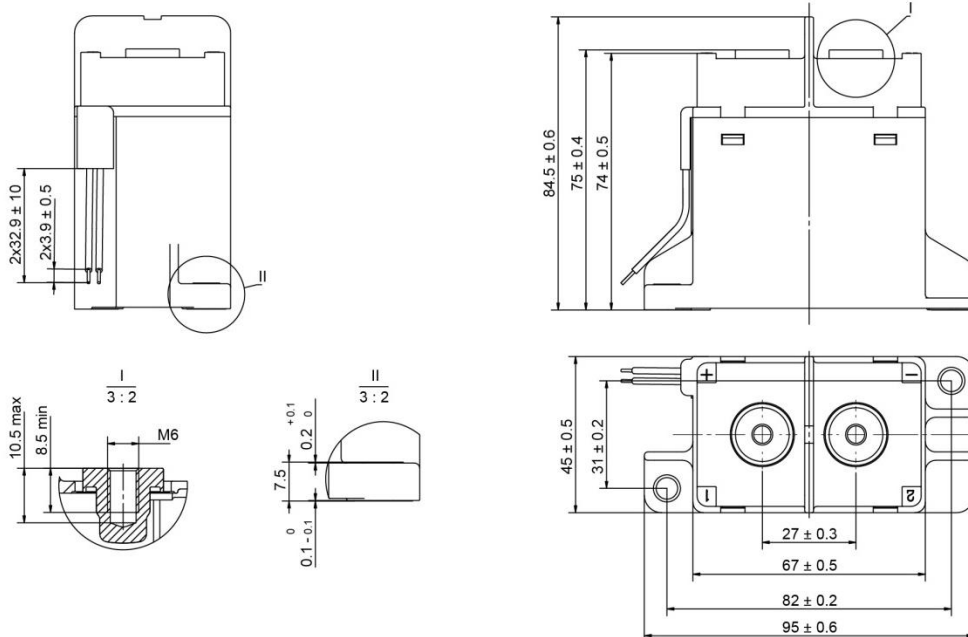
Notes: Above is the initial vale in the room temperature

## ORDERING INFORMATION

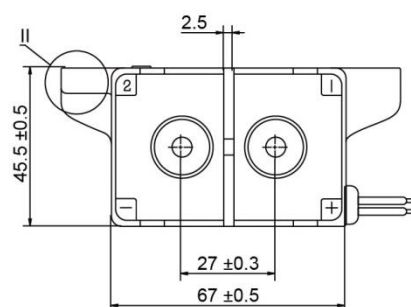
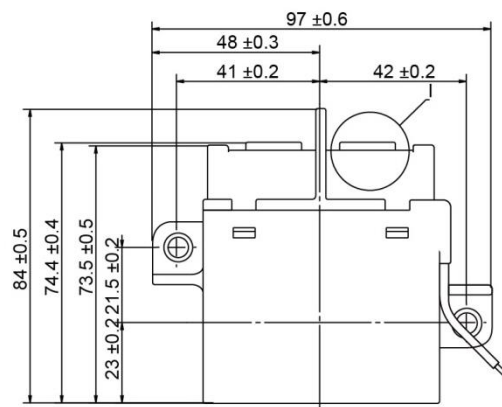
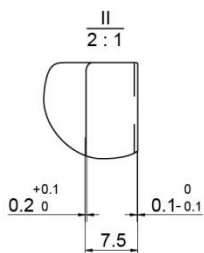
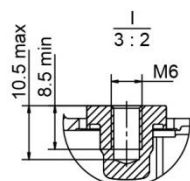
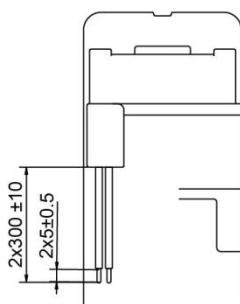
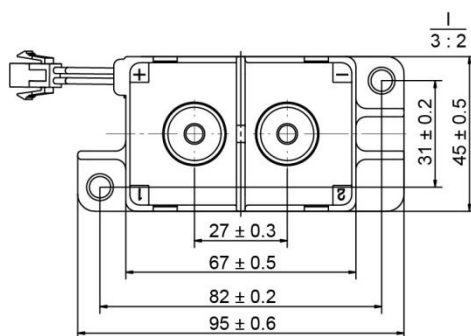
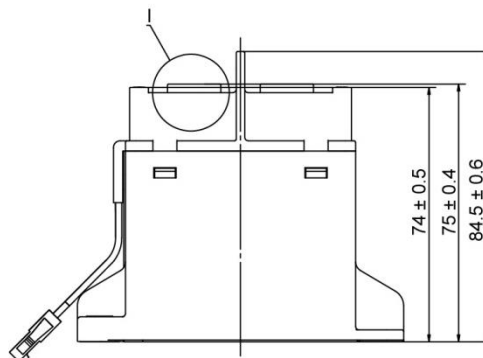
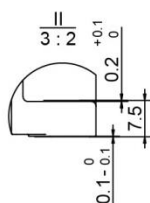
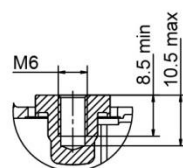
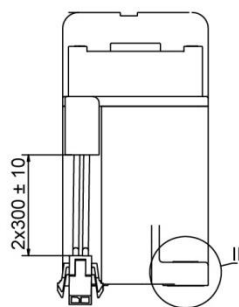
<b>CHEV</b>	<b>-1</b>	<b>12</b>	<b>P</b>	<b>200</b>	<b>-1</b>	<b>L</b>	<b>1</b>	<b>H</b>	<b>, xxx</b>
<b>Product Series:</b> CHEV									
<b>Contact Arrangement:</b> 1:1 Form A									
<b>Nominal Voltage:</b> 12:12Vd.c. 24:24Vd.c.									
<b>Sub-series:</b> P: P Series									
<b>Load Current:</b> 200:200A									
<b>Load Voltage:</b> 1: 450Vd.c. 2: 750Vd.c.									
<b>Coil Termination :</b> L:Wire M: Wire+ Connector									
<b>Termination :</b> 1:Screw Terminal Female									
<b>Installation Type:</b> Nil:Standard Type H:Horizontal Type									
<b>Extra numbers or letters:</b> Blank or Other Customer Requirements									

Notes: The customer special requirement express as special code after evaluating by Churod.

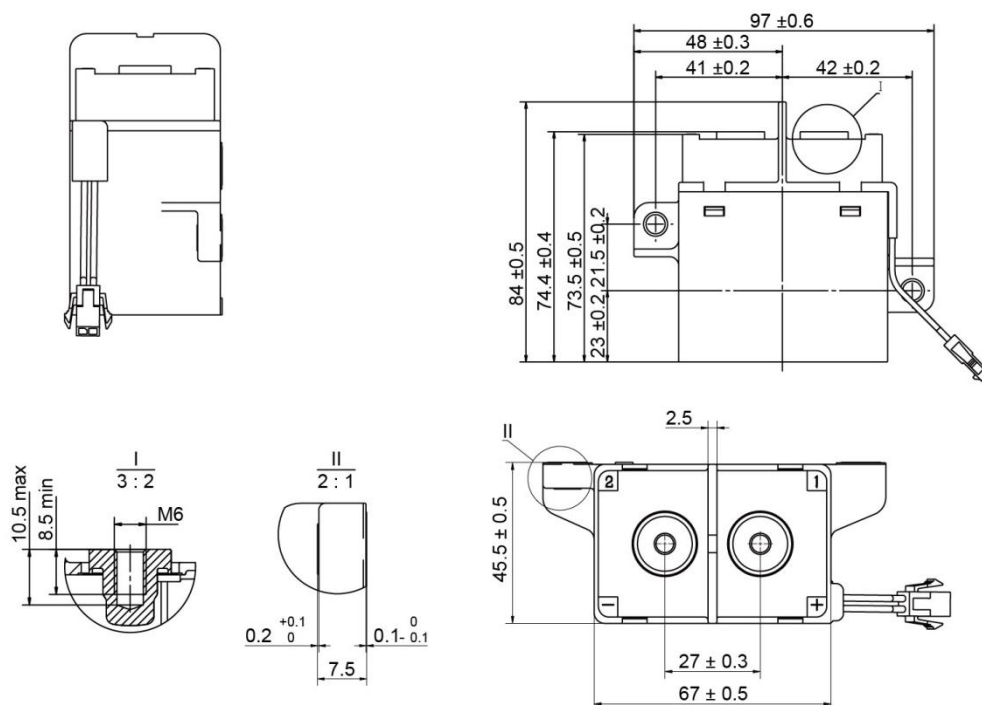
## OUTLINE DIMENSIONS



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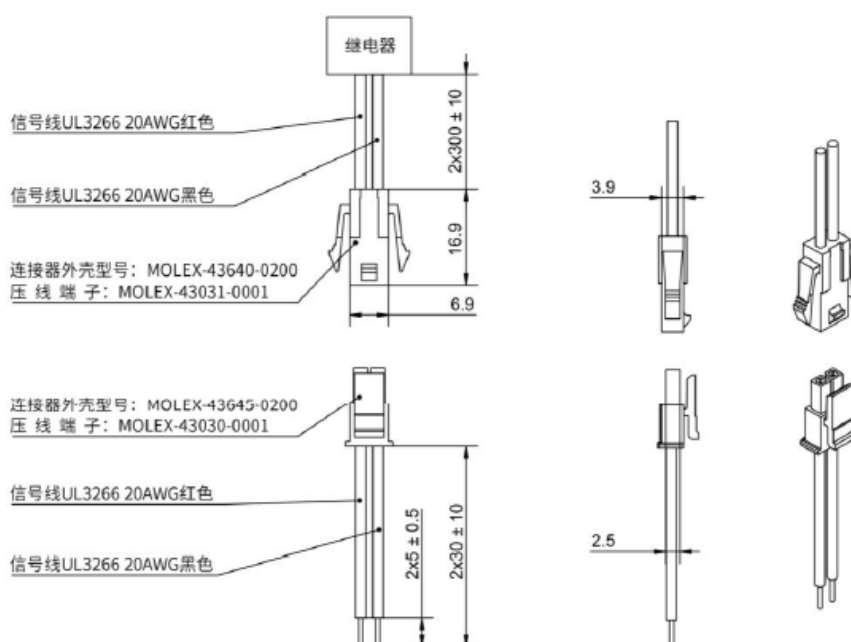
## OUTLINE DIMENSIONS



**Remark:** in case of no tolerance shown in outline dimension: outline dimension  $\leq 10\text{mm}$ ; tolerance should be  $\pm 0.3\text{mm}$ , outline dimension  $> 10\text{mm}$  and  $\leq 50\text{mm}$ , tolerance should be  $\pm 0.5\text{mm}$ , outline dimension  $> 50\text{mm}$ , tolerance should be  $\pm 0.8\text{mm}$ .

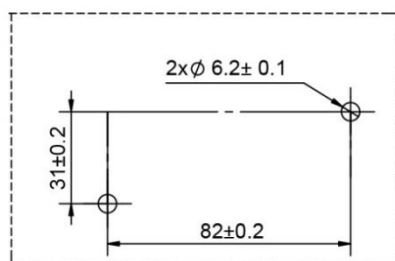
## WIRING DIAGRAM

Coil termination  
Wire+ Connector

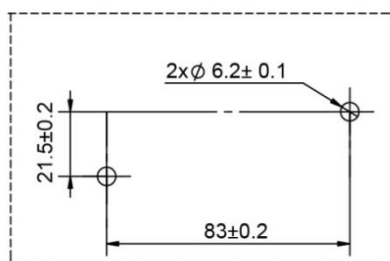


## INSTALLATION HOLE SIZE 、 WIRING DIAGRAM

Installation Hole

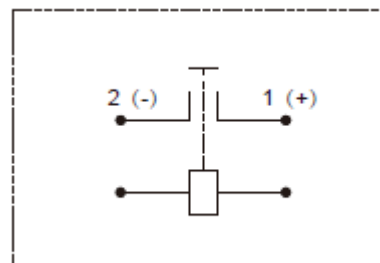


Standard Type



Horizontal Type

Wiring Diagram



Note: The load has polarity and The coil has no polarity

## INSTALLATION INFORMATION

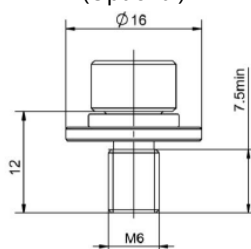
### Load Terminal Installation

Installation Mode	Selection Screw	Torque	Copper Busbar Diameter	Copper Busbar Thickness
M6 Screw	M6×12 Combined Bolt	6N·m ~8N·m	$\phi 6.0 \sim 6.5$ mm	2.0 ~3.0 mm

### Relay Installation

Installation Mode	Torque
M5 Screw	3N·m ~4N·m

Combined Bolt Drawing (Optional)



Note:

- In order to prevent loosening, please use the washer when installing the relay.
- Please avoid grease and other foreign matter in the terminal, please use the connecting wire with a cross section area  $\geq 60\text{mm}^2$ , or they may cause abnormal heating in the terminal part.

## DISCLAIMER

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change within notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query. Please contact Churod for the technical service. However, it is the user's responsibility to determine which product should be used only.