HES-300

Characteristic

- Ceramic sealing structure using magnetic blowing out technology and filled with hydrogen gas mixture, achieving anti contact oxidation, zero arc, low contact resistance. A new safe, stable, and reliable solution.
- Built in a set of normally open auxiliary contacts.
- No polarity requirement during loading.
- Environmental protection: All parts comply with the latest EU ROHS environmental protection requirements.
- Approval: UL, CE, TÜV

Ordering

	HE	S	300	/1500	-12D	–H	C	5	W	XXX
Design Code										
Application	S:PV and energy storage									
Load current	300:300A									
Load voltage	1000:1000VDC 1500:1500VDC 2000:2000VDC									
Coil voltage	12D：12VDC Double Coil 24D：24VDC Double Coil									
Contact type	H: With normally open									
Coil input terminal	C: Connector									
Load terminal	5:Bolt terminal female									
Mounting type	Nil: Vertical mounting W: Horizontal mounting									
Customer No.	XXX: Customer requirement Nil: Standard									

Note: The customer special requirement express as customer No. after evaluating between each party.

Contact parameter

Contact type	1H
Contact resistance	⩽0.3mΩ(at 300A 23℃)
Contact rated current	300A
Max. switching voltage	2000VDC
Max. breaking current	2000A（1 op）
Max. switching power	1000VDC 300KW
	1500VDC 450KW
Current carrying capacity	300A: keeping
	400A：10min
	600A：90s
	2000A：1s

Note: Current carrying capacity data is tested at ambient temperature of 85℃, cross section≥50mm², more detail, please see curve.

Coil parameter

Rated voltage VDC	Operational voltage VDC	Release voltage VDC	Coil power W
12	⩽9.6	⩾1	5
24	⩽19.2	⩾2	5

Note: The operational voltage and release voltage are conservative values in the full temperature range（−40℃ ~ +85℃）.

Environmental characteristics

Shock	Stability	98m/s²
	Strength	490m/s²
Vibration		10Hz ~ 55Hz 49m/s²
Humidity		5% ~ 85%RH
Ambient temperature		−40℃ ~ +85℃
IP grade		IP67（contact）

Life

Mechanical endurance	2×10^5 ops
Electrical Endurance（Breaking）	100A 1500Vdc. 5×10^3 ops
	150A 1500Vdc. 3×10^3 ops
	300A 1500Vdc. 1×10^3 ops
	300A 2000Vdc. 100 ops
	1000A 1500Vdc. 1 ops
	2000A 1000Vdc. 1 ops

Note 1：Except for special notes, the ambient temperature of electrical durability test is 23℃ and the on-break ratio is 0.6s:5.4s.
Note 2：When the relay is used to control the main circuit of charge and discharge, the pre-charge circuit should be added. If there is no pre-charging path, a transient large current will be generated when the relay closes, which may cause the relay to stick.

Electrical characteristics

Insulation resistance		⩾1000MΩ (2000VDC 1min)
Dielectric withstand voltage	between contact and coil	5000VAC 1min
	between open contacts	5000VAC 1min
Operate time（at nomi. volt.）		≤30ms
Release time（at nomi. volt.）		≤10ms

Note: The data shown above are initial values.

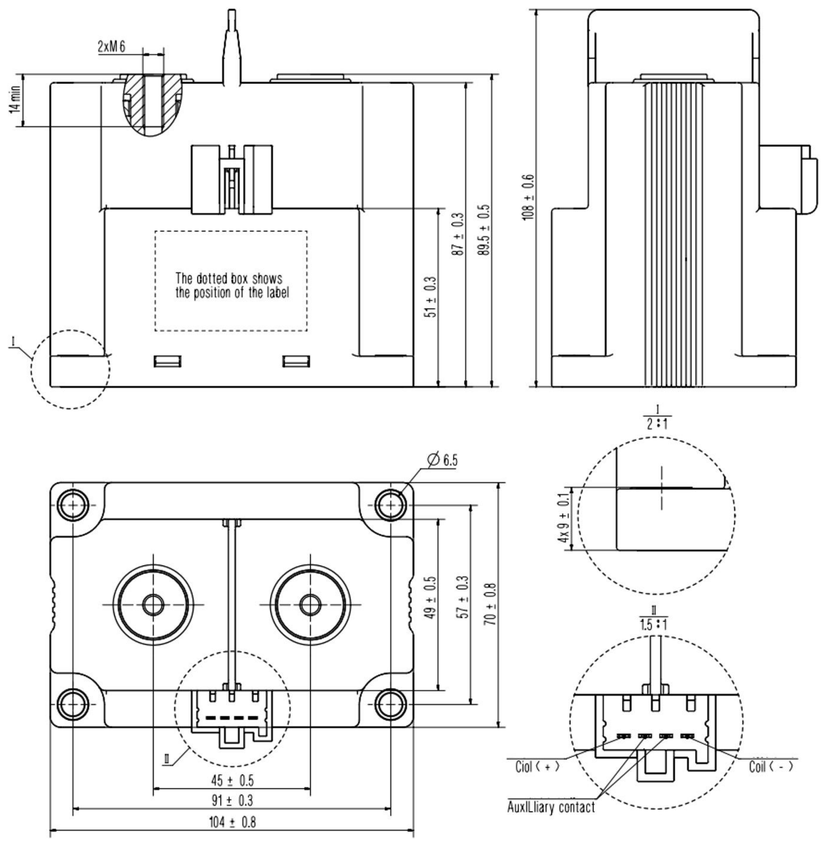
Other

Terminal	M6 internal thread
Mounting torque at load end	M6 6~8N · m
Outline dimension	104mm×70mm×89mm
Weight	≈1100g

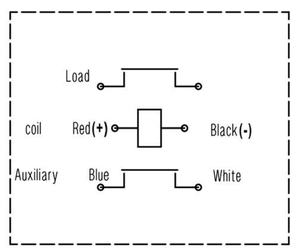
Outline, coil wiring , installation hole

Unit: mm

HES-300/1500/xxx-xxD-HAC5



Wiring Diagram



No polarity on load
Auxiliary contacts are non-polar
Polarity on the coil