

HES-750



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

| | |
|---------------------|---|
| Design Code | HE S 750 /1500 -12D -H C 5 W XXX |
| Application | S:PV and energy storage |
| Load current | 750:750A |
| Load voltage | 1000:1000VDC 1500:1500VDC |
| 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 750A 23°C) |
| Contact rated current | 750A |
| Max. switching voltage | 1500VDC |
| Max. breaking current | 2000A (1 op) |
| Max. switching power | 1000VDC 750KW 1500VDC 1125KW |
| Current carrying capacity | 750A: keeping |
| | 850A: 83min |
| | 1000A: 8min |
| | 1500A: 75s 2000A: 45s |

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

Life

| | |
|---------------------------------|-------------------------------------|
| Mechanical endurance | 2×10 ⁵ ops |
| Electrical Endurance (Breaking) | 100A 1500Vdc. 5×10 ³ ops |
| | 150A 1500Vdc. 3×10 ³ ops |
| | 600A 1000Vdc. 1×10 ³ ops |
| | 750A 1000Vdc. 500 ops |
| | 1000A 1500Vdc. 1 ops |
| | 20000A 1500Vdc. 1 ops |

Note 1: Except for special notes, the ambient temperature of electrical durability test is 23°C 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.

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°C ~ +85°C).

Electrical characteristics

| | | |
|---------------------------------|--------------------------|--------------|
| Insulation resistance | ≥1000MΩ (1500VDC 1min) | |
| Dielectric withstand voltage | between contact and coil | 4000VAC 1min |
| | between open contacts | 4000VAC 1min |
| Operate time (at nomi. volt.) | ≤30ms | |
| Release time (at nomi. volt.) | ≤10ms | |

Note: The data shown above are initial values.

Environmental characteristics

| | | |
|---------------------|------------------|---------------------|
| Shock | Stability | 98m/s ² |
| | Strength | 490m/s ² |
| Vibration | 10Hz ~ 55Hz | 49m/s ² |
| Humidity | 5% ~ 85%RH | |
| Ambient temperature | -40°C ~ +85°C | |
| IP grade | IP67 (contact) | |

Other

| | |
|-----------------------------|--------------------|
| Terminal | M8 internal thread |
| Mounting torque at load end | M8 8~10N.m |
| Outline dimension | 104mm×70mm×89mm |
| Weight | ≈1100g |

Outline, coil wiring , installation hole

Unit: mm

