3.The continuous power-on time of the shunt release shall not exceed 5s, or the shunt release may be burnt out; when the rated control power voltage is DC24V, the rated current of the control circuit shall reach 4.5A~5.5A.
4.The undervoltage is of the backpack structure when delivery, and all accessories (excluding undervoltage) shall use the lead-wire structure by default.
5.The default wire length is about 500mm for lead-wire structure product. If a longer lead wire length is used by the user and the shunt or undervoltage cannot be driven, it is recommended to use a relay mode recommended in the "Note 2" to ensure that the minimum drive power can be satisfied.

6.Maintenance and service

- The maintenance and service shall be conducted by the qualified professional;
- Do not maintain the live product;
- The maintenance and service shall be conducted once every year under the normal operation conditions, and the maintenance contents are listed in table below:

Item	Content
Appearance	No dust or condensation; clean if necessary; the shell is not damaged
Connection of the wiring terminal	Tighten it according to the torque listed in the 4.5 Recommended tightening torque table of the wiring screw without any looseness.
Closed/Open/ Trip operation by handle	The handle shall be operated flexibly without blockage; this product uses the self-cleaning contact structure. If the contact resistance changes due to the oxidation phenomenon, please open and close the handle multiple times to realize that the oxide layer between the moving and fixed silver contacts is peeled off to reduce the contact resistance.

7.Unpacking inspection

After unpacking, check whether the product is intact, whether the exposed metal is rusted, and whether the product is damaged due to poor transport and storage. If found the above phenomenon, do not operate the product, and please contact the supplier timely.

Safety Notice

Before the installation, operation, run, maintenance, and inspection, please carefully read this manual, and install and operate this product properly according to this manual.

⚠ Danger:

- Do not operate the circuit breaker with your wet hands;
- Do not touch the live part during operation;
- Cut off the power supply before maintenance and service;
- Do not use the short circuit method to test the product;

⚠ Attention:

- The installation, maintenance and service of the product shall be conducted by the qualified professional;
- All features of the product have been set in factory, and the product cannot be dismantled or adjusted without permission during operation;
- Before operation, confirm that the rated voltage, rated current, frequency and characteristics of the product meet the working requirements;
- To prevent the interphase short circuit, a phase partition is provided when delivery. Please install the product properly and insulate the exposed wire or copper busbar at the wiring terminal for insulation safety;
- To test the insulation resistance or power frequency withstand voltage, please disconnect the electronic components between the current circuits to prevent damage to the product performance;
- If found any damage or abnormal sound when unpacking, please stop the product immediately and contact the supplier;
- The overload alarm non-trip product has no the overload protection function, and is only suitable for overload alarm without trip;
- For the product with an undervoltage release, apply the rated voltage onto the undervoltage release before power-on;
- To select accessories, please use the supporting accessories provided by the company to ensure the quality; our company will not bear any adverse consequence due to the use of the accessories not provided our company;
- When scrapping the product, please dispose the product waste properly. Thanks for your cooperation.

⚠ Test:

- This circuit breaker has passed the insulation test specified in the standard in the factory. The steps for re-test (if required) before installation are as follows:

- A 1000VDC megameter is used;
- The insulation resistance shall not be less than 20M Ω ;
- Between the contacts of circuit breaker, between the phases, and between the phase and the housing (the housing is covered with metal foil);
- When connecting to the undervoltage release of main circuit, between the incoming line and the housing of the circuit breaker;

Note: If there is no megameter, a power frequency withstand volage tester is used for alternative test. Apply 2000V volage for 5s onto the measuring part using the insulation test method.
Please note the information marked with ⚠

1.About HDM3

1.1 Packing list

Product model HDM3-	Mounting screw Qty.	Wiring screw Qty.	Phase partitions Qty.	Extended handle	Circuit breaker	Manual (with certificate)
1600 N	M5 x 75-4	M10x 40-12 (800A~1250A) M10x45-12 (1600A)	4	1	1	1

1.2Product use environment and conditions

- The protection grade of this product is IP30 (IP00 for wiring terminal)
- The pollution level of this product is Level 3
- The rated working voltage is 400/415V
- The altitude of the installation place shall not exceed 2000m. If installed at the altitude of more than 2000m, please contact the manufacturer
- The allowable ambient temperature is ranged -25℃ to +70℃; the relative humidity (at the ambient temperature 25℃) is ≤95%; the average temperature within 24h does not exceed 35℃.

(Note: If used in the temperature range -25℃ to -5℃ and +40℃ to +70℃, please contact the manufacturer)

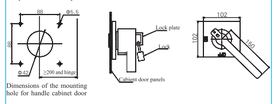
2.Operation and commissioning HMD3

- Turn the handle of the circuit breaker to the "Trip" position when shipment;
- Turn the operating handle to the "Open" position before trip;
- Turn the circuit breaker to the "Closed" position;
- Press the Trip button to return the handle of the circuit breaker to the "Trip" position;

8.User manual of external accessories

8.1 Manual operating mechanism

- Optional handle style and size

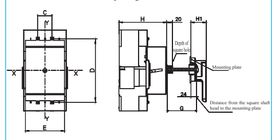


Dimensions of the mounting hole for handle cabinet door

- Features of the operating handle:

1) When the circuit breaker is at the Closed state, the cabinet door cannot be opened;
2) When at the Closed or Open state, pull the lock plate marked with on the square operating handle for locking (lock with a diameter ranged 5 to 8m self-provided by the user).

- Outline dimensions of manual operating mechanism



Model HDM3-	C	D	E	H	G* direct manual operating mechanism	G* extended manual operating mechanism (by default)	Height of round handle H1
1600F/N	70	320	193	236	40	150	91

⚠ Attention:

G* For other length to be customized, please contact the manufacturer.

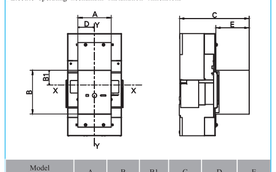
- Manual operating mechanism installation method

Step 1
Remove four screws from the cover of circuit breaker

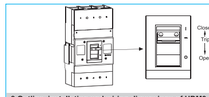
Step 2
Insert the handle of the circuit breaker into the manual operating mechanism, and tighten the screw;
Insert the square shaft, and tighten the screw with a screwdriver; assemble the handle and check whether the product can be closed and opened normally.

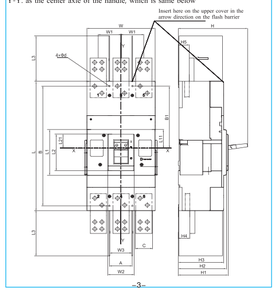
2.2 Electric operating mechanism

- Electric operating mechanism installation dimensions



Model HDM3-	A	B	B1	C	D	E
1600 F/N	131	177	63	281	65.5	141



3.Outline, installation and wiring dimensions of HDM3 series

X-X: as the center axle of the base, which is same below
Y-Y: as the center axle of the handle, which is same below