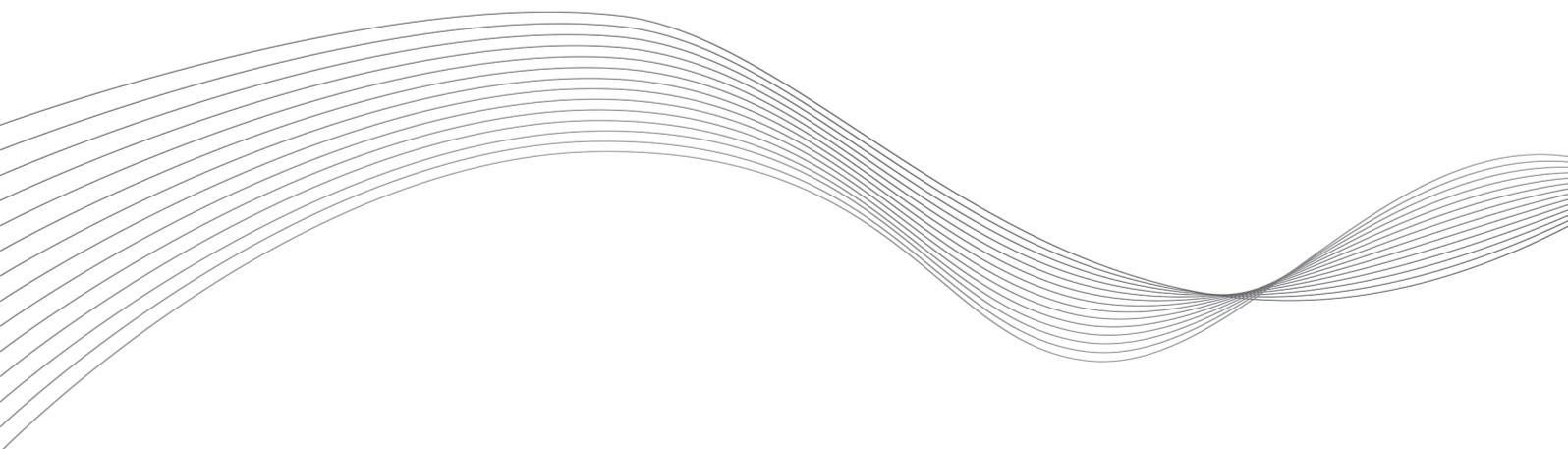


使用说明书

Instruction manual

(UEW6DHG-2500 直流隔离开关)
(UEW6DHG-2500 Switch-Disconnecter)



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1 使用前相关注意事项 Precautions before use

1.1 收货检查 Receiving inspection

对收到的货物进行检查，核对 UEW6DHG 直流隔离开关（以下简称隔离开关）型号规格和数量与所订货物是否一致。打开包装木箱检查时，避免碰伤隔离开关和损坏包装。在安装使用前建议保留包装木箱。在进行收货检查后，即使很短的时间内将安装使用，仍请将隔离开关放回包装内，注意防水、防潮。检查发现有任何损坏和异常，请在收货后 5 天内联系处理。

Check the received goods and verify whether the model, specification and quantity of UEW6DHG DC switch disconnecter (hereinafter referred to as disconnecter) are the same as the ordered goods. When opening the wooden packing box for inspection, avoid bruising the disconnecter and damaging the package. It is recommended to keep the wooden packing box until installation and use. After carrying out an inspection of the goods received, even if it will be installed and used in a short time, please still put the disconnecter back into the package, taking care to protect it from water and moisture. If any damage or abnormality is found during the inspection, please contact us within 5 days after receiving the goods.

1.2 储存、搬运 Storage and handling

储存环境要求干燥，无尘，无腐蚀、爆炸性的化学物质。

The storage environment shall be dry, dust-free, and free from corrosive and explosive chemicals.

请水平放置隔离开关在任何固定部件上，不允许直接放置在地上。

Please place the disconnecter horizontally on any fixed parts, no directly on the ground.

储运过程中，隔离开关应处于断开状态、弹簧机构处于释能状态。

During storage and transport, the disconnecter shall be in disconnected state and the spring mechanism in the energy release state.

安装搬运过程中，注意对隔离开关和人员进行防护；倾倒、撞击或跌落均可能导致隔离开关损坏。

During moving for installation, take care to protect the disconnecter and personnel; Tipping, hitting or dropping may lead to damage to the disconnecter.

2 正常工作条件和安装条件 Normal operating condition and installation condition

- ◆ 周围空气温度为 $-40^{\circ}\text{C}\sim+70^{\circ}\text{C}$ ，且 24h 的平均值不超过 $+35^{\circ}\text{C}$ 。超过 55°C 需降容使用。
The ambient temperature is $-40^{\circ}\text{C}\sim+70^{\circ}\text{C}$, and the average value in 24h shall not exceed $+35^{\circ}\text{C}$. If the temperature exceeds 55°C , deration should be considered.

- ◆ 大气条件：在周围空气温度为 $+40^{\circ}\text{C}$ 时，大气相对湿度不超过 50%。在较低的温度下允许有较高的相对湿度，例如 $+20^{\circ}\text{C}$ 时，大气相对湿度可以90%。对于由于温度变化产生的凝露应采取除湿或相应的措施。

Atmospheric conditions: at ambient temperature of $+40^{\circ}\text{C}$, the relative humidity of the atmosphere does not exceed 50%. At lower temperature, a higher relative humidity is allowed, for example, at $+20^{\circ}\text{C}$, the atmospheric relative humidity can be 90%. Dehumidification or appropriate measures should be taken for condensation due to temperature changes.

- ◆ 安装地点海拔超过 4000m 以上需降容使用。

If the altitude of the installation site exceeds 4000m, deration should be Considered.

- ◆ 污染等级为 3 级。

Pollution level: level 3

- ◆ 隔离开关主电路安装类别为IV，其余辅助电路、控制电路安装类别为III。

The installation category of main circuit is IV, and the installation category of other auxiliary circuits and control circuits is III.

- ◆ 隔离开关的垂直倾斜度不超过 5° 。

The vertical inclination of this switch-disconnector shall not exceed 5° .

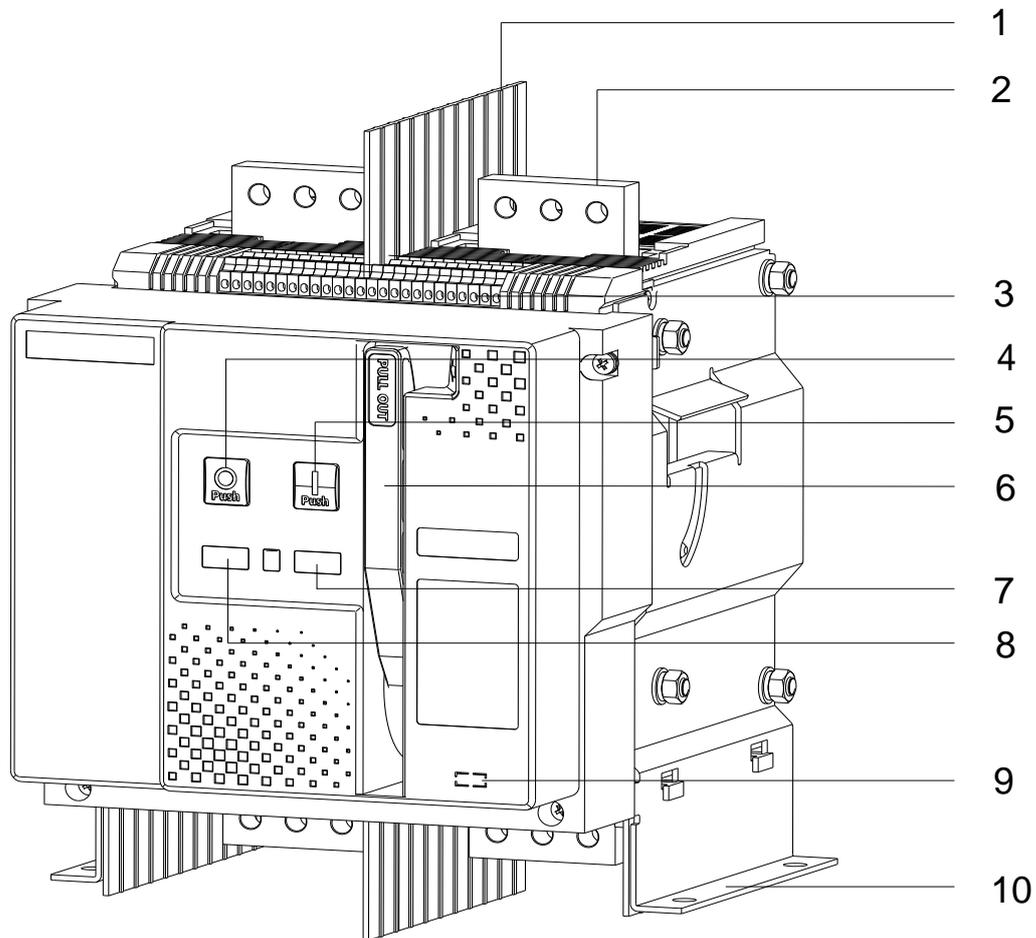
- ◆ 隔离开关应安装在无爆炸危险和无导电尘埃、无足以腐蚀金属和破坏绝缘板的地方。

This switch-disconnector shall be installed at a place without explosion hazard, conductive dust, sufficient corrosion of metal and damage to insulating plate.

- ◆ 储存条件：周围空气温度 $-40^{\circ}\text{C}\sim+80^{\circ}\text{C}$ 。

Storage condition: ambient temperature is $-40^{\circ}\text{C}\sim+80^{\circ}\text{C}$.

3 产品结构及操作说明 Product structure and operating instructions



1.相间隔板 Interphase Barriers

2.端子母排 Terminal Busbar

3.二次端子 Terminals Block

4.分闸按钮 OFF Button (O)

5.合闸按钮 ON Button (I)

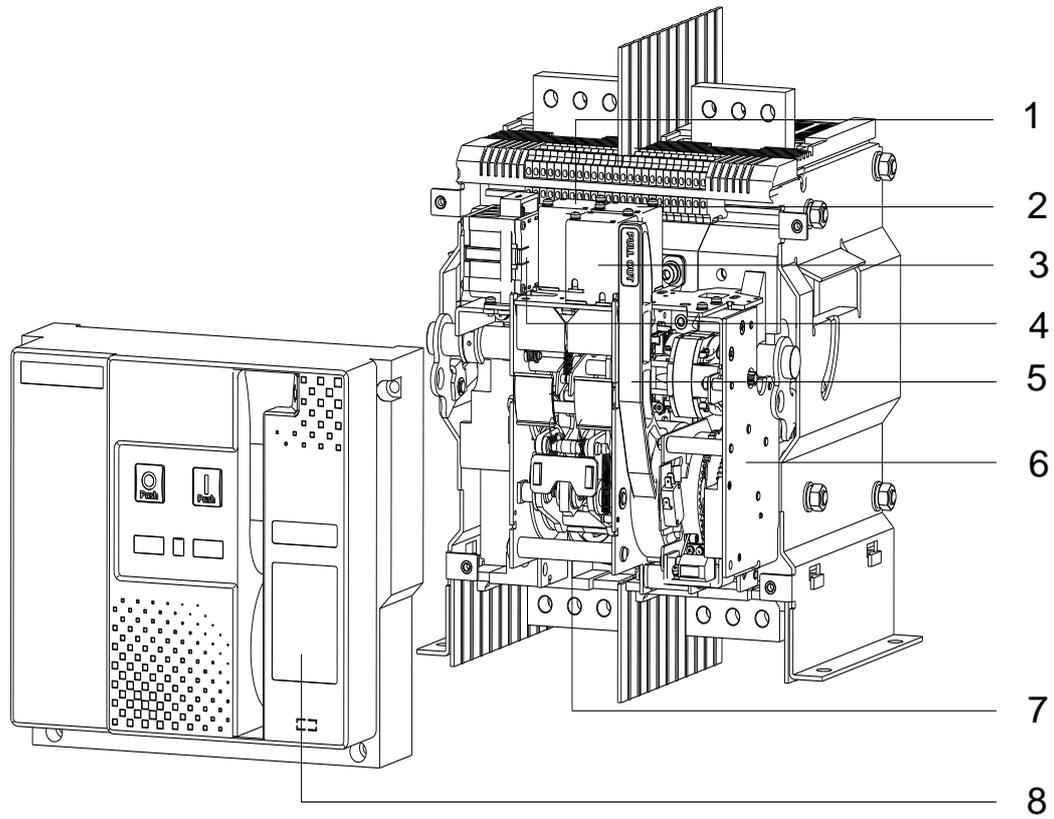
6.储能手柄 Charging Handle

7.储能\释能指示 Charged\Discharged Indicator

8.合闸 (I) \分闸(O)指示 Close (I) \Open (O) Indicator

9.计数器窗口 Counter Window

10.安装侧板 Side Panel



1. 欠压脱扣器 Undervoltage Trip Device

2. 分励脱扣器 Shunt Trip

3. 闭合电磁铁 Closing Coil

4. 辅助触头 Auxiliary Contact

5. 储能手柄 Charging Handle

6. 电动操作机构 Charging Motor

7. 操作机构. Operation Mechanism

8. 面罩 Front Cover

3.1 储能操作 Energy storage operation

电动储能：当隔离开关释能后，若对电动操作机构通电，则电动操作机构将自动对隔离开关操作机构储能，储能完毕电机自动停转，并可听到咔嚓声，此时面板“储能/释能”指示在储能状态。

Electric energy storage: When the disconnecter releases energy, if the electric energy storage mechanism is energized, the energy storage motor will automatically store energy to the disconnecter operating mechanism, and the motor will stop automatically when the energy storage is finished, and a clicking sound can be heard, at this time the panel "energy storage/release" indication is in the storage state.

手动储能：同样，可以通过下压手动储能手柄进行储能操作；下压约 6、7 次，听到咔嚓声，下压手柄的反力明显减小，此时面板上“储能/释能”指示在储能状态，表示储能完毕。

Manual energy storage: similarly, the manual energy storage handle can be pressed to store energy; Press down for about 6 or 7 times, hear a click, and the reaction force of pressing down the handle decreases obviously. At this time, the "energy storage / energy release" indication on the panel is in the energy storage state, indicating that the energy storage is completed.

3.2 合闸操作 Closing operation

储能情况下，按下的合闸按钮，或对合闸电磁铁通电动作，将听到“叭”响声，此时面板上“I/O”指示窗口指示“I”，表示隔离开关已闭合。同时面板上“储能/释能”指示在释能状态，此时若电动储能机构仍在通电，则电动储能机构将自动对断路器操作机构再次储能，储能完毕电动机自动停转，面板上“储能/释能”指示在储能状态。

In the case of energy storage, press the closing button or energize the closing electromagnetic iron, and you will hear the "bell" sound. At this time, the "I / O" indication window on the panel indicates as "I", meaning that the disconnecter has been closed. At the same time, the "energy storage / release" indication on the panel is in the energy release state. At this time, if the energy storage mechanism is still powered on, the energy storage mechanism will automatically store energy for the operating mechanism of the disconnecter again. After energy storage, the motor will stop automatically, and the "energy storage / release" indication on the panel is in the energy storage state.

注意：只有在隔离开关操作机构储能情况下才能合闸；

若选配有欠电压脱扣器，必须先对欠电压脱扣器通电后才能合闸；

Note: the disconnecter can be closed only when the operating mechanism stores energy;

If an undervoltage release is matched, the undervoltage release must be energized before closing;

3.3 分闸操作 Opening operation

合闸情况下，按下面板的分闸按钮，或对分励脱扣器通电动作，将听到“叭”响声，此时面板上“I/O”指示窗口指示“O”，表示隔离开关已断开。此时，隔离开关操作机构释能完毕。

Under closing status, press the opening button on the panel or energize the shunt release to hear the "bell" sound. At this time, the "I / O" indication window on the panel indicates as "O", meaning that the disconnecter has been disconnected. At this time, the energy release of the disconnecter operating mechanism is completed.

注意：只有在合闸情况下才能分闸

Note : the disconnecter can be opened only when it is in closing state.

4 降容系数 Derating coefficient

环境温度降容系数 Ambient temperature derating factor

环境温度 Allowable continuous current		+55℃	+60℃	+65℃	+70℃
允许持续工 作电流 Allowable continuous current	800 A	1I _n	1I _n	1I _n	1I _n
	1000A	1I _n	1I _n	1I _n	1I _n
	1250A	1I _n	1I _n	1I _n	1I _n
	1600A	1I _n	1I _n	1I _n	1I _n
	2000A	1I _n	1I _n	1I _n	1I _n
	2500A	1I _n	0.99I _n	0.94I _n	0.89I _n

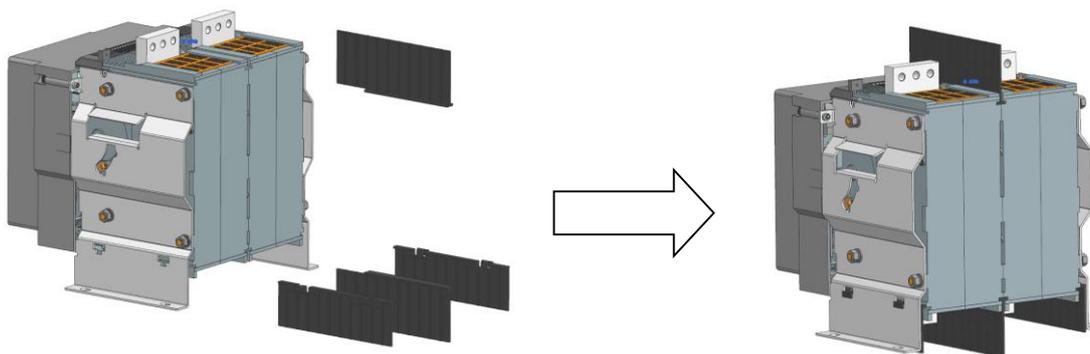
海拔降容系数 Altitude derating factor

海拔 Altitude (m)	2000	3000	4000	5000
最大额定工作电压 Maximum rated operating voltage	1500V	1500V	1500V	1500V
工作电流修正系数 Operating current correction factor	1	1	1	0.97

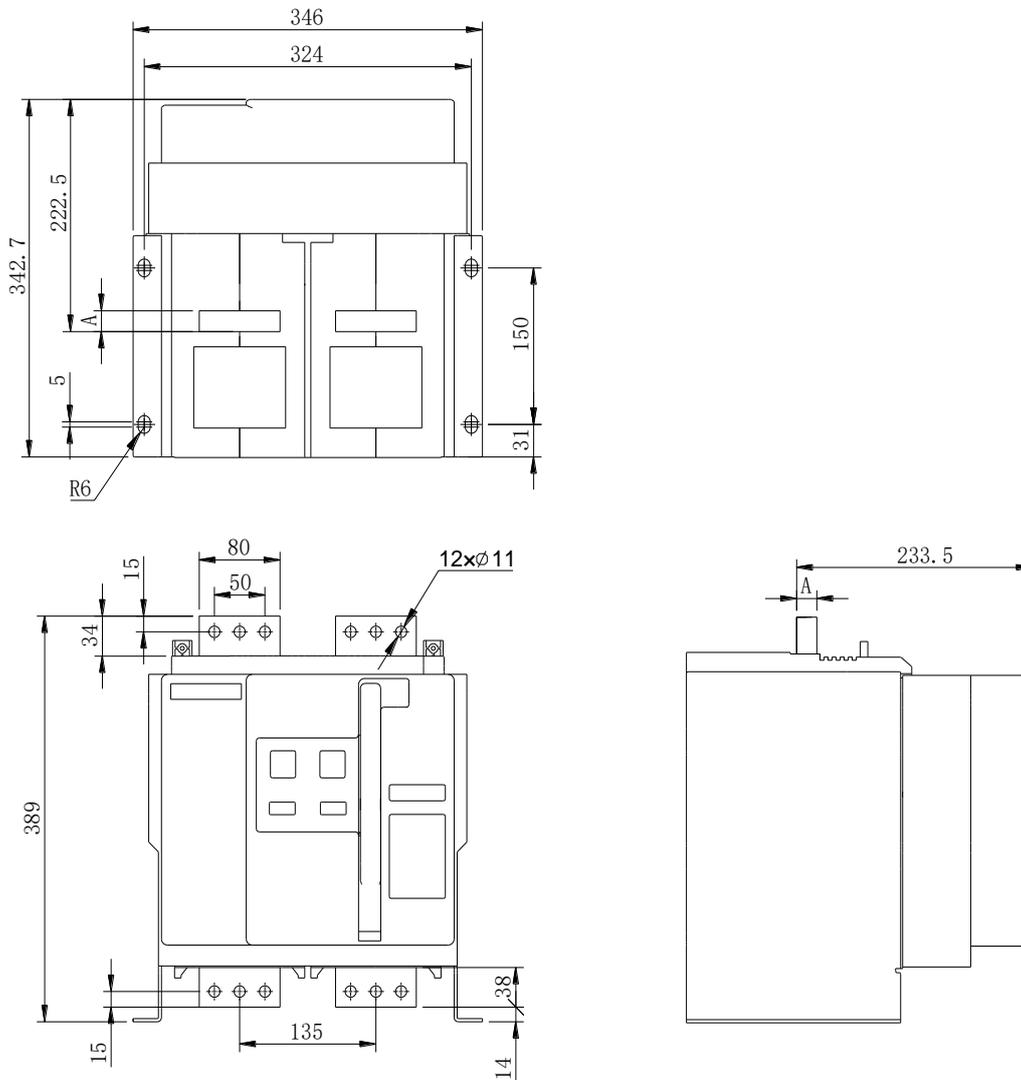
5 相间隔板 Interphase Barriers

安装方式：上下（中间）两片沿本体 T 型槽插入，到底即可，左右两片沿本体与侧板的间隙插到底后嵌于左右侧板 T 型槽内。

Installation method: insert the upper and lower (middle) two pieces along the T-shaped slot of the body to the bottom, and insert the left and right pieces along the gap between the body and the side plate to the bottom and then insert them into the T-shaped slot of the left and right side plates.

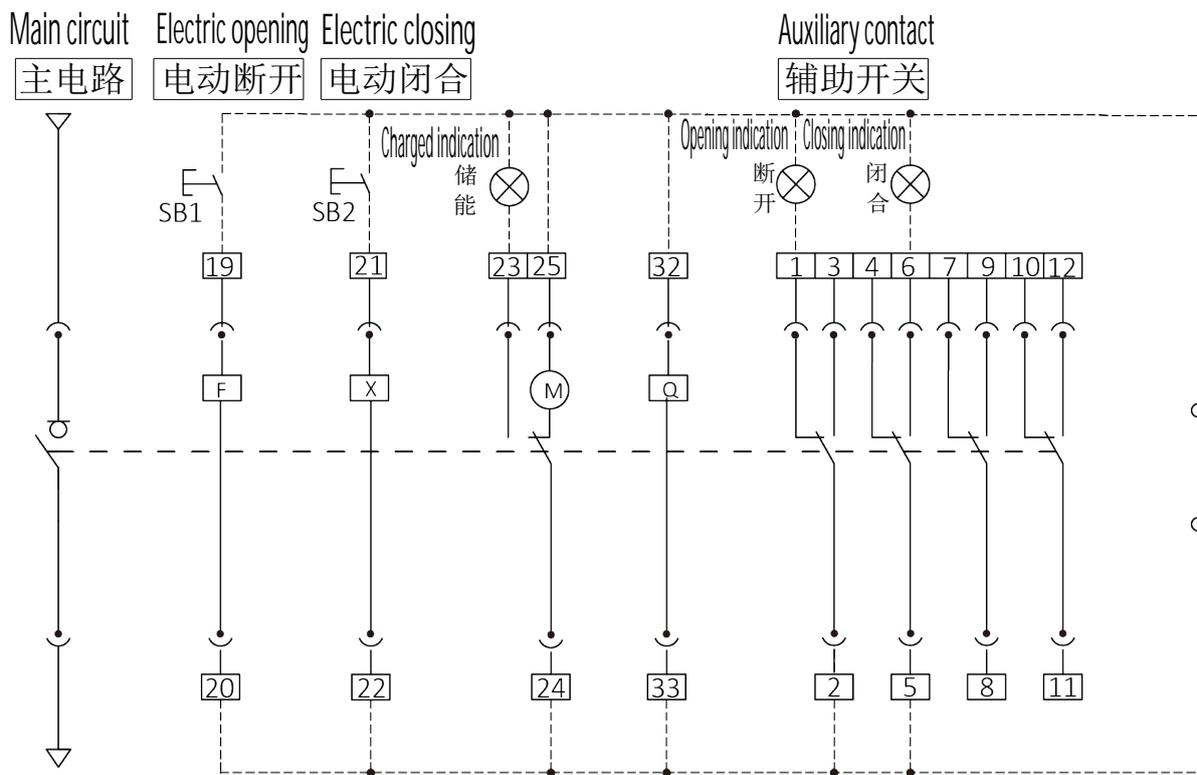


6 外形及安装尺寸 Outline and Mounting Dimension



I_n	A(mm)
800A-1250A	10
1600A-2000A	15
2500A	20

7 电气接线图 Electrical wiring diagram

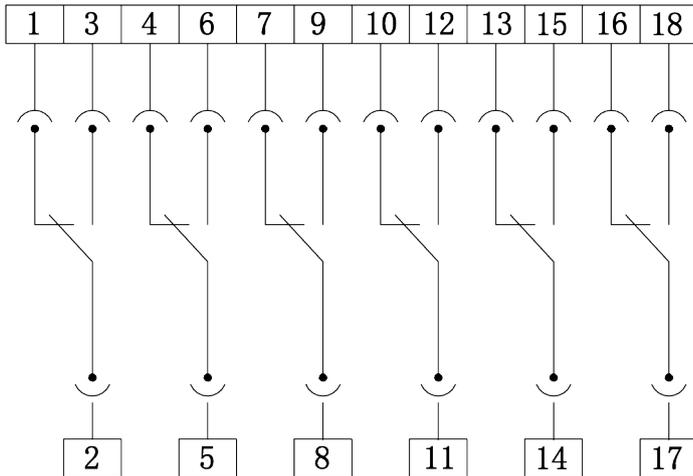


- 注:** 1、二次端子接口可连接 2.5mm^2 及以内的二次线，二次端子紧固扭矩 $0.3\text{ N.m} \sim 0.4\text{N.m}$ 。
2、上图辅助类型为四组转换。

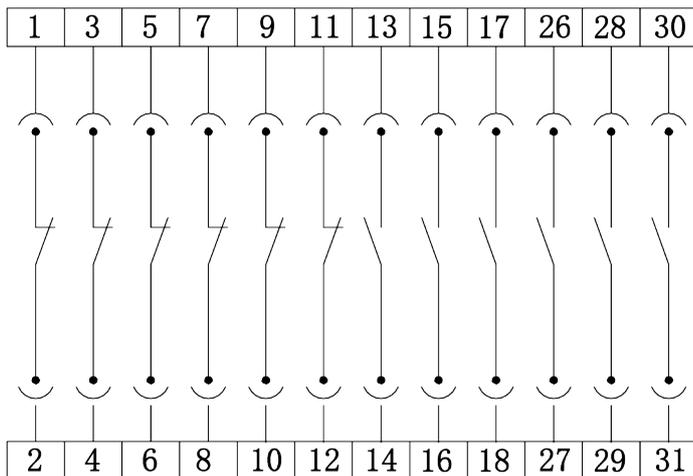
- Note:** 1、The secondary terminal interface can connect the secondary line within 2.5 mm^2 and the tightening torque of the secondary terminal is $0.3\text{ N.m} \sim 0.4\text{ N.m}$.
2、Above figure shows 4 changeover.

SB1: 分励按钮 (用户自备)	SB1: Shunt button (prepared by the user)
SB2: 合闸按钮 (用户自备)	SB2: Closing button (prepared by the user)
X: 合闸电磁铁	X: Closing coil
F: 分励脱扣器	F: Shunt trip
M: 储能电机	M: Charging motor
Q: 欠/失压脱扣器	Q: Under-voltage / No-Voltage Trip Device

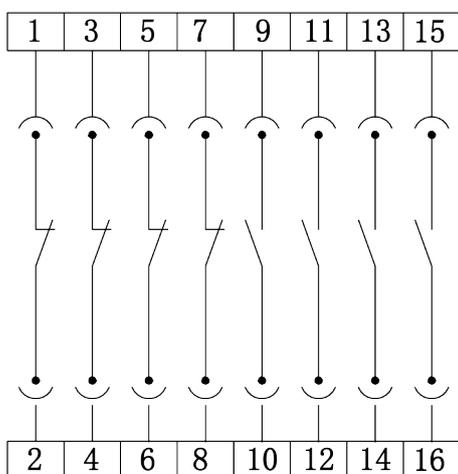
六组转换 6change-over



六开六闭 6NO6NC



四开四闭 4NO4NC



8 隔离开关连接铜排要求

Requirement for the copper bar connected to the switch-disconnector

壳架等级 Frame rating	额定电流 (A) Rated current(A)	铜排规格 Copper bar specification	
		数量 Quantity	尺寸 Size(mm)
UEW6DHG-2500	800	1	80×5
	1000	2	80×5
	1250	2	100×5
	1600	2	100×5
	2000	3	100×5
	2500	4	100×5

注：1、母排安装螺栓及开关地脚固定螺栓建议规格为M10等级8.8，拧紧力矩37.5N.m。柜体母排和开关母排搭界面长度不低于30mm。

2、表中规格为断路器处于周围环境温度最高40℃，敞开安装且满足IEC 60947-3中约定发热条件。

Note: 1、The overlapping interface between cabinet busbar and switch busbar shall not be less than 30mm.

2、The specifications in the table are for the circuit breaker which is installed in open condition meeting the heating conditions in IEC 60947-3, where the maximum ambient temperature is 40.

