



**1. 安全注意事项 (Safety precautions)**

本说明书涉及产品均为开放式外壳设计。要求用户使用产品时，务必将产品安装于具有防尘、防潮以及免于电击 / 冲击等意外的控制柜内，并且需要设置保护措施以防止非维护人员不当操作或意外导致设备故障或损坏，造成不可避免的人员危险和财产损失。

The products involved are all open-type housing designs. Therefore they should be installed in a control cabinet that is free of airborne dust, humidity, electric shock, and vibration. The cabinet should prevent non-maintenance staff from operating the products or accidents from happening in case danger and damage may occur on the products.

更详细的信息请参考 M 系列硬件手册。

Please refer to the M series hardware manual for more detailed information.

**2. 通用电气及环境规格 (General electrical and environmental specifications)**

**2.1 通用电气规格 (General electrical specifications)**

型号 (Model)	额定功率: W	Rated power: W	额定电压	Rated voltage
HCMXB-AB-500-BD	0.5	0.5	DC5V, 电压范围: DC4.75V~DC5.25V	DC5V, voltage range: DC4.75V~DC5.25V

\*注: 所有型号均为安全特低电压输入产品。

\*Note: All models are featured by the SELV input type.

**2.2 环境规格 (Environmental requirements)**

项目	Item	规格	Specifications
海拔高度	Altitude	≤2000m	≤2000m
使用环境	Operating environment	控制柜内安装, 开放式及室内使用	Installation within a control cabinet, open-type and indoor use
工作温度	Operating temperature	0~50°C	0~50°C
储存温度	Storage temperature	-25~75°C	-25~75°C
环境湿度	Ambient humidity	5~95%RH (无结露)	5~95%RH (non-condensation)
振动耐受	Vibration resistance	5~150Hz (X/Y/Z方向, 1g/3.5mm位移)	5~150Hz (X/Y/Z direction, 1g/3.5mm displacement)
污染等级	Pollution degree	污染度II	Level 2
冷却方式	Cooling method	自然冷却	Natural air cooling
防护等级	IP rating	IP20	IP20
外壳材质	Enclosure material	阻燃材料	Self-extinguishable

\*注: 如果以制造商未规定的方式使用设备, 可能会损坏设备。

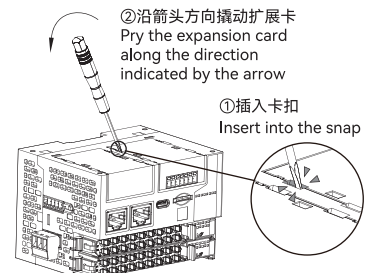
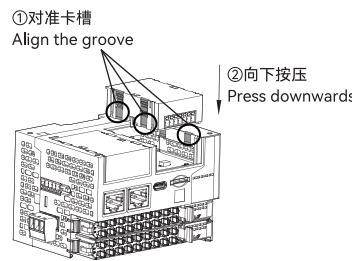
\*Note: The equipment may be damaged if used in a manner not specified by the manufacturer.

**3. 安装说明 (Installation instructions)**

**3.1 扩展卡拆装 (Expansion card mounting and dismounting)**

CN 将扩展卡沿卡槽放入水平放置控制器卡槽中, 并向下按压扩展卡, 听到“咔哒”声后确认表面平齐即完成安装, 将一字螺丝刀插入卡扣处, 按箭头方向撬动扩展卡使其控制器脱离, 将扩展卡垂直取出即可完成拆卸。

EN During mounting, place the controller horizontally, then align the groove of the expansion card with that of the controller and press the expansion card downwards. After hearing the "click" sound, check whether the junction surface is flush, if it is then the installation is completed. During dismounting, insert a screwdriver into the card snap, pry the expansion card along the direction indicated by the arrow to disengage it from the controller, and then remove the expansion card vertically to complete the dismounting process.

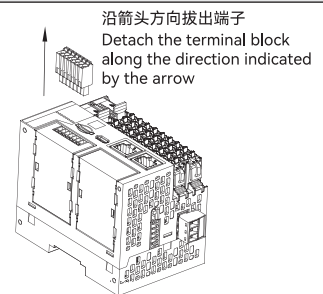
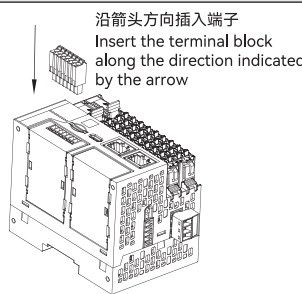


注: 该扩展卡仅可安装在扩展卡槽1。  
Note: Encoder expansion cards can only be installed in expansion card slot 1.

**3.2 拆卸端子拆装 (Removable terminal block mounting and dismounting)**

CN 可拆卸端子拆装如右图所示。

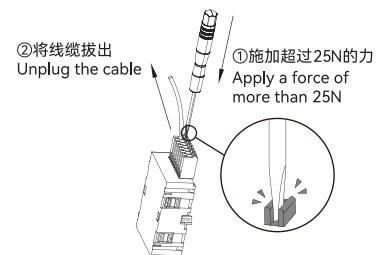
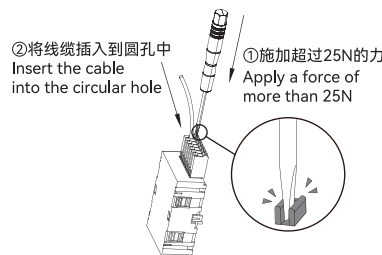
EN The mounting and dismounting of the removable terminal block are shown in the figures on the right side.

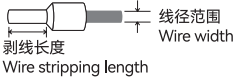


**3.3 线缆拆装 (Cable connecting and disconnecting)**

CN 安装线缆时, 将赠送的一字螺丝刀垂直插入可拆卸端子压块内, 施加超过 25N 的力, 此时圆孔打开, 将准备好的线缆插入到圆孔中, 拔出一字螺丝刀, 轻拽线缆, 线缆不松动即成功完成配线; 反之即可取出线缆。端子规格及配线示意图如右图所示。

EN During connecting, insert the flat-blade screwdriver into the unlocking tab of the terminal with a force of more than 25 N. Then insert a cable into the circular hole. Gently tug the cable after pulling out the screwdriver. If the cable is secured firmly, then the connection is finished. The reverse is the procedure for unplugging the cable. The terminal specifications and wiring diagram are shown in the right figure.



扩展卡端子 (Terminal)	线径范围: AWG (Wire width)	剥线长度: mm (Wire stripping length)	按压力: N (Pressure)	拔线力: N (Wire pulling force)	
扩展卡端子 (Expansion card terminal)	28~16	8~9	25	125	

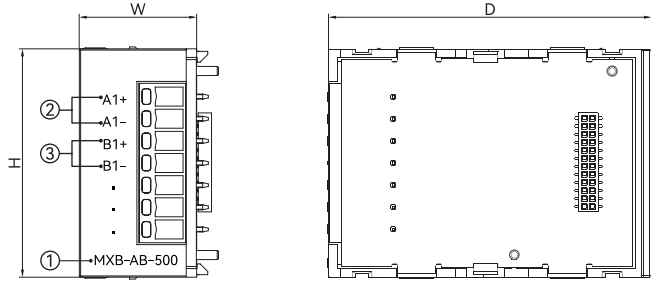
警告: 仅使用铜导线。

Warning: Use copper conductors only.

Attention: Utilisez uniquement des conducteurs en cuivre.

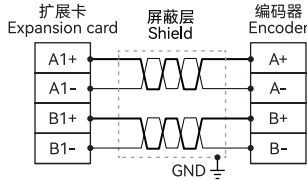
#### 4. 接口和尺寸说明 (Interface and dimension description)

序号 (No.)	项目	Item
1	产品型号	Product model
2	A 相信号	A-phase signal
3	B 相信号	B-phase signal



型号 (Model)	外形尺寸 (Dimension) : mm			重量 (Weight) : g
	W	H	D	
HCMXB-AB-500-BD	18.6	36.1	51.1	19 approx.

#### 5. 端子及配线说明 (Terminal and wiring description)

扩展卡端子说明 (Expansion card terminal description)		接线 (Wiring)
A相信号 + (A-phase signal +)	A1+	
A相信号 - (A-phase signal -)	A1-	
B相信号 + (B-phase signal +)	B1+	
B相信号 - (B-phase signal -)	B1-	
-	■	
-	■	

注: 脉冲输入信号为差分信号, 脉冲输入频率每相可达 250kHz。

Note: The pulse input signal is differential signal, and the pulse input frequency can be up to 250kHz per phase.