

1. 安全注意事项 (Safety precautions)

本说明书涉及产品为工业产品，并且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 in this manual are industrial products and are all open-type housing designs. It is essential to install these products within a control cabinet that is safeguarded against dust, moisture, and accidents such as electric shocks or physical impacts. Additionally, protective measures must be taken to prevent malfunctions or damage caused by improper operation or accidents involving non-maintenance personnel. Failure to do so may lead to serious risks to personnel safety and potential loss of property.

更详细的信息请参考 QP 系列硬件手册。
Please refer to the QP series hardware manual for more detailed information.

2. 命名规则 (Model identification)

HC QXB - USB - BD
1 2 3 4

1	产品名称 (Product name)	3	产品系列 (Product series)	4	后缀 (Suffix)
HC	禾川 (Hechuan Technology)	USB	USB Host	BD	BD选配卡 (Optional BD card)
2	选配卡系列 (Expansion card series)				
QXB	Q系列选配扩展 (Q-Series optional expansion)				

3. 适用型号 (Applicable model)

名称 (Name)	型号 (Model)	适配的主机型号 * (Applicable controller model)	简要说明 (Brief description)
扩展卡 Expansion card	HCQXB-USB-BD	HCQ0P-1200-D4 HCQ1P-1300-D4	USB Host, 用于挂载U盘, 支持FAT32, exFAT格式 USB Host, used to mount USB drives, supporting FAT32 and exFAT formats

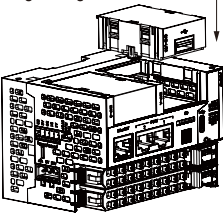
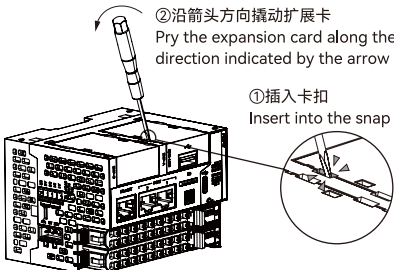
* 注: USB Host 扩展卡仅支持安装在主机扩展槽 B 的位置。
*Note: USB Host expansion card can only be installed in expansion slot B of the host controller.

4. 环境规格 (Environmental specifications)

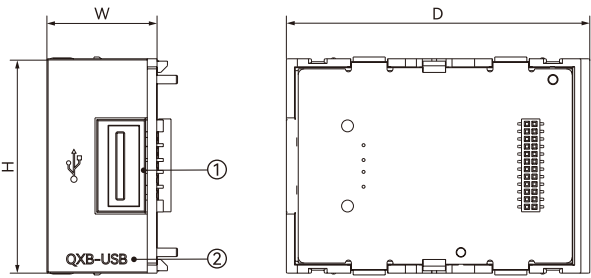
4.1 环境规格 (Environmental requirements)			
项目	Item	规格	Specifications
海拔高度	Altitude	≤2000m	≤2000m
使用环境	Operating environment	控制柜内安装，开放式及室内使用	Installation within a control cabinet, open-type and indoor use
工作温度	Operating temperature	0~55℃	0~55℃
储存温度	Storage temperature	-25~70℃	-25~70℃
环境湿度	Ambient humidity	10~95%RH (无结露)	10~95%RH (non-condensing)
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2	Level 2
冷却方式	Cooling method	自然冷却	Natural cooling
防护等级	IP rating	IP20	IP20
外壳材质	Enclosure material	阻燃材料	Self-extinguishable

* 注: 若设备未依制造商指定方式使用，设备所提供的保护可能会被减弱。
*Note: If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

5. 安装说明 (Installation instructions)

5.1 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。	<div><div><div>①对准卡槽 Align the groove</div><div>②向下按压 Press downwards</div></div><div></div></div> <div><div>②沿箭头方向撬动扩展卡 Pry the expansion card along the direction indicated by the arrow</div><div>①插入卡扣 Insert into the snap</div><div></div></div>
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.	

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



序号 (No.)	名称	Name	功能	Function
1	USB接口	USB interface	用于挂载U盘，支持FAT32，exFAT格式	Used to mount USB drives, supporting FAT32 and exFAT formats
2	产品型号	Product model	显示扩展卡型号	Displays expansion card model

型号 (Model)	外形尺寸 (Dimension) : mm			重量 (Weight) : g
	W	H	D	
HCQXB-USB-BD	18.6	36.1	51.1	20.8 approx.