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07060201-0810-001
Date 2025-06-20
CN 安装说明
EN Instruction Sheet

⚠ 1. 安全注意事项（Safety precautions）

本说明书涉及产品为工业产品，并且均为开放型外壳设计。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 HDv-E600 系列变频器用户手册。
Please refer to the HDv-E600 series variable frequency drive (VFD) user's manual.

2. 命名规则（Model identification）

HDv	E600	-	4T	7.5	B	-	XXXX
1	2		3	4	5		6

1	产品名称（Product name）
HDv	禾川变频器（Hechuan variable frequency drive）

2	产品系列（Product series）
E600	E600系列（E600 series）

3	产品电压等级（Product voltage class）
2S	单相（Single phase）220V-240V
2T	三相（Three-phase）220V-240V
4T	三相（Three-phase）380V-480V

4	功率等级（Power class）
0.4	400W
0.7	750W
1.5	1.5kW
2.2	2.2kW
3.7	3.7kW
5.5	5.5kW
7.5	7.5kW

5	制动组件（Braking component）
空(N/A)	不含制动单元（Without brake unit）
B	含制动单元（With brake unit）

6	软件/固件定制代码（Customized software/ firmware code）
X	0~9/A~Z/空(N/A)

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

3.1 通用电气规格（General electrical specifications）

型号（Model）	电源容量（Power capacity）：kVA	输入电流（Input current）：A	输出电流（Output current）：A	适配电机（Compatible motor）：kW
单相电源（Single-Phase power supply）：200~240V，50/60Hz				
HDv-E600-2S0.4B-000	1.1	3.8	3.5	0.4
HDv-E600-2S0.7B-000	2.1	5.3	4.8	0.75
HDv-E600-2S1.5B-000	4.2	8.6	7.5	1.5
HDv-E600-2S2.2B-000	5.3	11.5	11	2.2
三相电源（Three-Phase power supply）：200~240V*，50/60Hz				
HDv-E600-2T0.4B-000	1.1	3.8	3.5	0.4
HDv-E600-2T0.7B-000	2.1	5.3	4.8	0.75
HDv-E600-2T1.5B-000	4.2	8.6	7.5	1.5
HDv-E600-2T2.2B-000	5.3	11.5	11	2.2
三相电源（Three-Phase power supply）：380~480V，50/60Hz				
HDv-E600-4T0.4B-000	2	2.3	2.0	0.4
HDv-E600-4T0.7B-000	2.8	3.8	3.5	0.75
HDv-E600-4T1.5B-000	5	5.3	4.8	1.5
HDv-E600-4T2.2B-000	6.7	8.6	7.2	2.2
HDv-E600-4T3.7B-000	12	11.5	9	3.7
HDv-E600-4T5.5B-000	17.5	16.6	13	5.5
HDv-E600-4T7.5B-000	22.6	21.9	17	7.5

* 注：三相 220~240V 兼容单相 220~240V 使用；

*Note: Three-phase 220~240V (compatible with single-phase 220~240V operation).

3.2 环境规格（Environmental requirements）

项目	Item	规格	Specifications
海拔高度	Altitude	≤ 1000m（1000~3000m 降额使用）	Altitude ≤ 1000m (Derating is required for altitude from 1000m to 3000m)
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	-10~50℃（40~50℃降额使用）	-10~50℃ (Derating is required for temperature from 40 to 50℃)
储存温度	Storage temperature	-20~70℃	-20~70℃
环境湿度	Ambient humidity	20~85%RH（无结露）	20~85%RH (non-condensing)
振动耐受	Vibration resistance	<5.9m/s²（0.6g）	<5.9m/s² (0.6g)
污染等级	Pollution degree	污染度 2	Level 2
冷却方式	Cooling method	风冷	Cooling fan
防护等级	IP rating	IP20	IP20

* 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。

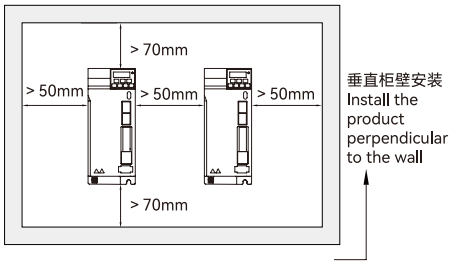
*Note: If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

4. 安装说明（Installation instructions）

4.1 控制柜安装（Installation within a control cabinet ）

CN 设备通过风扇进行冷却，请保证安装方向与墙壁垂直；请参考右侧示意图，在设备的周围留有足够的空间。 并排安装时，建议横向两侧预留 50mm 以上间距。

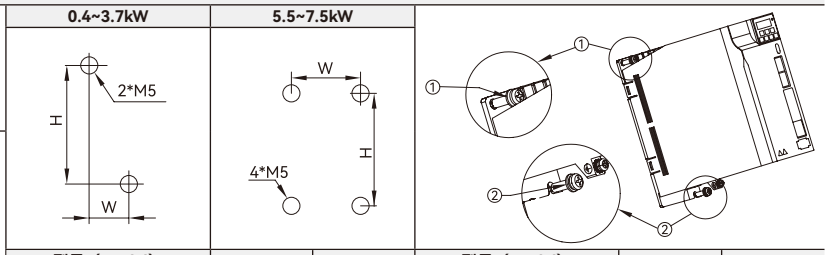
EN The device is cooled by adding a fan. Please ensure the installation direction is perpendicular to the wall.Please leave enough clearance around the product as shown in the right figure. During a side-by-side installation, please leave a horizontal clearance of more than 50 mm on both sides.



4.2 整机拆装（VFD mounting and dismounting）

CN 按孔位图在机柜背板上开孔，安装时，使用 M5 内六角组合螺丝紧固设备，先预锁螺丝②，然后将设备底部基板卡入螺丝②内，再去用螺丝①紧固上部位壳体，建议扭矩 3.5N.m。拆卸时，请确保设备断电，使用螺丝刀将螺丝②预松。后用螺丝刀拆卸螺丝①，同时用手扶住设备壳体，防止掉落，拆掉螺丝①，然后上提设备即可拆卸。

EN Drill holes on the cabinet backplane according to the punchdown dimensions. During mounting, secure the device with M5 hex socket combination screws. First, pre-tighten the screw ②, slide the device's bottom base plate into the screw ②, then tighten the upper housing with the screw ①. The recommended torque is 3.5N·m. During dismounting, ensure the device is powered off, pre-loosen the screw ② with a screwdriver, and support the housing firmly with hands while removing the screw ① to prevent dropping, then lift the device after the screw ① is detached.

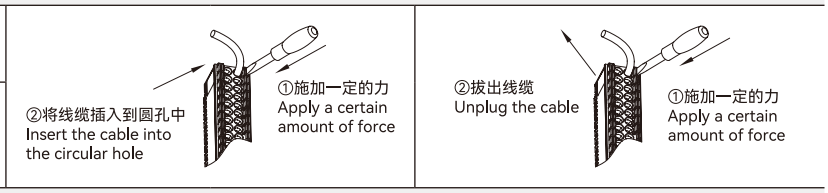


0.4~3.7kW			5.5~7.5kW		
型号（Model）	W：mm	H：mm	型号（Model）	W：mm	H：mm
HDv-E600-2S0.4B-000	21.3	162.8	HDv-E600-4T1.5B-000	39.7	163.0
HDv-E600-2T0.4B-000			HDv-E600-2S2.2B-000	54.7	
HDv-E600-2S0.7B-000	31.3		HDv-E600-2T2.2B-000		
HDv-E600-2T0.7B-000			HDv-E600-4T2.2B-000		
HDv-E600-2S1.5B-000			HDv-E600-4T3.7B-000		
HDv-E600-2T1.5B-000			HDv-E600-4T5.5B-000	76.0	227.5
HDv-E600-4T0.4B-000	39.7	163.0	HDv-E600-4T7.5B-000		
HDv-E600-4T0.7B-000			-	-	-

4.3 线缆拆装 1（Cable connecting and disconnecting I）

CN 安装线缆时，将一字螺丝刀垂直插入端子压块内，施加一定的力，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。

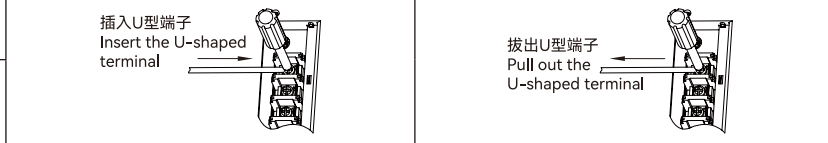
EN During connecting, vertically insert the flat-blade screwdriver into the unlocking tab with a certain force to open the circular hole. Then insert a cable into the circular hole. Gently tug the cable after pulling out the screwdriver. If the cable is secured firmly, then the connection is finished. The reverse is the procedure for unplugging the cable.



4.4 线缆拆装 2（Cable connecting and disconnecting II）

CN 安装线缆时，使用十字小螺丝刀将接线螺丝处拧松，插入 U 型端子后再拧紧螺丝，轻拽线缆，线缆不松动即成功完成配线；反之即可取出线缆。

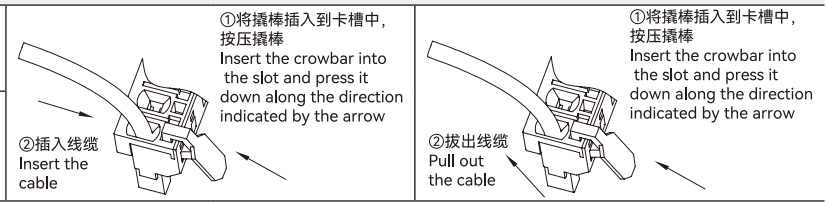
EN During connecting, use a small screwdriver to loosen the screws first. Insert the U-shaped terminal and then tighten the screws. Gently tug the cable, if the cable is secured firmly, then the connection is finished. The reverse is the procedure for unplugging the cable.



4.5 线缆拆装 3（Cable connecting and disconnecting III）

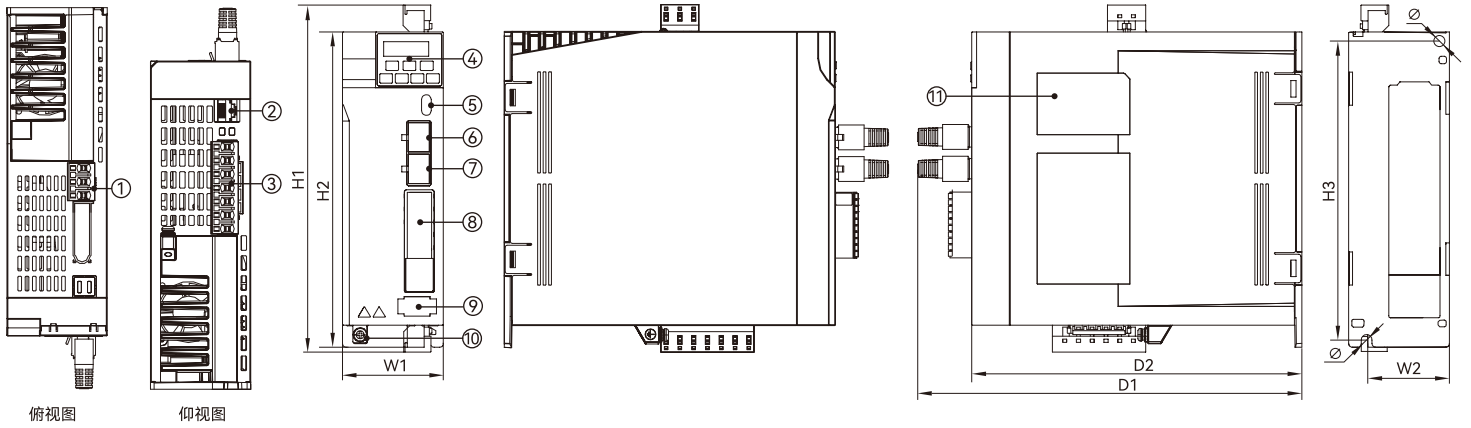
CN 撬棒使用如右图所示。

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



5. 接口及配线说明（Interface and wiring instructions）

5.1 功率（Power）0.4~3.7kW

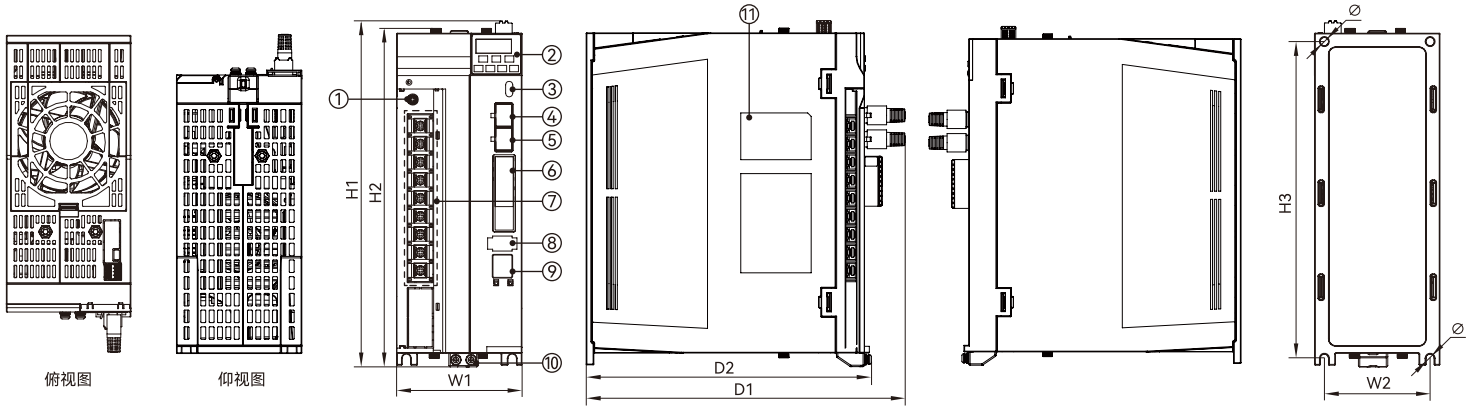


序号(No.)	名称	Name	功能	Function
1	CN7：主回路接口	CN7: Main circuit interface	电源输入接口	Power supply input interface
2	CN8：外引键盘接口	CN8: External keyboard interface	用于连接外引键盘	Used for connecting external keyboard
3	电机动力输出接口	Servo motor connection interface	母线电压输出、电机动力输出接口，具体说明请参考第 7 节：电机动力输出接口说明	Bus voltage output, motor power output interface .For specific details, refer to Section 7: Motor power output interface description
4	操作显示界面	LED display screen	显示用户界面，用于操作控制、状态监测	Displays user interface for operation control and status monitoring
5	CN1：USB 接口	CN1: USB interface	仅用于烧录程序，无法用于连接电脑后台软件	Only used for program burning, unable to connect to the computer background software
6	CN2：RJ45 通讯输入接口	CN2: RJ45 communication input interface	RS485 通讯信号输入接口	RS485 communication signal input interface
7	CN3：RJ45 通讯输出接口	CN3: RJ45 communication output interface	RS485 通讯信号输出接口	RS485 communication signal output interface
8	CN4：功能 IO 接口	CN3: Functional I/O interface	数字量 I/O，模拟量 I/O ，继电器，公共端等多种功能接口，具体说明请参考第 7 节：功能 I/O 接口说明	Multiple functional interfaces include digital I/Os, analog I/Os, relays, common terminals. For specific instructions, please refer to Section 7: Functional I/O interface description
9	CN5	CN5	预留	Reserved

10	接地端子	Ground terminal	保护接地	Protective grounding
11	标签	Label	显示变频器型号、规格参数、内部序列号等基本信息	Displays the basic information including variable frequency drive model, specification parameters, and internal serial number

型号（Model）	外形尺寸（Dimension）：mm								重量（Weight）：g
	W1	W2	H1	H2	H3	D1	D2	Φ	
HDv-E600-2S0.4B-000 HDv-E600-2T0.4B-000	37.00	26.80	189.20	160.00	162.80	199.00	170.00	5.5	750 approx.
HDv-E600-2S0.7B-000 HDv-E600-2T0.7B-000 HDv-E600-2S1.5B-000 HDv-E600-2T1.5B-000	47.00	36.80							960 approx.
HDv-E600-4T0.4B-000 HDv-E600-4T0.7B-000 HDv-E600-4T1.5B-000	55.00	45.20			163.00	209.00	180.00		1170 approx.
HDv-E600-2S2.2B-000 HDv-E600-2T2.2B-000 HDv-E600-4T2.2B-000 HDv-E600-4T3.7B-000	70.00	60.20							1380 approx.

5.2 功率（Power）5.5~7.5kW

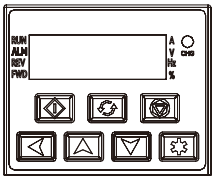


序号(No.)	名称	Name	功能	Function
1	EMC 端子	EMC terminal	电磁干扰接地	Electromagnetic interference (EMI) grounding
2	操作显示界面	LED display screen	显示用户界面，用于操作控制、状态监测	Displays user interface for operation control and status monitoring
3	CN1：USB 接口	CN1: USB interface	仅用于烧录程序，无法用于连接电脑后台软件	Only used for program burning, unable to connect to the computer background software
4	CN2：RJ45 通讯输入接口	CN2: RJ45 communication input interface	RS485 通讯信号输入接口	RS485 communication signal input interface
5	CN3：RJ45 通讯输出接口	CN3: RJ45 communication output interface	RS485 通讯信号输出接口	RS485 communication signal output interface
6	CN4：功能 IO 接口	CN3: Functional I/O interface	数字量 I/O 模拟量 I/O 继电器，公共端等多种功能接口，具体说明请参考第 7 节：功能 I/O 接口说明	Multiple functional interfaces include digital I/Os, analog I/Os, relays, common terminals. For specific instructions, please refer to Section 7: Functional I/O interface description
7	主回路接口	Main circuit interface	电源输入接口，母线电压输出、电机动力输出接口，具体说明请参考第 7 节：5.5~7.5kW 主回路端子说明	Power supply input interface, bus voltage output, motor power output interface. For specific details, refer to Section 7: 5.5~7.5kW Main circuit terminal description
8	CN5	CN5	预留	Reserved
9	CN8：外引键盘接口	CN8: External keyboard interface	用于连接外引键盘	Used for connecting external keyboard
10	接地端子	Ground terminal	保护接地	Protective grounding
11	标签	Label	显示变频器型号、规格参数、内部序列号等基本信息	Displays the basic information including variable frequency drive model, specification parameters, and internal serial number

型号（Model）	外形尺寸（Dimension）：mm								重量（Weight）：g
	W1	W2	H1	H2	H3	D1	D2	Φ	
HDv-E600-4T5.5B-000 HDv-E600-4T7.5B-000	90.00	76.00	248.70	243.30	227.50	229.00	200.00	6	3070 approx.

6. 指示灯和面板说明（Indicator and LED panel description）

丝印 (Screen printing)	指示灯含义 (Indicator meaning)	颜色 (Color)	状态		Status	说明	Description
RUN	运行 (Run)	绿色 (Green)		熄灭	Not lit	停止状态	Stop
				常亮	Lit	正常运行	Run
ALM	故障 (Alarm)	绿色 (Green)		熄灭	Not lit	无故障发生	No error
				常亮	Lit	发生故障	Error
REV	反转 (Reverse rotation)	绿色 (Green)		熄灭	Not lit	无反转指令	No reverse rotation instruction
				常亮	Lit	停机前有反转指令；运行状态时，变频器反转运行	Before the VFD is stopped, there is a reverse rotation instruction. During the running state, the VFD runs in the reverse direction.
FWD	正转 (Forward rotation)	绿色 (Green)		熄灭	Not lit	无正转指令	No forward rotation instruction
				常亮	Lit	停机前有正转指令；运行状态时，变频器正转运行	Before the VFD is stopped, there is a forward rotation instruction. During the running state, the VFD runs in the forward direction.
A	电流 (Current)	绿色 (Green)		熄灭	Not lit	-	-
				常亮	Lit	当前单位为电流	Unit: A

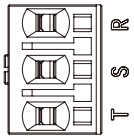


V	电压 (Voltage)	绿色 (Green)	熄灭	Not lit	-	-
			常亮	Lit	当前单位为电压	Unit: V
Hz	频率 (Frequency)	绿色 (Green)	熄灭	Not lit	-	-
			常亮	Lit	当前单位为频率	Unit: Hz
%	百分比 (Percentage)	绿色 (Green)	熄灭	Not lit	-	-
			常亮	Lit	当前单位为百分比	Unit: %
CHG	电源 (Charge)	红色 (Red)	熄灭	Not lit	电源未接通	Power OFF
			常亮	Lit	电源接通	Power ON

按键符号(key)	名称	Name	详细说明	Description
	运行按键	Run	面板控制情况方式下，用于控制电机运行操作	In the panel control mode, it is used to control the motor operation.
	多功能按键	Multi-function	默认初始功能为参数界面退出。 正转点动，反转点动，正反转切换，操作面板与远程切换	The default initial function is to exit the parameter interface. Forward JOG, reverse JOG, forward and reverse rotation switching, operation panel and remote switching
	复位 / 停机按键	Reset/Stop	故障报警时，用于复位故障；运行状态下，停止电机运行	When there is a fault alarm, it is used to reset the fault. During the running state, it is used to stop the motor.
	移位按键	Shift	在 0 级菜单更换显示参数，在 2 级和 3 级菜单下，向左移动循环显示面板参数	Under the level 0 menu, the key is used to change the display parameters. Under the level 2 and 3 menus, the key is used to display panel parameters from the left.
	UP 按键	Up	增大显示参数	Increase display parameters
	DOWN 按键	Down	减小显示参数	Decrease display parameters
	参数设置 / 确认退出按键	Parameter setting/ Exit confirmation	短按按键，进入下一界面； 长按按键，返回上一界面； 3 级菜单页面下，短按按键，参数保存	Short press the key to enter the next interface. Long press the key to return to the previous interface. Under the level 3 menu page, press the key to save the parameter.

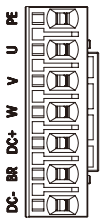
7. 端子及配线说明（Terminal and wiring description）

0.4~3.7kW主回路端子说明（Main circuit terminal description）



R	主回路输入三相电源	Main circuit input three-phase power supply
S		
T		

电机动力输出端子说明（Motor power output terminal description）



PE	保护接地	Protective grounding
U	电机动力输出接口	Motor power output interface
V		
W		
DC+	母线电压正极	Positive polarity of the busbar voltage
BR	制动电阻接口	Braking resistor interface
DC-	母线电压负极	Negative polarity of the busbar voltage

5.5~7.5kW主回路端子说明（Main circuit terminal description）

R	三相主电源输入	Three-phase main circuit power supply input
S		
T		
DC+	母线电压正极	Positive polarity of the busbar voltage
BR	制动电阻接口	Braking resistor interface
DC-	母线电压负极	Negative polarity of the busbar voltage
U	电机动力输出接口	Motor power output interface
V		
W		

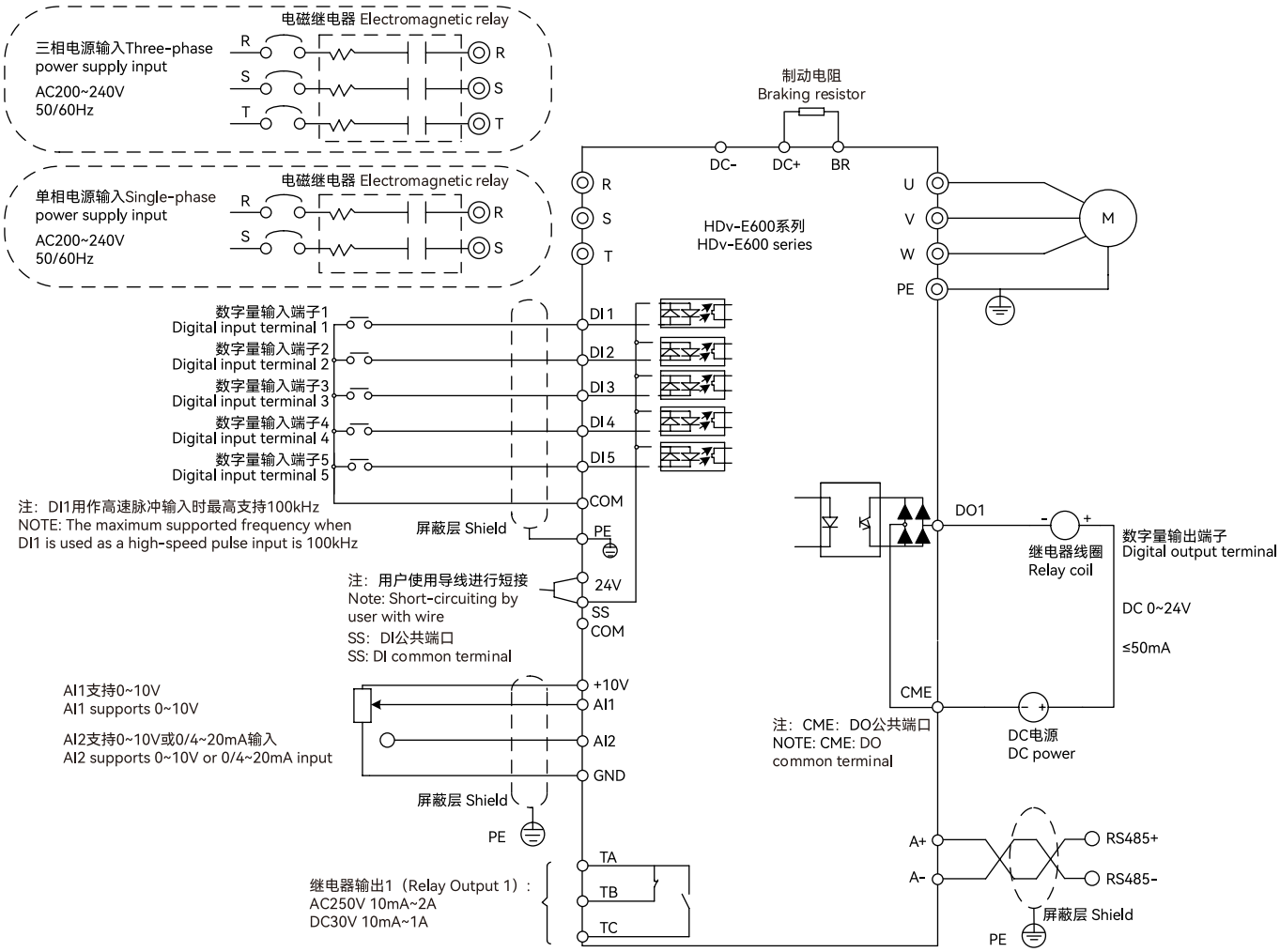
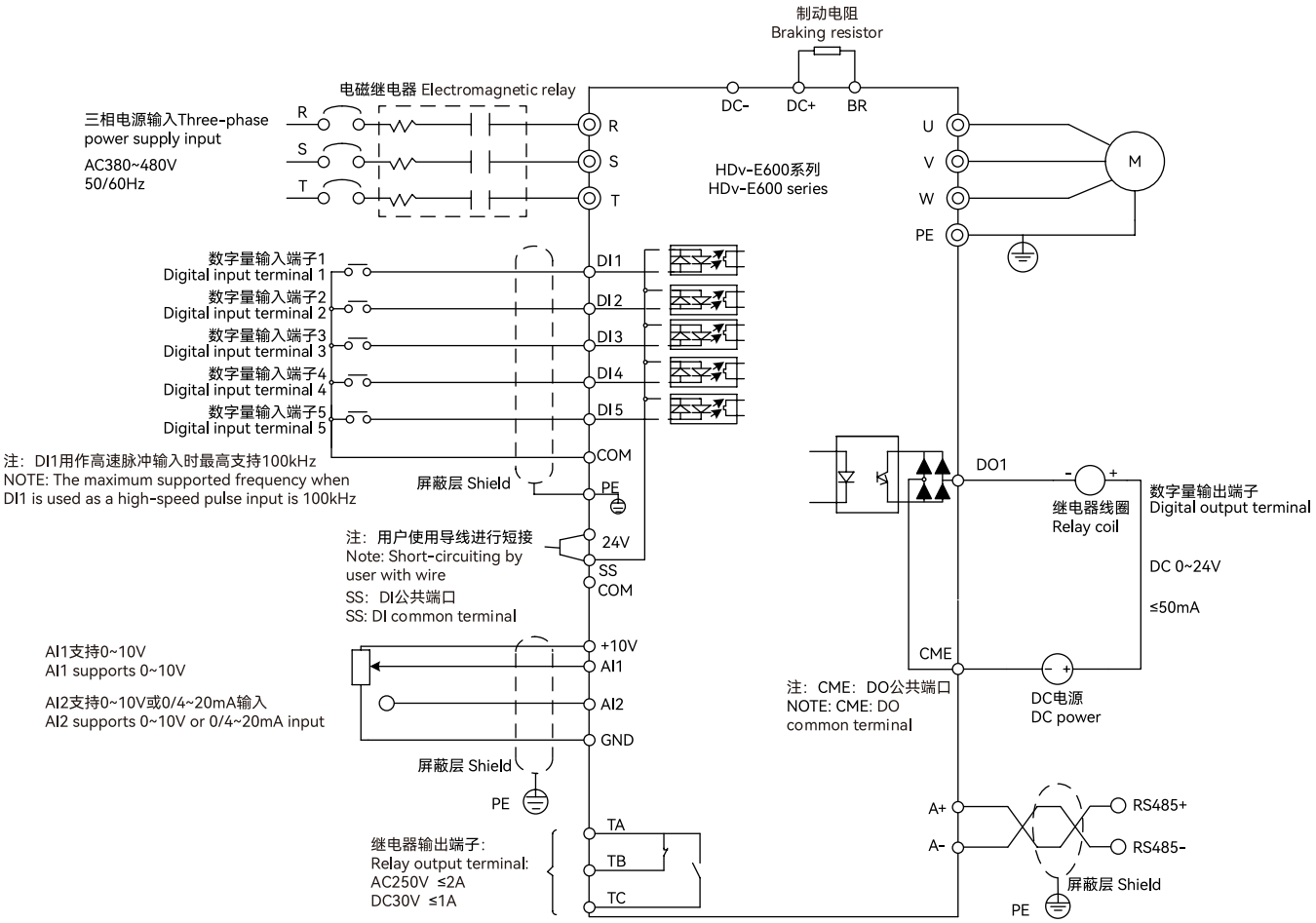
CN4功能I/O端子说明（CN4 functional I/O terminal description）

详细说明	Description	名称 (Name)	PIN	端口说明（Terminal description）	PIN	名称 (Name)	详细说明	Description
继电器公共端	Relay common terminal	TA	PIN1	TA	PIN2	DI1	高速输入 / 数字量输入	High-speed input or digital input
继电器输出 NC	Relay output NC	TB	PIN3	TB	PIN4	DI2	数字量输入	Digital input
继电器输出 NO	Relay output NO	TC	PIN5	TC	PIN6	DI3		
数字量输出	Digital output	DO1	PIN7	DO1	PIN8	DI4		
DC0V 内部电源	DC0V internal power supply	COM*	PIN9	COM	PIN10	DI5		
数字量输入公共端	Digital input common terminal	SS	PIN11	SS	PIN12	COM*	DC0V 内部电源	DC0V internal power supply
DC24V 内部电源	DC24V internal power supply	24V	PIN13	24V	PIN14	CME	数字量输出公共端	Digital output common terminal
模拟量地	Analog ground	GND	PIN15	GND	PIN16	+10V	DC 10V 电源	DC 10V power supply
模拟量输入	Analog input	AI1	PIN17	AI1	PIN18	A+	RS485 通讯	RS485 communication
		AI2	PIN19	AI2	PIN20	A-		

* 注：COM 端内部短接。

*Note: COM terminal is internally shorted.

单相/三相220V机种标准接线（ Single phase / three-phase 220V standard wiring）



三相380V机种标准接线（Three-phase 380V standard wiring）