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HPPV0150001-00A	
Date	2024-03-07
CN	安装说明
EN	Instruction Sheet

支持的设备型号
Supported Models

HDv-E610(E600)-4T0.7B-000　HDv-E610(E600)-4T1.5B-000　HDv-E610(E600)-4T2.2B-000
HDv-E610(E600)-4T3.7B-000　HDv-E610(E600)-4T5.5B-000　HDv-E610(E600)-4T7.5B-000

1. 安全注意事项（Safety precautions）

本说明书设计产品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 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 E 系列变频器说明书及硬件操作手册。

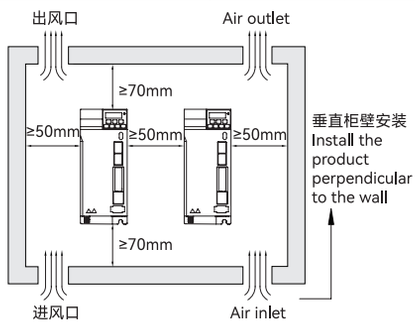
Please refer to the E series VFD instructions or hardware operation manual for more detailed information.

2. 安装说明（Installation instructions）

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

CN 设备冷却方式为自然冷却或通过加装风扇进行冷却，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。

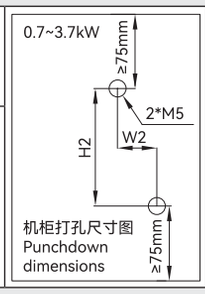
EN Please install the product perpendicular to the wall and ensure a sufficient cooling effect via natural air or a cooling fan. Please leave enough clearance around the product as shown in the right figure. During a side-by-side installation, please leave a horizontal clearance of more than 50 mm on both sides.

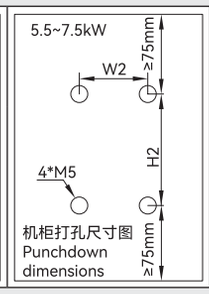


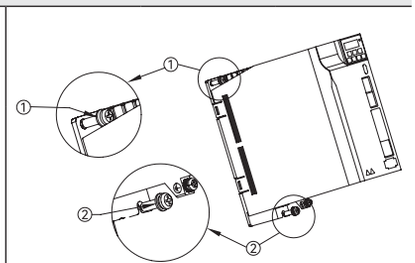
2.2 整机拆装（VFD mounting and dismounting）

CN 安装时，用内六角组合螺丝 M5*20 螺丝紧固机器，先预缩螺丝②，然后将机器底部基板卡入螺丝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，用螺丝刀先将②号内六角组合螺丝 M5*20 螺丝预松，不拆卸掉。然后在用螺丝刀拆卸螺丝①，同时用手扶住机器壳体，防止掉落，拆掉螺丝①，然后上提机器即可拆卸。

EN During mounting, use hexagonal M5*20 screws to secure the machine. Pre-tighten the screw ② first, then snap the base plate at the bottom of the machine onto the screw ②, and finally use the screw ① to secure the upper part of the housing. The recommended torque is 3.5N.m. During dismounting, use a screwdriver to pre-loosen the screw ② first without removing it. While removing the screw ① with a screwdriver, hold the device with a hand to prevent it from falling until the screw ① is completely removed. Finally, lift the machine upward to take down the device.



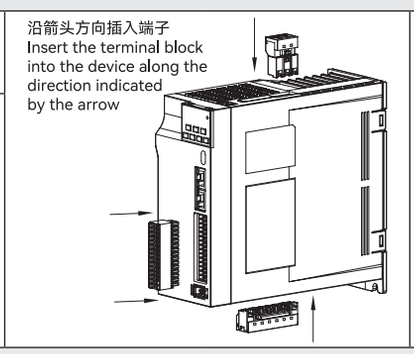


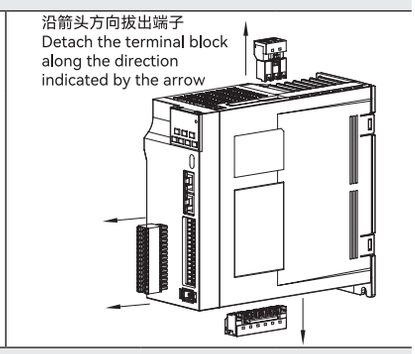


2.3 可拆卸端子拆装 (Removable terminal block mounting and dismounting)

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.

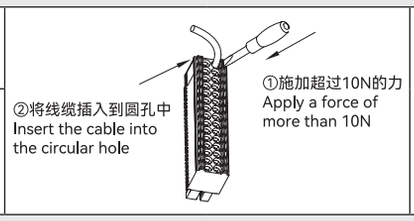


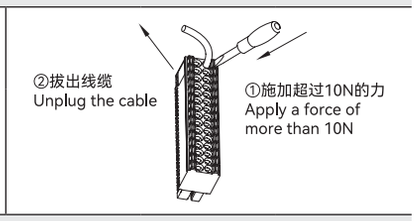


2.4 线缆拆装 1（Cable connecting and disconnecting I）

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 10N 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, insert the flat-blade screwdriver into the unlocking tab with a force of more than 10 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.

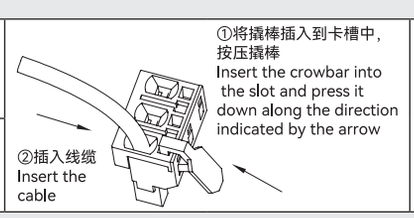


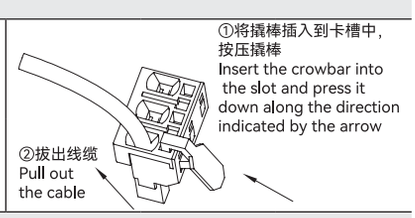


2.5 线缆拆装 2（Cable connecting and disconnecting II）

CN 撬棒使用如右图所示。

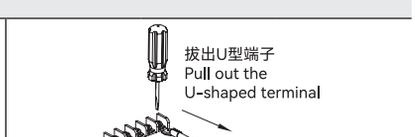
EN The mounting and dismounting of the terminal block are shown in the figures on the right side.



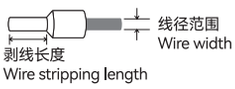


2.6 线缆拆装 3（Cable connecting and disconnecting III）

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。端子规格及配线示意图如右图所示。



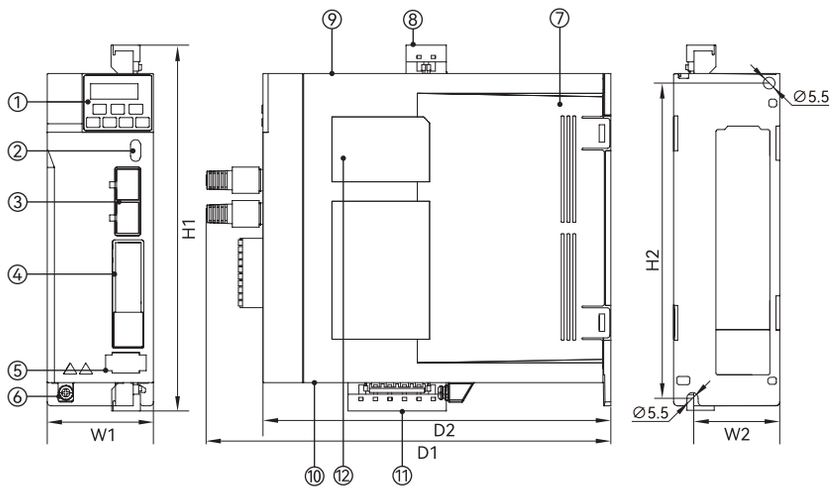
EN During connecting, use a small screwdriver to loosen the screws first. Insert the U-shaped terminal and then tighten the screws. Gently tug the cable, if the cable is secured firmly, then the connection is finished. The reverse is the procedure for unplugging the cable. The terminal specifications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



端子 (Terminal)	线径范围AWG (Wire width)	剥线长度mm (Wire stripping length)
30PIN	26~16	10
20PIN	26~16	10
7PIN	28~12	8
3PIN	28~12	8

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

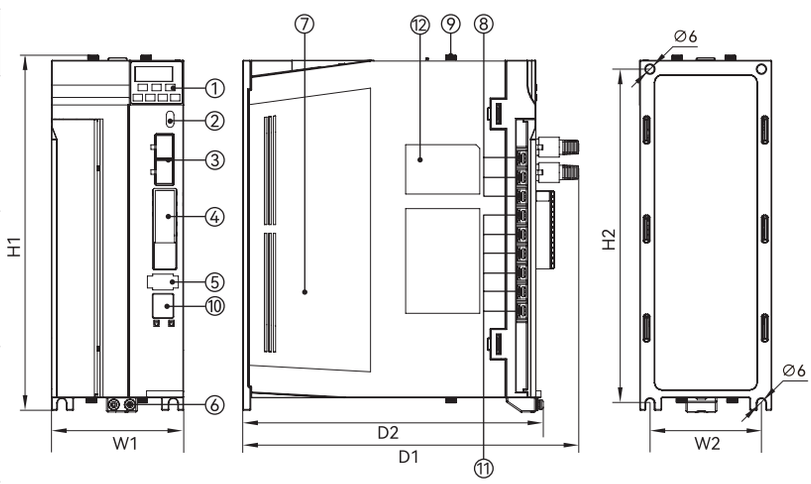
序号(No.)	项目	Item
1	操作显示界面	LED display screen
2	CN1：USB接口	CN1: USB interface
3	CN2,CN3：RJ45通讯接口	CN2,CN3: RJ45 communication interface
4	CN4：控制端子	CN4: Control terminal
5	CN5：预留	CN5: Reserved
6	接地端子	Ground terminal
7	内置风扇	Built-in fan
8	主回路电源输入	Main circuit power supply input
9	CN6：STO接口*	CN6: STO interface
10	CN8：RJ45通讯接口（外引键盘接口）	CN8: RJ45 communication interface (External keyboard interface)
11	电机动力输出	Servo motor connection interface
12	标签	Label



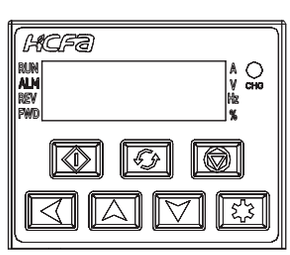
* 注：E600 系列暂未开放，仅 E610 系列可选配。

*Note : E600 series is not released yet. The optional STO function is only available for the E610 series.

型号（Model）	外形尺寸（Dimension）：mm							重量 (Weight) : kg
	W1	W2	H1	H2	D1	D2	Φ	
HDv-E600-4T0.7B-000	55.00	39.70	182.90	163.00	209.00	180.00	5.5	1.17 MAX.
HDv-E600-4T1.5B-000								
HDv-E610-4T0.7B-000								
HDv-E610-4T1.5B-000								
HDv-E600-4T2.2B-000	70.00	54.70						1.38 MAX.
HDv-E600-4T3.7B-000								
HDv-E610-4T2.2B-000								
HDv-E610-4T3.7B-000								
HDv-E600-4T5.5B-000	90.00	76.00	243.30	227.50	229.00	200.00	6	3.07 MAX.
HDv-E600-4T7.5B-000								
HDv-E610-4T5.5B-000								
HDv-E610-4T7.5B-000								

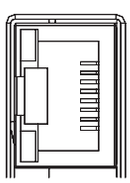


项目(Item)	颜色	Color	状态		Status	详细说明	Description
CHG电源指示灯 (Charge indicator)	红色	Red	●	常亮	Lit	电源接通	Power ON
			○	熄灭	Not lit	电源未接通	Power OFF
RUN运行指示灯 (Run indicator)	绿色	Green	RUN	常亮	Lit	正常运行	RUN
			RUN	熄灭	Not lit	停止状态	STOP
ALM故障显示灯 (Alarm indicator)	绿色	Green	ALM	常亮	Lit	故障显示	Fault indication
			ALM	熄灭	Not lit	无故障发生	No error
REV反转指示 (Reverse rotation indicator)	绿色	Green	REV	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正转指示 (Forward rotation indicator)	绿色	Green	FWD	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.
电流指示 (Current indicator)	绿色	Green	A	常亮	Lit	当前单位为电流	Unit: A
电压指示 (Voltage indicator)	绿色	Green	V	常亮	Lit	当前单位为电压	Unit: V
频率指示 (Frequency indicator)	绿色	Green	Hz	常亮	Lit	当前单位为频率	Unit: Hz
百分比指示 (Percentage indicator)	绿色	Green	%	常亮	Lit	当前单位为百分比	Unit: %



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
	RESET/STOP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.

端口说明 (Terminal description)	PIN	HDv-E600_CN2_CN3_RS485*[1]		HDv-E610_CN2_CN3_RS485/CAN*[1]*[2]	
		名称（Name）	功能（Function）	名称（Name）	功能（Function）
	PIN1	NC	- Reserved	CANH	CANopen
	PIN2	NC		CANL	
	PIN3	NC		CAN-GND	CANopen
	PIN4	RS485-	RS485	RS485-	RS485
	PIN5	RS485+		RS485+	
	PIN6	RS485-GND	RS485地（RS485 ground）	RS485-GND	RS485地（RS485 ground）
	PIN7	NC	- Reserved	NC	- Reserved
	PIN8	NC		NC	

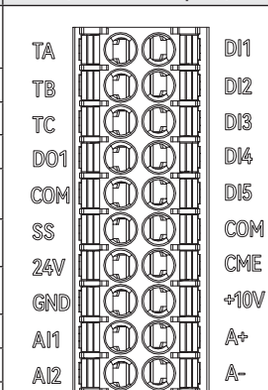
* 注 1：可选配终端电阻 120Ω。

*Note 1: The optional termination resistor is 120Ω.

* 注 2：E610 系列才支持 CANopen

*Note 2: CANOpen is only available for the E610 series.

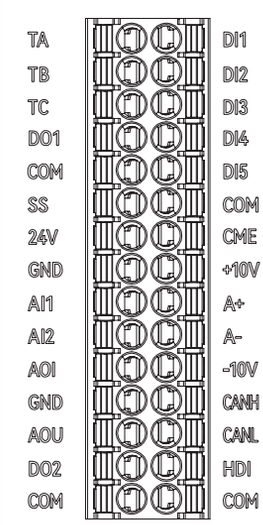
HDv-E600 CN4 DIDO端子说明（DIDO terminal description）

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		PIN2	DI1	高速输入DI，也可用做普通数字量输入	High-speed input DI or general digital input
继电器输出NC	Relay output NC	TB	PIN3		PIN4	DI2	数字量输入DI	Digital input DI
继电器输出NO	Relay output NO	TC	PIN5		PIN6	DI3		
数字量输出DO	Digital output DO	DO1	PIN7		PIN8	DI4		
内部电源地DC0V	Internal power supply ground DC0V	COM*[3]	PIN9		PIN10	DI5		
数字量输入DI公共端	Digital input DI common terminal	SS	PIN11		PIN12	COM*[3]	内部电源地DC0V	Internal power supply ground DC0V
内部电源DC24V	Internal power supply DC24V	24V	PIN13		PIN14	CME	数字量输出DO公共端	Digital output DO common terminal
模拟量地	Analog ground	GND	PIN15		PIN16	+10V	电源DC+10V	Power supply DC+10V
模拟量输入	Analog input	AI1	PIN17		PIN18	A+	RS485	RS485
		AI2	PIN19		PIN20	A-		

* 注 3：COM 端内部短接。

*Note 3: COM terminal is internally shorted.

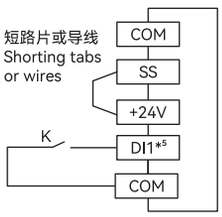
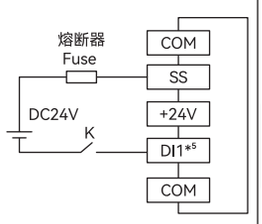
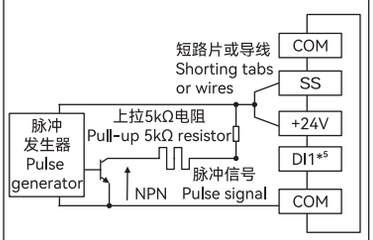
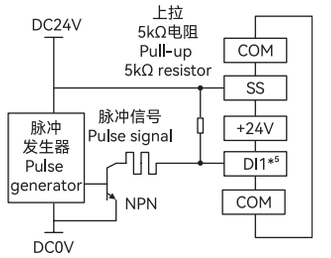
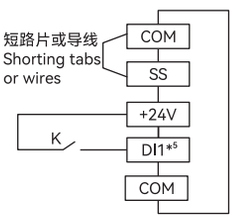
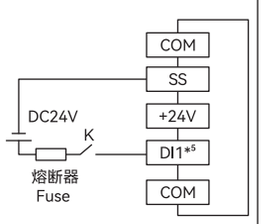
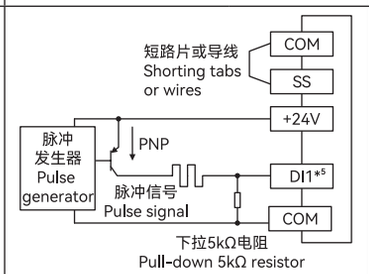
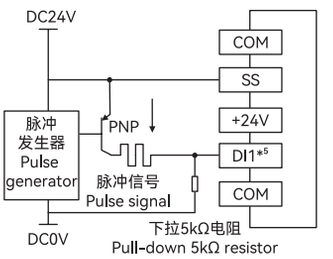
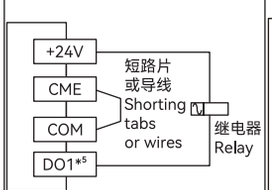
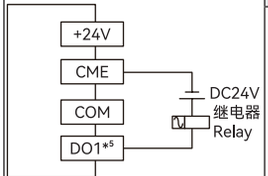
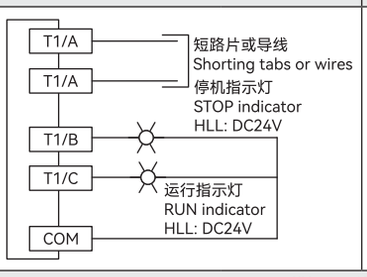
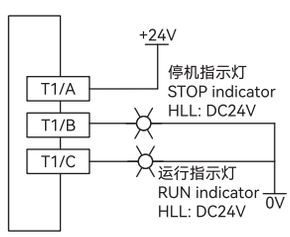
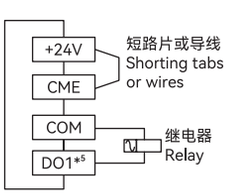
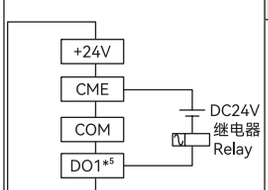
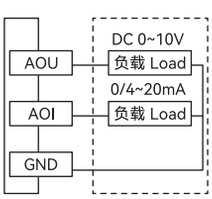
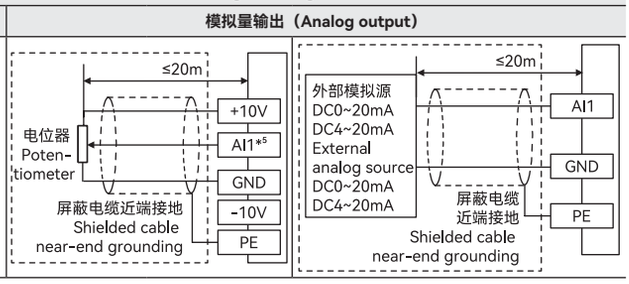
HDv-E610 CN4 DIDO端子说明（DIDO terminal description）

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		PIN2	DI1	高速输入DI，也可用做普通数字量输入	High-speed input DI or general digital input
继电器输出NC	Relay output NC	TB	PIN3		PIN4	DI2	数字量输入DI	Digital input DI
继电器输出NO	Relay output NO	TC	PIN5		PIN6	DI3		
数字量输出DO	Digital output DO	DO1	PIN7		PIN8	DI4		
内部电源地DC0V	Internal power supply ground DC0V	COM*[4]	PIN9		PIN10	DI5		
数字量输入DI公共端	Digital input DI common terminal	SS	PIN11		PIN12	COM*[4]	内部电源地DC0V	Internal power supply ground DC0V
内部电源DC24V	Internal power supply DC24V	24V	PIN13		PIN14	CME	数字量输出DO公共端	Digital output DO common terminal
模拟量地	Analog ground	GND	PIN15		PIN16	+10V	电源DC+10V	Power supply DC+10V
模拟量输入	Analog input	AI1	PIN17		PIN18	A+	RS485	RS485
		AI2	PIN19		PIN20	A-		
模拟量电流输出	Analog current output	AOI	PIN21		PIN22	-10V	电源DC-10V	Power supply DC-10V
模拟量地	Analog ground	GND	PIN23		PIN24	CANH	CANopen	CANopen
模拟量电压输出	Analog voltage output	AOU	PIN25		PIN26	CANL		
数字量输出DO	Digital output DO	DO2	PIN27		PIN28	HDI	高速输入HDI，也可用做普通数字量输入	High-speed input HDI or general digital input
内部电源地DC0V	Internal power supply ground DC0V	COM*[4]	PIN29		PIN30	COM*[4]	内部电源地DC0V	Internal power supply ground DC0V

* 注 4：COM 端内部短接。

*Note 4: COM terminal is internally shorted.

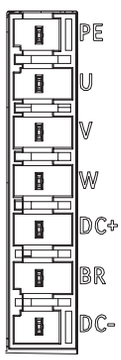
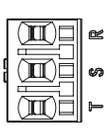
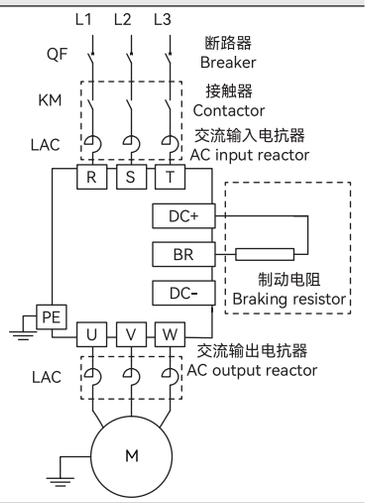
IO接线（IO wiring）

类型 (Type)	通用IO接线（General IO wring）		高速IO接线（High speed IO wring）	
	内部电源接线 (Internal power supply wiring)*5	外部电源接线 (External power supply wiring)	内部电源接线 (Internal power supply wiring)*5	外部电源接线 (External power supply wiring)
漏型输入 NPN Input				
源型输入 PNP Input				
漏型输出 NPN Output			继电器输出（Relay output） 内部电源接线 (Internal power supply wiring)*5 	外部电源接线 (External power supply wiring) 
源型输出 PNP Output			模拟量IO接线（Analog IO wiring） 模拟量输入（Analog input） 	模拟量输出（Analog output） 

* 注 5：此处以 DI1/DO1/AI1 示意，端子可以是 DI1~DI5,HDI1,DO1,DO2,AI1~AI2。

*Note 5: There is shown DI1/DO1/AI1 terminal, the terminal can be DI1~DI5, HDI1,DO1,DO2,AI1~AI2.

HDv-E600/ HDv-E610

电机动力输出接口（Motor power output interface）				主回路电源输入接口（Main circuit power input interface）				接线 (Wiring)
端口说明 (Terminal description)	名称 (Name)	详细说明	Description	端口说明 (Terminal description)	名称 (Name)	详细说明	Description	
	PE	接地	Grounding		R	主回路输入三相电源	Main circuit input three-phase power supply	
	U	电机输出	Motor output		S			
	V							
	W				T			
	DC+	直流母线+	DC busbar+					
	BR	制动电阻	Braking resistor					
	DC-	直流母线-	DC busbar-					

*Note 5: There is shown DI1/DO1/AI1 terminal, the terminal can be DI1~DI5, HDI1,DO1,DO2,AI1~AI2.

HDv-E610 CN6 STO 安全端子（STO terminal）*[6]

端口说明 (Terminal description)	名称 (Name)		详细说明	Description	内部电源接线 (Internal power supply wiring)*[7]	外部电源接线 (External power supply wiring)
+24V 24V+ STO1+ EDM+ STO2+ EDM- COM COM STO1- NC STO2- NC	1	+24V	内部24端口	Internal 24V port	短路片或导线 Shorting tabs or wires +24V +24V STO1+ EDM+ STO2+ EDM- COM COM STO1- STO2- 短路片或导线 Shorting tabs or wires 继电器 Relay	+24V：外部电源 External power supply +24V +24V STO1+ EDM+ 0V：外部电源 External power supply STO2+ EDM- COM COM STO1- STO2- +24V：外部电源 External power supply 继电器 Relay 0V：外部电源 External power supply
	2	24V+				
	3	STO1+	STO开关1	STO switch 1		
	4	EDM+	STO信号监视输出	STO signal monitoring output		
	5	STO2+	STO开关2	STO switch 2		
	6	EDM-	STO信号监视输出	STO signal monitoring output		
	7	COM	内部24端口	Internal 24V port		
	8	COM				
	9	STO1-	STO开关1	STO switch 1		
	10	NC	-	-		
	11	STO2-	STO开关2	STO switch 2		
	12	NC	-	-		

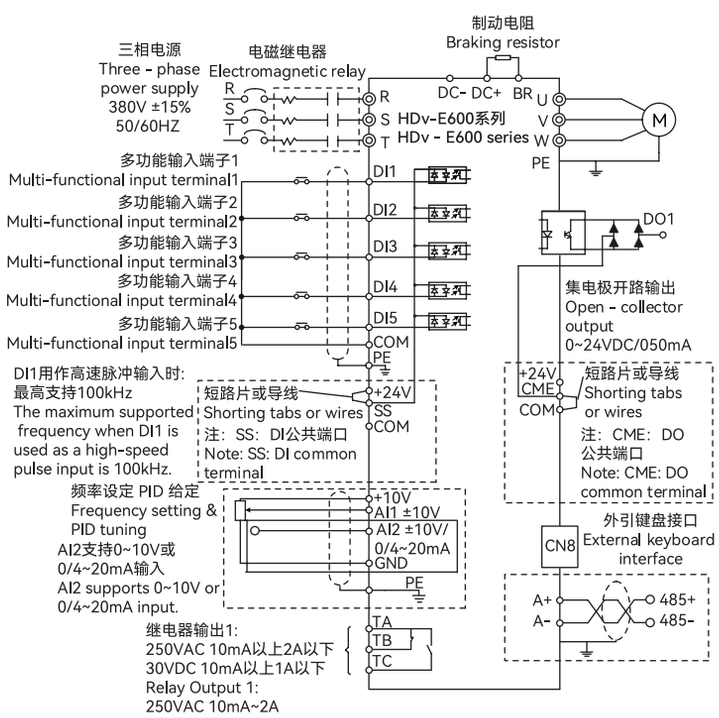
* 注 6：E600 系列暂未开放，仅 E610 系列可选配。

*Note 6: E600 series is not released yet. The optional STO function is only available for the E610 series.

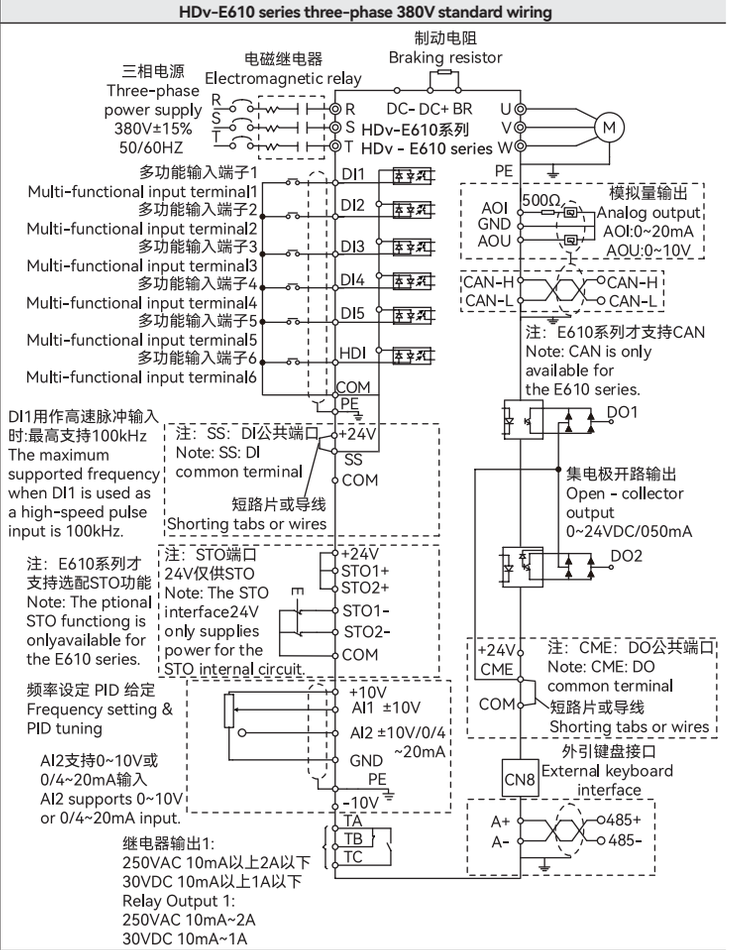
* 注 7：STO 端子 24V 电源仅供 STO 内部接线使用。

*Note 7: STO terminal 24V power supply is for STO internal wiring only.

HDv-E600 系列三相 380V 机种标准接线
HDv-E600 series three-phase 380V standard wiring



HDv-E610 系列三相 380V 机种标准接线
HDv-E610 series three-phase 380V standard wiring



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