

## Product family overview

### Dual network ports for CAN communication

Optional speed regulator panel  
Simple speed regulation of individual equipment

Optional LCD panel for easy parameters copying

Tool-free crimp terminals  
60% improvement in assembly efficiency

- No screws required, prevent terminal tooth slipping
- MD200: 22 screws, complicated assembly

**CANlink**  
**CANopen**

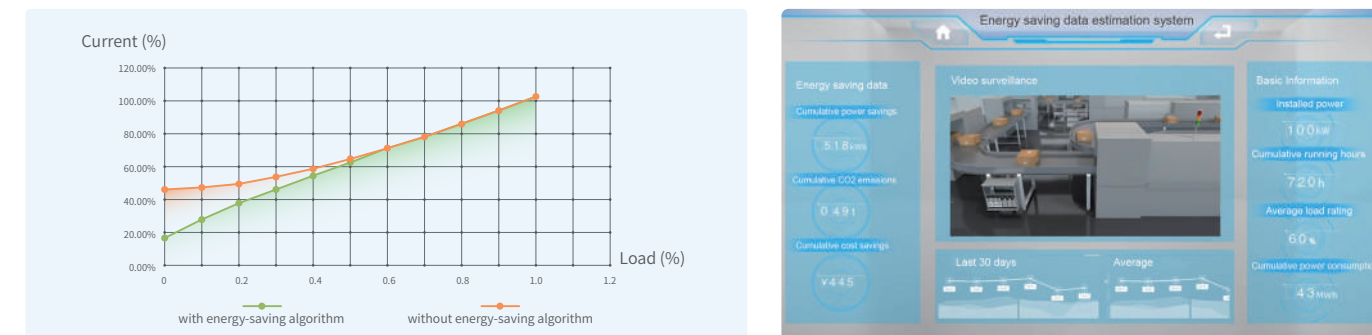
### Compact for flexible installation

- The compact size of the MD600 reduces the overall cost of the structural materials of the on-board cabinet during the design process.\*
- \*Note: The MD600 air-cooled model supports seamless side by side installation.



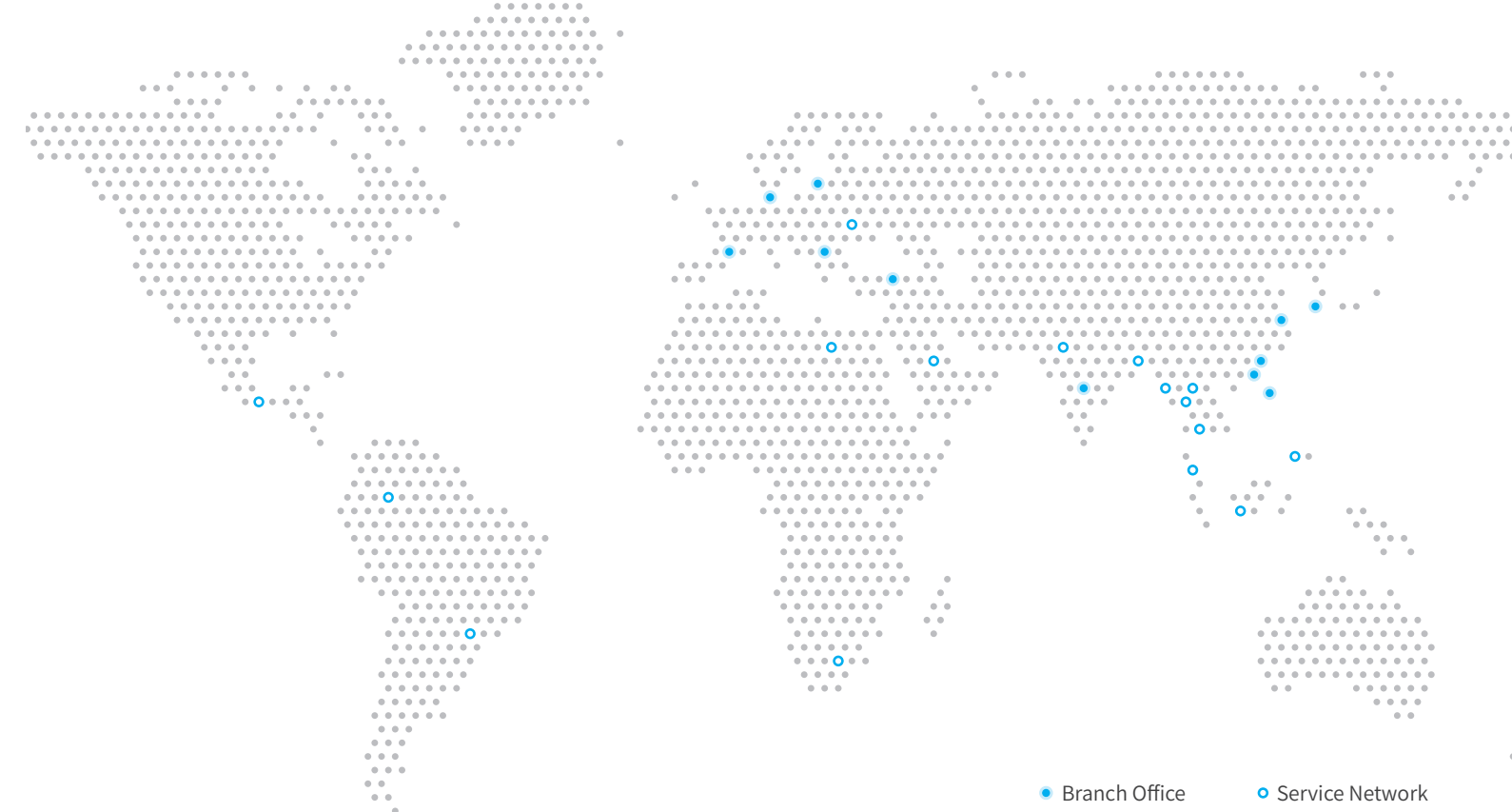
### Energy saving

- Automatic power optimization: Reduce the current under light load, and reduce the energy cost about 8% while 30% load.
- Data estimation: The energy saving effect of energy consumption during the life cycle can be converted to data such as kWh, CO2 emission, and amount, which can be used for directly reading by the host controller.



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## INOVANCE

# MD600 Series AC Drive

Stable, compact, simple application



### Features & functions

- Compact footprint
- Dual network ports for CAN communication, tool-free crimp terminals
- Energy saving algorithms
- Thermosyphon Technology for cooling
- Drive board coated with 100% tri-proof coating
- Independent air duct + intelligent fan for cooling
- Support V/F & SVC control function\*  
Note: SVC function coming soon...

**CANlink** **CANopen**



## Product family overview

**Next generation thermal technology**

- The heat transfer efficiency of the thermostatic plate is **more than 20 times higher** than that of conventional aluminum materials.
- \* Note: MD600 T2 models all designed with thermostatic plate.

**Drive board coated with 100% tri-proof coating**

- The drive circuit is effectively prevented from corrosion by salt spray in the environment, improving the product's environmental resistance.

**Independent air duct**

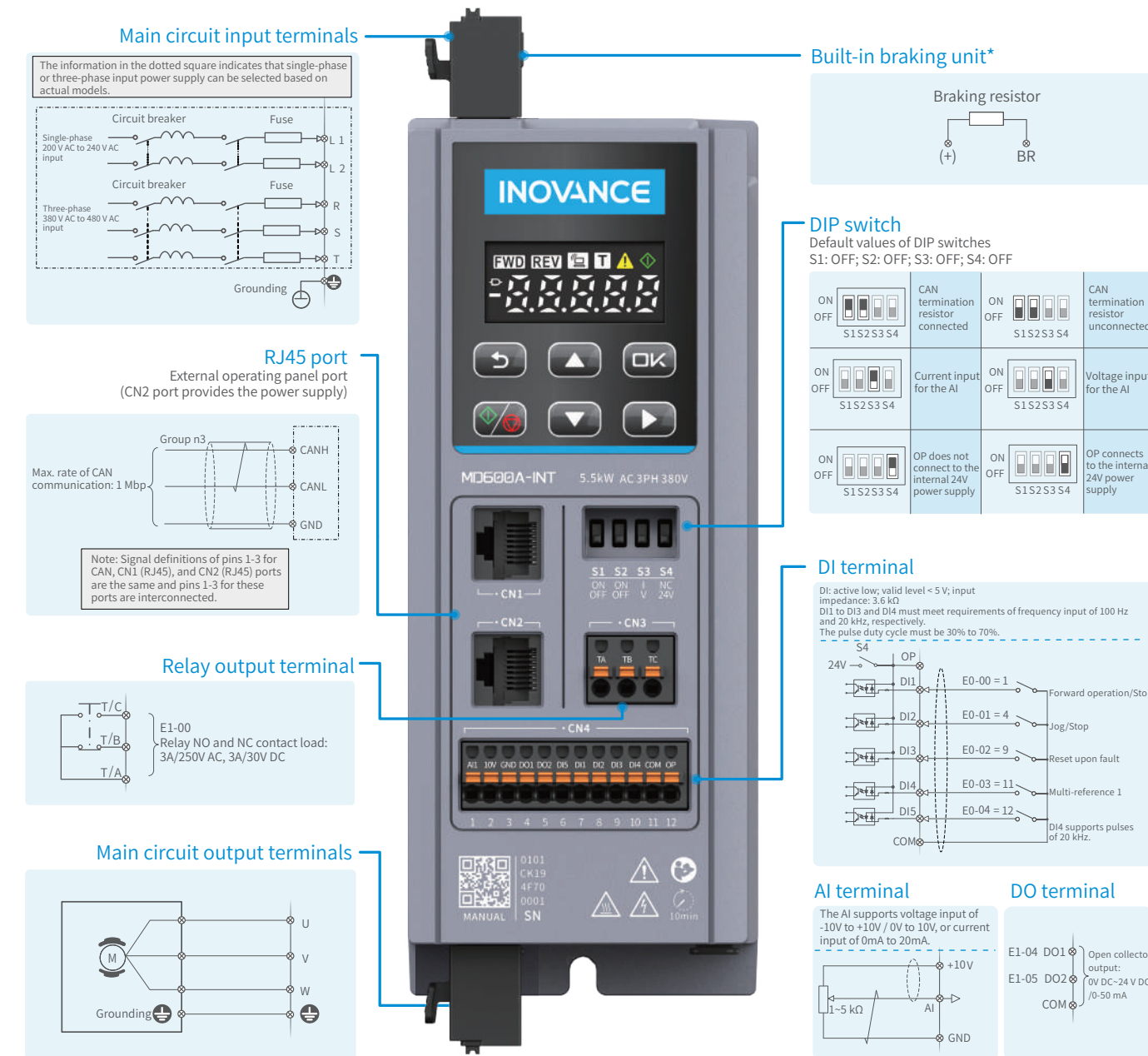
- Isolates foreign objects such as dust, cutting fluid, and conductive fibers from the drive board, improving reliability in harsh environment applications.

**Intelligent fan**

- The customized working system supports forward and reverse rotation to prevent foreign objects such as cotton lint from clogging the air duct and avoid manual maintenance.
- The fan drive is integrated into the drive board, which provides stable operation in harsh environments.
- Note: MD600 natural ventilation models do not have fan, more details please refer to the product selection.

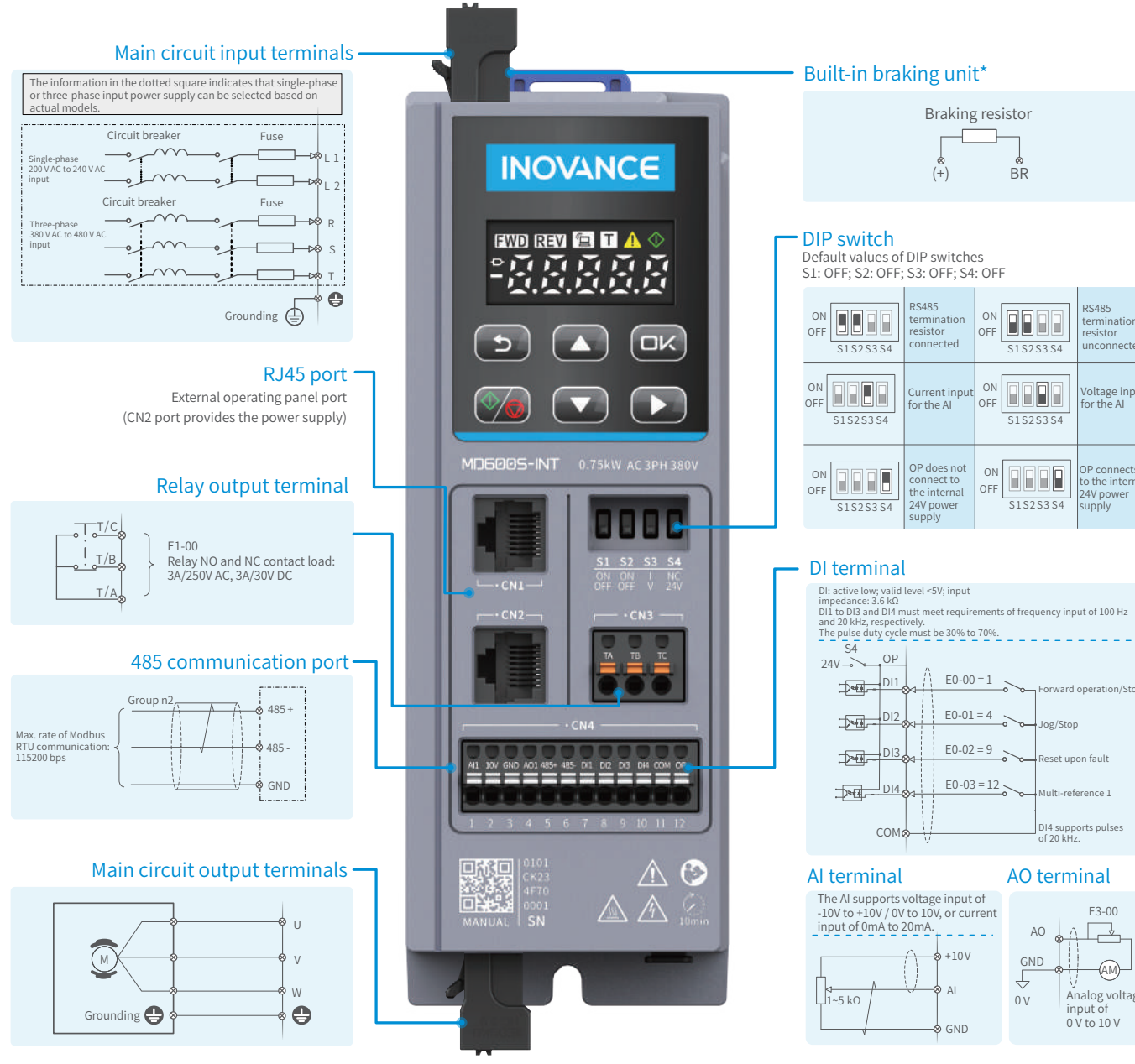
# Wiring diagram

## CAN model



\*Note: For details on the models of the built-in braking unit, please refer to the product selection.

## RS485 model



\*Note: For details on the models of the built-in braking unit, please refer to the product selection.

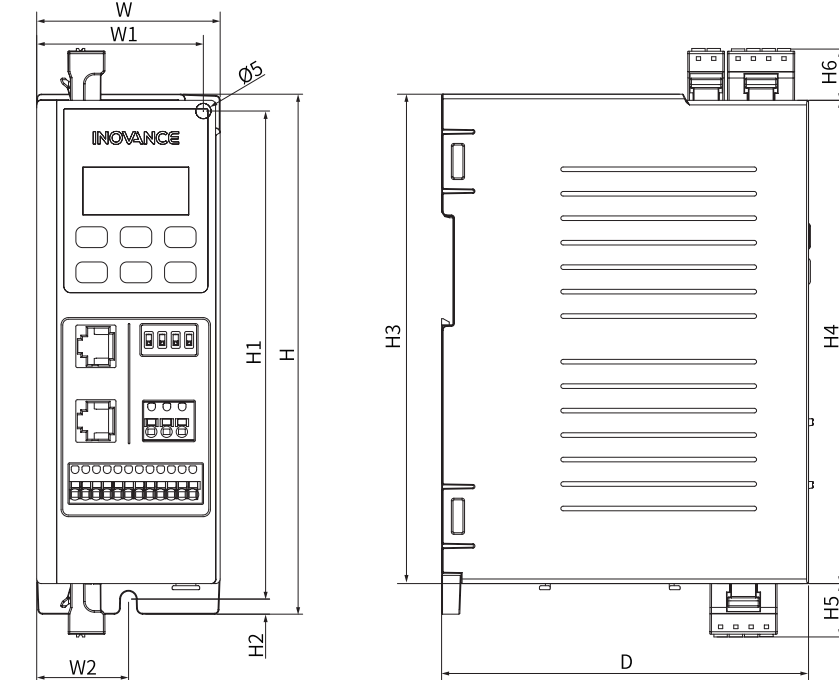
# Ordering code

MD600 S - 4T 5R5 B - INT  
① ② ③ ④ ⑤ ⑥

① Product series MD600 series AC drive	③ Voltage class 4T: Three-phase 380 V to 480 V 2S: Single-phase 200 V to 240 V	⑤ Braking unit B: with the braking unit None: without braking unit
② Model S: RS485 model A: CAN model	④ Output current 1R6: 1.6A 5R5: 5.5A ... 013: 13A (Note: R represents the decimal point ".")	⑥ Version INT: international version*

\*Note: The international version enjoys global warranty rights; otherwise, it does not.

# Dimensions



Structure	Mounting hole mm (in.)		Overall dimensions mm (in)									Mounting Hole Diameter mm (in.)	Weighing kg (lb)
	W1	W2	H1	H2	H3	H4	H5	H6	H	W	D		
T1	54.5 (2.15)	30 (1.18)	159.5 (6.28)	5 (0.2)	160 (6.30)	158 (6.22)	17.5 (0.69)	17 (0.67)	170 (6.69)	60 (2.36)	120 (4.72)	φ5 (0.20)	0.8 (1.76)
T2	62.5 (2.46)	34 (1.34)	159.5 (6.28)	5 (0.2)	160 (6.30)	158 (6.22)	22 (0.87)	24 (0.95)	170 (6.69)	68 (2.68)	140 (5.51)	φ5 (0.20)	1 (2.20)

# Selection chart

Model	Voltage class	Structure	Power (kW)	Rated input current (A)	Rated output current (A)	Cooling mode	Braking Unit	Interface
RS485 model								
MD600S-4T1R6-INT	Three-phase 380 V to 480 V	T1	0.37	1.9	1.6	Natural ventilation	×	Modbus - RTU 4*DI 1*AI 1*AO 1*RO
MD600S-4T2R3-INT	Three-phase 380 V to 480 V	T1	0.75	2.8	2.3	Natural ventilation	×	
MD600S-4T4R8-INT	Three-phase 380 V to 480 V	T1	1.5	5.9	4.8	Air cooling	×	
MD600S-4T5R5B-INT	Three-phase 380 V to 480 V	T1	2.2	6.7	5.5	Air cooling	✓	
MD600S-4T9R5B-INT	Three-phase 380 V to 480 V	T2	4	11.6	9.5	Air cooling	✓	
MD600S-4T013B-INT	Three-phase 380 V to 480 V	T2	5.5	15.8	13	Air cooling	✓	
MD600S-2S2R8-INT	Single-phase 200 V to 240 V	T1	0.37	6.2	2.8	Natural ventilation	×	
MD600S-2S4R6-INT	Single-phase 200 V to 240 V	T1	0.75	10.2	4.6	Air cooling	×	
MD600S-2S7R5B-INT	Single-phase 200 V to 240 V	T1	1.5	16.6	7.5	Air cooling	✓	
MD600S-2S010B-INT	Single-phase 200 V to 240 V	T2	2.2	22.2	10	Air cooling	✓	
CAN model								
MD600A-4T1R6-INT	Three-phase 380 V to 480 V	T1	0.37	1.9	1.6	Natural ventilation	×	CANlink communication CANopen communication 5*DI 2*DO 1*AI 1*RO
MD600A-4T2R3-INT	Three-phase 380 V to 480 V	T1	0.75	2.8	2.3	Natural ventilation	×	
MD600A-4T4R8-INT	Three-phase 380 V to 480 V	T1	1.5	5.9	4.8	Air cooling	×	
MD600A-4T5R5B-INT	Three-phase 380 V to 480 V	T1	2.2	6.7	5.5	Air cooling	✓	
MD600A-4T9R5B-INT	Three-phase 380 V to 480 V	T2	4	11.6	9.5	Air cooling	✓	
MD600A-4T013B-INT	Three-phase 380 V to 480 V	T2	5.5	15.8	13	Air cooling	✓	
MD600A-2S2R8-INT	Single-phase 200 V to 240 V	T1	0.37	6.2	2.8	Natural ventilation	×	
MD600A-2S4R6-INT	Single-phase 200 V to 240 V	T1	0.75	10.2	4.6	Air cooling	×	
MD600A-2S7R5B-INT	Single-phase 200 V to 240 V	T1	1.5	16.6	7.5	Air cooling	✓	
MD600A-2S010B-INT	Single-phase 200 V to 240 V	T2	2.2	22.2	10	Air cooling	✓	

## Accessories list

Type	Name	Model	Applicable Unit Model	Function
External Operating Panel	Intelligent keypad	SOP20-810	All models	External LCD operation panel, supports Chinese/English display, parameter copying, and connection to the background.
	SOP20-810 mounting base	CP600-BASE1	All models	Optional, used to install SOP20-810 to the cabinet door
	Operating panel extension cable	MDCAB	All models	3m standard 8-pin cable, can be connected to the operating panel through the network port
DIN guide rail-based installation	Mini-type basic keypad	MD-BP-M	All models	LED operating panel, supports simple speed adjustment by the rotary knob
	DIN rail	MD600-DGJ1	Only for T1 models	DIN rail
Spare parts	T1 accessory package without brake	\	Only for T1 model	Plug-in Terminal Blocks-Plugs-Shrapnel Wiring-/5.0mm-4P-Black-180°-R/L1 Position Anti-Misalignment-Package
	T1 accessory package with brake	\	Only for T1 model	Plug-in Terminal Blocks-Plugs-Shrapnel Wiring-/5.0mm-2P-Black-180°-Package
	T2 accessory package	9EDGKD-HC-5.0-10P-13-09A(H)	Only for T2 model	Plug-in Terminal Blocks-Plugs-Shrapnel Wiring-/7.5mm-10P-Black-180°-Package
	T1 fan	YY4015H12B	Only for T1 model	DC Fan-24V-4.44W-15.88CFM-55.4dB(A)-44*40*15mm
	T2 fan	SB120520BFCNR	Only for T2 model	DC Fan-12V-5.04W-28.79CFM-60.5dB(A)-55*50*20mm