

Product family overview

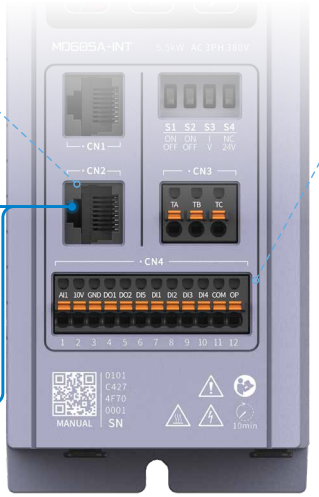
Dual network ports for CAN communication

Optional speed regulator panel
Simple speed regulation of individual equipment



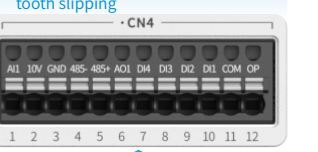
Optional LCD panel for easy parameters copying





Tool-free crimp terminals
60% improvement in assembly efficiency

✓ No screws required, prevent terminal tooth slipping



✗ MD200: 22 screws, complicated assembly



CANlink
CANopen

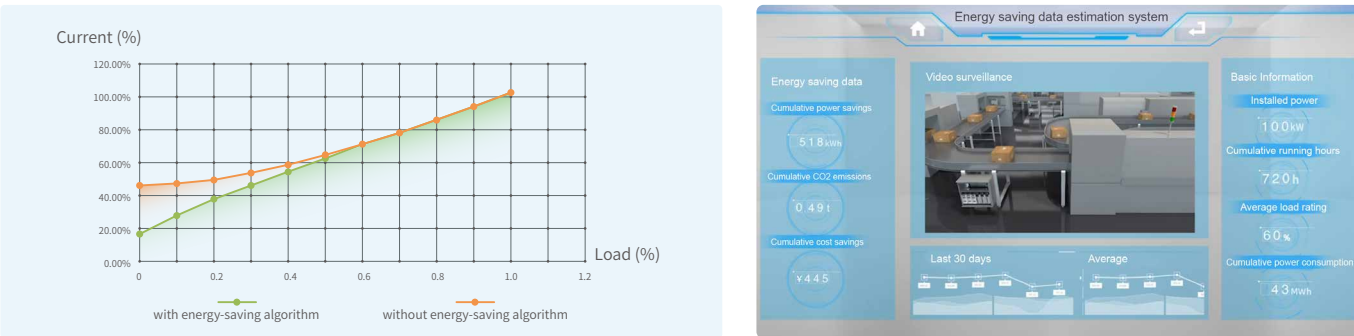
Compact for flexible installation

- 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.
- T1 is build-in DIN guide rail-based installation



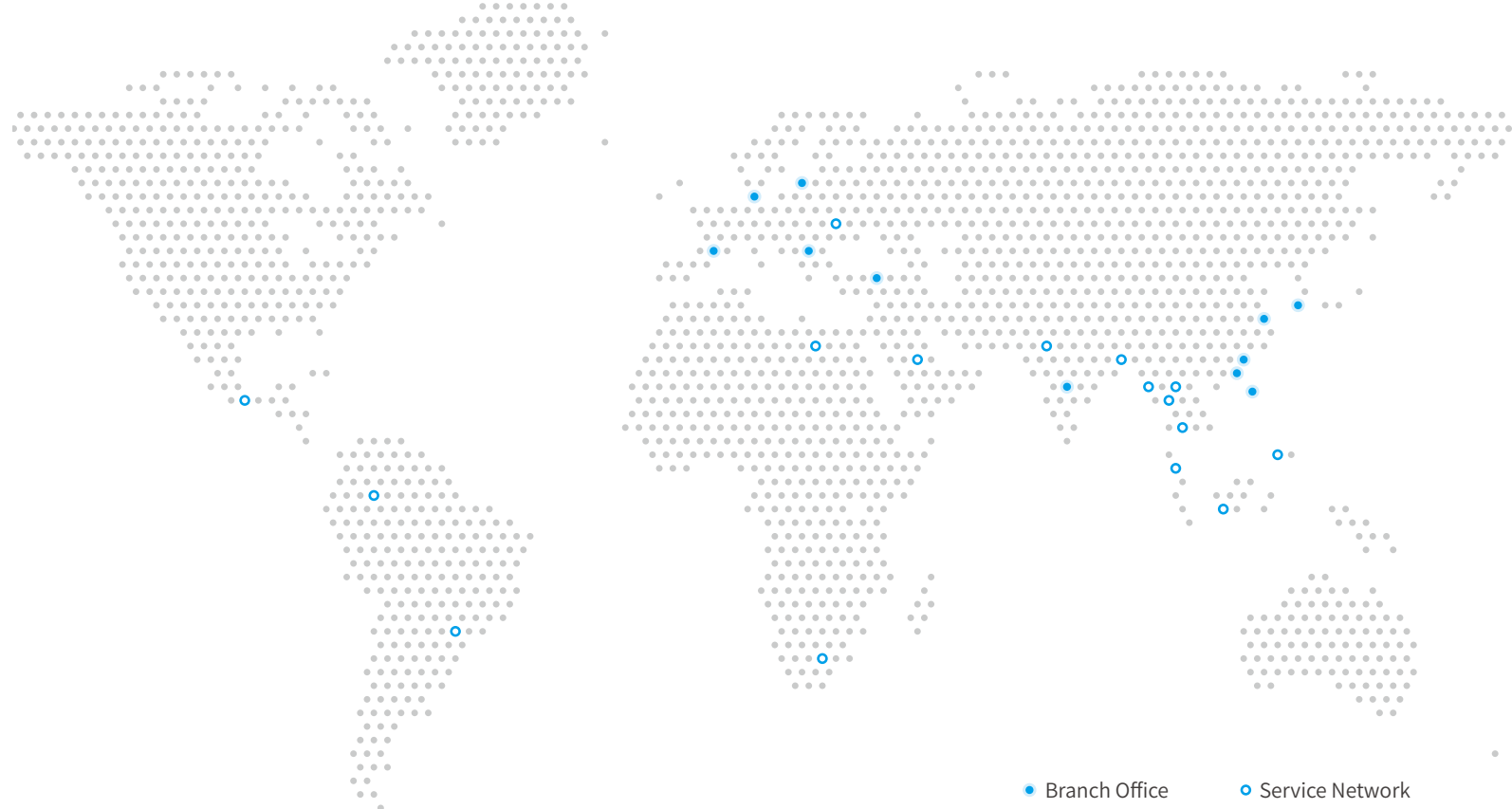
Energy saving

- 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 port 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 cooling fan
- Induction (V/f, SVC) & PM synchronous(SVC) motor control

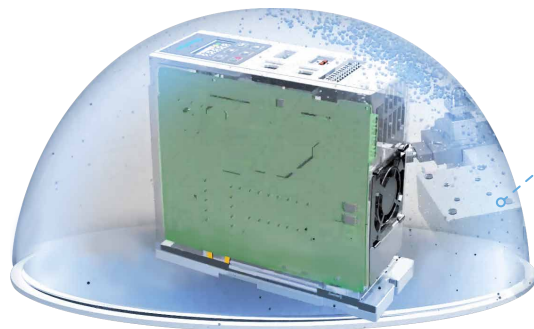


Product family overview



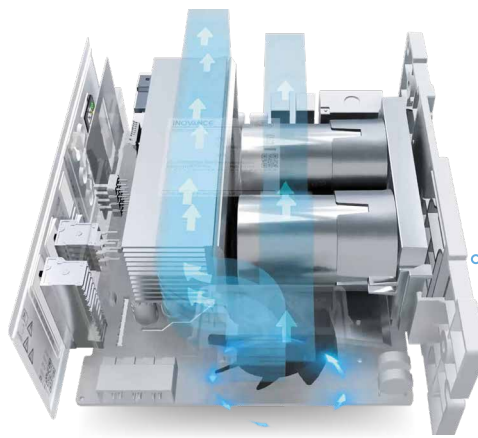
Next generation thermal technology

- 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.



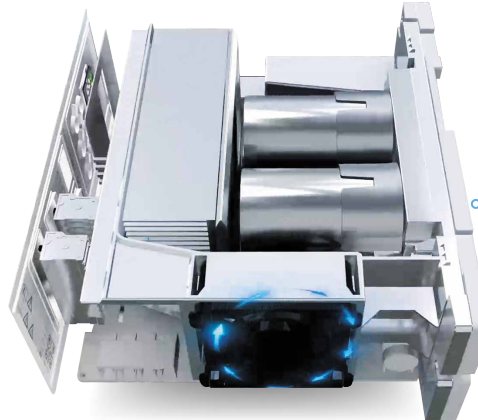
Drive board coated with 100% tri-proof coating

- 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.



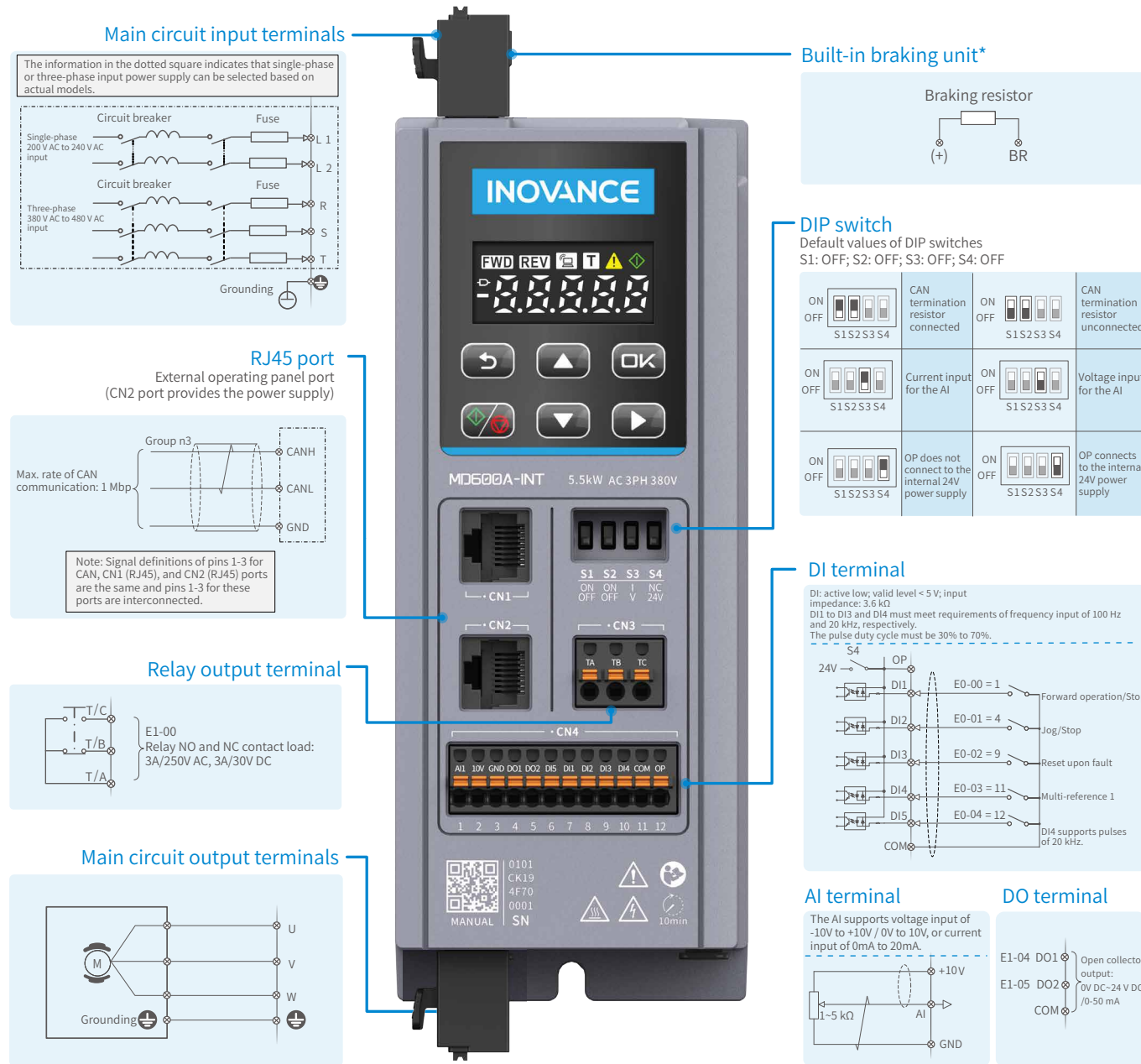
Intelligent fan

- 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.

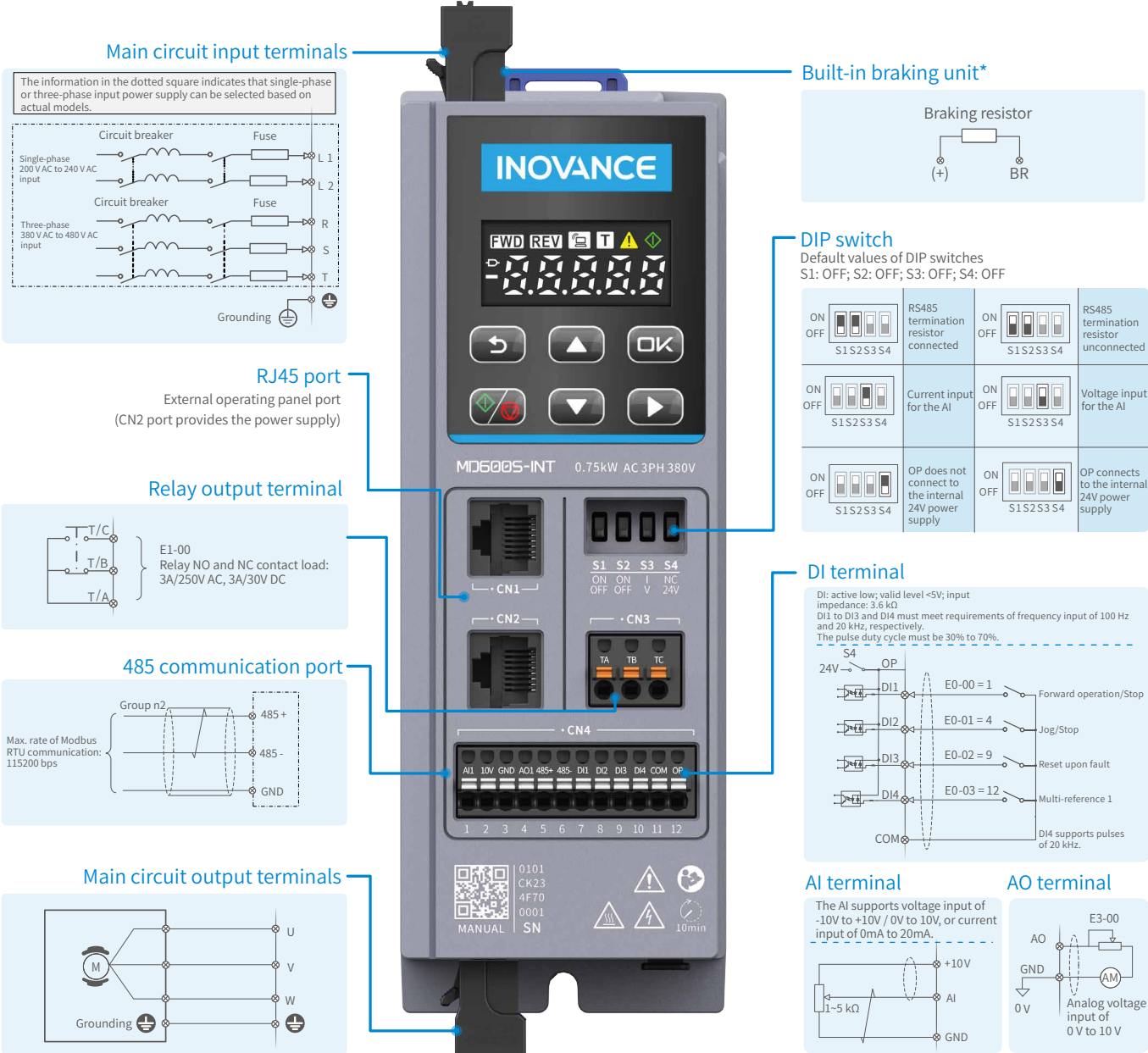
Wiring diagram

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.

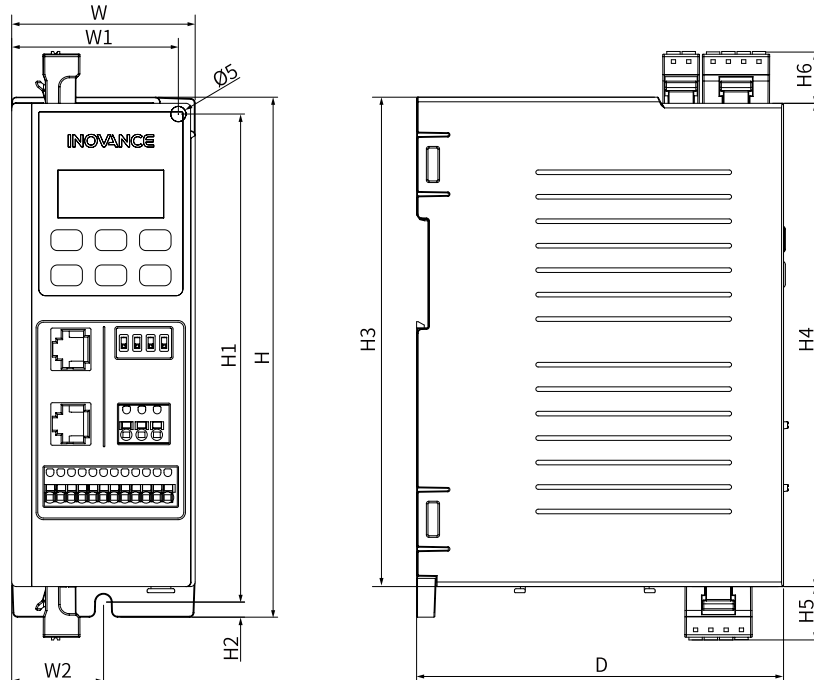
Ordering code

MD600 S - 4T 5R5 B - INT

① 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
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 (21.5)	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	Interface
RS485 model							
MD600S-4T1R6B-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-4T2R3B-INT	Three-phase 380 V to 480 V	T1	0.75	2.8	2.3	Natural ventilation	
MD600S-4T4R8B-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-2S2R8B-INT	Single-phase 200 V to 240 V	T1	0.37	6.2	2.8	Natural ventilation	
MD600S-2S4R6B-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-4T1R6B-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-4T2R3B-INT	Three-phase 380 V to 480 V	T1	0.75	2.8	2.3	Natural ventilation	
MD600A-4T4R8B-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-2S2R8B-INT	Single-phase 200 V to 240 V	T1	0.37	6.2	2.8	Natural ventilation	
MD600A-2S4R6B-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	

Derating Coefficient of MD600 Series AC Drive

Power	Rated output current	Derating coefficient of carrier frequency													
heavy load(kW)	heavy load(A)	4kHz	5kHz	6kHz	7kHz	8kHz	9kHz	10kHz	11kHz	12kHz	13kHz	14kHz	15kHz	16kHz	
Three-phase 400 V (SVPWM_DPWM1)															
0.37	1.6	100.00%	84.67%	72.77%	63.32%	55.65%	49.34%	44.04%	39.53%	35.66%	32.30%	29.36%	26.77%	24.44%	
0.75	2.3	100.00%	86.17%	75.03%	65.89%	58.33%	51.96%	46.55%	41.93%	37.89%	34.34%	31.22%	28.43%	25.95%	
1.5	4.8	100.00%	88.21%	78.47%	70.26%	63.38%	57.55%	52.69%	48.61%	45.09%	41.99%	39.25%	36.80%	34.61%	
2.2	5.5	100.00%	89.72%	80.91%	73.38%	66.85%	61.14%	56.18%	51.83%	48.03%	44.75%	41.87%	39.30%	36.97%	
4	9.5	100.00%	88.34%	78.47%	70.09%	62.95%	56.87%	51.59%	46.95%	42.86%	39.26%	36.10%	33.31%	30.83%	
5.5	13	100.00%	92.48%	85.84%	79.81%	74.37%	69.43%	64.95%	60.88%	57.15%	53.77%	50.66%	47.82%	45.22%	
Single-phase 230 V (SVPWM_DPWM1)															
0.37	2.8	100.00%	96.05%	92.05%	88.17%	84.33%	80.63%	77.08%	73.68%	70.54%	67.61%	64.91%	62.25%	59.54%	
0.75	4.6	100.00%	94.49%	88.97%	83.74%	78.89%	74.15%	69.64%	65.35%	61.31%	57.43%	53.78%	50.40%	47.25%	
1.5	7.5	100.00%	96.28%	92.53%	88.99%	85.62%	82.45%	79.43%	76.58%	73.87%	71.32%	68.89%	66.58%	64.41%	
2.2	10	100.00%	96.20%	92.64%	89.27%	86.08%	83.06%	80.20%	77.48%	74.90%	72.46%	70.14%	67.93%	65.82%	

Accessories list

Type	Name	Model	Applicable Unit Model	Function
External operating panel	Operating panel extension cable	MDCAB	All models	3m standard 8-pin cable, can be connected to the operating panel through the network port
	Mini-type basic keypad	MD-BP-M	All models	LED operating panel, supports simple speed adjustment by the rotary knob
	Hand-held LCD keypad	SOP-20-810	All models	LCD operating panel, supports Chinese/English display, parameter copy, quick debugging, and can connect with PC.
DIN guide rail-based installation	DIN rail	MD600-DGJ1	Only for T1 models	DIN rail
Spare parts	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