



Digitized Automation for a Changing World

Delta Compact Multi-Drive MX300 Series



www.deltaww.com



Compact Multi-Drive MX300 Series

Bilateral Installation & Compact Size: The Winning Combination

Industries are pursuing smart manufacturing and high efficiency production, which makes space and time utilization the key to smart factory upgrades.

To meet the rapid changes of the market, Delta has newly introduced its Compact Multi-Drive MX300 Series. Inheriting the outstanding performance, diverse applications, high quality, and energy saving advantages of Delta's AC motor drives, the MX300 Series features a multi-axis control by a modular structure. The multi-axis modular structure with one rectifier module and single/double/triple-axis inverter modules significantly saves cabinet space, accessories, and peripheral devices, reducing commissioning and maintenance time as well as Total Cost of Ownership (TCO). Compared with the traditional single drive structure, the Compact Multi-Drive MX300 Series has the advantages of optimal space, quick mounting, simple commissioning, and easy networking, which efficiently utilize limited space and enhance production efficiency, helping customers stay competitive in this ever-changing market.

Delta has been continuously dedicated to research, development, and innovation as well as providing high quality products and excellent aftersales maintenance service to establish smart production lines and embrace "Digitized Automation for a Changing World" with global customers.





Table of Contents

Multi-Axis Modular Structure	4
Compact Multi-Drive	6
• Open-Loop Control Applications with Multiple Low-Power Axes	
• Applications	
Features	12
• Compact Size	
• Friendly Mounting	
• Smooth Networking	
• Energy Saving	
• High Performance	
• High Reliability	
Appearance	22
Wiring	23
Dimensions	24
Mounting	26
Models Overview	27
Model Name Explanation	27
Specifications	29
Model Selection	32
Ordering Information	33
Accessories	34

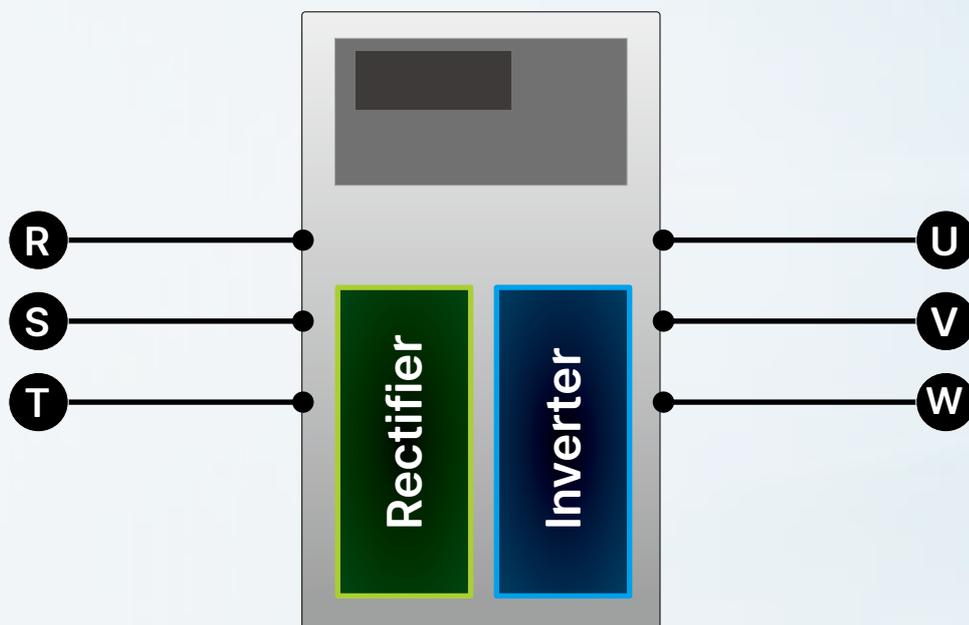
Multi-Axis Modular Structure

How does a drive work?

Single Drive Structure



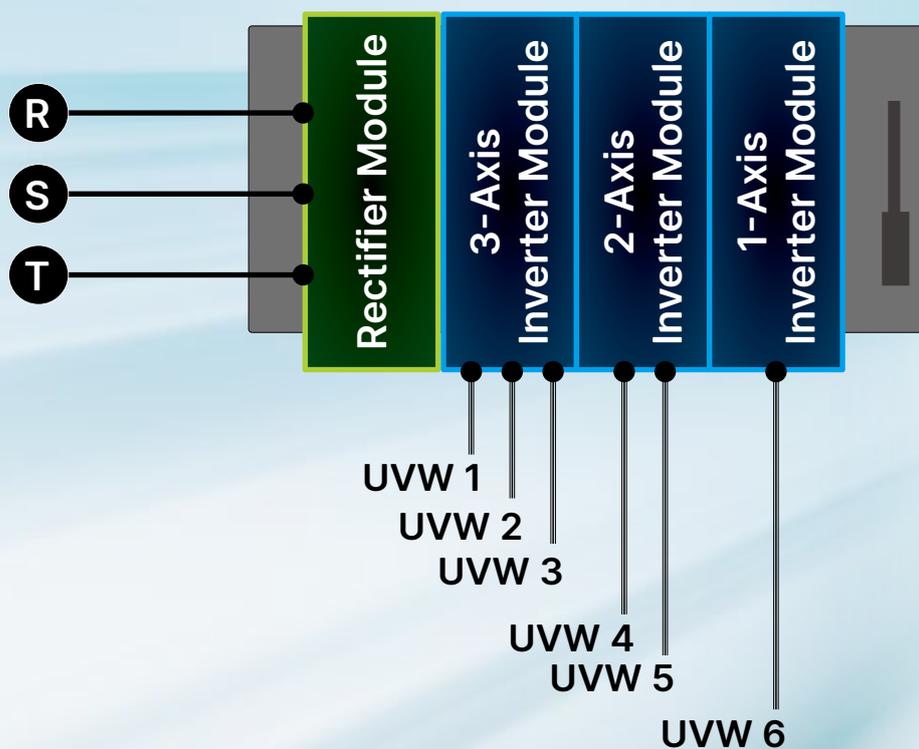
Single Input, Single Output



Multi-Axis Modular Structure

In the multi-axis modular structure, one rectifier module supports multiple inverter modules to control motors.

Single Input, Multiple Output



Compact Multi-Drive MX300 Series

Rectifier module; Single / Double / Triple-Axis Inverter Module;
Transmission Module

Rectifier Module

- Input voltage: 230V 1-phase, 460V 3-phase
- Max. output power: 230V 3.7kW, 460V 18.5kW
- Supports up to 6 inverter modules
- Supports up to 15 axes
- Two built-in RJ45 ports for Modbus and CANopen



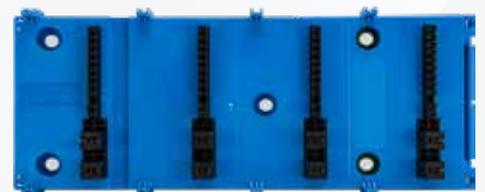
Inverter Module

- Max. output power: 230V 2.2kW, 460V 7.5kW
- Max. output: 3-axis inverter module supports 3 outputs
- Wiring: Detachable terminal for simple wiring



Transmission Module

Connects rectifier and inverter modules, establishing a common DC bus structure



Modular structure, flexible configuration

Users can choose different inverter module configurations based on requirements



Bilateral Installation

(6-axis output as an example)

Option 1

1-Axis
Inverter
Module
x2



+

2-Axis
Inverter
Module
x2



Option 2: left / right side

3-Axis
Inverter
Module
x2



Option 3: left / right side

2-Axis
Inverter
Module
x3



Compact Multi-Drive MX300 Series



Open-loop control applications with multiple low-power axes

Suitable for machines with multiple low-power motors such as glass edging machines, woodworking machines, car wash machines, and more. Also applicable to production lines such as conveyor, packaging machine, material sorting machine, and more.

Multi-axis modular structure

Greatly saves on cabinet space, wiring, and accessories for cost efficiency. Common DC bus design reduces energy consumption and carbon emissions.



User Demands

Cost Efficiency

User Friendly

Communication & Networking

Compact Multi-Drive MX300 Series



Compact Size

- Saves cabinet space/wiring/accessories



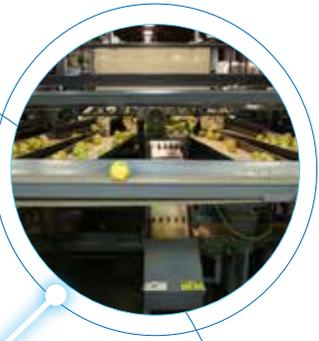
Friendly Mounting

- Simple mounting & replacement
- Detachable terminals for easy wiring



Smooth Networking

- Two built-in RJ45 ports
- Supports Modbus and CANopen



Reduce Carbon Emissions

Outstanding Capability

Long-Term Stability

Compact Multi-Drive MX300 Series



Energy Saving

- Common DC bus for energy efficiency

High Performance

- Max. 200% starting torque
- 150% 60 sec. overload capacity
- Supports IM/PM motors

High Reliability

- High vibration suppression
- Enhanced PCB coating
- Circuit protection

Applications



Conveyor

- Multi-axis modular structure saves cabinet space
- Max. 200% starting torque to prevent stalled motors
- Supports jog function for commissioning
- Parameters duplication function reduces effort needed when replacing inverter modules
- Supports PM motor open-loop operation for energy efficiency
- Long motor cable up to 100 meters without additional components



Woodworking Machine

- Multi-axis modular structure saves cabinet space
- Common DC bus for energy saving
- Detachable terminals make the assembly underneath the machine more convenient
- Duplicates whole system parameters once through an extensional keypad to enhance commission efficiency
- Optional braking chopper optimizes space utilization and cost efficiency
- Built-in CANopen enhances communication quality
- Side rib fasten design achieves high vibration suppression
- IP40 with individual flow path design prevents foreign material from entering the mainboard



Packaging Machine

- Multi-axis modular structure saves cabinet space
- Common DC bus for energy saving
- Built-in CANopen enhances communication quality
- Side rib fasten design achieves high vibration suppression
- Rectifier module with optional braking chopper optimizes space utilization and cost efficiency



Material Sorting Machine

- Multi-axis modular structure saves cabinet space
- Built-in CANopen enhances communication quality
- Supports IM/PM motors
- Side rib fasten design achieves high vibration suppression
- Rectifier module with optional braking chopper optimizes space utilization and cost efficiency
- Momentary power loss speed tracking function ensures stable operation, enhancing production efficiency



Car Wash Machine

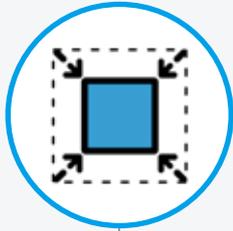
- Multi-axis modular structure saves cabinet space
- Common DC bus for energy saving
- Built-in CANopen enhances communication quality
- Side rib fasten design achieves high vibration suppression
- 100% PCB coating strengthens moisture resistance capacity



Encrusting Machine

- Multi-axis modular structure saves cabinet space
- Common DC bus for energy saving
- Built-in CANopen enhances communication quality
- Side rib fasten design achieves high vibration suppression
- Rectifier module with optional braking chopper optimizes space utilization and cost efficiency

Features



Compact Size

- Controls up to 6 inverter modules, 15 axes
- Modular structure saves cabinet space
- 3-axis inverter module achieves high power density



High Reliability

- High vibration suppression
- 100% PCB coating for moisture, corrosion, dust resistance
- Circuit protection extends module life



Friendly Mounting

- Bilateral installation
- Plug-in installation for fast setup
- One interface commissions multi-axis parameters



Smooth Networking

- Supports Modbus and CANopen
- Connects and controls up to 15 axes
- USB Type-C with DIADesigner*

*Integrated Development & Engineering Software



Energy Saving

- Regenerative power on a common DC bus ensures energy efficiency



High Performance

- Max. 200% starting torque
- 150% 60 sec. overload capacity
- Supports IM/PM motors

Compact Size

Book shape with equal height and depth is ideal for space utilization

- Rectifier Module (W × D × H = 98 × 160 × 160 mm)
- Inverter Module (W × D × H = 49 × 160 × 160 mm)



High power density

Under 3-axis operation condition, users have the following options

Option 1: Three 1-axis inverter modules

Option 2: One 1-axis and one 2-axis inverter modules save space by 33%, compared with Option 1

Option 3: One 3-axis inverter module saves space by 66%, compared with Option 1

Option 1



Option 2

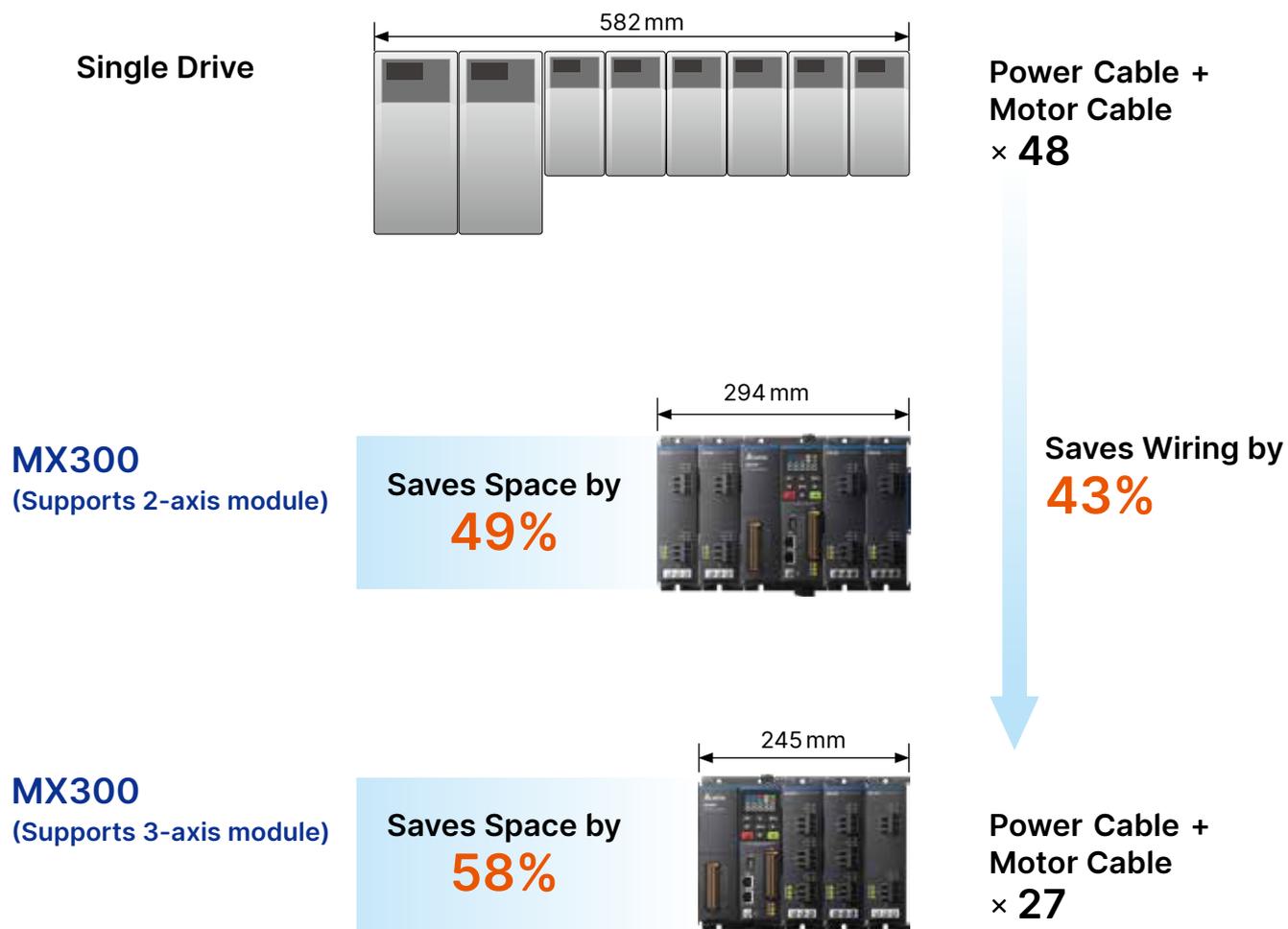


Option 3



Saves cabinet space + wiring + accessories = cost efficiency

- Multi-drive saves cabinet space and cables
- Unifies screw hole location between modules for simple installation



Note: Two 3.7kW drives with six 0.75kW drives as an example

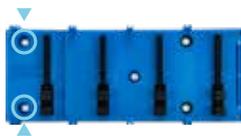
Friendly Mounting

Plug-in installation saves set-up effort

- Saves installation time by 30%
- Single-/Dual-sided installation optimizes space utilization

Single-Sided Installation Steps

- 1 Fasten one transmission module



- 2 Screw on the rectifier module



- 3 Mount the inverter module one by one



- 4 Fasten inverter modules



Dual-Sided Installation Steps

- 1 Fasten two pieces of transmission modules



- 2 Screw on the rectifier module across the middle of two transmission modules



- 3 Mount the inverter module one by one



- 4 Fasten inverter modules



Quick replacement

For maintenance, modules can be replaced separately

Replacement Steps

- 1 Power off. Remove motor terminals



- 3 Remove the inverter module and mount the new module



- 2 Unfasten screws fixed on inverter modules

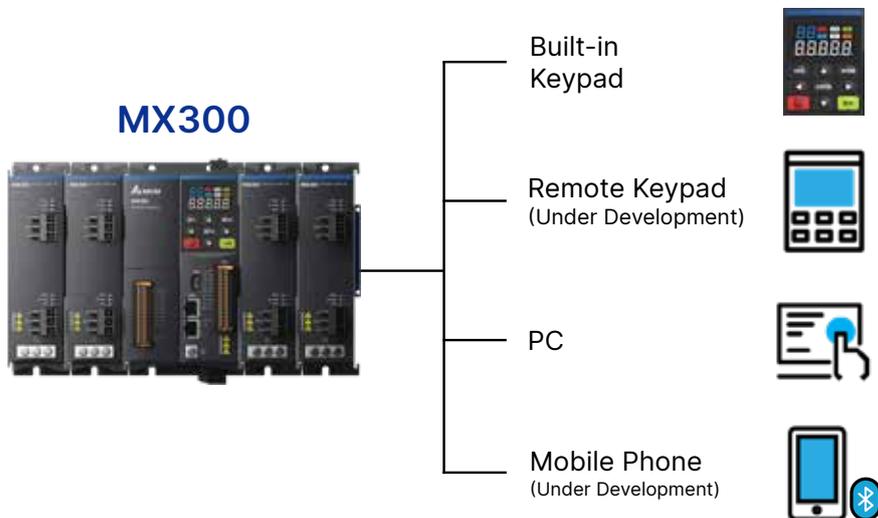


- 4 Plug in motor terminals. Power on. Restore parameters through the rectifier module



One interface commissions multi-axis parameters

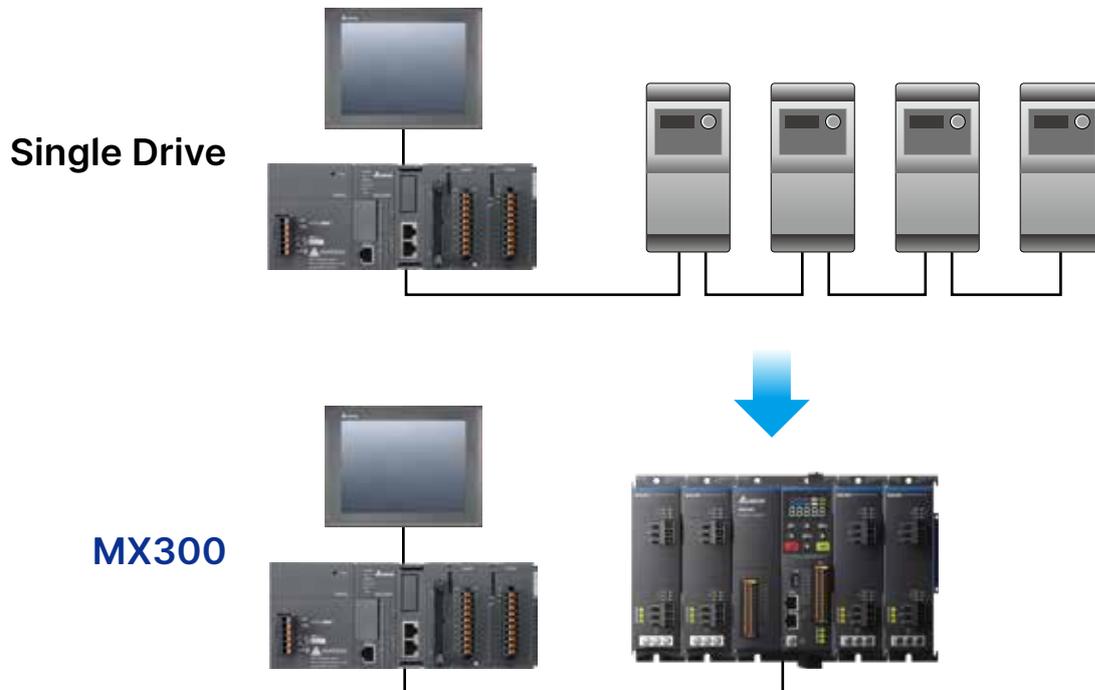
Parameters of each axis can be stored and duplicated



Smooth Networking

One cable connects multiple axes

Only one cable is needed for cable saving



PC software facilitates multi-axis commissioning

Connects with the DIADesigner (Integrated Development & Engineering Software) via built-in USB Type-C port to build a network topology and commission parameters *Under Development

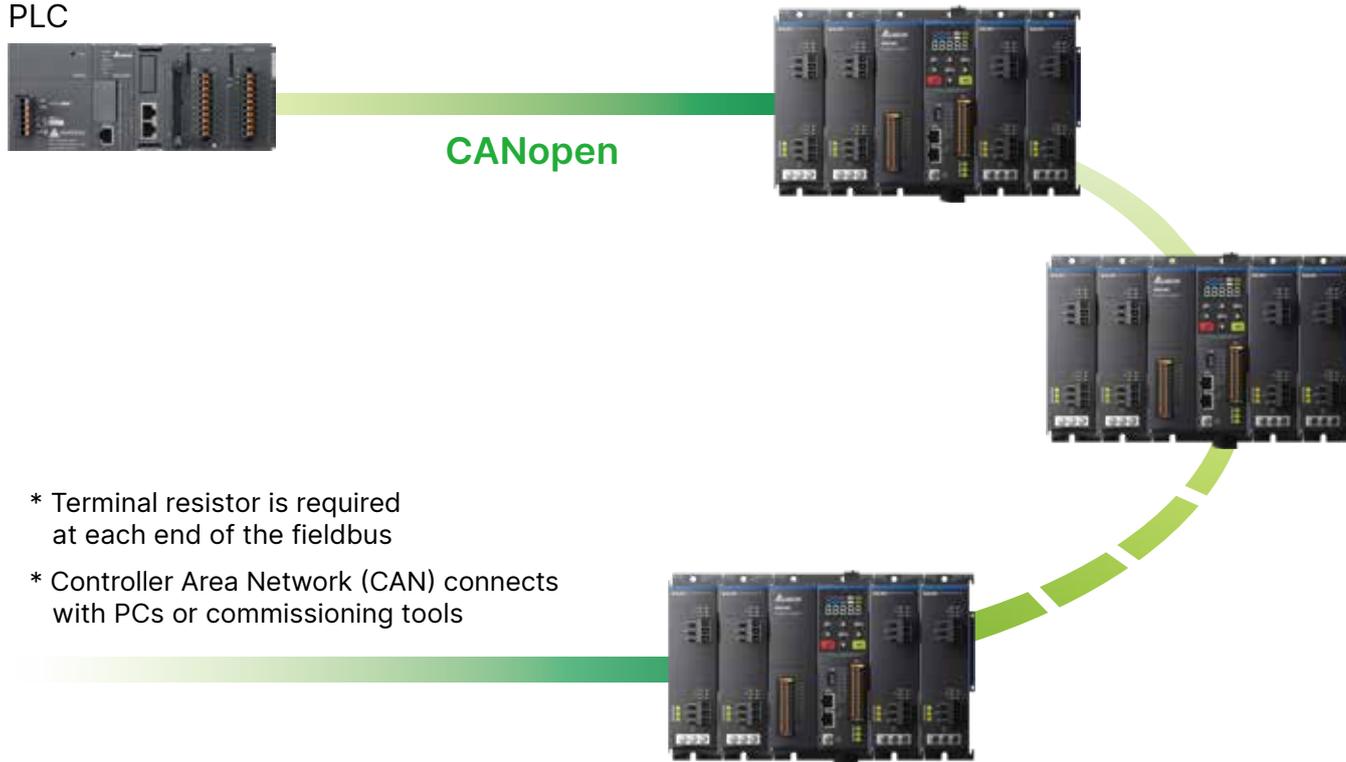


Built-in CANopen

Dual RJ45 ports for easy connection on multiple drives

Fieldbus Topology Structure

PLC



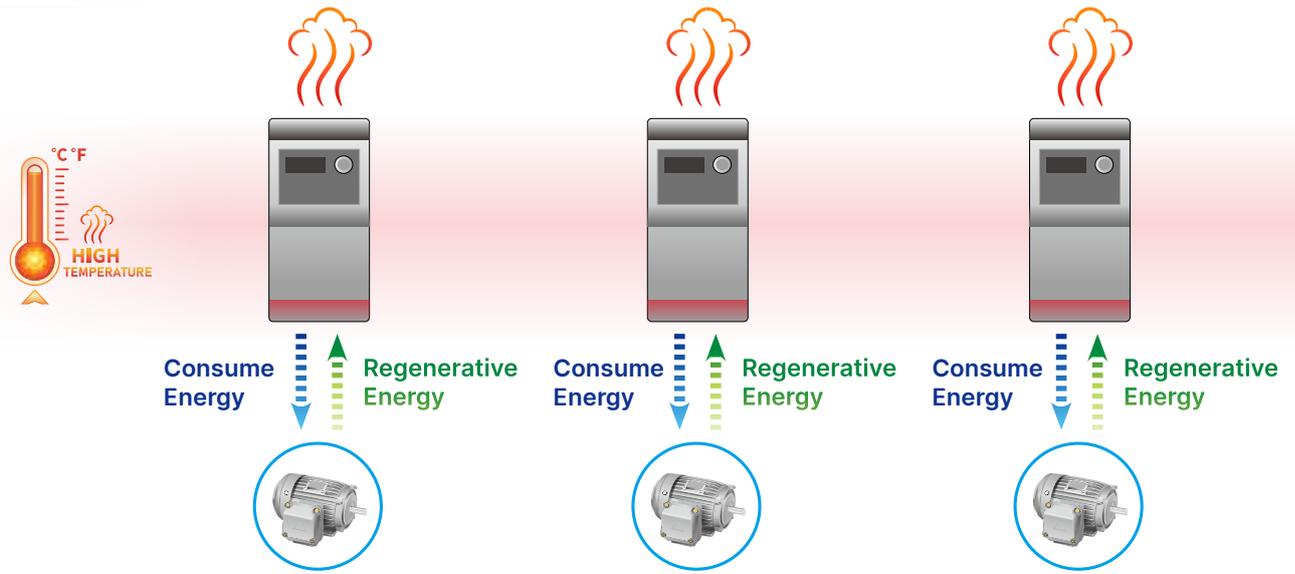
- * Terminal resistor is required at each end of the fieldbus
- * Controller Area Network (CAN) connects with PCs or commissioning tools

Energy Saving

Regenerative power on a common DC bus ensures energy efficiency

Single Drive

The drive's braking unit dissipates the regenerative energy as heat



Multi-Axis Modular

- Axes are in a common DC bus configuration
- Regenerative power is fed back to the common DC bus and can be reused
- Less brake resistor needed for energy saving



High Performance

Supports IM/PM motors

Equipped with 2 independent IM control parameter sets



SPM Motors



IPM Motors



IM Motors

High Reliability

Vibration suppression

Side rib fasten design to achieve high vibration suppression

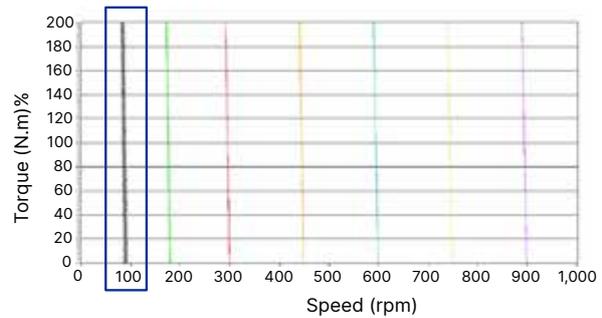


Circuit protection

Breakdown on single module does not affect other modules, which extends module life

High starting torque

Delivers 200% high starting torque with a low speed control of 3Hz and provides outstanding machine stability. Suitable for dynamic loading applications



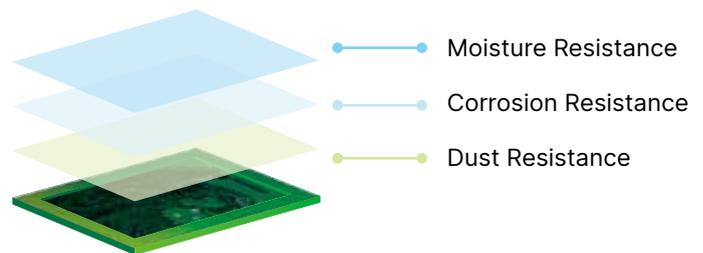
Torque below 200% remains the preset speed

High overload capacity

Outstanding overload capacity with rated current 150% for 60 seconds; 200% for 3 seconds

Enhanced PCB coating

100% PCB coating extends the lifespan of the drive operating in harsh environments or under corrosive gas exposure (e.g., salt mist, SO₂, O₃, H₂S, and more). Compliant with the IEC 60721-3-3 Class 3C3 standard



IP40 rated

Individual flow path design to prevent foreign material from entering mainboard

Long motor cable

Long motor cable up to 100 meters without additional component

Appearance

Rectifier Module

- Up to 15 axes
- Mounts inverter modules on both sides

1-Axis Inverter Module

2-Axis Inverter Module

3-Axis Inverter Module

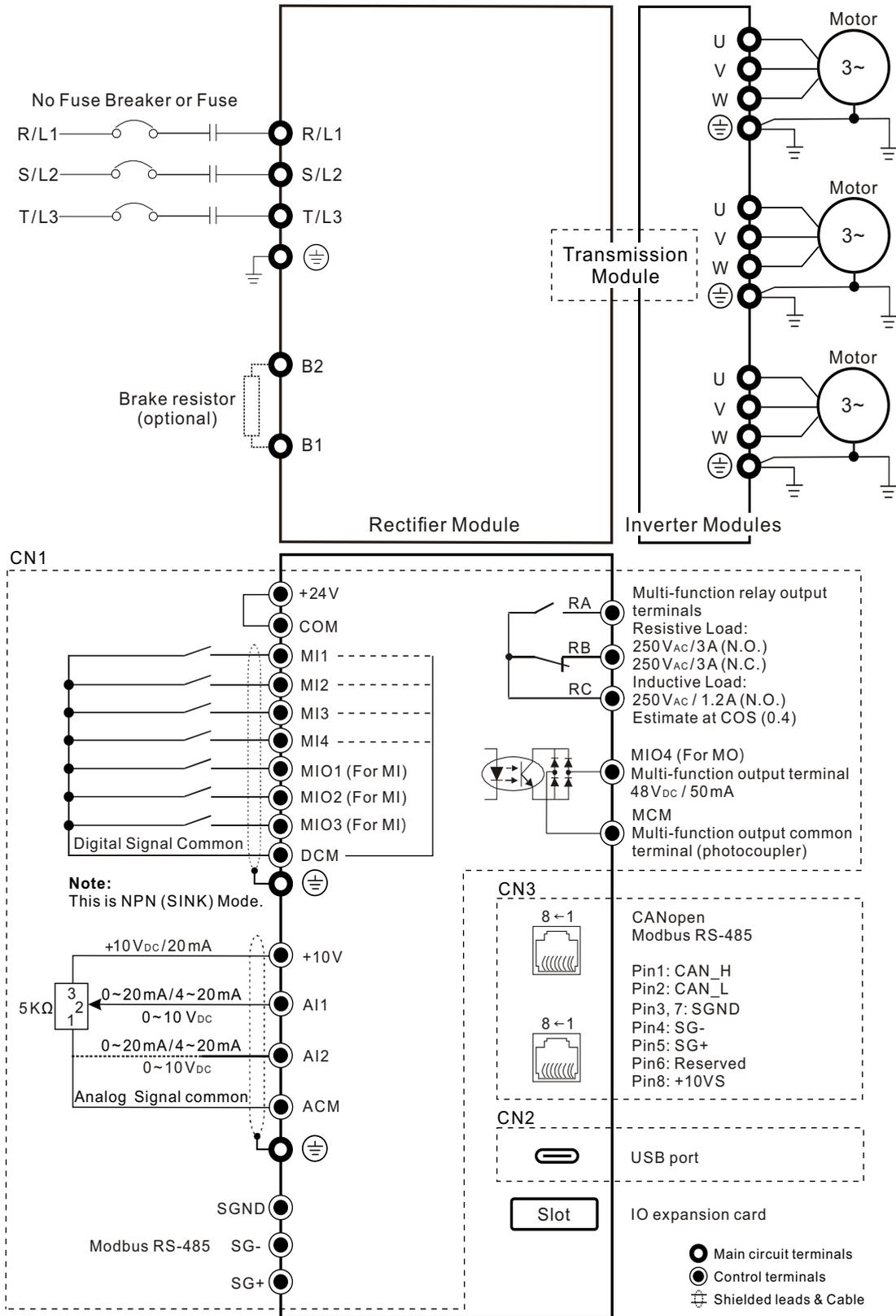


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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1 Ground terminal (UVW)</p> <p>2 Ground terminal (RST)</p> <p>3 RS-485/CANopen connector (CN3)</p> <ul style="list-style-type: none"> • Supports Modbus and CANopen <p>4 USB Type-C connector (CN2)</p> <ul style="list-style-type: none"> • Connects to PC and Integrated Development & Engineering Software DIADesigner <p>5 I/O signal connector (CN1)</p> <ul style="list-style-type: none"> • Digital input: 4 channels • Digital input/output: 4 channels • Relay: 1 channel, RA/RB/RC • Analog input: 2 channels, 0~10V/0~20mA/4~20mA <p>6 Machine information label area</p> | <p>7 Motor terminals (U, V, W)</p> <ul style="list-style-type: none"> • Supports IM/PM <p>8 Status indicator (PWR, RUN, ALM)</p> <p>9 Main circuit input power (R, S, T)</p> <p>4 Brake resistor interface (B1, B2)</p> <ul style="list-style-type: none"> • Models with built-in brake unit <p>10 I/O extension card (optional)</p> <p>11 Transmission module</p> <ul style="list-style-type: none"> • Connects rectifier and inverter modules • Supports 2 ~ 3 inverter modules |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Wiring

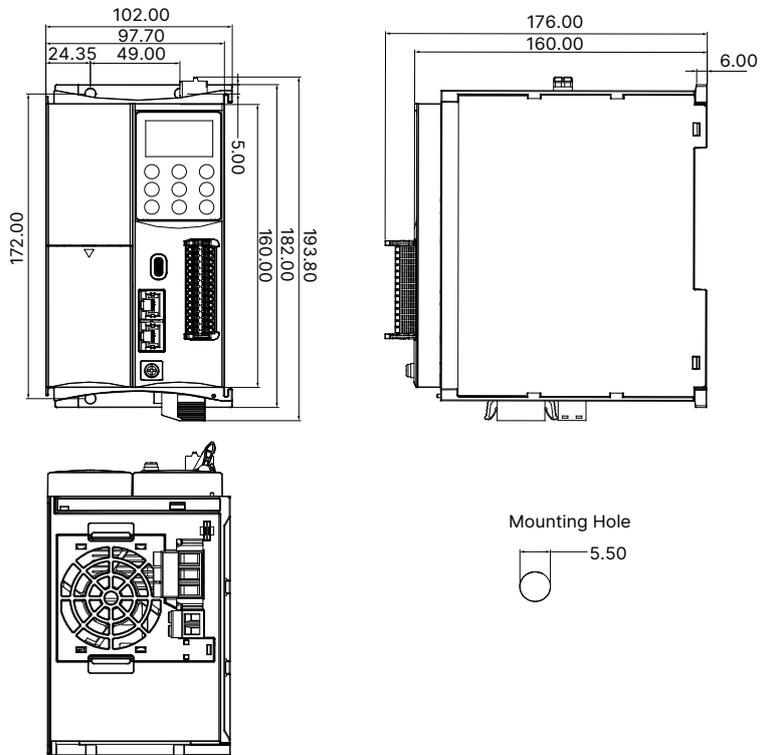
Input: 1-phase / 3-phase power

-Take rectifier module with 3-axis inverter module as an example

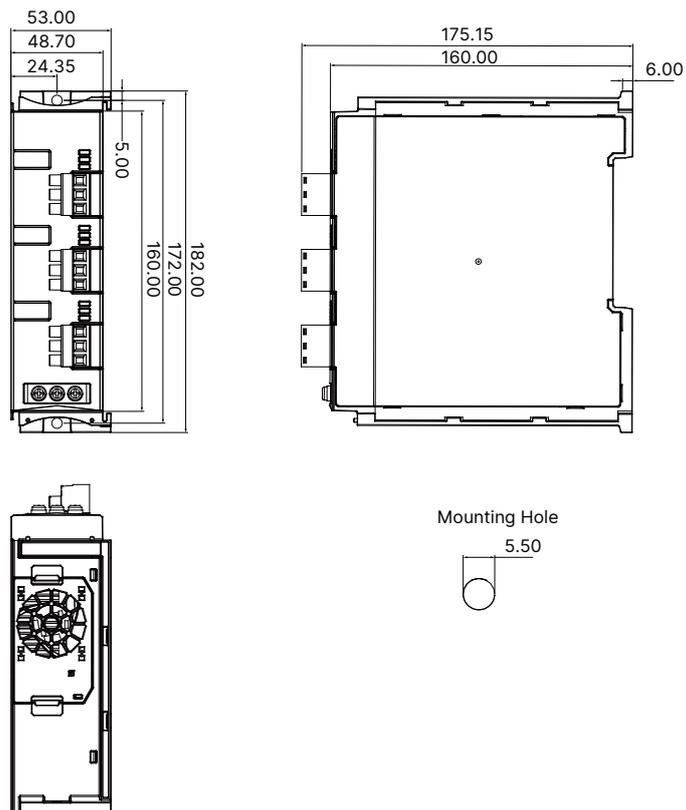


Dimensions Unit: mm

Rectifier Module

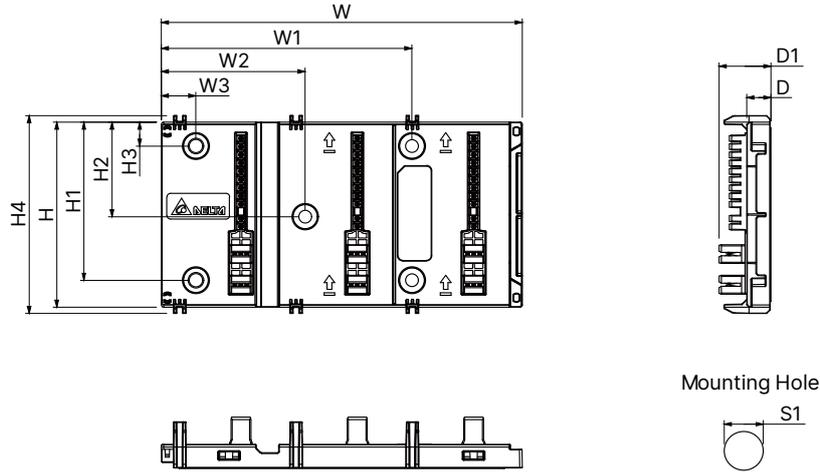


Inverter Module

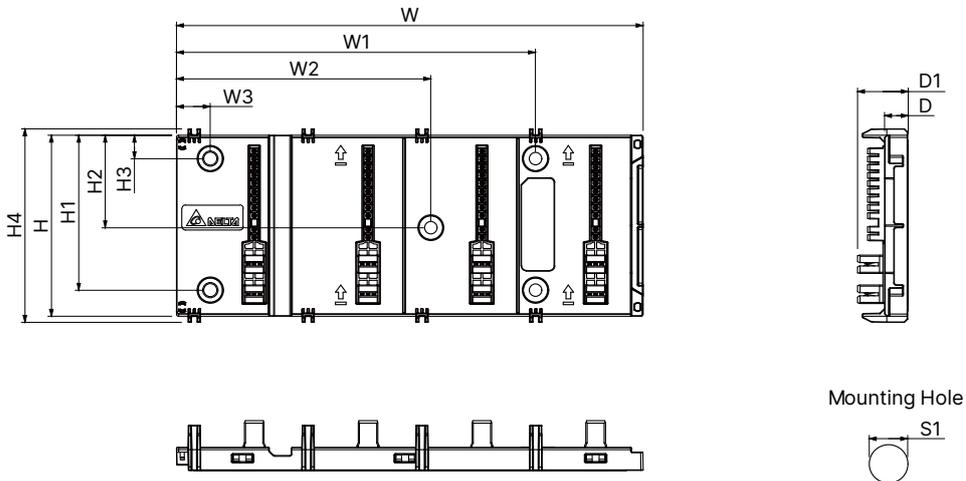


Transmission Module

Supports 2 inverter modules MKM-DR2M



Supports 3 inverter modules MKM-DR3M



Unit: mm

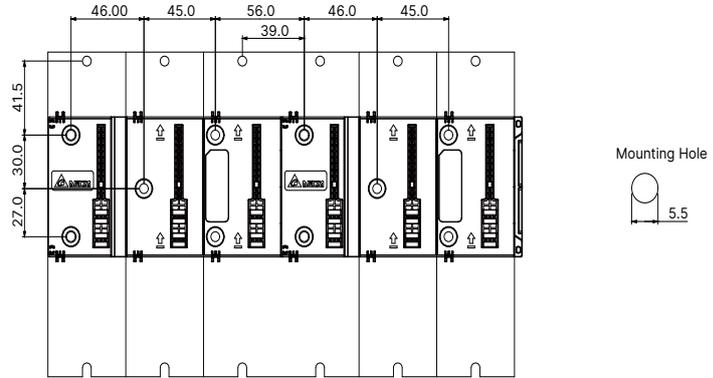
	W	W1	W2	W3	H	H1	H2	H3	H4	D	D1	S1
MKM-DR2M	151.95	105.5	60.5	14.5	78.6	67.25	40.25	10.25	84	10.2	21.8	5.5
MKM-DR3M	200.95	154.5	109.5									

Mounting (Please lock screws by following mounting size)

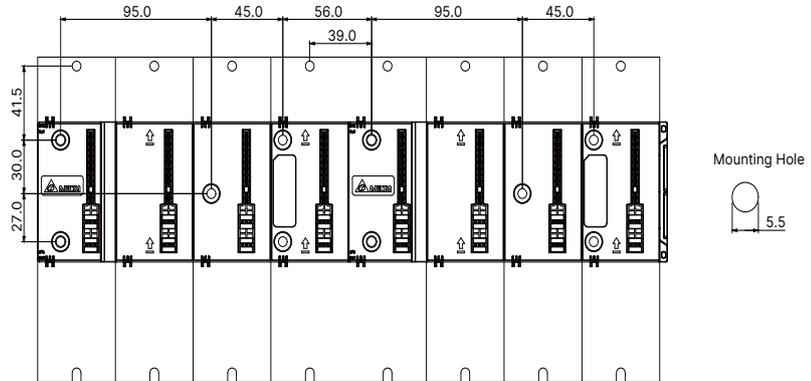
Unit: mm

Transmission Module

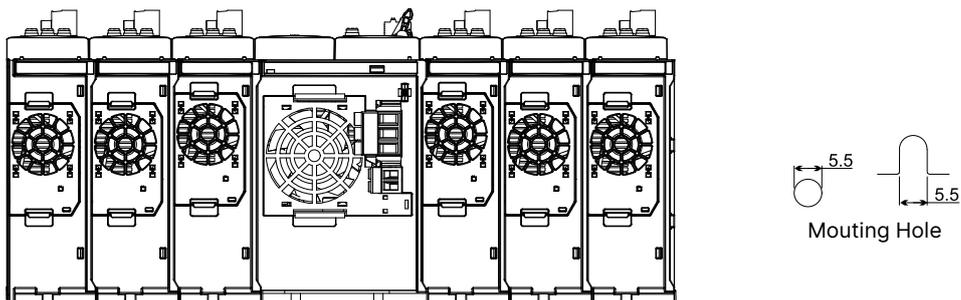
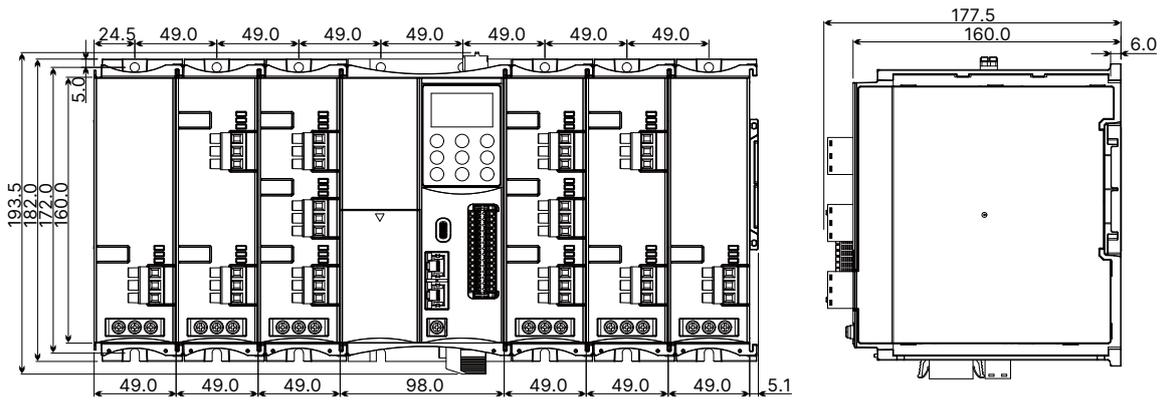
MKM-DR2M



MKM-DR3M



Rectifier & Inverter Modules

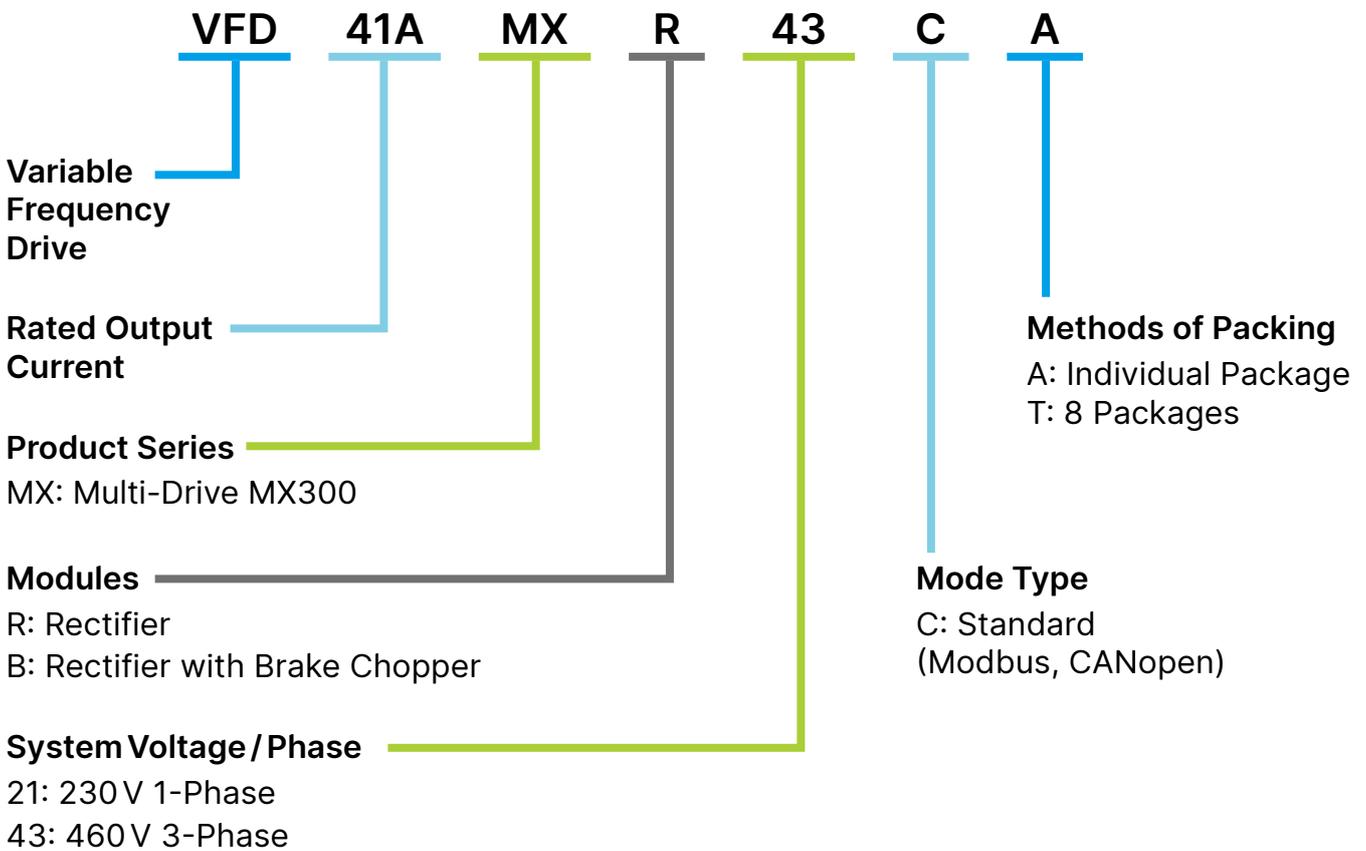


Models Overview

Power Range (kW)										
0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22
230V 1-Phase Rectifier (Under Development)										
230V 1-Axis Inverter (Under Development)										
230V 2-Axis Inverter (Under Development)										
460V 3-Phase Rectifier										
460V 1-Axis Inverter										
460V 2-Axis Inverter										
460V 3-Axis Inverter (Under Development)										

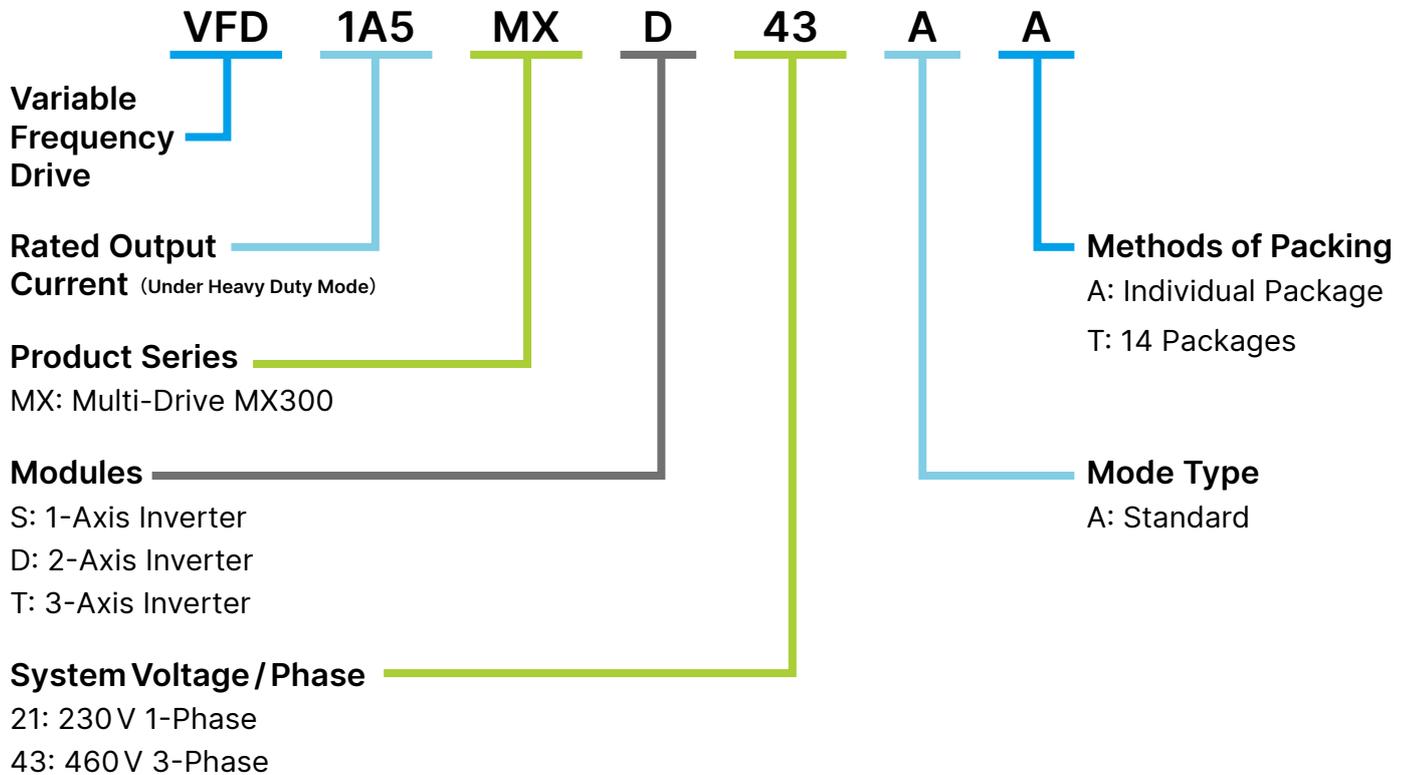
Model Name Explanation

Rectifier Module

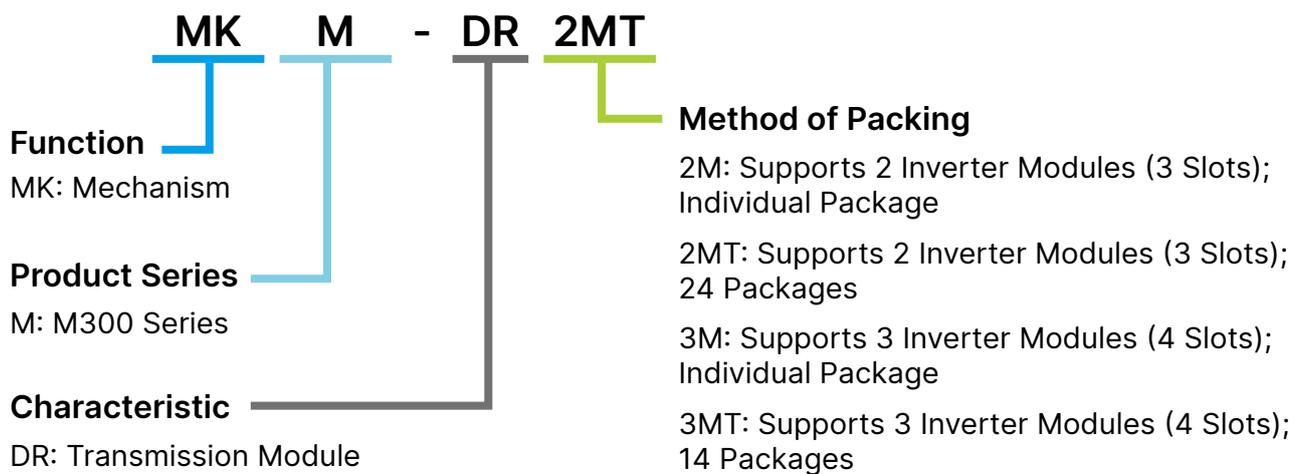


Model Name Explanation

Inverter Module



Transmission Module



Specifications

230 V 1-Phase (Under Development)

Rectifier Module

Model		Unit	Specifications			
VFD_ _MX_21CA			15A R	15A B	25A R	25A B
Power		kW	2.2	2.2	3.7	3.7
Input	Rated Voltage/Frequency	-	1-phase AC 200 ~ 240 V, 50/60 Hz			
	Operating Voltage Range	-	-15 ~ +10%, actual range 170 ~ 265 V			
	Frequency Tolerance	Hz	47 ~ 63			
Output	Equivalent AC Current	A	15	15	25	25
Braking Chopper		-	N/A	Built-in	N/A	Built-in
Power Loss		W	53.6	53.6	96.0	96.0
Dissipation Airflow		CFM	24.6	24.6	35.2	35.2
Cooling Method		-	Fan cooling			
Noise		dB	45.2	45.2	53.4	53.4
Net Weight		kg	2	2	2	2

Single-Axis Inverter Module

Model		Unit	Specifications			
VFD_ _MXS21AA			2A8	4A8	7A5	11A
Output	Heavy Duty Rated Output Current	A	2.8	4.8	7.5	11
	Normal Duty Rated Output Current	A	3.5	8	11	17.6
	Applicable Motor Output	kW	0.4	0.75	1.5	2.2
		Hp	0.5	1	2	3
Input	Voltage	V _{DC}	270 ~ 360			
Carrier Frequency		kHz	2 ~ 15 (Default: 6)			
Power Loss (HD)		W	13.5	25.0	39.0	56.5
Power Loss (ND)			14.1	34.1	51.6	77.0
Dissipation Airflow		CFM	0	7.56	10.92	16.8
Cooling Method		-	Natural air cooling	Fan cooling		
Motor	Shielded	m	50	50	50	50
Cable	Unshielded	m	100	100	100	100
Noise		dB	0	39.2	46.7	54.1
Net Weight		kg	1	1	1	1

Double-Axis Inverter Module

Model		Unit	Specifications			
VFD_ _MxD21AA			2A8	4A8	7A5	11A
Output	Heavy Duty Rated Output Current	A	2 × 2.8	2 × 4.8	2 × 7.5	2 × 11
	Normal Duty Rated Output Current	A	2 × 3.5	2 × 8	2 × 11	2 × 17.6
	Applicable Motor Output	kW	2 × 0.4	2 × 0.75	2 × 1.5	2 × 2.2
		Hp	2 × 0.5	2 × 1	2 × 2	2 × 3
Input	Voltage	V _{DC}	270 ~ 360			
Carrier Frequency		kHz	2 ~ 15 (Default: 6)			
Power Loss (HD)		W	28.3	49.3	76.5	110.2
Power Loss (ND)			42.6	67.5	101.6	151.2
Dissipation Airflow		CFM	7.56	10.92	12.6	16.8
Cooling Method		-	Fan cooling			
Motor	Shielded	m	50	50	50	50
Cable	Unshielded	m	100	100	100	100
Noise		dB	39.2	46.7	49.0	54.1
Net Weight		kg	1	1	1	1

Specifications

460 V 3-Phase

Rectifier Module

Model		Unit	Specifications					
VFD_ _ _MX_43CA			22A R	22A B	33A R	33A B	41A R	41A B
Power		kW	7.5	7.5	11	11	18.5	18.5
Input	Rated Voltage / Frequency	-	3-phase AC 380 ~ 480 V, 50 / 60 Hz					
	Operating Voltage Range	-	-15 ~ +10%, actual range 323 ~ 528 V					
	Frequency Tolerance	Hz	47 ~ 63 Hz					
Output	Equivalent AC Current	A	22	22	33	33	41	41
Braking Chopper		-	N/A	Built-in	N/A	Built-in	N/A	Built-in
Power Loss		W	90.7	90.7	148.3	136.3	170.7	170.7
Dissipation Airflow		CFM	24.6	24.6	35.2	35.2	35.2	35.2
Cooling Method		-	Fan cooling					
Noise		dB	45.2	45.2	53.4	53.4	53.4	53.4
Net Weight		kg	2	2	2	2	2	2

Single-Axis Inverter Module

Model		Unit	Specifications						
VFD_ _ _MXS43AA			1A5	2A7	4A2	5A5	9A0	13A	17A
Output	Heavy Duty Rated Output Current	A	1.5	2.7	4.2	5.5	9	13	17
	Normal Duty Rated Output Current	A	2.3	4.2	5.5	9	13	17	21
	Applicable Motor Output	kW	0.4	0.75	1.5	2.2	3.7	5.5	7.5
	Applicable Motor Output	Hp	0.5	1	2	3	5	7.5	10
Input	Voltage	V _{dc}	510 ~ 720						
Carrier Frequency		kHz	2 ~ 15 (Default: 6)						
Power Loss (HD)		W	16.0	24.0	35.9	43.8	87.3	139.0	160.8
Power Loss (ND)			12.3	24.7	34.6	69.0	94.2	126.7	133.7
Dissipation Airflow		CFM	0	7.56	7.56	7.56	10.92	16.8	16.8
Cooling Method		-	Natural air cooling	Fan cooling					
Motor Cable	Shielded	m	50	50	50	50	50	50	50
	Unshielded	m	100	100	100	100	100	100	100
Noise		dB	0	39.2	39.2	39.2	46.7	54.1	54.1
Net Weight		kg	1	1	1	1	1	1	1

Double-Axis Inverter Module

Model		Unit	Specifications				
VFD_ _ _MXD43AA			1A5	2A7	4A2	5A5	9A0
Output	Heavy Duty Rated Output Current	A	2 × 1.5	2 × 2.7	2 × 4.2	2 × 5.5	2 × 9
	Normal Duty Rated Output Current	A	2 × 2.7	2 × 4.2	2 × 5.5	2 × 9	2 × 13
	Applicable Motor Output	kW	2 × 0.4	2 × 0.75	2 × 1.5	2 × 2.2	2 × 3.7
	Applicable Motor Output	Hp	2 × 0.5	2 × 1	2 × 2	2 × 3	2 × 5
Input	Voltage	V _{dc}	510 ~ 720				
Carrier Frequency		kHz	2 ~ 15 (Default: 6)				
Power Loss (HD)		W	33.3	46.9	70.6	88.0	173.7
Power Loss (ND)			29.9	48.2	67.9	138.4	187.5
Dissipation Airflow		CFM	7.56	7.56	7.56	16.8	16.8
Cooling Method		-	Fan cooling				
Motor Cable	Shielded	m	50	50	50	50	50
	Unshielded	m	100	100	100	100	100
Noise		dB	39.2	39.2	39.2	54.1	54.1
Net Weight		kg	1	1	1	1	1

460V 3-Phase

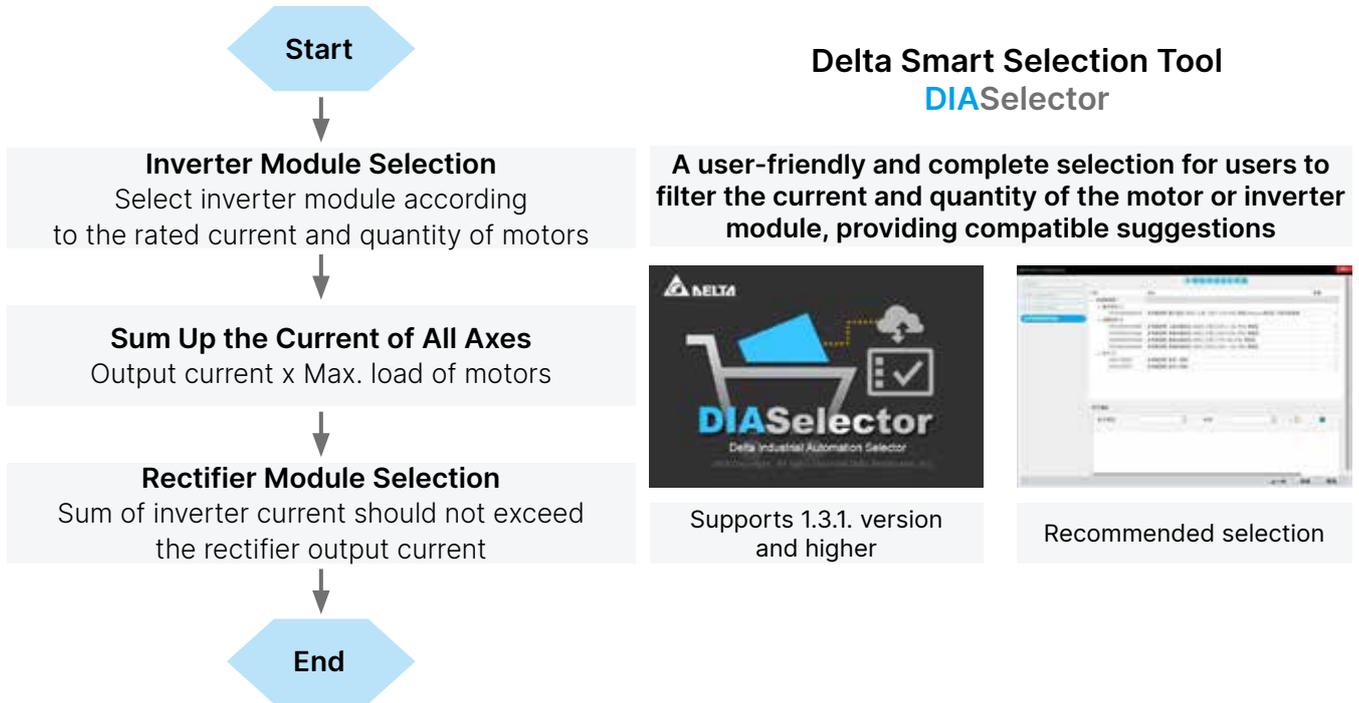
Triple-Axis Inverter Module

Model		Unit	Specifications			
VFD_ _MXT43AA			1A5	2A7	4A2	5A5 (開發中)
Output	Heavy Duty Rated Output Current	A	3 × 1.5	3 × 2.7	3 × 4.2	3 × 5.5
	Normal Duty Rated Output Current	A	3 × 2.7	3 × 4.2	3 × 5.5	3 × 9
	Applicable Motor Output	kW	3 × 0.4	3 × 0.75	3 × 1.5	3 × 2.2
	Applicable Motor Output	Hp	3 × 0.5	3 × 1	3 × 2	3 × 3
Input	Voltage	V _{DC}	510 ~ 720			
Carrier Frequency		kHz	2 ~ 15 (Default: 6)			
Power Loss (HD)		W	49.4	69.7	105.9	130.6
Power Loss (ND)			44.2	71.7	101.8	206.1
Dissipation Airflow		CFM	7.6	7.6	10.9	16.8
Cooling Method		-	Fan cooling			
Motor	Shielded	m	50	50	50	50
Cable	Unshielded	m	100	100	100	100
Noise		dB	39.2	39.2	46.7	54.1
Net Weight		kg	1	1	1	1

General Specifications

Control Characteristics	Control Method and Applied Motor	Induction Motor (IM): V/F, SVC PM Motor (PM): SVC
	Output Frequency	0.00 ~ 599.00 Hz
	Starting Torque	200% / 3 Hz (V/F, SVC control for IM) 100% / (1/20 of motor rated frequency) (SVC control for PM)
	Speed Control Range	1:50 (V/F, SVC control for IM) 1:20 (SVC control for PM)
	Frequency Setting Signal	a. Digital keypad b. RS-485 c. Analog input d. CANopen e. PID
	Operation Instruction	a. Digital keypad b. External terminals c. RS-485 d. CANopen
	Overload Capability	<ul style="list-style-type: none"> Normal Duty (ND): 110% of rated output current for 60 seconds. If the temperature is above 50°C, decrease 2.5% of the rated current for every 1°C increase in temperature. The maximum allowable temperature is 60°C Heavy Duty (HD): 150% of rated output current for 60 seconds. If the temperature is above 40°C, decrease 2.5% of the rated current for every 1°C increase in temperature. The maximum allowable temperature is 60°C
Protection Characteristics	Rectifier Module	Overload, low voltage, overvoltage, overtemperature, output, input phase loss, communication failure
	Inverter Module	Overload, overcurrent, overvoltage, overtemperature, output, ground detection protection, stall prevention
Product Compliance		CE
Ingress Protection Rating		IP40 (Except for marked positions, which refer to Chapter 2 of the User Manual)
Operating Environment		IEC60364-1/IEC60664-1 Pollution degree 2, indoor use only
Ambient Temperature	Operation	-20 ~ +60°C Derating required in Normal Duty(ND) mode when temperature is above 50°C Derating required in Heavy Duty(HD) mode when temperature is above 40°C
	Storage	-40 ~ 85°C
	Transportation	-20 ~ 70°C
Rated Humidity	Operation	Max. 90%
	Storage/Transportation	Max. 95%
Air Pressure	Operation	86 ~ 106 kPa
	Storage/Transportation	70 ~ 106 kPa
Pollution Level		IEC60721-3-3 Class 3C3
Altitude		Operable at altitude below 1,000m (Derating if operated over 1,000m)
Vibration		IEC 60721-3-3 Class 3M5
Shock		IEC 60721-3-3 Class 3M5

Model Selection



Example

8-Axis

- **Input voltage: 460 V 3-phase**
- **Motor: 7.5 kW*1, 1.5 kW*2, 0.75 kW*5 with Max. load 100%. Built-in brake unit is required**

Step 1 Select inverter module by the motor current and number. Sum up the current of all axes



Inverter Module	Model	Sum of Motor Current = 38.9 A
7.5 kW 1-Axis Inverter Module	VFD17AMXS43AA	$17\text{ A} \times 1 \times 100\% = 17\text{ A}$
1.5 kW 2-Axis Inverter Module	VFD4A2MXD43AA	$4.2\text{ A} \times 2 \times 100\% = 8.4\text{ A}$
0.75 kW 3-Axis Inverter Module	VFD2A7MXT43AA	$2.7\text{ A} \times 3 \times 100\% = 8.1\text{ A}$
0.75 kW 2-Axis Inverter Module	VFD2A7MXD43AA	$2.7\text{ A} \times 2 \times 100\% = 5.4\text{ A}$

Step 2 Select rectifier module by the sum of motor current and built-in brake unit



The rectifier module output current should be higher than the sum of motor current of the inverter module. Select the rectifier module with output current 41A and built-in brake unit. The model is VFD41AMXB43CA

Step 3 Select the transmission module by the quantity of inverter modules

For 4 inverter modules, please select 2 transmission modules MKM-DR2M

Ordering Information

Rectifier Module

Input Voltage	Rated		Model	Built-in		8 Package
	Power (kW)	Output Current (A)		Brake Unit	CANopen	
230V 1-phase (Under Development)	2.2	15.1	VFD15AMXR21CA	-	●	-
	2.2	15.1	VFD15AMXR21CT	-	●	●
	2.2	15.1	VFD15AMXB21CA	●	●	-
	2.2	15.1	VFD15AMXB21CT	●	●	●
	3.7	25	VFD25AMXR21CA	-	●	-
	3.7	25	VFD25AMXR21CT	-	●	●
	3.7	25	VFD25AMXB21CA	●	●	-
	3.7	25	VFD25AMXB21CT	●	●	●
460V 3-Phase	7.5	22	VFD22AMXR43CA	-	●	-
	7.5	22	VFD22AMXR43CT	-	●	●
	7.5	22	VFD22AMXB43CA	●	●	-
	7.5	22	VFD22AMXB43CT	●	●	●
	11	33	VFD22AMXB43CT	-	●	-
	11	33	VFD33AMXR43CT	-	●	●
	11	33	VFD33AMXB43CA	●	●	-
	11	33	VFD33AMXB43CT	●	●	●
	18.5	41	VFD41AMXR43CA	-	●	-
	18.5	41	VFD41AMXR43CT	-	●	●
	18.5	41	VFD41AMXB43CA	●	●	-
	18.5	41	VFD41AMXB43CT	●	●	●

Transmission Module

Model	Inverter Module Supported	Multi-Package
MKM-DR2M	2	-
MKM-DR2MT	2	24
MKM-DR3M	3	-
MKM-DR3MT	3	14

Ordering Information

Inverter Module

Voltage	Rated			Model	1-Axis	2-Axis	3-Axis	14 Packages
	Output Horsepower (HP)	Output Power (kW)	Output Current (A)					
270 ~ 360 V _{DC} (Under Development)	0.5	0.4	2.8	VFD2A8MXS21AA	●	-	-	-
	0.5	0.4	2.8	VFD2A8MXS21AT	●	-	-	●
	0.5	0.4	2.8	VFD2A8MXD21AA	-	●	-	-
	0.5	0.4	2.8	VFD2A8MXD21AT	-	●	-	●
	1	0.75	4.8	VFD4A8MXS21AA	●	-	-	-
	1	0.75	4.8	VFD4A8MXS21AT	●	-	-	●
	1	0.75	4.8	VFD4A8MXD21AA	-	●	-	-
	1	0.75	4.8	VFD4A8MXD21AT	-	●	-	●
	2	1.5	7.5	VFD7A5MXS21AA	●	-	-	-
	2	1.5	7.5	VFD7A5MXS21AT	●	-	-	●
	2	1.5	7.5	VFD7A5MXD21AA	-	●	-	-
	2	1.5	7.5	VFD7A5MXD21AT	-	●	-	●
	3	2.2	11	VFD11AMXS21AA	●	-	-	-
	3	2.2	11	VFD11AMXS21AT	●	-	-	●
	3	2.2	11	VFD11AMXD21AA	-	●	-	-
3	2.2	11	VFD11AMXD21AT	-	●	-	●	
510 ~ 720 V _{DC}	0.5	0.4	1.5	VFD1A5MXS43AA	●	-	-	-
	0.5	0.4	1.5	VFD1A5MXS43AT	●	-	-	●
	0.5	0.4	1.5	VFD1A5MXD43AA	-	●	-	-
	0.5	0.4	1.5	VFD1A5MXD43AT	-	●	-	●
	0.5	0.4	1.5	VFD1A5MXT43AA	-	-	●	-
	0.5	0.4	1.5	VFD1A5MXT43AT	-	-	●	●
	1	0.75	2.7	VFD2A7MXS43AA	●	-	-	-
	1	0.75	2.7	VFD2A7MXS43AT	●	-	-	●
	1	0.75	2.7	VFD2A7MXD43AA	-	●	-	-
	1	0.75	2.7	VFD2A7MXD43AT	-	●	-	●
	1	0.75	2.7	VFD2A7MXT43AA	-	-	●	-
	1	0.75	2.7	VFD2A7MXT43AT	-	-	●	●
	2	1.5	4.2	VFD4A2MXS43AA	●	-	-	-
	2	1.5	4.2	VFD4A2MXS43AT	●	-	-	●
	2	1.5	4.2	VFD4A2MXD43AA	-	●	-	-
2	1.5	4.2	VFD4A2MXD43AT	-	●	-	●	

Inverter Module

Voltage	Rated			Model	1-Axis	2-Axis	3-Axis	14 Packages
	Output Horsepower (HP)	Output Power (kW)	Output Current (A)					
510~720 V _{DC}	2	1.5	4.2	VFD4A2MXT43AA	-	-	●	-
	2	1.5	4.2	VFD4A2MXT43AT	-	-	●	●
	3	2.2	5.5	VFD5A5MXS43AA	●	-	-	-
	3	2.2	5.5	VFD5A5MXS43AT	●	-	-	●
	3	2.2	5.5	VFD5A5MXD43AA	-	●	-	-
	3	2.2	5.5	VFD5A5MXD43AT	-	●	-	●
	3	2.2	5.5	VFD5A5MXT43AA (Under Development)	-	-	●	-
	3	2.2	5.5	VFD5A5MXT43AT (Under Development)	-	-	●	●
	5	3.7	9	VFD9A0MXS43AA	●	-	-	-
	5	3.7	9	VFD9A0MXS43AT	●	-	-	●
	5	3.7	9	VFD9A0MXD43AA	-	●	-	-
	5	3.7	9	VFD9A0MXD43AT	-	●	-	●
	7.5	5.5	13	VFD13AMXS43AA	●	-	-	-
	7.5	5.5	13	VFD13AMXS43AT	●	-	-	●
	10	7.5	17	VFD17AMXS43AA	●	-	-	-
	10	7.5	17	VFD17AMXS43AT	●	-	-	●

Accessories

I/O Card

	Terminals	Description
EMM-D88A	+24 V, DCM	Output power: +24 V (+20V~+30V)
	MI9~MI16	Refer to Pr. 02-26 ~ Pr. 02-33 to program the multi-function Choose SINK (NPN) / SOURCE (PNP) from SJ1 COM Pin Internal power is supplied by terminal +24 V: +24 V (+20 V ~ +30 V) If external power is +24 V _{DC} , the Max. voltage is 30 V _{DC} , Min. voltage is 19 V _{DC} ON: the activation current is 6.5 mA OFF: leakage current tolerance is 10 μA
	MO9~MO16	Refer to Pr. 02-36 ~ Pr. 02-43 to program the multi-function The drive releases various monitor signals, such as drive in operation, frequency attained and overload indication, via transistor (open collector) Add a pull-up resistor to the MO output signals to avoid signal interference, external power Max. 48 V _{DC} / 50 mA
	MCM	Common for multi-function output terminals MO9~MO16 (photocoupler)
	PE	Earthing terminal to reduce noise; this terminal should also be grounded

Fan Kit

	Model	Description
	MKM-FKMRC	Rectifier module fan
	MKM-FKMDR	Inverter module fan

Connection Port Protection Cover

	Model	Description
	MKM-COVRC	Rectifier module protection cover
	MKM-COVBP	Transmission module protection cover

EMC Plate

	Model	Description
	MKM-EPRD	EMC plate

Delta Standard Fieldbus Cable

Delta Cables	Model	Description	Length
CANopen Cable / Digital Keypad RJ45 Extension Cable	UC-CMC003-01A	CANopen cable, RJ45 connector	0.3m
	UC-CMC005-01A		0.5m
	UC-CMC010-01A		1m
	UC-CMC015-01A		1.5m
	UC-CMC020-01A		2m
	UC-CMC030-01A		3m
	UC-CMC050-01A		5m
	UC-CMC100-01A		10m
	UC-CMC200-01A		20m

Detachable Terminals

Model	Description
	MKM-TBLTRC1 Rectifier module 460V power terminal block
	MKM-TBLTRC2 Rectifier module 230V power terminal block
	MKM-TBIORC Rectifier module I/O terminal block
	MKM-TBBKRC Rectifier module brake terminal block
	MKM-TBMTDR Inverter module output terminal block

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Taoyuan Plant 1



Tainan Plant (Diamond-rated Green Building)

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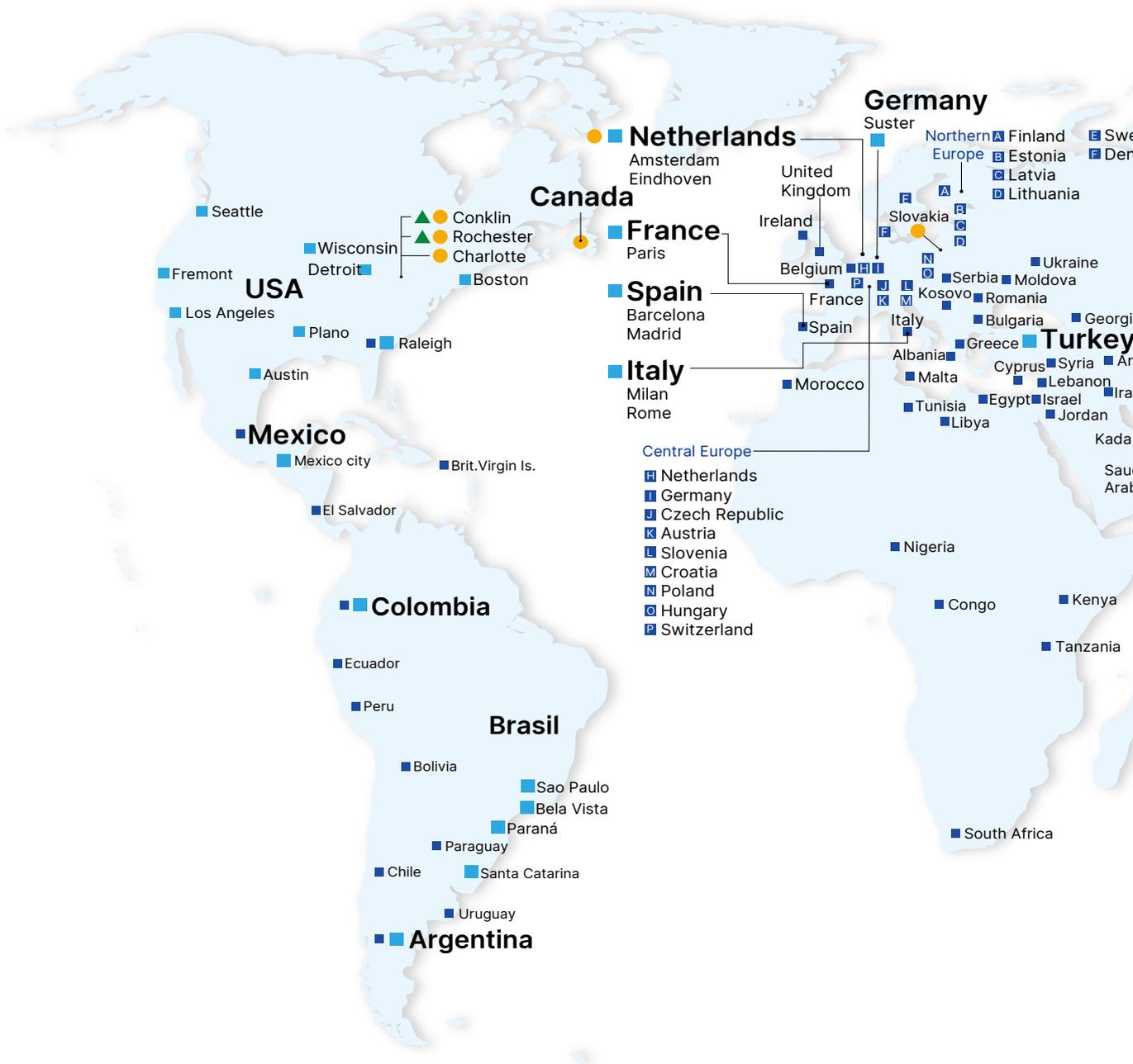


Wujiang Plant 3



Shanghai Office

▲ 10 Factories



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ASIA (India)



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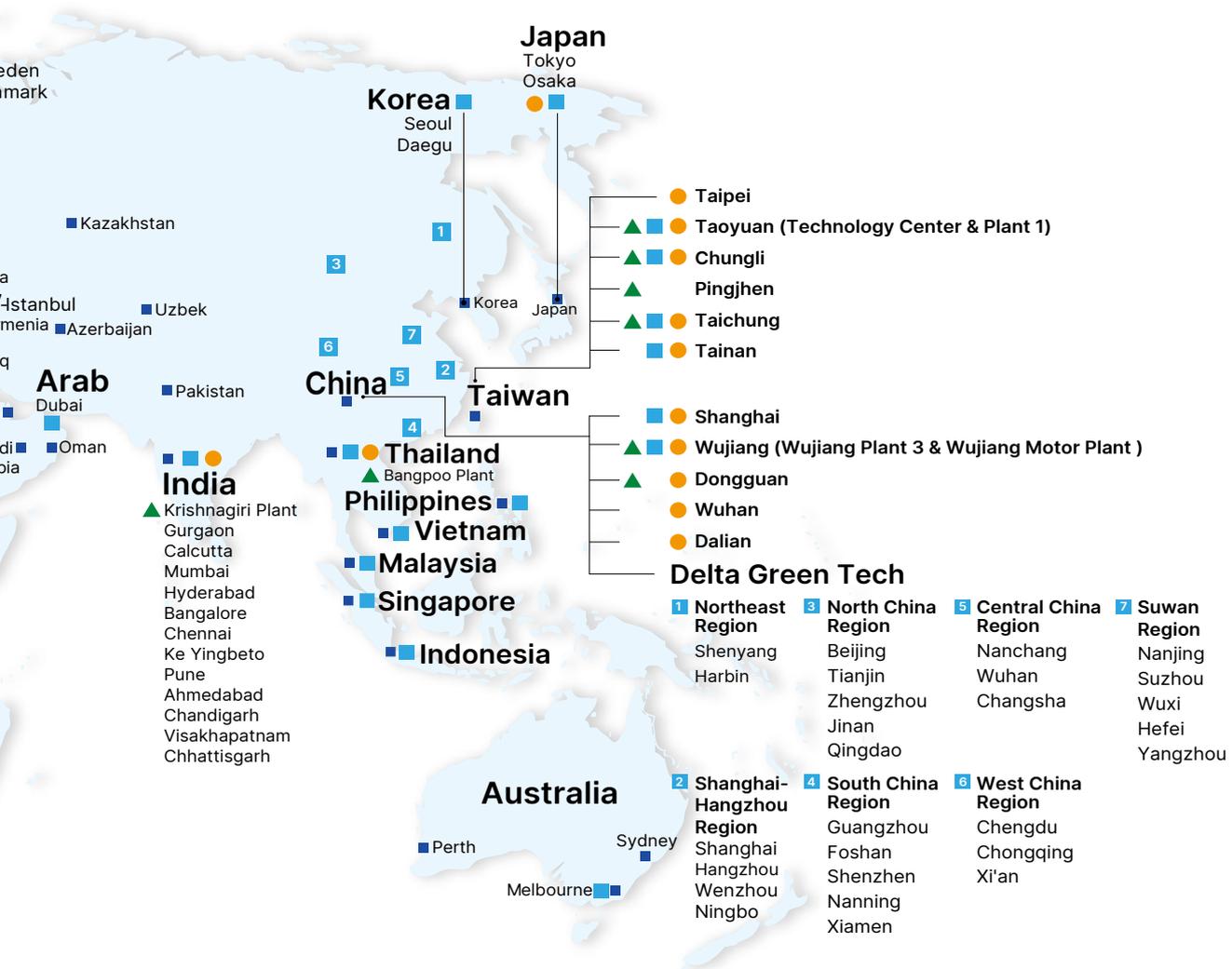


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