

MD310 AC Drive

Open Loop General Purpose & Economic

Features & Functions

- Open-loop V/F & SVC control
- Starting torque
 - 150% at 0.5 Hz (SVC)
 - 100% at 1.0 Hz (V/F)
- Modbus or CANlink^{*1} comms
- Automatic torque boost
- Slip compensation
- Simplified parameter for easy set-up
- 4 independent S-Ramps
- Flexible programmable I/O connection
- Variable DC-injection braking
- Comprehensive trip diagnostics
- Output frequency 500 Hz
- In-built dynamic braking unit

Wide operating voltage
Three-phase 323 to 480 Vac
0.4 kW to 18.5 kW



Onboard Modbus RTU
(optional CANlink^{*1})

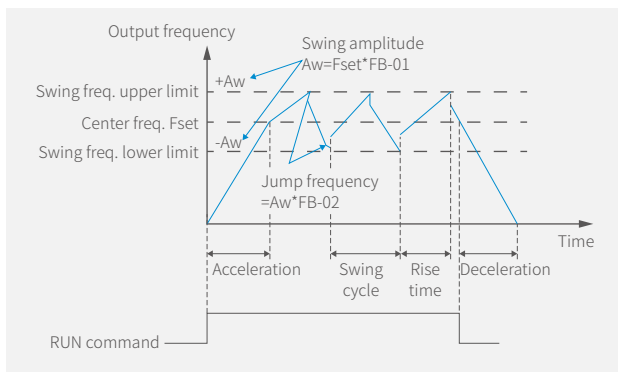
Operation in high ambient temperature
 $45^{\circ}\text{C}_{\text{avg}}$



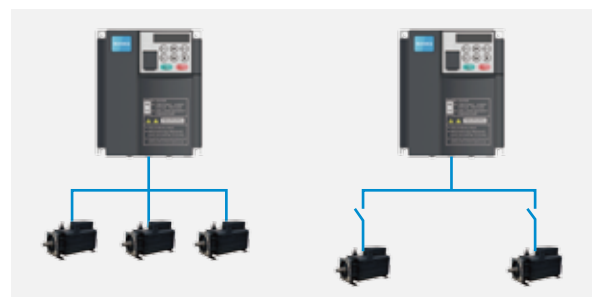
Note

*1 CANlink is Inovance proprietary serial comms.

Swing Frequency



Switchover among multiple motors



Control multiple motors simultaneously in V/F mode

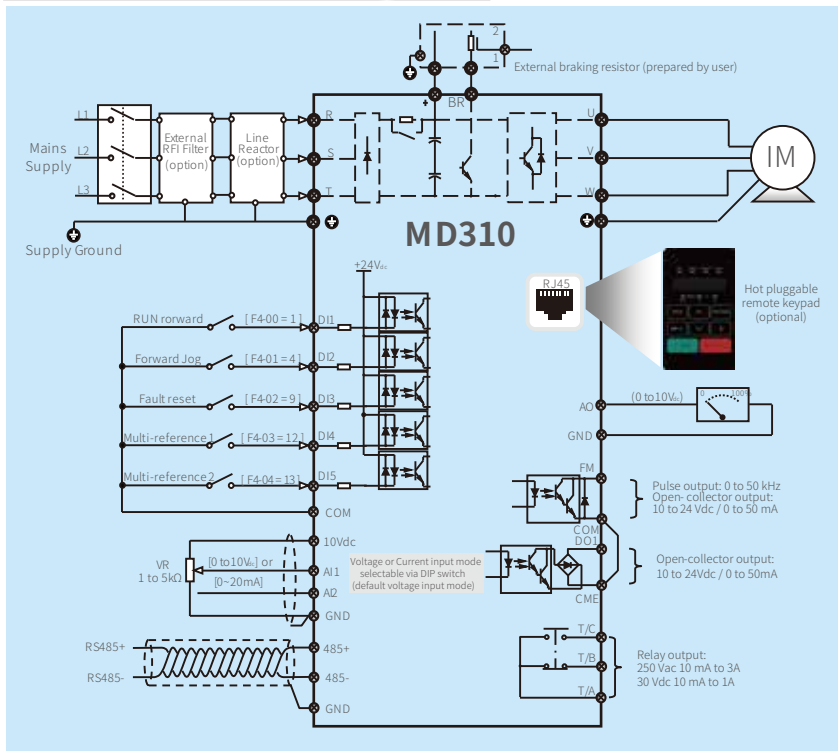
Control up to 2 motors in different time divisions in SVC mode (multiple motor parameter groups)

General Specifications

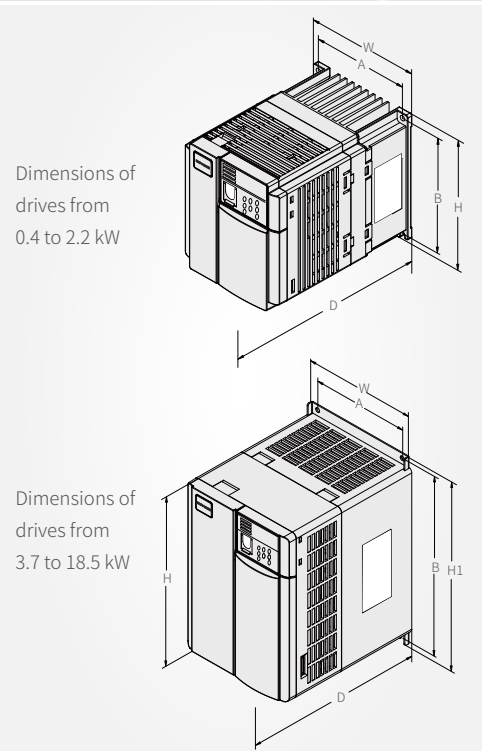
Voltage Class		Three-phase 380Vac									
Drive model: MD310TxxxB-INT		0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5
Dimension	Frame	Size 1				Size 2		Size 3		Size 4	
	Height Width Depth	[H]: 128 mm [W]: 108 mm [D]: 158 mm				[H1]: 209 mm [W]: 130 mm [D]: 164 mm		[H1]: 260 mm [W]: 140 mm [D]: 171 mm		[H1]: 298 mm [W]: 180 mm [D]: 176 mm	
Drive Input	Rated input voltage	Three-phase 380 to 480 Vac, -15% to +10% (323 to 528 Vac)									
	Rated input current [A]	1.9	3.4	5	5.8	10.5	14.6	20.5	26	35	38.5
	Power capacity [kVA]	1	1.5	3	4	5.9	8.9	11	17	21	24
	Rated input frequency	50/60 Hz, $\pm 5\%$ (47.5 to 63 Hz)									
Drive Output	Applicable motor [kW]	0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5
	Output current [A] ¹	1.5	2.1	3.8	5.1	9	13	17	25	32	37
	Overload capacity	150% for 60 Sec & 180% for 2 Sec									
	Max. output voltage	380 to 440 Vac (Proportional to input voltage)									
	Max. output frequency	500 Hz									
Braking Resistor	Recommended power [W]	150	150	150	250	300	400	500	800	1,000	1,300
	Recommended resistance [Ω]	≥ 300	≥ 300	≥ 220	≥ 200	≥ 130	≥ 90	≥ 65	≥ 43	≥ 32	≥ 25
Enclosure		IP 20									

¹ Carrier switching frequency 6 kHz at rated output current.

General Connection Diagram



Dimensions



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