

MD310 AC Drive

Open loop, general purpose, compact drive

Features & functions

- Open-loop V/F & sensorless vector 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 parameters for easy set-up
- 4 independent S-Ramps
- Flexible programmable I/Os
- Variable DC-injection braking
- Comprehensive trip diagnostics
- Output frequency: 500 Hz
- Built-in 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})

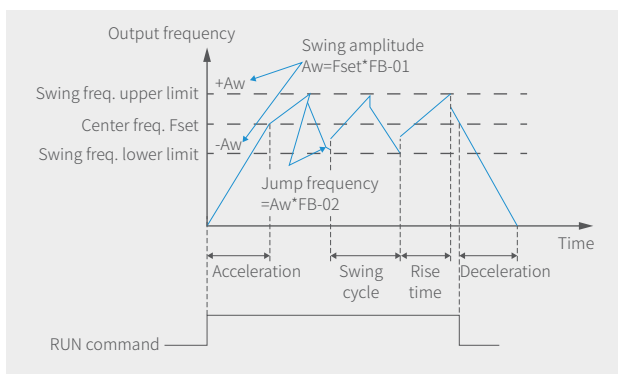
PC based
software:
simplified
start up and
backup^{*2}

Operation in high ambient
temperatures $\leq 50^{\circ}\text{C}$
Please note: If operating above 40°C ,
derating is required

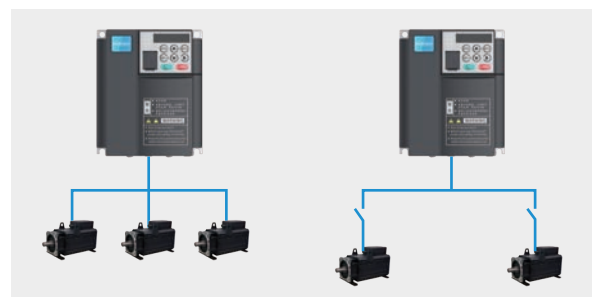


^{*1} CANlink is Inovance's proprietary serial comms offering.
^{*2} PC comms kit is required (optional accessory).

Textile wobble control



Able to control multiple motors



Control multiple motors
simultaneously in V/F mode

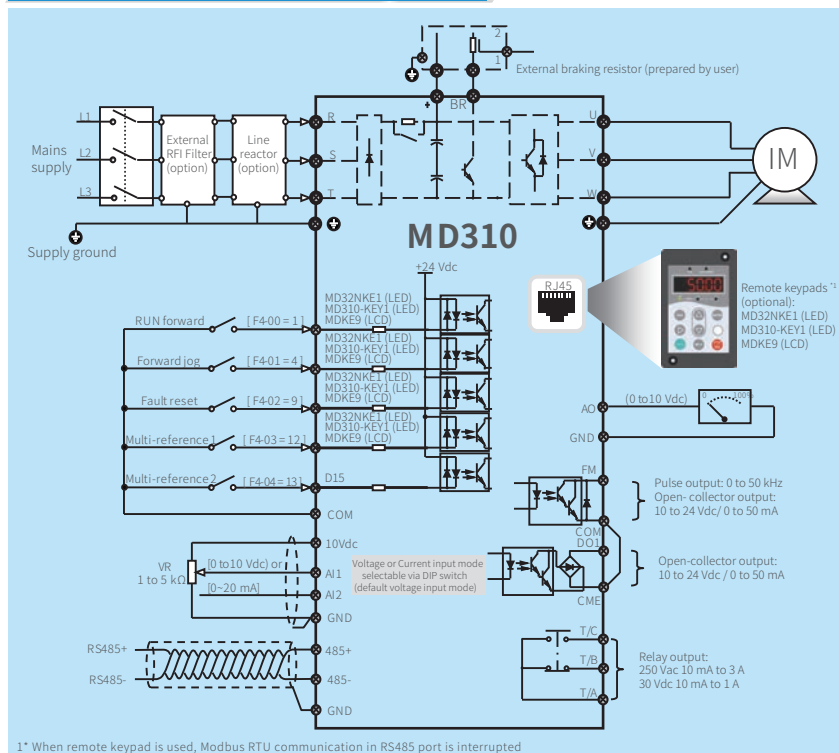
One drive can control 2
motors with different
parameter sets at different
times (SVC mode)

General specifications

Voltage class		Three-phase 380 Vac										
Drive model: MD310Txxx-B-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 440 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, ±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 s & 180% for 2 s									
	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										

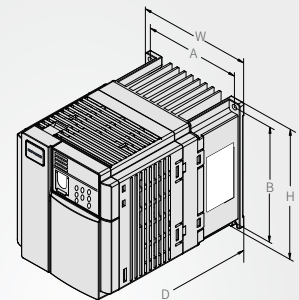
*1 Rated output current using a carrier frequency of 6 kHz

General connection diagram

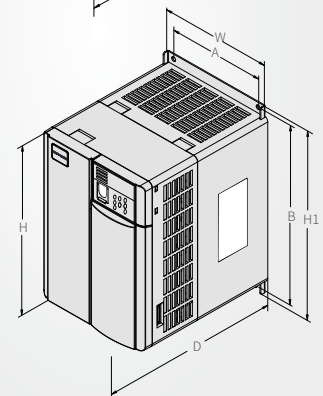


Dimensions

Dimensions of drives from 0.4 to 2.2 kW



Dimensions of drives from 3.7 to 18.5 kW



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