

## 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<sup>\*1</sup> 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<sup>\*1</sup>)

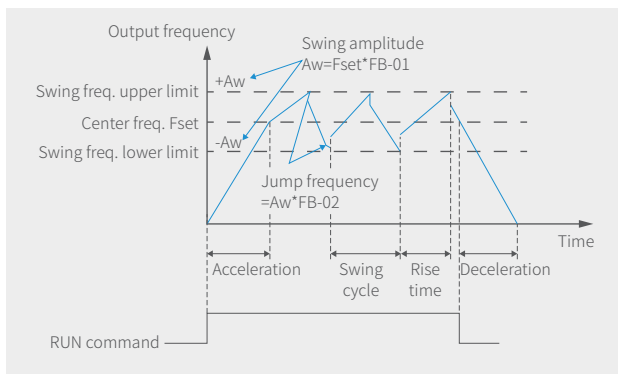
PC based software:  
simplified start up and backup<sup>\*2</sup>

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

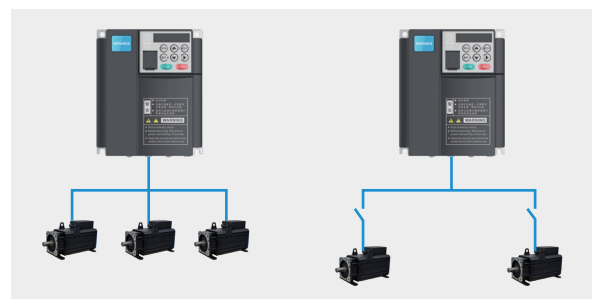


\*1 CANlink is Inovance's proprietary serial comms offering.  
\*2 PC comms kit is required (optional accessory).

### Textile wobble control



### Able to control multiple motors



Control multiple motors simultaneously in V/F mode

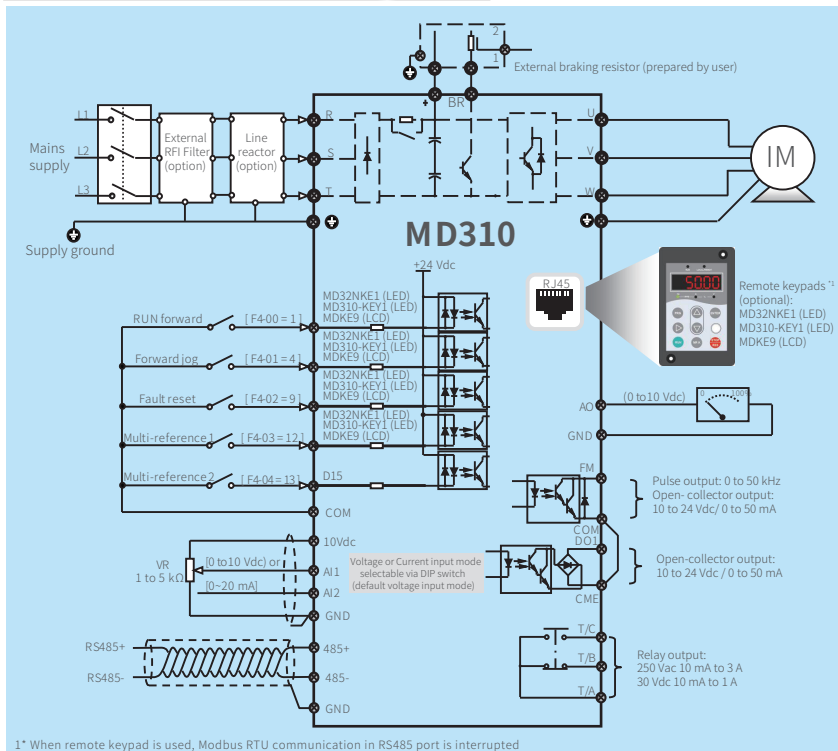
One drive can control 2 motors with different parameter sets at different times (SVC mode)

## General specifications

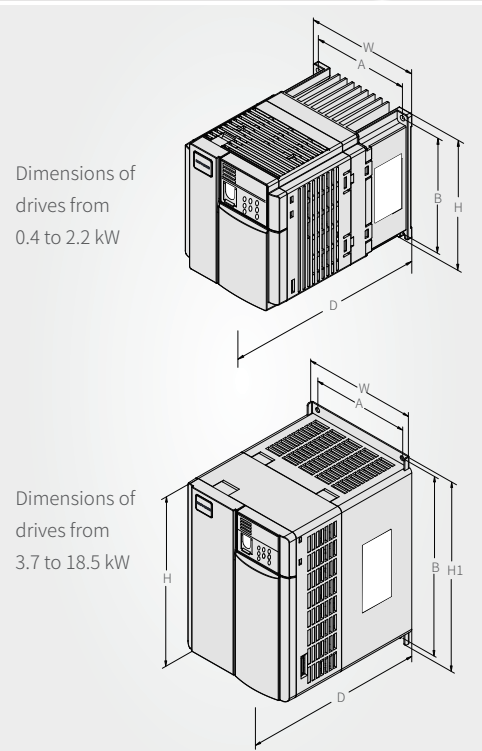
Voltage class		Three-phase 380 Vac									
Drive model: MD310TxxxB-INT		0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5
Dimension	Frame	Size 1				Size 2		Size 3		Size 4	
	Height Width Depth	[H]: 128 mm [W]: 108 mm [D]: 158 mm				[H1]: 209 mm [W]: 130 mm [D]: 164 mm		[H1]: 260 mm [W]: 140 mm [D]: 171 mm		[H1]: 298 mm [W]: 180 mm [D]: 176 mm	
Drive input	Rated input voltage	Three-phase 380 to 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] <sup>1</sup>	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									

<sup>1</sup> Rated output current using a carrier frequency of 6 kHz

## General connection diagram



## Dimensions



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