

# LOW VOLTAGE INVERTER

FD100M



The FD100 series uses DSP control system as the platform, current vector control technology, and multiple protection methods, which can be applied to asynchronous motors to provide excellent driving performance.

## Products features



Good dynamic performance



Rich combination functions



Stable performance



Standard RS485 communication

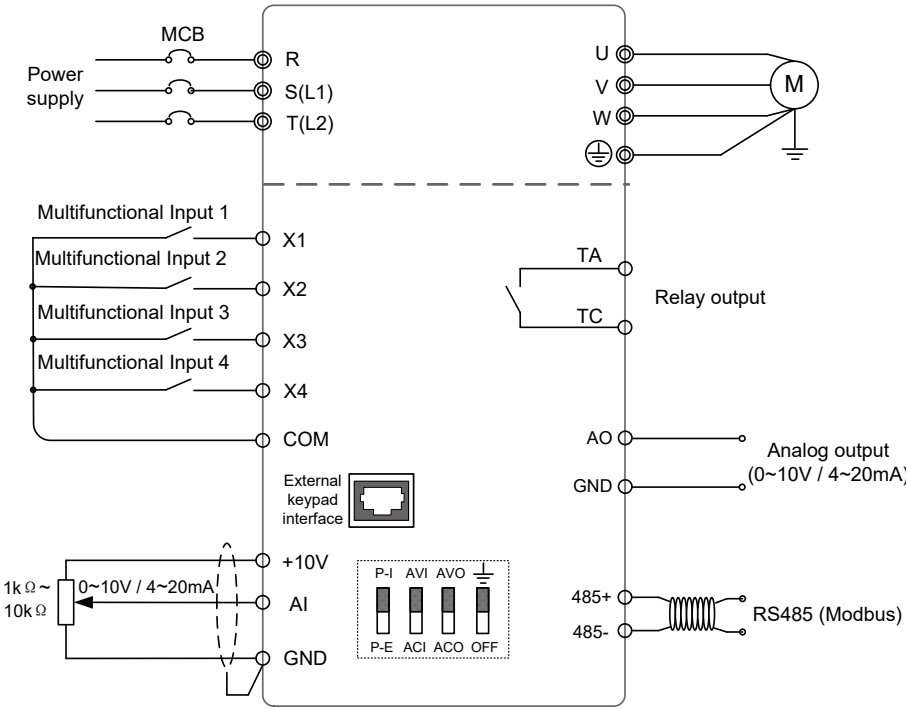


Technical specifications

Item	Technical Index	Specification
Input	Input voltage	1AC 220V±15% 3AC 380V±15%
	Input frequency	50/60Hz±5%
Output	Output voltage	0~rated input voltage
	Output frequency	0~200Hz
Control Features	Control mode	V/f control Sensorless vector control Torque control
	Operation command mode	Keypad control Terminal control Serial communication control (Modbus)
	Frequency setting mode	Digital setting, analog setting, Modbus communication setting, multi-step speed setting & simple PLC, PID setting, etc. These frequency settings can be combined & switched in various modes.
	Overload capacity	120% 60S
	Starting torque	0.25Hz/150% (SVC); 0.5Hz/150% (V/f)
	Speed control precision	±0.5% (V/f), ±0.2% (SVC),
	Carrier frequency	2.0~16.0kHz
	Frequency accuracy	Digital setting: 0.01Hz Analog setting: maximum frequency ×0.05%
	Torque boost	Automatically torque boost; manually torque boost: 0.1%~30.0%
	V/f curve	Three types: linear, multiple point and square type
	Acceleration/deceleration mode	Two groups of acceleration/deceleration time, range: 0.1s~999.9s
	DC braking	DC braking when starting and stopping DC braking frequency: 0.0Hz~maximum frequency, braking time: 0.0s~25.0s
	Jog operation	Jog operation frequency: 0.0Hz~maximum frequency Jog acceleration/deceleration time: 0.1s~3600.0s
	Simple PLC & multi-step speed operation	It can realize a maximum of 16 multi-step speeds running via the built-in PLC or control terminal.
	PID	Standard PID function build-in

Item	Technical Index	Specification
Control Function	Over-voltage & over-current stall control	Limit current & voltage automatically during the running process, prevent frequent over-current & over-voltage tripping
	Fault protection function	Comprehensive protections include over-current, over-voltage, under-voltage, overheating, default phase, overload, shortcut, etc., can record the detailed running status during failure & has fault automatic reset function
Input / output terminals	Input terminals	4 multifunctional programmable digital input; 1 analog input AI: 0~10V / 4~20mA
	Output terminals	1 normal open relay output (TA, TC) 1 analog output AO: 0~10V / 4~20mA
	Communication	RS485 interface, MODBUS-RTU communication protocol
Human machine interface	LED display	Display frequency setting, output frequency, output voltage, etc.
	Multifunction key	QUICK/JOG key, can be used as multifunction key
Environ-ment	Ambient temperature	-10℃~40℃, without direct sunshine.
	Humidity	90%RH or less (non-condensing)
	Altitude	≤1000M: output rated power, >1000M: output derated
	Storage temperature	-20℃~60℃

System wiring



◇ Product Model Description

**FD100M – 1R5G – S2**

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①	Series code	FD100M: High performance variable frequency drive
②	Rated power	1R5G: 1.5kW heavy load
③	Rated Voltage	S2: 1AC 220~240V ± 15% 4: 3AC 380~415V ± 15%



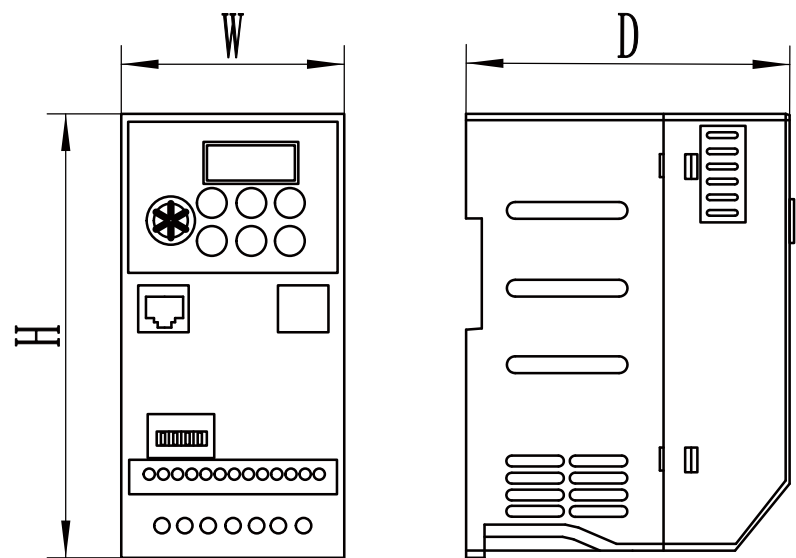
◇ Selection Guide

Power	Suitable Motor (kW)	Rated Output Current (A)
1AC 220~240V ±15%		
0.4kW	0.4	2.3
0.75kW	0.75	4
1.5kW	1.5	7
2.2kW	2.2	9.6
3AC 380~415V ±15%		
0.75kW	0.75	2.5
1.5kW	1.5	4.2
2.2kW	2.2	5.5
4KW	4	9
5.5KW	5.5	13



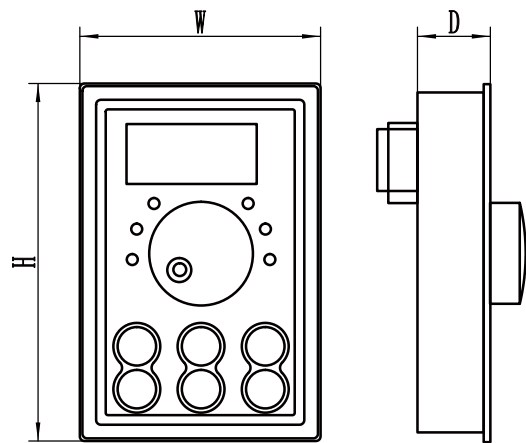


◇ Outlook Drawing



◇ Inverter outlook dimensions

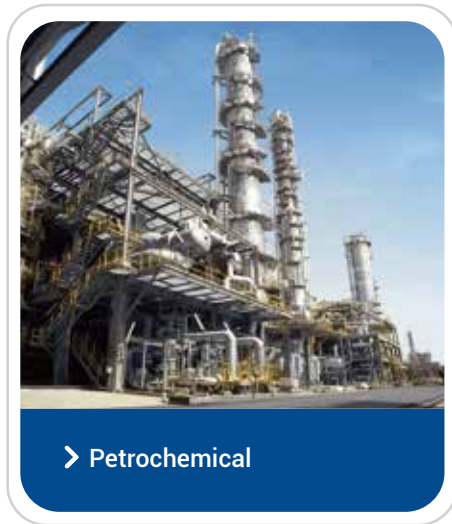
Power (kW)	Outlook dimensions (mm)		
	H	W	D
0.75~2.2KW	63	142	104.5
4~5.5KW	78	180	126.4



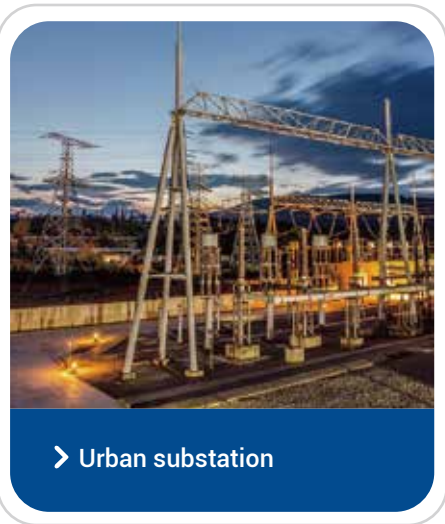
◇ Keyboard base hole size

Power (kW)	Outlook dimensions (mm)		
	H	W	D
All Series	53	79	15.9

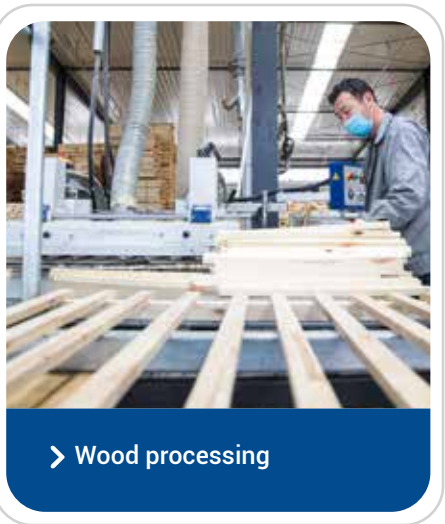
◇ Application fields



> Petrochemical



> Urban substation



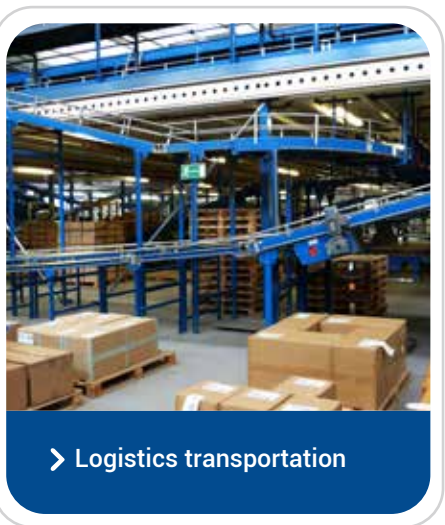
> Wood processing



> Power station



> Lithium current waterline



> Logistics transportation



> Food processing



> Metallurgy



> Packaging assembly line