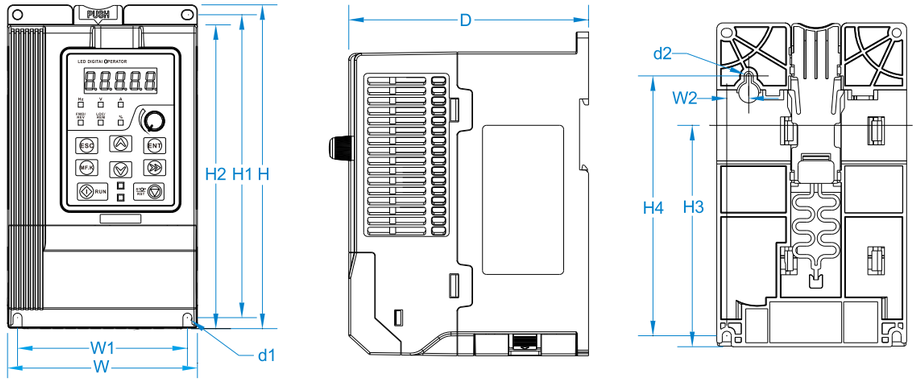
Product Installation Dimension

F1-1~F2-2 Structure Dimension Diagram



Size of the Case	External and installation dimensions（mm）											Weight (Kg)
	W	H	D	W1	W2	H1	H2	H3	H4	d1	d2	
F1-1	95	162	120	85	11	151.5	152	110.8	130	4.5	4.5	1.1
F1-2	110	173	135	100	11	163	163	121.8	140.5	4.5	5	1.5

Electric Specification

Main Power Voltage	Model No.	Motor Power (kW)	Power Capacity (kVA)	Input Current (A)	Output Current (A)	Size of the Case	Dimension（W*H*D）(mm)
208-240VAC, 1~	FR100-2S-0.2B	0.2	0.5	4.9	1.6	F1-1	95*162*120
	FR100-2S-0.4B	0.4	1.0	6.5	2.5		
	FR100-2S-0.7B	0.75	1.5	9.3	4.2		
	FR100-2S-1.5B	1.5	3.0	15.7	7.5	F1-2	110*173*135
	FR100-2S-2.2B	2.2	4.0	24	9.5		
380-480VAC, 3~	FR100-4T-0.7B	0.75	1.5	3.4	2.5	F1-2	110*173*135
	FR100-4T-1.5B	1.5	3.0	5.0	4.2		
	FR100-4T-2.2B	2.2	4.0	5.8	5.5		
	FR100-4T-4.0B	4	6.0	11	9.5		

FRECON ELECTRIC (SHENZHEN) CO.,LTD.

Add：Floor3,Block C,F&D technology Park Baoan Road Baoan District,Shenzhen,China

Tel：(+86)-0755-33067999

Fax：(+86)-0755-33067186

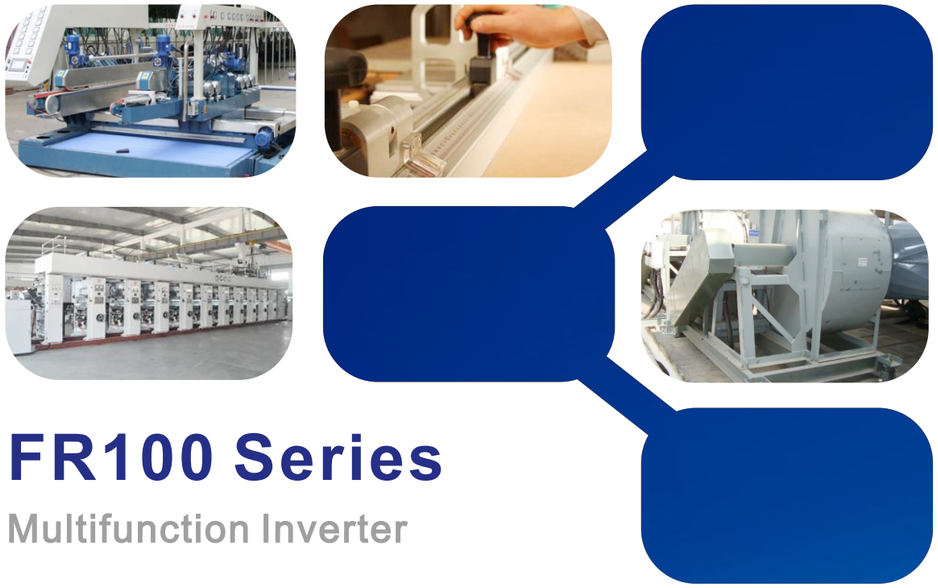
E-mail：frecon@frecon. com. cn

Http://www.frecon.com.cn

For FRECON Website

20160229(V1.1)

FRECON



FR100 Series

Multifunction Inverter

FRECON ELECTRIC (SHENZHEN) CO.,LTD.

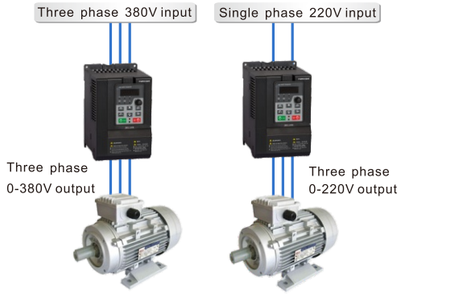
FR100 Series summary

FR100 Series multifunction compact inverter is a compact,feature-rich,and highly price-competitive model.

Particularly suitable for glass machine,electronic equipment,food packaging,woodworking,pump,conveyer belt and other small power transmission applications,mixer,grinder,medical centrifuge,small lift device,agricultural machinery,automatic shutter and ete application.

Suitable for several types of motor

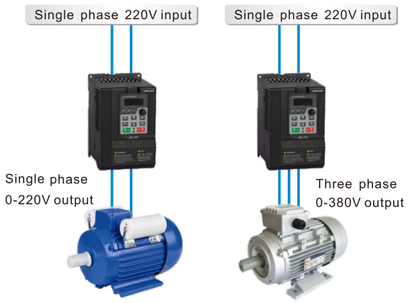
- Standard application wiring



Three phase 380V asynchronous motor　Three phase 220V asynchronous motor

- Special application wiring

（※Please contact factory if using below application wiring）



Single phase 220V asynchronous motor　Three phase 380V asynchronous motor

Smaller size, compact design

- Designed for small automatic device,smaller size, parallel installations,space save

Common DC bus

- When using several inverters, can parallel DC buses of drives to implement energy share,reduce braking resistance power or cancel braking resistor

Built-in braking unit in all ratings

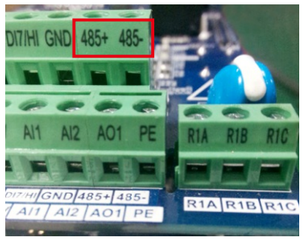
- Only connect braking resistor to save cost

Support input phase lacking protection,short circuit protection between motor to ground and motor phases

- Comprehensive protection to ensure reliable operation

Built-in RS 485 communication（Modbus）

- 485+ 485- terminals,supports standard Modbus RTU communication,implement system integration



Built-in 485+485- terminal

Convenient debugging

- Powerful background software

- Short-cut menu
  Common parameters setting rapidly to save customer's time to read manual
- Unique upload and download module which is convenient for parameter commissioning
  Restore factory parameters, backup user parameters
- Design special application macro according to industry demand

Technical Parameters

Item		Specification
Input Power	Rated Input Voltage(V)	Single phase 220 V（-15%～+30%） Three phase 380 V（-15%～+30%）
	Rated Input Frequency（Hz）	50Hz/60Hz, ±5%
Output Power	Maximum Output Voltage（V）	0～Rated input voltage, Error<±3%
	Maximum Output Frequency（Hz）	0.00～600.00 Hz, Units: 0.01Hz
Control Characteristic	Control mode	V/f control, sensor less vector control 1
	Speed range	1:50 (V/f control) 1:100 (sensor-less vector control 1)
	Speed accuracy	±0.5% (V/f control) ±0.2% (sensor-less vector control 1)
	Speed fluctuation	±0.3% (sensor-less vector control 1)
	Torque response	< 10ms (sensor-less vector control 1)
	Starting torque	0.5Hz: 180% (V/f control, sensor-less vector control 1)
Basic functions	Carrier frequency	0.7kHz～16kHz
	Overload capability	150% Rated Current 60s,180% Rated Current 10s,200% Rated Current 2s
	Torque boost	Automatic torque boost; Manual torque boost 0.1%～30.0%
	V/F Curve	Three ways: Straight; multi-point type; NTh-type V / F curve
	Acceleration and deceleration Curve	Line or curve acceleration and deceleration mode. Four kinds of acceleration and deceleration time, Ramp Time Range :0.0～6000.0s
	DC brake	DC brake start frequency: 0.00～600.00Hz DC brake time:0.0s～10.0s DC brake current:0.0%～150.0%
Run	Command source	Given the control panel, control terminal, serial communication port given.
	Frequency given	9 kinds of frequency sources
	Input terminal	5 Switch input terminals, one way to make high-speed pulse input. 2-channel analog inputs, including 1-way voltage input, one way voltage and current options
	Output terminal	1-way switch output terminal,1 relay output terminals,1 analog output terminal
Featured functions	Parameter copy、parameter backup、flexible parameter displayed & hidden. Reliable speed search started. Timing control、fixed length control、count function, three faults recorded、Over excitation brake、overvoltage stall protection programmable、under voltage stall protection、programmable、restart upon power loss、Motor thermal protection、Wobble frequency control、High-precision torque control	
Protection function	Provide fault protection dozen: Over current、Overvoltage、Under voltage、Over temperature、Overload Etc Protection.	
Environment	Place of operation	Indoors, no direct sunlight, free from dust, corrosive gases, flammable gases, oil mist, water vapor, water drop and salt, etc.
	Altitude	0～2000m De-rate 1% for every 100m when the altitude is above 1000 meters
	Ambient temperature	-10℃～40℃(De-rate from 40℃～50℃)
Others	Efficiency	Rated power; ≥93%
	Installation	Wall-mounted or Flange mounting
	IP grade	IP20
	Cooling method	Fan cooled