



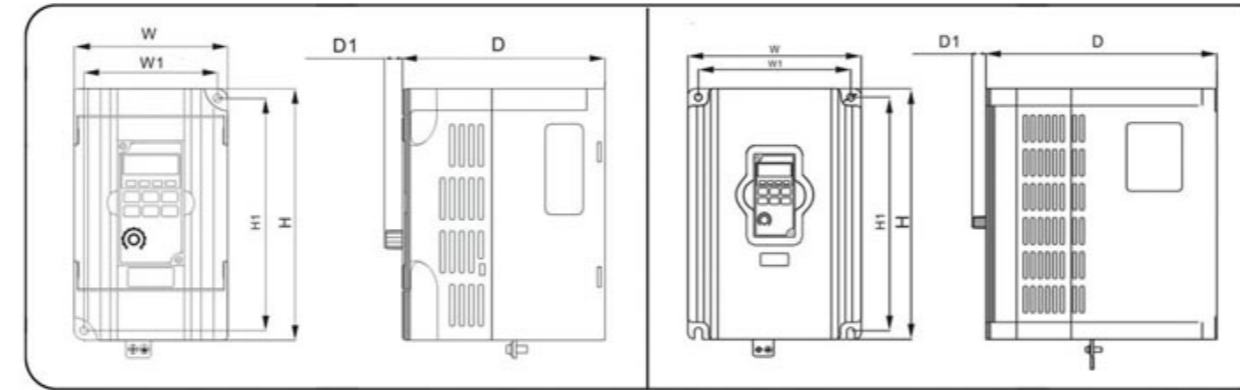
شرکت فنی مهندسی آتی روش
نماینده انحصاری شرکت ریفرورد



B550 Series
Sensorless Vector Frequency Drive



B550 series exterior dimension:

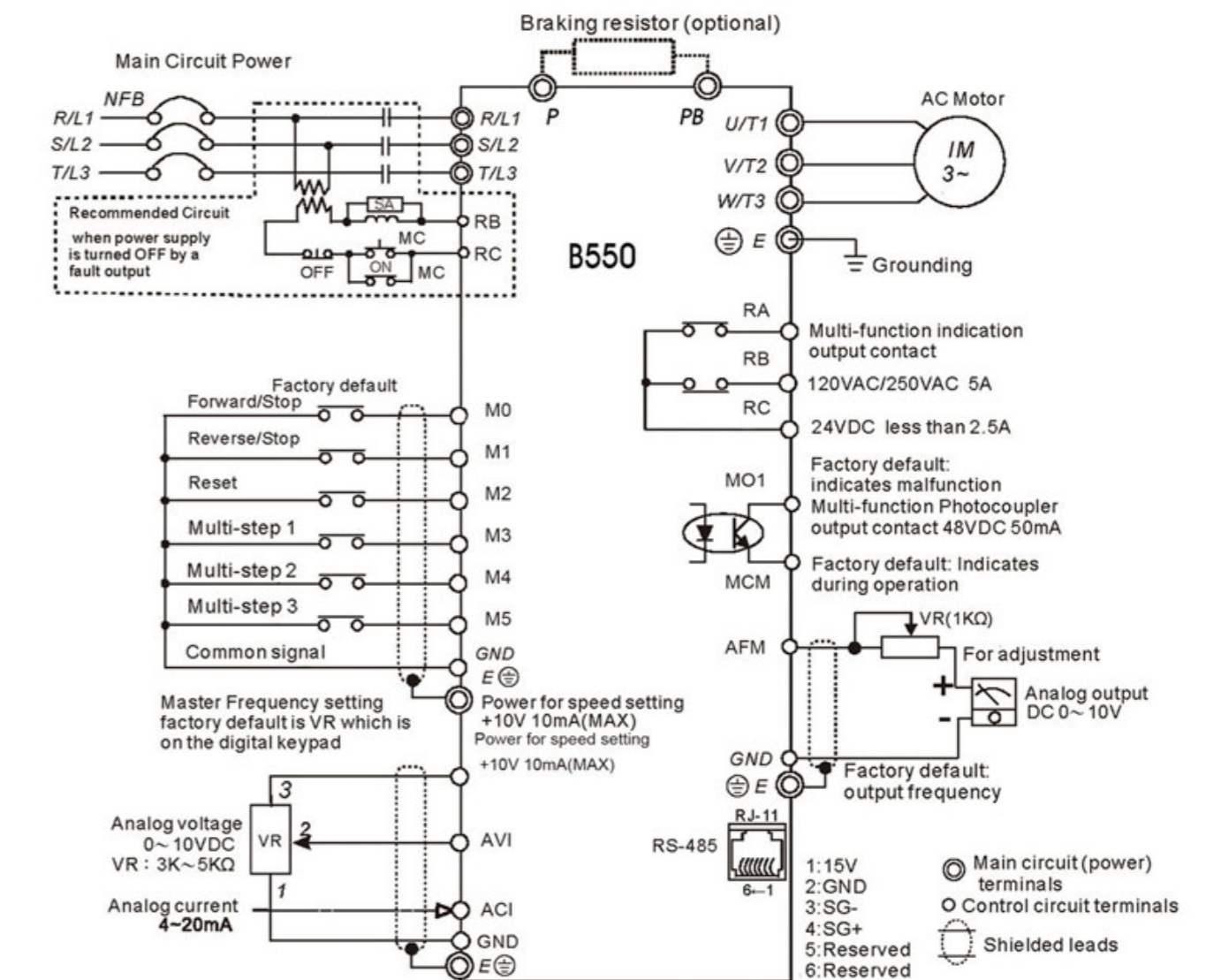


Dimension:

Fig	Model	W	W1	H	H1	D	D1	Fan cooled
A	B550-20R5	85	74	141.5	130.5	113	10.5	YES
	B550-2T0R5							
	B550-2001							
	B550-2T001							
	B550-2002							
A	B550-4001	100	89	151	140	106.5	10.5	
	B550-4002							
	B550-2T003							
	B550-4003							
	B550-2003							
B	B550-2005	125	110	220	205	166.5	10.5	
	B550-2T005							
	B550-4005							
	B550-4007							
	B550-4010							
	B550-2T007							
	B550-2T007							

B550 Series

standard connection diagram



NOTE: Do not plug a Modem or telephone line to the RS-485 communication port, permanent damage may result. Terminal 1 & 2 are the power sources for the optional copy keypad and should not be used while using RS-485 communication.

* If it is single phase model, please select any of the two input power terminals in main circuit power.
* Single phase model can be input 3-phase power.



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تلفن: ۸۸۹۲۸۱۲۹ - ۸۸۹۲۷۸۷۲
تهران، میدان فاطمی، خیابان جویبار، خیابان میرهادی شرقی، پلاک ۸، واحد ۱۷

General Specifications

Control Characteristics	Control System	SPWM (Sinusoidal Pulse Width Modulation) control (V/F or sensorless vector control)
	Freq. Setting Resolution	0.1Hz
	Output Frequency Resolution	0.1Hz
	Torque Characteristics	Including the auto-torque, auto-slip compensation; starting torque can be 150% at 5.0Hz
	Overload Endurance	150% of rated current for 1 minute
	Skip Frequency	Three zones, settings range 0.1-400Hz
	Accel/Decel Time	0.1 to 600 seconds (4 Independent settings for Accel/Decel Time)
	Stall Prevention Level Frequency Setting	20 to 200%, Setting of Rated Current
	DC Injection Braking	Operation frequency 0-60Hz, output 0-100% rated current Start time 0-5 seconds, stop time 0-25 seconds
	Braking Torque	Approx. 20% (up to 125% possible with option braking resistor or braking unit externally mounted, 1-15HP braking transistor built-in)
V/F Pattern	Adjustable V/F pattern	
Operating Characteristics	Frequency Setting	Setting by ▲ ▼ Potentiometer-5KΩ/0.5W, 0 to +10VDC, 4 to 20mA RS-485 interface; Multi-Function Inputs 0 to 5 (7 steps, Jog, up/down)
	Operation Setting	Set by RUN, STOP M0 to M5 can be combined to offer various modes of operation, RS-485 serial interface (MODBUS).
	Multi-Function Input Signal	Multi-step selection 0 to 7, Jog, accel/decel inhibit, first to forth accel/decel switches, counter, PLC operation, external Base Block (NC, NO), auxiliary motor control is invalid, selections, driver reset, UP/DOWN key settings, sink/source selection
	Multi-Function Output Indication	AC drive operating, frequency attained, non-zero, base block, fault indication, local/remote indication, PLC operation indication, auxiliary motor output, driver is ready, overheat alarm, emergency stop
	Analog Output Signal	Analog frequency/current signal output.
	Alarm Output Contact	1 Form C contact or open collector output
	Operation Functions	AVR, S-Curve, over-voltage, over-current stall prevention, fault records, adjustable carrier frequency, DC braking, momentary power loss restart, auto tuning, frequency limits, parameter Lock/Reset, vector control, counter, PID Control, PLC, MODBUS communication, reverse Inhibition, abnormal reset, abnormal re-start, digital frequency output, sleep/revival function, 1st/2nd frequency source selections.
	Protection Functions	Self-testing, over voltage, over current, under voltage, overload, overheating, external fault, electronic thermal, ground fault.
	Display Keypads	6-key, 4-digit, 7-segment LED, 4 status LEDs, master frequency, output frequency, output current, custom units, parameter values for setup, review and faults, RUN, STOP, RESET, FWD/REV
	Environmental Conditions	Built-in Braking Chip
Protection Level		IP20
Pollution Degree		2
Installation Location		Altitude 1,000 m or lower, keep from corrosive gasses, liquid and dust
Ambient Temperature		-10°C to 40°C (-10°C to 50°C without blind plate) Non-Condensing and not frozen
Storage/Transportation Temperature		-20°C to 60°C
Ambient Humidity		Below 90% RH (non-condensing)
Vibration	9.80665m/s ² (1G) less than 20Hz, 5.88m/s ² (0.6G) at 20 to 50Hz	
Approvals		

Specification:

230V SERIES

Voltage Class		230V Class					
Model Number B550-20XX		R5	01	02	03	05	07
Max. Applicable Motor Output (kW)		0.4	0.75	1.5	2.2	3.7	5.5
Max. Applicable Motor Output (hp)		0.5	1.0	2.0	3.0	5.0	7.5
Rated Output Capacity (kVA)		1.0	1.7	2.7	3.8	6.5	9.5
Rated Output Current (A)		3.0	4.5	7.0	10	17	25
Maximum Output Voltage (V)	3-Phase proportional to input voltage						
Output Frequency (Hz)	0.1~400 Hz						
Carrier Frequency (kHz)	1-15						
Rated Input Current (A)	Single/3-phase	6.3/2.9	11.5/7.6	15.7/8.8	27/12.5	19.6	28
	3-phase						
Input Current for 1-phase Models when Using 3-phase Power		3.2	6.3	9.0	12.5	--	--
Rated Voltage, Frequency	Single/3-phase	200-240 VAC, 50/60Hz			3-phase 200-240VAC, 50/60Hz		
Voltage Tolerance	± 10% (180~264 VAC)						
Frequency Tolerance	± 5% (47~63 Hz)						
Cooling Method	Fan Cooled						

460V SERIES

Voltage Class		460V Class					
Model Number B550-40XX		01	02	03	05	07	
Max. Applicable Motor Output (kW)		0.75	1.5	2.2	3.7	5.5	
Max. Applicable Motor Output (hp)		1.0	2.0	3.0	5.0	7.5	
Rated Output Capacity (kVA)		2.3	3.1	3.8	6.2	9.9	
Rated Output Current (A)		3.0	4.2	5.0	8.2	12.5	
Maximum Output Voltage (V)	3-phase Proportional to Input Voltage						
Output Frequency (Hz)	0.1~400 Hz						
Carrier Frequency (kHz)	1-15						
Rated Input Current (A)	3-phase	4.2	5.7	7.0	8.5	14	
	3-phase						
Rated Voltage, Frequency	3-phase	380-480 VAC, 50/60Hz					
Voltage Tolerance	± 10% (342~528 VAC)						
Frequency Tolerance	± 5% (47~63 Hz)						
Cooling Method	Fan Cooled						



B550 SERIES SENSORLESS VECTOR FREQUENCY INVERTER

1 phase 220-240V	0.5HP-3HP (0.4kW-2.2kW)
3 phase 220-240V	1HP-7HP (0.75kW-5.5kW)
3 phase 380-440V	1HP-7HP (0.75kW-5.5kW)

The main features of our B550 series as below:

- Adjustable V/F curve and vector control
- Sine wave PWM control
- Auto torque boost and slip compensation
- 150% when starting the torque at 1.0Hz
- Output Frequency 0.1-400Hz
- 8-step speed control and 7-step preset speed process control
- Built-in PID feedback control
- Analog frequency setting: 0-10VDC, 4-20mA
- Built-in MODBUS communication, Baud Rate upto 38400bps
- Energy saving running and AVR functions.
- Auto-adjustment acceleration and deceleration
- Sleeping and awake up functions.
- RS-485/232 communication protocol

适用行业 Applications:

Packing machine; dumpling machine; treadmill; temperature/humidity control fan for agriculture and aquaculture; mixer for food processing; grinding machine; drilling machine; small size hydraulic lathe; coating equipment; small size milling machine; robot arm of injection machine (clamp); wood machine (two-side woodworking planer); edge bending machine, elasticizer, etc.

功率范围 Power Range:

1 phase 220-240V	0.5HP-3HP (0.4kW-2.2kW)
3 phase 220-240V	1HP-7HP (0.75kW-5.5kW)
3 phase 380-440V	1HP-7HP (0.75kW-5.5kW)