



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; dumping 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)

技术规范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
Output Rating	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					
Input Rating	Rated Input Current (A)	Single/3-phase			3-phase		
		6.3/2.9	11.5/7.6	15.7/8.8	27/12.5	19.6	28
	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					

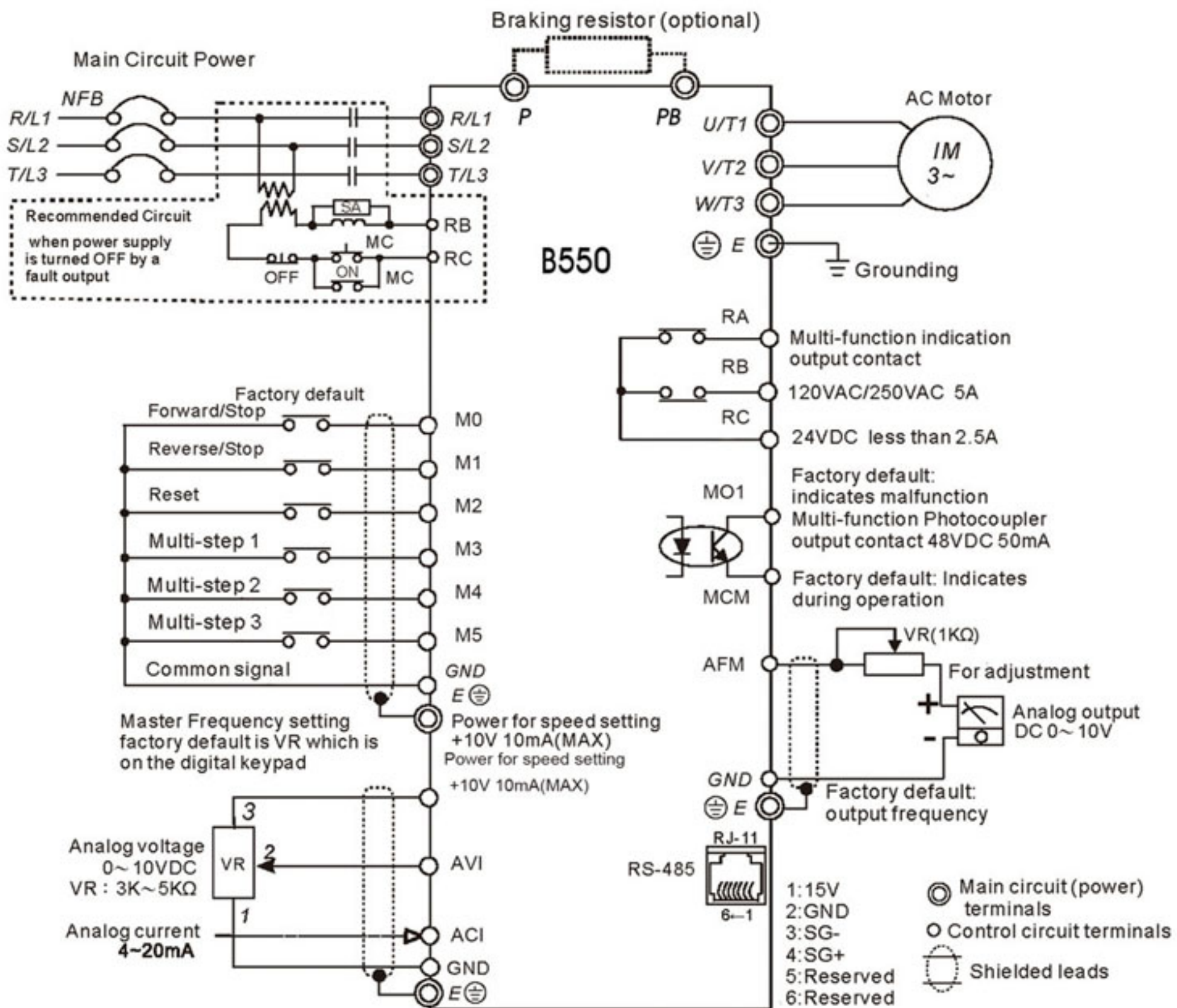
460V SERIES

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	
Output Rating	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						
Input Rating	Rated Input Current (A)	3-phase					
		4.2	5.7	7.0	8.5	14	
	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					

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	Keypad	Setting by ▲ ▼
		External Signal	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 Signal	Keypad	Set by RUN, STOP
		External Signal	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		
Built-in Braking Chip	Built-in for all models		
Environmental Conditions	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	CE		

接线图 standard connection diagram

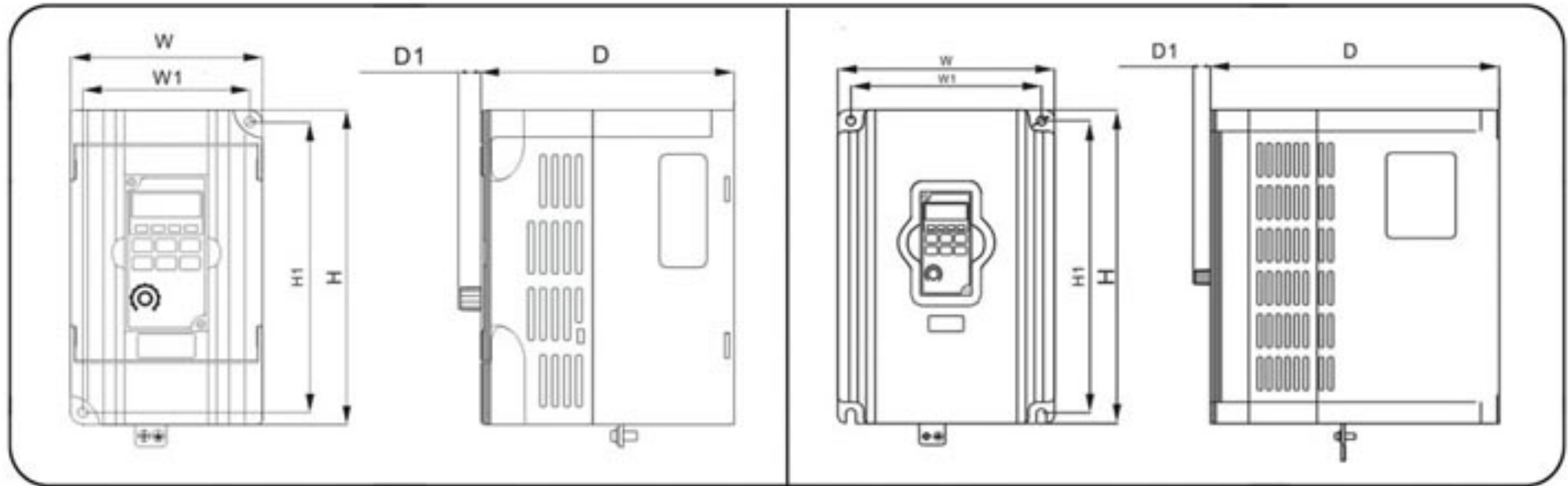


NOTE: Do not plug a Modem or telephone line to the RS-485 communication port, permanent damage may result. Terminal 1 & 2 are the power sources for the optional copy keypad and should not be used while using RS-485 communication.

* 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.

B550 series exterior dimension:



产品尺寸 Dimension:

(unit:mm)

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							
	B550-2T002							
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							

