



Main Features of B550 Series Mini AC Drives

- 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
- Accel./Decel. pause (Dwell) and droop control functions
- 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 function
- RS-485/232 communication protocol

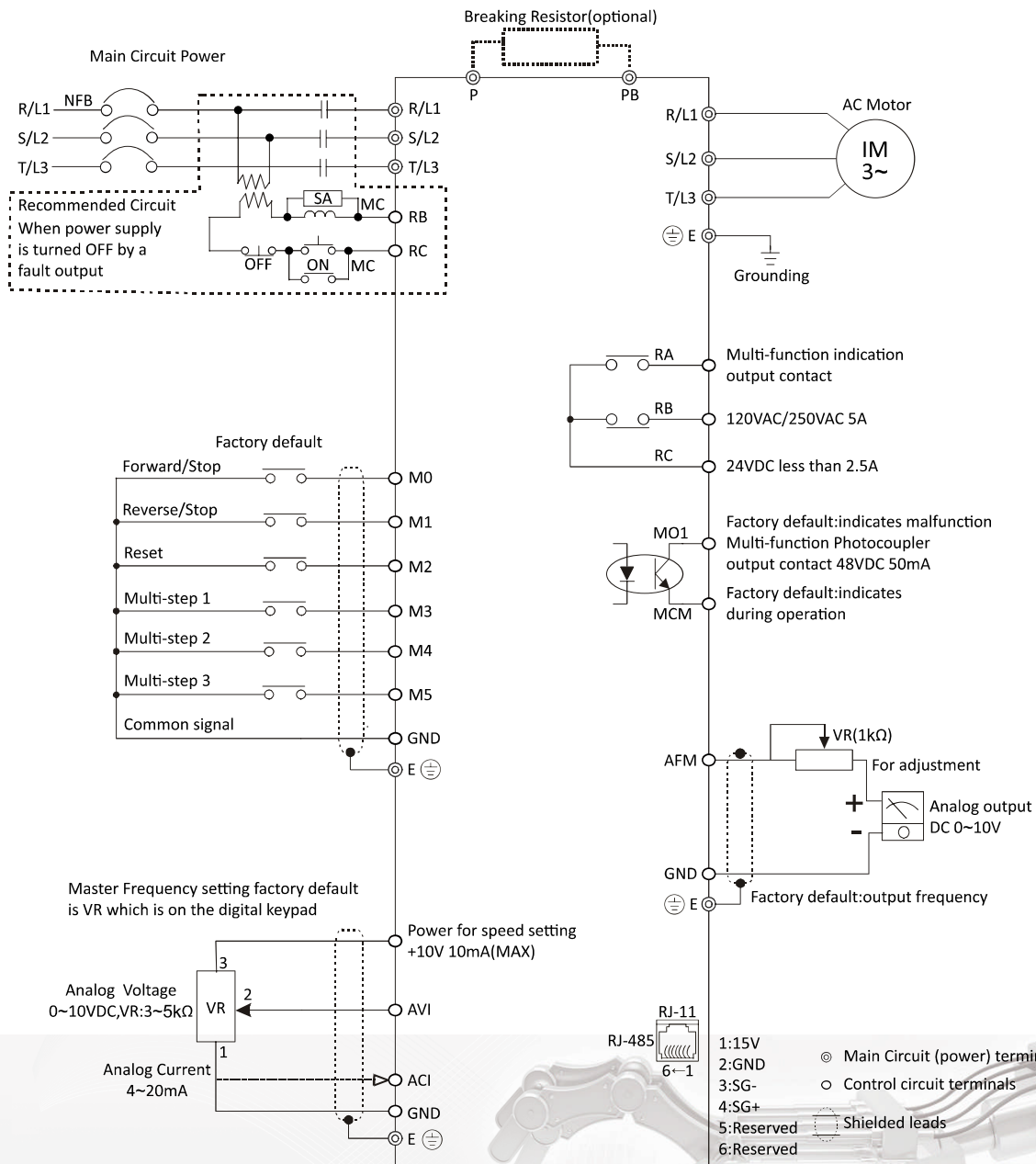
Applications

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),Wooden machine (two-side woodworking planer),Edge bending machine,Elasticizer,etc.

Power Range

- 1 phase 220~240V 0.5HP-5HP (0.4kW~3.7kW)
- 3 phase 220~240V 1HP-7HP (0.75kW~5.5kW)
- 3 phase 380~460V 1HP-10HP (0.75kW~7.5kW)

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.





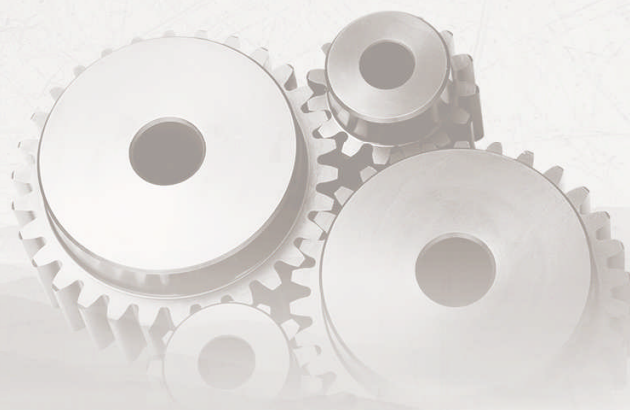
Standard Specifications

Voltage Class		230V Class					
Model Number B550-20□□		R5	01	02	03	05	07
Max. Applicable Motor Outout(kW)		0.4kW	0.75kW	1.5kW	2.2kW	3.7kW	5.5kW
Max. Applicable Motor Outout(HP)		0.5	1.0	2.0	3.0	5.0	7.5
Outout Raeting	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
	Max. Output Voltage	3 phase 200~240V (Proportional to input voltage)					
	Output Frequency	0.1~400Hz					
Carrier Frequency		1-15kHz					
Inout Raeting	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 Model when Using 3-phase Power	3.2	6.3	9.0	12.5	--	--
	Rating Voltage & Frequency	Single/3-phase 200~240VAC,50/60Hz				3-phase 200~240VAC,50/60Hz	
	Voltage Tolerance	±10% (180~264VAC)					
Frequency Tolerance	±5% (47~63VAC)						
Cooling Method		Fan Cooled					

Voltage Class		400V Class					
Model Number B550-40□□		01	02	03	05	07	10
Max. Applicable Motor Outout(kW)		0.75	1.5	2.2	3.7	5.5	7.5
Max. Applicable Motor Outout(HP)		1.0	2.0	3.0	5.0	7.5	10
Outout Raeting	Rated Output Capacity(kVA)	2.3	3.1	3.8	6.2	9.9	13.7
	Rated Output Current(A)	3.0	4.2	5.0	8.2	12.5	18
	Max. Output Voltage	3 phase 380~440V (Proportional to input voltage)					
	Output Frequency(Hz)	0.1~400Hz					
Carrier Frequency		1-15kHz					
Inout Raeting	Rated Input Current (A)	3-phase					
		4.2	5.7	7.0	8.5	14	23
	Rating Voltage & Frequency	Single/3-phase 200~240VAC,50/60Hz					
	Voltage Tolerance	±10% (342~528VAC)					
Frequency Tolerance	±5% (47~63VAC)						
Cooling Method		Fan Cooled					

B550 Standard 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-silp compensation;starting torque can be 150% at 5.0 Hz
	Overload Endurance		150% of rated current for 1 munite
	Skip Frequency		Three zones,setting range 0.1-400Hz
	Accel/Decel Time		0.1 to 600 seconds (4 independent setting for Accel/Decel time)
	Stall Prevention Level		20 to 200% setting of rated current
	Frequency Setting		20 to 200% setting of rated current
	DC Injection Braking		Operation frequency 0-60Hz,output 0-100% rated current, start time0-5 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 patten		Adjustable V/F patten
Power Supply	Frequency Setting	Keypad	Setting by ▲▼
		External Signal	Potentiometer-5kΩ/0.5W,0 to +10DC,4 to 20mA RS-485 interface; Multi-Function inputs 0 to 5 (7 steps,jog,up/down)
	Operation Setting Signl	Keypad	Set by RUN,STOP
		External Signal	M0 toM5 can be combined to offer various modes of operation, RS-485 serial interface (MODBUS).
	Multi-Function Input Indication		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
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 restart, 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,electrnic 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	Protention Level		IP20
	Pollution Degree		2
	Installtion Location		Atitude 1,000m 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 non frozen
	Storage/Transportation Temperature		-20°C to 60°C
	Ambient Humidity		Below 90% RH (non-condensing)
Vibration		1g (9.8m/s ²) or less than 20Hz,0.6g (5.88m/s ²) at 20 to 50Hz	
Approvals			



B550 Series Dimensions(mm)

Fig:A

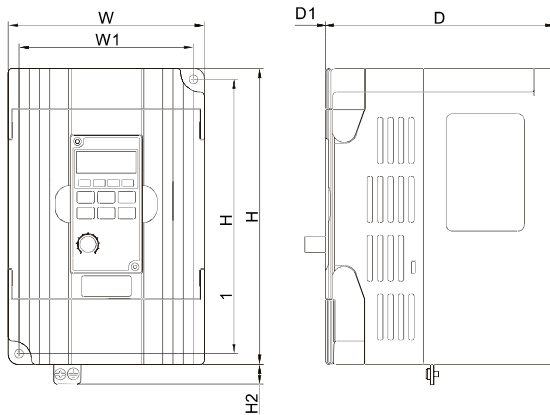
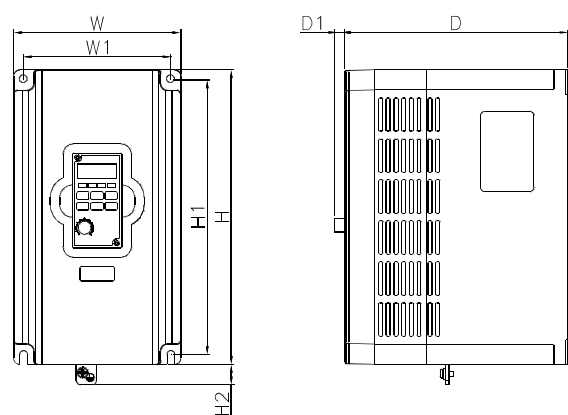


Fig:B



•Enclosure Dimensions (mm)

Fig	Model	W	W1	H	H1	D	D1	Fan cooled
A	B550-20R5	85	74	141.5	130.5	113	10.5	
	B550-2T0R5							
	B550-2001							
	B550-2T001							
	B550-2002							
	B550-2T002							
A	B550-4001	100	89	151	140	106.5	10.5	YES
	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							