BF100
SERIES

Vector control
AC Drive

SINEFORD®

Main Features of BF100 Series AC Drive

- Compact Structure Design
  Select new generation IGBT technology with high junction temperature and high power density to save installation space and facilitate electrical layout.
- Control mode: VF (V/F control) and SVC (sensorless vector control)
- Strict temperature-rise test
  Adopt the most strict cyclic overload test to meet the long-term reliable operation under extreme load conditions.
- Independent air duct design
  Use the large air volume & long-life cooling fans to reduce the internal temperature rise to keep the drive reliable & stable run.
- Torque boost: Fixed torque boost curve, customer defined V/F curve
- Overload capacity: 150% of rated current for 60s,180% of rated current for 10s & 200% of rated current for 2s.
- Easy to use
  Deceleration over-excitation function, Under-voltage stall function, Excellent speed research tracking function, Automatic energy-saving control of Fan/Pump type, Friendly operation keypad, and Powerful internal logic function. Rich expansion functions
- Superior protection
  Short circuit protection, Over-current protection, Over-voltage protection, Under-voltage protection, Phase loss protection, Overload protection, Off-load protection, External fault Protection etc.
- Start Torque:
  150%/0.5Hz (V/F),
  150%/0.25Hz (SVC)
- Speed Control Accuracy:
  ±0.2% of Rated Speed (SVC)
  ±0.5% of Rated Speed (VF)

Applications

It's available for 3phase AC induction motor , Such as Paper Process, Rolling machine, Metal machine tools, Food Process machine, Air compressor; Ceramic ball mill, Dumpling machine, CNC machine, Wooden machine, Industrials Washing machine, Plastic injection machine etc.

Power Range

Single phase 220V (200V-240V)	0.5HP-3HP (0.4KW-2.2KW)
3phase 220V (200V-240V)	0.5HP-5HP (0.4KW-3.7KW)
3phase 400V (340V-460V)	1HP-10HP (0.75KW-7.5KW)

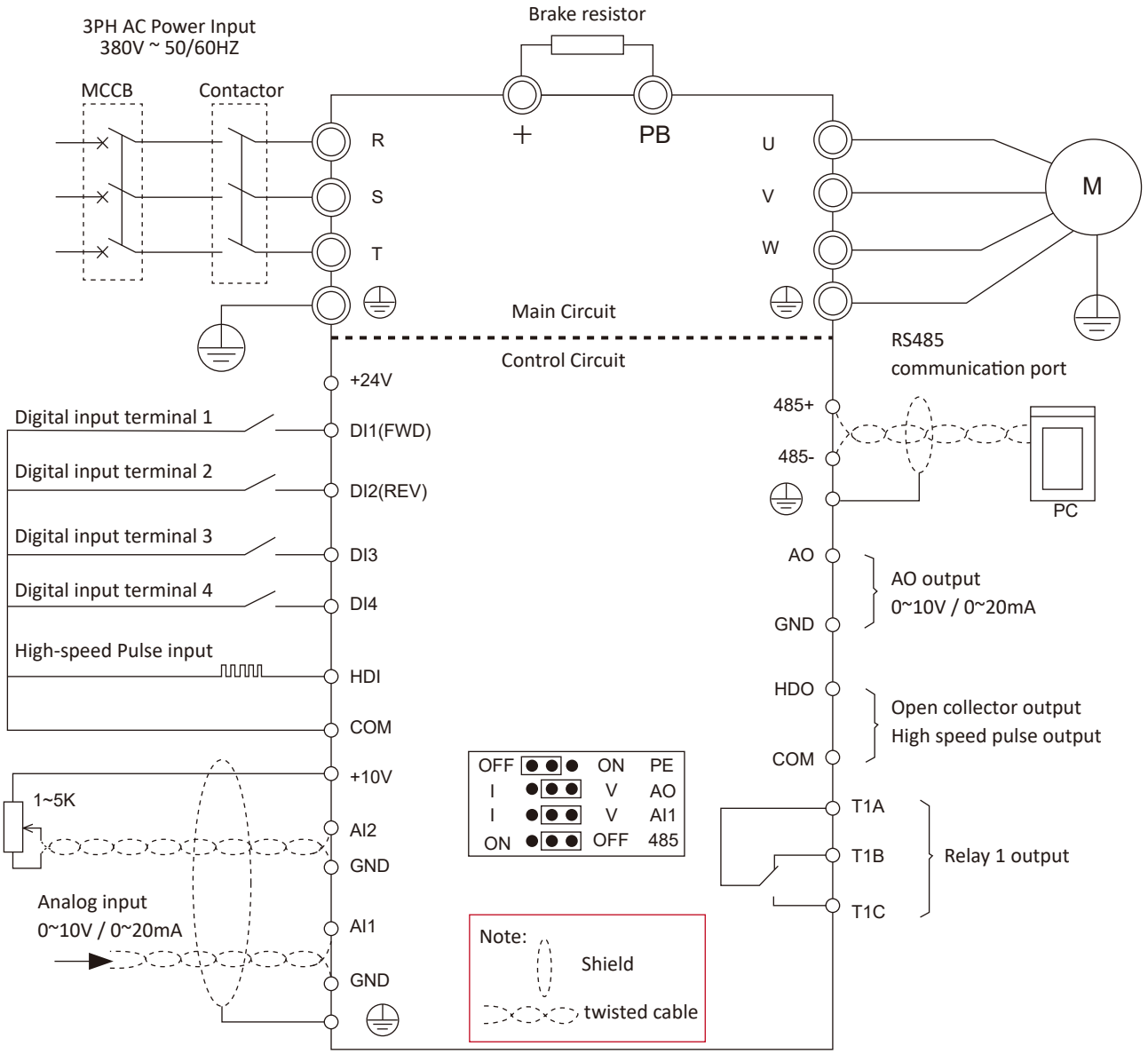
BF100 Series Standard Specifications (220V)

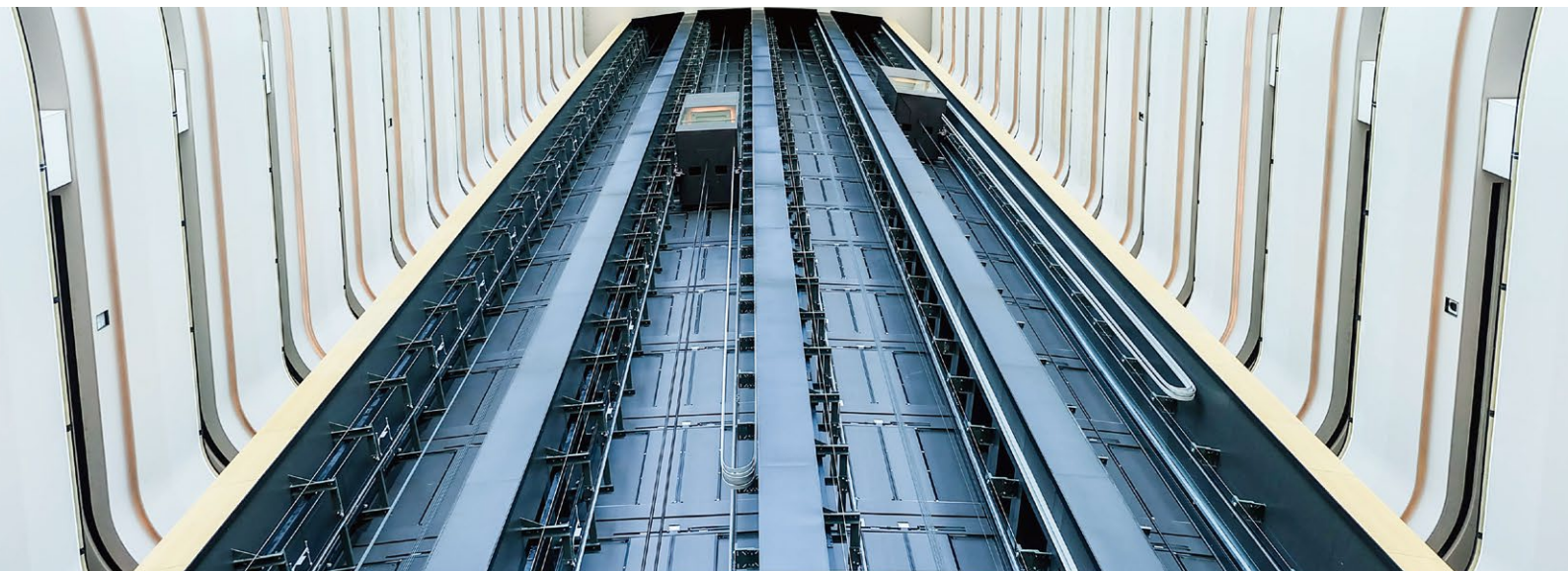
BF100-2XXX		00R5	001	002	003	T00R5	T001	T002	T003	T005
Motor Power (KW)		0.4	0.75	1.5	2.2	0.4	0.75	1.5	2.2	3.7
Rated Output Current(A)-ND		5.6	8.0	10.6	12.5	4.2	5.6	10.5	17	23
Rated Output Current(A)-HD		3.2	5.6	8.0	10.6	2.5	4.2	9.4	13	17
Power supply	Input voltgae & freq.	1phase 200V 50/60Hz (200V-240V)				3phase 200V 50/60Hz (200V-240V)				
	Voltage fluctuation	-15%~10% (200V-15%, ~ 240V + 10%)								
	Input freq, fluctuation	50/60Hz, Freq. fluctuation ± 5%								
	Max. ouput voltage (V)	3phase 0 - 240V (proportional to input voltage)								
	Max. output freq. (Hz)	0.0~3000.0HZ (V/F); 0.00~200.00Hz (SVC)								
Control Characteristics	Control mode	Voltage/Frequency control (VF) Sensorless Vector Control (SVC)								
	Input mode	Frequency (speed) input & Torque input								
	Speed control range	1:100 (VF) 1:200 (SVC)								
	Speed control accuracy	±0.2% of Rated Speed (SVC) ±0.5% of Rated Speed (VF)								
	Starting Torque	150%/0.5Hz (V/F); 150%/0.25Hz (SVC)								
	V/F Features	Rated output voltage: 20%-100% adjustable.								
		Frequency Base:1Hz-300Hz								
	Torque control accuracy	<5Hz: ±10% of Rated Torque (SVC); ≥5Hz: ±5% of Rated Torque(SVC)								
	AcceL/DeceL Time	0.00-60000s								
	Automatic Current Limit	Automatically limit output current to avoid frequently overcurrent trip								
	AVR	Output voltage remains unchangeable and input voltage varies when AVR is active								
	Start/Stop Control Method	Keypad, control terminal (2-wire, 3-wire sequence) & communication control								
	Signal input source	Communication, Preset speed, Analog input								
	Protection	Short circuit protection, Overcurrent,Overvoltage, Undervoltage, Phase loss, Overload etc								
	Input freq, resolution	Digital setting: 0.01Hz Analog setting: Max. freq. X 0.1%								
	Overload Capacity	Heavy Duty:150% of rated output current for 60s, 180% of rated output current for 10s, 200% of rated output current for 2s Normal Duty:120% of rated output current for 60s,150% of rated output current for 10s, 180% of rated output current for 2s								
	DC Brake	Brake frequency: 0.01 - Max. frequency Brake time: 0-30S Brake current: 0% -150% Rated current								
Environment	Installation location	Indoor (Protected from corrosive gases and dust)								
	Altitude	≤ 1000 m or less								
	Ambient temperature	-10˚C - +40˚C for NEMA 1 type								
		-10˚C - +45˚C for open chassis type								
	Humidity	95% RH (non-condensing)								
	Vibration	Less than 5.9m/s^2 (0.6g)								
	Storage Temperature	-40˚C - +70˚C								
	Installation method	Wall mounted type								
	Protection Level	IP20/IP21 (add plastic baffle)								
	Cooling method	Forced air cooling								
Approvals		CE								

BF100 Series Standard Specifications (400V)

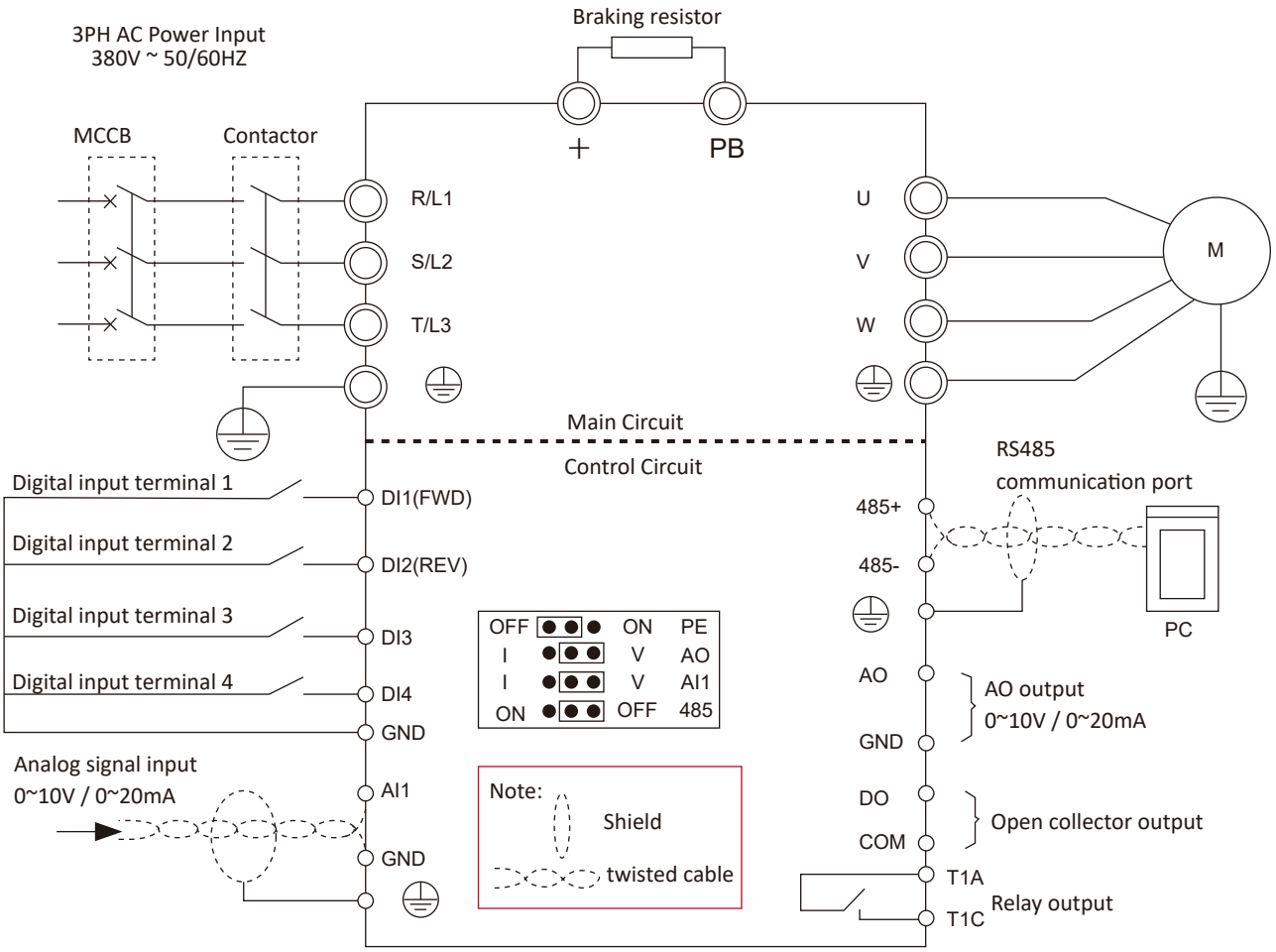
BF100-4XXX		001	002	003	005	007	010
Motor Power (KW)		0.75	1.5	2.2	3.7	5.5	7.5
Rated Output Current(A)-ND		4.2	5.6	9.4	10.5	17	23
Rated Output Current(A)-HD		2.5	4.2	5.6	9.4	13	17
Power supply	Input voltgae & freq.	3phase 400V 50/60Hz (340V-460V)					
	Voltage fluctuation	-15% ~ 10% (340V-15%, ~ 460V + 10%)					
	Input freq, fluctuation	50/60Hz, Freq, fluctuation ±5%					
	Max. ouput voltage (V)	3phase 0 - 480V (proportional to input voltage)					
	Max. output freq. (Hz)	0.0~3000.0Hz (V/F); 0.00~200.00HZ (SVC)					
Control Characteristics	Control mode	Voltage/Frequency control (VF) Sensorless Vector Control (SVC)					
	Input mode	Frequency (speed) input & Torque input					
	Speed control range	1:100 (VF) 1:200 (SVC)					
	Speed control accuracy	±0.2% of Rated Speed (SVC) ±0.5% of Rated Speed (VF)					
	Starting Torque	150%/0.5Hz (V/F) 150%/0.25Hz (SVC)					
	V/F Features	Rated output voltage: 20%-100% adjustable.					
		Frequency Base:1Hz-300Hz					
	Torque control accuracy	<5Hz: ±10% of Rated Torque (SVC); ≥5Hz: ±5% of Rated Torque (SVC)					
	AcceL/DeceL Time	0.00-60000s					
	Automatic Current Limit	Automatically limit output current to avoid frequently overcurrent trip					
	AVR	Output voltage remains unchangeable and input voltage varies when AVR is active					
	Start/Stop Control Method	Keypad, control terminal (2-wirez 3-wire sequence) & communication control					
	Signal input source	Communication, Preset speed, Analog input					
	Protection	Short circuit protection, Overcurrent,0vervoltage, Undervoltage, Phase loss, Overload etc					
	Input freq, resolution	Digital setting: 0.01Hz Analog setting: Max. freq. X 0.1%					
	Overload Capacity	Heavy Duty: 150% of rated output current for 60s, 180% of rated output current for 10s, 200% of rated output current for 2s Normal Duty: 120% of rated output current for 60s, 150% of rated output current for 10s, 180% of rated output current for 2s					
	DC Brake	Brake frequency: 0.01 - Max. frequency Brake time: 0-30s Brake current: 0% -150% Rated current					
Environment	Installation location	Indoor (Protected from corrosive gases and dust)					
	Altitude	≤1000 m or less					
	Ambient temperature	-10˚C - +40˚C for NEMA 1 type					
		-10˚C - +45˚C for open chassis type					
	Humidity	95% RH (non-condensing)					
	Vibration	Less than 5.9m/s^2 (0.6g)					
	Storage Temperature	-40˚C - +70˚C					
	Installation method	Wall mounted type					
	Protection Level	IP20/IP21 (add plastic baffle)					
	Cooling method	Forced air cooling					
Approvals		CE cULus					

BF100 Series Connection Diagram (Size B/C)





BF100 Series Connection Diagram (Size A)



BF100 Series Dimension (mm)

SIZE	Dimension and Installation Size (mm)						
	A	B	H	W	D	ød	Screw
SIZE A	66	137	145	75	115	ø5.0	M4 X 16
SIZE B	72	165	175	86	128	ø5.0	M4 X 16
SIZE C	108	225	235	120	158	ø5.0	M4 x 16