

# SF730(E) SERIES FREQUENCY INVERTER

- Single Phase AC 220V-240V 0.4kW-7.5kW
- Three Phase AC 220V-240V 0.4kW-160kW
- Three Phase AC 340V-460V 0.75kW-400kW

SF730 series inverter is a high-reliability general-purpose inverter: supports three-phase AC asynchronous motor (SF730 inverter) and permanent magnet synchronous motor (SF730E inverter); supports a variety of drive control technologies - vector VF control technology (VVF) and sensorless vector control technology (SVC); supports two output forms of speed and torque, supports Wi-Fi access function and background software debugging function.



## SF730(E) series inverters have the following features

- 1 Support mobile APP and Wi-Fi module to facilitate debugging and monitoring inverter status.
- 2 Reliable operation under full load at 50°C ambient temperature.
- 3 Integrated special functions for retracting and unwinding.
- 4 Support high frequency output up to 3000Hz for driving high-speed motors.
- 5 Support 100kHz high-speed pulse input.
- 6 The built-in filter is close to the C3 level, and the external interference is greatly reduced.
- 7 The all-metal base plate adapts to the working environment with vibration and reduces the induced voltage of the motor.



## Models and Rated Output Current

Rated voltage of power supply	Model	Applicable motor power(kW)	Heavy-duty rated output current (A)	Light-duty rated output current (A)
Single-phase/ three-phase AC 200V~240V	SF730/SF730E-0R4-2B	0.4	2.8	3.2
	SF730/SF730E-0R7-2B	0.75	4.8	5.0
	SF730/SF730E-1R5-2B	1.5	8	8.5
	SF730/SF730E-2R2-2B	2.2	10	11.5
Three-phase AC 340~460V	SF730/SF730E-0R7-3B	0.75	2.5	3
	SF730/SF730E-1R5-3B	1.5	4.2	4.6
	SF730/SF730E-2R2-3B	2.2	5.6	6.5
	SF730/SF730E-4R0-3B	4.0	9.4	10.5
	SF730/SF730E-5R5-3B	5.5	13	15.7
	SF730/SF730E-7R5-3B	7.5	17	20.5
	SF730/SF730E-011-3B	11	25	28
	SF730/SF730E-015-3B	15	32	36
	SF730/SF730E-018-3B	18.5	38	41.5
	SF730/SF730E-022-3B	22	45	49
	SF730/SF730E-030-3/3B	30	60	70
	SF730/SF730E-037-3/3B	37	75	85
	SF730/SF730E-045-3	45	90	105
	SF730/SF730E-055-3	55	110	134
	SF730/SF730E-075-3	75	150	168
	SF730/SF730E-090-3	90	176	200
	SF730/SF730E-110-3	110	210	235
SF730/SF730E-132-3	132	253	290	
SF730/SF730E-160-3	160	304	340	

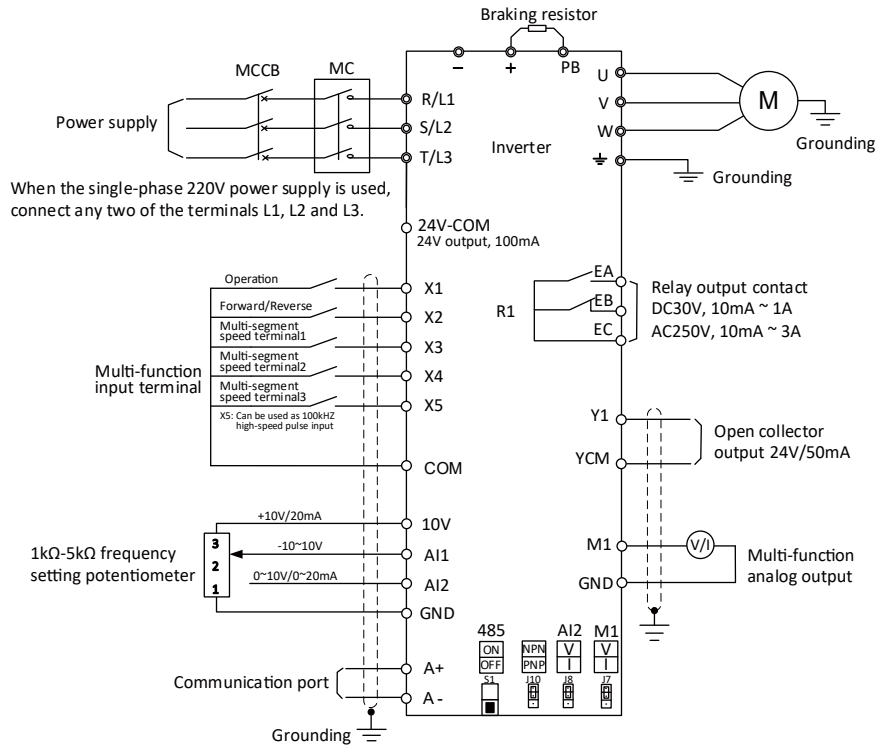
Note: For bigger powers or other specifications, please contact us for details.

## Technical Specifications

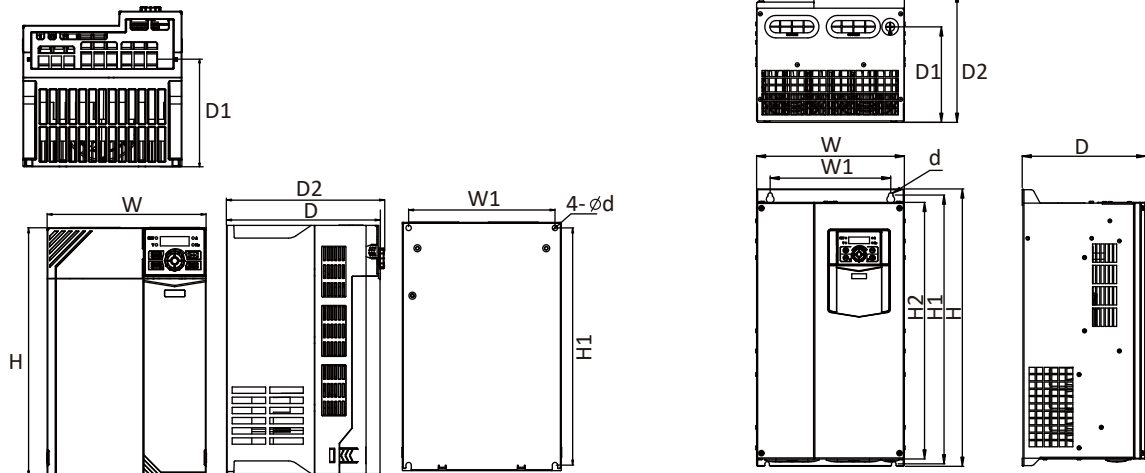
	Item	Specification
Power supply	Rated voltage of power supply	Three-phase 340V-10% to 460V+10%, Single-phase/three-phase 200V-10% to 240V+10%; 50-60Hz $\pm$ 5%; voltage unbalance rate: <3%
Output	Maximum output voltage	The maximum output voltage is the same as the input power voltage.
	Rated output current	Continuous output of 100% rated current
	Maximum overload current	150% heavy-duty rated current: 60s; 180% heavy-duty rated current: 10s; 200% heavy-duty rated current: 2s 120% light-duty rated current: 60s; 150% light-duty rated current: 10s; 180% light-duty rated current: 2s
Basic control functions	Drive mode	V/F control (VVF); speed sensorless vector control (SVC)
	Input mode	Frequency (speed) input, torque input
	Start and stop control mode	Keyboard, control terminal (two-line control and three-line control), communication
	Frequency control range	0.00~600.00Hz/0.0~3000.0HZ
	Input frequency resolution	Digital input: 0.01Hz/0.1Hz Analog input: 0.1% of maximum frequency
	Speed control range	1:50 (VVF), 1:200 (SVC)
	Speed control accuracy	Rated synchronous speed $\pm$ 0.2%
	Acceleration and deceleration time	0.01 s to 600.00 s / 0.1 s to 6,000.0 s / 1 s to 60,000 s
	Voltage/frequency characteristics	Rated output voltage: 20% to 100%, adjustable Reference frequency: 1Hz to 600Hz/3,000Hz
	Torque boost	Fixed torque boost curve Any V/F curve is acceptable.
	Starting torque	150%/1Hz (VVF) 150%/0.25Hz (SVC)
	Torque control accuracy	$\pm$ 5% rated torque (SVC)
	Self-adjustment of output voltage	When the input voltage changes, the output voltage will basically remain unchanged.
	Automatic current limit	Output current is automatically limited to avoid frequent overcurrent trips.
DC braking	Braking frequency: 0.01 to maximum frequency Braking time: 0~30S Braking current: 0% to 150% rated current	

	Item	Specification
	Signal input source	Communication, multi-speed, analog, etc.
Input and output function	Reference power supply	10V/20mA
	Terminal control power	24V/100mA
	Digital input terminal	5-channel digital multi-function input: X1~X5 X5 can be used as the high-speed pulse input (max. 100kHz).
	Analog input terminal	2-channel analog inputs: One (AI1) voltage source: -10 to 10V input; One channel (AI2): 0 to 10V input voltage or 0 to 20mA input current optional;
	Digital output terminal	Multi-function output of one open collector and one relay Maximum output current of the collector: 50 mA; Relay contact capacity: 250VAC/3A or 30VDC/1A, EA-EC: normally open; EB-EC: normally closed
	Analog output terminal	One multi-function analog terminal output M1: 0-10V/0-20mA multi-function analog output terminal
Keyboard	LED display	The LED digital tube displays relevant information about the inverter.
Protection	Protective Function	Short circuit, overcurrent, overvoltage, undervoltage, phase loss, overload, overheat, load loss, external protection, etc.
Use conditions	Location	Indoor, at an altitude of less than 1 km, free of dust, corrosive gases and direct sunlight. When the altitude is higher than 1km, it is derated by 1% per 100m. The maximum allowable altitude is 3km.
	Applicable environment	-10℃ to +50℃, 5% to 95%RH (no condensation). When the ambient temperature exceeds 50℃, it needs to be derated by 3% per 1℃ temperature rise. The maximum allowable ambient temperature is 60℃.
	Vibration	Less than 0.5g
	Storage environment	-40℃ ~ +70℃
	Installation method	Wall-mounted or installed in the cabinet
	Levels of protection	IP20/IP21 (with plastic baffle)
	Cooling method	Forced air cooling

## Standard Wiring Diagram of Control Circuit



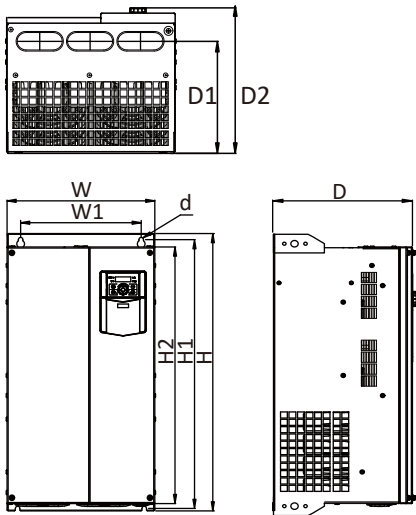
## Outline Dimensions and Installation Dimensions



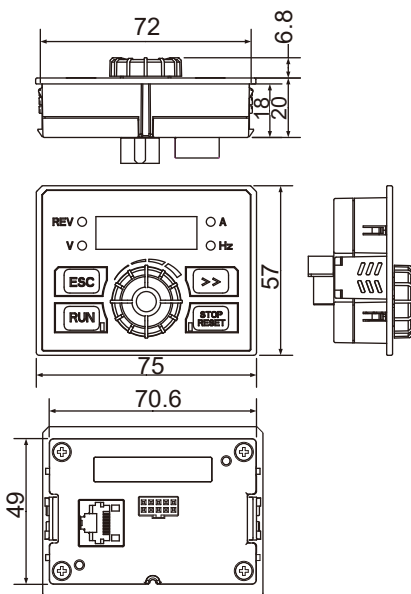
① Appearance of SF730/SF730E-0R7-3B to SF730/SF730E-022-3B inverters

② Appearance of SF730/SF730E-030-3B to SF730/SF730E-075-3 inverters

Unit: mm



③ Appearance of SF730/SF730E-090-3 to SF730/SF730E-160-3 inverters



④ SF730 keyboard appearance

Specifications	W	W1	H	H1	D	D1	D2	d
SF730/SF730E-0R4-2B	75	65	142	132	146	67	152	4.5
SF730/SF730E-0R7-2B								
SF730/SF730E-1R5-2B	93	82	172	163	136	85	141	4.7
SF730/SF730E-2R2-2B								
SF730/SF730E-0R7-3B	75	65	142	132	146	67	152	4.5
SF730/SF730E-1R5-3B								
SF730/SF730E-2R2-3B	93	82	172	163	136	85	141	4.7
SF730/SF730E-4R0-3B								
SF730/SF730E-5R5-3B	109	98	207	196	154	103	160	5.5
SF730/SF730E-7R5-3B								
SF730/SF730E-011-3B	136	125	250	240	169	115	174	5.5
SF730/SF730E-015-3B								
SF730/SF730E-018-3B	190	175	293	280	184	145	189	6.5
SF730/SF730E-022-3B								

Specifications	W	W1	H	H1	H2	D	D1	D2	d
SF730/SF730E-030-3									
SF730/SF730E-030-3B	245	200	454	440	420	205	156	212	7.5
SF730/SF730E-037-3									
SF730/SF730E-037-3B									
SF730/SF730E-045-3	300	266	524	508	480	229	174	236	9
SF730/SF730E-055-3									
SF730/SF730E-075-3	335	286	580	563	536	228	177	235	9
SF730/SF730E-090-3	335	286	630	608	570	310	247	317	11
SF730/SF730E-110-3									
SF730/SF730E-132-3	430	330	770	747	710	311	248	319	13
SF730/SF730E-160-3									

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