

 **ZONCN**  
**INVERTER**



*Changes for Better Life*



芜湖众辰自动化设备有限公司  
Wuhu ZONCN Automation Equipment Co., LTD

## Z5000-BF Series IP65 Waterproof Inverter



- Mounted directly on the motor or to the wall
- Allow for heavy load equipment
- Vector Control mode ( Z5000 Series)
- Function: no water stop, timing, antifreeze, change pump when fault, water supply alarm, ect; IP65, allows to use in kinds of bad environment.
- Power range 220V: 0.75~2.2kW  
380V: 0.75~132kW

### Technical Specification

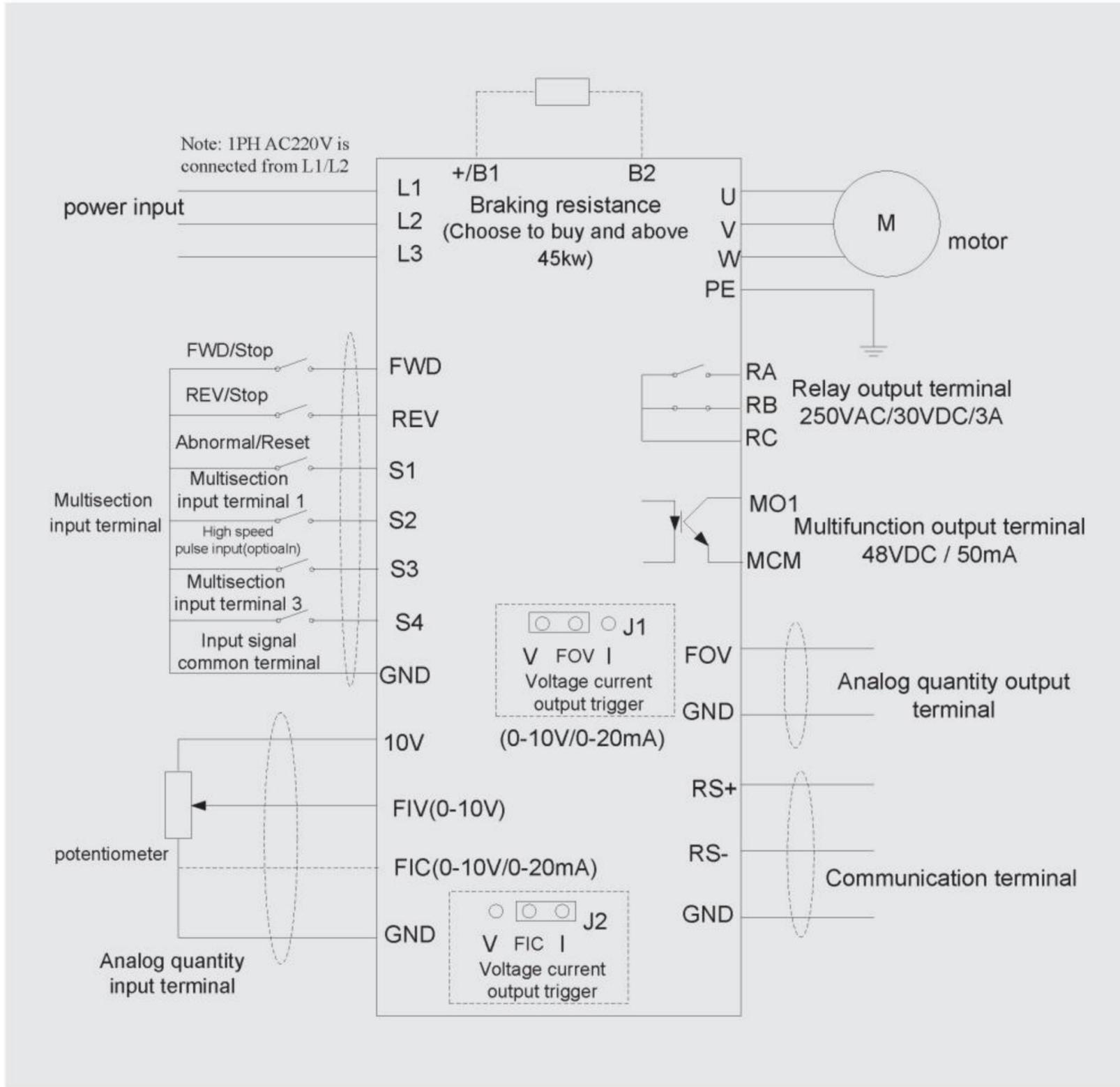
Project name	Specifications
control method	Voltage/Frequency (V/F) control Senseless flux vector control(SFVC)
maximal frequency	V/F control: 0~599Hz Vector control: 0~320Hz
carrier frequency	0.5kHz~16kHz The carrier frequency can be adjusted according to the load characteristics.
Input the frequency resolution	Number setting: 0.01Hz Simulation setting: maximum frequency 0.025%
Start torque	G-type machine: 0.5Hz/150% (no PG); P-type machine: 0.5Hz/100%
Speed range	1: 100 (no PG)
Steady speed accuracy	±0.5% (with PG)
overload capacity	G-type machine: 150% rated current 60s; 180% rated current 3s. P-type machine: 120% rated current 60s; 150% rated current 3s.
Torque boost	Automatic-boost; Customized boost 0.1%~30.0%
V/F curve	Three ways: straight; multipoint; N power V / F curve (1.2 Power, 1.4 power, 1.6 power, 1.8 power, 2 power)
V/F separation	2 ways: total separation, half separation
Add deceleration curve	Straight-line or S-curve acceleration and deceleration mode. Four kinds of acceleration and deceleration times, and the acceleration and deceleration time range is 0.0~6500.0s
DC braking	DC brake frequency: 0.00Hz~ Maximum frequency Brake time: 0.0s~36.0s Brake action current value: 0.0%~100.0%
JOG control	Point movement frequency range:0.00Hz~50.00Hz.Tap-acceleration and deceleration time 0.0s~6500.0s.
Simple PLC, multi-segment speed operation built-in PID	Up to 16 segments can be run through the built-in PLC or control terminal It can easily realize the process control closed-loop control system
Automatic Voltage Adjustment (AVR)	When the power grid voltage changes, it can automatically keep the output voltage constant
Over pressure over loss speed control	Automatic limit current voltage during operation to prevent frequent overflow pressure trip
Fast flow limit	Minimize the overcurrent fault, and protect the normal operation of the frequency converter
Torque limit and control	The characteristic of "excavator" automatically limits the torque during operation and prevents frequent excessive current trip; the closed-loop vector mode can realize torque control
Protection mode	Short-circuit detection of the upper electric motor, input and output phase deficiency protection, overcurrent protection, overvoltage protection, undervoltage protection, overheat protection, and overload Protection et al

Project name		Specifications
Running	Command source	Operation panel given, control terminal given, serial communication port given. It can be switched in various ways
	Frequency source	10 frequency sources: digital given, analog voltage given, analog current given, pulse given, serial port given. It can be switched in various ways
	Auxiliary frequency source	Of the 10 auxiliary frequency sources. It can flexibly assist frequency fine-tuning and frequency synthesis
	Enter the terminal line	standard: 6 digital input terminals, where S3 supports high speed pulse input up to 100kHz (optional) Two analog input terminals, one supports only 0-10 V voltage input, and one supports 0-10 V, voltage input or 4 to 20 mA current input
	Leading-out terminal	1 high-speed pulse output (optional) and 1 collector output terminal 1 relay output terminal 1 analog output terminal, supporting 4 to 20 mA current output or 0 to 10 V voltage output
	Communication support	RS-485
Environment	Ambient temperature	-10°C ~ + 40°C (ambient temperature is 40°C ~50°C, please decrease for use)
	Humidity	Less than 95% RH, and the anhydrous beads were condensed
	Storage temperature	-20°C~+60°C
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
	Levels of protection	IP54 of IP65,3.7KW and above below 3.7KW
	Aititude	Below 1000m

## Specification

Model	Input Current (A)	Output Power(KW)	Output Current (A)	Motor (kW)
Input Voltage(V): 1PH AC220V±15%				
Z5200A0D75-BF	7.2	0.75	5	0.75
Z5200A1D5-BF	10	1.5	7	1.5
Z5200A2D2-BF	16	2.2	11	2.2
Input Voltage(V): 3PH AC380V±15%				
Z5400A0D75-BF-V	3.8	0.75	2.5	0.75
Z5400A1D5-BF-V	5	1.5	3.7	1.5
Z5400A2D2-BF-V	5.8	2.2	5	2.2
Z5400A3D7-BF-V2	10.0	3.7	9	3.7
Z5400A5D5-BF-V2	15.0	5.5	13	5.5
Z5400A7D5-BF-V2	20.0	7.5	17	7.5
Z5400A0011K-BF-V	26.0	11	25	11
Z5400A0015K-BF	35.0	15	32	15
Z5400A0018K-BF	38.0	18.5	37	18.5
Z5400A0022K-BF	46.0	22	45	22
Z5400A0030K-BF	62.0	30	60	30
Z5400A0037K-BF	76.0	37	75	37
Z5400A0045K-BF	92.0	45	90	45
Z5400A0055K-BF	113.0	55	110	55
Z5400A0075K-BF	157.0	75	150	75
Z5400A0090K-BF	180.0	90	176	90
Z5400A00110K-BF	214.0	110	210	110
Z5400A00132K-BF	256.0	132	253	132

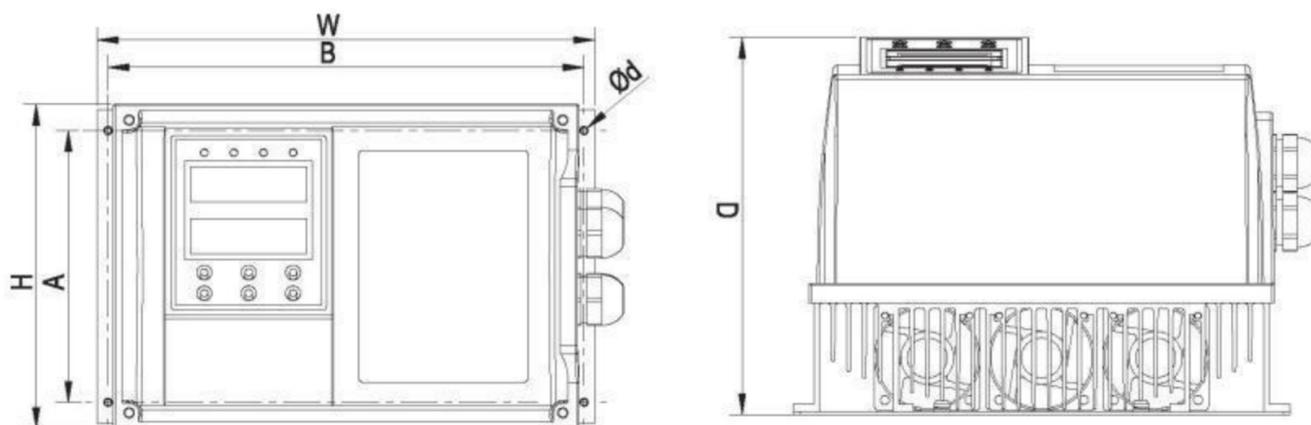
## Typical Wiring diagram



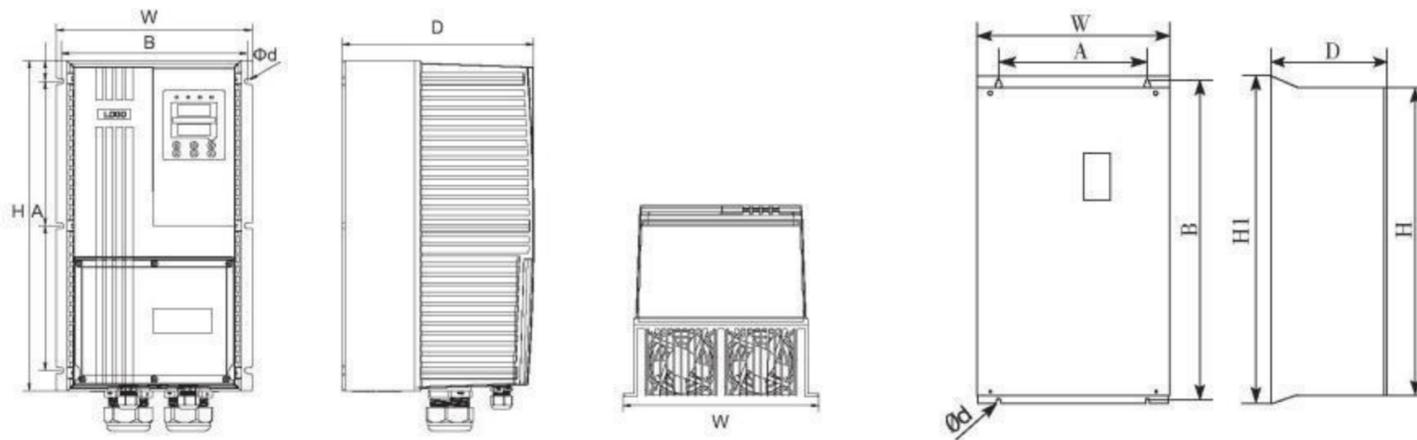
## Dimension

Unit: mm

Horizontal installation outline drawing



### Vertical Installation Outline Drawing



Model	Power (KW)	Output Current (A)	Outline Dimension ( mm)				Install Dimension(mm) A*B*Ød
			W	H	H1	D	
Input Voltage(V): 3PH AC1140V±15%							
Z5200A0D75-BF	0.75	5	188	122	-	134	178*105*Ø4
Z5200A1D5-BF	1.5	7					
Z5200A2D2-BF	2.2	11					
Z5400A0D75-BF	0.75	2.5					
Z5400A1D5-BF	1.5	3.7					
Z5400A2D2-BF	2.2	5					
Z5400A3D7-BF	3.7	9	235	154	-	179	225*129*Ø4
Z5400A5D5-BF	5.5	13					
Z5400A7D5-BF	7.5	17					
Z5400A0011K-BF	11	25					
Z5400A0D75-BF-V	0.75	2.5	140	190	-	138	130*160*Ø4.5
Z5400A1D5-BF-V	1.5	3.7					
Z5400A2D2-BF-V	2.2	5					
Z5400A3D7-BF-V2	3.7	9	140	225	-	139	130*160*Ø4.5
Z5400A5D5-BF-V2	5.5	13					
Z5400A7D5-BF-V2	7.5	17					
Z5400A0011K-BF-V	11	25	192	280	-	178	180*200*Ø5.5
Z5400A0015K-BF	15	32					
Z5400A0018K-BF	18.5	37	236	300	-	204	225*250*Ø7
Z5400A0022K-BF	22	45					
Z5400A0030K-BF	30	60	236	400	-	231	225*(175+175)*Ø7
Z5400A0037K-BF	37	75					
Z5400A0045K-BF	45	90	300	450	482	278	210*465*Ø9
Z5400A0055K-BF	55	110					
Z5400A0075K-BF	75	150	400	520	560	275	300*535*Ø9
Z5400A0090K-BF	90	176					
Z5400A00110K-BF	110	210	400	760	800	321.5	330*780*Ø11
Z5400A00132K-BF	132	253					
Z5400A00160K-BF	160	300					

**Note:** 380V/0.75-11kW lateral installation and vertical installation exist at the same time, -V is vertical installation; 15 or more is vertical installation.



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内容如有更改，恕不另行通知