



INVERTER



Z8000 Series

Advanced Close Loop Vector Control Inverter





Z8000 Series High Performance Close loop Vector Control

- The carrier frequency is automatically adjusted based on the load features;
- Wide Frequency range, adapt to most applications;
- V/F control, On board PID control;
Modbus communication (Optional parts);
- Support for various PG card; Special for kinds of industries, with tension control, spindle servo, support for PM motor ect.
- Power range:
220V 0.4kW~3.7kW
380V 0.75kW~1000kW
690V 11~1000kW

Technical Specification

Item		Z8000
Based Function	Control mode	Senseless flux vector control (SFVC) Closed-loop vector control (CLVC) V/F(Voltage/Frequency) control
	Maximum frequency	Vector control: 0~320 Hz V/F control: 0~3200Hz
	Carrier frequency	1.0~16.0 kHz The carrier frequency is automatically adjusted based on the load features.
	Input frequency resolution	Digital setting: 0.01 Hz ; Analog setting: 0.025% of maximum frequency
	Startup torque	G type: 0.5 Hz/150% (SFVC); 0 Hz/180% (CLVC) P type: 0.5 Hz/100%
	Speed range	1:100 (SFVC); 1:1000 (CLVC)
	Speed stability accuracy	± 0.2% (SFVC); ± 0.02% (CLVC)
	Torque control accuracy	± 5% (CLVC)
	Overload capacity	G type: 60s for 150% of the rated current, 3s for 180% of the rated current. P type: 60s for 120% of the rated current, 3s for 150% of the rated current.
	Torque boost	Auto boost Customized boost 0.1%~30.0%
	V/F curve	Line V/F curve; Multi-point V/F curve N-power V/F curve (1.2-power, 1.4-power, 1.6-power, 1.8-power, square)
	V/F separation	two types: complete separation; half separation
	Ramp mode	Straight-line ramp; S-curve ramp; Four groups of acceleration/deceleration time with the range of 0.0~6500.0s
	DC braking	DC braking frequency: 0.00 Hz to maximum frequency: Braking time: 0.0~100.0s Braking action current value: 0.0%~100.0%
	JOG control	JOG frequency range: 0.00~50.00 Hz JOG acceleration/deceleration time: 0.0~6500.0s
	Onboard multiple preset speeds	It implements up to 16 speeds via the simple PLC function or combination of terminal states
	Onboard PID	It realizes process-controlled closed loop control system easily.
	Auto voltage regulation (AVR)	It can keep constant output voltage automatically when the mains voltage changes.
	Overvoltage/ Overcurrent stall control	The current and voltage are limited automatically during the running process so as to avoid frequent tripping due to overvoltage/over current.
	Rapid current limit	It helps to avoid frequent over current faults of the AC drive.
	Torque limit and control	It can limit the torque automatically and prevent frequent over current tripping during the running process. Torque control can be implemented in the CLVC mode.

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PG card

Model	Description	Suitable inverter
PG-B1	ERN1387_SIN&COS input PG card_DB15	Z8400-5.5kW and above
PG-B2	ABZ_ different input PG card _terminal connector	Z8400-3.7kW and above
PG-B3	Rotating PG card _terminal connector	Z8400-3.7 kW and above
PG-B4	ABZ_OC input PG card_ terminal connector	Z8400-3.7 kW and above
PG-B5	ABZUVW_ different input PG card_DB15	Z8400-5.5 kW and above
PG-B6	CANLINK communication card	Z8400-3.7 kW and above
PG-B8	CARD0_with PT100_fan output_485 transformer connect	Z8400-3.7 kW and above
PG-B9	Profibus card	Z8400-5.5 kW and above
PG-B10	ABZ_ different input PG card_DB9	Z8400-5.5 kW and above
PG-B11	Rotating PG card_DB9	Z8400-5.5 kW and above
PG-B12	1A input connector_ Plastic Injection Application	Z8400-3.7 kW and above
PG-B13	GPRS expansion card_ with connector_485 or 232 connector are optional	30kW and below need to external
PG-D1	Double ABZ_OC input PG card_ terminal connector	Z8400D-3.7 kW and above
PG-D2	Double ABZ_ different input PG card _ terminal connector	Z8400D-3.7 kW and above

Specification

1.Voltage: 1PH AC 220V \pm 15% 3PH AC 380V \pm 15%

Model	Rated Output Power (KW)	Rated Input Current(A)	Rated Output Current(A)	Motor Equipped(kW)
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Input Voltage(V): 1PH AC220V \pm 15%

Z8200-0R4G	0.4	5.4	2.4	0.4
Z8200-0R75G	0.75	7.2	4.5	0.75
Z8200-1R5G	1.5	10	7	1.5
Z8200-2R2G	2.2	16	10	2.2
Z8200-3R7G	3.7	23	16	3.7

Input Voltage(V): 3PH AC380V \pm 15%

Z8400-0R7G	0.75	3.8	2.5	0.75
Z8400-1R5G	1.5	5	3.7	1.5
Z8400-2R2G	2.2	5.8	5	2.2
Z8400-3R7G/5R5P	3.7/5.5	10/15.0	9.0/13	3.7/5.5
Z8400-5R5G/7R5P	5.5/7.5	15/20	13/17	5.5/7.5
Z8400-7R5G/11P	7.5/11	20/26	17/25	7.5/11

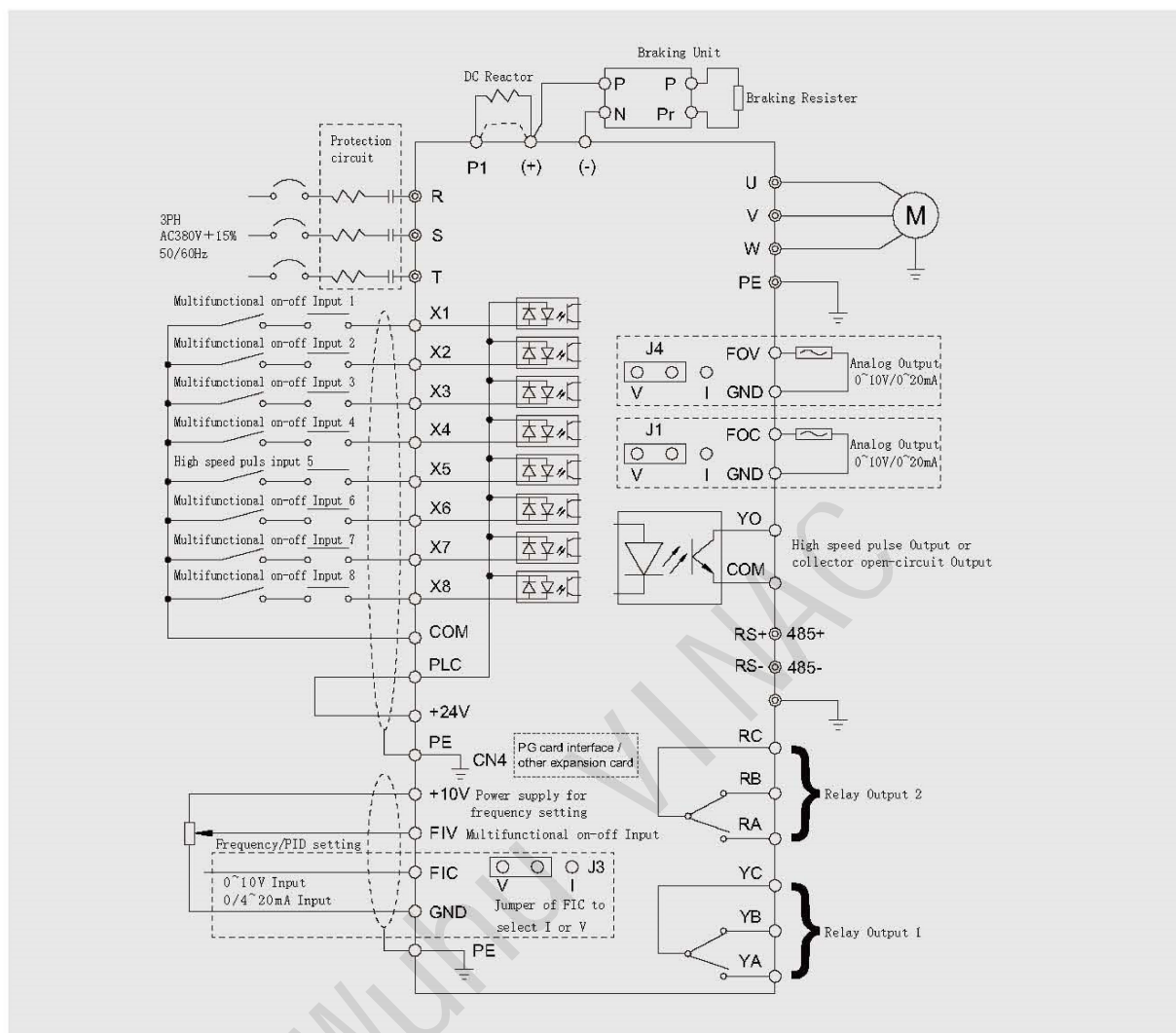
Model	Rated Output Power (KW)	Rated Input Current(A)	Rated Output Current(A)	Motor Equipped(kW)
Z8400-11G/15P	11/15.0	26/35	25/32	11/15.0
Z8400-15G/18.5P	15/18.5	35/38	32/37	15/18.5
Z8400-18.5G/22P	18.5/22	38/46	37/45	18.5/22
Z8400-22G/30P	22/30	46/62	45/60	22/30
Z8400-30G/37P	30/37	62/76	60/75	30/37
Z8400-37G/45P	37/45	76/90	75/90	37/45
Z8400-45G/55P	45/55	90/105	90/110	45/55
Z8400-55G	55	105	110	55
Z8400-75P	75	140	150	75
Z8400-75G/90P1	75/90	140/160	150/176	75/90
Z8400-90G/110P1	90/110	160/210	176/210	90/110
Z8400-110G/132P1	110/132	210/240	210/253	110/132
Z8400-132G/160P	132/160	240/290	253/300	132/160
Z8400-160G/185P	160/185	290/330	300/340	160/185
Z8400-185G/200P	185/200	330/370	340/380	185/200
Z8400-200G/220P	200/220	370/410	380/420	200/220
Z8400-220G/250P	220/250	410/460	420/470	220/250
Z8400-250G/280P	250/280	460/500	470/520	250/280
Z8400-280G/315P	280/315	500/580	520/600	280/315
Z8400-315G/350P	315/350	580/620	600/640	315/350
Z8400-350G/400P	350/400	620/670	640/690	350/400
Z8400-400G/450P	400/450	670/790	690/790	400/450
Z8400-450G/500P	450/500	790/835	790/860	450/500
Z8400-500G/560P	500/560	835/920	860/950	500/560
Z8400-560G/630P	560/630	920/1050	950/1100	560/630
Z8400-630G/710P	630/710	1050/1123	1100/1280	630/710
Z8400-710G/800P	710/800	1126/1460	1280/1380	710/800
Z8400-800G/900P	800/900	1460/1640	1380/1640	800/900
Z8400-900G/1000P	900/1000	1640/1800	1640/1720	900/1000
Z8400-1000G	1000	1800	1720	1000

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Input Voltage(V): 3PH AC (660V-690V) $\pm 15\%$

Model	Power (kW)	Output Current (A)	Outline Dimension (mm)			Install Dimension(mm) A*B*Φd	Remark
			H	W	D		
Z8600-11G/15P	11	16	410	277	189	390*262*Φ6.5	Wall Mounted
Z8600-15G/18D5P	15	20					
Z8600-18GD5/22P	18.5	25					
Z8600-22G/30P	22	28					
Z8600-30G/37P	30	35					
Z8600-37G/45P	37	45					
Z8600-45G/55P	45	52	595	300	236	573*200*Φ9	
Z8600-55G/75P	55	63					
Z8600-75G/90P1	75	86					
Z8600-90G/110P1	90	98	620	380	290	595*250*Φ9	
Z8600-110G/132P1	110	121					
Z8600-132G/160P	132	150	880	380	358	840*250*Φ13	
Z8600-160G/185P	160	175					
Z8600-185G/200P	185	198					
Z8600-200G/220P	200	218					
Z8600-220G/250P	220	240					
Z8600-250G/280P	250	270	995	630	350	971*500*Φ11	
Z8600-280G/315P	280	320					
Z8600-315G/350P	315	350					
Z8600-350G/400P	350	380					
Z8600-400G/450P	400	430	Wall Mounted: 1040 Cabinet: 1515	680	400	Wall Mounted: 1060*520*Φ11 Cabinet: 550*300*Φ13	Wall Mounted/ Cabinet
Z8600-450G/500P	450	480					
Z8600-500G/560P	500	540					
Z8600-560G/630P	560	600	1800	650	920	550*800*Φ17	Cabinet
Z8600-630G/710P	630	680					
Z8600-710G/800P	710	750	1800	750	920	650*800*Φ17	
Z8600-800G/900P	800	860					
Z8600-900G/1000P	900	950	1800	900	920	800*800*Φ17	
Z8600-1000G	1000	1080					

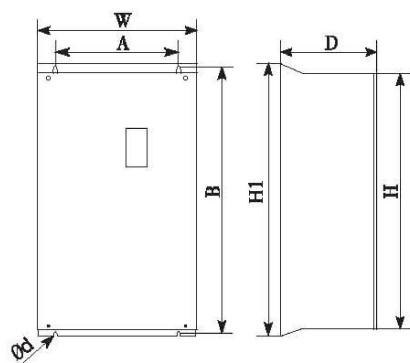
Typical Wiring diagram



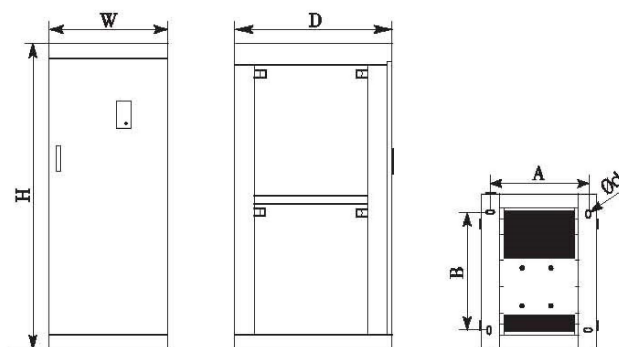
Dimension

Unit:mm

1. Wall Mounted Install



2. Cabinet Install



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Model	Outline Dimension(mm)				Install Dimension (mm)A*B*Φd	Unit: mm	
	W	H	H1	D		Install Method	Remark
Z8200-3R7G	120	225	—	143	105*208*Φ5	Wall Mounted	Plastic
Z8400-3R7G/5R5P	120	225	—	143	105*208*Φ5		Semi-plastic
Z8400-5R5G/7R5P	185	260	—	170	168*248*Φ6.5		Semi-plastic
Z8400-7R5G/11P							Plastic
Z8400-11G/15P	210	330	—	190	195*310*Φ6.5		Semi-plastic
Z8400-15G/18.5P							
Z8400-18.5G/22P	277	410	—	189	262*390*Φ6.5		
Z8400-22G/30P							
Z8400-30G/37P							
Z8400-37G/45P	300	430	455	212	200*433*Φ9		
Z8400-45G/55P	300	535	560	236	200*538*Φ9		
Z8400-55G							
Z8400-75P							
Z8400-75G/90P1							
Z8400-90G/110P1	338	550	580	300	270*564*Φ9		
Z8400-110G/132P1							
Z8400-132G/160P	420	Wall:730 Cabinet:1130	Wall:790 Cabinet:1165	330	Wall:300*765*Ø11 Cabinet:250*350*Ø12	Wall Mounted /Cabinet Install	
Z8400-160G/185P							
Z8400-185G/200P	530	Wall:800 Cabinet:1300	Wall:860 Cabinet:1335	335	Wall:400*835*Ø11 Cabinet:250*450*Ø12		
Z8400-200G/220P							
Z8400-220G/250P							
Z8400-250G/280P	700	Wall:880 Cabinet:1380	Wall:940 Cabinet:1415	350	Wall:600*915*Ø11 Cabinet:250*620*Ø12		
Z8400-280G/315P							
Z8400-315G/350P							
Z8400-350G/400P	600	1600	——	800	550*700*Φ13		
Z8400-400G/450P							
Z8400-450G/500P							
Z8400-500G/560P	650	1600	——	800	600*700*Φ13		
Z8400-560G/630P							
Z8400-630G/710P							
Z8400-710G/800P	700	2200	——	1000	650*900*Φ13	Cabinet Install	
Z8400-800G/900P							
Z8400-900G/1000P							
Z8400-1000G							