

Z2000 Series

Advanced Vector Control Inverter





Z2000 Series

Compact Vector Control

- Senseless flux vector control (VC)
V/F (Voltage/Frequency) Control
- Overload capacity is 60s for 150% of the rated current,
3s for 180% of the rated current.
- There are ten auxiliary frequency sources.
- It can implement fine tuning of auxiliary frequency
and frequency synthesis
- Support PM motor (Z2000 T series)
- Power range: 220V 0.4~7.5kW
380V 0.75~450kW

Technical Specification

Item		Z2000
Standard function	Control mode	Senseless flux vector control(SFVC) Voltage/Frequency (V/F) control
	Maximum frequency	Vector control: 0-320Hz V/F control: 0-3200Hz
	Carrier frequency	1-16kHz The carrier frequency is automatically adjusted based on the load features
	Input frequency resolution	Digital setting: 0.01Hz Analog setting: maximum frequency x 0.025%
	Startup torque	G type: 0.5Hz/150%(SFVC) P type: 0.5Hz/100%
	Speed range	1:100
	Speed stability accuracy	±0.5%
	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
	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: 0.0Hz to maximum frequency Braking time: 0.0~100.0s Braking action current value: 0.0%~100.0%
	JOG control	JOG frequency range: 0.00~50.00Hz 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 X 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.
	Auto voltage/ Over current 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 keep constant output voltage automatically when the mains voltage changes

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Specification

Model	Rated Output Power (kW)	Rated Input Current (A)	Rated Output Current (A)	Motor Equipped (kW)
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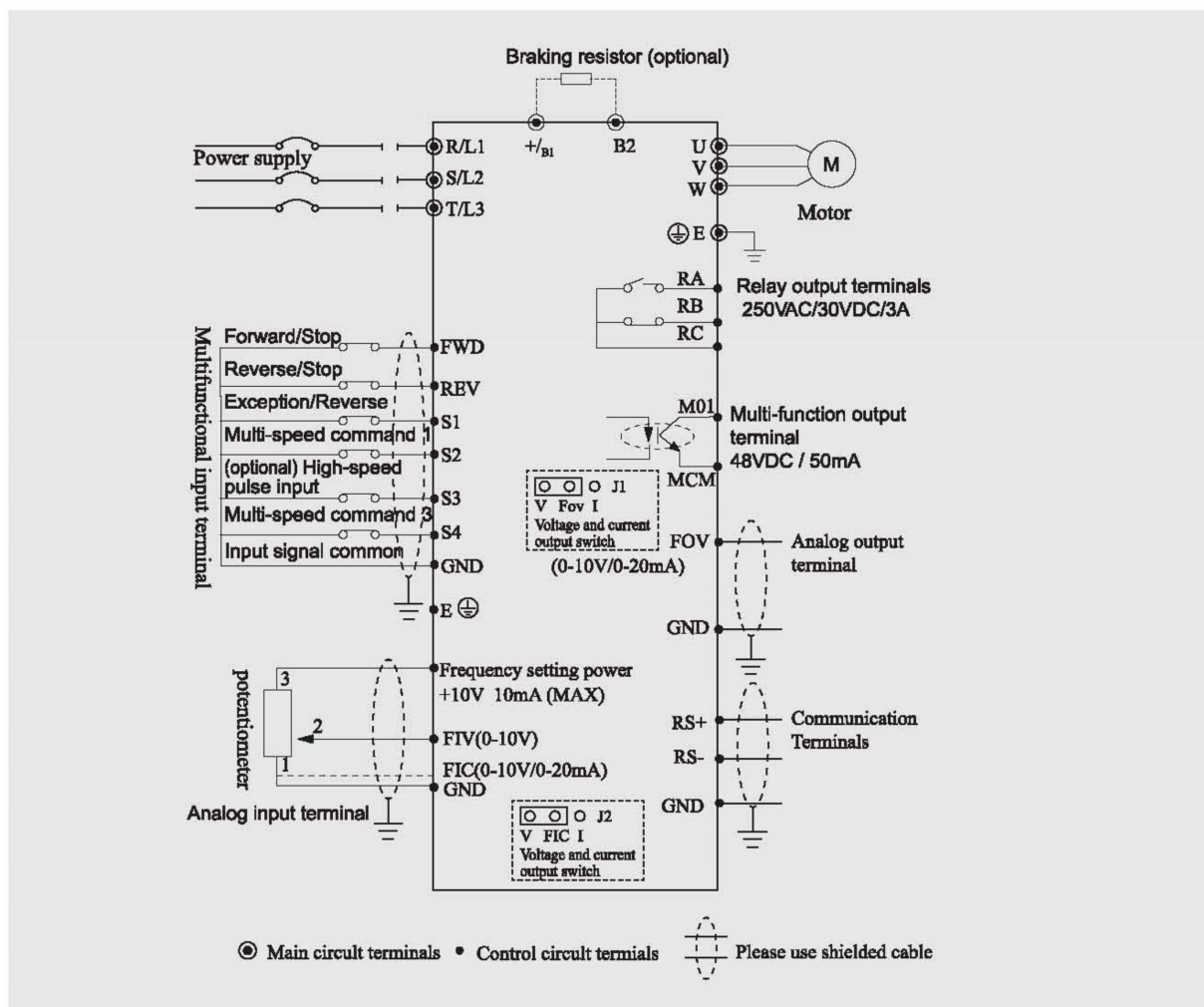
Input Voltage(V): 1PH/3PH AC220V±15%

Z2200-0R4G	0.4	5.4	2.5	0.4
Z2200-0R75G	0.75	7.2	5	0.75
Z2200-1R5G	1.5	10	7	1.5
Z2200-2R2G	2.2	16	11	2.2
Z2200-3R7G	3.7	23	16.5	3.7
Z2200-5R5G	5.5	21	25	5.5
Z2200-7R5G	7.5	31	32	7.5

Input Voltage(V): 3PH AC380V±15%

Z2400-0R75G	0.75	3.8	2.5	0.75
Z2400-1R5G	1.5	5	3.7	1.5
Z2400-2R2G	2.2	5.8	5	2.2
Z2400-3R7G/5R5P	3.7/5.5	10/15.0	9.0/13	3.7/5.5
Z2400-5R5G	5.5	15	13	5.5
Z2400-7R5P	7.5	20	17	7.5
Z2400-7R5G/11P	7.5/11	20/26	17/25	7.5/11
Z2400-11G/15P	11/15.0	26/35	25/32	11/15.0
Z2400-15G/18.5P	15/18.5	35/38	32/37	15/18.5
Z2400-18.5G/22P	18.5/22	38/46	37/45	18.5/22
Z2400-22G/30P	22/30	46/62	45/60	22/30
Z2400-30G/37P	30/37	62/76	60/75	30/37
Z2400-37G/45P	37/45	76/90	75/90	37/45
Z2400-45G/55P	45/55	90/105	90/110	45/55
Z2400-55G	55	105	110	55
Z2400-75P	75	140	150	75
Z2400-75G/90P	75/90	140/160	150/176	75/90
Z2400-90G/110P	90/110	160/210	176/210	90/110
Z2400-110G/132P	110/132	210/240	210/253	110/132
Z2400-132G/160P	132/160	240/290	253/300	132/160
Z2400-160G/185P	160/185	290/330	300/340	160/185
Z2400-185G/200P	185/200	330/370	340/380	185/200
Z2400-200G/220P	200/220	370/410	380/420	200/220
Z2400-220G/250P	220/250	410/460	420/470	220/250
Z2400-250G/280P	250/280	460/500	470/520	250/280
Z2400-280G/315P	280/315	500/580	520/600	280/315
Z2400-315G/350P	315/350	580/620	600/640	315/350
Z2400-350G/400P	350/400	620/670	640/690	350/400
Z2400-400G/450P	400/450	670/790	690/790	400/450
Z2400-450G/500P	450/500	790/835	790/860	450/500

Typical Wiring diagram



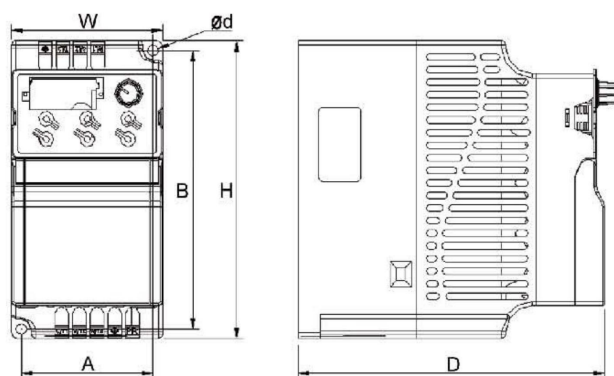
Remark:

- 1: Below 37kW (include 37kW) built-in braking unit, built-in braking unit of 45~160kW are optional
- 2: Built-in DC reactor of 30~160kW are optional.

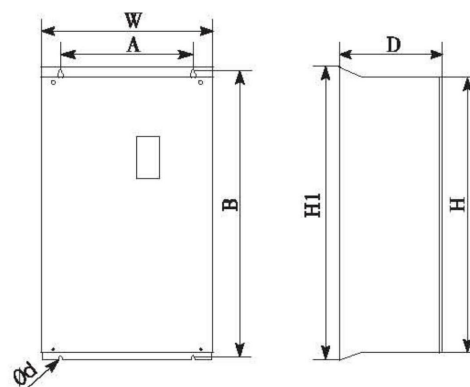
Dimension

Unit:mm

(1) 0.4--22kW



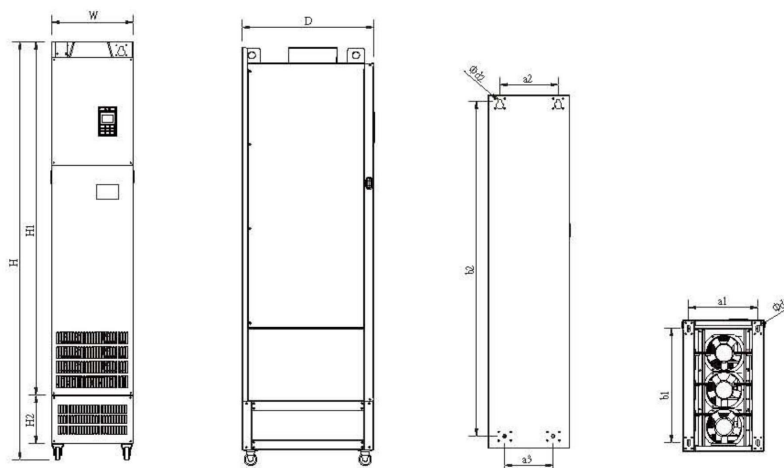
(2) 30--160kW



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Model	Outline Dimension(mm)				Install Size(mm)			Reactor (Optional)
	W	H	H1	D	A	B	Φd	
Z2200-0R4G	72	142	—	152	62.7	132.7	5	—
Z2200-0R75G								
Z2200-1R5G								
Z2200-2R2G	100	183	—	143	90	173	5	—
Z2200-3R7G								
Z2200-5R5G								
Z2200-7R5G	130	260	—	184	120	250	5	—
Z2400-0R4G								
Z2400-0R75G								
Z2400-1R5G	72	142	—	152	62.7	132.7	5	—
Z2400-2R2G								
Z2400-3R7G/5R5P								
Z2400-5R5G	100	183	—	143	90	173	5	—
Z2400-7R5P								
Z2400-7R5G/11P								
Z2400-11G/15P	130	260	—	184	120	250	5	—
Z2400-15G/18.5P								
Z2400-18.5G/22P								
Z2400-22G/30P	195	280	—	179	182.5	266	7	—
Z2400-30G/37P								
Z2400-37G/45P								
Z2400-45G/55P	245	390	425	193	180	410	7	Built-in DC reactor (Optional)
Z2400-55G								
Z2400-75P								
Z2400-75G/90P	300	500	540	252	200	522	9	
Z2400-90G/110P								
Z2400-110G/132P								
Z2400-132G/160P	338	546	576	258.5	270	560	9	
Z2400-160G/185P								
Z2400-160G/185PZ								
Z2400-160G/185PZ	400	675	715	310	320	695	11	Without DC reactor
Z2400-132G/160PZ								
Z2400-160G/185PZ								
Z2400-160G/185PZ	400	871.5	915	310	320	895	11	Built-in DC reactor
Z2400-160G/185PZ								
Z2400-160G/185PZ								

(3) 185–450kW



Model	Outline Dimension(mm)					Cabinet Size(mm)			Wall Mounted Size(mm)			
	W	D	H	H1	H2	a1	b1	d1	a2	a3	b2	d2
Z2400-185G/200P	300	500	1445	1180	200	250	430	14	200	150	1135	13
Z2400-200G/220P												
Z2400-220G/250P												
Z2400-250G/280P	330	545	1595	1330	200	280	475	14	220	185	1275	13
Z2400-280G/315P	325	545	1495	1230	200	275	470	14	225	185	1175	14
Z2400-315G/350P												
Z2400-350G/400P												
Z2400-400G/450P	335	545	1720	1455	200	285	470	14	240	200	1380	14
Z2400-450G/500P												