

ZONCN INVERTER



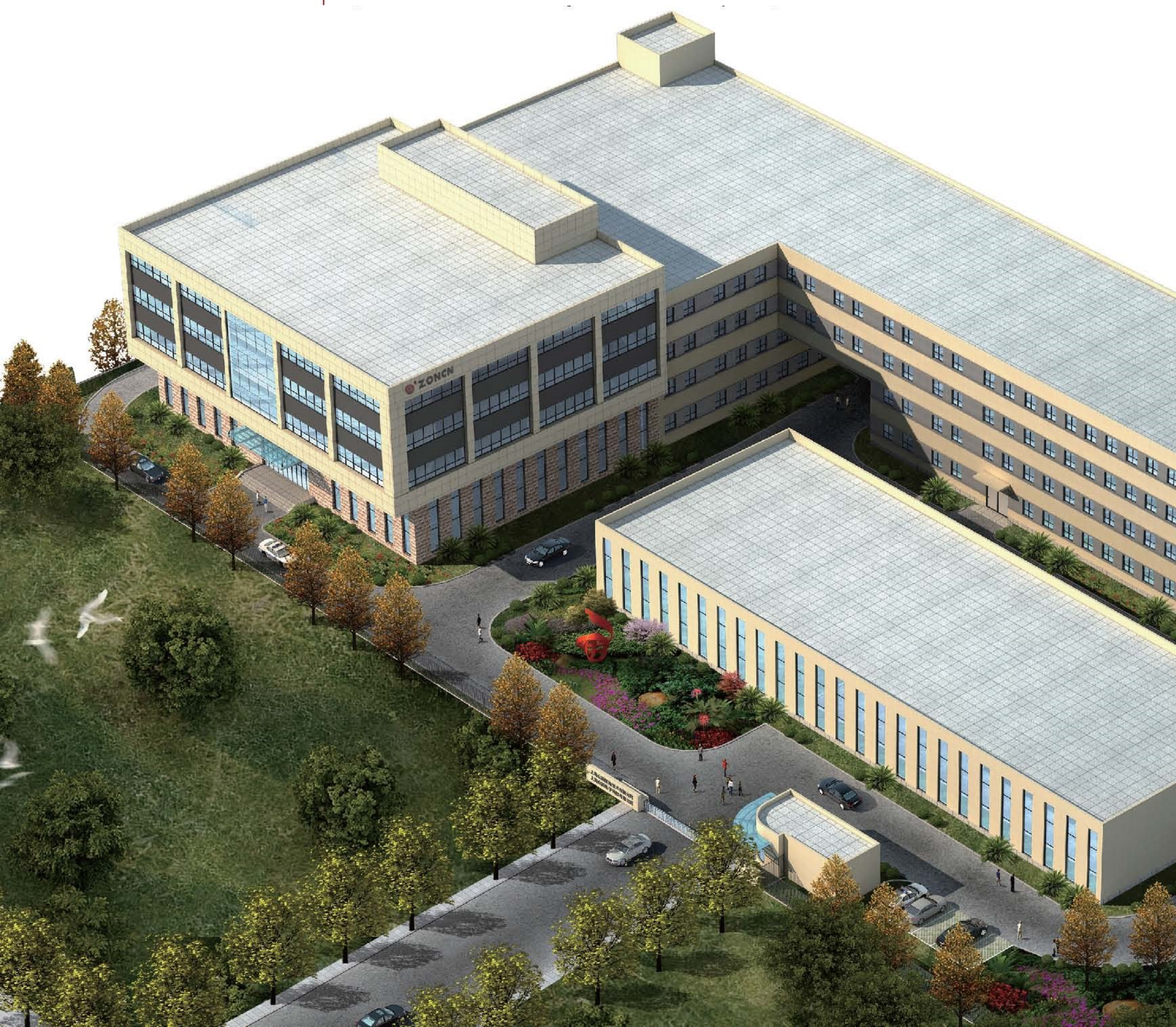
Changes for Better Life





Company Profile

ZONCN are one of a leading manufacturer which specialized in Inverter in China, the headquarters is located in Shanghai, we are expanding to build another factory in Wuhu city. ZONCN focuses on the research and development, production, sales and the service of Inverters. ZONCN has 6 main general series of VFD and there are more than 100 professional Inverter, it's used widely in various applications. We have passed ISO9001 Quality Management System Certificate and the CE Certificate in EU, and the KC Certificate in South Korea.



ZONCN has 6 main series of VFDs: NZ100, NZ200, Z2000, Z8000, H5000BF, and H5000. Besides we also have servo system and electrical vehicle driver and some specially designed products. The voltage ranges are from 110V to 1140V; power range covers 0.4kW to 1000Kw. Our products are widely used in textile, print, CNC machine, food package, injection machine, fan, pump, air compressor, water treatment, industrial washing machine and many industrial applications.

ZONCN has more than 80 dealers in china and abroad. Now our products are exported to more than 50 countries in Asia, Europe, Africa and America. ZONCN will always dedicate in the field of electrical drive and warmly welcome you to be our partner.

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servo drive





NZ100 Series Micro & Economic

- Compact size and low cost design;
- Terminals uncovered, easy for wiring
- DIN-rail mounting (below 5.5kW)
- Supports MODBUS via RS485
- Maintenance-free
- V/F control; Built-in PID control,
- Power range: 220V 0.4kWw-2.2kW
380V 0.75kW-160kW

Technical Specification

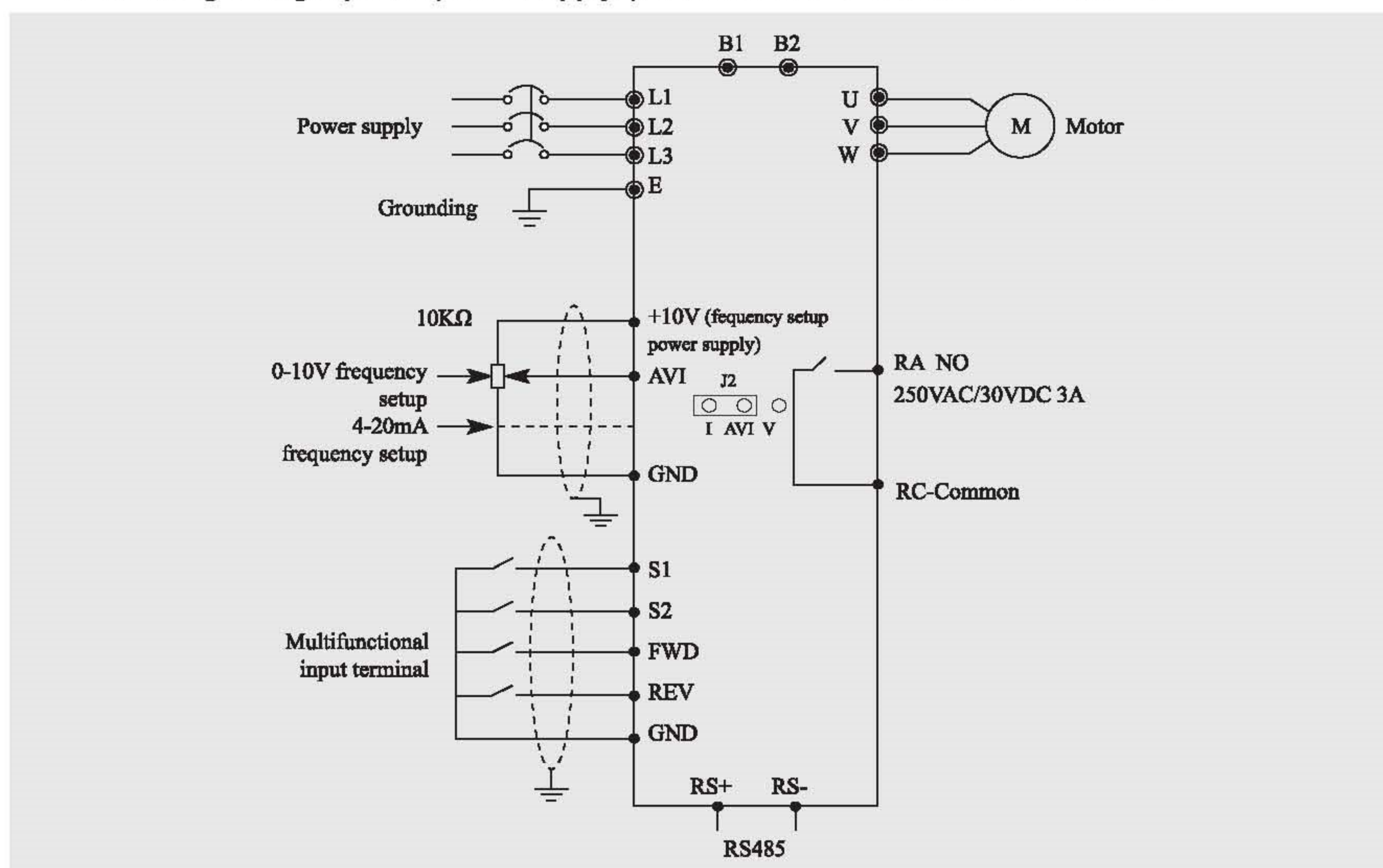
Items		NZ100
Power Supply	Rated voltage, Frequency	One-phase/Three-phase AC 220V/380V 50/60Hz
	Voltage Range	220V: 170~240V 380V: 330V~440V
Output	Voltage Range	220V: 0~220V 380V: 0~380V
	Frequency Range	0.10~400.00Hz
Control method		V/F control
Indication		Operating status/Alarm definition/interactive guidance: frequency setting, the output frequency/ current, DC bus voltage and so on.
Control Specifications	Output Frequency Range	0.10Hz~400.00Hz
	Frequency Setting Resolution	Digital input: 0.10Hz, analog input: 0.1% of maximum output frequency
	Output Frequency Accuracy	0.01Hz
	V/F Control	Setting V/F curve to satisfy various load requirements.
	Torque Boost	Auto increase: auto raise torque by loading Condition; Manual increase: enable to set 0.0~20.0% of raising torque.
	Multifunctional Input Terminal	Four multi-function input terminals, realizing functions including eight section speed control, Program running, four-section acceleration/deceleration speed switch, UP/DOWN function and emergency stop and other functions
	Multifunctional Output Terminal	1 multi-function output terminals for displaying of run, zero speed, external abnormality, program operation and other information and warnings.
Other functions	Acceleration/ Deceleration Time Setting	0~999.9s acceleration/deceleration time can be set individually.
	PID Control	Built-in PID control
	RS485	Standard RS485 communication function(MODBUS)
	Frequency Setting	Analog input: 0 ~ 10 V, 4~20mA Digital input: Operation panel or RS485 or UP/DOWN. Note: AVI terminals can be used to select an Analog voltage input (AV) and analog current input (AI) through the switch J2.
	Multi-speed	Four multifunction input terminals, 15 section speed can be set
	Automatic Voltage Regulation	Automatic voltage regulation function can be selected
Protection/ Warning Function	Counter	Built-in 2 group of counters
	Overload	150%, 60 second(Constant torque)
	Over Voltage	Over voltage protection can be set.
	Under Voltage	Under voltage protection can be set
Other Protections		Output short circuit, over current, and parameter lock and so on.
Environment	Ambient Temperature	-10°C to 40°C(non-freezing)
	Ambient Humidity	Max. 95% (non-condensing)
	Altitude	Lower than 1000m
	Vibration	Max.0.5G
Structure	Cooling Mode	Forced air cooling
	Protective Structure	IP 20
Installation		Wall-mounted or standard 35mm rail mounting (≤5.5kW)

Specification

Model	Input Current (A)	Output Power (kW)	Capacity (KVA)	Output Current (A)	Overload capacity (60s)(A)	Motor Equipped (kW)
Input Voltage(V): 1PH AC220V±15%						
NZ100-0R4G-2	5.4	0.4	1.0	2.5	3.75	0.4
NZ100-0R75G-2	8.2	0.75	2.0	5	7.5	0.75
NZ100-1R5G-2	14	1.5	2.8	7	10.5	1.5
NZ100-2R2G-2	23	2.2	4.5	11	16.5	2.2
Input Voltage(V): 3PH AC380V±15%						
NZ100-0R75G-4	3.4	0.75	2.2	2.7	4.05	0.75
NZ100-1R5G-4	5.0	1.5	3.2	4.0	6	1.5
NZ100-2R2G-4	5.8	2.2	4.0	5.0	7.5	2.2
NZ100-3R7G/5R5P-4	10.7	3.7	6.8	8.6	12.9	3.7
NZ100-5R5G/7R5P-4	14.6	5.5	10	12.5	18.75	5.5
NZ100-7R5G/11P-4	20	7.5	11.2	17.5	26.25	7.5
NZ100-11G/15P-4	26	11	17	24	36	11
NZ100-15G/18P-4	35	15	26	33	49.5	15
NZ100-18G/22P-4	38	18.5	32	40	60	18.5
NZ100-22G/30P-4	46	22	37	47	70.5	22
NZ100-30G/37P-4	62	30	52	65	97.5	30
NZ100-37G/45P-4	76	37	64	80	120	37
NZ100-45G/55P-4	90	45	72	90	135	45
NZ100-55G/75P-4	105	55	84	110	165	55
NZ100-75G/90P-4	140	75	115	152	228	75
NZ100-90G/110P-4	160	90	135	176	264	90
NZ100-110G/132P-4	210	110	160	210	315	110
NZ100-132G/160P-4	240	132	193	255	382.5	132
NZ100-160G/185P-4	290	160	230	305	457.5	160

Typical Wiring diagram

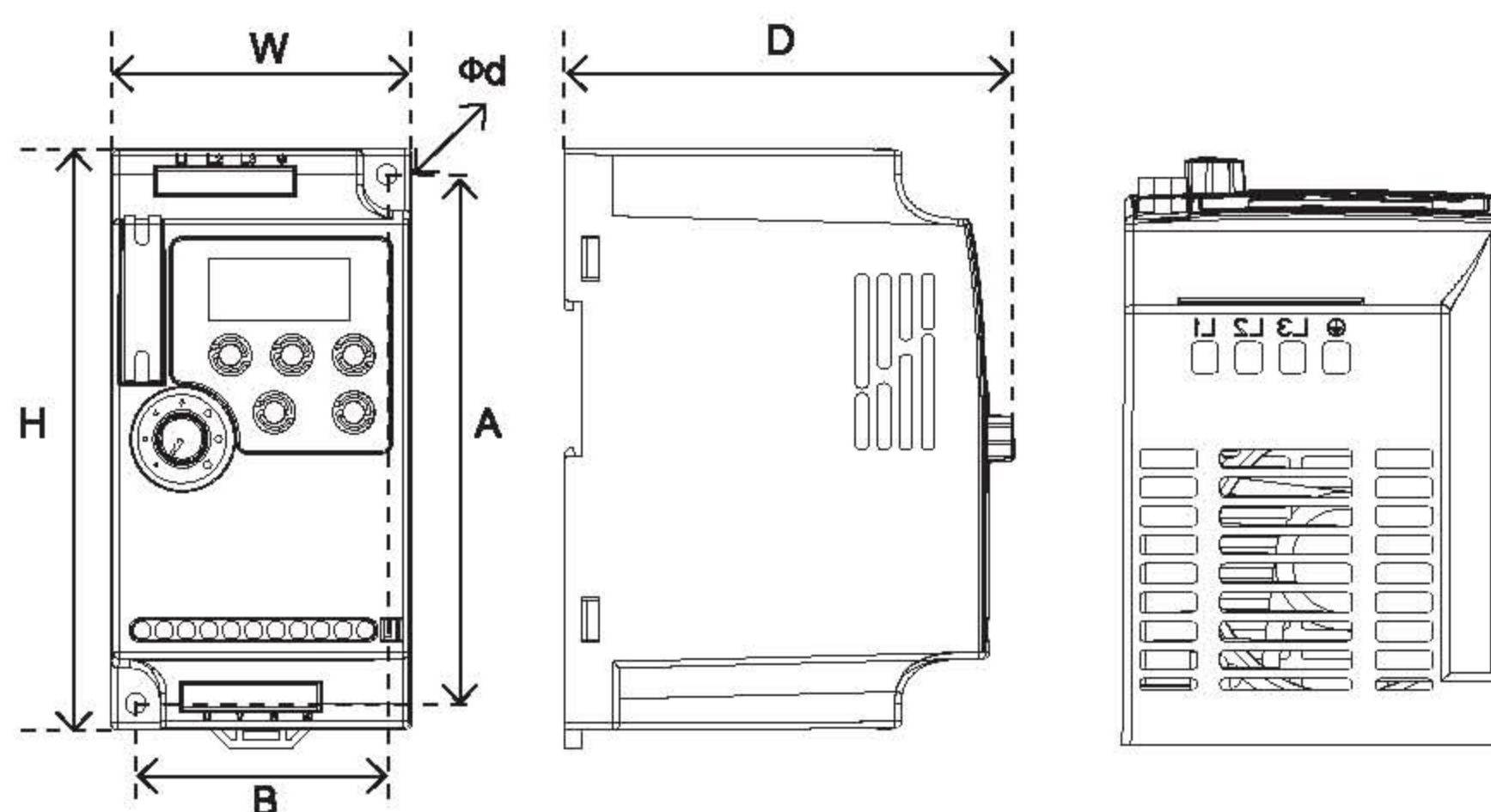
When using a single-phase power supply, please access from terminals L1 and L2



Note: AVI terminals can be used to select an analog voltage input (0-10V) and analog current input (4-20mA) through the switch J2.

Dimension

Unit:mm



Model	W	H	D	A	B	Φd
NZ100-0R4G-2 -- NZ100-1R5G-2	68	132	102	120	57	4.5
NZ100-2R2G-2	72	142	112.2	130	61	4.5
NZ100-0R75G-4 -- NZ100-2R2G-4						
NZ100-3R7G/5R5P-4 -- NZ100-5R5G/7R5P-4	85	180	116	167	72	5.5
NZ100-7R5G/11P-4 -- NZ100-11G/15P-4	106	240	153	230	96	4.5
NZ100-15G/18P-4 -- NZ100-22G/30P-4	151	332	165.5	318	137	7
NZ100-30G/37P-4 -- NZ100-37G/45P-4	217	400	201	385	202	7
NZ100-45G/55P-4 -- NZ100-55G/75P-4	300	455	240	440	200	4.5
NZ100-75G/90P-4 -- NZ100-110G/132P-4	275	630	310	612	200	4.5
NZ100-132G/160P-4 -- NZ100-160G/185P-4	400	715	310	695	320	11



NZ200 series

Mini simple Vector Control Inverter

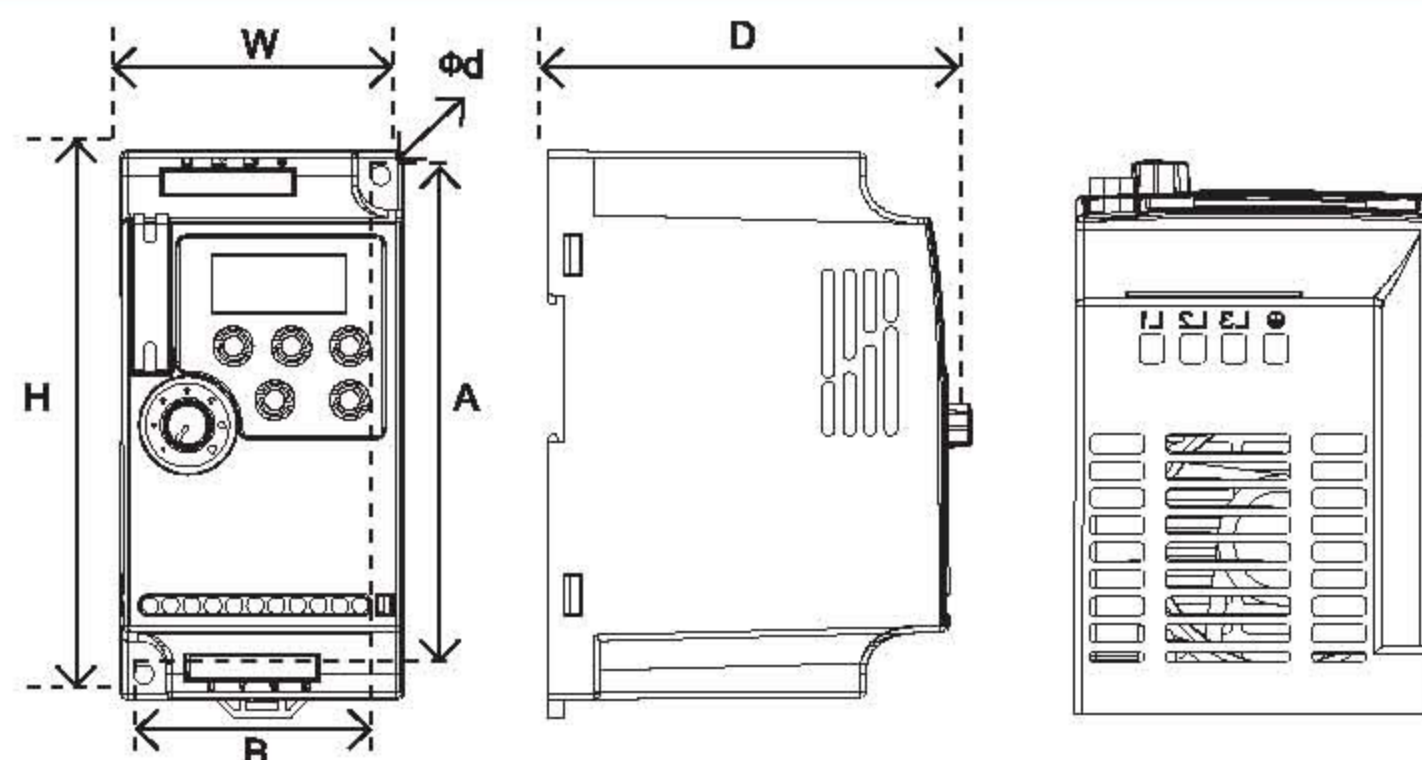
- Open loop vector control, V/F control
- Overload capacity is 60s for 150% of rate current, 3s for 180% of rate current.
- High performance; environmental adaptation
- Simple structure; Compact size; Easy install
- Economic vector control inverter, high torque output, motor runs smoothly when heavy loading.
- Instantaneous stop doesn't stop, reduce the rate of frequent fault alarm
- Protection function: Output phase loss protection, Over-current protection, Over-voltage protection, Overload protection, Over-heat protection etc.
- Support PM motor (Z200 T series)
- Power range: 380V 3.7~160Kw

Specification

Model	Input Current (A)	Output Power (kW)	Capacity (KVA)	Output Current (A)	Overload capacity (60s)(A)	Motor Equipped (kW)
Input Voltage(V): 3PH AC380V±15%						
NZ200-0R75G-4	3.8	0.75	2.2	2.5	3.75	0.75
NZ200-1R5G-4	5	1.5	3.2	3.7	5.55	1.5
NZ200-2R2G-4	5.8	2.2	4	5	7.5	2.2
NZ200-3R7G/5R5P-4	10.7	3.7	6.8	9	13.5	3.7
NZ200-5R5G/7R5P-4	14.6	5.5	10	13	19.5	5.5
NZ200-7R5G/11P-4	20	7.5	11.2	17	25.5	7.5
NZ200-11G/15P-4	26	11	17	25	37.5	11
NZ200-15G/18P-4	35	15	26	32	48	15
NZ200-18G/22P-4	38	18.5	32	37	55.5	18.5
NZ200-22G/30P-4	46	22	37	45	67.5	22
NZ200-30G/37P-4	62	30	52	60	90	30
NZ200-37G/45P-4	76	37	64	75	112.5	37
NZ200-45G/55P-4	90	45	72	90	135	45
NZ200-55G/75P-4	105	55	84	110	165	55
NZ200-75G/90P-4	140	75	115	150	225	75
NZ200-90G/110P-4	160	90	135	176	264	90
NZ200-110G/132P-4	210	110	160	210	315	110
NZ200-132G/160P-4	240	132	193	253	379.5	132
NZ200-160G/185P-4	290	160	230	300	450	160

Dimension

Unit:mm



Model	W	H	D	A	B	Φd
NZ200-0R75G-4--NZ200-2R2G-4	72	142	112.2	130	61	4.5
NZ200-3R7G/5R5P-4--NZ200-5R5G/7R5P-4	85	180	116	167	72	5.5
NZ200-7R5G/11P-4--NZ200-11G/15P-4	106	240	153	230	96	4.5
NZ200-15G/18P-4--NZ200-22G/30P-4	151	332	165.5	318	137	7
NZ200-30G/37P-4--NZ200-37G/45P-4	217	400	201	385	202	7
NZ200-45G/55P-4--NZ200-55G/75P-4	300	455	240	440	200	4.5
NZ200-75G/90P-4--NZ200-110G/132P-4	275	630	310	612	200	4.5
NZ200-132G/160P-4--NZ200-160G/185P-4	400	715	310	695	320	11



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

Z2000 Series Compact Vector Control

Specification

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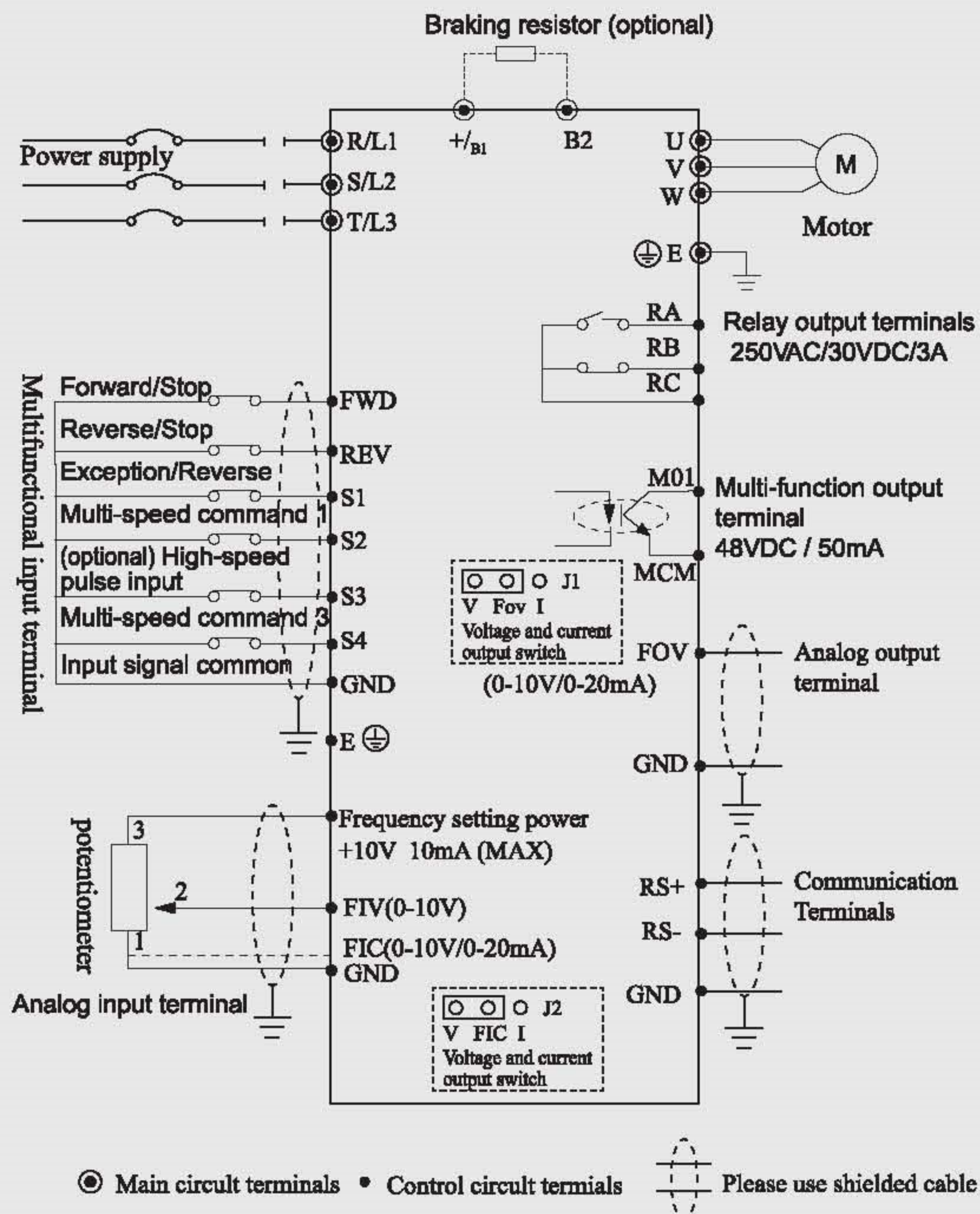
Input Voltage(V): 1PH/3PH AC220V±15%

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



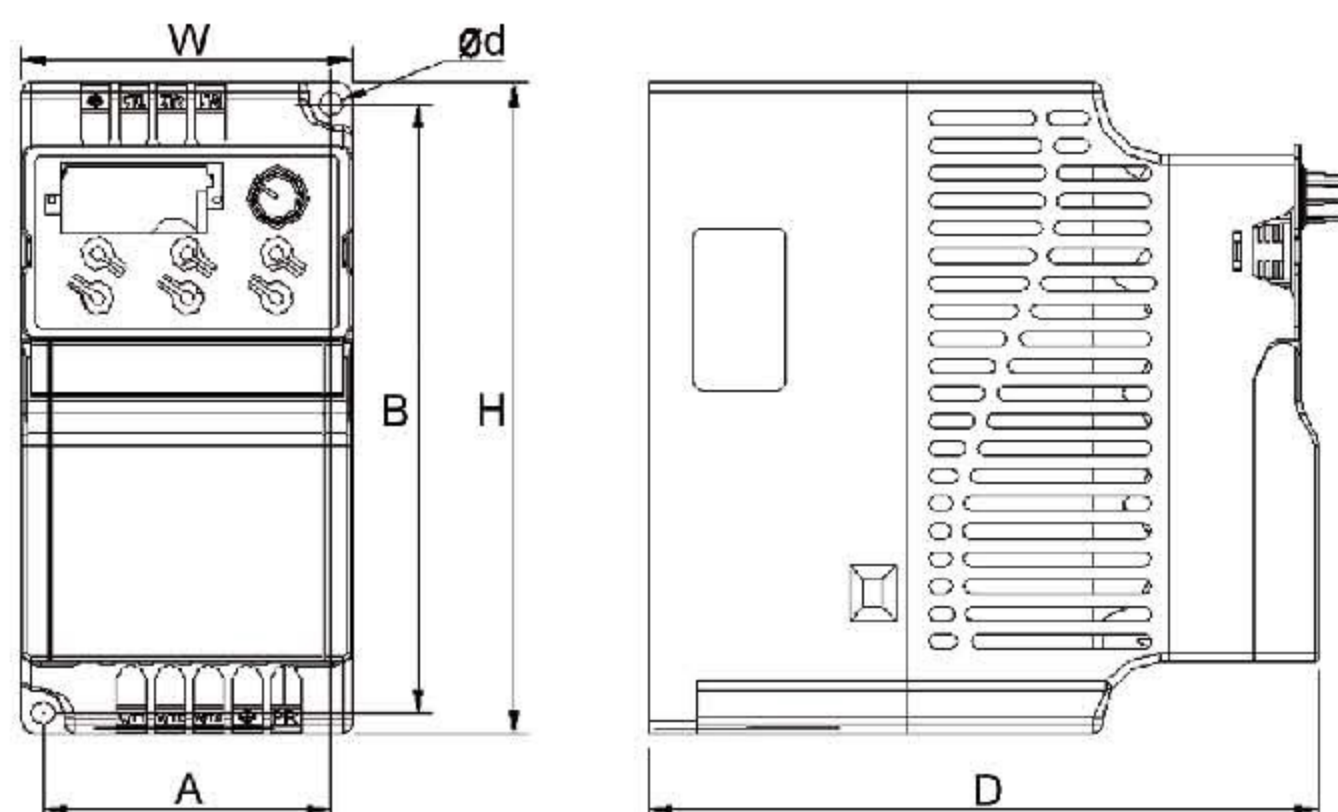
Remark:

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

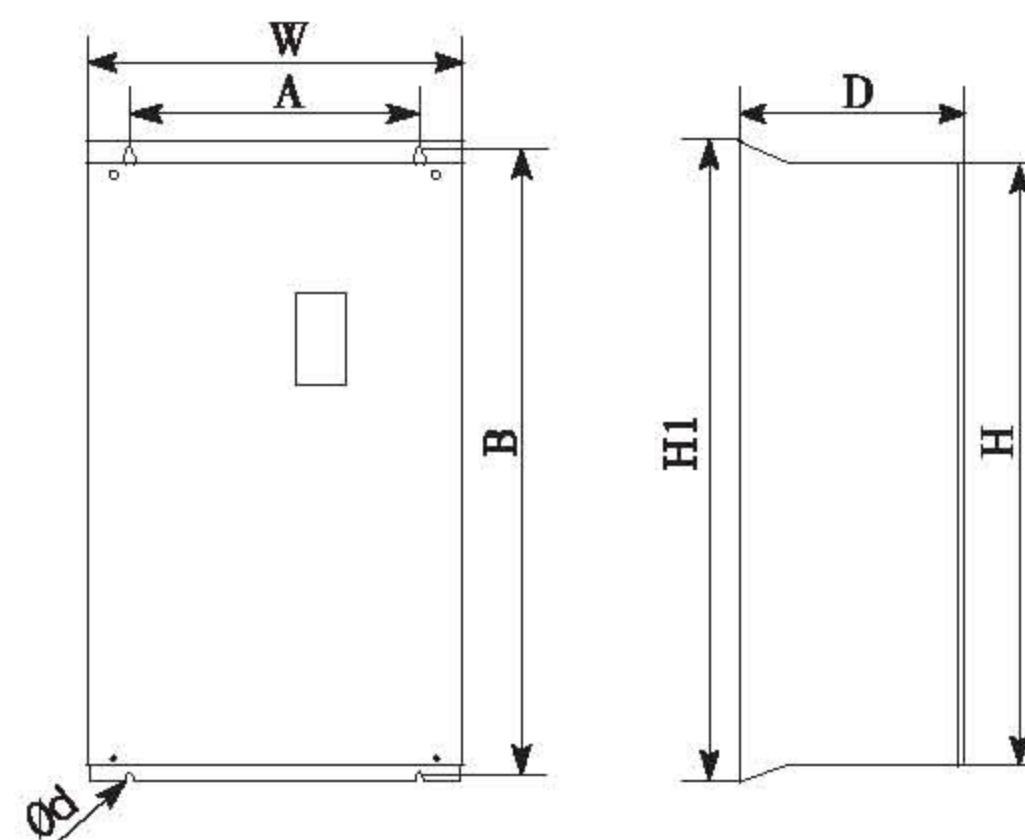
Dimension

Unit:mm

(1) 0.4--22kW



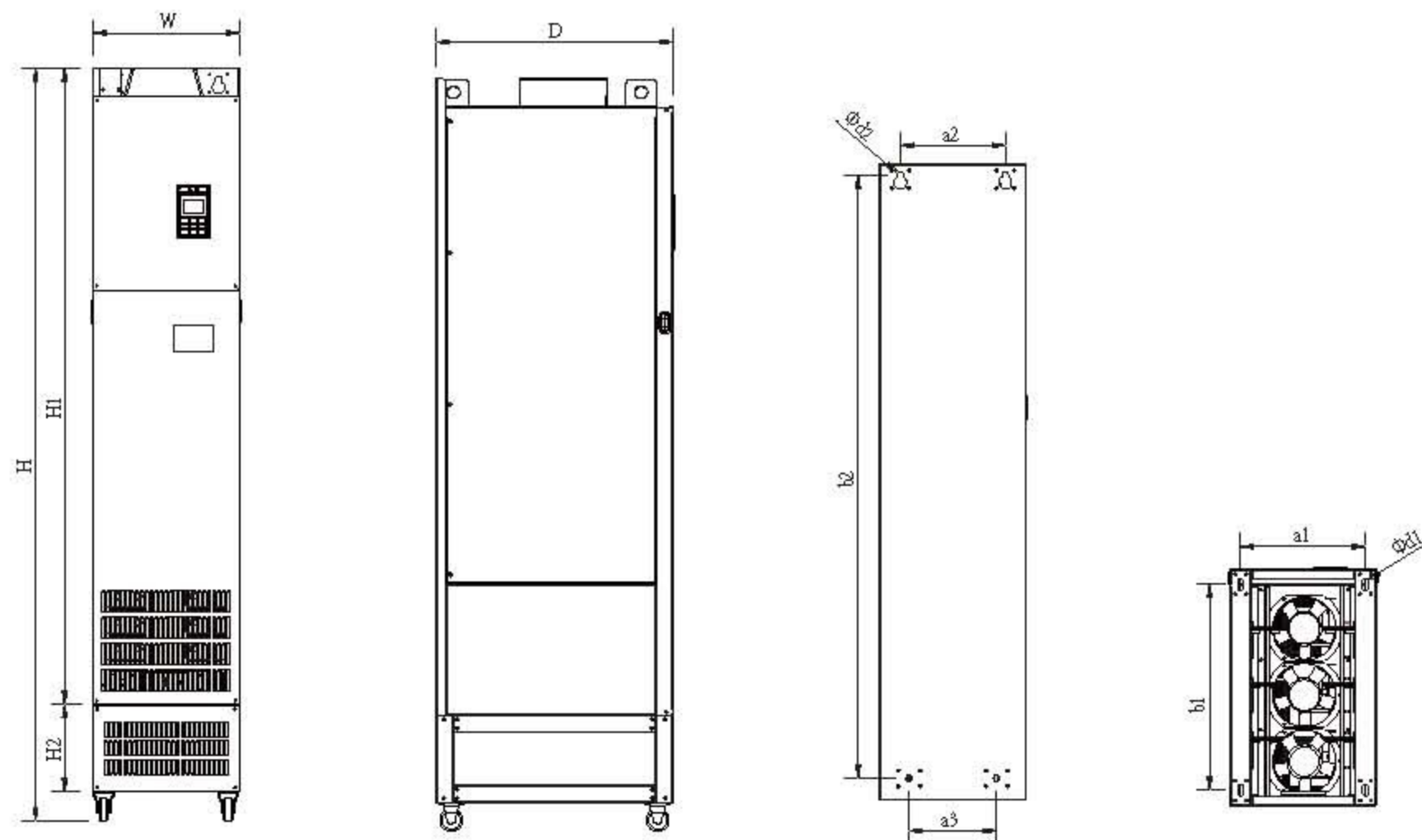
(2) 30--160kW



Z2000 Series Compact Vector Control

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	Built-in DC reactor (Optional)
Z2400-90G/110P	338	546	576	256.5	270	560	9	
Z2400-110G/132P	338	550	580	300	270	564	9	
Z2400-132G/160P	400	675	715	310	320	695	11	Without DC reactor
Z2400-160G/185P								
Z2400-132G/160PZ								
Z2400-160G/185PZ	400	871.5	915	310	320	895	11	Built-in DC reactor

(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												



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.

Z8000 Series High Performance Close loop Vector Control

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

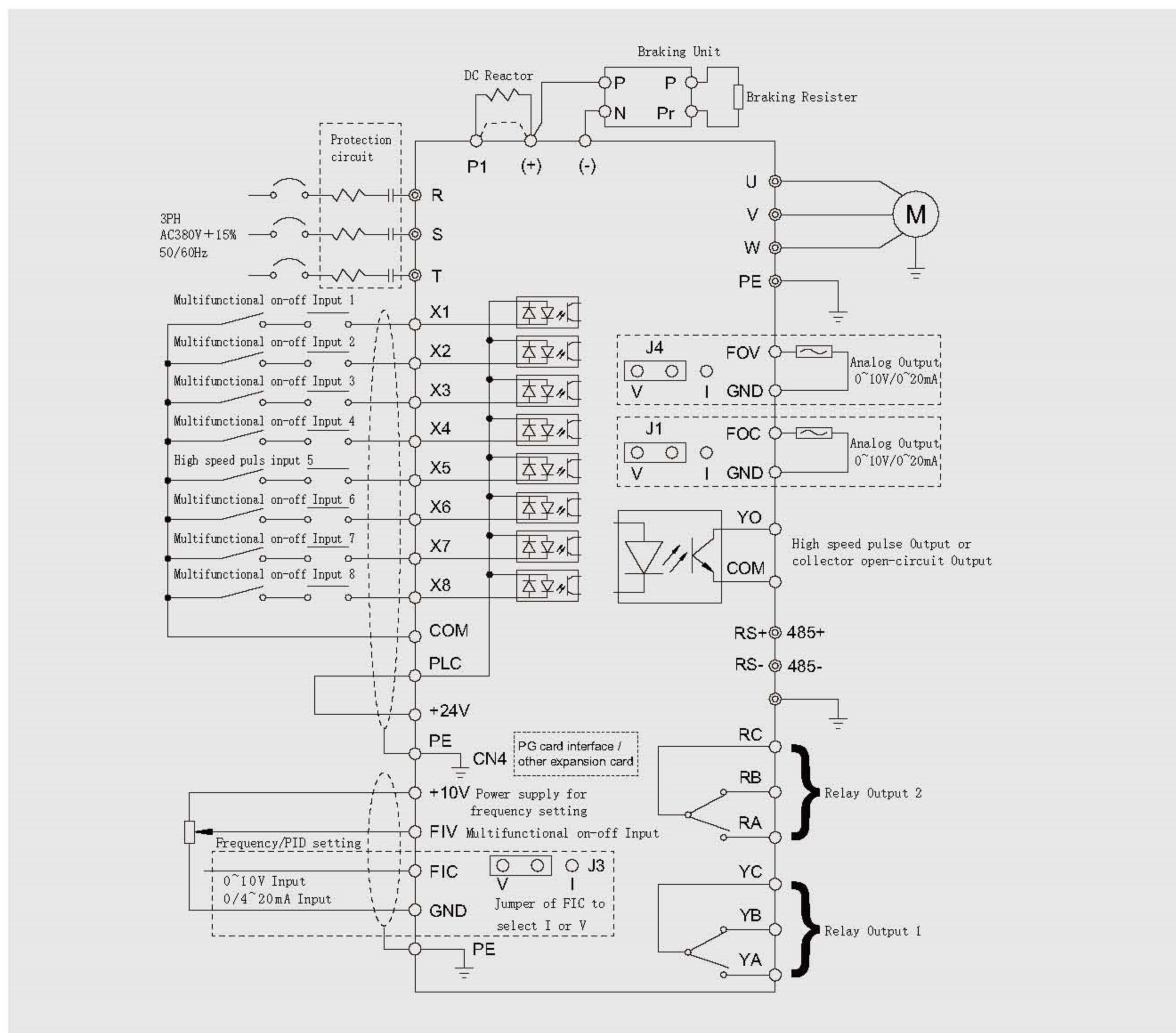
Model	Rated Output Power (KW)	Rated Input Current(A)	Rated Output Current(A)	Motor Equipped(kW)
Z8400-11G/15P	11/15.0	26/35	25/32	11/15.0
Z8400-15G/18.5P	15/18.5	35/38	32/37	15/18.5
Z8400-18.5G/22P	18.5/22	38/46	37/45	18.5/22
Z8400-22G/30P	22/30	46/62	45/60	22/30
Z8400-30G/37P	30/37	62/76	60/75	30/37
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

Z8000 Series High Performance Close loop Vector Control

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					
Z8600-280G/315P	280	320	995	630	350	971*500*Φ11	
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					

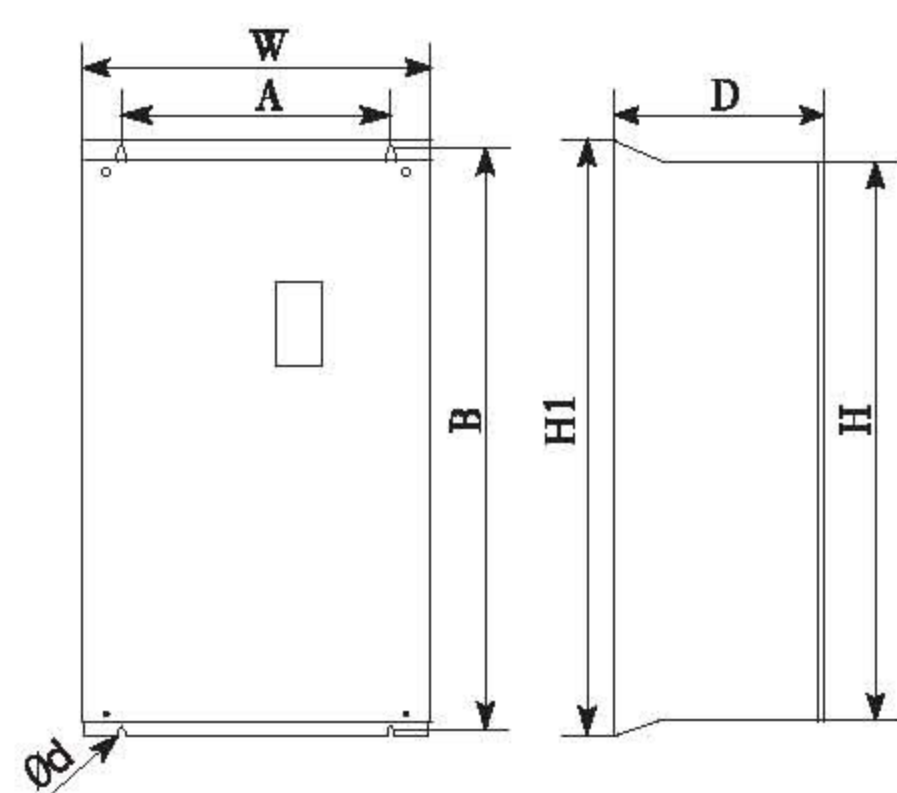
Typical Wiring diagram



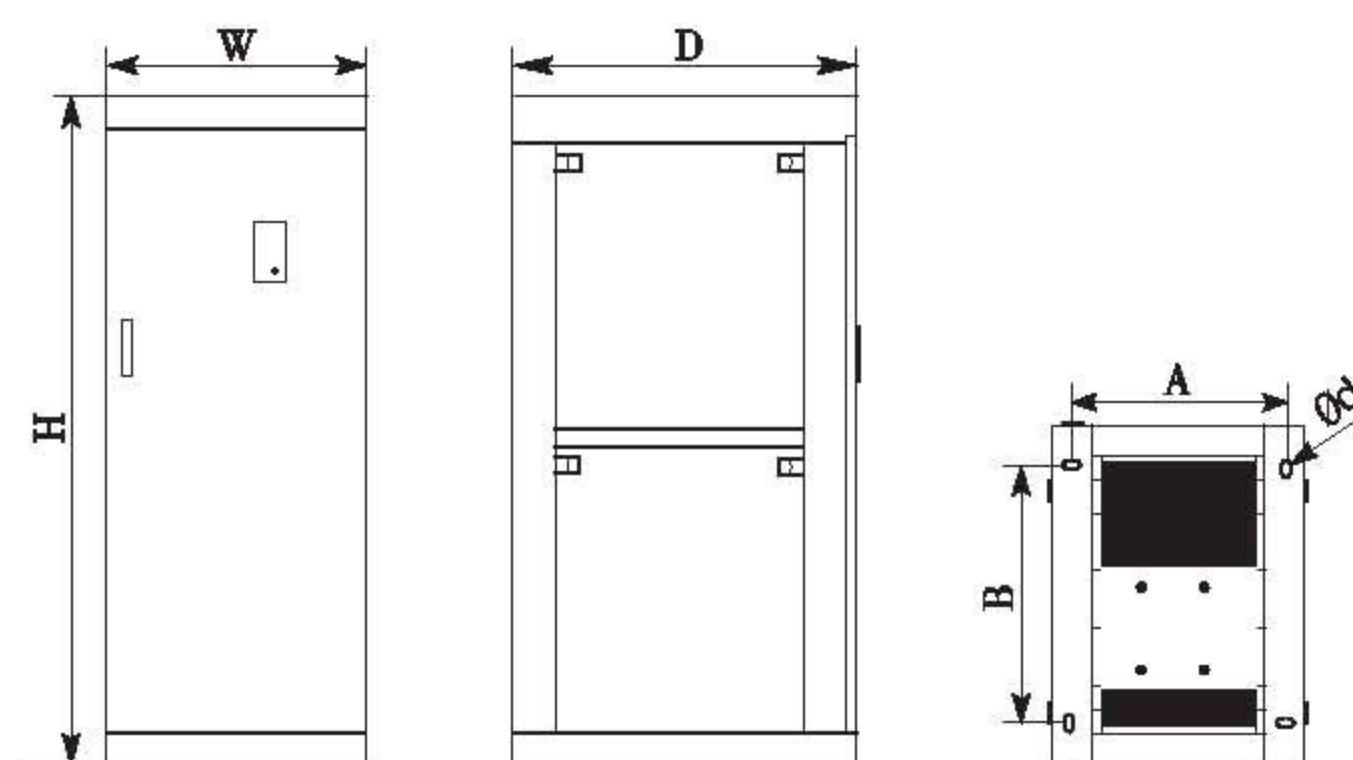
Dimension

Unit:mm

1. Wall Mounted Install



2. Cabinet Install



Z8000 Series High Performance Close loop Vector Control

Model	Outline Dimension(mm)				Install Dimension (mm)A*B*Φ d	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	338	546	576	256.5	270*560*Φ9		
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	Metal	
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		
Z8400-800G/900P							
Z8400-900G/1000P							
Z8400-1000G							



H5000-BF Series

IP65 Waterproof Inverter

- Mounted directly on the motor or to the wall ;
- Allow for heavy load equipment;
- Vector Control mode (Z5400A 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: 0.75~30kW

Technical Specification

Model		H5000BF
Input	Rated voltage, Frequency	1PH/3PH AC 220V 50/60Hz; 3PH AC 380V 50/60 Hz
	Voltage Range	220V: 170~240V; 380V: 330V~440V
Output	Voltage Range	220V: 0~220V ; 380 V: 0~380 V
	Frequency Range	0.10~400.0 Hz
Control method		V/F control, Space vector control
Indication		Operating status/Alarm definition, interactive guidance; eg, frequency setting, the output frequency /current, rotating speed, fault and so on.
Control Specification	Output Frequency Range	0.10~400.00 Hz.
	Frequency Setting Resolution	Digital input: 0.01 Hz. Analog input:0,1% of maximum output frequency
	Output Frequency Accuracy	0.01 Hz.
	V/F Control	Setting V/F curve to satisfy various load requirements
	Torque Control	Auto increase: auto raise torque by loading condition; Manual increase: enable to set 0.0~20% of raising torque
	Multifunctional Input Terminal	4 multi-function input terminals, realizing functions including 15 section speed control, program running, 4 section acceleration/deceleration speed switch, UP/DOWN function and emergency stop and other functions
	Multifunctional Output Terminal	1 multi-function output terminals for displaying of running, zero speed, counter, external abnormality, program operation and other information and warnings
	Acceleration/ deceleration Time Setting	0~999.9 s acceleration/deceleration time can be set individually
Other functions	PID Control	Built-in PID control
	RS485	Standard RS485 communication function (MODBUS)
	Frequency Setting	Analog input 0~10V, 0~20mA, can be selected; Digital input: input using the setting dial of the operation panel or RS 485 or UP/DOWN
	Multi-speed	4 multi-function input terminals,15 section speed can be set
	Automatic voltage regulation	Automatic voltage regulation function can be selected
	Counter	Built-in 2 group of counters
Protection Function	Overload	150%, 60s (Constant torque); 120%,60s (variable torque)
	Over Voltage	Over voltage protection can be set
	Under Voltage	Under voltage protection can be set
	Other Protections	Output short-circuit, over current, and parameter lock and so on.
Environment	Ambient Temperature	-10°C~40°C(non-freezing)
	Ambient Humidity	Max. 95% (non-condensing)
	Altitude	Lower than 1000m.
	Vibration	Max. 0.5 g
Structure	Cooling Mode	Below 3.7 kW no have fan; Above 5.5 kW Forced air cooling
	Protective Structure	IP 65

Specification

Model	Output Power (kW)	Capacity (KVA)	Output Current (A)	Overload Capacity (60s)(A)	Motor Equipped (kW)
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Input Voltage(V): 1PH AC220V±15%

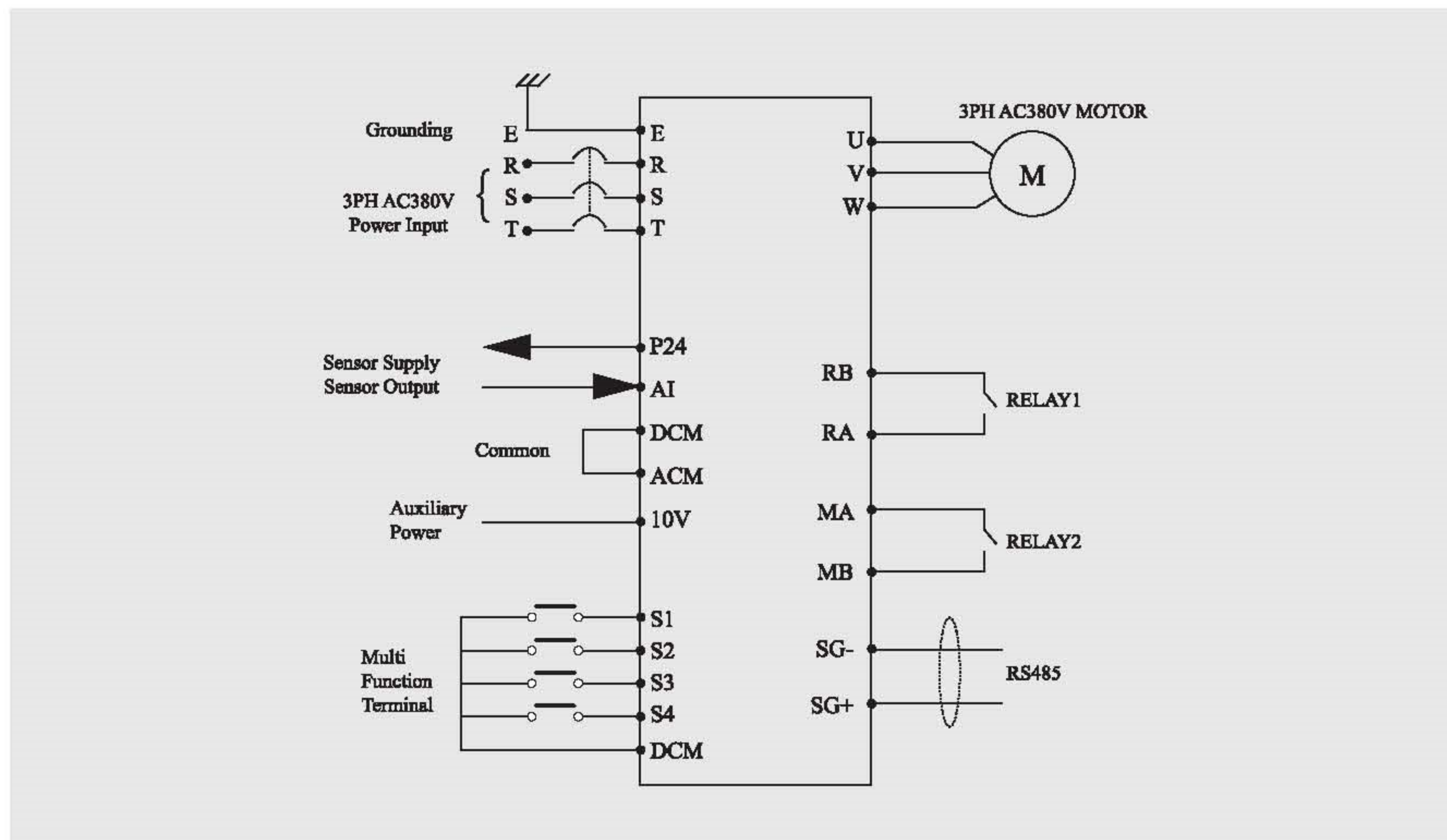
H5200P0D75K-BF	0.75	2	5	7.5	0.75
H5200P01D5K-BF	1.5	2.8	7	10.5	1.5
H5200P02D2K-BF	2.2	4.5	11	16.5	2.2

Input Voltage(V): 3PH AC380V±15%

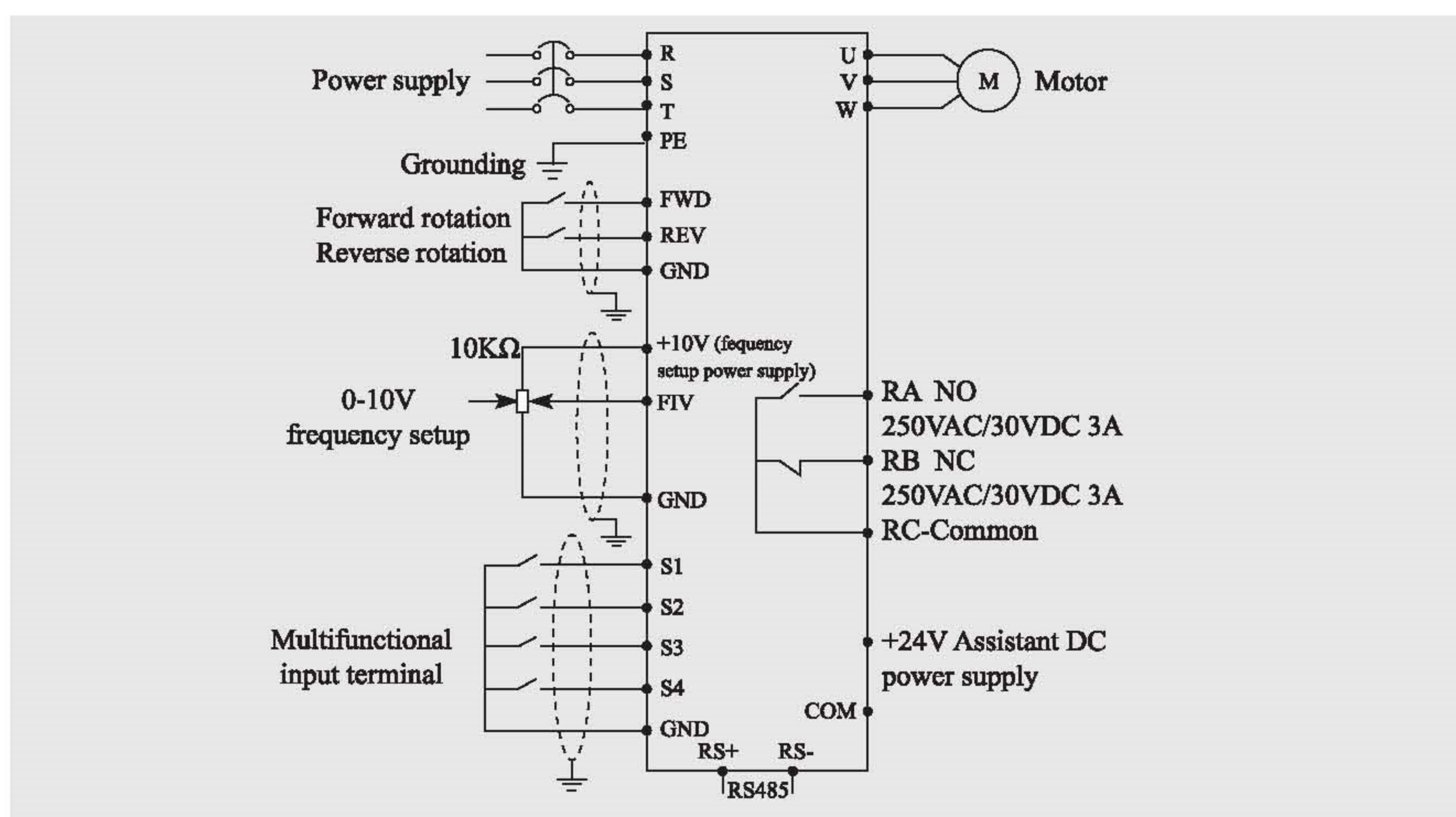
H5400P0D75K-BF	0.75	2.2	2.7	4.05	0.75
H5400P01D5K-BF	1.5	3.2	4	6	1.5
H5400P02D2K-BF	2.2	4	5	7.5	2.2
H5400P03D7K-BF	3.7	6.8	8.6	12.9	3.7
H5400P05D5K-BF	5.5	10	12.5	18.75	5.5
H5400P07D5K-BF	7.5	14	17.5	21	7.5
H5400P0011K-BF	11	19	24	36	11
H5400P0015K-BF	15	26	33	39.6	15
H5400P0018K-BF	18.5	32	40	48	18.5
H5400P0022K-BF	22	37	47	56.4	22
H5400P0030K-BF	30	52	65	78	30

Typical Wiring diagram

1. 1PH 220V input /3PH 220V output



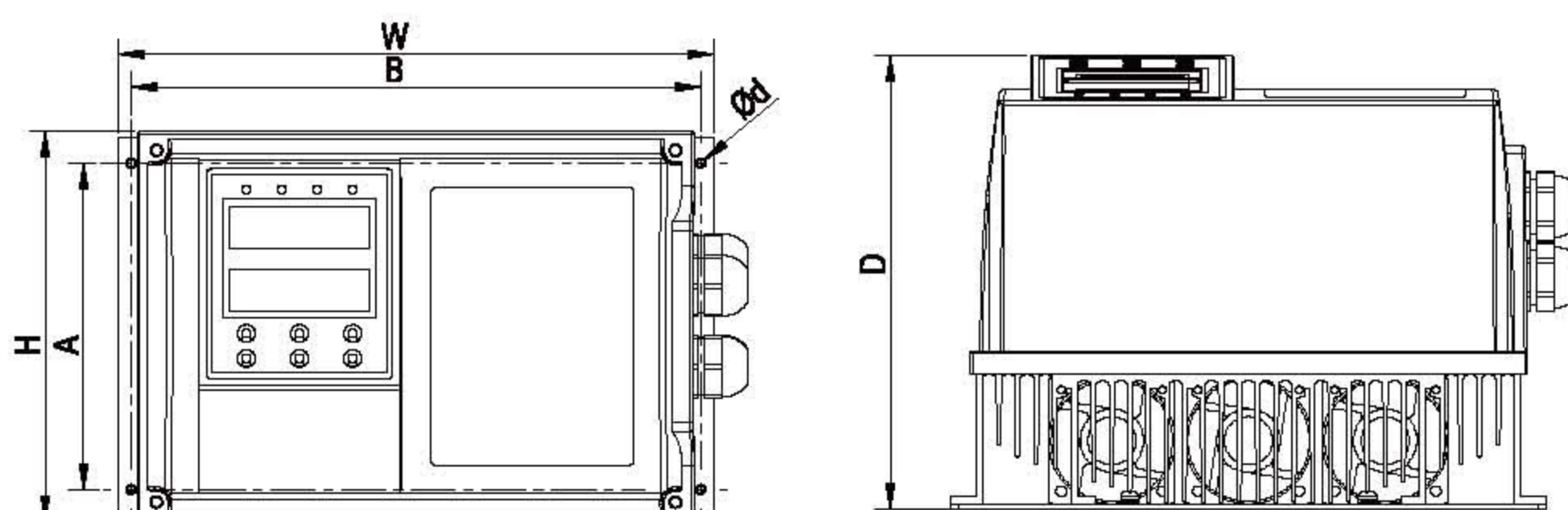
2. 3PH 380V input/3PH 380V output



Note: AI/FIV terminals can be used to select an analog voltage input (0-10V) and analog current input (4-20mA) through the switch SW1.

Dimension

Unit:mm



Model	Motor Equipped	Output Current	Outline Dimension (mm)			Assembly Dimension (mm)		
			W	H	D	A	B	Φ d
H5200P0D75K-BF	0.75	5	188	122	134	105	178	M4
H5200P01D5K-BF	1.5	7						
H5200P02D2K-BF	2.2	11						
H5400P0D75K-BF	0.75	2.7	188	122	134	105	178	M4
H5400P01D5K-BF	1.5	4						
H5400P02D2K-BF	2.2	5						
H5400P03D7K-BF	3.7	8.6	235	154	179	129	225	M4
H5400P05D5K-BF	5.5	12.5						
H5400P07D5K-BF	7.5	17.5						
H5400P0011K-BF	11	24	192	280	178	200	180	M5.5
H5400P05D5K-BF-V	5.5	12.5						
H5400P07D5K-BF-V	7.5	17.5						
H5400P0011K-BF-V	11	24	192	280	178	200	180	M5.5
H5400P0015K-BF	15	33						
H5400P0018K-BF	18.5	40						
H5400P0022K-BF	22	47	236	300	204	250	225	M7
H5400P0030K-BF	30	65						

H5000 Series Multi-pump Water Supply Inverter



H5000 Series Multi-Pump Water Supply

- Energy saving and environmental protection
- Easy to operate, flexible control
- V/F control, built-in PID control
- Standard RS485 communicate function
- Auto "Sleep" and "Awake"
- Over voltage, under voltage can be set
- Power range: 380V 5.5~250kW 380V: 5.5~250kW

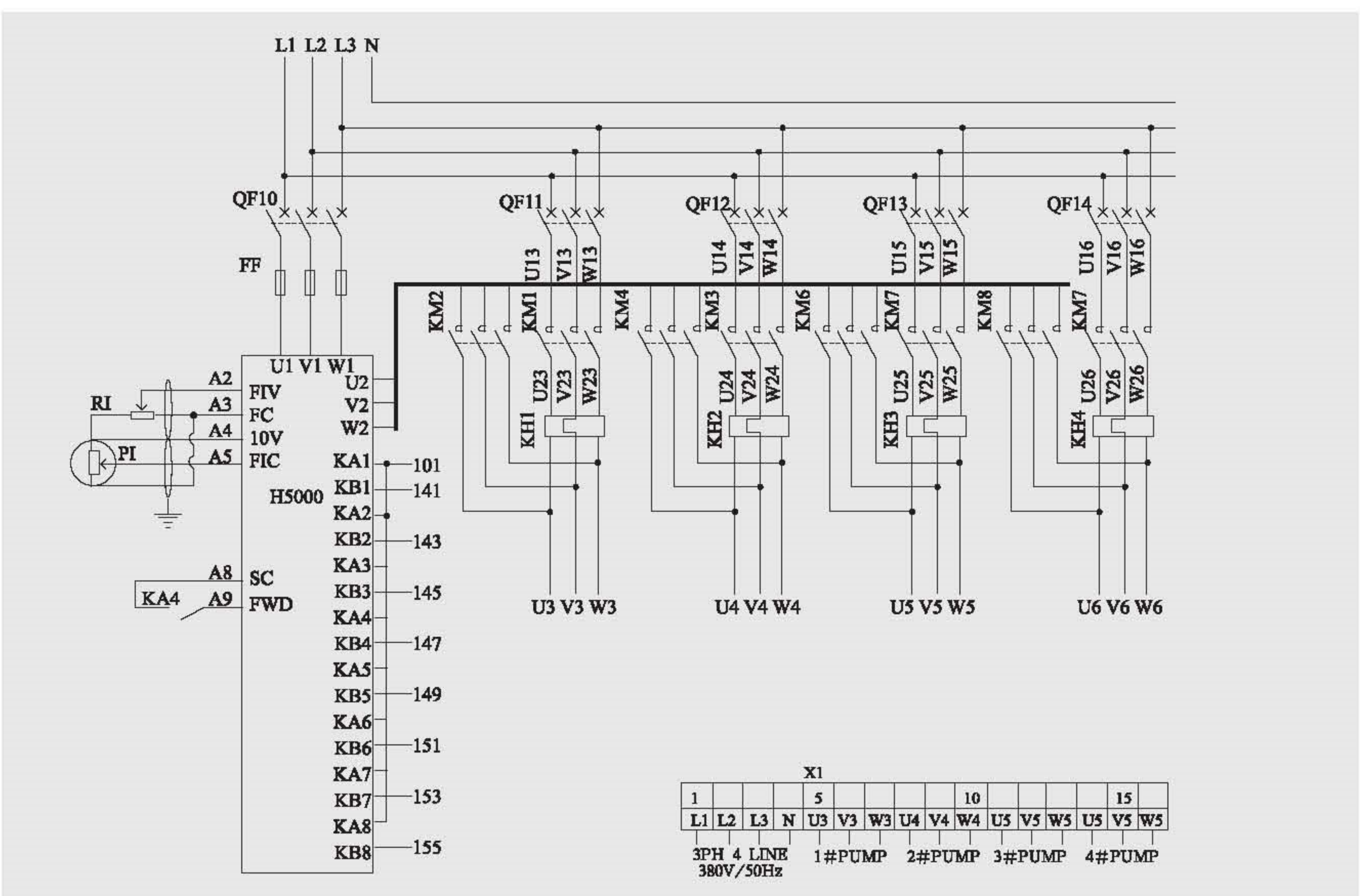
Technical Specification

Model		H5000
Input	Rated voltage, Frequency	1PH/3PH AC 220V 50/60Hz; 3PH AC 380V 50/60 Hz
	Voltage Range	220V: 170~240V; 380V: 330V~440V
Output	Voltage	220V: 0~220V ; 380 V: 0~380 V
	Frequency	0.10~400.0 Hz
Control method		V/F control, Space vector control
Indication		Operating status/Alarm definition, interactive guidance; eg, frequency setting, the output current, DC bus voltage, temperature and so on.
Control Specification	Output Frequency Range	0.10~400.00 Hz.
	Frequency Setting Resolution	Digital input: 0.01 Hz. Analog input: 0.1% of maximum output frequency
	Output Frequency Accuracy	0.01 Hz.
	V/F Control	Setting V/F curve to satisfy various load requirements
	Torque Control	Auto increase: auto raise torque by loading condition; Manual increase: enable to set 0.0~20% of raising torque
	Multifunctional Input Terminal	8 multi-function input terminals, realizing functions including 15 section speed control, program running, 4 section acceleration/deceleration speed switch, UP/DOWN function and emergency stop and other functions
	Multifunctional Output Terminal	3 multi-function output terminals for displaying of running, zero speed, counter, external abnormality, program operation and other information and warnings
Other functions	Acceleration/deceleration Time Setting	8 multi-functional special points to switch frequency and power frequency, 1 inverter can control 4 circular variable frequency pumps
	PID Control	0~6000 s acceleration/deceleration time can be set individually
	RS485	Built-in PID control
	Frequency Setting	Standard RS485 communicate function (MODBUS)
	Multi-speed	Analog input 0~10V, 0~20mA, can be selected; Digital input: input using the setting dial of the operation panel or RS 485 or UP/DOWN
	Automatic voltage regulation	8 multi-function input terminals, 15 section speed can be set
	Counter	Automatic voltage regulation function can be selected
Protection Function	Keypad copy parameter	Built-in 2 group of counters
	Overload	DP-LED05/DP-LED06 keypad (Optional)
	Over Voltage	150%, 60s (Constant torque); 120%, 60s (variable torque)
	Under Voltage	Over voltage protection can be set
Environment	Other Protections	Under voltage protection can be set
	Ambient Temperature	Overheat, Output short-circuit, over current, and parameter lock and so on.
	Ambient Humidity	-10°C~40°C(non-freezing)
	Altitude	Max. 95% (non-condensing)
Structure	Vibration	Lower than 1000m.
	Cooling Mode	Max. 0.5 g
	Protective Structure	Forced air cooling
Install Method		Below 132kW are wall mounted; 160-350kW are wall mounted or cabinet; above 400kW are cabinet

Specification

Model	Input voltage/ frequency	Output Power (kW)	Capacity (KVA)	Output Current (A)	Overload Capacity (60s)(A)	Motor Equipped (kW)
H5400P05D5K	3PH 380V 50/60Hz	5.5	10	12.5	15	5.5
H5400P07D5K		7.5	14	17.5	21	7.5
H5400P0011K		11	19	24	28.8	11
H5400P0015K		15	26	33	39.6	15
H5400P0018K		18.5	32	40	48	18.5
H5400P0022KN		22	37	47	56.4	22
H5400P030KN		30	52	65	78	30
H5400P0037KN		17	64	80	96	17
H5400P0045KN		45	72	90	108	45
H5400P0055KN		55	84	110	132	55
H5400P0075KN		75	115	152	182.4	75
H5400P0090KN1		90	135	176	211.2	90
H5400P0110KN1		110	160	210	252	110
H5400P0132KN1		132	193	255	306	132
H5400P0160KN1		160	230	305	366	160
H5400P0185KN1		185	260	340	408	185
H5400P0200KN1		200	290	380	456	200
H5400P0220KN1		220	320	425	510	220
H5400P0250KN1		250	365	480	576	250

Applicable Example



US200 series AC servo system

Labe Servo drive

Model: US200 - 40A - 2 (00)

① ② ③ ④

- ①US200: US200 series
- ②Drive power: 40A:400W; 75A:750W; 100A:1kW; 150A:1.5kW; 200A:2kW; 300A:3kW; 450A:4.5kW; 550A:5kW; 750A:7.5kW
- ③Drive voltage class: 2:1PH/3PH AC220V; 4:3PH AC380V
- ④Software model: 00:General used; 01:ECAM; 02:EtherCAT bus



Drive technical specifications

■ Working current of servo drive

Servo drive model	Voltage class(V)	Rated power(kW)	Rated output current (A)
US200-20A-2	1PH-220	0.2	1.6
US200-40A-2	1PH-220	0.4	2.8
US200-75A-2	1PH/3PH-220	0.75	5.5
US200-100A-2	3PH-220	1.0	7.6
US200-150A-2	3PH-220	1.5	9.6
US200-200A-2	3PH-220	2.0	11.6
US200-200A-4	3PH-380	2.0	6.0
US200-300A-4	3PH-380	3.0	9.0
US200-450A-4	3PH-380	4.5	12.9
US200-550A-4	3PH-380	5.5	16.5
US200-750A-4	3PH-380	7.5	25.7

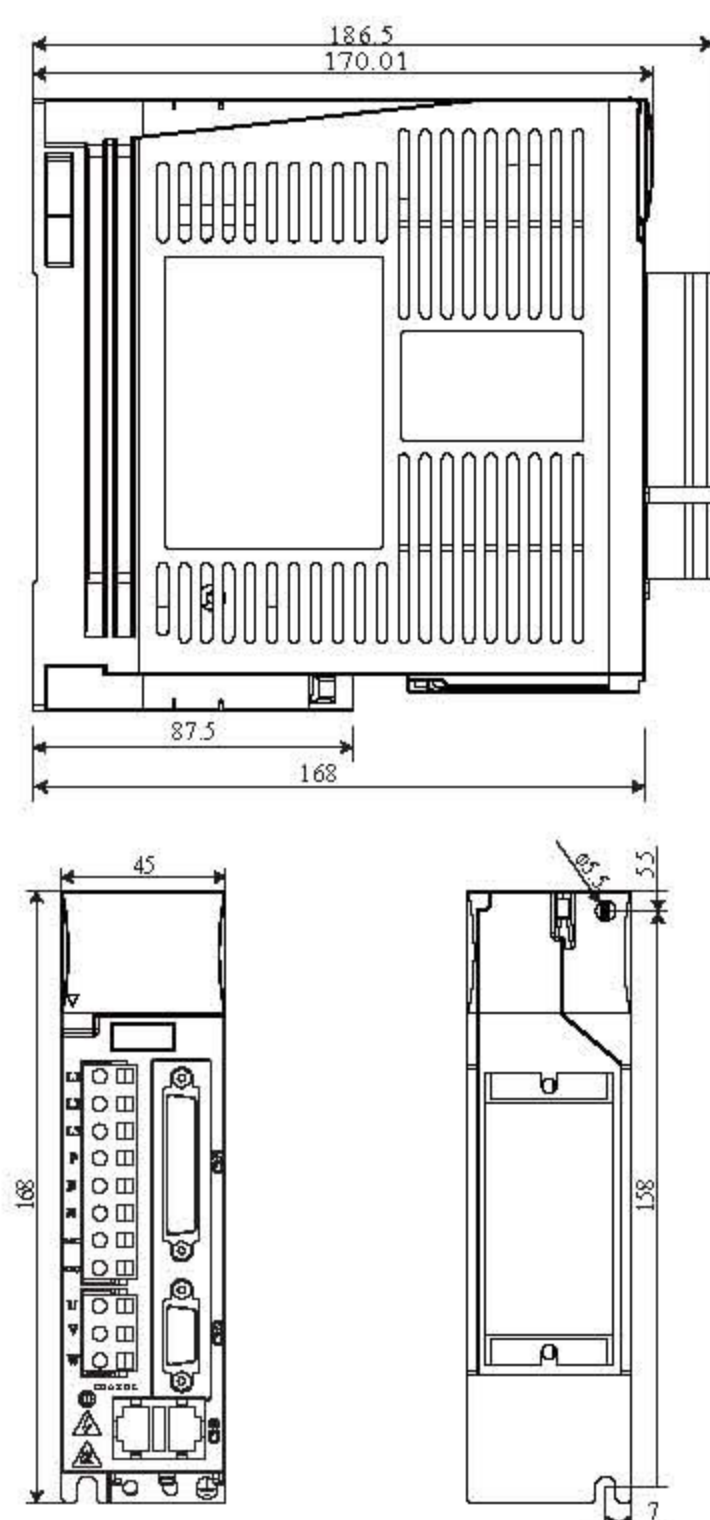
■ EtherCAT type servo drive general -used specifications

Model		US200
Basic specifications	Control method	1. Position control 2. Speed control 3. Torque control
	Feedback type	1. Square wave increment type 2. Absolute value
	Using/Storage temperature	0~+55°C/-20~+85°C
	Using conditions	Using/Storage humidity
		90%RH below (will not have condensation)
	Strength of Vibration	4.9m/s ² /19.6m/s ²

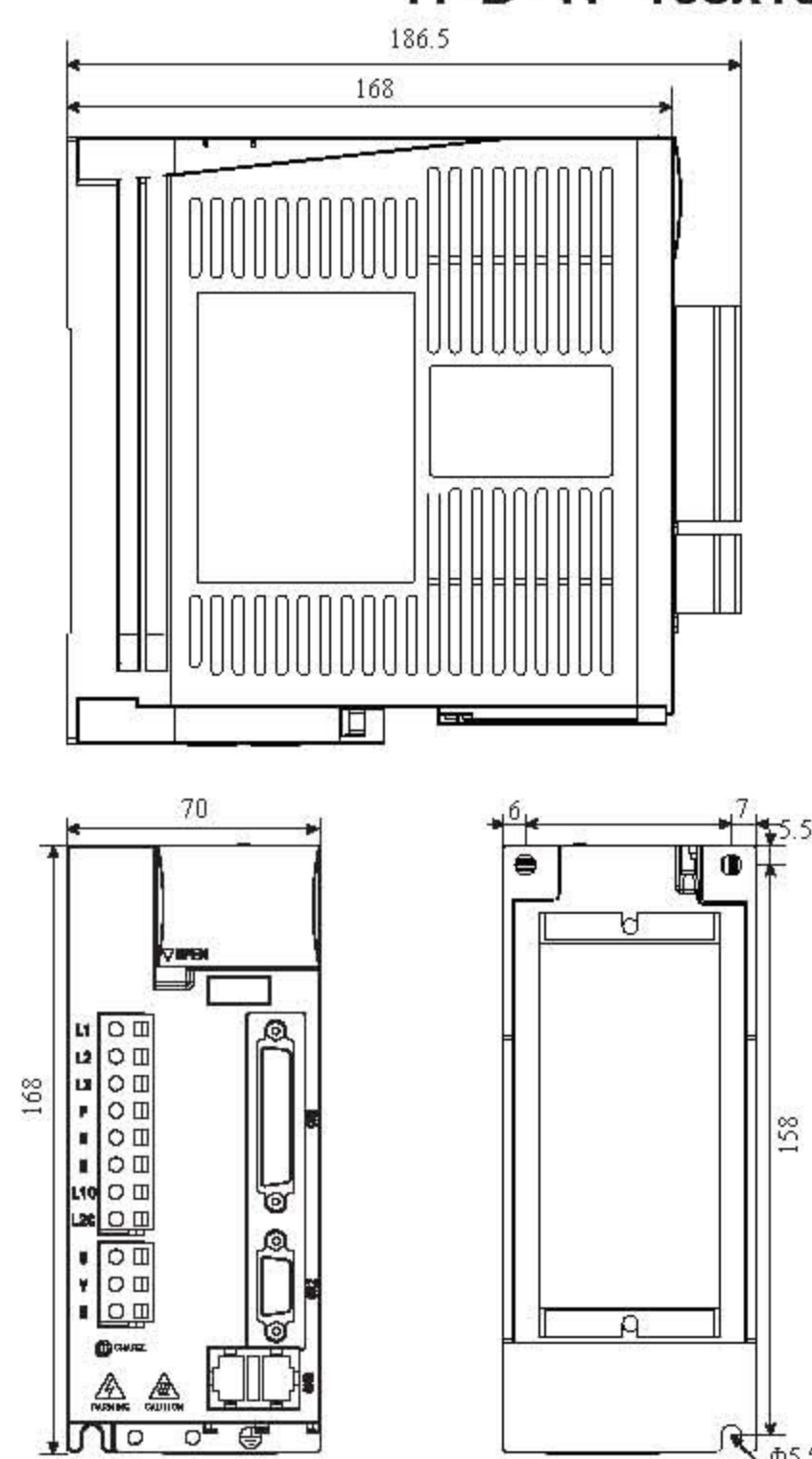
Model				US200	
Torque speed instruction	Performance	Speed controlling range		1:5000 (The bottom limit of speed controlling range is the condition of non-stop when rated torque overload)	
		Speed change rate	Load change rate	When 0~100% load: ±0.01% below (under the rated rotary speed)	
			Voltage change rate	Rated voltage ±10%: 0% (under the rated rotary speed)	
			Temperature change rate	25±25°C: ±0.1% below (under the rated rotary speed)	
		Frequency characteristics (bandwidth)		1.3KHz (when J L = J M)	
		Torque control precision (reproducibility)		±2%	
		Soft start time setting		0 ~ 65s(can separate set acceleration and deceleration time)	
	Input signal	Speed instruction input	Instructed voltage	DC±10V (0V ~ ±10V: alterable setting range)/rated rotary speed Input voltage: max±12V(motor FWD when positive order)	
			Input impedance	About 10kΩ	
			Circuit time parameters	About 47μs	
		Torque instruction input	Instructed voltage	DC±10V (0V ~ ±10V: alterable setting range)/rated rotary speed Input voltage: max±12V(FWD torque instruction when positive instruction)	
			Input impedance	About 10kΩ	
			Circuit time parameters	About 47μs	
		Torque speed instruction	Rotation direction selection	Use DI signal input	
Position of position control mode	Performance	Feedforward compensation		0~100% (set resolution ratio 1%)	
		Positioning complete width setting		1~65535 instruction unit (set resolution ratio 1 instruction unit)	
	Encoder	Incremental		2500 Line, 5000 Line Provincial line	
		Absolute		17 bit, 20 bit, 23 bit	
Input output signal	Position signal	Output form		A phase , B phase , Z phase	
		Frequency division ratio		Arbitrary	
	Sequential input signal	Can make changes in signal distribution		Line 9 DI servo on, P action (or control mode swift, make motor swift in FWD/REV by internal setted speed,Zero clamping, forbid instruction pulse).Positive side current limit, reverse side current limit (or internal speed choose)	
	Sequential output signal	Can make changes in signal distribution		Line 8 DO include positioning complete (same speed), motor under rotation, servo be all set, current under limit, speed under limit	
Internal function	Dynamic brake (DB) function			Main power OFF, servo alarm, servo OFF, Overshoot action	
	Overrange (OT) prevention function			When P-OT, N-OT action, DB stop, deceleration to stop or Inertial operation to stop	
	Electronic Gearing			0.001≤B/A≤4000	
	Defensive function			Over-current, over-voltage, low-voltage, overload, Starting resistance abnormal, abnormality of main circuit detection unit, heat sink overheating, power supply phase loss, spillover and overspeed, encoder abnormal, prevent loss of control, abnormal CPU, abnormal parameter, and so on...	
	LED display function			Main power CHARGE, 5 bit LED display	
	Communication function	Connection device		EtherCAT, MODBUS	
		Axis address setting		Setted as per user parameters	
		Function		MODBUS: Status display, user parameters setting, monitor display, alarm follow display, JOG operation and automatic tuning, Surveying and mapping function	
	Others			Origin retrieval, motor angle self-learning function,gain self adjustment,low-frequency vibration restrain, operation mode swift, motor resonance restrain, rich DIDO function, all close-loop	

Installation size A、B

- Suitable model: 750W and following
H×D×W=168x168x45mm

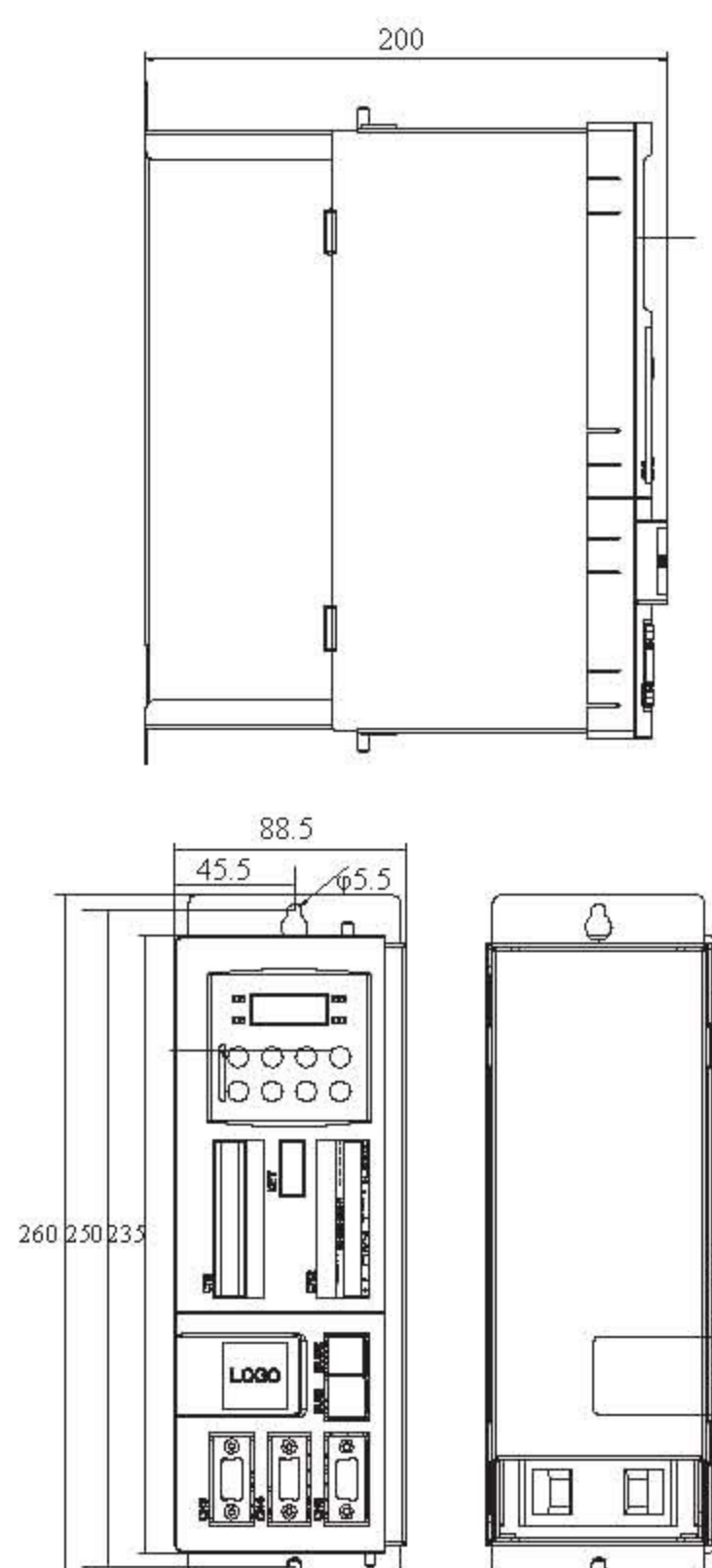


- Suitable models: 220V 1KW-2KW
380V 2KW-3KW
H×D×W=168x168x70mm

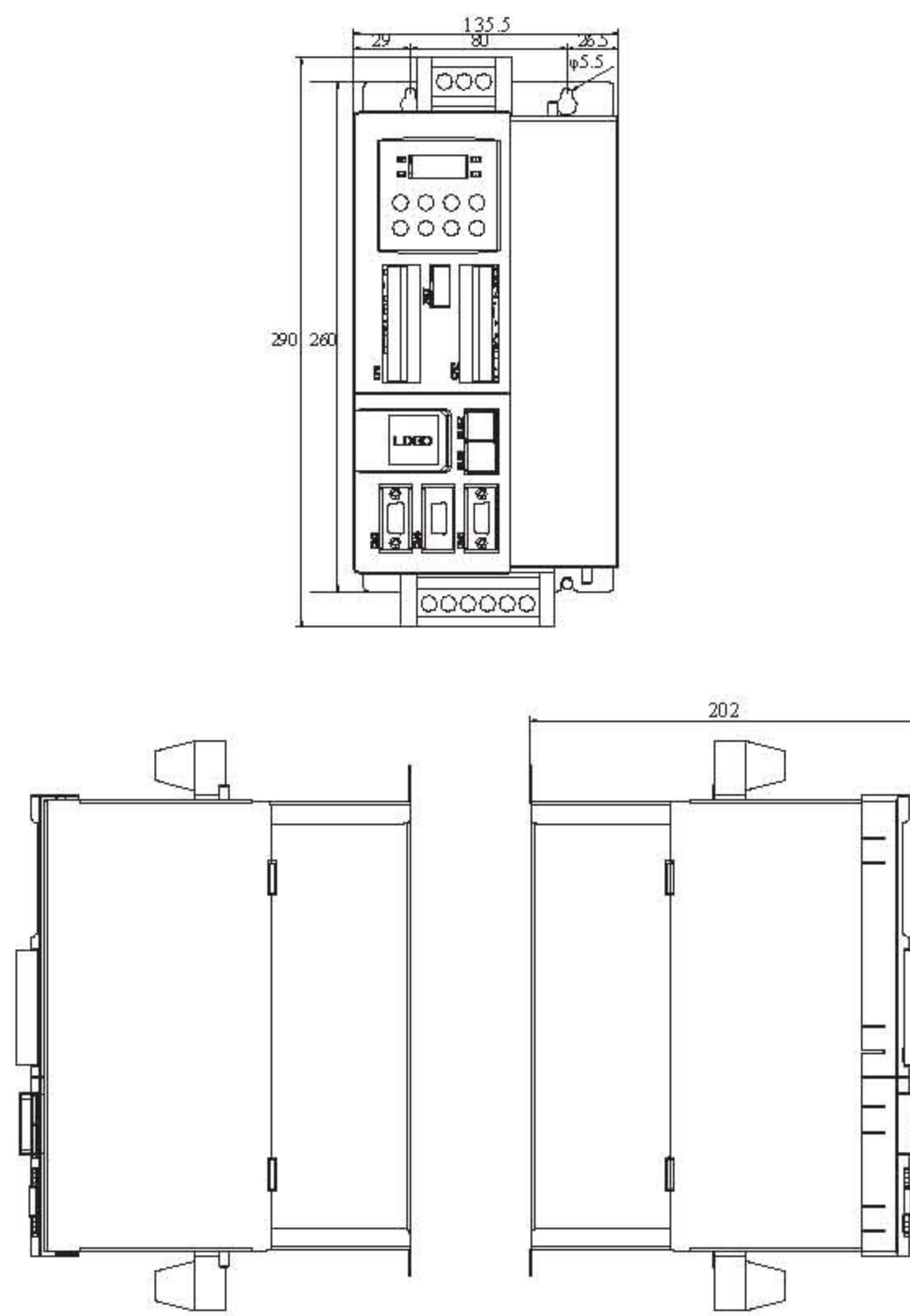


Installation size C, D

- Suitable model: 380V 4.5KW-5.5KW
H×D×W=260x200x88.5mm



- Suitable model: 380V 7.5KW-11KW
H×D×W=290x202x135.5mm



T8000D series

multi-function high-performance spindle servo drive

Technical Specification

Item	T8000D
Maximum frequency	Vector control: 0~1300 V/F control: 0~3200
Carrier frequency	0.8kHz~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%
Control Mode	Sensorless flux vector control (SVC) Close-loop vector control (FVC)
Start torque	G type: 0.5Hz/150%(SVC); 0Hz/180%(FVC)
Speed range	1: 100(SVC) 1: 1000(FVC)
Speed stability accuracy	±0.5%(SVC) ±0.02%(FVC)
Torque control accuracy	±5%(FVC)
Overload capacity	G type: 60s for 150% of the rated current, 3s for 180% of the rated current.
Torque boost	Auto-boost; Customized boost: 0.1%~30.0%
V/F Curve	Straight-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)
Ramp Mode	Straight-line ramp. Four groups of acceleration/deceleration time with the range of 0.00~6500.0s
DC braking	DC braking frequency: 0.00Hz~Maximum frequency Braking time: 0.0s~36.0s Braking action current value: 0.0%~100.0%
Auto voltage regulation (AVR)	It can keep constant output voltage automatically when the mains voltage changes
Rapid current limit	It helps to avoid frequent over current faults of the AC drive.
Support for kinds of PG cards	Differential input PG card; Rotating transformer PG card, Open-collector.
Power dip ride through	The load feedback energy compensates the voltage reduction so that the AC drive can continue to run for a short time
Overvoltage/overcurrent stall control	The current and voltage are limited automatically during the running process so as to avoid frequent tripping due to over voltage/over current
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 FVC mode.
Onboard multiple preset speeds	It implements up to 16 speeds via the simple PLC function or combination of X terminal states
Support motor type	Asynchronous motor, spindle asynchronous motor, Permanent Magnet Synchronous Motor, Spindle Synchronous Motor

Specification

Model	Rated output power (kW)	Rated input current(A)	Rated output current (A)	Motor Power (kW)
Input Voltage(V): 3PH AC380V±15%				
T8400D-3R7G/5R5P	3.7/5.5	10.0/15.0	9.0/13.0	3.7/5.5
T8400D-5R5G/7R5P	5.5/7.5	15.0/20.0	13.0/17.0	5.5/7.5
T8400D-7R5G/11P	7.5/11	20.0/26.0	17.0/25.0	7.5/11
T8400D-11G/15P	11/15	26.0/35.0	25.0/32.0	11/15
T8400D-15G/18R5P	15/18.5	35.0/38.0	32.0/37.0	15/18.5
T8400D-18R5G/22P	18.5/22	38.0/46.0	37.0/45.0	18.5/22
T8400D-22G/30P	22/30	46.0/62.0	45.0/60.0	22/30
T8400D-30G/37P	30/37	62.0/76.0	60.0/75.0	30/37
T8400D-37G/45P	37/45	76.0/90.0	75.0/90.0	37/45

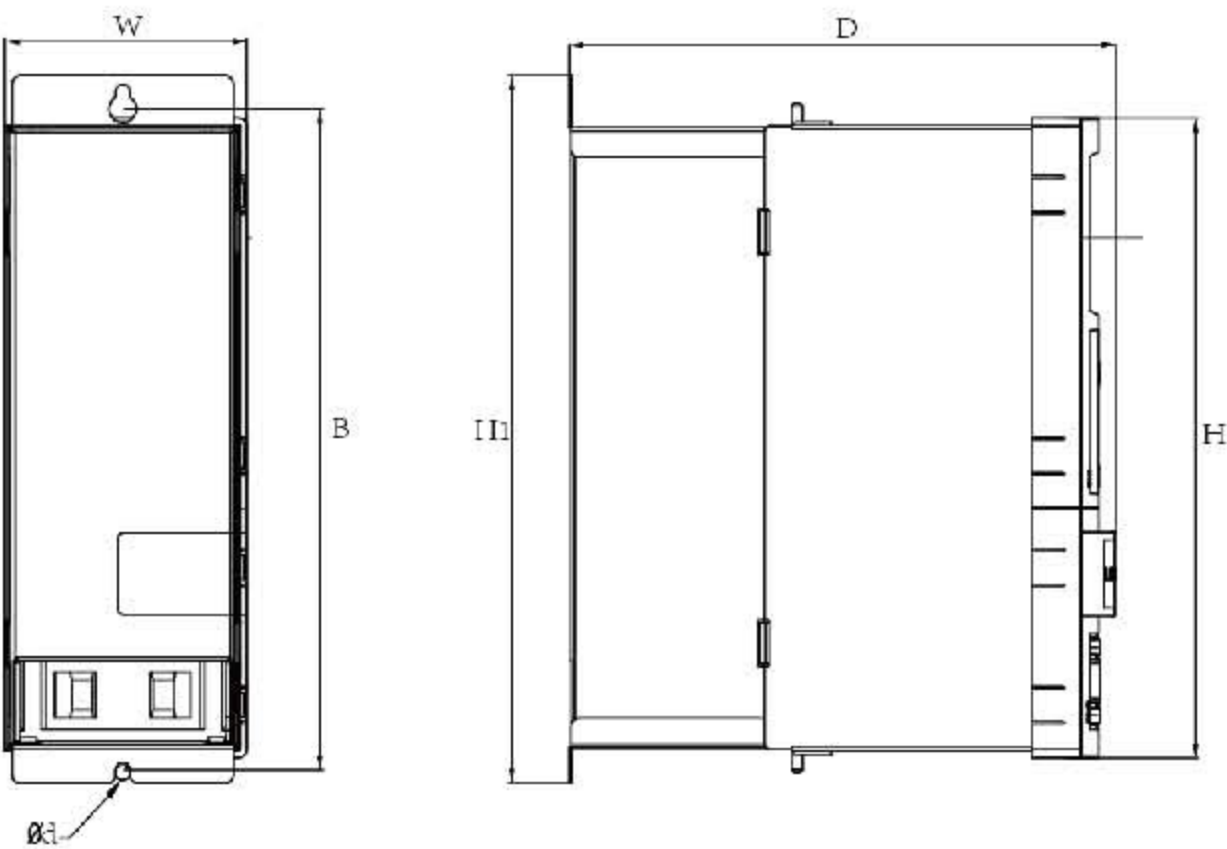


T8000D series multi-function high-performance spindle servo drive

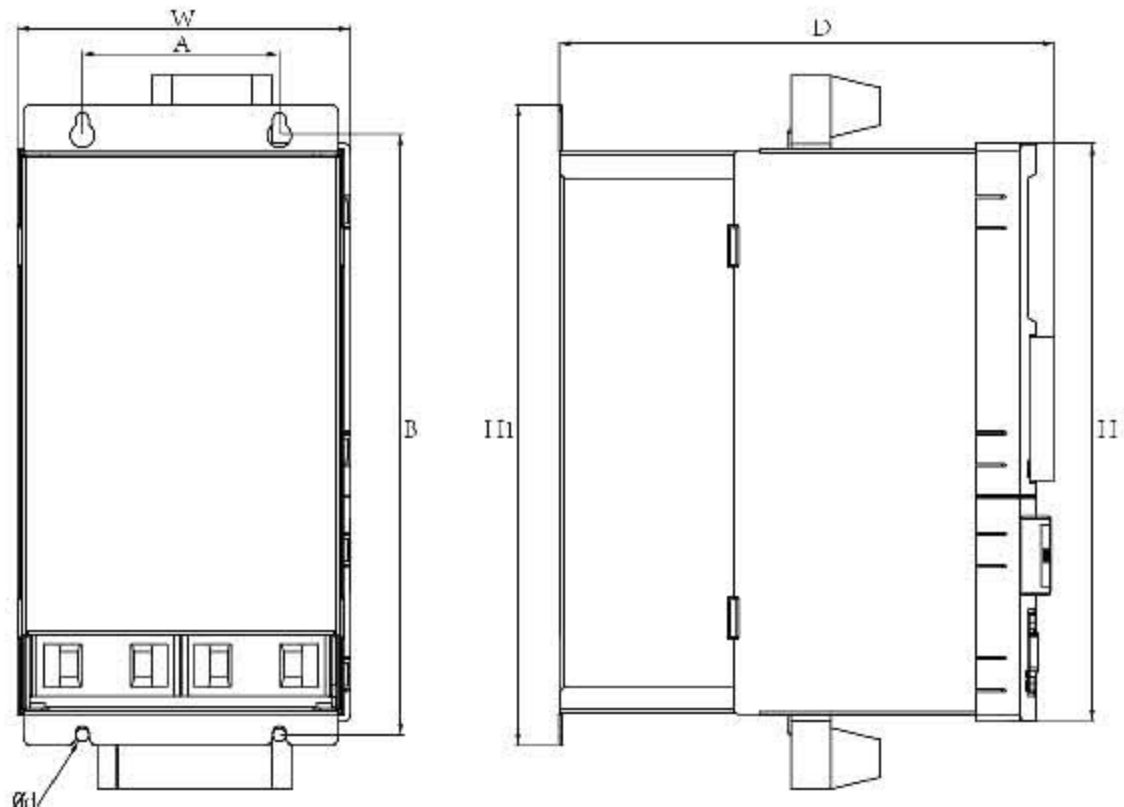
Dimension

Unit:mm

① 3.7-7.5kW

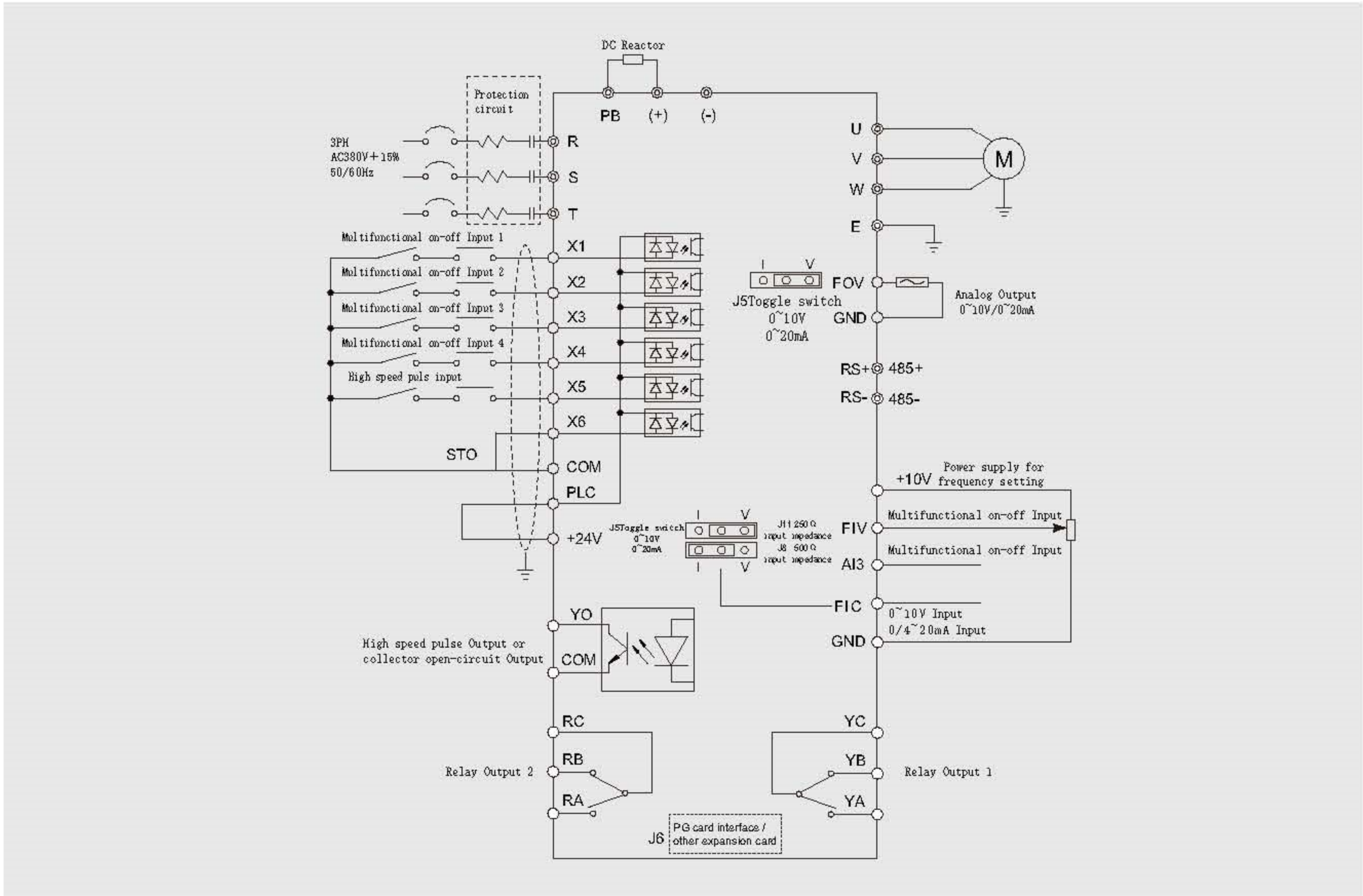


② 11-22kW



Model	Outline Dimension (mm)				Assembly Dimensio (mm)			unit: mm
	W	H	H1	D	A	B	Φ d	Install
T8400D-3R7G/5R5P	88.5	235	260	200	-	250	5.5	Install Wall Mounted
T8400D-5R5G/7R5P								
T8400D-7R5G/11P	135.5	235	260	202	80	250	5.5	
T8400D-11G/15P								
T8400D-15G/18R5P								
T8400D-18R5G/22P	192.5	235	260	222	132	250	5.5	
T8400D-22G/30P								
T8400D-30G/37P	176	-	475	256	120	460	7.0	
T8400D-37G/45P								

Typical Wiring diagram





WUHU ZONCN AUTOMATION EQUIPMENT CO.,LTD.

Factory Add.: No.168,Sunshine Avenue,Xinwu Economic Development Zone

Wuhu City,Anhui Province,P.R.China

TEL.:0086-553-2619975 Mobile&Wechat:0086-13695679077

Email: info@whzoncn.com Website: www.whzoncn.com