



INVERTER



NZ200 Series

Mini Simple Vector Control Inverter



1-1 NZ200 Technical Specification

Item	ZONCN NZ200 Series
Control Mode	Sensorless flux vector control (SFVC) Voltage/Frequency (V/F) Control
Maximum frequency	Vector control: 0-320Hz V/F control: 0-3200Hz
Carrier frequency	1kHz~16kHz The carrier frequency is automatically adjusted based on the load features.
Input frequency resolution	Digital setting:0.01Hz Analog setting: Maximum frequency 0.025%
Start torque	G: Type:0.5Hz/150%(SVC) P: Type:0.5Hz/100%
Speed range	1:100(SVC)
Speed stability accuracy	±0.5%(SVC)
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%
VF curve	Straight-line VF curve; Multi-point VF curve; N-power VF curve(1.2-power,1.4-power,1.6-power,1.8-power, 2-power)
VF separation	2 types: complete separation; half separation
Ramp Mode	Straight-line ramp ; S-curve ramp ; Four groups of acceleration/deceleration time:0~6500.0s
Simple PLC, Multiple preset speeds	It implements up to 16 speeds via the simple PLC function or combination of terminal states
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.
Torque limit and control	It can limit the torque automatically and prevent frequent over-current tripping during the running process.
Onboard PID	It realizes process-controlled closed loop control system easily
Rapid current limit	It helps to avoid frequent over current faults of the AC drive.
JOG control	JOG frequency range: 0.00~50.00 Hz JOG acceleration/deceleration time: 0.0~6500.0s
DC braking	DC braking frequency : 0.00Hz to maximum frequency Braking time : 0.0-100.0s Braking action current value: 0.0%-100.0%
Instantaneous blackout doesn't stop	The load feedback energy compensates the voltage reduction so that the AC drive can continue to run for a short time.
Timing control	Timing range:0.0Min~6500.0Min
Communication	RS485
Run instruction channel	Keyboard given, control terminal given, serial communication port given. It can be switched in a variety of ways.
Frequency source	10 kinds: digital given, analog voltage given, analog current given, pulse given,

		serial port given. It can be switched in a variety of ways.
Auxiliary frequency source		10 auxiliary frequency sources. It can flexibly realize auxiliary frequency fine-tuning and frequency synthesis.
Input terminals		6 digital input terminals, one of which supports up to 100 kHz high-speed pulse input (S3 optional). 2 analog input terminal, one of which only supports 0-10v voltage input(FIV) and the other supports 0-10 voltage input or 4-20 mA current input(FIC).
Output terminals		1 digital output terminal (MO1) 1 relay output terminal(RA, RB, RC) 1 analog output terminal :that supports 0-20 mA current output or 0-10v voltage output (FOV)
Remark		X terminal is NPN type by default. If PNP type is required, contact customer service for customization.
LED display		Not removable. More than 45kw is acceptable.
Keystroke locking and function selection		Realize partial or full lock of keys, and define the scope of action of some keys to prevent false touch
Multiple protection modes		Motor short-circuit detection at power-on, output phase loss protection, over-current protection, over-voltage protection, under voltage protection, overheat protection and overload protection.

★ The specific functions of each power segment shall be subject to the basic wiring diagram

1-2 NZ200/Z2000 series vector control inverter hardware configuration comparison

NZ200 series		Z2000 series	
VF/Vector control	Yes	VF/Vector control	Yes
Built-in braking unit	Support below 37kw. More than 45kw optional.	Built-in braking unit	Support below 37kw. More than 45kw optional.
LED display removable	More than 45kw support	LED display removable	Yes
High speed pulse output	Optional	High speed pulse output	Optional
DC braking	Yes	DC braking	Yes
24V power supply	Under 37kw no 45kw or above is standard	24V power supply	Under 30kw optional 30kw or above is standard
Built-in EMC filter	No	Built-in EMC filter	Optional
Grade of protection	IP20	Grade of protection	IP20
Quality authentication	CE	Quality authentication	KC+CE
0.1S acceleration and deceleration	Yes	0.1S acceleration and deceleration	Yes
Simple PLC	Yes	Simple PLC	Yes
Ether CAT communication	No	Ether CAT communication	Optional
Communication	RS485	Communication	RS485
Dc bus +, - terminals	No	Dc bus +, - terminals	Yes
PID	Yes	PID	Yes

1-3 NZ200 Specification

Model	Rated output power (kW)	Rated input current (A)	Rated output current (A)	Motor Power (kW)
Input voltage (v): 1PH AC 220V±15%				
NZ200-0R4G-2	0.4	5.4	2.5	0.4
NZ200-0R75G-2	0.75	7.2	5	0.75
NZ200-1R5G-2	1.5	10	7	1.5
NZ200-2R2G-2	2.2	16	11	2.2
NZ200-3R7G-2	3.7	17	16.5	3.7
Input voltage (v): 3PH AC 380V±15%				
NZ200-0R4G-4	0.4	3.4	1.2	0.4
NZ200-0R75G-4	0.75	3.8	2.5	0.75
NZ200-1R5G-4	1.5	5	3.7	1.5
NZ200-2R2G-4	2.2	5.8	5	2.2
NZ200-3R7G/5R5P-4	3.7	10.7	9	3.7
NZ200-5R5G/7R5P-4	5.5	14.6	13	5.5
NZ200-7R5G/11P-4	7.5	20	17	7.5
NZ200-11G/15P-4	11	26	25	11
NZ200-15G/18.5P-4	15	35	32	15
NZ200-18.5G/22P-4	18.5	38	37	18.5
NZ200-22G/30P-4	22	46	45	22
NZ200-30G/37P-4	30	62	60	30
NZ200-37G/45P-4	37	76	75	37
NZ200-45G/55P-4	45	92	90	45
NZ200-55G/75P-4	55	113	110	55
NZ200-75G/90P-4	75	157	150	75
NZ200-90G/110P-4	90	180	176	90
NZ200-110G/132P-4	110	214	210	110
NZ200-132G/160P-4	132	256	253	132
NZ200-160G/185P-4	160	307	300	160

★ For models with higher power, please consult customer service

1-4 Product description

MODEL: NZ200-3R7G/5R5P-4

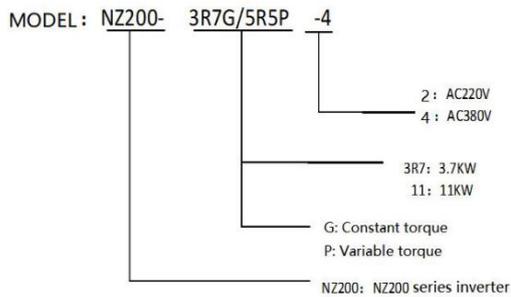
INPUT: 3PH 380V 50Hz/60Hz

OUTPUT: 3PH 380V 9.0A/13.0A

FREQ RANGE: 0.1-600Hz 3.7KW/5.5KW

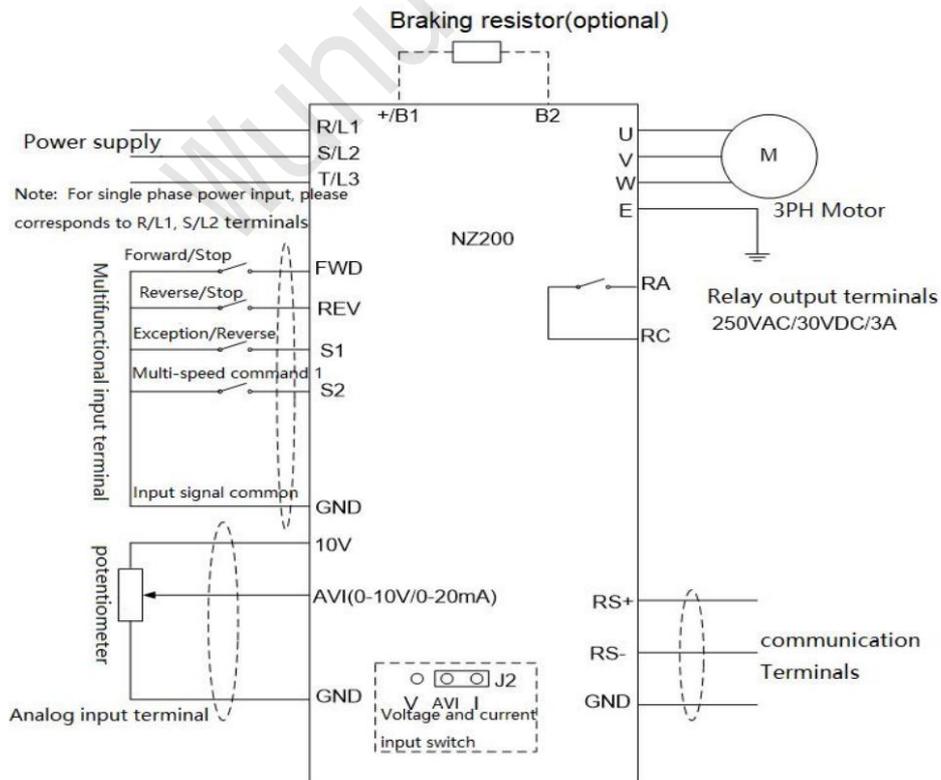


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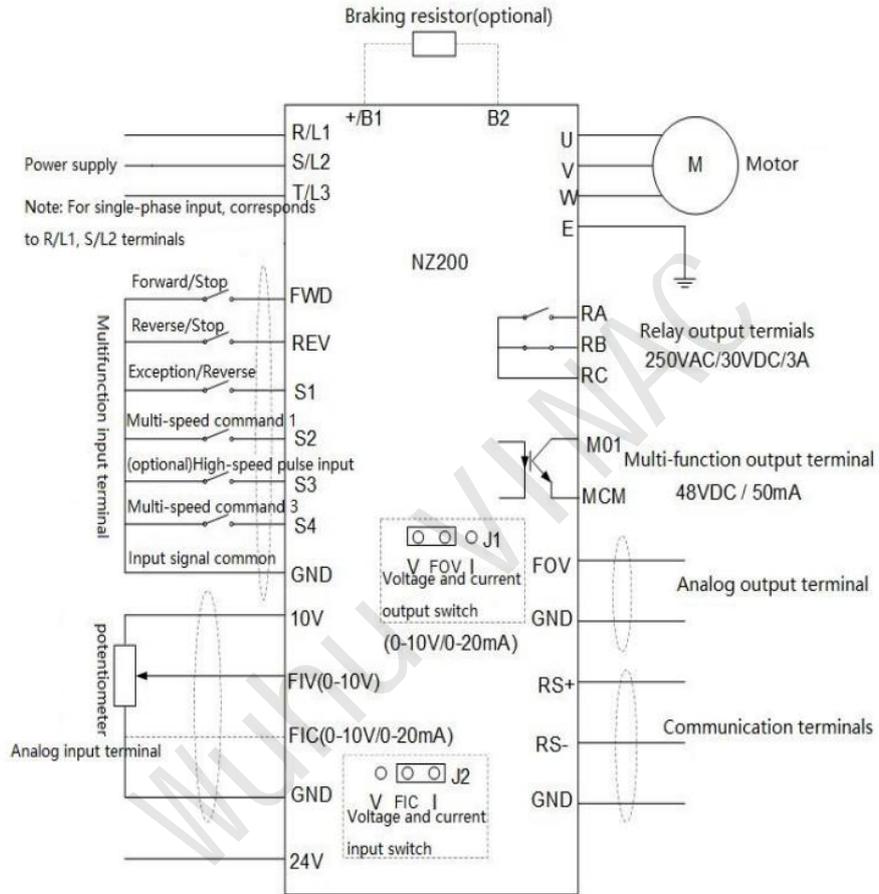


1-5 Typical Wiring diagram

0.75~37kw



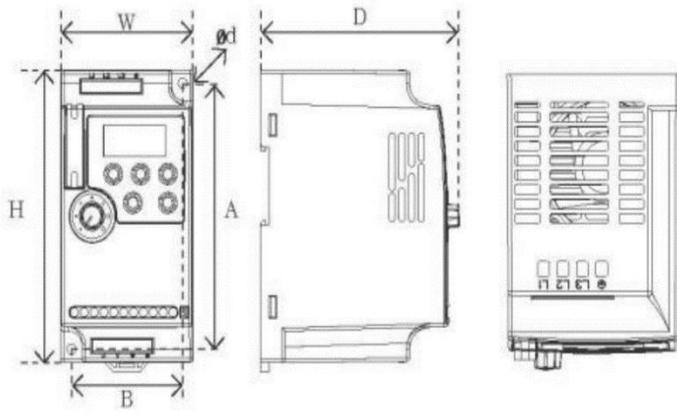
45-220kw



1-6 NZ200 series external dimensions

Model	W	H	D	A	B	Φd
Input voltage: 1PH AC 220V±15%						
NZ200-0R4G-2	72	142	112.2	130	61	4.5
NZ200-0R75G-2	72	142	112.2	130	61	4.5
NZ200-1R5G-2	72	142	112.2	130	61	4.5
NZ200-2R2G-2	85	180	116	167	72	5.5
NZ200-3R7G-2	85	180	116	167	72	5.5
Input voltage: 3PH AC 380V±15%						
NZ200-0R4G-4	72	142	112.2	130	61	4.5
NZ200-0R75G-4	72	142	112.2	130	61	4.5
NZ200-1R5G-4	72	142	112.2	130	61	4.5
NZ200-2R2G-4	72	142	112.2	130	61	4.5
NZ200-3R7G/5R5P-4	85	180	116	167	72	5.5
NZ200-5R5G/7R5P-4	85	180	116	167	72	5.5
NZ200-7R5G/11P-4	106	240	153	230	96	4.5
NZ200-11G/15P-4	106	240	153	230	96	4.5
NZ200-15G/18.5P-4	151	332	165.5	318	137	7
NZ200-18.5G/22P-4	151	332	165.5	318	137	7
NZ200-22G/30P-4	151	332	165.5	318	137	7
NZ200-30G/37P-4	217	400	201	385	202	7
NZ200-37G/45P-4	217	400	201	385	202	7
NZ200-45G/55P-4	300	470	240	455	200	4.5
NZ200-55G/75P-4	300	470	240	455	200	4.5
NZ200-75G/90P-4	275	630	310	612	200	4.5
NZ200-90G/110P-4	275	630	310	612	200	4.5
NZ200-110G/132P-4	275	630	310	612	200	4.5
NZ200-132G/160P-4	400	715	310	695	320	11
NZ200-160G/185P-4	400	715	310	695	320	11

0.4-37kw



Note: Support for standard 35mm Din-rail mounting. (Below 5.5kw)

45-450kw

