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# PRODUCT SELECTION MANUAL

NENA<sup>®</sup>



# EXPLORE INNOVATIVE

探索创新 厚积薄发



A black and white photograph of an astronaut in a space suit floating in the void of space. The astronaut's arm is extended, and a large solar panel array is visible in the background, partially illuminated by the sun. The Earth's horizon is visible in the distance.

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# INVERTER

## Model Selection Guide





ZHEJIANG  
XINHANG ELECTRIC  
CO.,LTD.



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# LNC820

LNC820 GENERAL - PURPOSE INVERTER

通用型变频器

绿色  
环保  
Eco-friendly



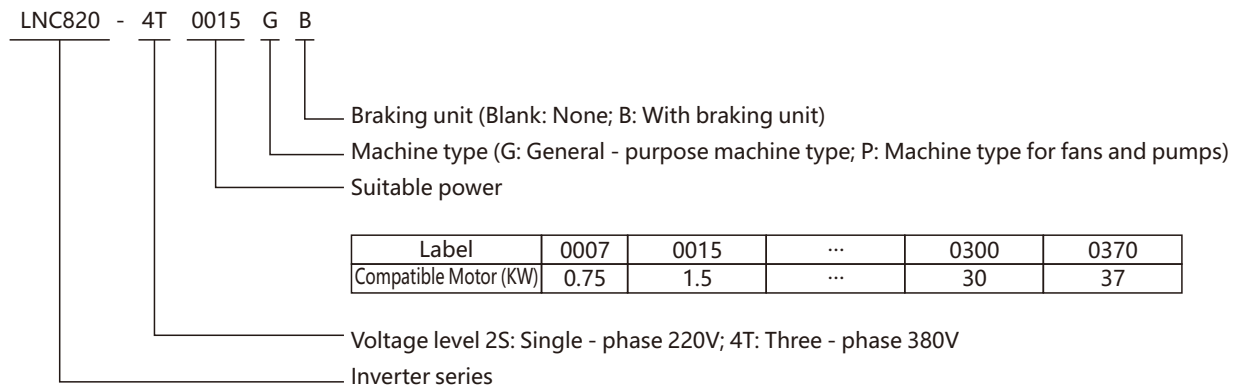
安全  
可靠  
Safe and  
Reliable



## Overview

LNC820 series inverters are general - purpose vector inverters that can easily drive and control asynchronous motors. They feature powerful functions and stable performance, meeting international mainstream standards and certifications. The main control chip is a dedicated DSP chip for motor control, enabling higher - performance and higher - precision motor drive control, more diverse frequency source superposition and switching methods, an advanced PID algorithm, 15 - step speed and automatic program operation, as well as frequency swing control and speed tracking functions. While improving product reliability and environmental adaptability, it strengthens the design of customer - friendliness and industry specialization, with more optimized functions, more flexible applications, and more stable performance. It can be applied to industries such as textiles, papermaking, wire - drawing, machine tools, packaging, food, fans, pumps, etc., and various automated production equipment series. This series is standard - equipped with a 485 communication function, and the power units of 22kW and below are standard - equipped with a braking unit. Power range: 0.75kW ~ 5.5kW - 220V, 0.75kW ~ 400kW - 380V.

## Model meaning



## Product features

- It can avoid over - current faults caused by direct starting and achieve smooth starting
- When the demand for motor torque is low, the excitation current is reduced according to the load current
- Maximize the efficiency of the motor
- Reduce motor losses and energy consumption
- There are three curve - setting methods: The linear curve is suitable for ordinary constant - torque loads. The multi - point curve is suitable for loads of dehydrators and centrifuges. The square - law curve is suitable for loads of fans and pumps. The three points of the curve can be adjusted
- The most suitable curve can be set according to the torque characteristics of the equipment to achieve better energy - saving results
- It can achieve smooth starting and avoid over - current faults caused by direct starting
- It is more suitable for the use of fans and pumps

## Nameplate instructions

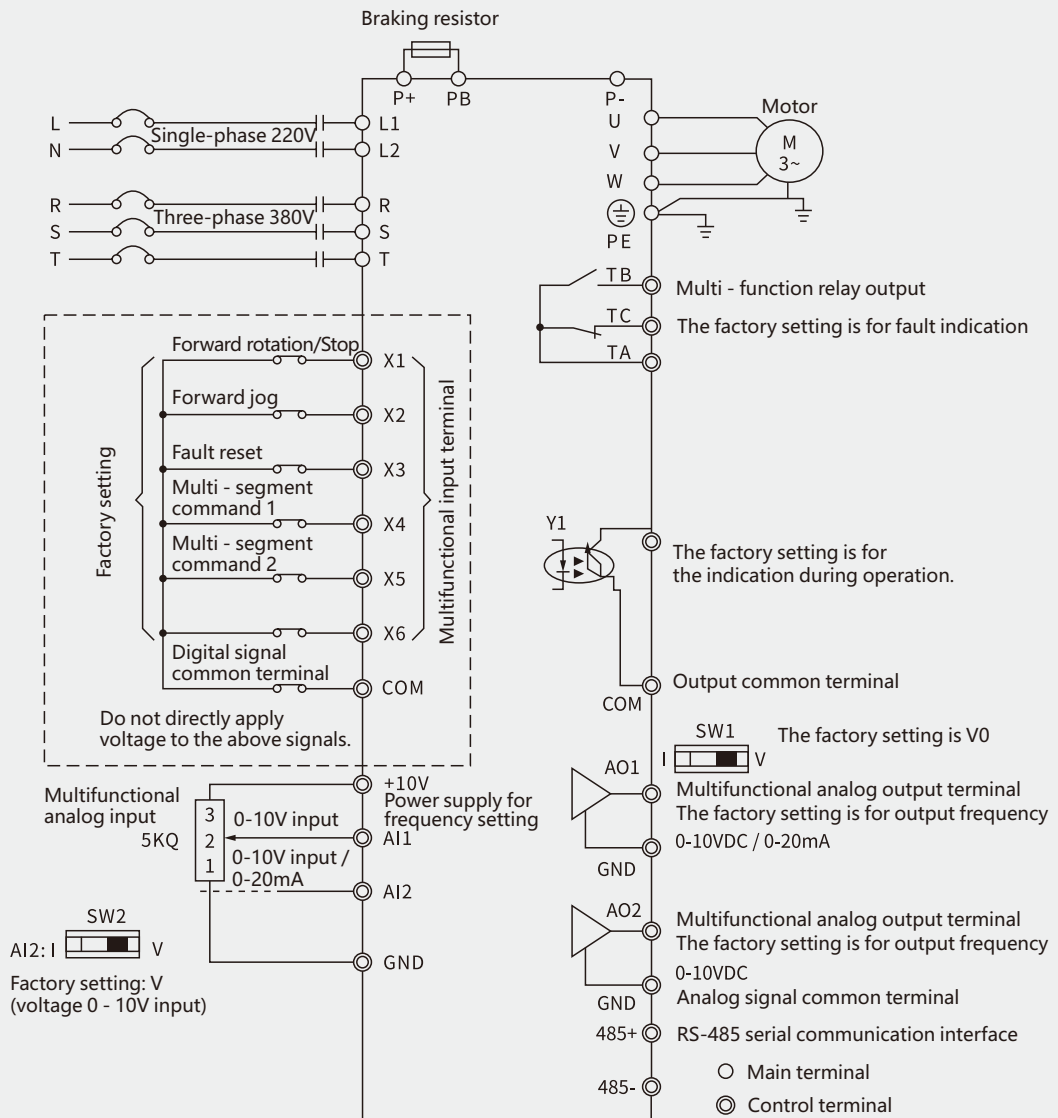
MODEL:	LNC820-4T0040GB/4T0055PB
POWER:	4KW 9A/5.5KW 13A
INPUT:	3PH AC380V 50HZ/60HZ
OUTPUT:	3PH AC0V-380V 0HZ-500HZ
S.N:	Barcode

## Technical specifications

	Item	Specification
Basic functions	Output frequency	0 - 500Hz
	Carrier frequency	0.8kHz ~ 12kHz, the carrier frequency can be automatically adjusted according to the load characteristics
	Frequency resolution	0.01Hz
	Control mode	V/F control
	Torque characteristics	With torque compensation and slip compensation, starting torque: G - type machine 0.5Hz/150%, P - type machine 0.5Hz/100%
	Torque boost	Automatic torque boost; Manual torque boost 0.1% ~ 30.0%
	Overload capacity	G - type machine: 150% of rated output current for 60S P - type machine: 130% of rated output current for 60S
	Speed regulation range	1:100
	Speed stability accuracy	±1%
	Automatic voltage regulation (AVR)	When the grid voltage changes, it can automatically maintain a constant output voltage
	Over - voltage and over - current stall control	Automatically limits the current and voltage during operation to prevent frequent over - current and over - voltage tripping
	Fast current - limiting function	Minimizes over - current faults to protect the normal operation of the frequency converter
	V/F curve	Four modes: linear type; multi - point type; complete V/f separation; incomplete V/f separation
	Acceleration and deceleration curves	Linear or S - curve acceleration and deceleration modes; four acceleration and deceleration times; acceleration and deceleration time range: 0.1 ~ 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%
	Simple PLC, multi - speed operation	Jog frequency range: 0.00Hz ~ 50Hz; jog acceleration and deceleration time: 0.0s ~ 6500.0s
	Jog control	Up to 16 - speed operation can be achieved through the built - in PLC or control terminals
	Built - in PID	It can easily implement a process - control closed - loop control system
Operating characteristics	Operating command channel	Three channels: given by the operation panel, given by the control terminals, given by the serial communication port. It can be switched in various ways
	Frequency source	Ten frequency sources: given by panel knob, given by operation panel, given by analog voltage, given by analog current, given by RS485 communication, multi - speed, PID, simple PLC, which can be switched in various ways
	Auxiliary frequency source	Ten auxiliary frequency sources. It can flexibly achieve auxiliary frequency fine - tuning and frequency synthesis
	Input terminals	Six digital input terminals, one of which can be used as a high - speed pulse input. Two analog input channels, AI1: input range 0 ~ +10V, AI2: input range 0 ~ +10V/0 - 20mA
Display and keyboard operation	Output terminals	One high - speed pulse output terminal, outputting square - wave signals from 0kHz ~ 50kHz, which can realize the output of physical quantities such as set frequency and output frequency One digital output terminal One relay output terminal Two analog output terminals, AO2: 0V ~ 10V, AO1: 0V ~ 10V/0 - 20mA, which can indicate output frequency/current/voltage/frequency command/speed/power factor signal output
	LED display	It is equipped with 8 function keys, a 5 - digit 7 - segment LED, and 5 status LED indicators. It can perform forward rotation, reverse rotation, reset, stop, jog, as well as parameter setting and display
Protection characteristics	Protection function	Motor short - circuit detection upon power - on, output phase - loss protection, over - current protection, over - voltage protection, under - voltage protection, over - heat protection, overload protection, etc
Environment	Application place	Indoors, not directly exposed to sunlight, free from dust, corrosive gases, flammable gases, oil mist, water vapor, dripping water or salt, etc
	Altitude	Less than 1000m
	Ambient humidity	- 10°C ~ + 40°C (When the ambient temperature is between 40°C ~ 50°C, derating operation is required)
	Humidity	Less than 95%RH, without water droplet condensation
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
	Storage temperature	- 20°C ~ + 60°C



## Basic wiring diagram



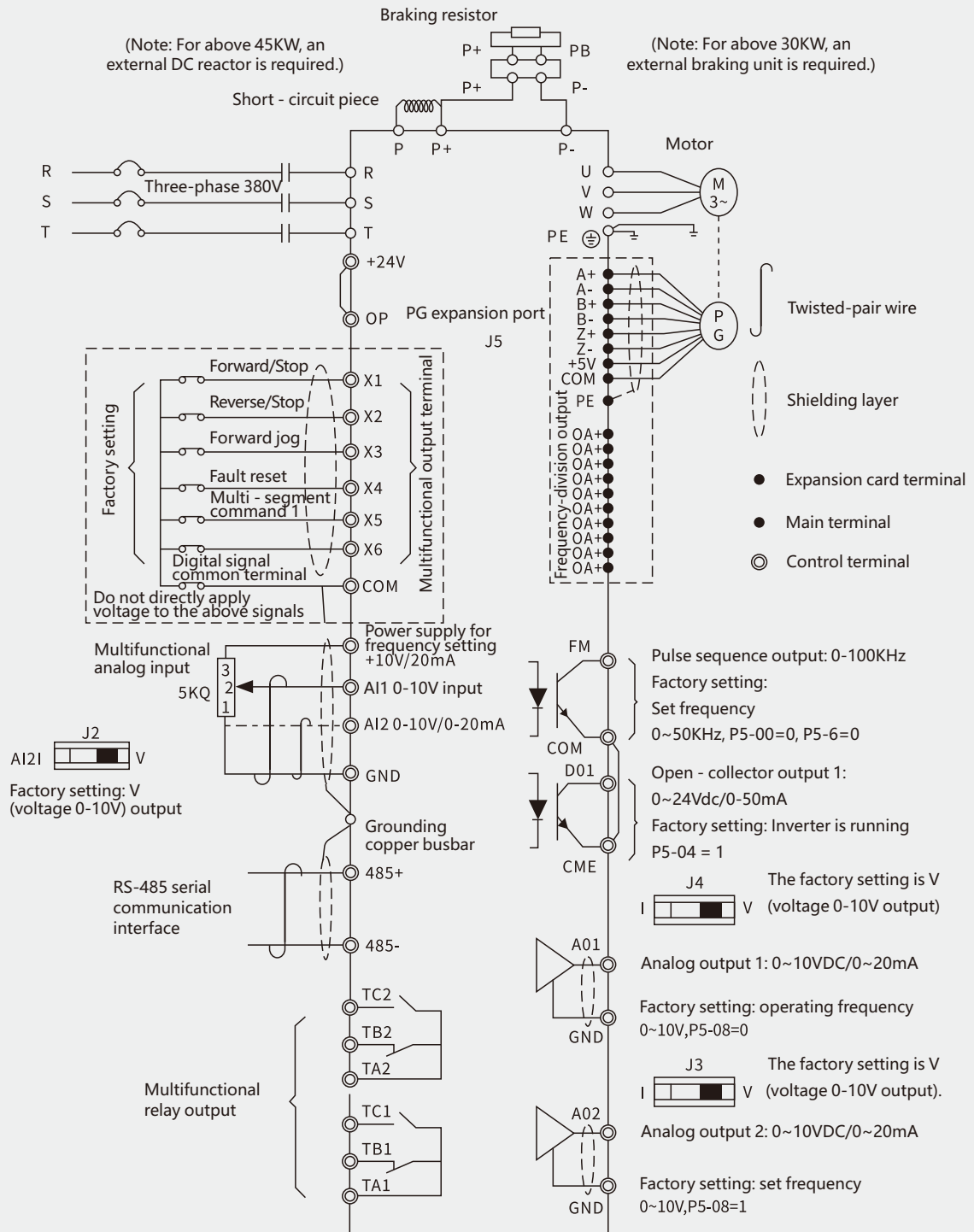
0.75-75kW Wiring diagram

## Industry application

Industries such as textiles, papermaking, wire - drawing, machine tools, packaging, food, fans, water pumps, etc., and various automated production equipment series.

For the overall dimensions and schematic diagrams, please refer to pages 14 - 15.

## Basic wiring diagram



90-400kW Wiring diagram

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# LNC860S

LNC860S HIGH - PERFORMANCE INVERTER

高性能变频器

绿色  
环保  
Eco-friendly



安全  
可靠  
Safe and  
Reliable



## Overview

LNC860S series general - purpose current vector inverters feature powerful current vector control performance, enabling higher - performance and higher - precision motor drive control. They come with a variety of expansion card options, have powerful functions, and support multiple field buses. With more abundant frequency source superposition and switching methods, advanced PID algorithms, 16 - step speed and automatic program operation, as well as frequency - swing control and speed tracking functions, while improving the product's reliability and environmental adaptability, they also strengthen customer - friendliness and industry - specific design. The functions are more optimized, applications are more flexible, and the performance is more stable. They can be widely used in industries such as CNC machining centers, lifting equipment, printing and packaging equipment, textile equipment, dyeing and printing equipment, metal products, petrochemicals, and high - end application scenarios. This series is standard - equipped with 485 communication function, and the models with a power of 22kW and below are standard - equipped with a braking unit. Power range: 0.75KW~5.5KW - 220V, 0.75KW~750KW - 380V.



## Model meaning

LNC860S - 4T 0015 G B

- Braking unit (Blank: None; B: With braking unit)
  - Machine type (G: General - purpose machine type; P: Machine type for fans and pumps)
  - Suitable power
- |                       |      |      |     |      |      |
|-----------------------|------|------|-----|------|------|
| Label                 | 0007 | 0015 | ... | 0450 | 7500 |
| Compatible Motor (KW) | 0.75 | 1.5  | ... | 45   | 750  |
- Voltage level 2S: Single - phase 220V; 4T: Three - phase 380V
  - Inverter series

## Product features

- ▲ Reliability
  - Multiple protection functions: over - voltage, over - current, overload, over - heat, etc.
  - Setting of over - voltage and over - current stall protection levels
  - Two - segment skip frequencies can effectively avoid mechanical resonance points
- ▲ High - performance
  - Automatic torque boost: Starting torque can reach 150% at 0.5Hz
  - Automatic slip compensation: More accurate speed
  - No - stop during momentary power failure: Maintain short - time operation during momentary power outage
  - Low noise: Smoother motor operation
  - Overload capacity: Can operate at 150% rated torque for 60 seconds
- ▲ Multifunctional
  - Main/auxiliary frequency addition and subtraction control frequency methods
  - Pulse input for frequency control
  - Maximum pulse output up to 100KHZ
  - Can display voltage, current, set frequency, output frequency, rotational speed, etc. according to user definition
  - Frequency - swing, fixed - length and counting functions
  - Built - in PLC can operate in 16 - step speed
  - Supports multiple frequency settings: digital setting, analog setting, PID setting, multi - step speed setting, simple PLC setting, PULSE pulse setting, RS485 communication setting
  - Embedded RS485 communication interface, supports Modbus protocol
- ▲ Input and output
  - Input functions: two - wire/three - wire control mode, external EF, UP/DOWN, automatic program operation control, counting, pulse input, etc
  - Output functions: counting - reached indication, frequency - reached indication, over - torque indication, overload early warning, etc.
- ▲ The models with 0.75 - 22KW can have a built - in braking unit

## Nameplate instructions

MODEL:	LNC860S-4T0040GB/4T0055PB
POWER:	4KW 9A/5.5KW 13A
INPUT:	3PH AC380V 50HZ/60HZ
OUTPUT:	3PH AC0V-380V 0HZ-500HZ
S.N:	Barcode

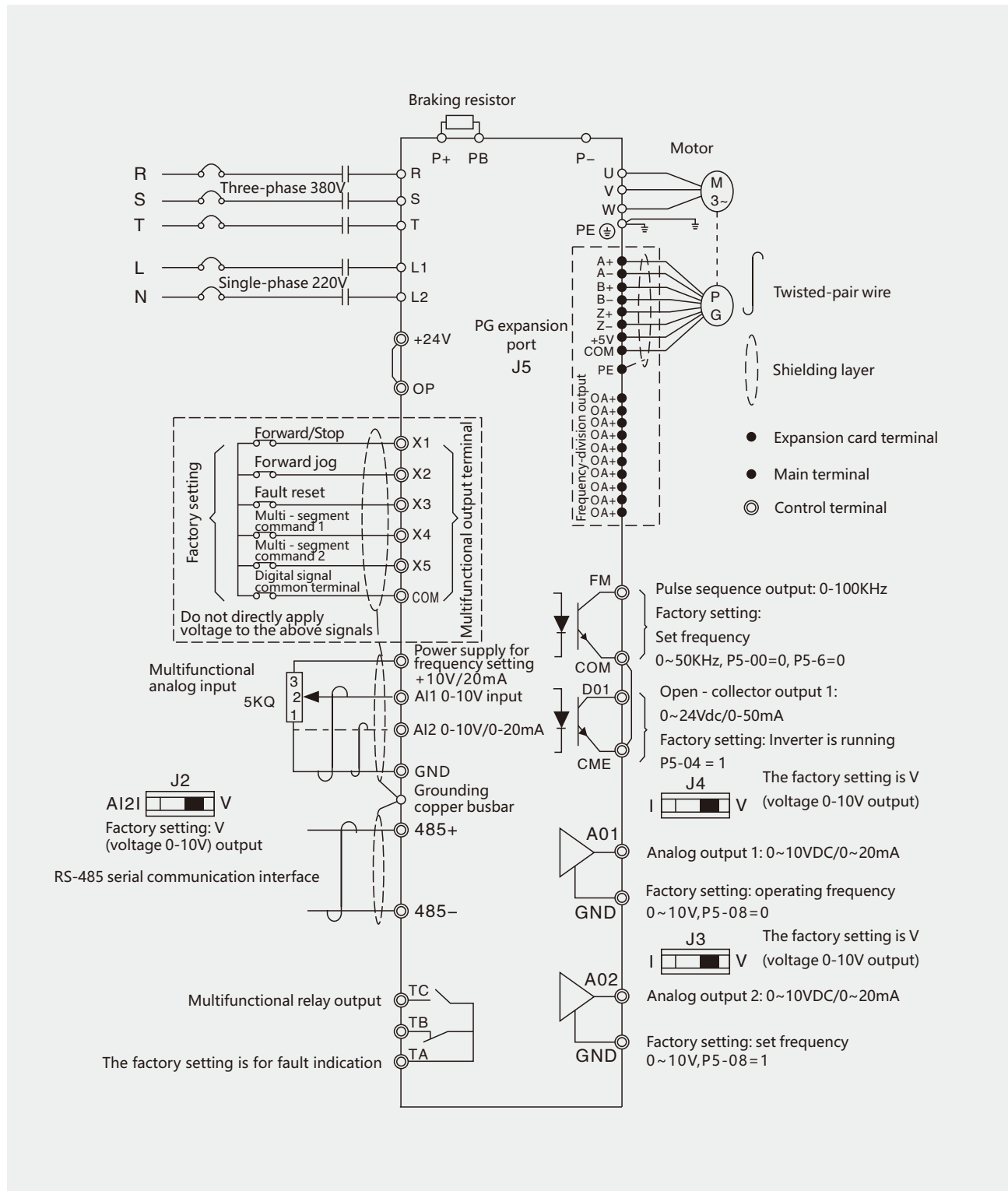
## Industry application

Industries such as CNC machining centers, lifting equipment, printing and packaging equipment, textile equipment, dyeing and printing equipment, metal products, petrochemicals, and high - end application scenarios.



## Technical specifications

	Item	Specification
Control characteristics	Output frequency	0 - 500HZ
	Carrier frequency	0.8kHz ~ 12kHz. The carrier frequency can be automatically adjusted according to the load characteristics.
	Output frequency resolution	Digital setting: 0.01Hz Analog setting: Maximum frequency × 0.025%
	Control mode	Open - loop vector control (SVC) V/F control Closed - loop vector control (FVC)
	Torque characteristics	With torque compensation and slip compensation, the starting torque can reach 150% at 0.25Hz (SVC)
	Torque control accuracy	SVC: Above 5Hz ± 5% FVC: ± 3%
	Over-voltage and over-current stall prevention protection	Automatically limit the voltage and current during use to prevent frequent over - voltage and over - current tripping
	Speed regulation range	1:200 (SVC) 1:1000 (FVC)
	Speed stabilization accuracy	±0.5% (SVC) ±0.02% (FVC)
	Overload capacity	150% of the rated output current for one minute
	V/F curve	Four modes: linear; multi - point; complete V/f separation; incomplete V/f separation
	Acceleration and deceleration curve	Linear or S - curve acceleration and deceleration modes; four acceleration and deceleration times; acceleration and deceleration time range 0.1 ~ 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%
	Jog control	Jog frequency range: 0.00Hz ~ maximum frequency; jog acceleration and deceleration time 0.1s ~ 6500.0s
	Simple PLC, multi-step speed operation	Up to 16 - step speed operation can be achieved through the built - in PLC or control terminals
	Built - in PID	It can easily realize the process - control closed - loop control system
	Automatic voltage regulation (AVR)	When the grid voltage changes, it can automatically maintain a constant output voltage
	Fast current - limiting function	Minimize over - current faults to the greatest extent and protect the normal operation of the frequency converter
Operating characteristics	Operating command channel	Three channels: given by the operation panel, given by the control terminals, given by the serial communication port. It can be switched in various ways
	Frequency source	Ten frequency sources: given by panel knob, given by operation panel, given by analog voltage, given by analog current, given by RS485 communication, multi - speed, PID, simple PLC, which can be switched in various ways
	Auxiliary frequency source	Ten auxiliary frequency sources. It can flexibly achieve auxiliary frequency fine - tuning and frequency synthesis
	Input terminals	Five digital input terminals, one of which can be used as a high - speed pulse input. Two analog input channels, AI1: input range 0 ~ +10V, AI2: input range 0 ~ +10V/0 - 20mA
	Output terminals	One high - speed pulse output terminal, capable of outputting a square - wave signal from 0kHz ~ 50kHz, which can realize the output of physical quantities such as set frequency and output frequency. It can be selected as open - drain type One digital output terminal One relay output terminal Two analog output terminals: 0V ~ 10V/0 - 20mA, which can indicate the output of output frequency/current/voltage/frequency command/rotational speed/power factor signals
Display and keyboard operation	LED display	It is equipped with 8 function keys, a 5 - digit 7 - segment LED, and 5 status LED indicators It can perform forward rotation, reverse rotation, reset, stop, jog, as well as parameter setting and display
Protection characteristics	Protection function	Motor short - circuit detection upon power - on, input and output phase - loss protection, over - current protection, over - voltage protection, under - voltage protection, over - heat protection, overload protection, short - circuit protection, etc
Other characteristics	Optional card	IO expansion card, communication card (isolated type), PG card
	Multi - encoder support	Supports differential, open - drain, UVW, resolver
Environment	Application place	Indoors, not directly exposed to sunlight, free from dust, corrosive gases, flammable gases, oil mist, water vapor, dripping water or salt, etc
	Altitude	Less than 1000m
	Ambient humidity	- 10°C ~ + 40°C (When the ambient temperature is between 40°C ~ 50°C, derating operation is required)
	Humidity	Less than 95%RH, without water droplet condensation
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
	Storage temperature	- 20°C ~ + 60°C



For the overall dimensions and schematic diagrams, please refer to P14 ~ P15 in detail.



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# LNC860E

LNC860E PERMANENT MAGNET SYNCHRONOUS INVERTER

永磁同步变频器

绿色  
环保

Eco-friendly



安全  
可靠

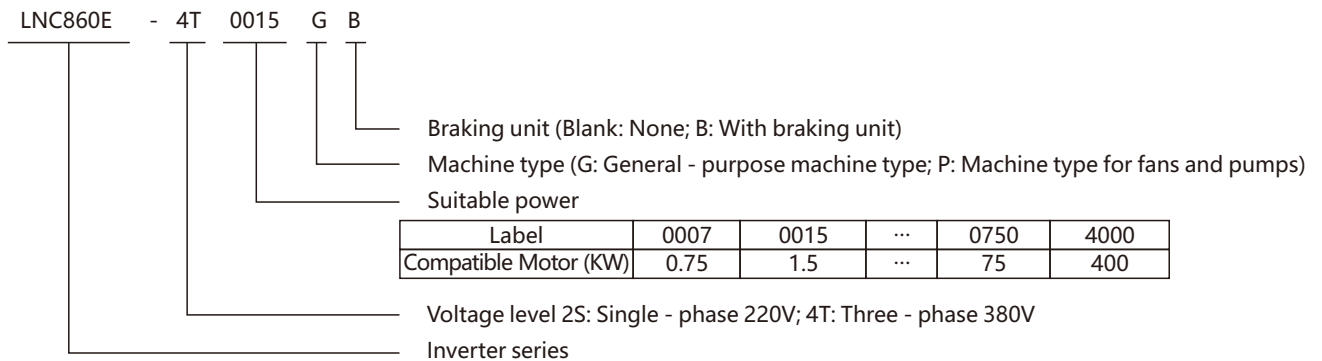
Safe and  
Reliable



## Overview

LNC860E series frequency converters are general - purpose high - performance vector frequency converters, mainly used to control and adjust the speed and torque of three - phase AC synchronous motors. It uses a 32 - bit DSP chip and has built - in core control algorithms such as closed - loop vector control, open - loop vector control, and torque control, enabling the drive control of permanent - magnet synchronous motors with higher performance and higher precision. It provides high - torque output at low speeds, has good dynamic characteristics, an extremely strong overload capacity, and supports various PG cards. While improving the product's reliability and environmental adaptability, it also strengthens the design for customer usability and industry specialization. With more optimized functions, more flexible applications, and more stable performance, it can be widely used in mid - to - high - end application scenarios such as injection molding machines, air compressors, medium - to - high - power servo systems, CNC machining centers, lifting equipment, and textile equipment. This series comes standard with a 485 communication function, and the power of 22kW and below comes standard with a braking unit. Power range: 0.75kW ~ 400kW - 380V.

## Model meaning



## Product features

- ▲ Open - loop and closed - loop vector control for permanent - magnet synchronous motors
- ▲ Supports various encoders: ABZ incremental, UVW incremental and resolver
- ▲ Wide voltage input, automatic output voltage regulation (AVR), non - stop operation during momentary power loss, with stronger adaptability
- ▲ Supports various frequency setting methods: digital setting, analog quantity setting, PID setting, RS485 communication setting
- ▲ Smooth start - up and stable operation, with speed tracking function
- ▲ Can share the DC bus to save energy
- ▲ Low noise and strong anti - interference ability
- ▲ Strong overload capacity, 150% of the rated torque can operate for 60 seconds
- ▲ Built - in advanced PID algorithm, with fast response, strong adaptability and easy debugging
- ▲ 16 - step speed control, simple PLC to achieve multi - function logic control such as timing, constant - speed and directional control
- ▲ Multiple protection functions: over - voltage, over - current, overload, over - heat, etc
- ▲ Supports LCD panel display and operation in Chinese and English
- ▲ Supports Profibus - DP and MODBUS communication
- ▲ Structurally adopts an independent air duct design, the fan can be freely disassembled, with good heat dissipation performance

## Nameplate instructions

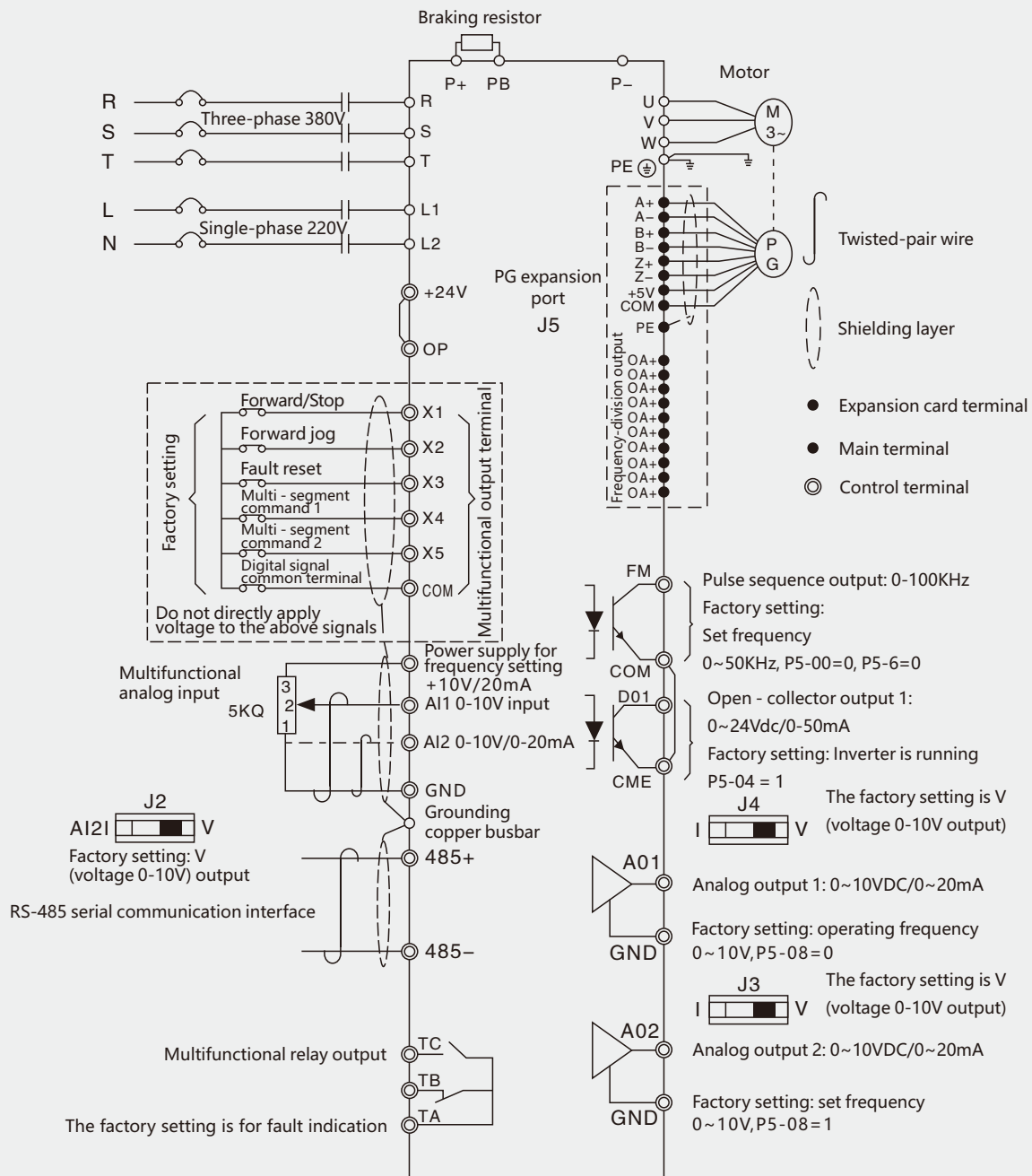
MODEL:	LNC860E-4T0040GB/4T0055PB
POWER:	4KW 9A/5.5KW 13A
INPUT:	3PH AC380V 50HZ/60HZ
OUTPUT:	3PH AC0V-380V 0HZ-400HZ
S.N:	Barcode

## Technical specifications

	Item	Specification
Control characteristics	Output frequency	0-500Hz
	Carrier frequency	0.8kHz ~ 12kHz. The carrier frequency can be automatically adjusted according to the load characteristics
	Output frequency resolution	0.01Hz
	Control mode	Open - loop vector control (SVC) V/F control Closed - loop vector control (FVC)
	Torque characteristics	With torque compensation and slip compensation, the starting torque can reach 150% at 0.25Hz (SVC)
	Torque control accuracy	±5% ( FVC )
	Stall prevention action criterion	Set as a percentage of the rated current, ranging from 20% to 250%
	Speed regulation range	1: 100 ( SVC )      1:1000 ( FVC )
	Speed stabilization accuracy	±0.5% ( SVC )      ±0.02% ( FVC )
	Overload capacity	150% of the rated output current for one minute
	V/F curve	Four modes: linear; multi - point; complete V/f separation; incomplete V/f separation
	Acceleration and deceleration curve	Linear or S - curve acceleration and deceleration modes; four acceleration and deceleration times; acceleration and deceleration time range 0.1 ~ 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%
	Jog control	Jog frequency range: 0.00Hz ~ maximum frequency; jog acceleration and deceleration time 0.1s ~ 6500.0s
	Simple PLC, multi-step speed operation	Up to 16 - step speed operation can be achieved through the built - in PLC or control terminals
	Built - in PID	It can easily realize the process - control closed - loop control system
	Automatic voltage regulation (AVR)	When the grid voltage changes, it can automatically maintain a constant output voltage
	Fast current - limiting function	Minimize over - current faults to the greatest extent and protect the normal operation of the frequency converter
Operating characteristics	Operating command channel	Three channels: given by the operation panel, given by the control terminals, given by the serial communication port. It can be switched in various ways
	Frequency source	Ten frequency sources: given by panel knob, given by operation panel, given by analog voltage, given by analog current, given by RS485 communication, which can be switched in various ways
	Auxiliary frequency source	Ten auxiliary frequency sources. It can flexibly achieve auxiliary frequency fine - tuning and frequency synthesis
	Input terminals	Six digital input terminals, one of which can be used as a high - speed pulse input. Two analog input channels, AI1: input range 0 ~ +10V, AI2: input range 0 ~ +10V/0 - 20mA
	Output terminals	One high - speed pulse output terminal, capable of outputting a square - wave signal from 0kHz ~ 50kHz, which can realize the output of physical quantities such as set frequency and output frequency. It can be selected as open - drain type One digital output terminal One relay output terminal Two analog output terminals: 0V ~ 10V/0 - 20mA, which can indicate the output of output frequency/ current/voltage/frequency command/rotational speed/power factor signals
Display and keyboard operation	LED display	It is equipped with 8 function keys, a 5 - digit 7 - segment LED, and 5 status LED indicators It can perform forward rotation, reverse rotation, reset, stop, jog, as well as parameter setting and display
	Protection function	Motor short - circuit detection upon power - on, input and output phase - loss protection, over - current protection, over - voltage protection, under - voltage protection, over - heat protection, overload protection, etc
Environment	Application place	Indoors, not directly exposed to sunlight, free from dust, corrosive gases, flammable gases, oil mist, water vapor, dripping water or salt, etc
	Altitude	Less than 1000m
	Ambient humidity	- 10°C ~ + 40°C (When the ambient temperature is between 40°C ~ 50°C, derating operation is required)
	Humidity	Less than 95%RH, without water droplet condensation
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
	Storage temperature	- 20°C ~ + 60°C



## Basic wiring diagram

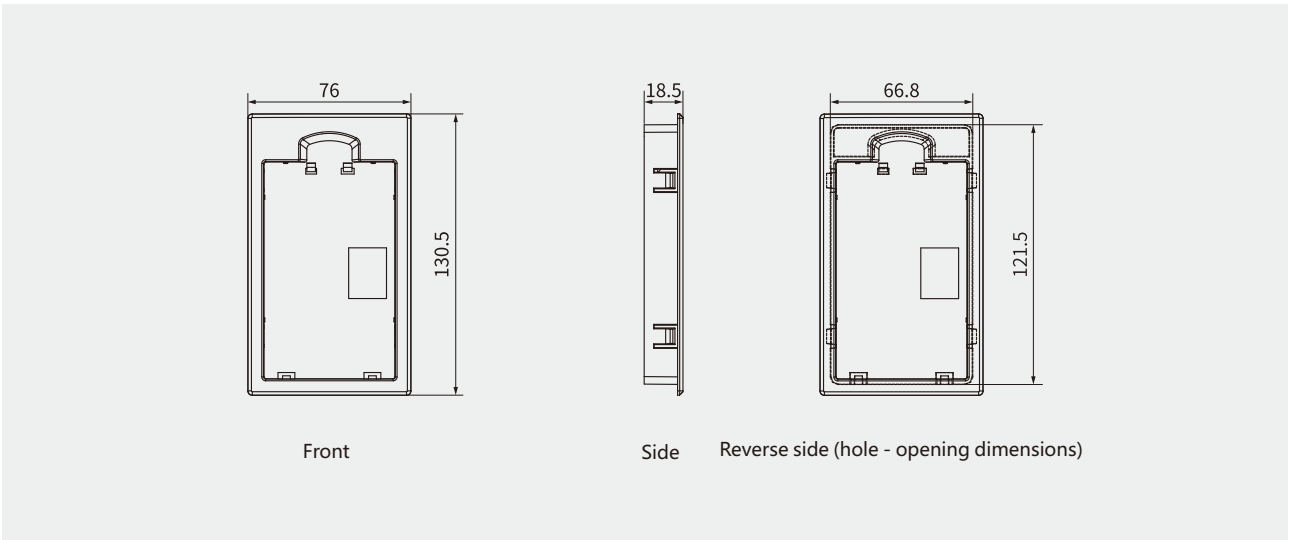


## Industry application

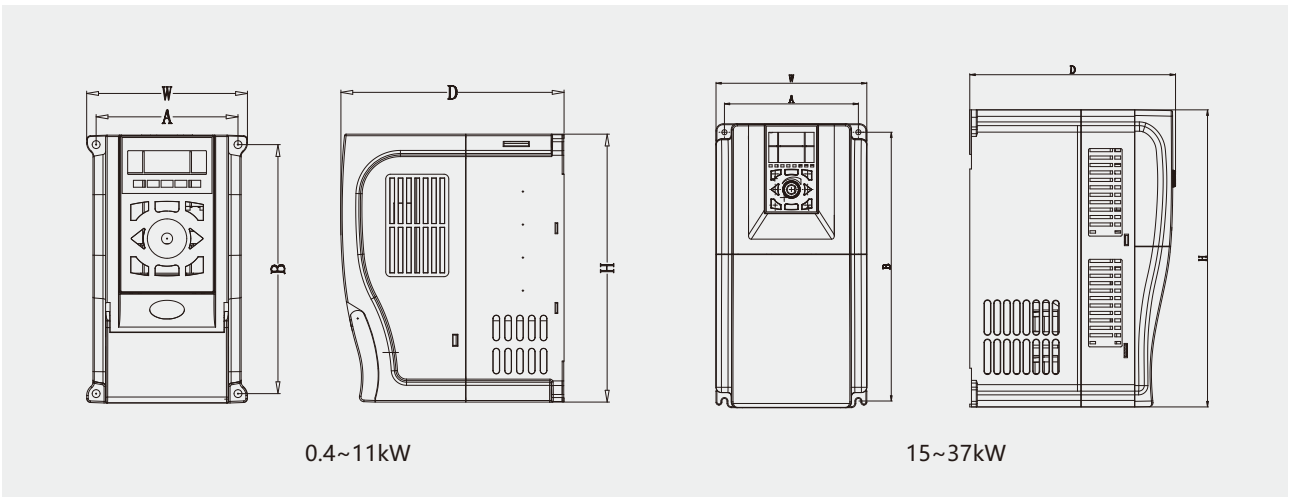
Industries such as textiles, papermaking, wire - drawing, machine tools, packaging, food, fans, water pumps, etc., and various automated production equipment series.

For the overall dimensions and schematic diagrams, please refer to pages 14 - 15.

Installation dimensions of the keyboard base



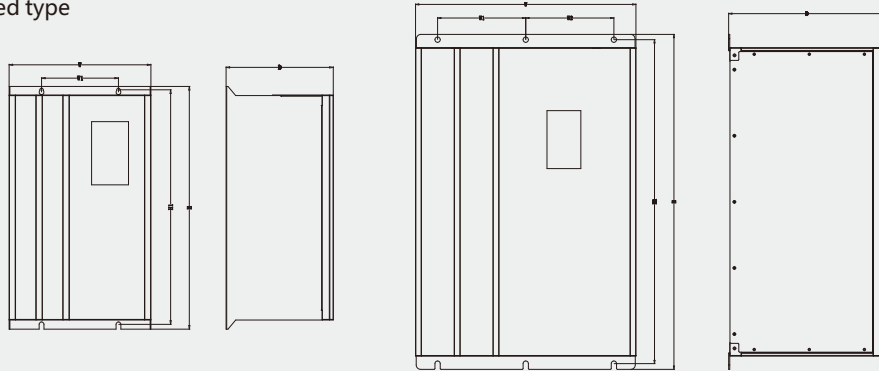
Diagrams of the overall dimensions and installation dimensions of the plastic structure



Applicable models	Rated output power (kW)	Input voltage	A (mm)	B (mm)	H (mm)	W (mm)	D (mm)	Installation aperture (mm)
820/860S	0.4~2.2	Single - phase 220V range: -15%~ + 15%	90	157	170	101	142	Φ5
820/860S/860E	0.75~2.2	Three - phase 380V range: -15%~ + 15%	90	157	170	101	142	Φ5
820/860S/860E	4		111	183	197	129	175	Φ5
820/860S/860E	5.5~7.5		137	237	256	157	190	Φ5
820	11		137	237	256	157	190	Φ5
820	15~22		151	303	320	170	222	Φ5.8
820	30~37		205	366	380	218	235	Φ6

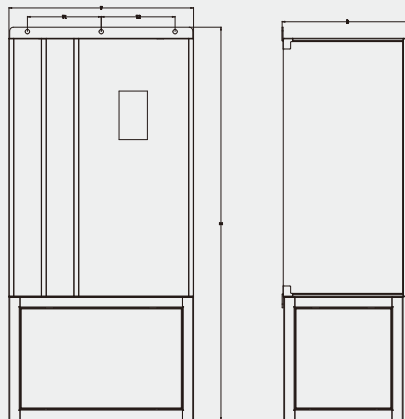
## Diagrams of the overall dimensions and installation dimensions of the sheet metal structure

Wall - mounted type



Applicable models	Machine type	Overall dimensions			Installation dimensions		Installation hole diameter
	kW	H(mm)	W(mm)	D(mm)	H1(mm)	W1(mm)	
820/860S/860E	11-15	340	204	214	325	150	Φ6
820/860S/860E	18.5-22	360	224	214	345	150	Φ6
820/860S/860E	30-37	380	262	220	360	192	Φ9
820	45-75	450	330	259	430	240	Φ9
860S/860E	45-75	570	380	263	547.5	240	Φ10
860S/860E	90-132	610	400	286	587.5	240	Φ12
860S/860E	160-220	760	500	355	735	200	Φ12
860S/860E	250-400	862	750	455	832	250	Φ12
860S	450-560	1122	950	505	1092	350	Φ12

Cabinet - type



Applicable models	Machine type	Overall dimensions			Installation dimensions	Installation hole diameter
	kW	H(mm)	W(mm)	D(mm)	W1(mm)	
860S	160-220	1065	500	355	200	Φ12
860S	250-400	1329	750	455	250	Φ12
860S	450-560	1644	950	505	350	Φ12
860S	630-750	1625	1050	505	400	Φ12



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# LNC860L

LNC860L INVERTER FOR WIRE - DRAWING MACHINE

拉丝机专用变频器

绿色  
环保  
Eco-friendly



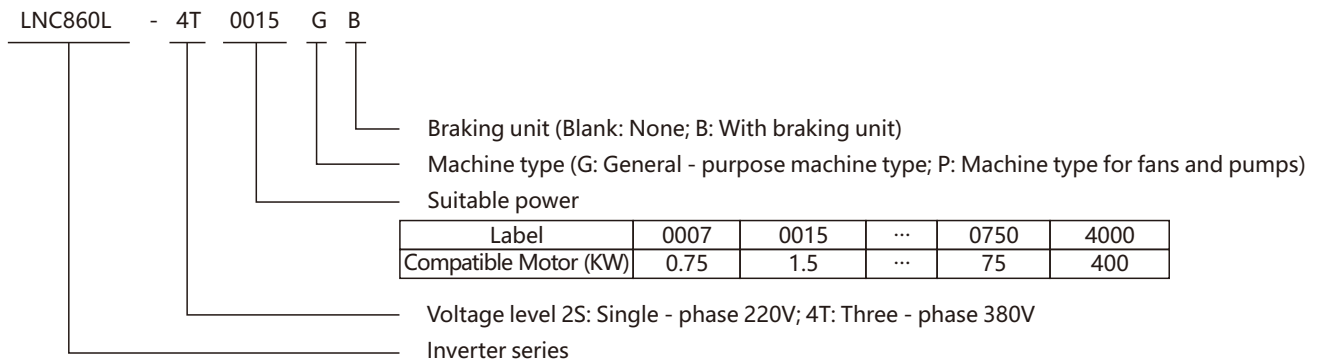
安全  
可靠  
Safe and  
Reliable



## Overview

LNC860L series of frequency converters dedicated to wire - drawing machines not only possess all the high - performance features of the 860S vector frequency converters, but also can achieve closed - loop tension control and open - loop tension control, meeting various winding and unwinding requirements. It has a built - in mathematical model for tension winding control and supports automatic calculation of the roll diameter. It can be widely used in industries such as wire and cable, metal foil processing, winding, metal wire - drawing, and plastic wire - drawing. This series is standard - equipped with a 485 communication function, and a braking unit is standard - equipped for power of 22kW and below. Power range: 0.75kW - 400kW - 380V.

## Model meaning



## Product features

- ▲ High - performance vector control, large low - frequency torque, and stable output
- ▲ Supports various encoders: ABZ incremental, U incremental, and resolver
- ▲ Wide voltage input, automatic output voltage regulation (AR), no shutdown during momentary power loss, with stronger adaptability
- ▲ Supports closed - loop tension control and open - loop tension control
- ▲ Built - in mathematical model for tension winding control, supports automatic calculation of the roll diameter
- ▲ Smooth start, stable operation, and constant tension
- ▲ Automatic wire - break detection, automatic inertia compensation
- ▲ Winding and unwinding system combination, can share the DC bus, saving electrical energy
- ▲ Built - in advanced PID algorithm, with fast response, strong adaptability, and easy debugging
- ▲ 16 - step speed control, simple PLC realizes multi - function logic control such as timing, constant - speed, and direction - setting
- ▲ Embedded RS485 communication interface supports Modbus protocol
- ▲ Multiple protection functions: over - voltage, over - current, overload, over - heat, etc

## Nameplate instructions

MODEL:	LNC860L-4T0037GB/4T0055PB
POWER:	3.7KW 9A/5.5KW 13A
INPUT:	3PH AC380V 50HZ/60HZ
OUTPUT:	3PH AC0V-380V 0HZ-400HZ
S.N:	Barcode

## List of machine types

Frequency converter model	Power capacity (kVA)	Input current (A)	Output current (A)	Applicable motor (KW)
Single - phase power supply: 220V±15%, 50/60Hz				
LNC860L-2S0007GB	1.5	8.2	5.0	0.75
LNC860L-2S0015GB	3.0	14.0	7.0	1.5
LNC860L-2S0022GB	4.0	23.0	9.6	2.2
Three - phase power supply: 380V±15%, 50/60Hz				
LNC860L-4T0007GB	1.5	3.4	2.1	0.75
LNC860L-4T0015GB	3.0	5.0	3.8	1.5
LNC860L-4T0022GB	4.0	5.8	5.1	2.2
LNC860L-4T0037GB	5.9	10.5	9	3.7
LNC860L-4T0055GB	8.9	14.6	13	5.5
LNC860L-4T0075GB	11	20.5	17	7.5
LNC860L-4T0110GB	17	26	25	11
LNC860L-4T0150GB	21	35	32	15
LNC860L-4T0185GB	24	38.5	37	18.5
LNC860L-4T0220GB	30	46.5	45	22
LNC860L-4T0300G	40	62	60	30
LNC860L-4T0370G	57	76	75	37
LNC860L-4T0450G	69	92	91	45
LNC860L-4T0550G	85	113	112	55
LNC860L-4T0750G	114	157	150	75
LNC860L-4T0900G	134	180	176	90
LNC860L-4T1100G	160	214	210	110
LNC860L-4T1320G	192	256	253	132
LNC860L-4T1600G	231	307	304	160
LNC860L-4T2000G	250	385	377	200
LNC860L-4T2200G	280	430	426	220
LNC860L-4T2500G	355	441	465	250
LNC860L-4T2800G	396	495	520	280
LNC860L-4T3150G	445	565	585	315
LNC860L-4T3550G	500	617	650	355
LNC860L-4T4000G	565	687	725	400



## Technical specifications

	Item	Specification
Control characteristics	Output frequency	0-500Hz
	Carrier frequency	0.8kHz ~ 12kHz. The carrier frequency can be automatically adjusted according to the load characteristics
	Output frequency resolution	0.01Hz
	Control mode	Open - loop vector control (SVC) V/F control Closed - loop vector control (FVC)
	Torque characteristics	With torque compensation and slip compensation, the starting torque can reach 150% at 0.5Hz
	Torque control accuracy	±5% ( FVC )
	Stall prevention action criterion	Set as a percentage of the rated current, ranging from 20% to 250%
	Speed regulation range	1: 100 ( SVC )      1:1000 ( FVC )
	Speed stabilization accuracy	±0.5% ( SVC )      ±0.02% ( FVC )
	Overload capacity	150% of the rated output current for one minute
	V/F curve	Four modes: linear; multi - point; complete V/f separation; incomplete V/f separation
	Acceleration and deceleration curve	Linear or S - curve acceleration and deceleration modes; four acceleration and deceleration times; acceleration and deceleration time range 0.1 ~ 6500.0s
	DC braking	DC braking frequency: 0.00Hz ~ maximum frequency. Braking time: 0.0s ~ 60.0s, braking action current value: 0.0% ~ 100.0%
	Jog control	Jog frequency range: 0.00Hz ~ maximum frequency; jog acceleration and deceleration time 0.1s ~ 6500.0s
	Simple PLC, multi-step speed operation	Up to 16 - step speed operation can be achieved through the built - in PLC or control terminals
	Built - in PID	It can easily realize the process - control closed - loop control system
	Automatic voltage regulation (AVR)	When the grid voltage changes, it can automatically maintain a constant output voltage
	Fast current - limiting function	Minimize over - current faults to the greatest extent and protect the normal operation of the frequency converter
Operating characteristics	Operating command channel	Three channels: given by the operation panel, given by the control terminals, given by the serial communication port. It can be switched in various ways
	Frequency source	Ten frequency sources: given by panel knob, given by operation panel, given by analog voltage, given by analog current, given by RS485 communication, which can be switched in various ways
	Auxiliary frequency source	Ten auxiliary frequency sources. It can flexibly achieve auxiliary frequency fine - tuning and frequency synthesis
	Input terminals	Six digital input terminals, one of which can be used as a high - speed pulse input. Two analog input channels, AI1: input range 0 ~ +10V, AI2: input range 0 ~ +10V/0 - 20mA
	Output terminals	One high - speed pulse output terminal, outputting square - wave signals from 0kHz ~ 50kHz, which can realize the output of physical quantities such as set frequency and output frequency One digital output terminal One relay output terminal Two analog output terminals: 0V ~ 10V/0 - 20mA, which can indicate the output of output frequency/ current/voltage/frequency command/rotational speed/power factor signals
	Protection function	Motor short - circuit detection upon power - on, input and output phase - loss protection, over - current protection, over - voltage protection, under - voltage protection, over - heat protection, overload protection, etc
Environment	Application place	Indoors, not directly exposed to sunlight, free from dust, corrosive gases, flammable gases, oil mist, water vapor, dripping water or salt, etc
	Altitude	Less than 1000m
	Ambient humidity	- 10°C ~ + 40°C (When the ambient temperature is between 40°C ~ 50°C, derating operation is required)
	Humidity	Less than 95%RH, without water droplet condensation
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
	Storage temperature	- 20°C ~ + 60°C

Braking resistor

Three-phase 380V

Single-phase 220V

Motor

PG expansion port J5

Twisted-pair wire

Shielding layer

Expansion card terminal

Main terminal

Control terminal

Factory setting

Do not directly apply voltage to the above signals

Multifunctional analog input

Power supply for frequency setting +10V/20mA

AI1 0-10V input

AI2 0-10V/0-20mA

GND

Grounding copper busbar

485+

485-

TC

TB

TA

The factory setting is for fault indication

FM

Pulse sequence output: 0-100KHz

Factory setting: Set frequency 0~50KHz, P5-00=0, P5-6=0

COM

Open - collector output 1: 0~24Vdc/0-50mA

Factory setting: Inverter is running P5-04 = 1

D01

CME

The factory setting is V

J4

I

V (voltage 0-10V output)

A01

Analog output 1: 0~10VDC/0~20mA

Factory setting: operating frequency 0~10V, P5-08=0

GND

The factory setting is V

J3

I

V (voltage 0-10V output)

A02

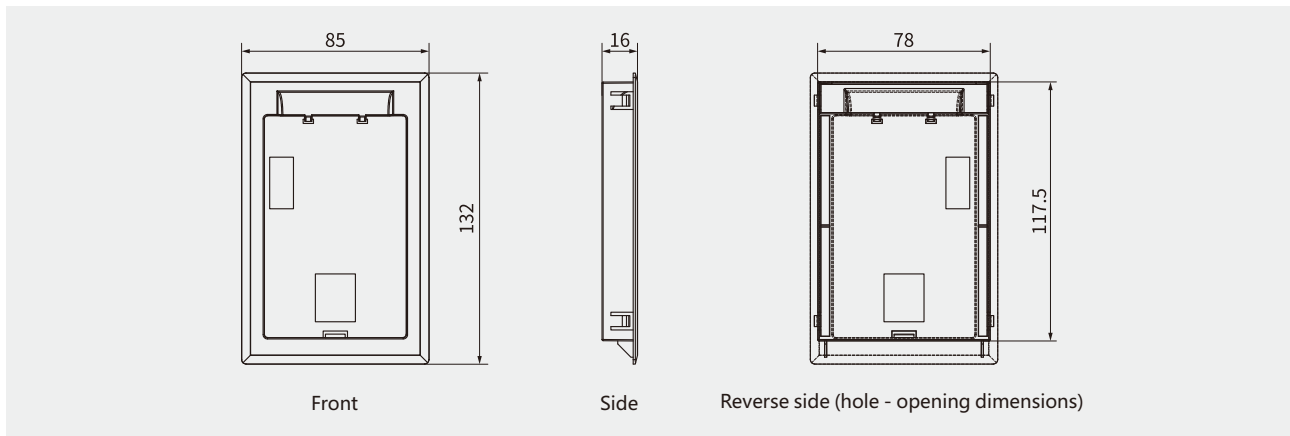
Analog output 2: 0~10VDC/0~20mA

Factory setting: set frequency 0~10V, P5-08=1

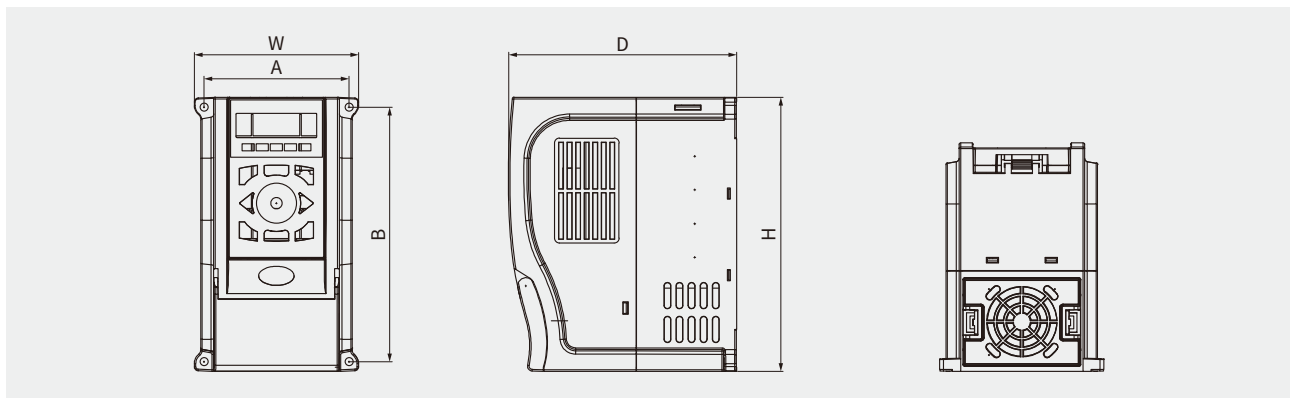
GND

Metal wire - drawing, winding and unwinding, metal foil processing

## Installation dimensions of the keyboard base



## Diagrams of the overall dimensions and installation dimensions of the plastic structure



Rated output power (kW)	Input voltage	A (mm)	B (mm)	H (mm)	W (mm)	D (mm)	Installation aperture (mm)
0.4~2.2	Single - phase 220V range: -15%~ + 15%	90	157	170	101	142	Φ5
0.75~2.2	Three - phase 380V range: -15%~ + 15%	90	157	170	101	142	Φ5
3.7		111	183	197	129	175	Φ5
5.5~7.5		137	237	256	157	190	Φ5

Wall - mounted (New)							
Machine type	Overall dimensions			Installation dimensions			Installation aperture
kW	H(mm)	W(mm)	D(mm)	H1(mm)	W1(mm)	W2(mm)	mm
11-15	340	204	214	325	150		Φ6
18.5-22	360	224	214	345	150		Φ6
30-37	460	260	264	440	200		Φ8
45-75	570	380	263	547.5	240		Φ10
90-132	610	400	286	587.5	240		Φ12
160-220	760	500	355	735	200	200	Φ12
250-400	862	750	455	832	250	250	Φ12

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创新 / 极致 / 智能

# LNC500

LNC500 GENERAL - PURPOSE INVERTER (SINGLE - TUBE)

通用变频器(单管)

绿色  
环保  
Eco-friendly



安全  
可靠  
Safe and  
Reliable



## Overview

LNC500 series general - purpose vector frequency converters are developed based on a brand - new software and hardware platform. In order to better meet the market demands of mechanical equipment such as machine tools, printing, textiles, chemical fibers, stone materials, and engraving, this series of frequency converters features high power density, complete protection functions, and comprehensive application functions. It supports the standard Modbus communication protocol (Note: For frequency converters with a power of 7.5kW 380V and below, and 5.5kW 220V and below, the communication interface is on an independent communication card. When placing an order, if you note "communication card", the standard 485 communication function will be included. Frequency converters with a power above 7.5kW 380V and above 5.5kW 220V come with the standard 485 communication function). Power range: 0.75kW - 5.5kW - 220V, 0.75kW - 37kW - 380V.



## Model meaning

LNC500 - 4T 0022

Suitable power

Label	0004	0007	...	0040	0055
Compatible Motor (KW)	0.4	0.7	...	4.0	5.5

Voltage level 2S: Single - phase 220V; 4T: Three - phase 380V

Inverter series

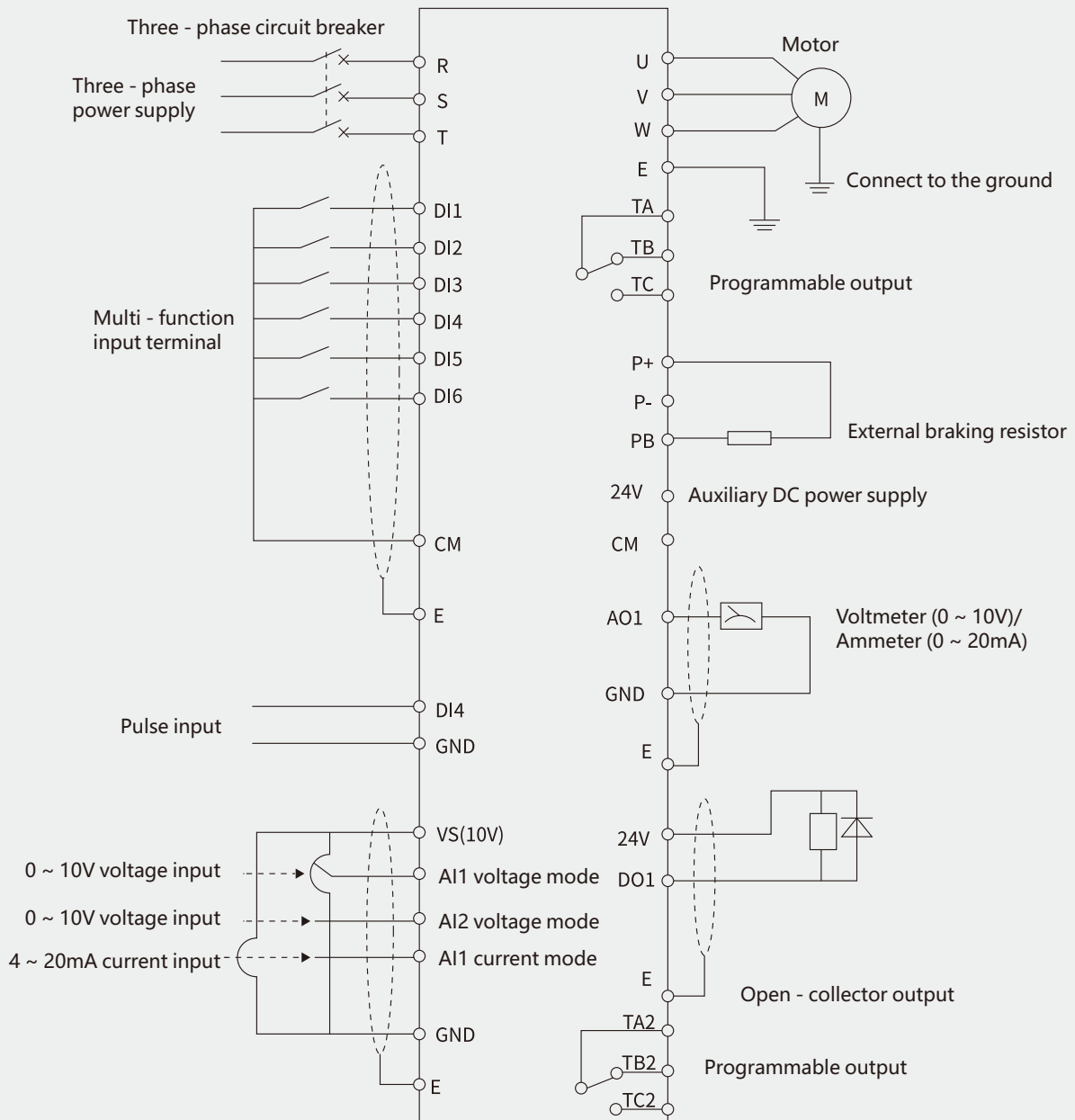
## List of machine models

Voltage and power of frequency converter	General - purpose load		
	Rated capacity (kVA)	Rated output current (A)	Applicable motor power (kW)
220V-0.7kW	1.9	5	0.75
220V-1.5kW	2.9	7	1.5
220V-2.2kW	3.8	10	2.2
220V-4.0kW	5.7	16	4
220V-5.5kW	8.5	25	5.5
380V-1.5kW	2.4	4.5	1.5
380V-2.2kW	3.6	5.5	2.2
380V-4.0kW	6.3	9	4
380V-5.5kW	8.6	13	5.5
380V-7.5kW	11	17	7.5
380V-11kW	16.5	25	11
380V-15kW	20	30	15
380V-18.5kW	25.7	39	18.5
380V-22kW	29.6	45	22
380V-30kW	39.5	60	30
380V-37kW	49.4	75	37

## Technical specifications

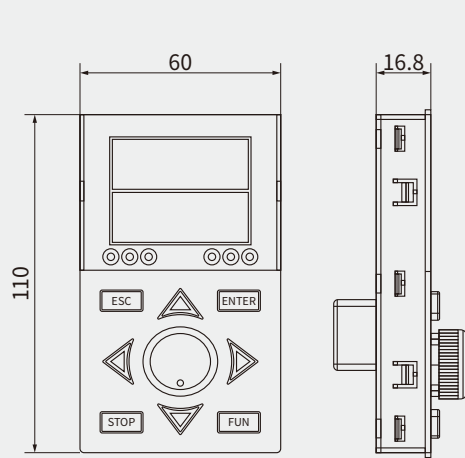
Item		Specification	
Input	Voltage frequency	Three - phase 380V 50/60Hz	Single - phase 220V 50/60Hz
	Voltage fluctuation	Three - phase 300V ~ 460V	Single - phase 170V ~ 270V
Output	Voltage range	4T# series: 0 ~ 380V	2S# series: 0 ~ 220V
	Frequency range	0~600Hz	
	Overload capacity	110% for long - term; 150% for 1 minute; 180% for 2 seconds	
Control characteristics	Control mode	V/F control	Open - loop vector control
	Starting torque	0 speed at 180%	0 speed at 180%
	Speed regulation range	1: 100	1: 200
	Speed stability accuracy	±0.5%	±0.1%
	Response time	≤20ms	≤5ms
	V/F curve	Arbitrary setting of multi - segment V/F curves Three fixed curves: constant torque, torque reduction 0, torque reduction 1	
	Torque boost	Manual setting: 0.0 ~ 30.0% of the rated output; Automatic boost: Automatically determine the boost torque according to the load condition	
	Current suppression	Current closed - loop control accurately limits the current within a reasonable range, thus avoiding current surges and fault tripping	
	Voltage suppression	In situations where the grid voltage fluctuates frequently or there are frequent acceleration and deceleration, a unique voltage prediction control is used to limit the voltage within a reasonable range	
	Frequency resolution	Analog quantity	0.1% of the maximum output frequency
		Digital quantity	0.01Hz
	Frequency accuracy	Analog quantity	0.1% of the maximum output frequency
		Digital quantity	0.01% of the set output frequency
Typical functions	Multi - speed operation	8 - stage programmable multi - speed control, 6 operation modes available for selection	
	Oscillating frequency operation	Oscillating frequency operation: Preset frequency and center frequency adjustable, status memory and restoration after shutdown and power failure	
	PID control	Built - in PID controller (preset frequency available)	
	RS485 communication	Standard RS485 communication function, supporting MODBUS communication protocol	
	Automatic energy - saving	Adjust the output voltage and slip compensation in real - time according to the output current, enabling the motor to work at the highest efficiency all the time	
	Automatic voltage regulation	Three ways of dynamic voltage regulation, static voltage regulation and non - voltage regulation can be selected as needed to obtain the most stable operation effect	
	Speed detection and restart	Smooth restart and instant - stop restart of the motor	
	Counter	One internal counter for easy system integration	
	Carrier frequency	Three - phase vector synthesis: 1.5 ~ 12.0KHz	
	Frequency setting	Analog input	Voltage input: 0 ~ 10V (input impedance 10K) (upper and lower limits can be set) Current input: 0 ~ 20mA (upper - limit voltage 12V) (upper and lower limits can be set)
		Digital input	Set by operation panel, RS485 interface, UP/DW terminals, and can also be set in various combinations with analog input
	Output signal	Analog output	1 - way 0 ~ 10V voltage or 0 ~ 20mA current signal
		Digital output	2 - way DO output, 1 - way fault relay output (TA, TB, TC)
	Braking	Regenerative braking	Over 75%
		DC braking	Selectable during startup and stop respectively, operating frequency 0 ~ 50.00Hz, operating time 0 ~ 20.0s or continuous operation
Protection function	Power supply protection	Under - voltage protection, three - phase power unbalance protection	
	Operation protection	Over - current protection, over - voltage protection, inverter overheat protection, inverter overload protection, motor overload protection, output phase - loss protection, module drive protection, input phase - loss protection, switching power supply overload protection	
	Equipment anomaly	Current detection anomaly, EEPROM memory anomaly, control unit anomaly, motor overheat, MC engagement fault, temperature fault	
	Motor connection	Motor not connected, unbalanced three - phase parameters of the motor, parameter identification error	
Environment	Ambient temperature	- 10°C to + 50°C (non - freezing)	
	Ambient humidity	Below 90% (non - frosting)	
	Surrounding environment	Indoors (no direct sunlight, no corrosive or flammable gases, no oil mist, dust, etc.)	
	Altitude	Below 1000m	
	Protection level	IP20	
	Cooling method	Forced air cooling	
	Vibration level	< 20m/s <sup>2</sup>	

## Basic wiring diagram

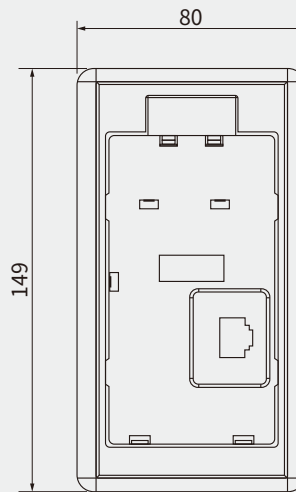




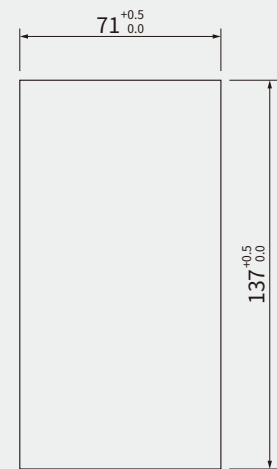
## Appearance and installation dimensions



Appearance dimensions  
of the operation panel



Base dimensions  
of the operation panel



Installation opening dimensions  
of the operation panel base

Inverter model	W1 (mm)	W (mm)	H1 (mm)	H (mm)	H2 (mm)	D (mm)	Screw
220V-0.7KW	76	101	182	190	-	156	M4
220V-1.5KW							
220V-2.2KW							
220V-4.0KW							
220V-5.5KW							
380V-1.5KW							
380V-2.2KW							
380V-4.0KW							
380V-5.5KW							
380V-7.5KW	100	146	266	278	-	178	M5
380V-11KW							
380V-15KW							
380V-18.5KW	136	170	308	321	-	188	M5
380V-22KW							
380V-30KW							
380V-37KW							

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# LNC500M

LNC500M GENERAL - PURPOSE INVERTER (ECONOMICAL TYPE)

通用变频器 (经济型)

绿色  
环保  
Eco-friendly



安全  
可靠  
Safe and  
Reliable



## Overview

LNC500M series inverters are mini - type inverters developed based on a new software and hardware platform to meet more market demands. They have excellent performance, complete protection functions, a compact size, are beautiful, durable, and operate stably and reliably. They can be flexibly applied to various process sites. They adopt V/F control and support the standard Modbus communication protocol (Note: The communication interface is on an independent communication card. The communication card will be attached after noting "communication card" when placing an order). Power range: 0.75kW ~ 2.2kW - 220V, 0.75kW ~ 5.5kW - 380V.

## Model meaning

LNC500M - 4T 0022

Suitable power

Label	0004	0007	...	0040	0055
Compatible Motor (KW)	0.4	0.7	...	4.0	5.5

Voltage level 2S: Single - phase 220V; 4T: Three - phase 380V

Inverter series

## List of machine models

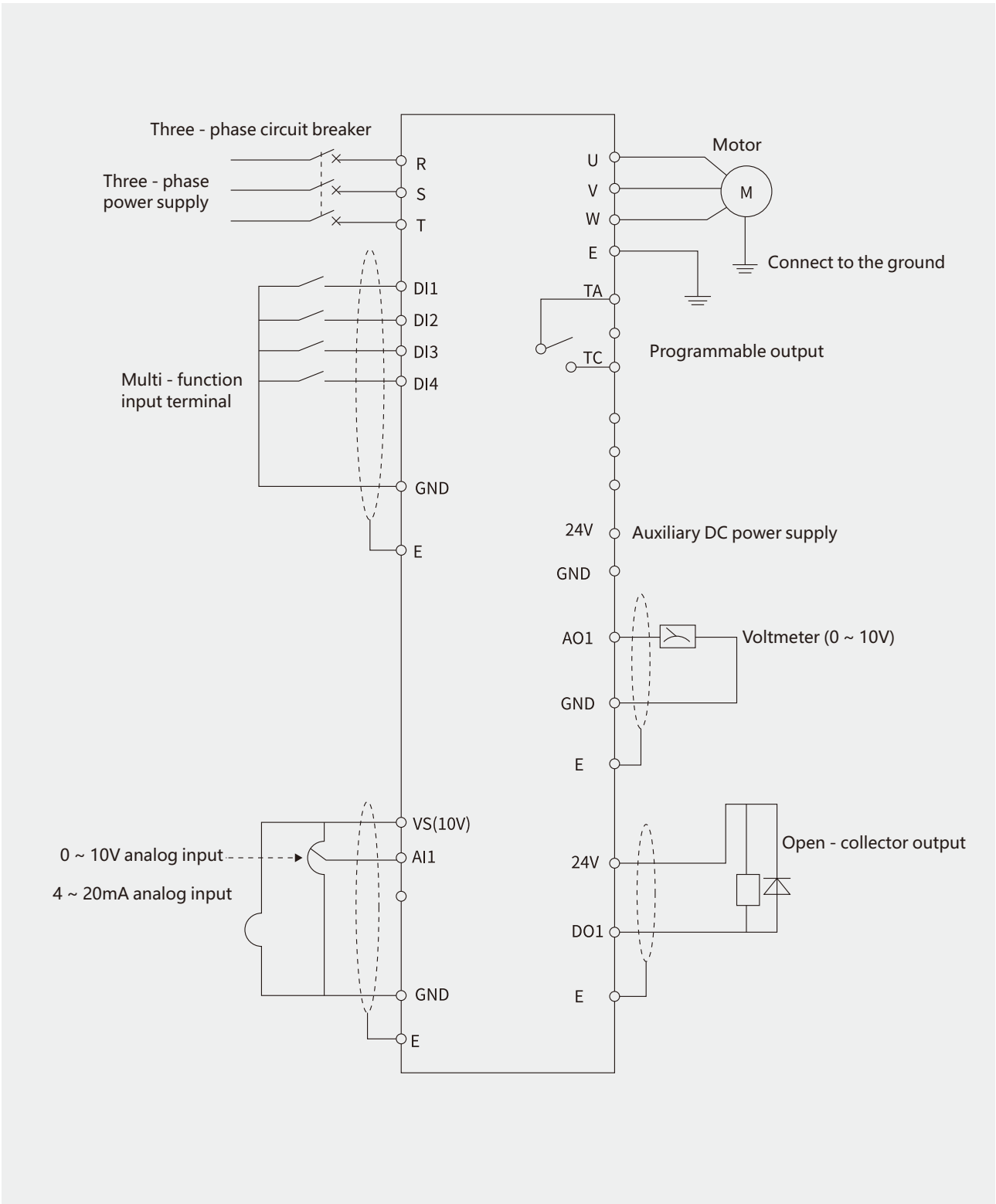
Inverter model	General - purpose load		
	Rated capacity (kVA)	Rated output current (A)	Applicable motor power (kW)
2S0004G	1.1	3	0.4
2S0007G	1.9	5	0.75
2S0015G	2.9	7	1.5
2S0022G	3.8	10	2.2
4T0007G	1.6	2.5	0.75
4T0015G	2.4	4.5	1.5
4T0022G	3.6	5.5	2.2
4T0040G	6.3	9	4.0
4T0055G	8.6	12	5.5



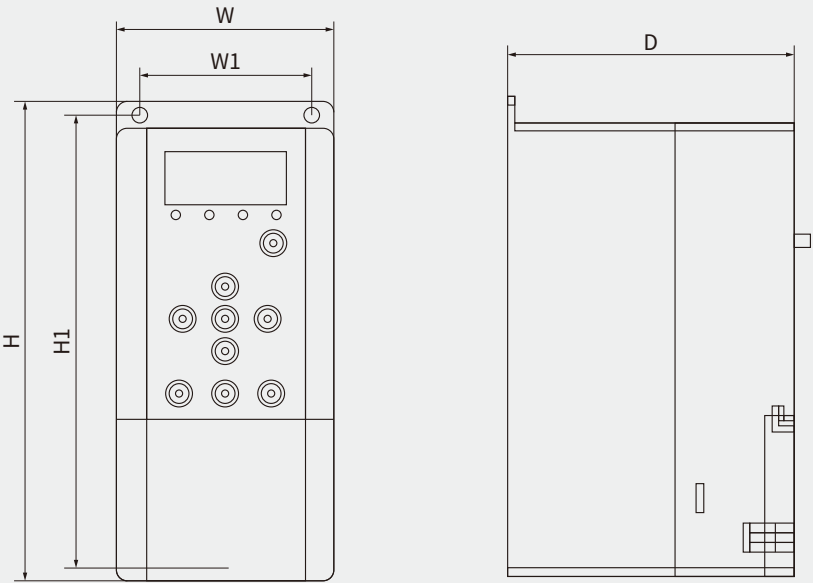
## Technical specifications

Item		Specification	
Input	Voltage frequency	Three - phase 380V 50/60Hz	Single - phase 220V 50/60Hz
	Voltage fluctuation	Three - phase 300V ~ 460V	Single - phase 170V ~ 270V
Output	Voltage range	4T# series: 0 ~ 380V	2S# series: 0 ~ 220V
	Frequency range	0~800Hz	
	Overload capacity	110% for long - term; 150% for 1 minute; 180% for 2 seconds	
Control characteristics	Control mode	V/F control	
	Starting torque	0 speed at 180%	
	Speed regulation range	1: 100	
	Speed stability accuracy	±0.5%	
	Response time	≤20ms	
	V/F curve	Arbitrary setting of multi - segment V/F curves Two fixed curves: constant torque and square - law torque reduction 1	
	Torque boost	Manual setting: 0.0 ~ 30.0% of the rated output	
	Current suppression	Current closed - loop control accurately limits the current within a reasonable range, thus avoiding current surges and fault tripping	
	Voltage suppression	In situations where the grid voltage fluctuates frequently or there are frequent acceleration and deceleration, a unique voltage prediction control is used to limit the voltage within a reasonable range	
	Frequency resolution	Analog quantity	0.1% of the maximum output frequency
		Digital quantity	0.01Hz
	Frequency accuracy	Analog quantity	0.1% of the maximum output frequency
		Digital quantity	0.01% of the set output frequency
Typical functions	Multi - speed operation	8 - stage programmable multi - speed control, 6 operation modes available for selection	
	Oscillating frequency operation	Oscillating frequency operation: Preset frequency and center frequency adjustable, status memory and restoration after shutdown and power failure	
	PID control	Built - in PID controller (preset frequency available)	
	RS485 communication	Standard RS485 communication function, supporting MODBUS communication protocol	
	Automatic energy - saving	Adjust the output voltage and slip compensation in real - time according to the output current, enabling the motor to work at the highest efficiency all the time	
	Automatic voltage regulation	It can be selected as needed to obtain the most stable operating effect	
	Speed detection and restart	Smooth restart and instant - stop restart of the motor	
	Counter	One internal counter for easy system integration	
	Carrier frequency	Three - phase vector synthesis: 0.8~15.0KHz	
	Frequency setting	Analog input	Voltage input: 0 ~ 10V (input impedance 10K) (upper and lower limits can be set)
		Digital input	Set by operation panel, RS485 interface, UP/DW terminals, and can also be set in various combinations with analog input
	Output signal	Analog output	1 - way 0 ~ 10V voltage
		Digital output	1 - way DO output, 1 - way fault relay output (TA, TB, TC)
	Braking	Regenerative braking	Over 75%
		DC braking	Selectable during startup and stop respectively, operating frequency 0 ~ 50.00Hz, operating time 0 ~ 20.0s or continuous operation
Protection function	Power supply protection	Under - voltage protection, three - phase power unbalance protection	
	Operation protection	Over - current protection, over - voltage protection, inverter overheat protection, inverter overload protection, motor overload protection, output phase - loss protection, module drive protection, input phase - loss protection, switching power supply overload protection	
	Equipment anomaly	Current detection anomaly, EEPROM memory anomaly, control unit anomaly, motor overheat, MC engagement fault, temperature fault	
	Motor connection	Motor not connected, unbalanced three - phase parameters of the motor, parameter identification error	
Environment	Ambient temperature	- 10°C to + 50°C (non - freezing)	
	Ambient humidity	Below 90% (non - frosting)	
	Surrounding environment	Indoors (no direct sunlight, no corrosive or flammable gases, no oil mist, dust, etc.)	
	Altitude	Below 1000m	
	Protection level	IP20	
	Cooling method	Forced air cooling	
	Vibration level	< 20m/s²	

Basic wiring diagram



Appearance and installation dimensions



Inverter model	W1 (mm)	W (mm)	H1 (mm)	H (mm)	H2 (mm)	D (mm)	Screw
2S0004G	65	83	172	181	-	110	M4
2S0007G							
2S0015G							
4T0007G							
4T0015G							
4T0022G							
2S0022G	65	93	183	193	-	131	M4
4T0040G							
4T0055G							

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# LNC180

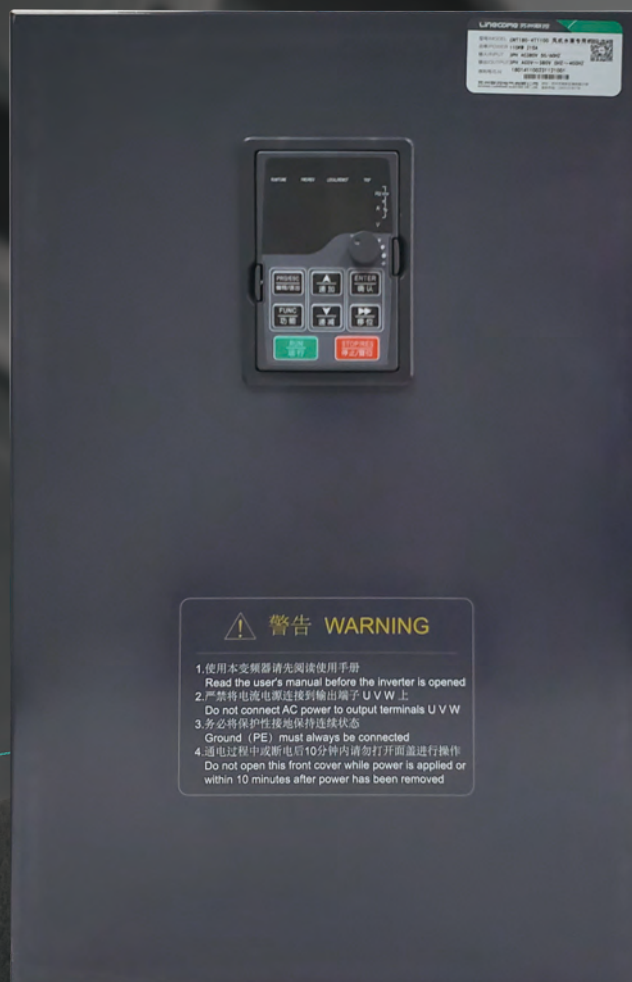
LNC180 INVERTER FOR FANS AND PUMPS

风机水泵专用变频器

绿色  
环保  
Eco-friendly



安全  
可靠  
Safe and  
Reliable

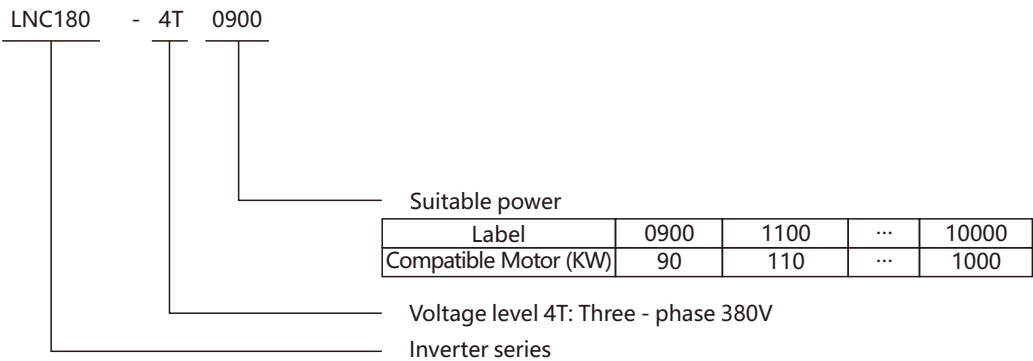


## Overview

LNC180 series inverters are special inverters for fans and pumps. They are mainly used to control and adjust the speed of three - phase AC asynchronous motors. They adopt high - performance control technology, with high - torque output at low speeds, good dynamic performance and an ultra - strong overload capacity. They are mainly used for driving fans and pumps. This series is standard - equipped with a 485 communication function. Power range: 90kW - 1000kW - 380V.



Model meaning



Nameplate instructions

MODEL:	LNC180-4T0900
POWER:	90KW
INPUT:	3PH AC380V 50HZ/60HZ
OUTPUT:	3PH AC0V-380V 0HZ-400HZ
S.N:	Barcode

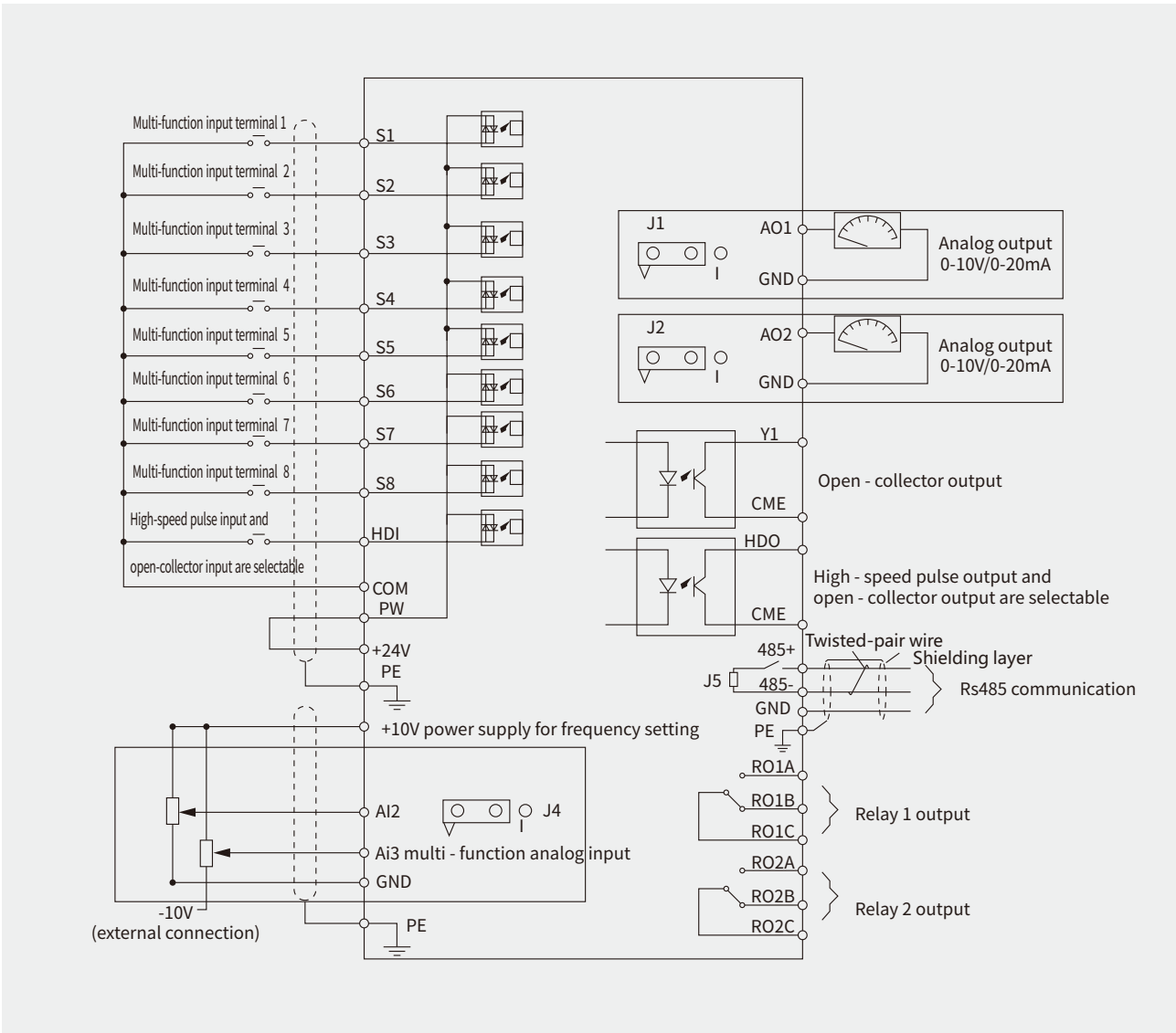
## List of machine models

Inverter model	Input current (A)	Output current (A)	Applicable motor power (kW)
180-4T0900	190	180	90
180-4T1100	225	215	110
180-4T1320	265	260	132
180-4T1600	310	305	160
180-4T1850	345	340	185
180-4T2000	385	380	200
180-4T2200	430	425	220
180-4T2500	485	480	250
180-4T2800	545	530	280
180-4T3150	610	600	315
180-4T3500	625	650	350
180-4T4000	715	720	400
180-4T5000	890	860	500
180-4T5600	980	1060	560
180-4T6300	1050	1200	630
180-4T7000	1126	1300	700
180-4T8000	1460	1440	800
180-4T10000	1800	1920	1000

## Technical specifications

	Item	Specification
Control characteristics	Output frequency	0 - 400Hz
	Carrier frequency	1kHz ~ 15kHz. The carrier frequency can be automatically adjusted according to the load characteristics
	Output frequency resolution	0.01Hz
	Control mode	V/F control
	Overload capacity	150% of the rated output current for one minute
	V/F curve	Four modes: linear type; multi - point type; complete V/f separation; incomplete V/f separation
	Acceleration and deceleration curve	Linear or S - curve acceleration and deceleration modes; four acceleration and deceleration times; the acceleration and deceleration time range is 0.1 ~ 6500.0s
	Jog control	Jog frequency range: 0.00Hz ~ maximum frequency; jog acceleration and deceleration time is 0.1s ~ 6500.0s
	Simple PLC, multi - speed operation	Up to 16 - speed operation can be achieved through the built - in PLC or control terminals.
	Built - in PID	It can easily realize a closed - loop control system for process control.
	Automatic voltage regulation (AVR)	When the grid voltage changes, it can automatically maintain a constant output voltage.
Operating characteristics	Operating command channel	Three channels: given by the operation panel, given by the control terminals, given by the serial communication port. It can be switched in various ways
	Frequency source	Ten frequency sources: given by panel knob, given by operation panel, given by analog voltage, given by analog current, given by RS485 communication, which can be switched in various ways
	Auxiliary frequency source	Ten auxiliary frequency sources. It can flexibly achieve auxiliary frequency fine - tuning and frequency synthesis
	Input terminals	Eight digital input terminals, one of which can be used as a high - speed pulse input. Two analog input channels, AI3: input range 0 ~ +10V, AI2: input range 0 ~ +10V/0 - 20mA
	Output terminals	1 high - speed pulse output with a maximum frequency of 50kHz One digital output terminal One relay output terminal Two analog output terminals. 0V ~ 10V/0 - 20mA can indicate output frequency/current/voltage/frequency command/speed/power factor signal output
	Protection function	Motor short - circuit detection upon power - on, input and output phase - loss protection, over - current protection, over - voltage protection, under - voltage protection, over - heat protection, overload protection, etc
Environment	Application place	Indoors, not directly exposed to sunlight, free from dust, corrosive gases, flammable gases, oil mist, water vapor, dripping water or salt, etc
	Altitude	Less than 1000m
	Ambient humidity	- 10°C ~ + 40°C (When the ambient temperature is between 40°C ~ 50°C, derating operation is required)
	Humidity	Less than 95%RH, without water droplet condensation
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
	Storage temperature	- 20°C ~ + 60°C

Basic wiring diagram



Installation dimensions of the keyboard base

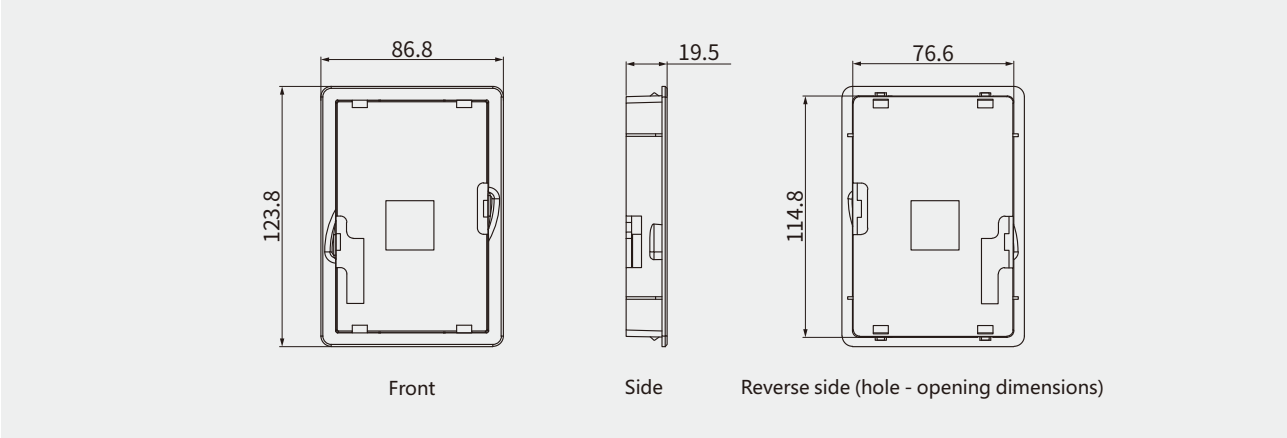




Diagram of overall dimensions and installation dimensions for 75-160kW sheet metal structure

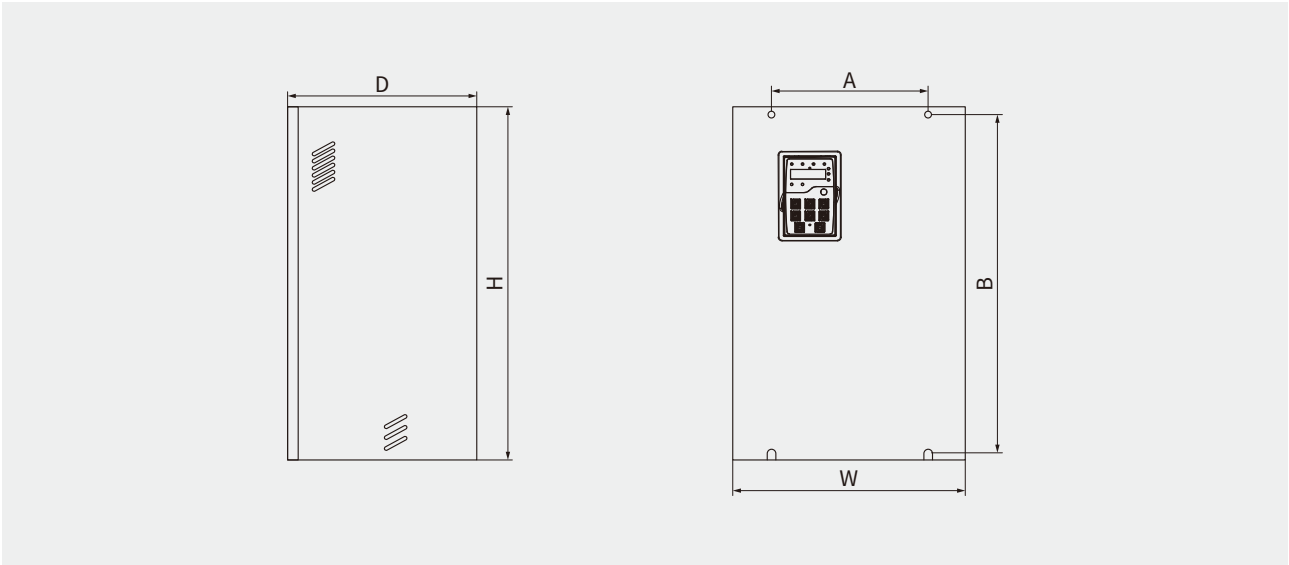
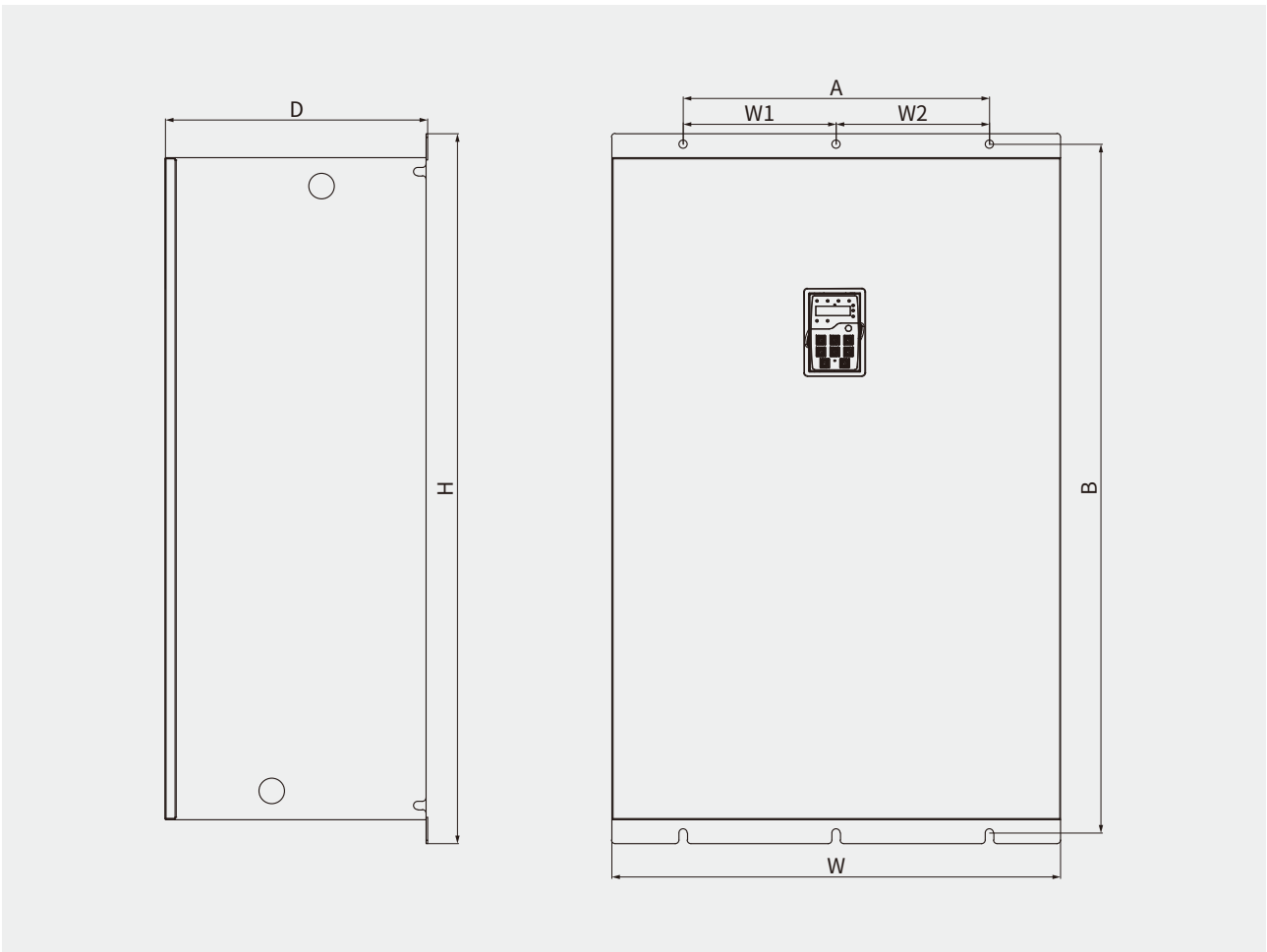
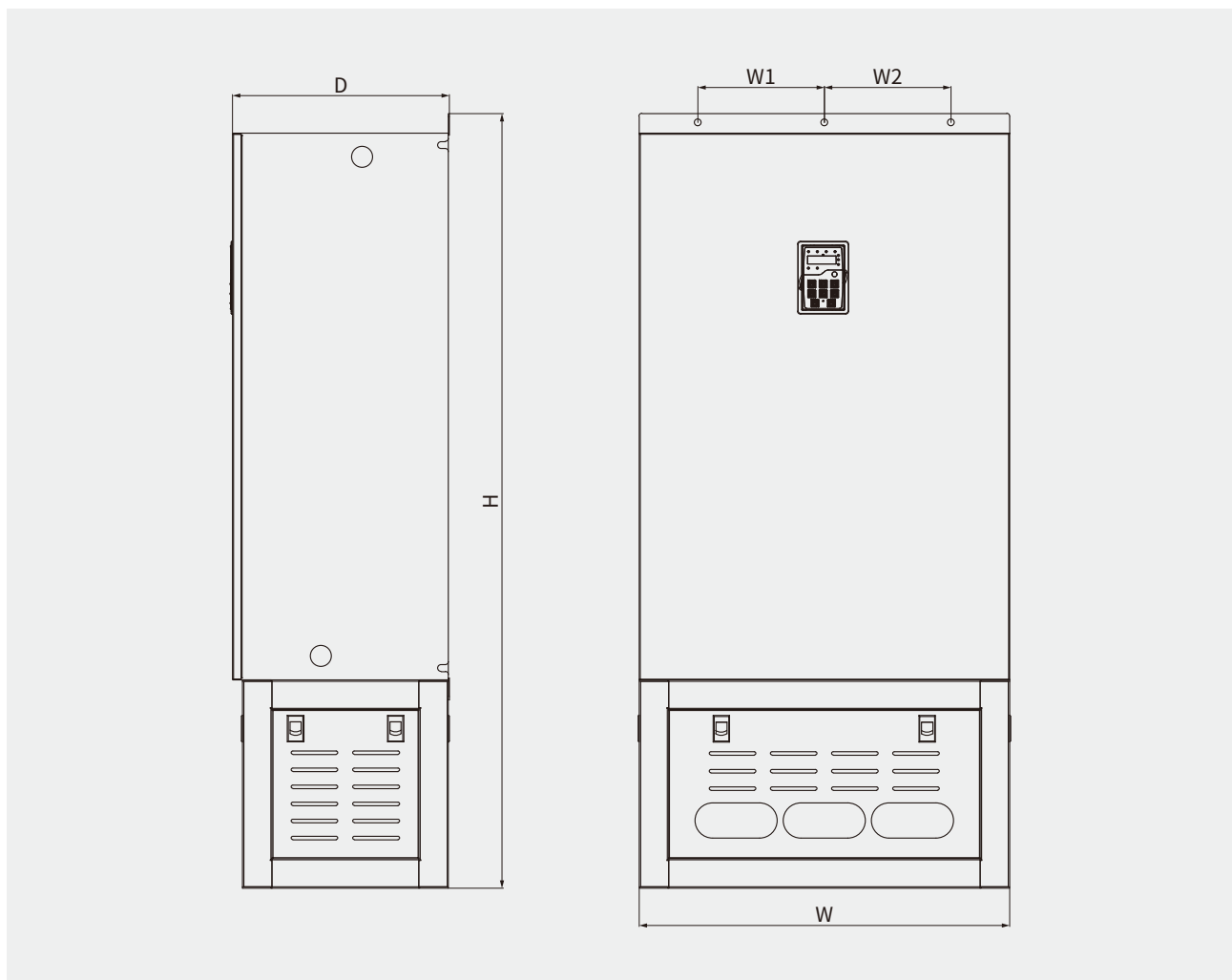


Diagram of overall dimensions and installation dimensions for 250-1000kW wall - mounted sheet metal structure



Rated output power (kW)	Input voltage	A (mm)	B (mm)	H (mm)	W (mm)	D (mm)	Installation aperture (mm)
90~110	Three - phase 380V range: -15%~ + 15%	216	478	500	323	275	Φ10.5
132~160		330	598	630	453	310	Φ10.5
185~250		330	853	880	515	340	Φ10.5
280~400		430	967	997	630	380	Φ12
500~630		610	1135	1165	910	485	Φ12
700~1000		610	1275	1305	930	485	Φ12

Diagram of external dimensions and installation dimensions of 250-1000kW wall - mounted cabinet sheet metal structure



Rated output power (kW)	Input voltage	H (mm)	W (mm)	D (mm)
280~400	Three - phase 380V range: -15%~ + 15%	1318	630	380
500~630		1527	910	485
700~1000		1667	930	485