Copyright

上海雷诺尔科技股份有限公司
Shanghai RENLE Science&Technology Co., Ltd.

Address: No.188 Building 1, Lane 3968, Chengbei Road, Jiading District, Shanghai, China
Zip code：201807
Tel：021-5996 6666
Fax：021-59160987

Http：// www.renle.com
E-mail：renle@renle.com
National toll free service hotline：
800-8200-785

February, 2025

Public Service Account

RENLE

Professional Manufacturer
of Smart Grid • New Energy
• Electric Drives

RNB1000 Series

Variable
Frequency Drive

Technical innovation benefits the world

Stock code: 833586

雷诺尔

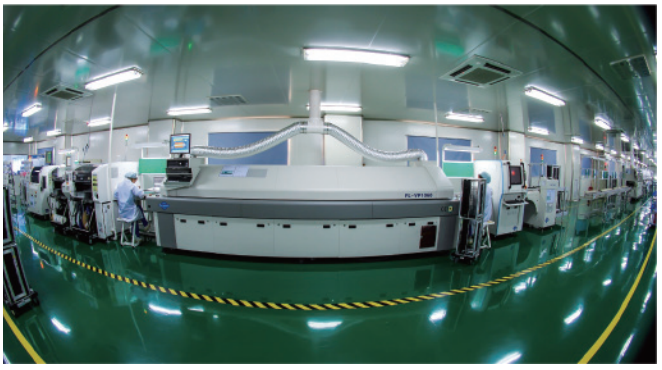
Shanghai RENLE
Science&Technology Co., Ltd.

Professional Manufacturer of Smart Grid • New Energy • Electric Drives

Shanghai RENLE Science&Technology Co., Ltd.

Shanghai RENLE Science & Technology Co., Ltd is a system integrator in solutions to industrial control and a professional manufacturer of industrial control and applied electrical. Our company' s business covers industrial automation products, intelligent power distribution, automatic control systems, etc. Our product range includes medium and low voltage motor soft starters, medium and low voltage variable frequency drives, explosion-proof electrical apparatus, medium and low voltage reactive power compensation and harmonic suppression devices, energy storage systems, drive control systems, MCS, DCS, energy efficiency retrofit system and medium and low voltage power transmission and distribution equipment, etc. The products are widely used in electric power, metallurgy, petroleum and petrochemical industries, military industry, mining, chemical industry, construction, building materials, pharmaceutical industry, municipal works, textile printing and dyeing, paper making, rubber industry, rail transit, hydropower industry, aerospace technology, new energy battery industry, semiconductor industry, etc.

雷诺尔
Shanghai RENLE
Science&Technology Co., Ltd.



Shanghai RENLE has been honored with several National-level awards and major professional certifications, including the title of Unique and Innovative “Little Giant” Enterprise, High Technology Enterprise, and Shanghai Enterprise Technology Center. It is not only qualified with Power Facility Installation (Repair, Test) Permit and Second-level Qualification for Professional Contracting in Building Mechanical and Electrical Installation Engineering, but also participates in the drawing-up and revision of 17 national technical standards. Additionally, our company has obtained the following certifications: ISO9001 Quality Management System certification, ISO14001 Environmental Management System Certification, ISO45001 Occupational Health and Safety Management System Certification, CE Certification of European Union, China Compulsory Certification (CCC), TÜV SÜD of German, Customs Union CU-TR Certification, Russian GOST Certification and Product Inspection Certification.

Shanghai RENLE’ s vision is to build a respected century-old enterprise with ever improving high technology. We specialize in promoting the quality of industrial automation products, the innovative design of equipment and systems, the development of superb research, and the provision of quality services. Improving productivity and energy efficiency for a better world is our commitment to each one of RENLE’ s clients.

RENLE

RNB1000 Series

Variable Frequency Drive

RNB1000 series VFD made by RENLE is suitable for three-phase squirrel-cage asynchronous motors. With compact structure and high reliability, RNB 1000 series VFD is widely used in manufacturing , transportation and other industries.

→ Various fans and pumps equipment;

→ Ceramic machinery;

→ Machine tools;

→ Woodworking machinery;

→ Packaging and printing machinery;

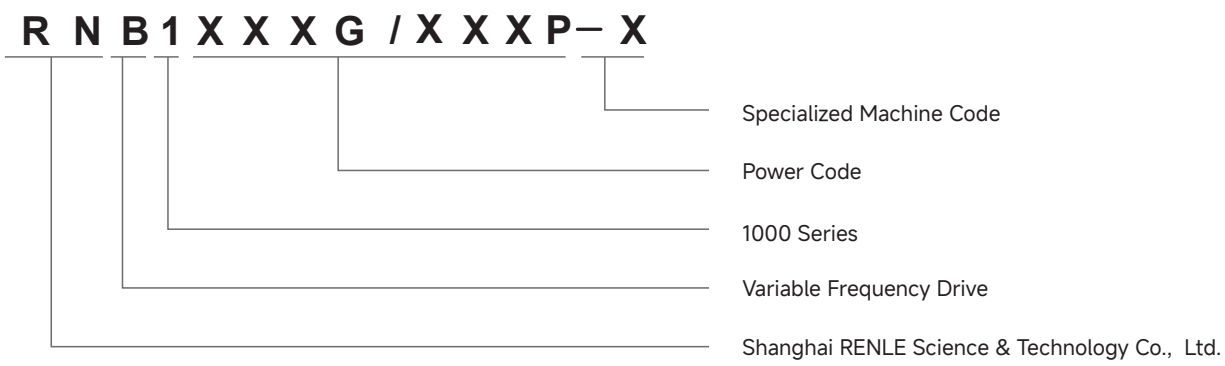
→ Material transportation equipment and other universal equipment (conveyor and hoisting).

Technical innovation benefits the world

Stock code：833586

Model Description

The letters and numbers on the nameplate indicate the product series, power, applicable load type and so on.



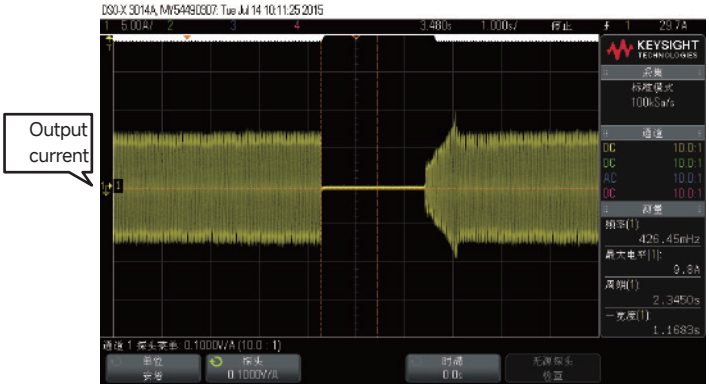
Character	Description
RN	Shanghai RENLE Science & Technology Co., Ltd.
B	Low-voltage Variable Frequency Drive
1	1000 Series
XXXG/XXXP	Power Code: G: Constant torque load (Heavy load) P: Variable torque load (light load) G/P: G/P-model in one XXX: Power code: such as 001: 1.5kW; 037: 37kW; 110: 110kW
-X	Specialized machine code: No code indicates universal model -2S: Single-phase 220VAC input, Three-phase 220VAC output; -2SS: Single-phase 220VAC input, Single-phase 220VAC output.

Product Feature

RNB1000 series VFD improves the production efficiency for the majority of users by virtue of its compact structure, powerful functions and convenient operation.

- V/F control mode enables high-precision current limit control so that there will be no overcurrent alarm during fast acceleration/deceleration or stall; Vector control mode enables high-precision torque limiting control, so that the drive can output strong torque or soft torque according to the user’s process control requirements and the mechanical equipment can be protected.
- V/F separation control mode enables output frequency and output voltage to be set separately, which is suitable for applications such as inverter power supply and torque motor control, etc.

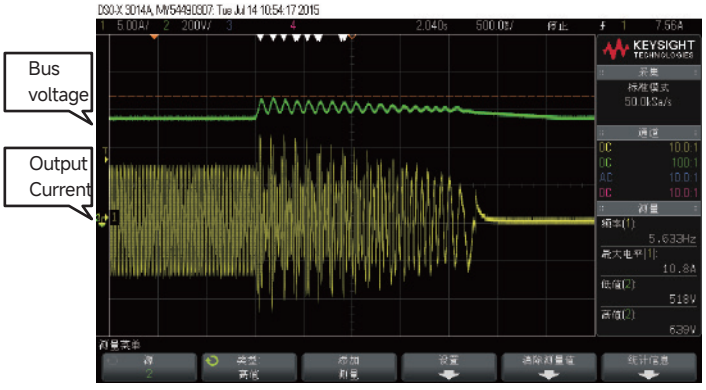
Control Mode	Start Torque	Speed Range	Speed Precision	Torque Response
V/F control	0.5Hz 180%	1: 100	±0.5%	
Vector control without PG	0.5Hz 180%	1: 100	±0.2%	<10mS



Speed search start

- Accurate and reliable speed search for smooth, shock-free starting of rotating motors.

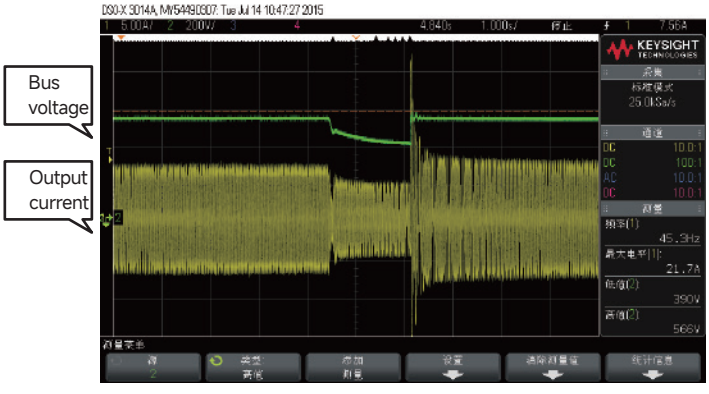
- Process PID control, with a rich set of setting and feedback methods, two sets of proportional, integral and differential parameters are freely switched. Especially suitable for fans, pumps load energy saving applications.



Overvoltage suppression

- DC power input is supported, enabling users to form a common DC bus application conveniently.

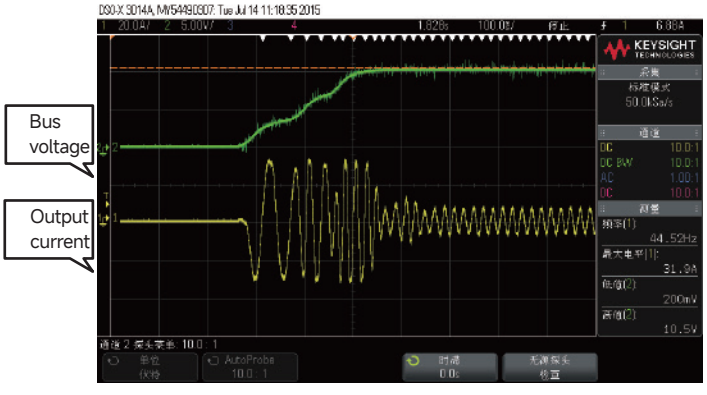
- **Overvoltage stall protection:** During rapid decelerating of large inertia loads, regenerative energy may lead to overvoltage faults. The instantaneous adjustment of output frequency can reduce the probability of overvoltage tripping, so the continuous and reliable operation of the system is ensured.



Undervoltage adjustment

- **Undervoltage adjustment:** In case of instantaneous undervoltage or power failure occurs, the DC bus voltage remains constant through the automatic reduction of output frequency, so the continuous operation of the driver within a short time is guaranteed. This function applies to fans and pumps.

- **Overcurrent stall protect function:** During fast acceleration of the heavy load, the instantaneous large slip may result in an overcurrent fault. The instantaneous adjustment of output frequency can reduce the probability of overcurrent tripping, so the continuous and reliable operation of the system is ensured.



Overcurrent stall protect function

- **Low-frequency oscillation suppression function:** During the no-load or light load start of a large power motor, acute oscillation may occur and result in fault tripping. Enabling this function can suppress oscillation effectively and ensure reliable operation of the system.

- **Automatic torque boost:** In V/F control mode, the output torque can be automatically adjusted according to the load condition to accommodate light load, no load or even overloaded starts.

Product Specification

	Items	Indicator and specifications
Input-output characteristics	Input voltage range	Three-phase 380VAC (±15%), Single-phase 220VAC (±15%).
	Input frequency range	50～60Hz±5%
	Output voltage range	0～Rated input voltage
	Output frequency range	0～500Hz
Technical characteristics	Control mode	V/F control; No PG vector control, torque control.
	Speed control range	Open-loop vector control 1: 100
	Speed control accuracy	±0.5%
	Starting frequency	0.00～10.00Hz
	Overload capacity	150% rated current 60s; 180% rated current 10s; 200% rated current 1s.
	Acceleration and Deceleration time	0.1～3000.0s
	Dynamic braking capacity	Brake unit operating voltage: 320～750V
	DC braking capacity	DC braking frequency: 0～300Hz; DC braking waiting time: 0～50s; DC braking current: 0.0～150.0%; DC braking time: 0.0～50.0s.
	Frequency setting method	Analog setting, High-speed pulse setting, Multi-segment command setting, PID control setting, 485 communication setting.
	Automatic voltage adjustment	It can keep a constant voltage output when the power grid voltage changes
	Speed search starting	Enables smooth and shock-free starting of rotating motors
Control terminals	Digital input terminal	8 inputs as standard, one of which can be used as a high-speed pulse input (HDI).
	Analog input terminals	2 inputs as standards , AI1: 0～10V or 0/4～20mA input selectable; AI2: 0~10V or 0/4～20mA input selectable
	Digital output terminals	2 multifunction collector outputs as standard, one of which can be used as a high-speed pulse output (HDO).
	Analog output terminals	2 outputs as standard AO1, AO2 (0～10V or 0/4～20mA selectable).
	Relay output	2 relay outputs as standard
Standard communication interface	RS485 communication	Provide RS485 communication interface to communicate with external RS485 and support Modbus protocol (RTU mode).
Fault protection	Acceleration overcurrent, deceleration overcurrent, constant speed overcurrent, acceleration overvoltage, deceleration overvoltage, constant speed overvoltage, Bus undervoltage fault, motor overload, VFD overload, input phase loss error, output phase loss error, rectifier module overheating fault, inverter module overheating fault, external fault, communication fault, current detection fault, motor parameter recognition fault, EEPROM operation fault, PID feedback disconnection, brake unit fault, manufacturer-set time reached.	
Keyboard display	LED	Bright LED digital tube displays information about VFD
Others	Operation place	Indoor, at an altitude of less than 1,000 meters above sea level, free from direct sunlight, dust, corrosive gases, etc.
	Ambient temperature	-10～+40°C, the device should be used with reduced capacity in 40～50°C, The rated output current should be reduced by 1% for every 1°C of increase.
	Humidity	5～95% (no condensation)
	Altitude	0～2000 meters, the device should be used with reduced capacity when above 1000 meters. The rated output current should be reduced by 1% for every 100 meters of elevation.
	Vibration	Less than 0.5g
	Storage temperature	-40～+70°C
	Protection level	IP20

Product Specification

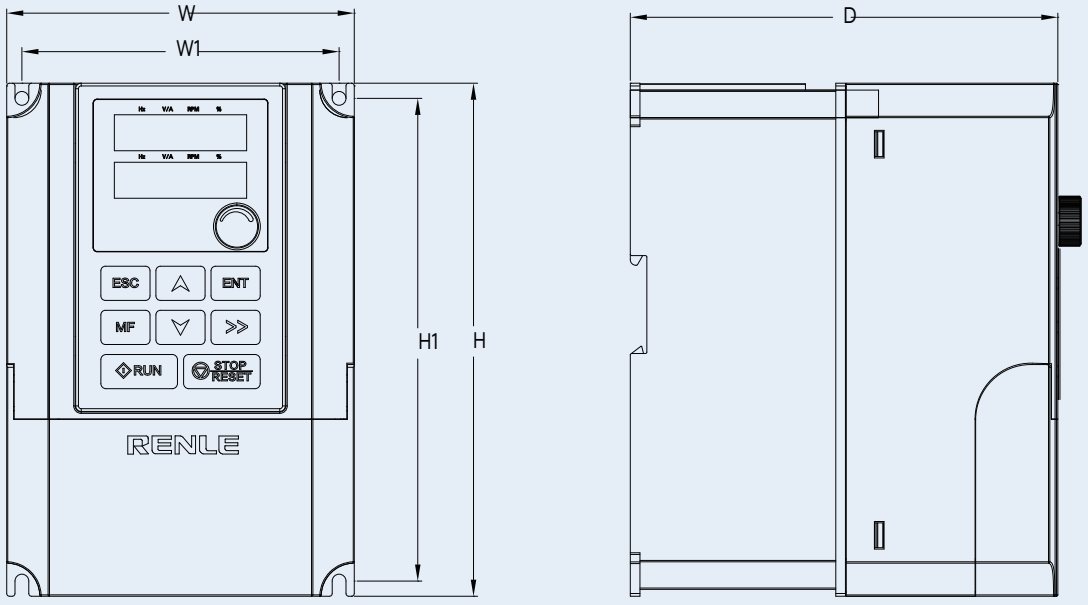
Model	Power (kW)	Input voltage (V)	Input current (A)	Output current (A)	Power of applicable motor (kW)	Note
RNB1000G-2S	0.75	Single-phase 220V	8.2	4.5	0.75	Built-in brake unit as standard
RNB1001G-2S	1.5		14	7	1.5	
RNB1002G-2S	2.2		23	9.6	2.2	
RNB1000G	0.75	Three-phase 380V	3.4	2.5	0.75	
RNB1001G	1.5		5	3.8	1.5	
RNB1002G	2.2		5.8	5.3	2.2	
RNB1004G/005P	4.0		12	9.5	4.0	
	5.5		18.5	14	5.5	
RNB1005G/007P	5.5		18.5	14	5.5	
	7.5		22.5	18.5	7.5	
RNB1007G/011P	7.5		22.5	18.5	7.5	
	11		30	25	11	
RNB1011G/015P	11		30	25	11	
	15		39	32	15	
RNB1015G/018P	15		39	32	15	
	18.5		45	38	18.5	
RNB1018G/022P	18.5		45	38	18.5	
	22		54	45	22	
RNB1022G/030P	22		54	45	22	
	30		68	60	30	
RNB1030G/037P	30		68	60	30	
	37		84	75	37	
RNB1037G/045P	37		84	75	37	
	45		98	92	45	
RNB1045G/055P	45		98	92	45	Optional built-in brake unit
	55		123	115	55	
RNB1055G/075P	55		123	115	55	
	75		157	150	75	
RNB1075G/090P	75		157	150	75	
	90		188	180	90	
RNB1090G/110P	90		188	180	90	
	110		221	215	110	
RNB1110G/132P	110		221	215	110	
	132		267	260	132	
RNB1132G/160P	132		267	260	132	
	160		309	305	160	

Model	Power (kW)	Input voltage (V)	Input current (A)	Output current (A)	Power of applicable motor (kW)	Note
RNB1160G/185P	160	Three-phase 380V	309.0	305	160	
	185		344.0	340	185	
RNB1185G/200P	185		344.0	340	185	
	200		384.0	380	200	
RNB1200G/220P	200		384.0	380	200	
	220		429.0	425	220	
RNB1220G/250P	220		429.0	425	220	
	250		484.0	480	250	
RNB1250G/280P	250		484.0	480	250	
	280		539.0	530	280	
RNB1280G/315P	280		539.0	530	280	
	315		612.0	600	315	
RNB1315G/350P	315		612.0	600	315	
	350		665.0	650	350	
RNB1350G	350		665.0	650	350	
RNB1400G	400		715	720	400	
RNB1450G	450		805	795	450	
RNB1500G	500		890	860	500	

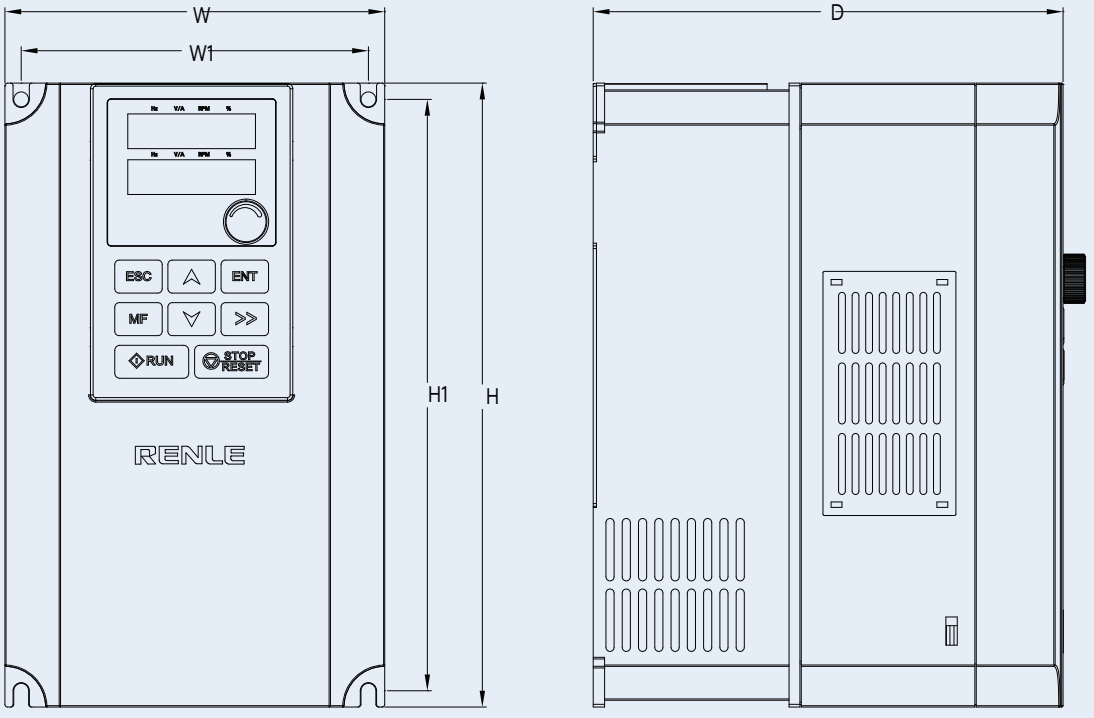
NOTE 1. Brake units are standard for models RNB1037G/045P (incl.). RNB1045G/055P (incl.) ~RNB 1132G/160P (incl.) models can be equipped with built-in brake unit as an option.

NOTE 2. The above models are standard general-purpose models, without industry-specific models. Other specifications of non-standard models can be customized.

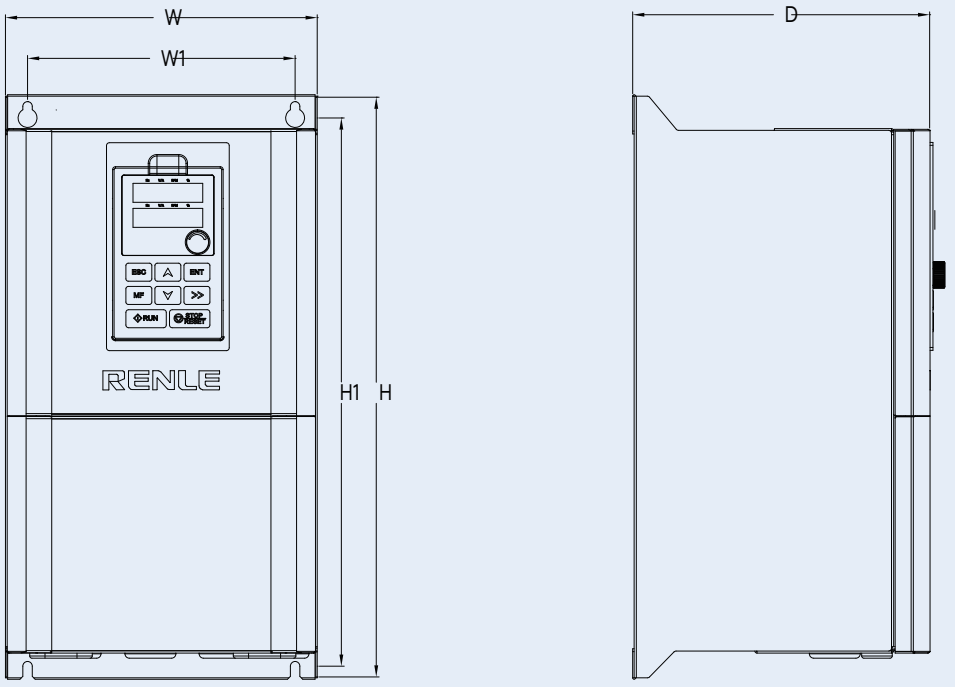
Product Installation Dimension Schematic



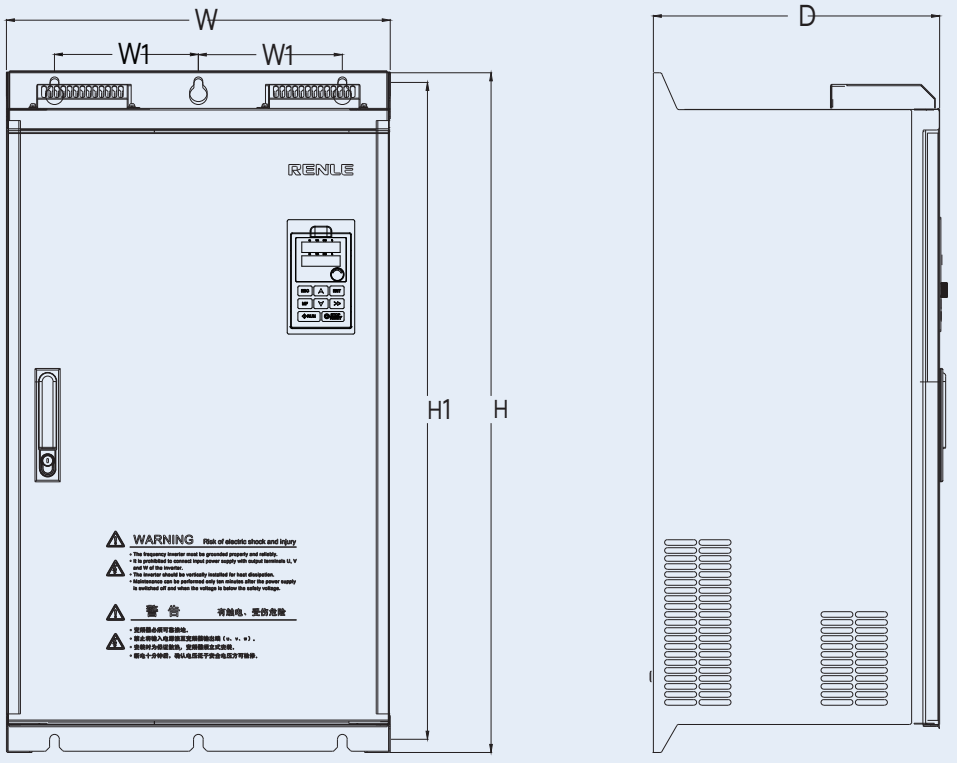
a）Suitable for RNB1000G (include) ～ RNB1004G/005P (include)



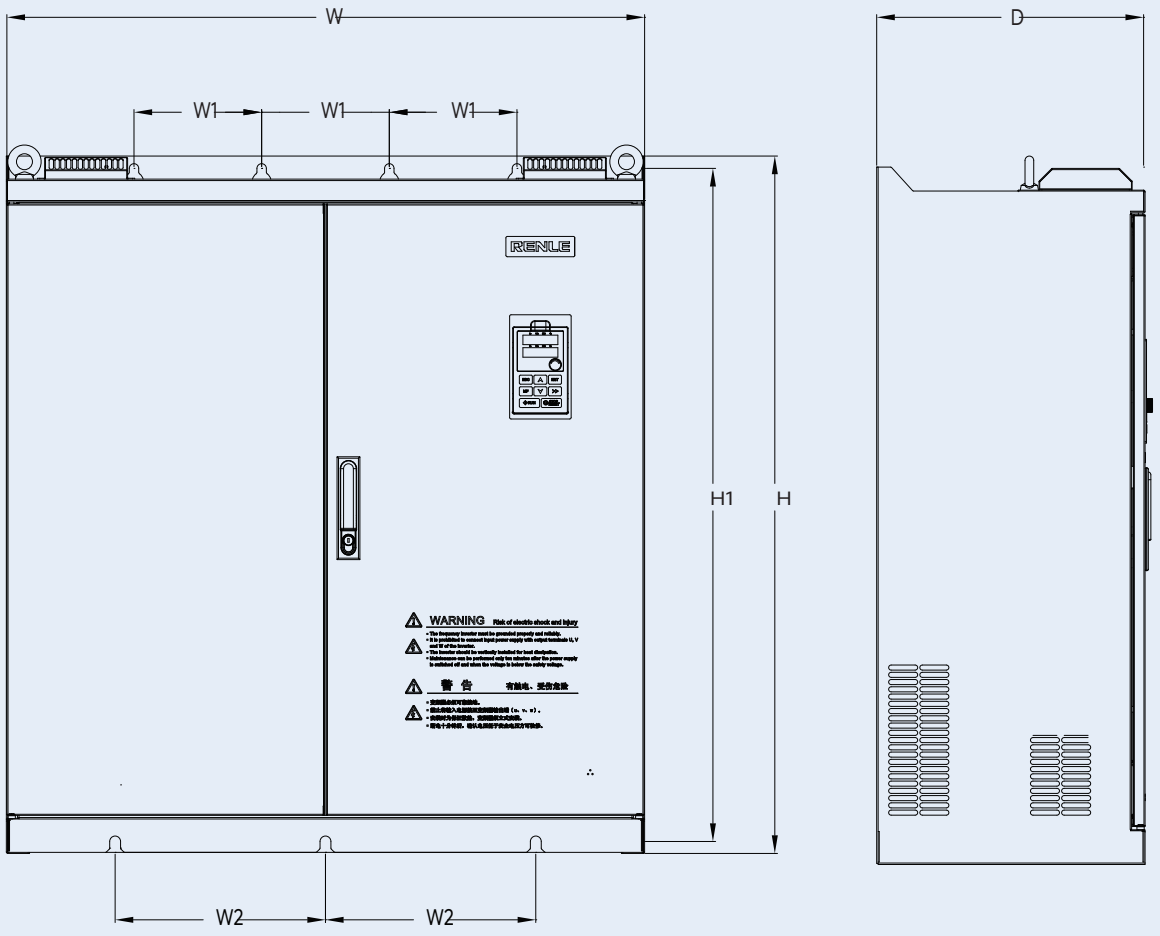
b）Suitable for RNB1005G/007P (include) ～ RNB1011G/015P (include)



c）Suitable for RNB1015G/018P (include) ~ RNB1132G/160P (include)



d）Suitable for RNB1160G/185P (include) ~ RNB1400G (include)

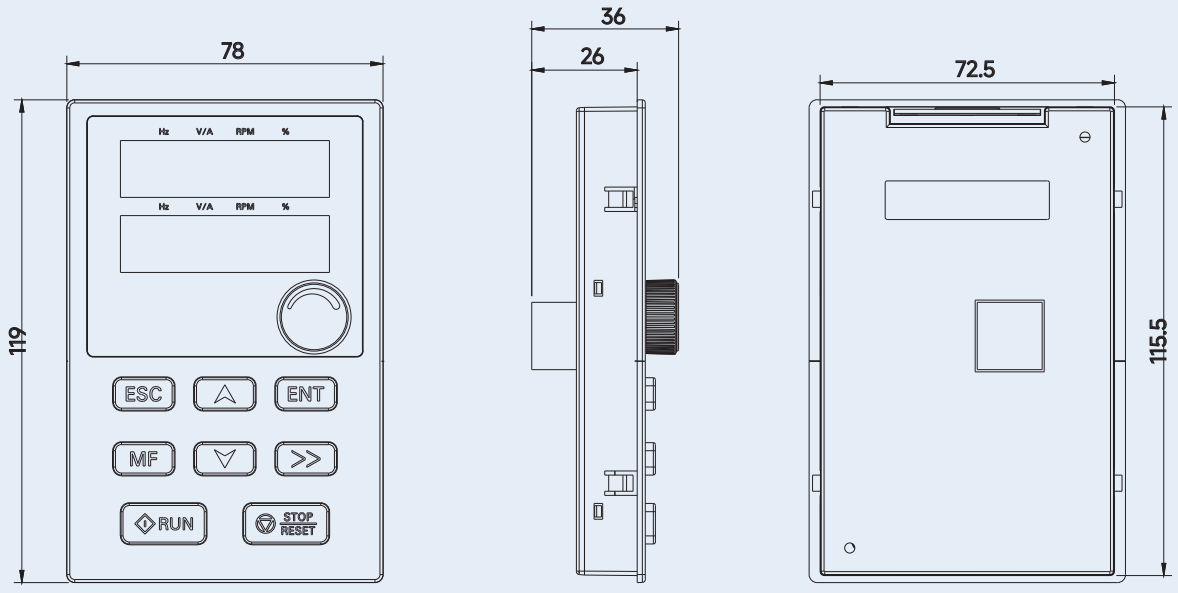


e) Suitable for RNB1450G (include) ~ RNB1500G (include)

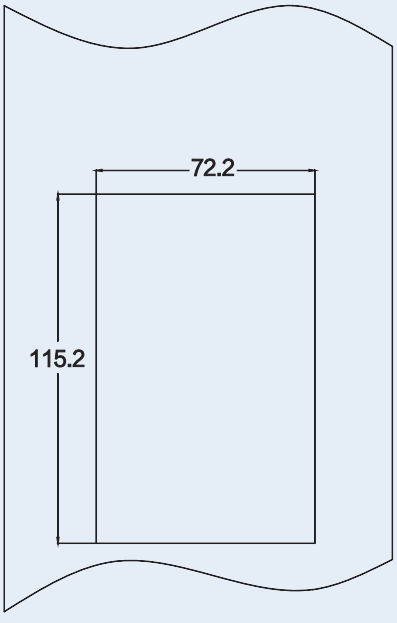
Product overall dimensions, installation dimensions, and weight

Model	Overall and installation dimensions (mm)						Mounting hole diameter (mm)	Weight (kg)	Cabinet dimensions	Note
	W	H	D	W1	W2	H1				
RNB1000G-2S	126	186	155	115	--	175	5	2.0	S0	Wall-mounted
RNB1001G-2S										
RNB1002G-2S										
RNB1000G										
RNB1001G										
RNB1002G										
RNB1004G/005P										
RNB1005G/007P	140	230	172	128	--	218	5.5	3.5	S1	Wall-mounted
RNB1007G/011P	165	285	200	153	--	273	5.5	5.4	S2	Wall-mounted
RNB1011G/015P										
RNB1015G/018P	214	402	205	184	--	385	7	10	S3	Wall-mounted
RNB1018G/022P										
RNB1022G/030P										
RNB1030G/037P	250	442	230	220	--	425	7	15	S4	Wall-mounted
RNB1037G/045P										
RNB1045G/055P	300	600	280	240	--	580	9	37	S5	Wall-mounted
RNB1055G/075P										
RNB1075G/090P										
RNB1090G/110P										
RNB1110G/132P	330	660	332	250	--	640	9	53	S6	Wall-mounted
RNB1132G/160P										
RNB1160G/185P	480	853	354	180	--	826	12	106	S7	Wall-mounted with optional base
RNB1185G/200P										
RNB1200G/220P										
RNB1220G/250P										
RNB1250G/280P										
RNB1280G/315P	680	940	370	290	--	908	14	151	S8	Wall-mounted with optional base
RNB1315G/350P										
RNB1350G										
RNB1400G										
RNB1450G	880	962	370	176	290	928	15	350	S11	Wall-mounted with optional base
RNB1500G										

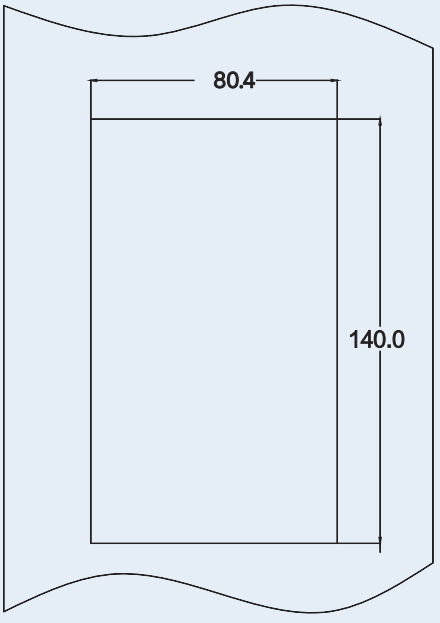
Operator Panel Dimensions



a) Panel dimensions

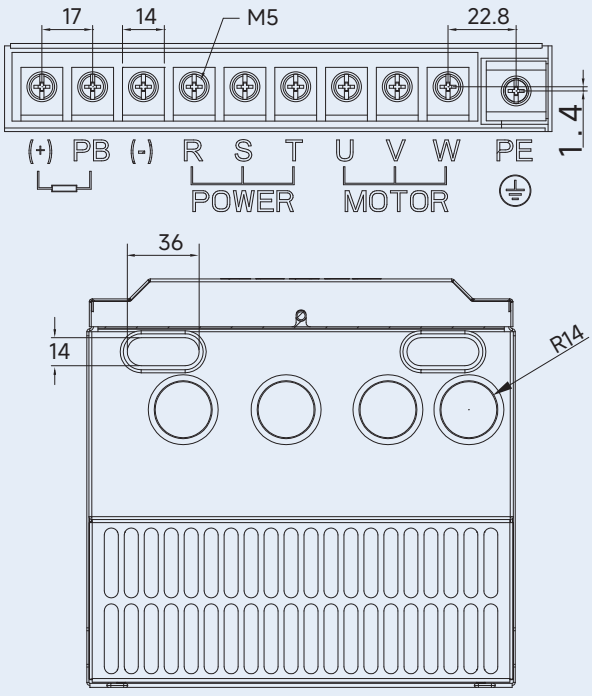


b) Panel cutout dimensions

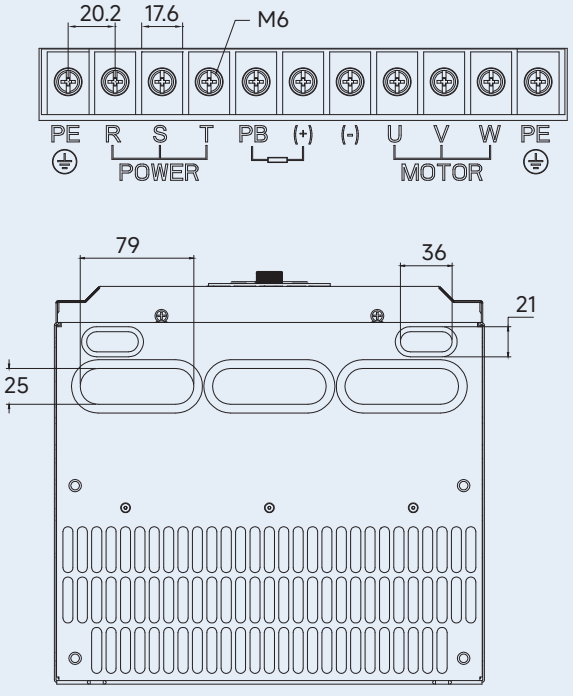


c) Panel bracket cutout dimensions

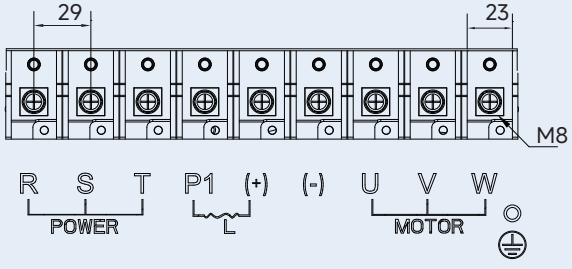
Main Circuit Terminal Coil Dimensions (mm)

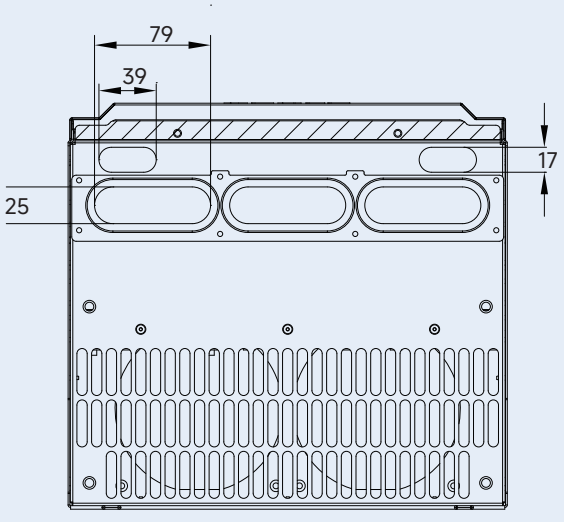


a) Suitable for RNB1015G/018P (include) ~ RNB1022G/030P (include)

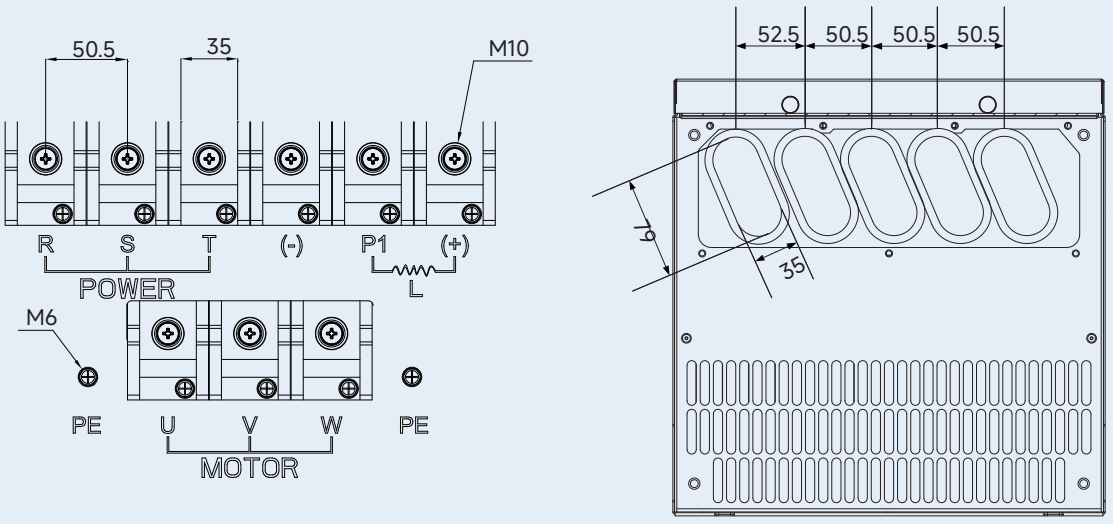


b) Suitable for RNB1030G/037P (include) ~ RNB1037G/045P (include)

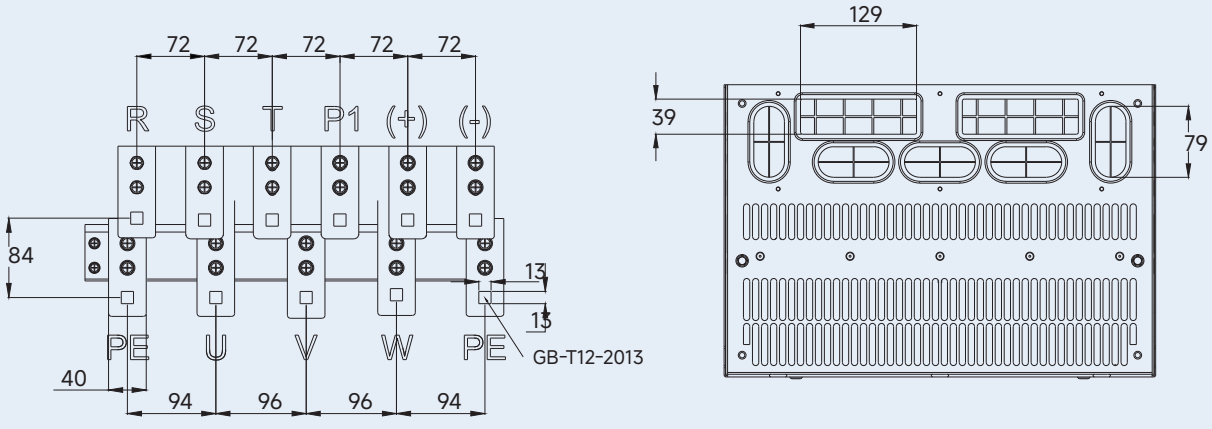




c) Suitable for RNB1045G/055P (include) ~ RNB1090G/110P (include)

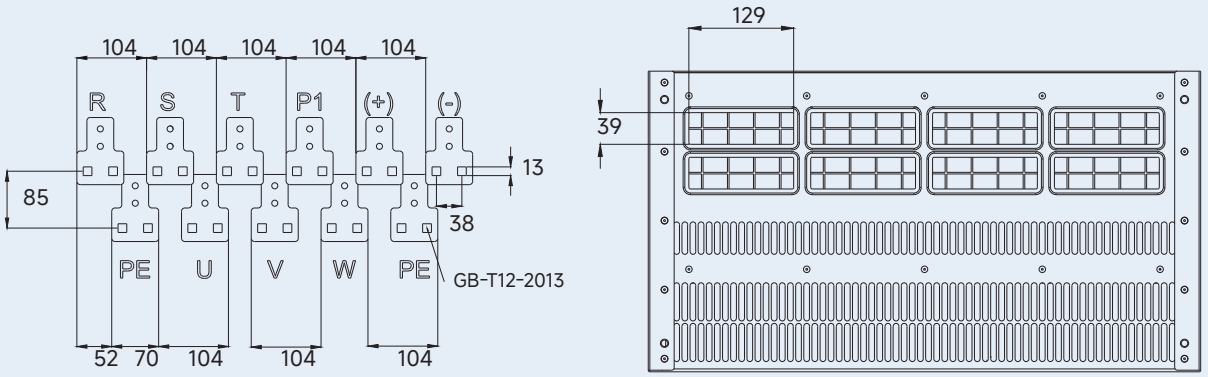


d) Suitable for RNB1110G/132P (include) ~ RNB1132G/160P (include)



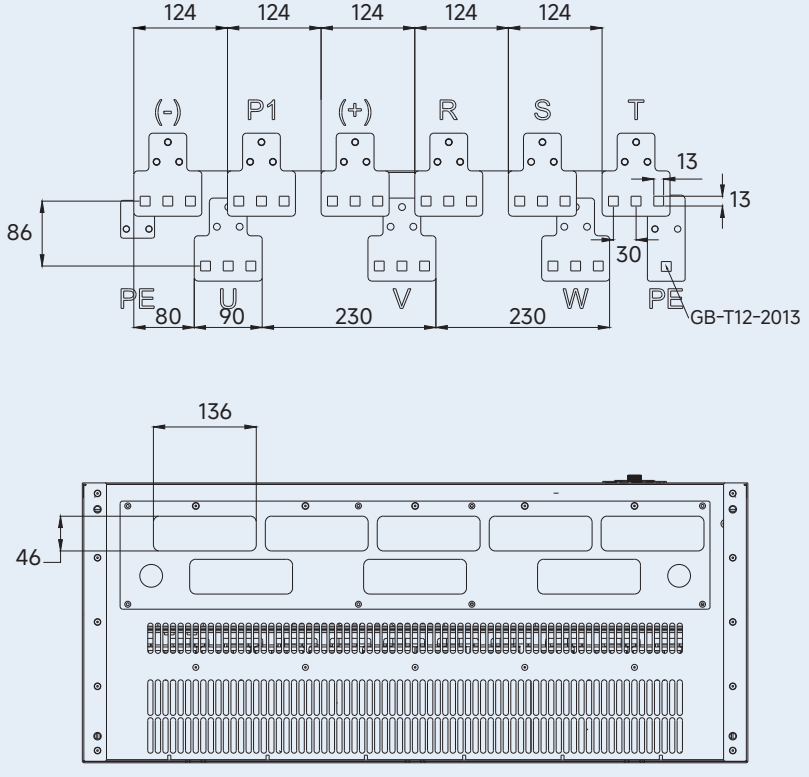
Copper bars connecting bolts are round head square neck bolts M12, neck thickness 3mm

e) Suitable for RNB1160G/185P (include) ~ RNB1250G/280P (include)



Copper bars connecting bolts are round head square neck bolts M12, neck thickness 3mm

f) Suitable for RNB1280G/315P (include) ~ RNB1400G (include)

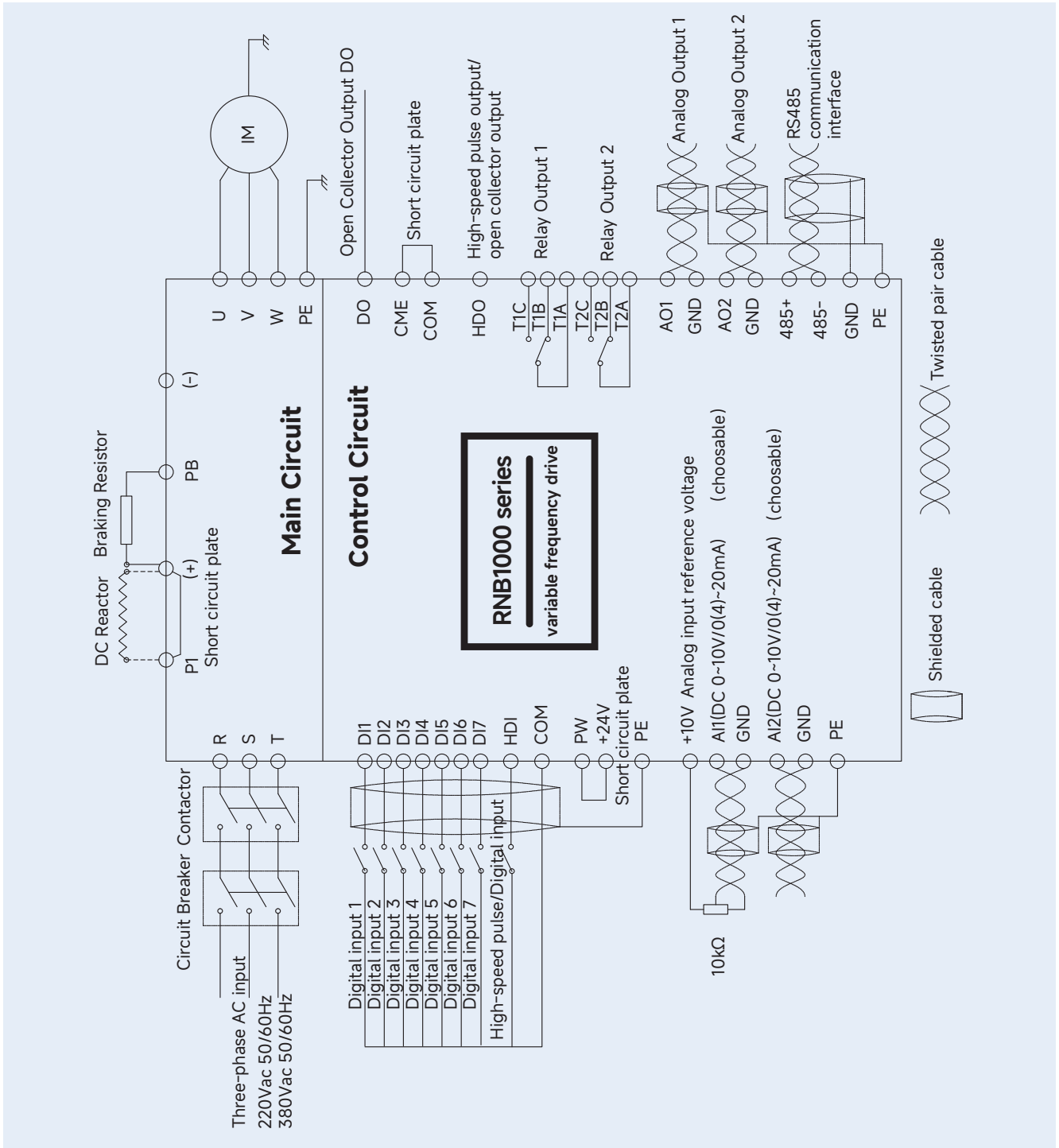


Copper bars connecting bolts are round head square neck bolts M12, neck thickness 3mm

g) Suitable for RNB1450G (include) ~ RNB1500G (include)

Standard Wiring Diagram

Please refer to the following diagram for the wiring of the VFD. When it is operated from the keypad panel it can start the motor by merely wiring the main circuit.



1. AI1 enables the selection of the input voltage or current signal, which is determined by the X2 pin on the control board to determine the type of input model.

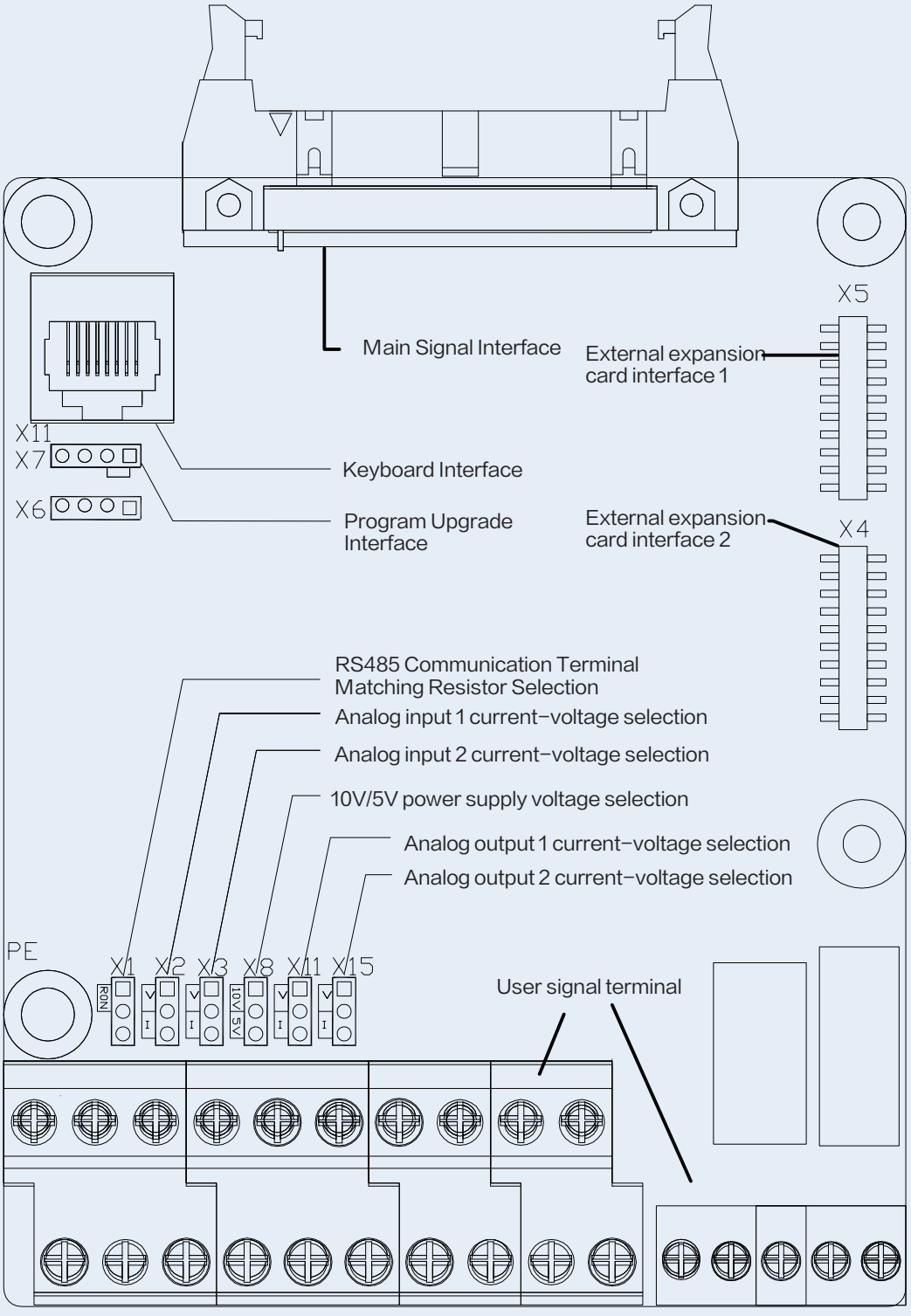
2. AI2 enables selection of the input voltage or current signal, which is determined by the X3 pin on the control board to determine the type of input model.

3. AO1 enables selection of the input voltage or current signal, which is determined by the X14 pin on the control board to determine the type of input model.

4. AO2 enables selection of the input voltage or current signal, which is determined by the X15 pin on the control board to determine the type of input model.

5. If an external braking resistor is required, please pay attention to proper wiring when connecting the braking resistor.

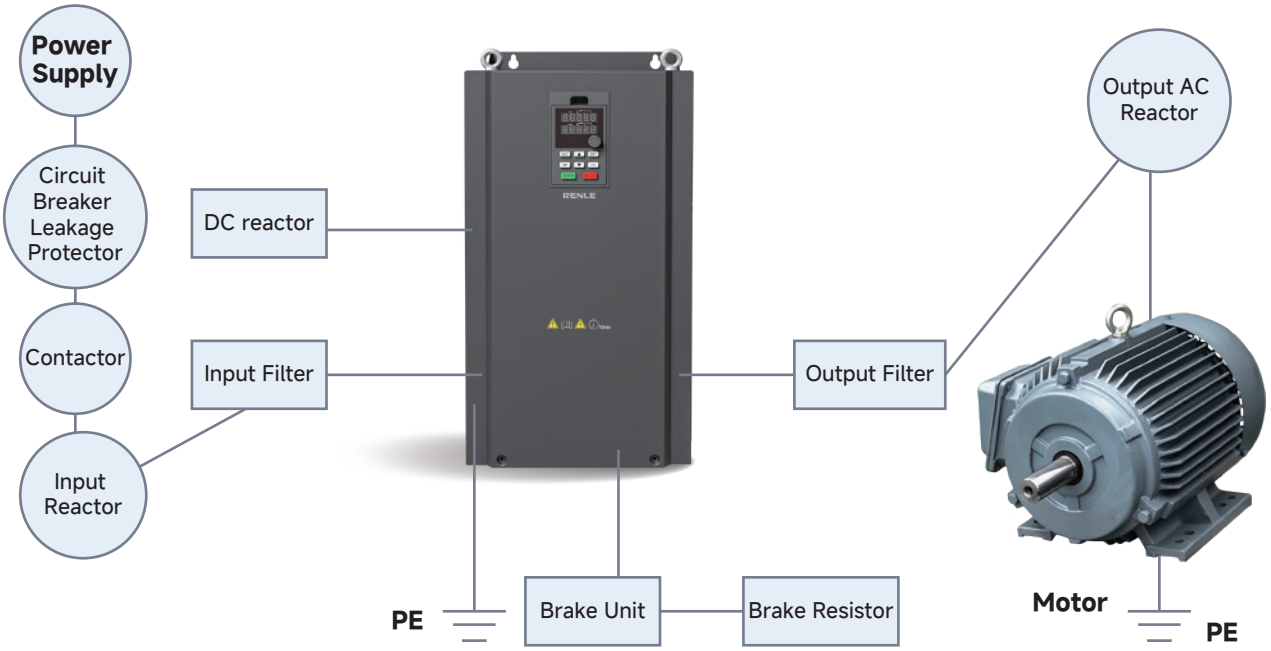
控制回路端子说明


Main Signal Interface
External expansion card interface 1
X5
X11
X7
Keyboard Interface
X6
Program Upgrade Interface
External expansion card interface 2
X4
RS485 Communication Terminal Matching Resistor Selection
Analog input 1 current-voltage selection
Analog input 2 current-voltage selection
10V/5V power supply voltage selection
Analog output 1 current-voltage selection
Analog output 2 current-voltage selection
PE
X1
X2
X3
X8
X11
X15
RON
10V
5V
User signal terminal

Function table of control panel terminals

Type	Terminal Symbol	Terminal Function Description	Technical Specification
Digital Input	+24V	+24V power supply	24V±10%, internally isolated from GND. Maximum load 200mA
	PW	External power input terminal (digital input terminal power supply)	Factory setting: short with +24V
	DI1～DI7	Digital input terminals 1～7	Input specification: 24V, 5mA
	HDI	High-speed pulse input	Pulse input frequency range: 0 ～ 50kHz
		Digital input	High level voltage: 24V
	COM	+24V power supply or external power supply	Internally isolated from GND
Digital output	DO	Open collector output with CME common terminal	External voltage range: 0 ～ 24V
	CME	Open collector output common terminal	Factory setting: short with COM
	HDO	High-speed pulse output or open collector output with CME common terminal	Pulse output frequency range 0 ～ 50kHz
	COM	HDO common terminal	Internally isolated from GND
Analog Input	+10V	+10V power output provided by the VFD	Output current range: 0~50mA (if a potentiometer is connected between +10V and GND, its resistance value should be not less than 2kΩ)
	AI1~AI2	Analog input terminal	Input voltage and current available
			Input voltage range: 0V ～ 10V
			Input current range: 0/4 ～ 20mA
	GND	Analog ground	Internal isolation from COM
Analog Output	AO1～AO2	Analog output terminal	Output voltage and current available
			Output voltage range: 0 ～ 10V
			Output current range: 0 / 4 ~ 2 0 m A
	GND	Analog ground	Internal isolation from COM
Relay output	T1A/TIB/TIC	Relay output	T1A-T1B: Normally closed
			T1A-T1C: Normally open
			Contact capacity: 250VAC/3A, 30VDC/1A
	T2A/T2B/T2C	Relay output	T2A-T2B: Normally closed
			T2A-T2C: Normally open
			Contact capacity: 250VAC/3A, 30VDC/1A
Communication Interface	485+/485-	RS485 communication interface	RS485 communication interface

Instructions for the use of product peripheral components



Configuration diagram of the peripheral components

Function table of the peripheral components

Name	Function Description
Circuit Breaker	Application: To cut off the power supply and protect the back-end equipment in case of failure of the back-end equipment.
	Selection: The breaking current of the circuit breaker should be 2 times the VFD current.
Contactor	Do not switch the contactor on and off frequently, as this will cause the VFD to malfunction; do not start and stop the VFD through the on-off of the main circuit, as this will affect its service life.
Input Reactor and DC Reactor	To improve the power factor
	To improve the effect of input power supply unbalance on the system;
	To suppress high harmonic and reduce the transmission of harmonic to the outside;
	To effectively suppress the effect of pulse current on the rectifier bridge.
Input and output Filters	To reduce the interference of VFD with peripheral equipment.
Brake Unit Brake Resistor	To consume the energy returned by the motor for fast braking.
Output Reactor	To reduce VFD protection due to leakage current;
	It is recommended to install when the connection between the VFD and motor exceeds 100 meters.

Partial performance in the power industry

Electric power industry

Shanxi Lu'an Ronghai Power Generation Co., Ltd	Shandong Zhucheng Longguang Thermal Power Co., Ltd
Shandong Zaozhuang Jianyang Thermal Power Co., Ltd	Shandong Weihai Thermal Power Group Co., Ltd
Huadian International Power Co., Ltd. Anhui Huadian Lu'an Power Plant Co., Ltd	
China Power International Development Co., Ltd. Shanxi Shentou Power Generation Co., Ltd	
Inner Mongolia Datang International Renewable Resources Development Co., Ltd	
China Datang Group Co., Ltd. Datang Gansu Power Generation Co., Ltd	
China Datang Group Co., Ltd. Datang Lubei Power Generation Co., Ltd	
China Huadian Group Co., Ltd. Hubei Xiangyang Huadian Power Generation Co., Ltd	
China Huadian Group Co., Ltd. Guizhou Huadian Tangzhai Power Generation Co., Ltd	
China Huadian Group Co., Ltd. Shaanxi Huadian Yuheng Coal Power Co., Ltd	

Partial performance in the steel industry

Steel industry

China Baowu Iron and Steel Group Co., Ltd	Ma'anshan Iron and Steel Co., Ltd
Houying Group Haicheng Steel Co., Ltd	Xining Special Steel Co., Ltd
Hebei Xingang Iron and Steel Group Co., Ltd	Fujian Sangang (Group) Co., Ltd
Pangang Group Co., Ltd. Xichang Steel Vanadium Co., Ltd	Tonghua Steel Co., Ltd
Jiangsu shagang Group Co Ltd	Hebei Zongheng Iron and Steel Group Co., Ltd
Benxi Iron and Steel (Group) Co., Ltd	Anyang Iron and Steel Co., Ltd
Hyundai Steel Company of Hyundai Group in Korea	Zhongtian Steel Group Co., Ltd
Xuanhua Iron and Steel Group Co., Ltd	Rizhao Steel Rolling Co., Ltd
Shandong Iron and Steel Group Laiwu Iron and Steel Xinjiang Co., Ltd	
Shaanxi Iron and Steel Group Shaanxi Longmen Iron and Steel Co., Ltd ...	

Partial performance in the paper industry

Paper industry

Shandong Sun Paper Industry Co., Ltd	Vietnam Shun'an Paper Industry Co., Ltd
Dongguan Junye Paper Industry Co., Ltd	Shandong Tianhe Paper Industry Co., Ltd
Shandong Huatai Paper Industry Co., Ltd	Shanxi Qiangwei Paper Industry Co., Ltd
Shandong Huamai Paper Industry Co., Ltd	Puyang Longfeng Paper Industry Co., Ltd
Fuyu Chenming Paper Industry Co., Ltd	Henan Xinmi Hengfeng Paper Industry Co., Ltd
Shandong Tianzhang Paper Industry Co., Ltd	Shandong Ronghua Paper Industry Co., Ltd
Jiulong Global (China) Investment Group	Shanying International Holdings Co., Ltd
Shandong Hengyu Paper Industry Co., Ltd	Shandong Jianghe Paper Industry Co., Ltd
Jiangsu Yangzi Shengda Paper Industry Technology Development Co., Ltd	
Zhejiang Rongsheng Environmental Protection Paper Industry Co., Ltd ...	

Partial performance in the coal industry

Coal industry

Jiangxi Fengcheng Qujiang Coal Development Co., Ltd	Zaozhuang Mining (Group) Co., Ltd
Kailuan (Group) Weizhou Mining Co., Ltd	Guangxi Bainaihe Mining Co., Ltd
Guizhou Panxian Zisenyuan Group Company	Huating Coal Industry Group Co., Ltd
Shenhua Ningxia Coal Industry Group Co., Ltd	Shanxi Lanhua Coking Coal Baoxin Coal Industry Co., Ltd
Xinjiang Tunnan Coal Industry Co., Ltd	China Pingmei Shenma Group Thirteenth Mine
Shanxi Coke Group Co., Ltd	Zuoquan Xinshun Coal Industry Co., Ltd. of Shanmei Group
Shanxi Xiyang Fenghui Coal Industry Co., Ltd	Inner Mongolia Shendong Coal Company
Shandong Yankuang Group Co., Ltd	Xinjiang Xinsai Shuanglu Mining Co., Ltd
Yutian County Guyu Coal Coking Co., Ltd	Qinghai Jiangcang Coal Industry Co., Ltd
Shanxi Coal Import and Export Group Zuoyun East Gucheng Coal Industry Co., Ltd ...	

Partial performance in the water conservancy industry

Water conservancy industry

Shanghai Nanhui Collection Rainwater Pump Station	Jinghui Large Pump Station in Baiyin City, Gansu Province
Tianjin Binhai New Area Central Bridge Yinhe Pump Station	Inner Mongolia Wulante Qianqi Water Supply Project
Jingdian Large Pump Station of Jingtaichuan Electric Power Irrigation Management Bureau in Gansu Province	
Reclaimed Water Reuse Project of Housing and Urban Rural Development Bureau in Siping City,Jilin Province	
Yijingtan Large Pump Station in Alashan League, Inner Mongolia Autonomous Region	
Connection of the Chengdong Water System in Jingmen City, Hubei Province to the Sutai Lake Pumping Station	
Ecological Migration Poverty Alleviation and Development Water Supply Project in Central Gansu Province	
Continued Construction and Distribution Project of Zaozhuang City on the East Line of the South to North Water Diversion Project	
Hebei Urban and Rural Water Supply Source Project in Zhongning County, Ningxia Province	
Gansu Province Taoyin Water Supply Phase II Qin'an County Urban and Rural Water Supply Good Ground Beam Project ...	

Partial performance in the petrochemical industry

Petroleum industry

Sinopec Shengli Oilfield Co., Ltd	Shandong Haixin Petrochemical Co., Ltd
CNOOC Tianjin Liquefied Natural Gas Co., Ltd	China Petroleum Sichuan Petrochemical Co., Ltd
CNOOC Huizhou Petrochemical Co., Ltd	Shandong Huafeng Petroleum Technology Co., Ltd
China National Petroleum Corporation Daqing Oilfield Co., Ltd	Wusu Huatai Petrochemical Co., Ltd
Jianghan Petroleum Drill Bit Co., Ltd	Shandong Haixin Petrochemical Co., Ltd
PetroChina Karamay Oilfield Branch	China Petroleum Dagang Oilfield Company
Xinjiang Zhongji Petrochemical Co., Ltd	Qingdao China Petroleum Warehousing Co., Ltd
China National Petroleum Corporation Liaohe Oilfield Branch	CNOOC Guangxi Fangchenggang Natural Gas Co., Ltd
China Petroleum and Chemical Corporation Natural Gas Sichuan East Pipeline Branch	
Hainan Fushan Oilfield Exploration and Development Co., Ltd. of China National Petroleum Corporation ...	