

Huayuan Electric - The Link Connecting Power



Frequency Converter Product Selection Brochure



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Official Website

V2.1

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Group Introduction

Beijing Huayuan Group Co., Ltd. (referred to as Huayuan Group) is a state-owned enterprise under Xicheng District, Beijing, which has grown up with the reform and opening-up. Since its establishment, it has always adhered to the corporate purpose of "Originating from society, serving society", upheld the corporate spirit of "Perseverance, unity, exploration and struggle", adhered to market-oriented operations, rooted in Xicheng and deepened in Beijing, and gradually developed into a comprehensive enterprise group facing the whole country, with a listed platform Huayuan Holdings (600743)

18.58 billion
Registered Capital of the Group

379.85 billion
Total Assets

154
Wholly-Owned and Controlled Enterprises

1983
Total Employees

Huayuan Group takes "Technology +" as its core development line and "comprehensive service provider for a smart and better life" as its vision, and has gradually formed a business structure of "Three Core Businesses + Seven Supporting Businesses".



HUAYUAN ELECTRIC INTRODUCTION

Huayuan Electric Co., Ltd. is a holding subsidiary of Beijing Huayuan Group. Huayuan Electric focuses on the R&D, production and sales of industrial automation control products, and is committed to becoming an internationally competitive product and solution provider in the field of industrial automation, striving to be a reliable industrial partner that continuously creates value for users.



100% State-owned holdings



100 million registered capital



300+Partners



We are committed to becoming an internationally competitive product and solution provider in the field of industrial automation



Focus on customer needs and create competitive advantages for customers

Expand the potential of employees and create development space for employees



Responsibility, cooperation, innovation and win-win

60+

Appearance Patents

40+

Utility model patents

20+

Invention patents

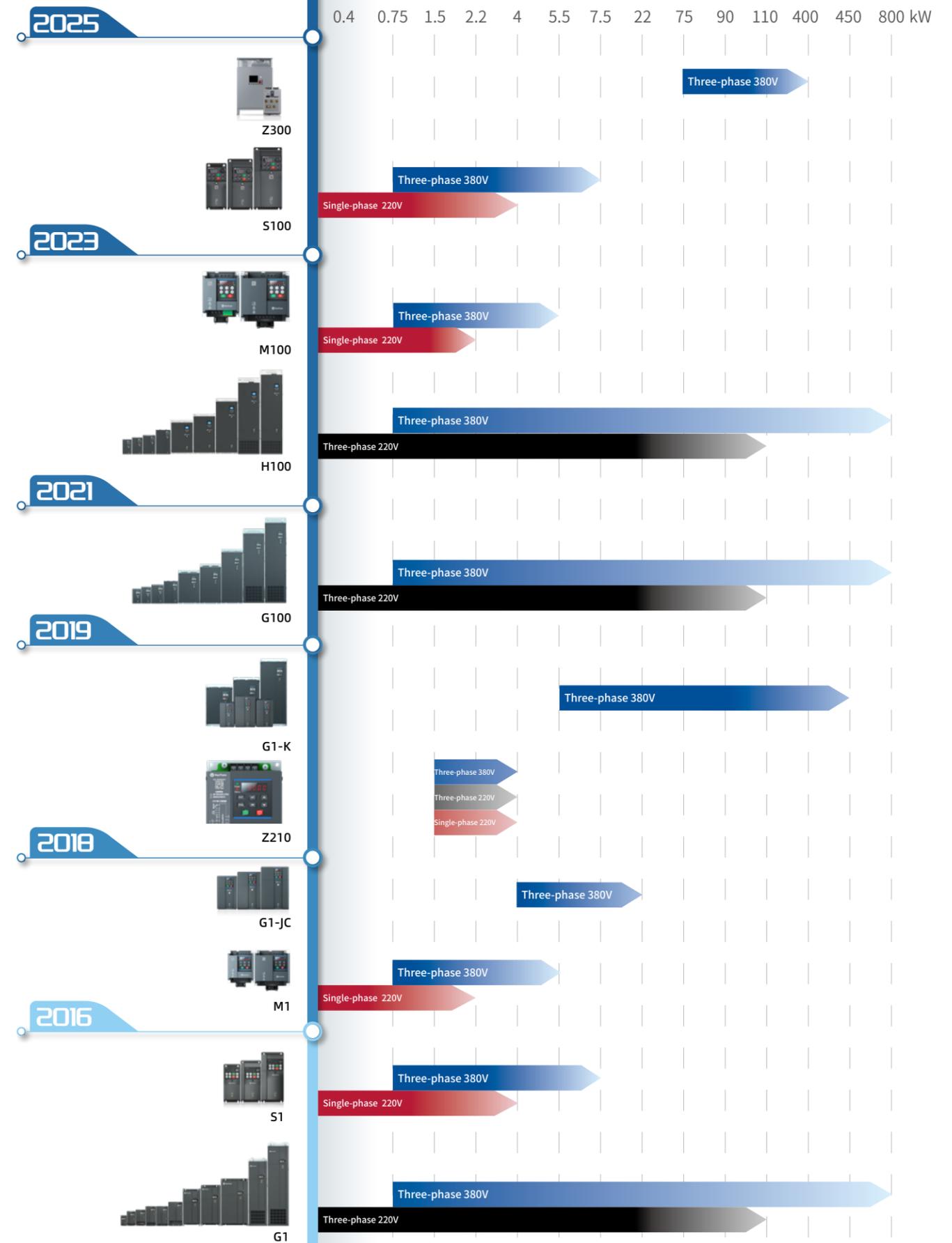
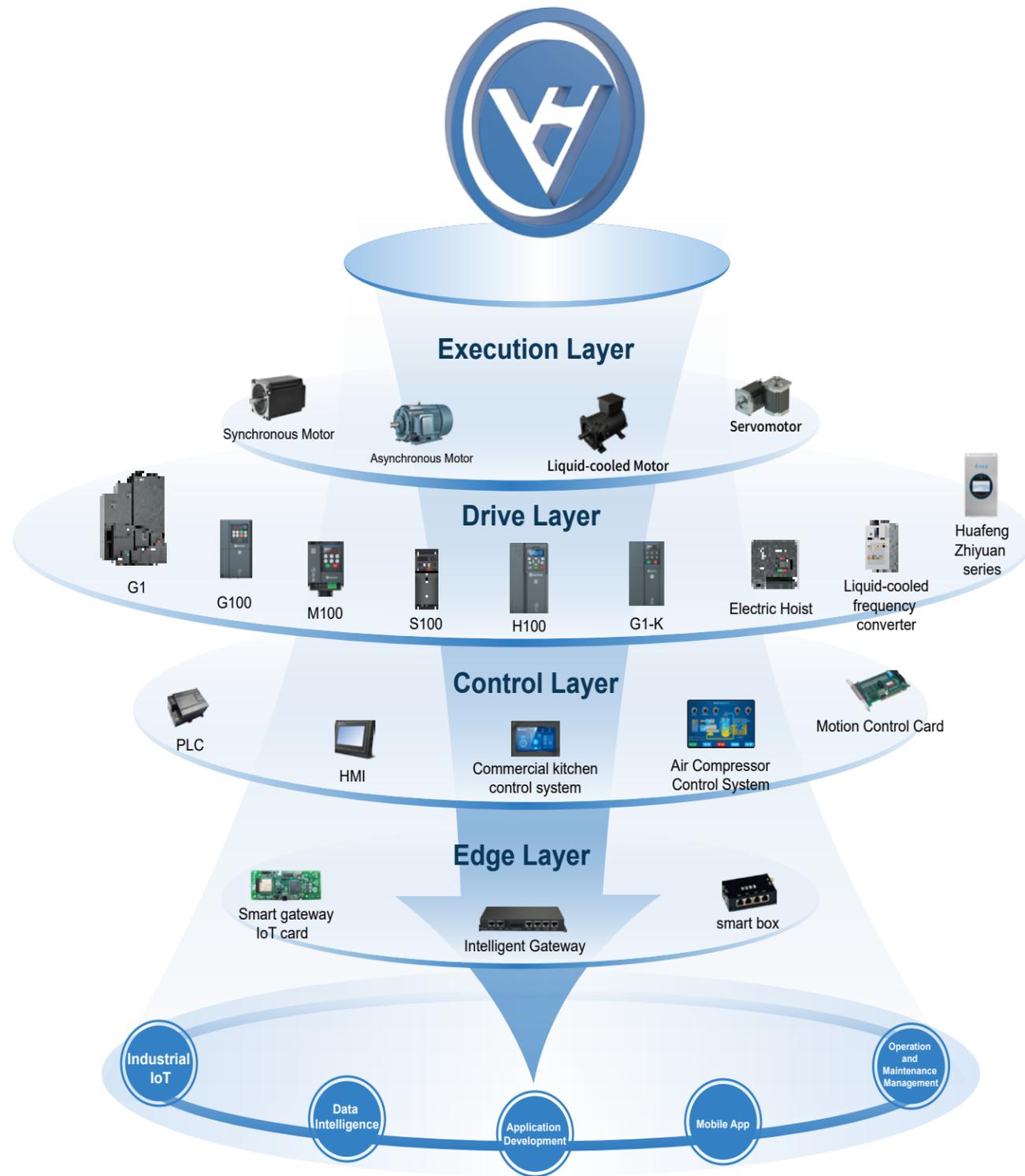
10+

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The company's R&D team accounts for more than 30% of the total staff, composed of more than 50 bachelors and masters. The team has an average industry experience of more than 8 years, integrating innovative vitality and practical wisdom. It adheres to the concept of standardized and modular design, uses a full digital design platform and finite element simulation, and masters the core control technology of motor drive. Huayuan's R&D team takes data as the anchor and customer needs as the orientation to continuously promote the improvement of product performance.



INDUSTRIAL AUTOMATION SOLUTION PLATFORM





General Purpose Frequency Converter

Since its establishment in 2015, Huayuan Electric has developed and produced a variety of frequency converters, including general-purpose, compact, protective, multi-functional, industry-specific types, etc. The power range is from 0.4kW to 800kW, mainly meeting the project needs of centrifuges, extruders, textiles, injection molding, cement, petrochemical and other industries in domestic and foreign markets.



PRODUCT INTRODUCTION

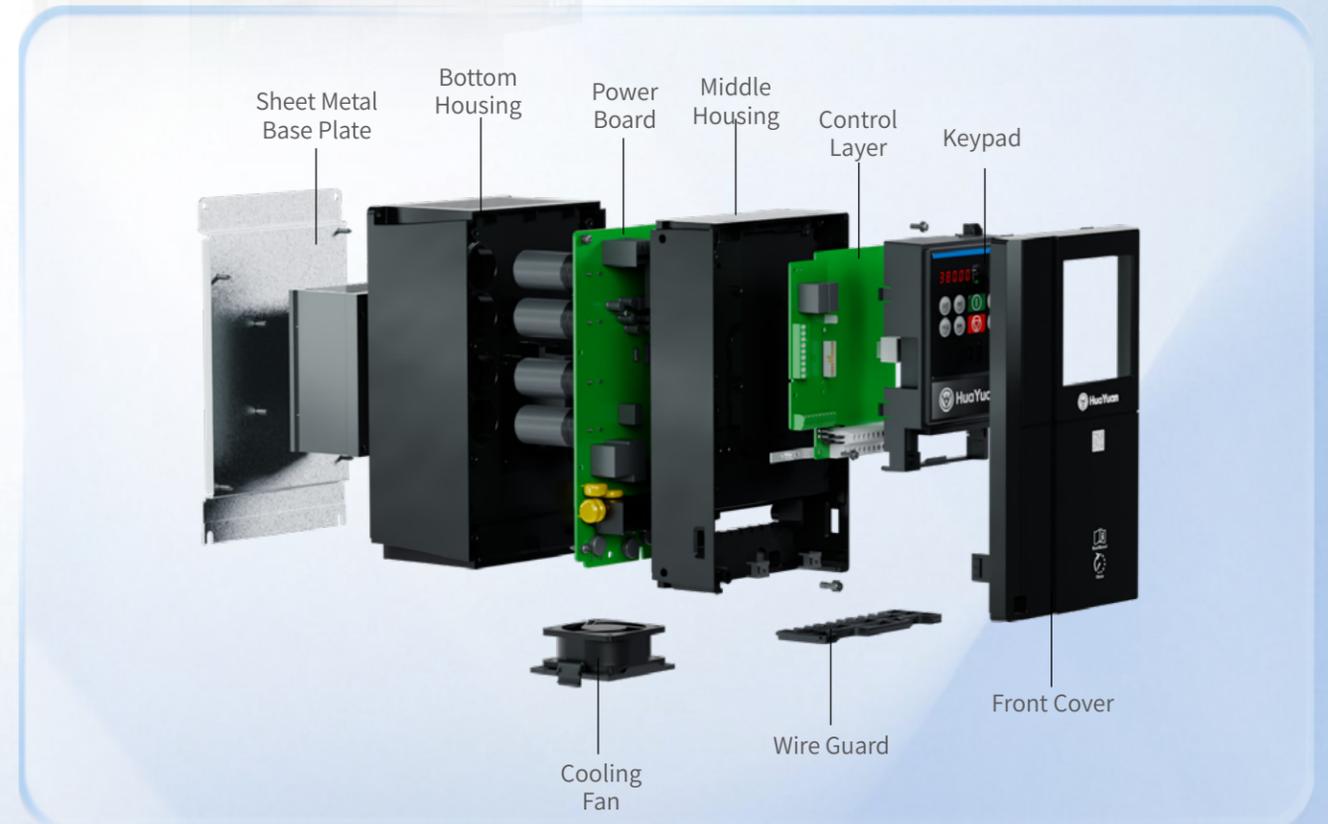


G100(E)

Series Open-Loop Vector Universal Frequency Converter

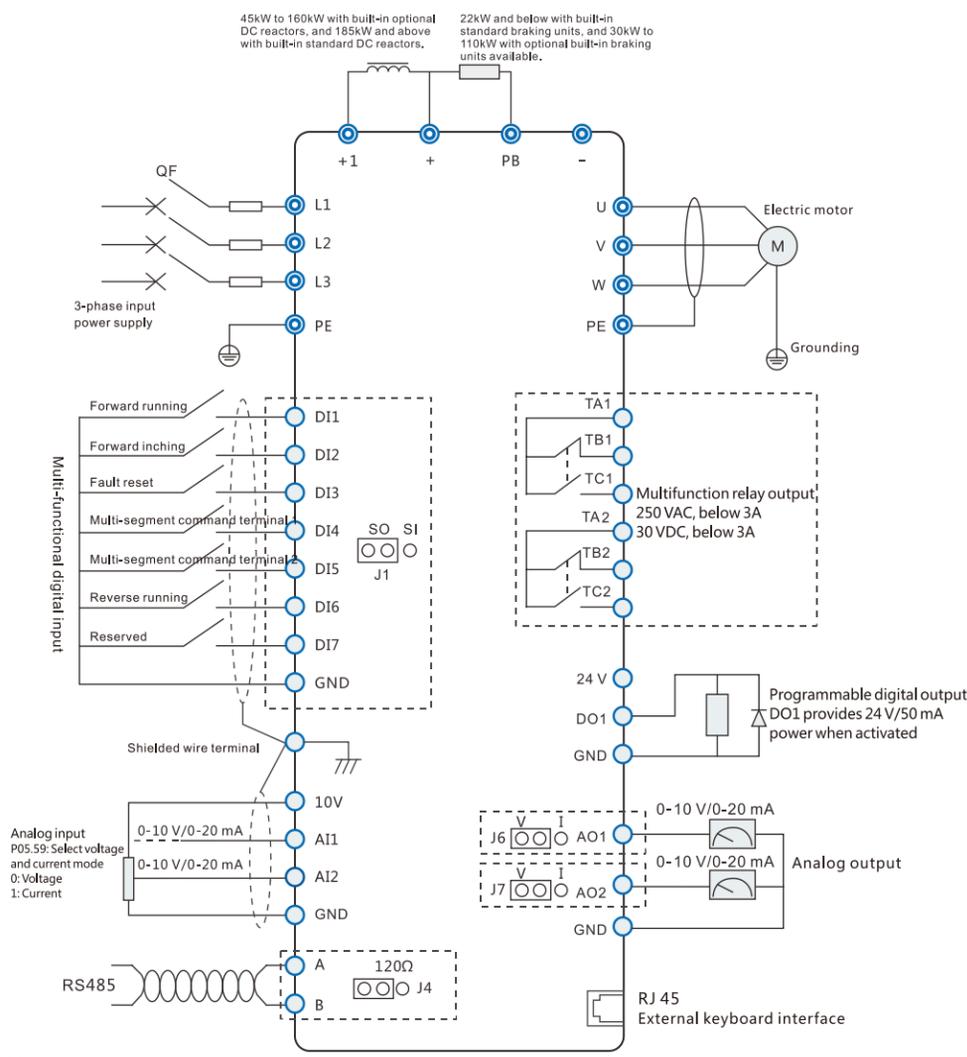
G100(E) - 4T 0040 1 N /00551L - A (- B -DCL)
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Product Series Name
- ② Voltage Level
 - 2S:Single-phase 220V
 - 2T:Three-phase 220V
 - 4T:Three-phase 380V
- ③ Power Level 0040: 4kW / 0055: 5.5kW ... 8000: 800kW
- ④ Power Digit 1: <10kW / 2: 10~99kW / 3: 100~999kW
- ⑤ Adapted Motor Type
 - N: General Purpose / L: Fan and Water Pump Type
- ⑥ Structural Frame A: Size A / B: Size B ...
- ⑦ Built-in Optional Brake Unit (Optional)
- ⑧ Built-in Optional DC Reactor (Optional)



PRODUCT SPECIFICATIONS

- Product Power** 0.75kW-800kW
- Control Mode** V/F, SVC
- Input Voltage** Three-phase 380V
- Motor Type** Supports synchronous and asynchronous motors
- Protection Level** IP20
- Operating Temperature** -10~55°C , derating required above 50°C
- Pollution Degree** PD2
- Overvoltage Level** OVCIII
- Altitude** Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m



Note:
 Jumper J7: AO2 output 0-10V, 0-20mA selection;
 Jumper J6: AO1 output 0-10V, 0-20mA selection;
 Jumper J4: RS485 terminal resistor selection;
 Jumper J1: DI input sink/source selection

Modle	Braking unit	DC resistor	Rated output voltage (VAC)	Normal Duty			Light Duty		
				Rated output current(A)	Rated input capacity (kVA)	Motor type (kW)	Rated output current(A)	Rated input capacity (kVA)	Motor type (kW)
G100-4T00071N-A	Built-in	/	380(4T)	2.5	1.7	0.75	/	/	/
G100-4T00151N-A	Built-in	/		4	2.6	1.5	/	/	/
G100-4T00221N-A	Built-in	/		5.2	3.4	2.2	/	/	/
G100(E)-4T00401N/00551L-A	Built-in	/		10	5.9	4	13	8.6	5.5
G100(E)-4T00551N/00751L-A	Built-in	/		13	8.6	5.5	17	11.2	7.5
G100(E)-4T00751N/01102L-B	Built-in	/		17	11.2	7.5	25	16.5	11
G100(E)-4T01102N/01502L-B	Built-in	/		25	16.5	11	32	21	15
G100(E)-4T01502N/01852L-C	Built-in	/		32	21	15	38	25	18.5
G100(E)-4T01852N/02202L-C	Built-in	/		38	25	18.5	45	30	22
G100(E)-4T02202N/03002L-C	Built-in	/		45	30	22	60	40	30
G100(E)-4T03002N/03702L-D	/	/		60	40	30	75	50	37
G100(E)-4T03002N/03702L-D-B	Built-in	/		60	40	30	75	50	37
G100(E)-4T03702N/04502L-D	/	/		75	50	37	90	60	45
G100(E)-4T03702N/04502L-D-B	Built-in	/		75	50	37	90	60	45
G100(E)-4T04502N/05502L-E	/	/		90	60	45	110	75	55
G100(E)-4T04502N/05502L-E-B	Built-in	/		90	60	45	110	75	55
G100(E)-4T04502N/05502L-E-DCL	/	Built-in		90	60	45	110	75	55
G100(E)-4T05502N/07502L-E	/	/		110	75	55	150	99	75
G100(E)-4T05502N/07502L-E-B	Built-in	/		110	75	55	150	99	75
G100(E)-4T05502N/07502L-E-DCL	/	Built-in		110	75	55	150	99	75
G100(E)-4T07502N/09002L-E	/	/		150	99	75	176	116	90
G100(E)-4T07502N/09002L-E-B	Built-in	/		150	99	75	176	116	90
G100(E)-4T07502N/09002L-E-DCL	/	Built-in		150	99	75	176	116	90
G100(E)-4T09002N/11003L-F	/	/		176	116	90	210	139	110
G100(E)-4T09002N/11003L-F-B	Built-in	/		176	116	90	210	139	110
G100(E)-4T09002N/11003L-F-DCL	/	Built-in		176	116	90	210	139	110
G100(E)-4T11003N/13203L-F	/	/		210	139	110	250	164	132
G100(E)-4T11003N/13203L-F-B	Built-in	/		210	139	110	250	164	132
G100(E)-4T11003N/13203L-F-DCL	/	Built-in		210	139	110	250	164	132
G100(E)-4T13203N/16003L-G	/	/		250	164	132	300	197	160
G100(E)-4T13203N/16003L-G-DCL	/	Built-in		250	164	132	300	197	160
G100(E)-4T16003N/18503L-G	/	/		300	197	160	340	224	185
G100(E)-4T16003N/18503L-G-DCL	/	Built-in		300	197	160	340	224	185
G100(E)-4T18503N/20003L-H	/	Built-in		340	224	185	380	250	200
G100(E)-4T20003N/22003L-H	/	Built-in		380	250	200	415	273	220
G100(E)-4T22003N/25003L-H	/	Built-in		415	273	220	470	309	250
G100(E)-4T25003N/28003L-H	/	Built-in		470	309	250	520	342	280
G100(E)-4T28003N/31503L-J	/	Built-in		520	342	280	600	395	315
G100(E)-4T31503N/35003L-J	/	Built-in		600	395	315	650	421	350
G100(E)-4T35003N/40003L-J	/	Built-in		650	421	350	720	454	400
G100(E)-4T40003N/45003L-J	/	Built-in	720	454	400	810	530	450	
G100(E)-4T50003N/L-K	/	Built-in	940	618	500	-	-	-	
G100(E)-4T63003N/L-K	/	Built-in	1200	790	630	-	-	-	
G100(E)-4T80003N/L-K	/	Built-in	1400	908	800	-	-	-	
*G100(E)-4T04502N/05502L-D	/	/	90	60	45	110	75	55	
*G100(E)-4T04502N/05502L-D-B	Built-in	/	90	60	45	110	75	55	

Tips: Models with * are suitable for specific occasions, please consult customer service for specific information

Digital Input

7-channel Optocoupler Isolated Digital Input: DI1~DI7, supports 12V and 24V level, sink or source selectable via jumper. DI7 can be used as a high-speed pulse input with a maximum frequency of 100 kHz.

Analog Input

2-channel Analog Input Terminal: 0-10V or 0-20mA. Both AI terminals can be used as Digital Input (DI) terminals.

Digital Output

1-channel Programmable Switch Output: Output level 0-24V, maximum frequency 100 kHz, maximum output current 50mA.

Relay Output

2-channel Programmable Relay Output (Form C): 250 VAC/3 A, 30 VDC/3 A.

Analog Output

2-channel Analog Output Terminal: 0-10V or 0-20mA. The AO output mode can be set (0-10V, 10-0V, 2-10V, 10-2V).

Communication

Communication and Bus: Standard 485 communication with MODBUS-RTU protocol. Optional bus protocols include Canopen, EtherCAT, EtherNET/IP, Modbus TCP/IP, Profibus, and Profinet.

Power Supply

Power Supply: 24V ($\pm 15\%$), maximum output current: 100mA; 10V ($\pm 5\%$), maximum output current: 20mA.

PRODUCT FEATURES

Built-in Brake Unit

Standard brake unit below a certain power, optional built-in within a specific power range

Built-in DC Reactor

Optional built-in DC reactor within a specific power range, standard built-in DC reactor above a certain power

Optional Card

Supports multiple bus protocols, motor temperature monitoring and I/O expansion functions are optional, only one optional card can be supported at the same time

Built-in Filter Optional

Users can choose built-in filter according to application needs to meet environmental requirements

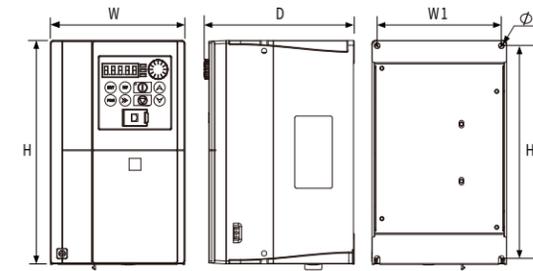
Optional Multi-language LCD Keyboard

Supports Chinese, English, Russian three-language LCD keyboard, Android system can control the frequency converter by installing Huayuan APP

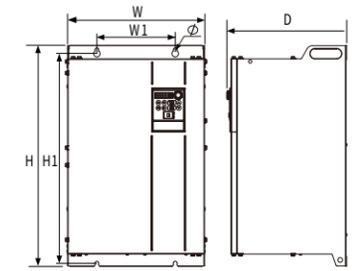
User-defined Parameter Group

Users can select required function codes to summarize into a custom parameter group for easy debugging and management

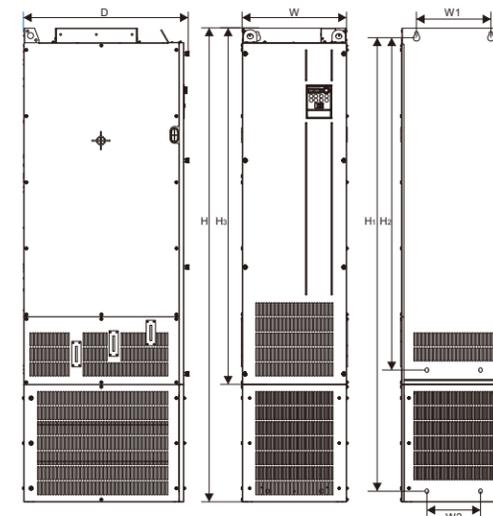
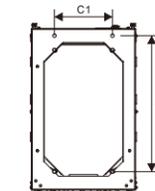
DIMENSIONS



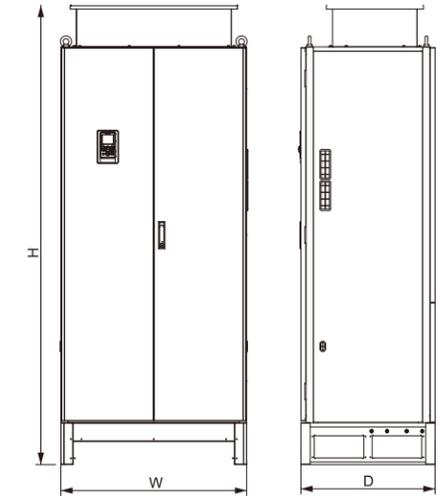
Frame A/B/C/D



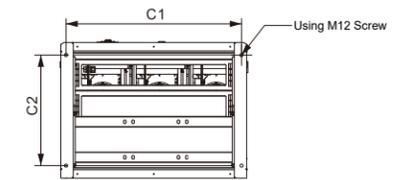
Frame E/F/G



Frame H/J



Frame K



size	Overall dimension(mm)						Installation size(mm)				Screw size	Torque (N·m)
	W1	W2	H1	H2	C1	C2	W	H	D	H3		
A	132	-	224	-	-	-	143	235	160	-	M5	3±10%
B	150	-	250	-	-	-	167	265	170	-	M5	3±10%
C	183	-	285	-	-	-	200	300	186	-	M5	3±10%
D	218	-	375	-	-	-	235	390	796	-	M6	4.5±10%
E	200	-	525	-	-	-	350	544	311	-	M8	11±10%
F	200	-	625	-	-	-	350	644	311	-	M8	11±10%
G	200	-	865	-	-	-	350	884	311	-	M8	11±10%
H	280	180	1540	1140	221.5	405	350	1608	545	1208	M10	22±10%
J	280	180	1665	1265	221.5	405	350	1738	545	1338	M12	39±10%
K	-	-	-	-	850	530	900	2200	650	-	M12	39±10%

OPTIONAL ACCESSORIES

Size	Installation Method			Optional Accessories				
	Wall-mounting Type	Wall-mounting Type	Floor-standing Type	Flush-mounting Kit	NEMA1 Protective Accessory Kit	Shielded Cable Grounding Kit	Dust-proof Accessory Kit	Base
A	✓	✓	/	✓	✓	✓	✓	/
B	✓	✓	/	✓	✓	✓	✓	/
C	✓	✓	/	✓	✓	✓	✓	/
D	✓	✓	/	✓	✓	✓	✓	/
E	✓	✓	/	✓	/	/	✓	/
F	✓	✓	/	✓	/	/	✓	/
G	✓	✓	/	✓	/	/	✓	/
H	✓	/	✓	/	✓	/	/	✓
J	✓	/	✓	/	✓	/	/	✓
K	/	/	✓	/	/	/	/	/

Product Name	Product Model	Description	Limitations
Communication Card	EG100TX11	CANopen Communication Card	The G100 series and G100E series have independent configuration files. Only one type of card (Communication, I/O Expansion, or Temperature Detection) can be supported at a time.
	EG100TX31	EtherCAT Communication Card	
	EG100TX51	EtherNet/IP Communication Card	
	EG100TX61	Modbus TCP/IP Communication Card	
	EG100TX21	PROFIBUS Communication Card	
	EG100TX41	PROFINET Communication Card	
I/O Expansion Card	EG100IO11	I/O Expansion Card: 4-ch DI, 2-ch AI (0~10V/0~20mA), 4-ch DO (Open-collector output), 2-ch NO/NC Relay	/
Temperature Detection Card	EG100PT11	Supports 2-channel PT100	Only supports the G100E series.
Keypad	VDP-BT22	Supports 2-channel PT100	/
	VDP-SE12	Dual-Display Keypad, External Cable Distance 200m	
	VDP-BC42	Single-Display Keypad, External Cable Distance 200m	

PRODUCT INTRODUCTION



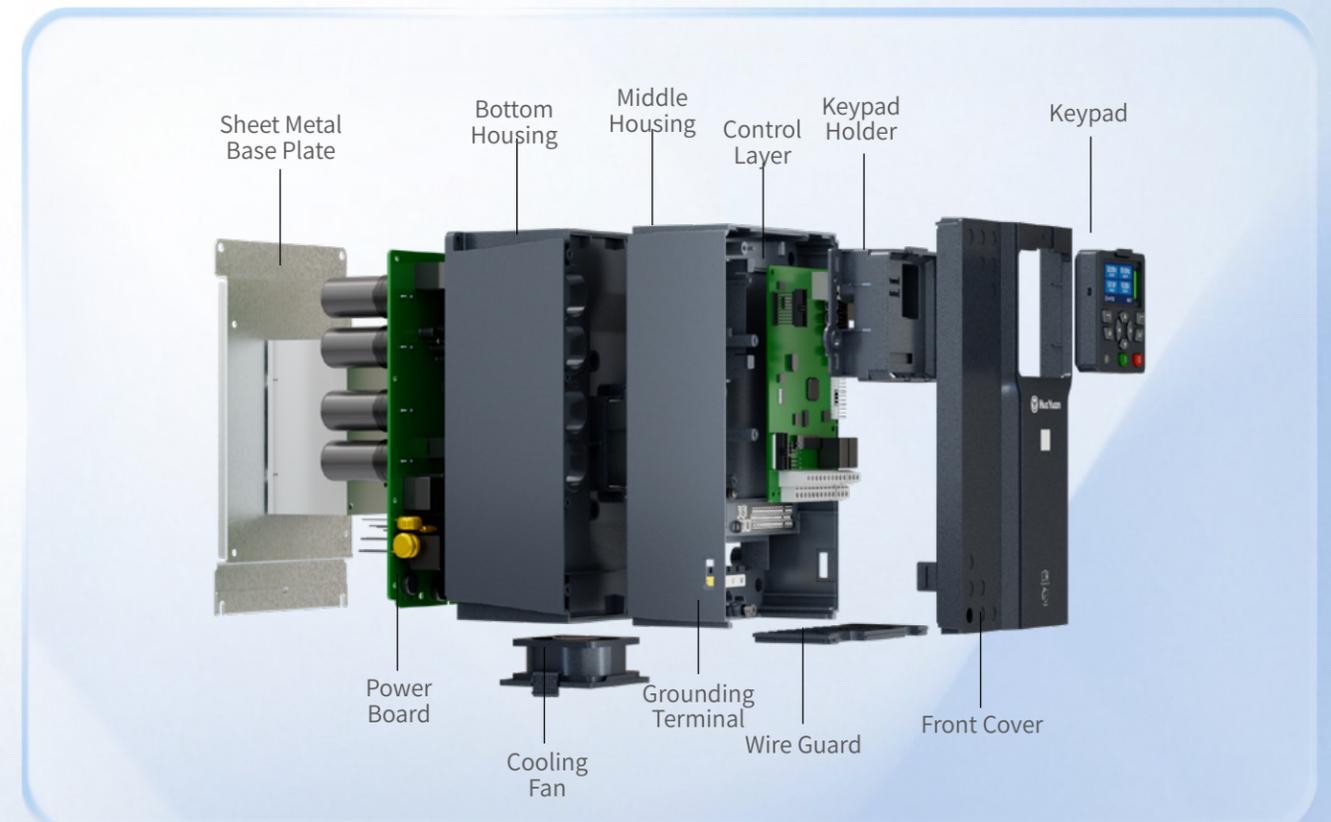
H100

Series Multi-Functional Frequency Converter



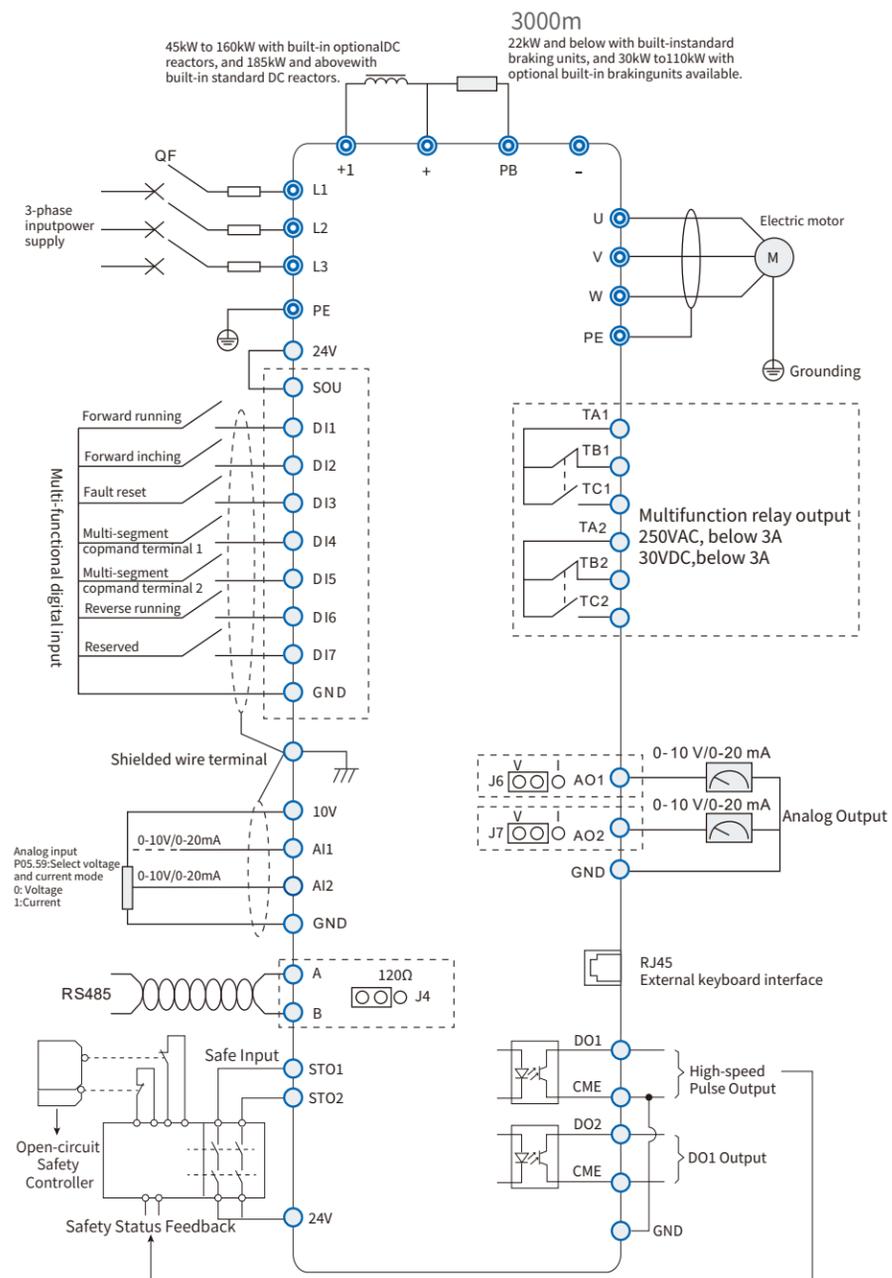
H100- 4T 0040 1 N /00551L - A (- B -DCL)

- ① Product Series Name
- ② Voltage Level
2S:Single-phase 220V
2T:Three-phase 220V
4T:Three-phase380V
- ③ Power Level 0040: 4kW / 0055: 5.5kW ... 8000: 800kW
- ④ Power Digit 1: <10kW / 2: 10~99kW / 3: 100~999kW
- ⑤ Adapted Motor Type
N: General Purpose / L: Fan and Water Pump Type
- ⑥ Structural Frame A: Size A / B: Size B ...
- ⑦ Built-in Optional Brake Unit (Optional)
- ⑧ Built-in Optional DC Reactor (Optional)



PRODUCT SPECIFICATIONS

- Product Power** 0.75kW-800kW
- Control Mode** V/F, SVC, FVC
- Input Voltage** Three-phase 380V
- Motor Type** Supports synchronous and asynchronous motors
- Protection Level** IP20
- Operating Temperature** -10~55°C , derating required above 50°C
- Pollution Degree** PD2
- Overvoltage Level** OVCIII
- Altitude** Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m



Modle	Braking unit	DC resistor	Rated output voltage (VAC)	Normal Duty			Light Duty		
				Rated output current(A)	Rated input capacity (kVA)	Motor type (kW)	Rated output current(A)	Rated input capacity (kVA)	Motor type (kW)
H100-4T00071N-A	Built-in	/	380(4T)	2.5	1.7	0.75	/	/	/
H100-4T00151N-A	Built-in	/		4	2.6	1.5	/	/	/
H100-4T00221N-A	Built-in	/		5.2	3.4	2.2	/	/	/
H100(E)-4T00401N/00551L-A	Built-in	/		10	5.9	4	13	8.6	5.5
H100(E)-4T00551N/00751L-A	Built-in	/		13	8.6	5.5	17	11.2	7.5
H100(E)-4T00751N/01102L-B	Built-in	/		17	11.2	7.5	25	16.5	11
H100(E)-4T01102N/01502L-B	Built-in	/		25	16.5	11	32	21	15
H100(E)-4T01502N/01852L-C	Built-in	/		32	21	15	38	25	18.5
H100(E)-4T01852N/02202L-C	Built-in	/		38	25	18.5	45	30	22
H100(E)-4T02202N/03002L-C	Built-in	/		45	30	22	60	40	30
H100(E)-4T03002N/03702L-D	/	/		60	40	30	75	50	37
H100(E)-4T03002N/03702L-D-B	Built-in	/		60	40	30	75	50	37
H100(E)-4T03702N/04502L-D	/	/		75	50	37	90	60	45
H100(E)-4T03702N/04502L-D-B	Built-in	/		75	50	37	90	60	45
H100(E)-4T04502N/05502L-E	/	/		90	60	45	110	75	55
H100(E)-4T04502N/05502L-E-B	Built-in	/		90	60	45	110	75	55
H100(E)-4T04502N/05502L-E-DCL	/	Built-in		90	60	45	110	75	55
H100(E)-4T05502N/07502L-E	/	/		110	75	55	150	99	75
H100(E)-4T05502N/07502L-E-B	Built-in	/		110	75	55	150	99	75
H100(E)-4T05502N/07502L-E-DCL	/	Built-in		110	75	55	150	99	75
H100(E)-4T07502N/09002L-E	/	/		150	99	75	176	116	90
H100(E)-4T07502N/09002L-E-B	Built-in	/		150	99	75	176	116	90
H100(E)-4T07502N/09002L-E-DCL	/	Built-in		150	99	75	176	116	90
H100(E)-4T09002N/11003L-F	/	/		176	116	90	210	139	110
H100(E)-4T09002N/11003L-F-B	Built-in	/		176	116	90	210	139	110
H100(E)-4T09002N/11003L-F-DCL	/	Built-in		176	116	90	210	139	110
H100(E)-4T11003N/13203L-F	/	/		210	139	110	250	164	132
H100(E)-4T11003N/13203L-F-B	Built-in	/		210	139	110	250	164	132
H100(E)-4T11003N/13203L-F-DCL	/	Built-in	210	139	110	250	164	132	
H100(E)-4T13203N/16003L-H	/	/	250	164	132	300	197	160	
H100(E)-4T13203N/16003L-H-DCL	/	Built-in	250	164	132	300	197	160	
H100(E)-4T16003N/18503L-H	/	/	300	197	160	340	224	185	
H100(E)-4T16003N/18503L-H-DCL	/	Built-in	300	197	160	340	224	185	
H100(E)-4T18503N/20003L-H	/	Built-in	340	224	185	380	250	200	
H100(E)-4T20003N/22003L-H	/	Built-in	380	250	200	415	273	220	
H100(E)-4T22003N/25003L-H	/	Built-in	415	273	220	470	309	250	
H100(E)-4T25003N/28003L-H	/	Built-in	470	309	250	520	342	280	
H100(E)-4T28003N/31503L-J	/	Built-in	520	342	280	600	395	315	
H100(E)-4T31503N/35003L-J	/	Built-in	600	395	315	650	421	350	
H100(E)-4T35003N/40003L-J	/	Built-in	650	421	350	720	454	400	
H100(E)-4T40003N/45003L-J	/	Built-in	720	454	400	810	530	450	
H100(E)-4T50003N/L-K	/	Built-in	940	618	500	-	-	-	
H100(E)-4T63003N/L-K	/	Built-in	1200	790	630	-	-	-	
H100(E)-4T80003N/L-K	/	Built-in	1400	908	800	-	-	-	
*H100(E)-4T04502N/05502L-D	/	/	90	60	45	110	75	55	
*H100(E)-4T04502N/05502L-D-B	Built-in	/	90	60	45	110	75	55	

Tips: Models with * are suitable for specific occasions, please consult customer service for specific information

Digital Input

7-channel optocoupler isolated digital input: DI1~DI7, supports 12V and 24V levels. Sink or source can be selected via jumper. DI7 can be used as a high-speed pulse input with a maximum frequency of 100 kHz.

Analog Input

Analog Input: 2-channel analog input terminals: 0-10V or 0-20mA. Both AI terminals can be used as digital input (DI) terminals.

Digital Output

2-channel programmable switch outputs, open-collector output, maximum frequency 100 kHz.

Relay Output

2-channel programmable relay output (Form C), 250 VAC/3 A, 30 VDC/3 A.

Analog Output

2-channel analog output terminals: 0-10V or 0-20mA. The AO output mode can be set (0-10V, 10-0V, 2-10V, 10-2V).

Communication

Standard 485 communication with MODBUS-RTU protocol. Optional bus protocols include CANopen, EtherCAT, EtherNet/IP, Modbus TCP/IP, PROFIBUS, and PROFINET.

Encoder

Options include incremental encoder, resolver encoder, and single-turn absolute encoder (23-bit).

Power Supply

24V ($\pm 15\%$), maximum output current: 100mA; 10V ($\pm 5\%$), maximum output current: 20mA.

STO

Built-in STO (Safe Torque Off) function, meeting SIL3 standard.

PRODUCT FEATURES

Unified Control for Induction and Synchronous Motors: A unified drive architecture for both induction and synchronous motors, with different motor control achieved through parameter settings.

Built-in DC Reactor: Built-in DC reactor for 45-800kW models, effectively suppresses harmonics, improves overall power factor, especially suitable for applications sensitive to grid quality.

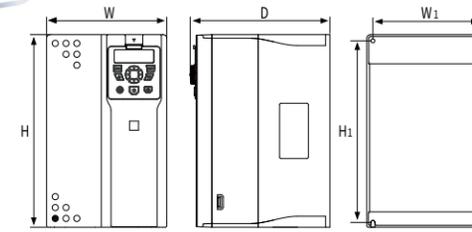
Dual-mode Temperature Monitoring: Optional PT100/KTY84 dual sensor interface for real-time motor winding temperature monitoring, protection accuracy up to $\pm 5^\circ \text{C}$.

Multi-Protocol Bus Support: Optional 8 industrial bus protocols including PROFINET, EtherCAT, and CANopen.

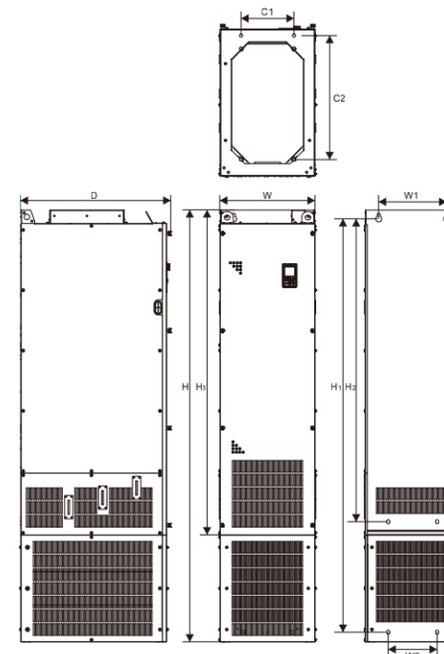
Closed-loop Control: Supports dual closed-loop control, provides various PG cards to meet customer needs, supports frequency division output and pulse input.

Optional Built-in C3 Filter: Users can optionally configure a built-in C3 filter based on application requirements to meet environmental standards.

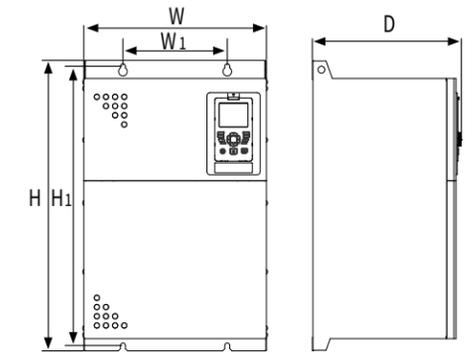
DIMENSIONS



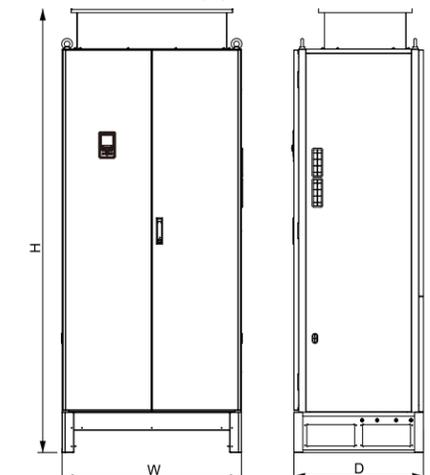
Frame A/B/C/D



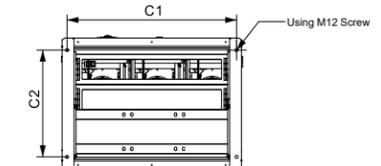
Frame H/J



Frame E/F/G



Frame K



Frame	Overall dimension(mm)					Installation size(mm)			Screw size	Torque (N·m)
	W1	H1	H2	C1	C2	W	H	D		
A	132	224	-	-	-	143	235	185	M5	3 \pm 10%
B	150	250	-	-	-	167	265	195		
C	183	285	-	-	-	200	300	210		
D	218	343	-	-	-	235	360	220	M6	4.5 \pm 10%
E	200	530	-	-	-	350	550	285	M8	11 \pm 10%
F	200	615	-	-	-	350	635	305		
G	300	770	-	-	-	450	800	380		
H	400	970	1000	476	290	560	1400	380	M12	39 \pm 10%
J	510	970	1000	586	290	670	1400	380		
K	-	-	-	885	500	854	2000	600		

OPTIONAL ACCESSORIES

Size	Installation Method			Optional Accessories				
	Wall-mounting Type	Wall-mounting Type	Floor-standing Type	Flush-mounting Kit	NEMA1 Protective Accessory Kit	Shielded Cable Grounding Kit	Dust-proof Accessory Kit	Base
A	✓	/	/	✓	✓	✓	✓	/
B	✓	/	/	✓	✓	✓	✓	/
C	✓	/	/	✓	✓	✓	✓	/
D	✓	✓	/	✓	✓	✓	✓	/
E	✓	✓	/	✓	/	/	✓	/
F	✓	✓	/	✓	/	/	✓	/
G	✓	✓	/	✓	/	/	✓	/
H	✓	/	✓	/	✓	/	/	✓
J	✓	/	✓	/	✓	/	/	✓
K	/	/	✓	/	/	/	/	/

Product Name	Product Model	Description
Communication Card	EH100TX11	CANopen Communication Card
	EH100TX31	EtherCAT Communication Card
	EH100TX51	EtherNet/IP Communication Card
	EH100TX61	Modbus TCP/IP Communication Card
	EH100TX21	PROFIBUS Communication Card
	EH100TX41	PROFINET Communication Card
I/O Expansion Card	EH100IO11	I/O Expansion Card: 4-ch DI, 2-ch AI (0~10V/0~20mA), 4-ch DO (Open-collector output), 2-ch NO/NC Relay
Temperature Detection Card	EH100PT11	Supports 2-channel PT100 temperature detection.
PG Card	EH100PG11	5V Differential Multi-function Incremental PG Card: Supports dual incremental encoders, 1x, 2x, 4x, 6x frequency division output, and supports A, B, Z pulse input.
	EH100PG21	Resolver PG Card, supports 2-channel PT100 temperature detection.
Keypad	VDP-BT22	Supports 2-channel PT100
	VDP-SE12	Dual-Display Keypad, External Cable Distance 200m
	VDP-BC42	Single-Display Keypad, External Cable Distance 200m

PRODUCT INTRODUCTION



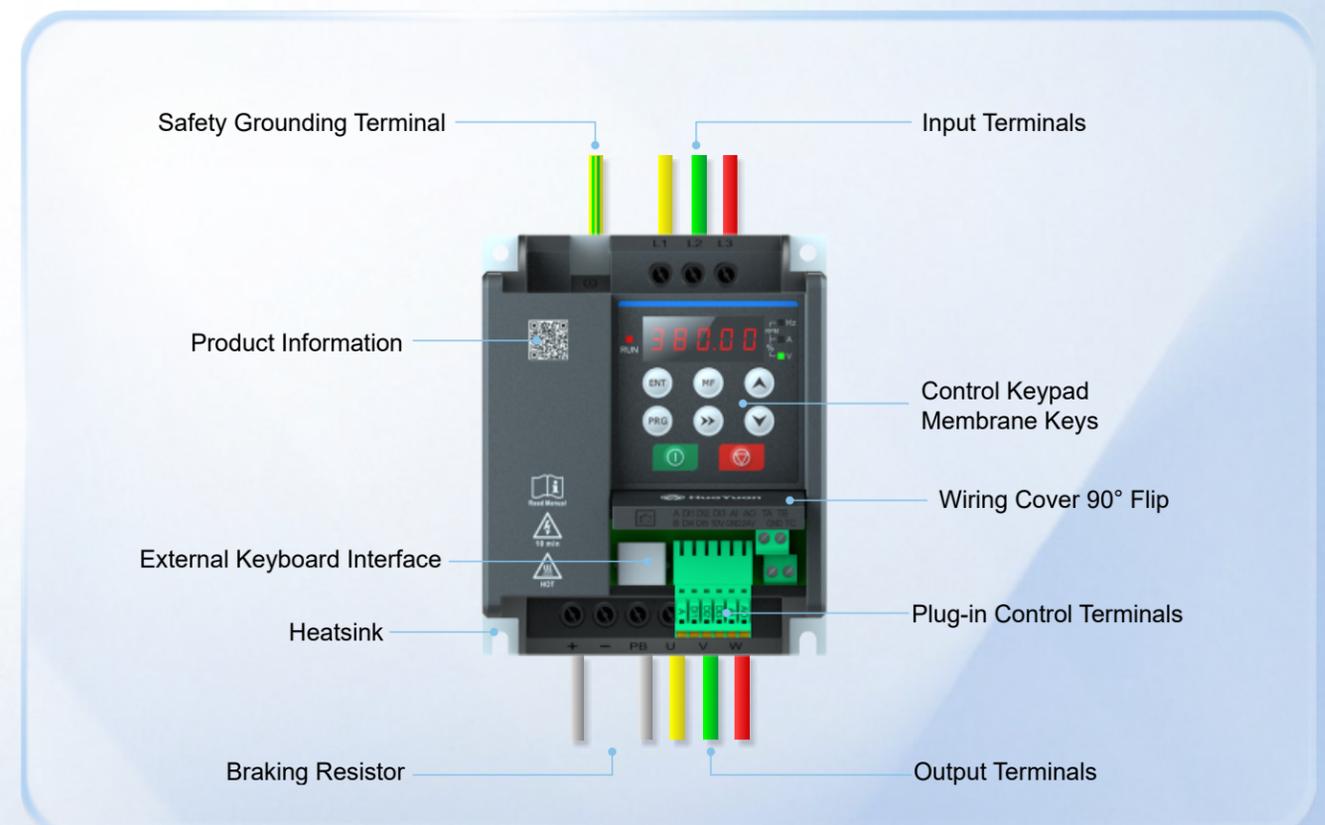
M100(E)

Series Protective Open-Loop Vector Frequency Converter



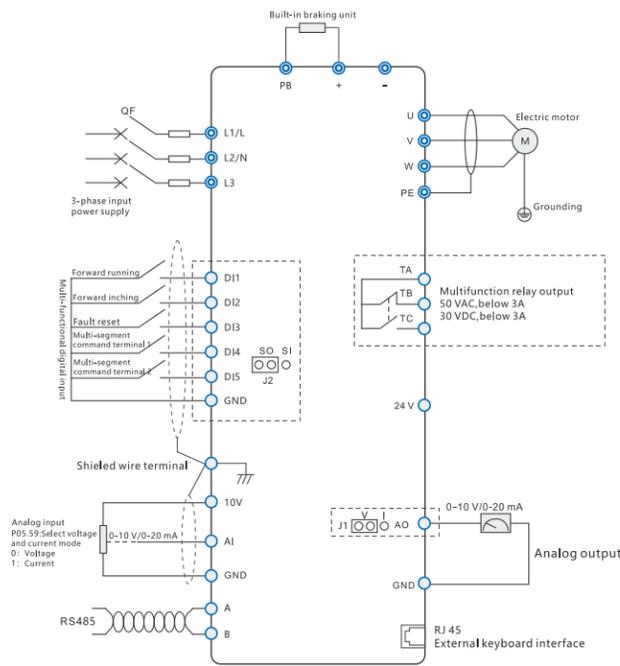
M100(E) - 4 T 0007 1 N - A

- ① Product Series Name
- ② Voltage Class 2: 220V / 4: 380V
- ③ Power Supply Phase S: Single-phase / T: Three-phase 380V
- ④ Power Rating 0007: 0.75kW / 0015: 1.5kW ...
- ⑤ Power Digit 1: <10kW
- ⑥ Matching Motor Type N: General Purpose
- ⑦ Chassis Frame A: Size A / B: Size B ...



PRODUCT SPECIFICATIONS

Product Power	0.75kW-5.5kW	Operating Temperature	-10~55°C , derating required above 50°C
Control Mode	V/F, SVC	Pollution Degree	PD2
Input Voltage	Single-phase220V, Three-phase 380V	Overvoltage Level	OVCIII
Motor Type	Supports synchronous and induction motors.	Altitude	Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m
Protection Level	IP20		



Model	Rated Voltage (V)	Rated Input Current (A)	Rated Output Current (A)	Rated Capacity (kVA)	Matching Motor (kW)
M100(E)-2S00071N-A	Single-phase220	9.5	4.0	1.5	0.75
M100(E)-2S00151N-A		14	6.5	2.8	1.5
M100(E)-4T00071N-A		3.2	2.5	1.7	0.75
M100(E)-4T00151N-A	Three-phase 380	5.0	4.0	2.6	1.5
M100(E)-4T00221N-A		5.8	5.2	3.4	2.2
M100(E)-2T00221N-B	Three-phase 220	25	9.0	4.1	2.2
M100(E)-4T00401N-B	Three-phase 380	13	10	5.9	4.0
M100(E)-4T00551N-B		15	13	8.6	5.5
*M100(E)-4T00751N-B-JC		20	17	11.2	7.5

Note: Models marked with * are suitable for specific applications. Please consult customer service for details.

Digital Input

5-channel optocoupler isolated digital input: DI1~DI5, supports 24V level. Sink or source can be selected via jumper.

Analog Input

1-channel analog input terminal: 0-10V or 0-20mA. The AI terminal can be used as a digital input (DI) terminal.

Relay Output

1-channel programmable relay output (Form C), 250 VAC/3 A, 30 VDC/3 A.

Analog Output

1-channel analog output terminal: 0-10V or 0-20mA. The AO output mode can be set (0-10V, 10-0V, 2-10V, 10-2V).

Communication

Standard 485 communication with MODBUS-RTU protocol.

Power Supply

24V (±15%), maximum output current: 100mA; 10V (±5%), maximum output current: 20mA.

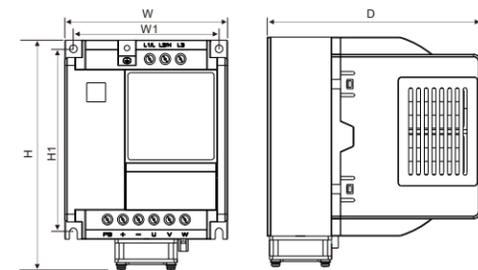
PRODUCT FEATURES

Optimized Environmental Resistance Design: Membrane keypad to prevent dust, oil, and other contaminants. NEMA1 protection is optional for all power ratings.

Plug-in Terminal Design: Top-in bottom-out wiring, convenient connection, simple operation, and less error-prone.

Rich Peripheral Functions: Can be externally connected to braking resistors. Can be externally connected to an EMI filter to avoid electromagnetic interference with equipment. Can be adapted to heatsinks of different sizes.

DIMENSIONS



Frame	Installation size(mm)		Overall dimension(mm)			Screw size	Torque (N·m)
	W1	H1	W	H	D		
A	94	117	105	148	138	M4	1.5±10%
B	129	129	140	161	148	M4	1.5±10%

*M100(E)-4T00071N-A (fanless)Dimensions: W: 105, H: 127, D: 124

PRODUCT INTRODUCTION



S100(E)

Series Compact Open-Loop Vector Frequency Converter

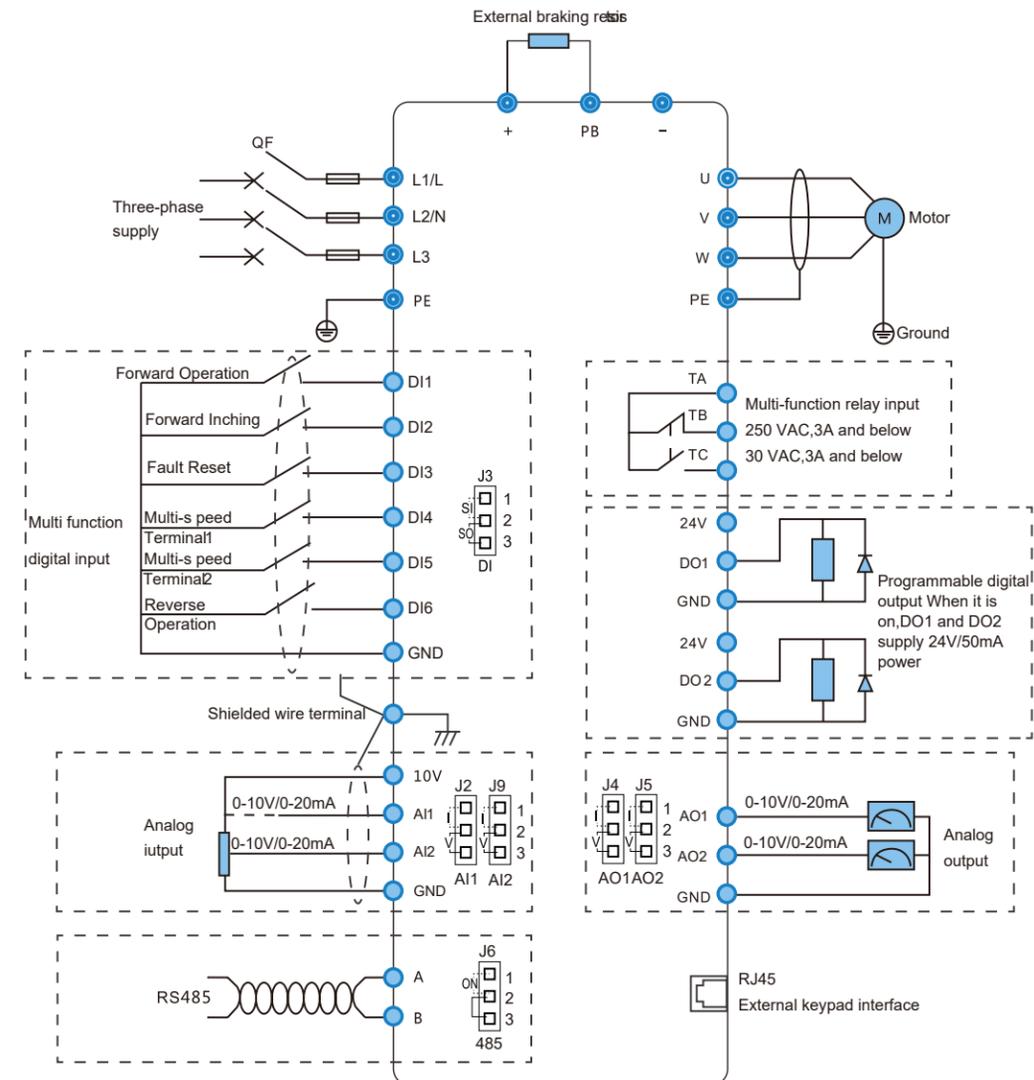
S100(E) - 2 S 0004 1 N - A

- ① Product Series Name
- ② Voltage Class 2: 220V / 4: 380V
- ③ Power Supply Phase S: Single-phase / T: Three-phase 380V
- ④ Power Rating 0040: 4kW / 0055: 5.5kW ...
- ⑤ Power Digit 1: <10kW / 2: 10~99kW
- ⑥ Matching Motor Type N: General Purpose
- ⑦ Chassis Frame A: Size A / B: Size B ...



PRODUCT SPECIFICATIONS

Product Power	0.4kW-7.5kW	Operating Temperature	-10~55°C , derating required above 50°C
Control Mode	V/F, SVC	Pollution Degree	PD2
Input Voltage	Single-phase 220V, Three-phase 380V	Overtoltage Level	OVCIII
Motor Type	Supports synchronous and induction motors.	Altitude	Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m
Protection Level	IP20		



Model	Braking Unit	Rated Voltage (V)	Rated Input Current (A)	Rated Capacity (kVA)	Matching Motor (kW)
S100(E)-2S00041N-A	Built-in as Standard	Single-phase 220	2.5	0.9	0.4
S100(E)-2S00071N-A			4	1.5	0.75
S100(E)-2S00151N-A			7	2.8	1.5
S100(E)-4T00071N-A		Three-phase 380	2.5	1.7	0.75
S100(E)-4T00151N-A			4	2.6	1.5
S100(E)-4T00221N-A			5.2	3.4	2.2
S100(E)-4T00401N-B		Three-phase 380	9	5.9	4
S100(E)-2S00221N-C		Single-phase 220	10	4.1	2.2
S100(E)-2S00401N-C			17	6.4	4
S100(E)-4T00551N-C		Three-phase 380	13	8.6	5.5
S100(E)-4T00751N-C			17	11.2	7.5

Digital Input

6-channel optocoupler isolated digital input: DI1~DI6, supports 12V and 24V levels. Sink or source can be selected via jumper. DI6 can be used as a high-speed pulse input with a maximum frequency of 100 kHz.

Analog Input

2-channel analog input terminals: 0-10V or 0-20mA, selectable via jumper. Both AI terminals can be used as digital input (DI) terminals.

Digital Output

2-channel programmable switch outputs, 0-24V output, maximum output current 50mA, maximum frequency 100 kHz.

Relay Output

1-channel programmable relay output (Form C), 250 VAC/3 A, 30 VDC/3 A.

Analog Output

2-channel analog output terminals: 0-10V or 0-20mA. The AO output mode can be set (0-10V, 10-0V, 2-10V, 10-2V).

Communication

Standard 485 communication with MODBUS-RTU protocol.

Power Supply

24V (±15%), maximum output current: 100mA; 10V (±5%), maximum output current: 20mA.

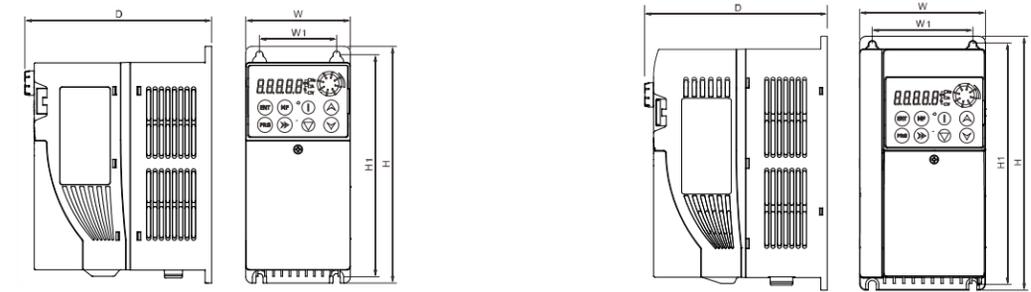
PRODUCT FEATURES

Book-Type Design: Slim and compact body, saving installation space. Suitable for space-constrained applications. Modular structure supports close side-by-side mounting.

SPFC Control: Built-in SPFC control function, capable of controlling up to "3+1" pump heads, greatly simplifying multi-pump system integration.

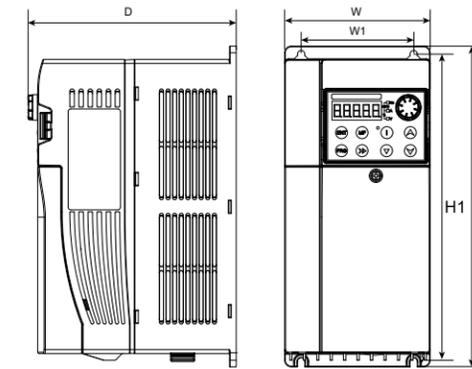
Fire Mode: Built-in fire mode function, ensuring critical equipment continues to operate during fire or other emergencies.

DIMENSIONS



Frame A

Frame B



Frame C

Frame	Installation size(mm)		Overall dimension(mm)			Screw size	Torque (N·m)
	W1	H1	W	H	D		
A	60	171.5	81.5	182.5	145	M5	3±10%
B	80	189	100	200	145		
C	85	230	110	240	158		

OPTIONAL ACCESSORIES

Frame	Installation Method	
	Wall-mounting Type	DIN Rail Mounting
A	✓	✓
B	✓	/
C	✓	/

KEYPAD OPTIONS

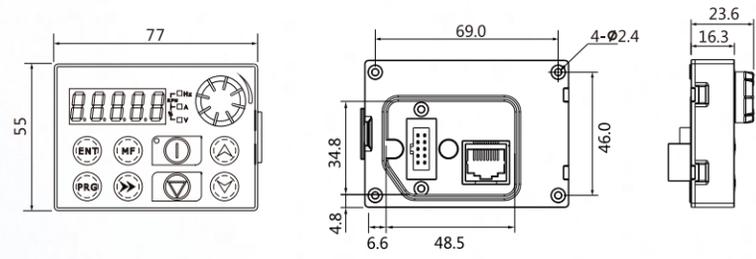
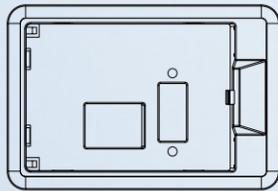
VDP-SC11



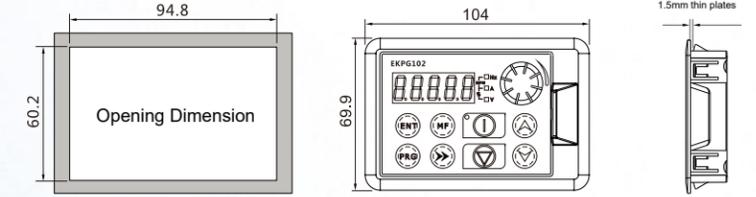
VDP-SE11



VDPHD-1



Keyboard Bracket Mounting Dimension Diagram



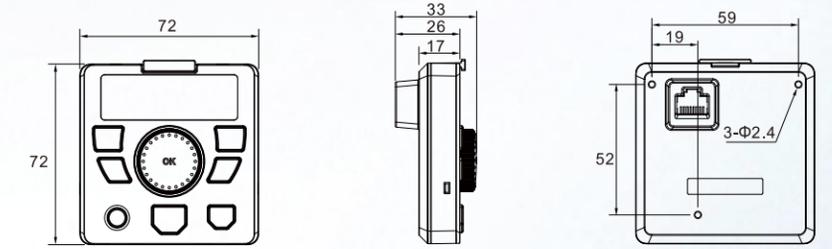
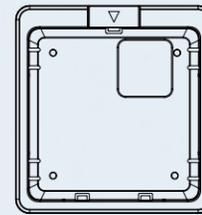
VDP-SC42



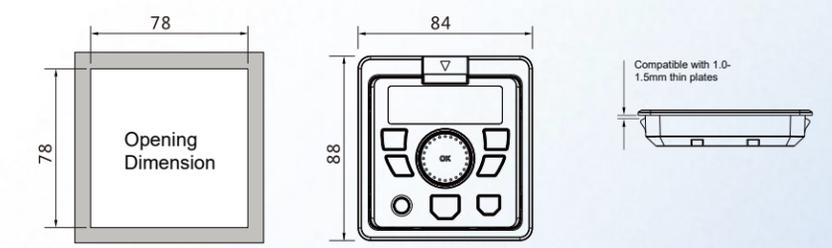
VDP-ST22



VDPHD-5



Keyboard Bracket Mounting Dimension Diagram



INSTALLATION OPTIONS

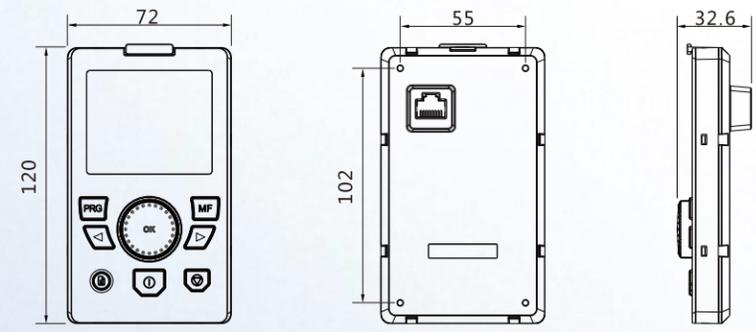
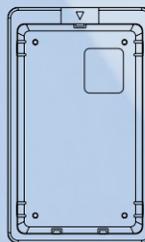
VDP-BC42



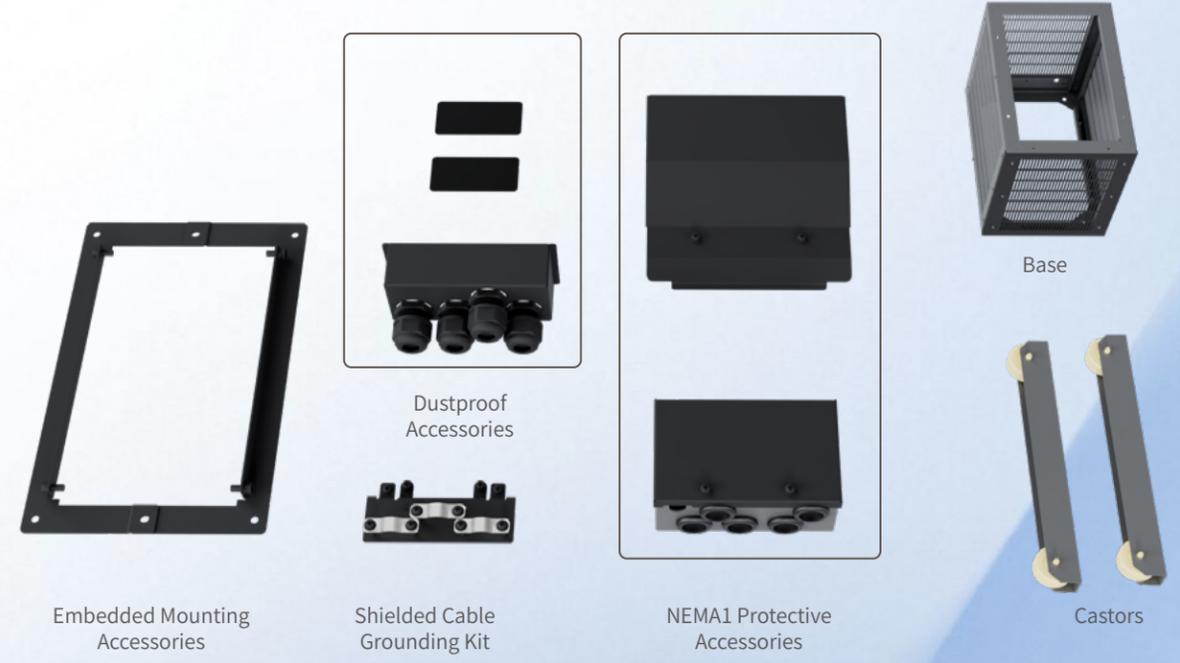
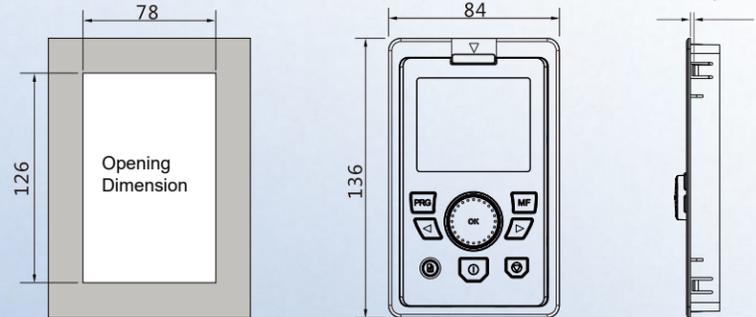
VDP-BT22



VDPHD-4



Keyboard Bracket Mounting Dimension Diagram



*For details, please consult our sales staff.



Dedicated Frequency Converter

PRODUCTS FOR CRANES

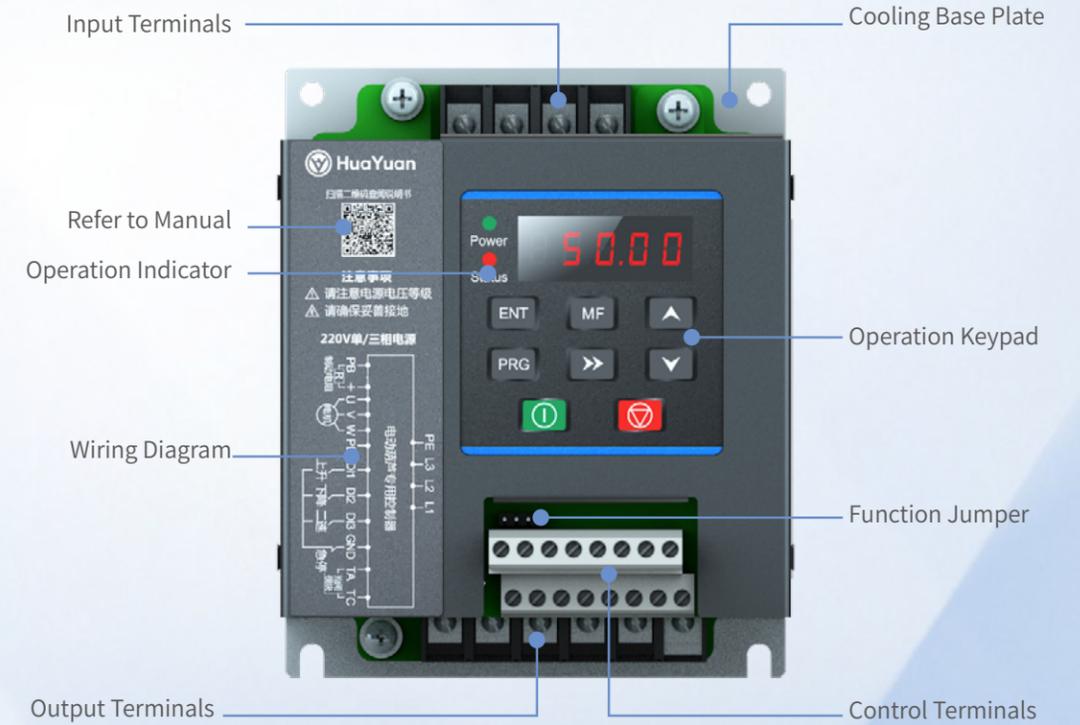
Z210

Series Electric Hoist-Specific Frequency Converter

Suitable for stepless speed control of various chain hoists and electric trolleys.

Z210 - 2 T 0015 G

- ① Product Series Name
- ② Voltage Class 2: 220V / 4: 380V
- ③ Power Supply Phase T: Three-phase 380V
- ④ Power Rating 0040: 4kW / 0055: 5.5kW ...
- ⑤ G: General-purpose



PRODUCT SPECIFICATIONS

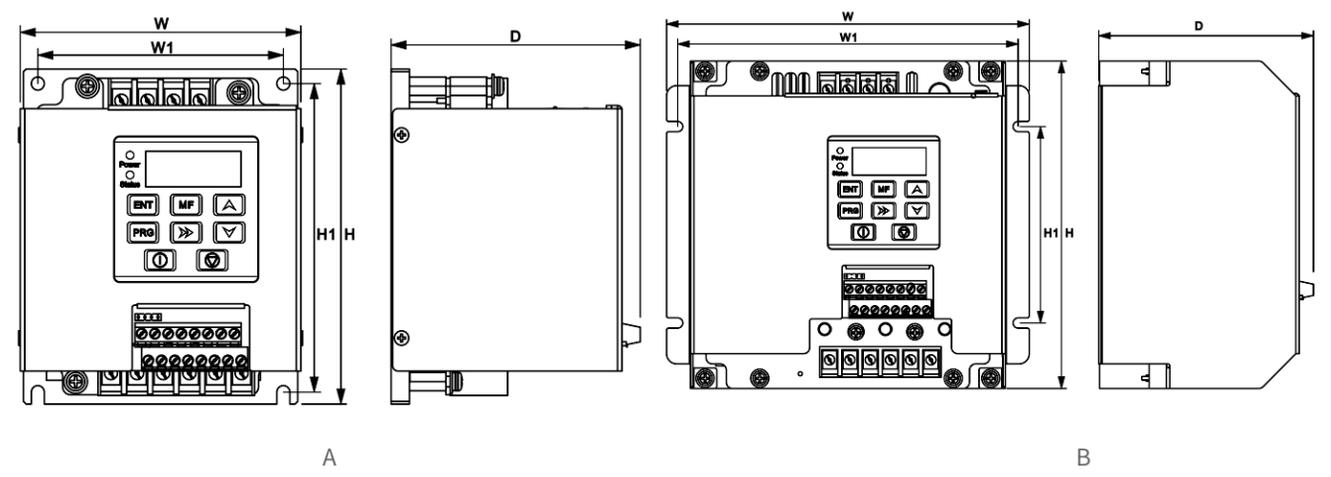
Product Power	1.5kW-4.0kW	Operating Temperature	-10~55°C , derating required above 50°C
Control Mode	V/F	Pollution Degree	PD2
Input Voltage	Single/Three-phase 220V , Three-phase 380V	Overvoltage Level	OVCIII
Motor Type	Supports induction motors	Altitude	Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m
Protection Level	IP20		

Digital Input	5-channel digital input: DI1~DI5, sink or source selectable via jumper. Supports a maximum of 54Vac AC input.
Analog Input	1-channel analog input: AI1 supports 0V~10V input, with a sampling period of 5ms.
Relay Output	2-channel programmable relay output (Form A): AC 250V/5A, DC 30V/5A.
Communication	RS485 communication, MODBUS-RTU protocol.
Debugging Keypad	On-body keypad.

Frame	Model	Rated Voltage (V)	Rated Output Current (A)	Rated Capacity (kVA)	Matching Motor (kW)
A	Z210-2T0015G	Single/Three-phase	7.5	2.8	1.1
	Z210-2T0022G	220V	10	3.8	1.5
	Z210-4T0015G	Three-phase 380V	4	2.6	1.1
	Z210-4T0022G		5.2	3.4	1.5
B	Z210-2T0040G	Single/Three-phase 220V	17	6.5	3
	Z210-4T0040G	Three-phase 380V	10	6.5	3

*For 2T models powered by single-phase 220V AC, the power rating must be used one grade lower. (For example: A 2T-2.2kW model powered by single-phase 220V AC actually supports a power equivalent to 2T-1.5kW).

DIMENSIONS



Frame	Installation size(mm)		Overall dimension(mm)		
	W1	H1	W	H	D
A	94	117	107	127	95
B	168	96	179	160	106



Z260

Series Electric Hoist-Specific Frequency Converter

Z260 - 1 S 0005 - A

- ① Product Series Name
- ② Voltage Class 1: 110V / 2: 220V / 4: 380V ⑤
- ③ Power Supply Phase S: Single-phase / T: Three-phase 380V
- ④ Power Rating 0040: 4kW / 0055: 5.5kW ...
- ⑤ Frame A: Size A / B: Size B ...

PRODUCT SPECIFICATIONS

Product Power	0.5kW-11kW	Operating Temperature	-10~55°C , derating required above 50°C
Control Mode	V/F, SVC, FVC	Pollution Degree	PD2
Input Voltage	Single-phase 110V, Single/Three-phase 220V, Three-phase 380V	Overvoltage Level	OVCIII
Motor Type	Supports synchronous and induction motors.	Altitude	Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m
Protection Level	IP20		

Digital Input

5-channel digital input: DI1~DI4 are optocoupler isolated bipolar inputs, supporting a maximum of 54Vac AC input. HDI is a high-speed pulse input with a voltage range of 10V~30V and frequency range of 0Hz~50kHz.

Analog Input

1-channel analog input: 0V~10V, input impedance 22kΩ, resolution 0.1%, accuracy 2%, sampling period 5ms.

Relay Output

1-channel integrated brake power supply Form A 5A relay series output:
 380V supply: B+, B- output voltage DC 170V
 220V supply: B+, B- output voltage DC 99V
 110V supply: B+, B- output voltage DC 99V

Debugging Keypad

Standard integrated membrane keypad.

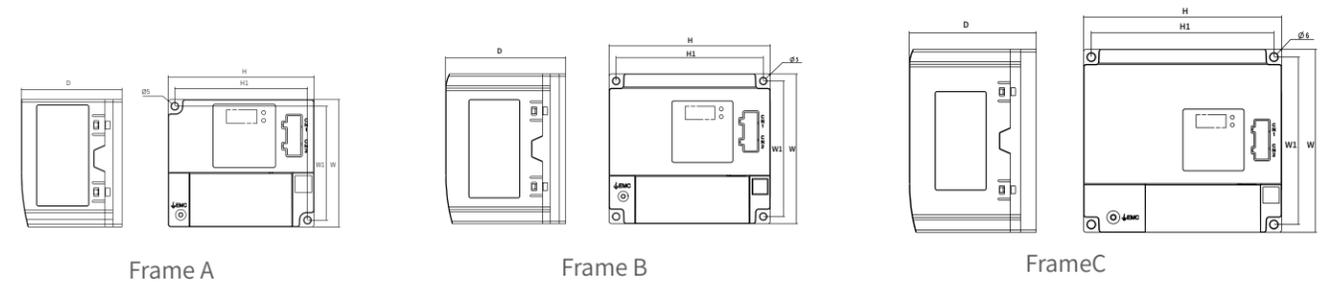
Functional Interface

AN bus communication interface, RS485 communication encoder interface, 4-wire/6-wire load cell interface.

Model	Rated Voltage (V)	Rated Output Current (A)	Rated Capacity (kVA)	Matching Motor (kW)
Z260-1S0005-A	Single-phase 110	5.2	1	0.4
Z260-2T0015-A	Three-phase 220	7	2.7	1.1
Z260-4T0015-A	Three-phase 380	4	2.6	1.1
Z260-4T0007-A		2.5	1.6	0.5
Z260-4T0022-A	Three-phase 380	5.2	3.4	1.5
Z260-1S0015-B	Single-phase 110	13	2.5	1.1
Z260-2T0022-B	Three-phase 220	10	3.8	1.5
Z260-4T0040-B	Three-phase 380	10	6.5	3
Z260-4T0055-B		13	8.5	4
Z260-1S0020-C	Single-phase 110	17	3.2	1.5
Z260-1S0030-C		25	4.7	2.2
Z260-2T0040-C	Three-phase 220	17	6.5	3
Z260-2T0055-C		25	9.5	4
Z260-4T0075-C	Three-phase 380	17	11	5.5
Z260-4T0110-C		25	16	7.5

*For 2T models powered by single-phase 220V AC, the power rating must be downgraded by one level. (For example: A 2T-2.2kW model powered by single-phase 220V AC actually supports a power rating equivalent to 2T-1.5kW.)

DIMENSIONS



Frame	Installation size(mm)		Overall dimension(mm)		
	W1	H1	W	H	D
A	85	100	95	110	76
B	104	114	115	125	93
C	128	141	140	153	98



Z280

Series Crane-Specific Frequency Converter

Z280 - 4 T 0040 - A

- ① Product Series Name
- ② Voltage Class 4: 380V
- ③ Power Supply Phase T: Three-phase 380V
- ④ Power Rating 0040: 4kW / 0055: 5.5kW ... 4000: 400kW
- ⑤ Frame A: Size A / B: Size B

PRODUCT SPECIFICATIONS

Product Power	4.0kW-400kW	Operating Temperature	-10~55°C , derating required above 50°C
Control Mode	V/F, SVC, FVC	Pollution Degree	PD2
Input Voltage	Three-phase 380V	Overvoltage Level	OVCIII
Motor Type	Supports induction motors.	Altitude	Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m
Protection Level	IP20		

Digital Input

7-channel digital input: DI1~DI6 are optocoupler isolated bipolar inputs, supporting a maximum of 54Vac AC input. HDI is a high-speed pulse input with a voltage range of 10V~30V and frequency range of 0Hz~100kHz.

Digital Output

1-channel open-collector multifunction output.

Analog Input

1-channel analog input: 0V~10V, input impedance 22kΩ; current input 0-20mA, input impedance 500Ω. Resolution 0.1%, accuracy 2%, sampling period 5ms.

Relay Output

2-channel programmable relay output (Form C), TA-TB normally closed, TA-TC normally open. Contact rating: 250VAC, 3A (cosΦ=1); 250VAC, 1A (cosΦ=0.4); 30VDC, 3A.

Debugging Keypad

Standard integrated keypad.

Functional Interface

Standard CAN bus communication. Reserved WIFI/Bluetooth debugging mode. Expansion support for closed-loop control, weight detection, RF control, various I/O expansion cards, and communication cards, etc.

Model	Rated Voltage (V)	Rated Output Current (A)	Rated Capacity (kVA)	Matching Motor (kW)
Z280-4T0040-A	Three-phase 380	10	6.5	4
Z280-4T0055-A		13	8.5	5.5
Z280-4T0075-B		17	11	7.5
Z280-4T0110-B		25	16	11
Z280-4T0150-C		32	21	15
Z280-4T0185-C		38	25	18.5
Z280-4T0220-C		45	30	22
Z280-4T0300-D		60	40	30
Z280-4T0370-D		75	50	37
Z280-4T0450-D		90	60	45
Z280-4T0450-E		90	60	45
Z280-4T0550-E		110	75	55
Z280-4T0750-E		150	99	75
Z280-4T0900-F		176	116	90
Z280-4T1100-F		210	139	110
Z280-4T1320-G		250	164	132
Z280-4T1600-G		300	197	160
Z280-4T1850-H		340	224	185
Z280-4T2000-H		380	250	200
Z280-4T2200-H		415	273	220
Z280-4T2500-H	470	309	250	
Z280-4T2800-J	520	342	280	
Z280-4T3150-J	600	395	315	
Z280-4T3500-J	650	421	350	
Z280-4T4000-J	720	454	400	



Z280T

Series Crane-Specific Frequency Converter

Z280T - 2 S 0007 - A

- ① Product Series Name
- ② Voltage Class 2: 220V / 4: 380V
- ③ Power Supply Phase S: Single-phase / T: Three-phase 380V
- ④ Power Rating 0007: 0.75kW / 0015: 1.5kW ...
- ⑤ Frame A: Size A / B: Size B ...

PRODUCT SPECIFICATIONS

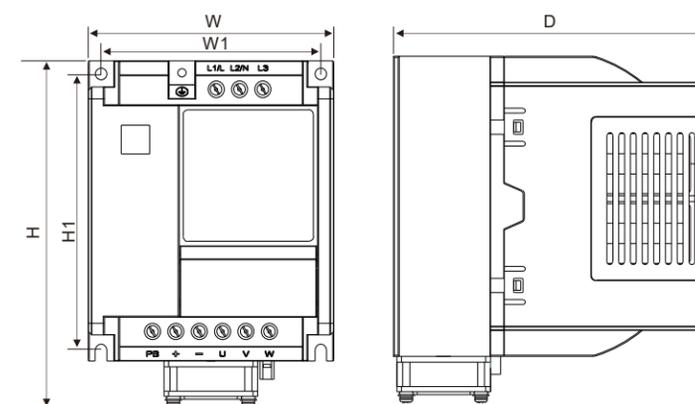
Product Power	0.75kW-7.5kW	Operating Temperature	-10~55°C , derating required above 50°C
Control Mode	V/F, SVC	Pollution Degree	PD2
Input Voltage	Single-phase 220V, Three-phase 380V	Overvoltage Level	OVCIII
Motor Type	Supports induction motors.	Altitude	Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m
Protection Level	IP20		

Digital Input	5-channel DI input, maximum support for 54Vac AC control.
Analog Input/Output	1-channel 0-10V analog input, 1-channel 0-10V analog output.
Relay Output	2 groups of normally open 5A contact relay outputs.
Functional Interface	1-channel RS485 communication.

Model	Rated Voltage (V)	Rated Output Current (A)	Rated Capacity (kVA)	Matching Motor (kW)
Z280T-2S0007-A	Single-phase 220	4.0	1.5	0.75
Z280T-2S0015-A		6.5	2.4	1.5
Z280T-4T0007-A	Three-phase 380	2.5	1.6	0.75
Z280T-4T0015-A		4.0	2.6	1.5
Z280T-4T0022-A		5.2	3.4	2.2
Z280T-2T0022-B	Three-phase 220	10	3.8	2.2
Z280T-4T0040-B	Three-phase 380	10	6.5	4.0
Z280T-4T0055-B		13	8.5	5.5
Z280T-4T0075-B		17	11	7.5

*For 2T models powered by single-phase 220V AC, the power rating must be used one grade lower. (For example: A 2T-2.2kW model powered by single-phase 220V AC actually supports a power rating equivalent to 2T-1.5kW.)

DIMENSIONS



Frame	Installation size(mm)		Overall dimension(mm)			Screw size	Torque (N·m)
	W1	H1	W	H	D		
A	94	117	105	148	138	M4	1.5±10%
B	129	129	140	161	148	M4	1.5±10%

*Z280T-4T0007-A (Fanless) Dimensions: W: 105, H: 127, D: 124



Z290

Series Integrated Crane Frequency Converter

Z290 - 4 T 7R5 - 2R2 - 0R7

- ① Product Series Name
- ② Voltage Class 0.75kW, 2.2kW, 7.5kW
- ③ Power Supply Phase T: Three-phase 380V
- ④ Lifting Inverter Power Rating 7R5: 7.5kW
- ⑤ Gantry/ Auxiliary Hook Inverter Power Rating 2R2: 2.2kW
- ⑥ Trolley Inverter Power Rating 0R7: 0.75kW

PRODUCT SPECIFICATIONS

- Product Power** 0.75kW, 2.2kW, 7.5kW
- Control Mode** V/F, SVC, FVC
- Input Voltage** Three-phase 380V
- Motor Type** Supports synchronous and induction motors.
- Protection Level** IP20
- Operating Temperature** -10~55°C , derating required above 50°C
- Pollution Degree** PD2
- Overvoltage Level** OVCIII
- Altitude** Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m

Model	Mechanism Type	Power Rating(kW)	Matching Motor Power(kW)	Rated Voltage (V)	Rated Current(A)
Z290-4T7R5-2R2-0R7	Lifting Mechanism	7.5	6	3PH 380	17
	Gantry Mechanism	2.2	2*0.8		5.2
	Trolley Mechanism	0.75	0.7		2.5

PRODUCTS FOR THE AIR COMPRESSORS



Z100-K

Series Permanent Magnet Synchronous Air Compressor-Specific Frequency Converter

Z100 - 4 T 0055 - K

- ① Product Series Name
- ② Voltage Class 4: 380V
- ③ Power Supply Phase T: Three-phase 380V
- ④ Power Rating 0055: 5.5kW / 0075: 7.5kW ...
- ⑤ Designed for Air Compressors

PRODUCT SPECIFICATIONS

- Product Power** 5.5kW-450kW
- Control Mode** V/F, SVC
- Input Voltage** Three-phase 380V
- Motor Type** Supports synchronous and induction motors.
- Protection Level** IP20
- Operating Temperature** -10~55°C , derating required above 50°C
- Pollution Degree** PD2
- Overvoltage Level** OVCIII
- Altitude** Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m

Frame	Model	Rated Voltage (V)	Rated Output Current (A)	Rated Capacity (kVA)	Matching Motor (kW)
A	Z100-4T0055-K	Three-phase 380	13	8.6	5.5
	Z100-4T0075-K		17	11.2	7.5
B	Z100-4T0110-K		25	16.5	11
	Z100-4T0150-K		32	21	15
C1	Z100-4T0185-K		38	25	18.5
	Z100-4T0220-K		45	30	22
C2	Z100-4T0300-K		60	40	30
	Z100-4T0370-K		60	40	30
D	Z100-4T0450-K		75	50	37
	Z100-4T0550-K		90	60	45

Frame	Model	Rated Voltage (V)	Rated Output Current (A)	Rated Capacity (kVA)	Matching Motor (kW)
E	Z100-4T0750-K	Three-phase 380	110	75	55
	Z100-4T0900-K		150	99	75
F	Z100-4T1100-K		176	116	90
	Z100-4T1320-K		210	139	110
G	Z100-4T1600-K		250	164	132
	Z100-4T1850-K		300	197	160
H	Z100-4T2000-K		340	224	185
	Z100-4T2200-K		380	250	200
	Z100-4T2500-K		415	273	220
	Z100-4T2800-K		470	309	250
J	Z100-4T3500-K		600	395	315
	Z100-4T4000-K		650	421	350
	Z100-4T4500-K	720	454	400	

Digital Input

3-channel multifunctional digital input, sink or source selectable via software. When the input is analog, <5V is low level, >9.8V is high level. When the input is digital, the high/low logic threshold voltage is 9.8V. Sampling period 2ms.

Analog Input

2-channel analog input: 0-10V. AI1 can be selected for 0-20mA input via jumper.

Relay Output

2-channel programmable relay output (Form C), 250 VAC/3 A, 30 VDC/3 A.

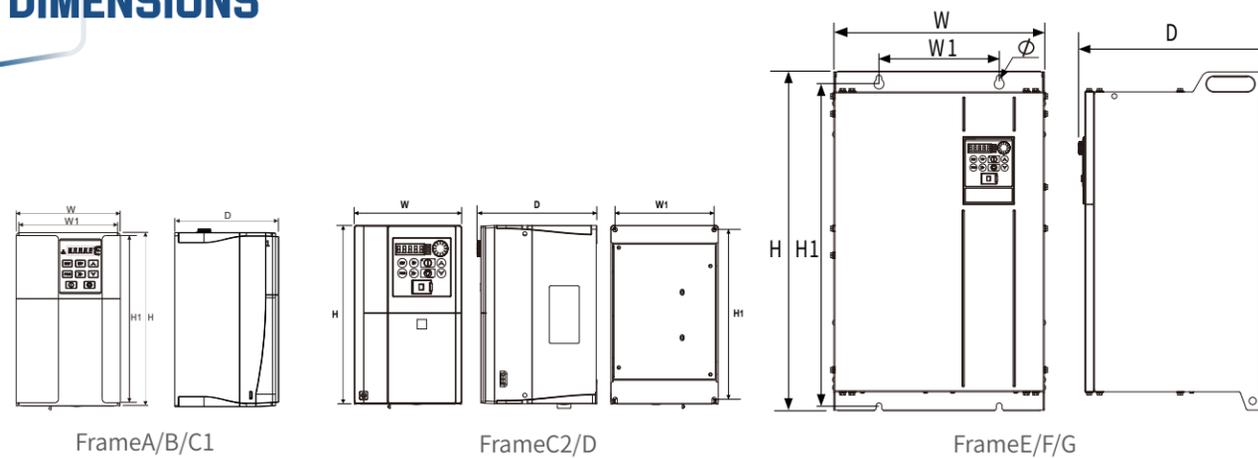
Communication

Standard 485 communication, standard MODBUS-RTU protocol.

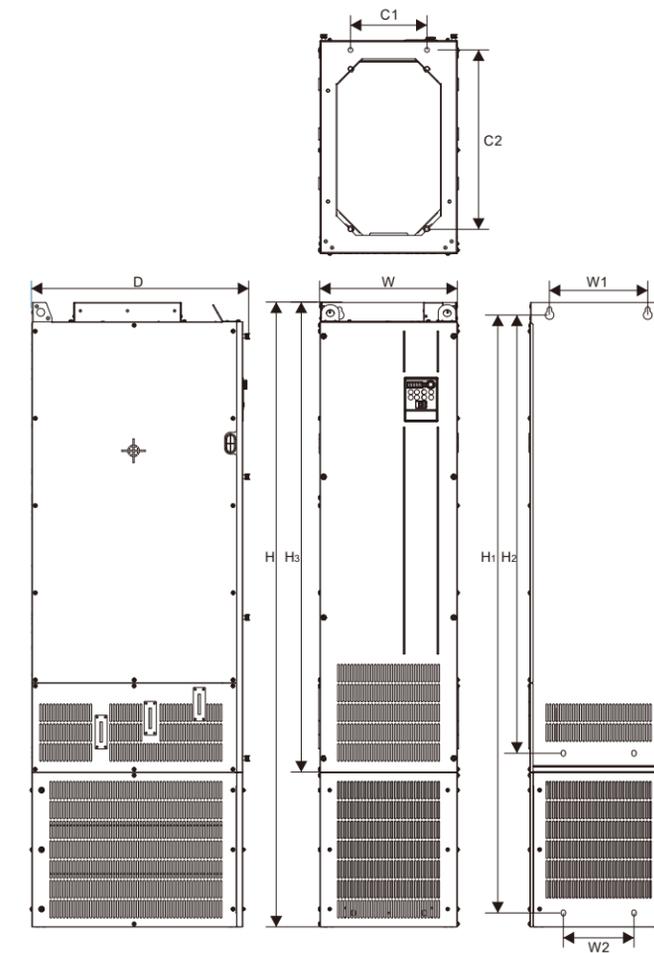
Power Supply

24V (±15%), maximum output current: 100mA; 10V (±5%), maximum output current: 20mA

DIMENSIONS



Frame	Installation size(mm)		Overall dimension(mm)			Screw size	Torque (N·m)
	W1	H1	W	H	D		
A	132	224	143	235	147	M5	3±10%
B	150	250	167	265	159.5	M5	3±10%
C1	183	285	200	300	175	M5	3±10%
C2	183	285	200	300	186	M5	3±10%
D	218	375	235	390	796	M6	4.5±10%
E	200	525	350	544	311	M8	11±10%
F	200	625	350	644	311	M8	11±10%
G	200	865	350	884	311	M8	11±10%



FrameH/J

Frame	Installation size(mm)						Overall dimension(mm)				Screw size	Torque (N·m)
	W1	W2	H1	H2	C1	C2	W	H	H3	D		
H	280	180	1540	1140	221.5	405	350	1608	1208	545	M10	22±10%
J	280	180	1665	1265	221.5	405	350	1738	1338	545	M12	39±10%

PRODUCTS FOR TEXTILES

BN200(E)

Series Air Jet Loom-Specific Frequency Converter



BN200(E) - 4 T 0220 G

- ① Product Series Name
- ② Voltage Class 4: 380V
- ③ Power Supply Phase T: Three-phase 380V
- ④ Power Rating 0040: 4kW / 0055: 5.5kW ...
- ⑤ G: General-purpose

PRODUCT SPECIFICATIONS

Product Power	22kW, 37kW, 45kW	Operating Temperature	-10~55°C , derating required above 50°C
Control Mode	V/F, SVC	Pollution Degree	PD2
Input Voltage	Three-phase 380V	Overvoltage Level	OVCIII
Motor Type	Supports synchronous and induction motors.	Altitude	Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m
Protection Level	IP20		

Model	Rated Voltage (V)	Rated Output Current (A)	Rated Capacity (kVA)	Matching Motor (kW)
BN200(E)-4T0220G	Three-phase 380	45	30	22
BN200(E)-4T0370G		75	50	37
BN200(E)-4T0450G		90	60	45

Digital Input

7-channel optocoupler isolated digital input: DI1~DI7, supports 12V and 24V levels. Sink or source can be selected via jumper. DI7 can be used as a high-speed pulse input with a maximum frequency of 100 kHz.

Analog Input

2-channel analog input terminals: 0-10V or 0-20mA. Both AI terminals can be used as digital input (DI) terminals.

Digital Output

1-channel programmable switch output, output level 0-24V, maximum frequency 100 kHz, maximum output current 50mA.

Relay Output

2-channel programmable relay output (Form C), 250 VAC/3 A, 30 VDC/3 A.

Analog Output

2-channel analog output terminals: 0-10V or 0-20mA. The AO output mode can be set (0-10V, 10-0V, 2-10V, 10-2V).

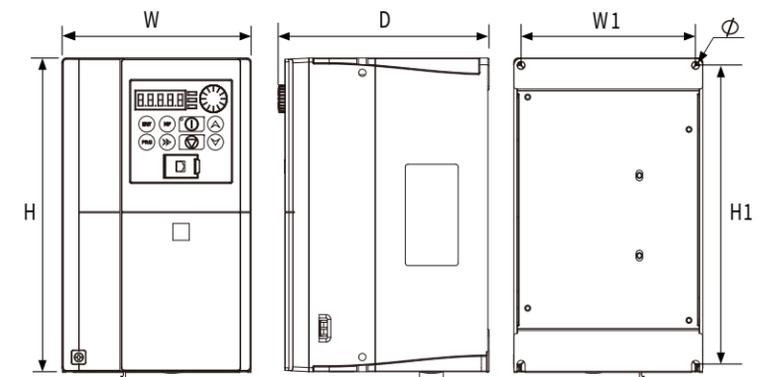
Communication

Standard 485 communication with MODBUS-RTU protocol. Optional bus protocols include CANopen, EtherCAT, EtherNet/IP, Modbus TCP/IP, PROFIBUS, and PROFINET.

Power Supply

24V (±15%), maximum output current: 100mA; 10V (±5%), maximum output current: 20mA.

DIMENSIONS



Frame	Installation size(mm)		Overall dimension(mm)			Screw size	Torque (N·m)
	W1	H1	W	H	D		
A	183	285	200	300	186	M5	3±10%
B	218	375	235	390	196	M6	4.5±10%

PRODUCTS FOR MACHINE TOOLS

GI-JC

Series Machine Tool-Specific Frequency Converter

G1 - 4 T 0040 G - JC
① ② ③ ④ ⑤ ⑥

- ① Product Series Name
- ② Voltage Class 4: 380V
- ③ Power Supply Phase T: Three-phase 380V
- ④ Power Rating 0040: 4kW / 0055: 5.5kW ...
- ⑤ G: General-purpose
- ⑥ Designed for Machine Tools



PRODUCT SPECIFICATIONS

Product Power	4.0kW-22kW	Operating Temperature	-10~55°C , derating required above 50°C
Control Mode	V/F, SVC	Pollution Degree	PD2
Input Voltage	Three-phase 380V	Overvoltage Level	OVCIII
Motor Type	Supports synchronous and induction motors.	Altitude	Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m
Protection Level	IP20		

Model	Rated Voltage (V)	Braking Unit	Braking Resistor Power Rating(W)	Braking Resistor Resistance(Ω)
G1-4T0040G-JC	Three-phase 380V380	Built-in	400	150
G1-4T0055G-JC			600	100
G1-4T0075G-JC			800	75
G1-4T0110G-JC			1000	75
G1-4T0150G-JC			1500	50
G1-4T0185G-JC			2000	30
G1-4T0220G-JC			2200	25

Digital Input

3-channel multifunctional digital input, sink or source selectable via software. When the input is analog, <5V is low level, >9.8V is high level. When the input is digital, the high/low logic threshold voltage is 9.8V. Sampling period 2ms.

Analog Input

2-channel analog input: 0-10V. AI1 can be selected for 0-20mA input via jumper.

Relay Output

2-channel programmable relay output (Form C), 250 VAC/3 A, 30 VDC/3 A.

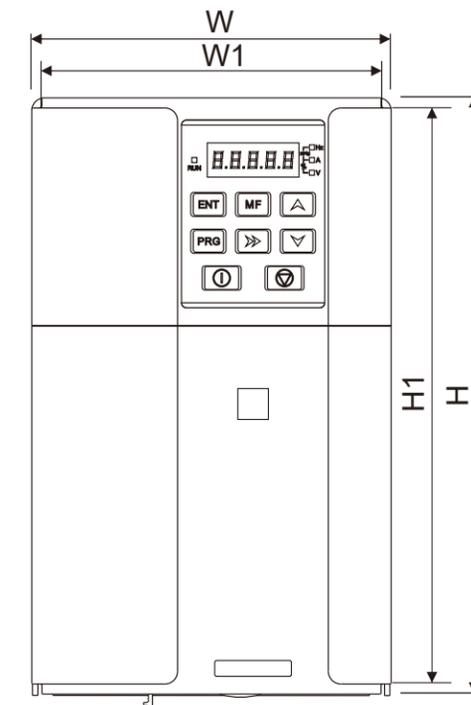
Communication

Standard 485 communication, standard MODBUS-RTU protocol.

Power Supply

24V (±15%), maximum output current: 100mA; 10V (±5%), maximum output current: 20mA.

DIMENSIONS



Frame	Installation size(mm)		Overall dimension(mm)			Screw size	Torque(N·m)
	W1	H1	W	H	D		
A	132	224	143	235	147	M5	3±10%
B	150	250	167	265	159		
C	183	285	200	300	175		



Z180

Series Spindle Servo Driver

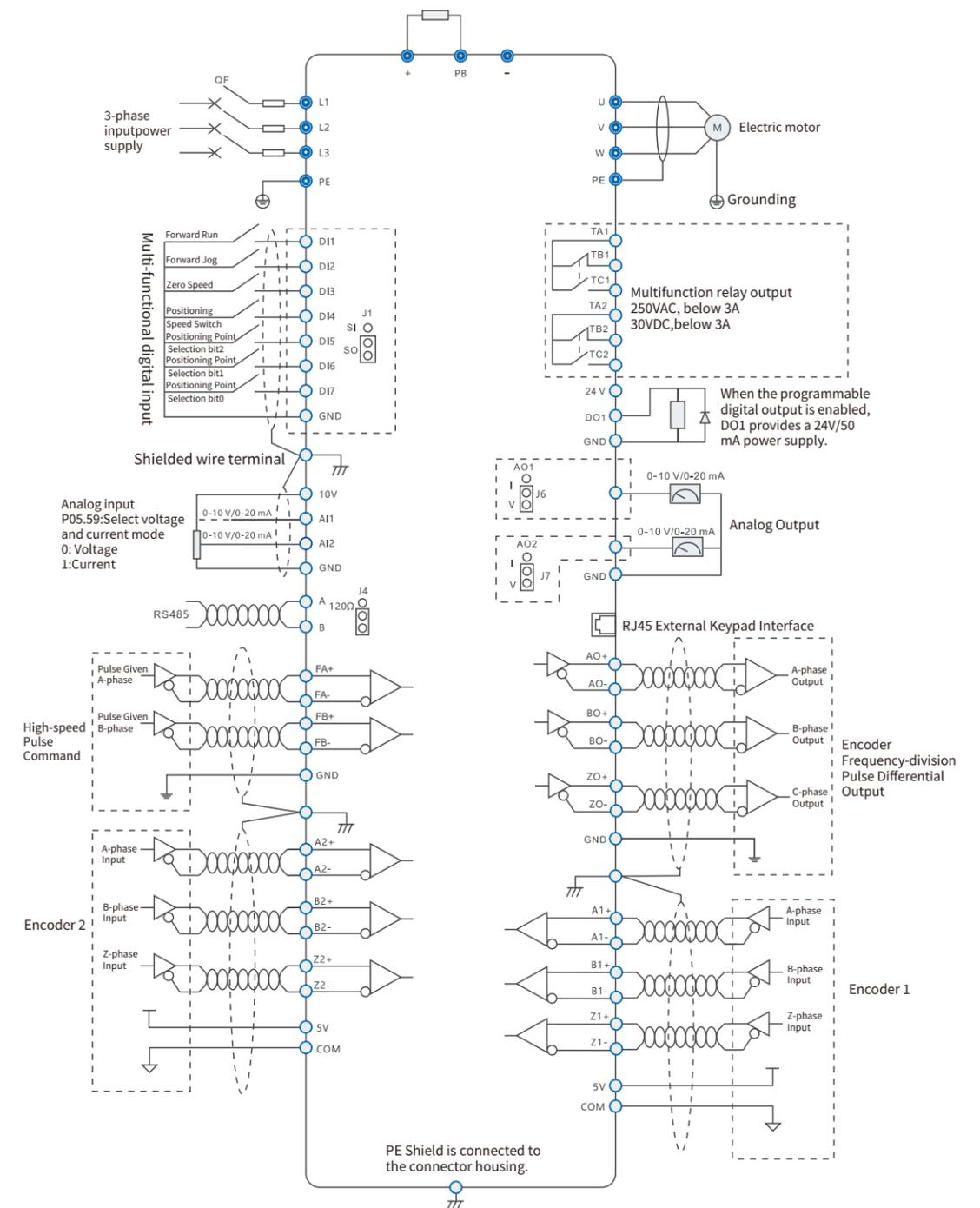
Z180 - 4 T 0040 1 N- A A 0

- ① Product Series Name
- ② Voltage Class 4: 380V
- ③ Power Supply Phase T: Three-phase 380V
- ④ Power Rating 0040: 4kW / 0055: 5.5kW ...
- ⑤ Power Digit 1: <10kW / 2: 10~99kW
- ⑥ Matching Motor N: General-purpose
- ⑦ Encoder 1 Type A: Incremental
- ⑧ Encoder 2 Type A: Incremental / B: Absolute Encoder
- ⑨ Drive Type 0: Pulse Type / 1: Ether Cat / 2: Profinet

PRODUCT SPECIFICATIONS

Product Power	4.0kW-22kW	Operating Temperature	-10~55°C , derating required above 50°C
Control Mode	V/F, SVC, FVC	Pollution Degree	PD2
Input Voltage	Three-phase 380V	Overvoltage Level	OVCIII
Motor Type	Supports synchronous and induction motors.	Altitude	Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m
Protection Level	IP20		

model	Rated Voltage (V)	Rated Input Current(A)	Rated Output Current (A)	Matching Motor (kW)
Z180-4T00401N-***	Three-phase 380	12.0	10.0	4.0
Z180-4T00551N-***		15.0	13.0	5.5
Z180-4T00751N-***		20.0	17.0	7.5
Z180-4T01102N-***		26.0	25.0	11.0
Z180-4T01502N-***		35.0	32.0	15.0



- Digital Input** 7-channel optocoupler isolated digital input: DI1~DI7, supports 12V and 24V levels. Sink or source can be selected via jumper. DI7 can be used as a high-speed pulse input with a maximum frequency of 100 kHz.
- Analog Input** 2-channel analog input terminals: 0-10V or 0-20mA. Both AI terminals can be used as digital input (DI) terminals.
- Digital Output** 1-channel programmable switch output, 0-24V output, maximum output current 50mA, maximum frequency 100 kHz.

Relay Output

2-channel programmable relay output (Form C), 250 VAC/3 A, 30 VDC/3 A.

Analog Output

2-channel analog output terminals: 0-10V or 0-20mA. The AO output mode can be set (0-10V, 10-0V, 2-10V, 10-2V).

Encoder

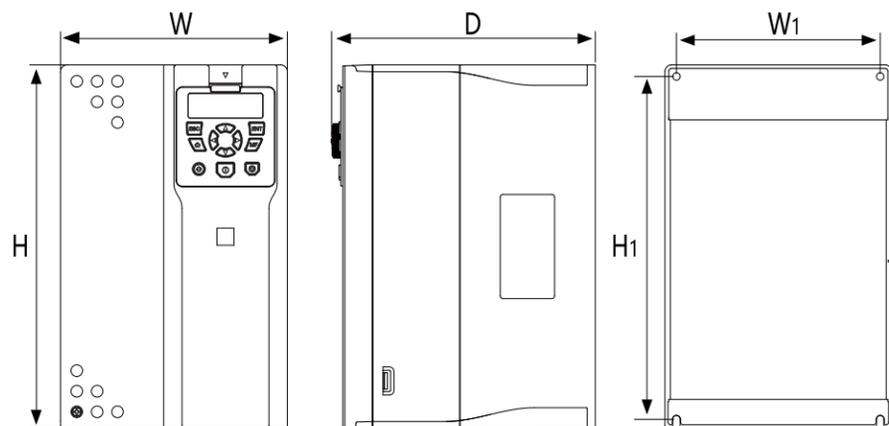
Standard 5V dual incremental encoder, maximum pulse frequency 400kHz.

Communication

Standard 485 communication with MODBUS-RTU protocol.

Frequency Division Output

A, B, Z support 5V differential output, with optional 1, 2, 4, 6 frequency division output.

DIMENSIONS

Frame	Installation size(mm)		Overall dimension(mm)			Screw size	Torque (N·m)
	W1	H1	W	H	D		
A	132	224	143	235	184	M5	3±10%
B	150	250	167	265	195		
C	183	285	200	300	210		

LIQUID-COOLED PRODUCTS**Z300**

Series Liquid-Cooled Frequency Converter

Z300 - 4 T 0750 2 N/09002L - A

① ② ③ ④ ⑤ ⑥ ⑦

- ① Product Series Name
- ② Voltage Class 4: 380V
- ③ Power Supply Phase T: Three-phase 380V
- ④ Power Rating 0750: 75kW / 0900: 90kW ... 4000: 400kW
- ⑤ Power Digit 1: <10kW / 2: 10~99kW / 3: 100~999kW
- ⑥ Matching Motor Type N: General-purpose / L: Fan & Pump
- ⑦ Frame A: Size A / B: Size B ...

PRODUCT SPECIFICATIONS**Product Power** 75kW-400kW**Control Mode** V/F, SVC**Input Voltage** Three-phase 380V**Motor Type** Supports synchronous and induction motors.**Protection Level** Drive Core: IP00
Integrated Cabinet Unit: IP55**Operating Temperature** -20~65°C, derating required above 60°C**Pollution Degree** PD3**Overvoltage Level** OVCIII**Altitude** Below 1000m; above 1000m, the output current capacity of the frequency converter decreases by 10% for every 1000m increase, with a maximum altitude of 3000m**Digital Input**

7-channel optocoupler isolated digital input: DI1~DI7, supports 12V and 24V levels. Sink or source can be selected via jumper. DI7 can be used as a high-speed pulse input with a maximum frequency of 100 kHz.

Analog Input

2-channel analog input terminals: 0-10V or 0-20mA. Both AI terminals can be used as digital input (DI) terminals.

Digital Output

1-channel programmable switch output, output level 0-24V, maximum frequency 100 kHz, maximum output current 50mA.

Relay Output

2-channel programmable relay output (Form C), 250 VAC/3 A, 30 VDC/3 A.

Analog Output

2-channel analog output terminals: 0-10V or 0-20mA. The AO output mode can be set (0-10V, 10-0V, 2-10V, 10-2V).

Communication

Standard 485 communication with MODBUS-RTU protocol. Optional bus protocols include CANopen, EtherCAT, EtherNet/IP, Modbus TCP/IP, PROFIBUS, and PROFINET.

Power Supply

24V (±15%), maximum output current: 100mA; 10V (±5%), maximum output current: 20mA.

Model	Rated Voltage (V)	Normal Duty			Light Duty		
		Rated output current(A)	Rated Output Current (A)	Matching Motor (kW)	Rated output current(A)	Rated Output Current (A)	Matching Motor (kW)
Z300-4T07502N/09002L-A	Three-phase 380	150	99	75	176	116	90
Z300-4T09002N/11003L-A		176	116	90	210	139	110
Z300-4T11003N/13203L-A		210	139	110	250	164	132
Z300-4T13203N/16003L-A		250	164	132	300	197	160
Z300-4T16003N/18503L-A		300	197	160	340	224	185
Z300-4T18503N/20003L-B		340	224	185	380	250	200
Z300-4T20003N/22003L-B		380	250	200	415	273	220
Z300-4T22003N/25003L-B		415	273	220	470	309	250
Z300-4T25003N/28003L-B		470	309	250	520	342	280
Z300-4T28003N/31503L-C		520	342	280	600	395	315
Z300-4T31503N/35003L-C		600	395	315	650	421	350
Z300-4T35003N/40003L-C		650	421	350	720	454	400
Z300-4T40003N/45003L-C		720	454	400	810	530	450

PRODUCT FEATURES

Efficient and Precise Cooling: Closed liquid-cooling channel directly cools components, enabling stable temperature control.

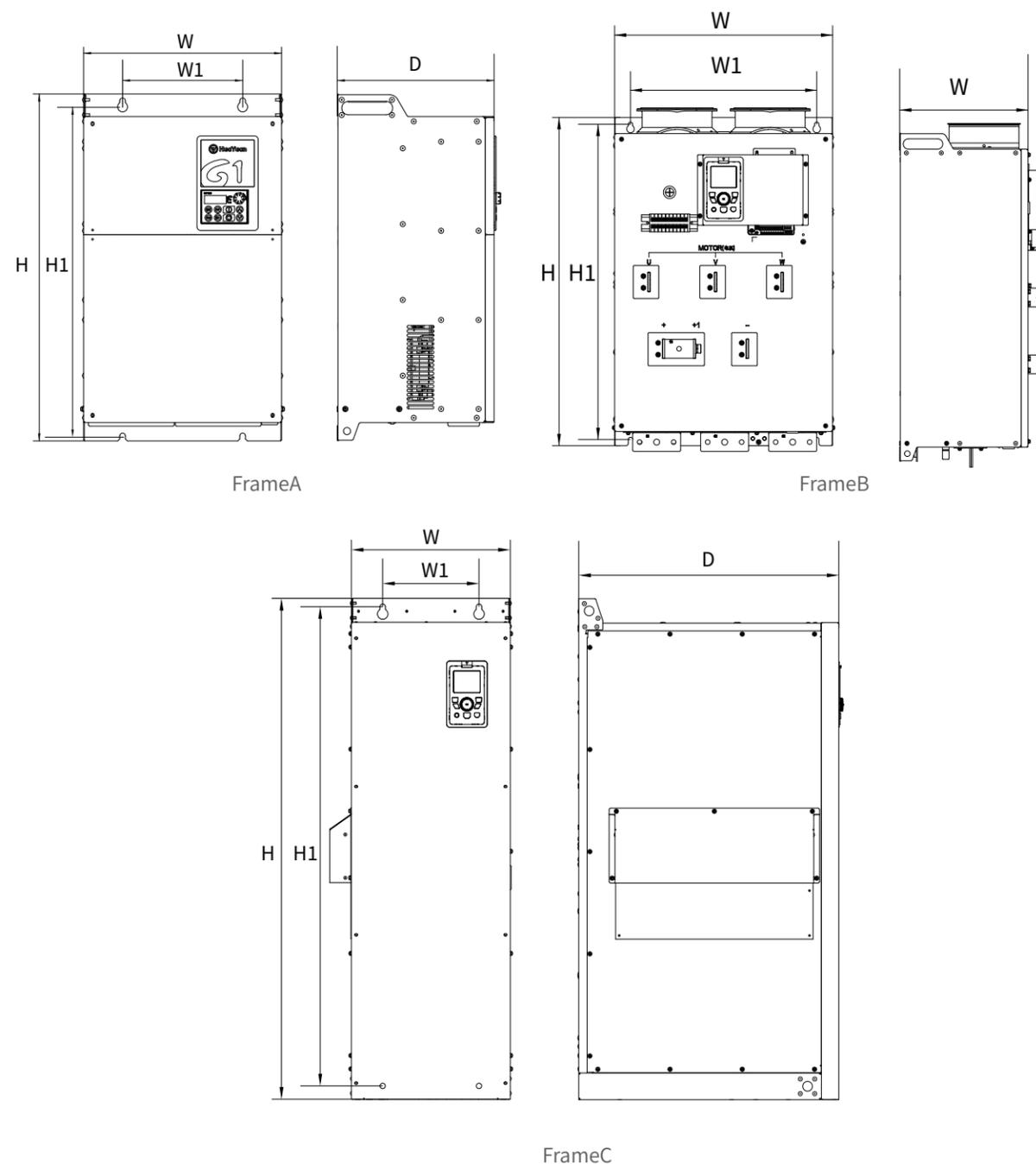
Full Environmental Protection: The cabinet can provide IP55 protection, resisting salt spray, dust, and corrosion, suitable for extreme environments from -20° C to 65° C.

Modular and Flexible Deployment: Quick-connect plug design, supports integrated cabinets or free cabinet combination.

Intelligent Safety Monitoring: Two-level liquid level alarm (warning/shutdown), ensuring continuous operation.

Energy-saving Expansion: Optional liquid-to-liquid heat exchanger linkage for waste heat recovery and overall system efficiency improvement.

DIMENSIONS



Frame	Installation size(mm)		Overall dimension(mm)			Screw size	Torque (N·m)
	W1	H1	W	H	D		
A	200	553	330	572	261.2	M8	11±10%
B	400	670	468	698	275.4		
C	200	985.5	330	1029.8	540	M10	22±10%