

BD600 Series

High-performance Vector Inverter



About Folinn



1994

The first Folinn inverter was R&D and manufactured in China . Folinn frequency inverte won the invention award in same year. Folinn Electric was founded.

2013

Folinn Electric combine Folinn inverter , FUREEN servo and B&B power units to form a joint venture, New Folinn Electric Group

Folinn History

2000

*Taizhou Fuling Motor Co., Ltd officially founded

2010

Renamed as "Taizhou Fuling Electrical Co., Ltd" and registered capital increased to 5,000,000 USD

2014

Elected as famous brand of Zhejiang
Company name was renamed to Zhejiang New Folinn Electric Co., Ltd

2016

Honored as famous brand product of Zhejiang

2001

ISO9001:2000 APPROVED/
CE approved

1994

In Wenling, the city with the first Chinese private enterprise founded, Fuling started its first step

2007

Elected as one of the first council members of CEEIA Inverter Department. Posted on inverter industry authority magazine "Inverter World". Honored as one of the "China Top 10 Brands". Chosen as the "Member of the Year 2007" by CEEIA

2009

Became "the best Commercial Partner" of Infineon

2004

Honored as one of the "Zhejiang Hi-Tech Enterprises"

2011

Elected as one of the second council members of CEEIA Inverter Department

DZB10HV series inverter has been approved as the "zhejiang Technology Innovation Special Item"

2012

Newly increases 2 more brands: "FUREEN" and "B&B Power."

2013

Honored as famous brand product of Zhejiang

2015

SGS approved

2018

Moved to Fuling building in the eastern New Area, covering an area of 42 acres and a construction area of 35000 square meters

2019

Sinopec Yipai certification
18000 approved

FOLINN AC Drive

Driven by your
heart to
win the future

随心驱动, 创赢未来





Our Mission

Energy conservation:

FOLINN are continue in-depth research, optimize and improve products, and improve market competitiveness in order to achieve sustainable development of global manufacturing industry, which is helpful.

Increase benefits:

FOLINN is committed to providing our suppliers with high performance and low price competitive products, reducing costs and increasing efficiency

Intelligent manufacturing:

Folinn AC Drive are widely used in various intelligent manufacturing fields, providing customized solutions for various application fields according to Customer site production process.

**Eurodrive
Chinamade**

BD600 series VFD

BD600 VFD overview

Folinn Electric Co.,Ltd is an industrial control company with more than 20 years of experience in R&D, production and sales of AC Drive. Low-voltage inverter products have successively DZB, BD330, BD600 and other products.

BD600 series inverter is a product with the unique design concept of European inverter. As a heavy-duty vector inverter, it has won customer recognition with its good performance. Its power range is from 0.75KW to 1600KW, and the voltage and voltage cover 220V, 380V, 660V, 1140V.



Advantages



- Heavy load VFD, multi-voltage with wide power
- Multi-control methods: standard VF control methods, voltage vector VFC and CFC control
- Multi-communication card, IOT card, PG card, Profinet/Profibus card, intelligent IOT Card
- Wide range of fields, can be used in hoisting, logistics transportation, air compressors, engraving machines and others;
- High-performance, high-quality cabinet-mounted AC drive
- Strong versatility, suitable for various types of loads, convenient and simple to debug

BD600 Schematic Diagram

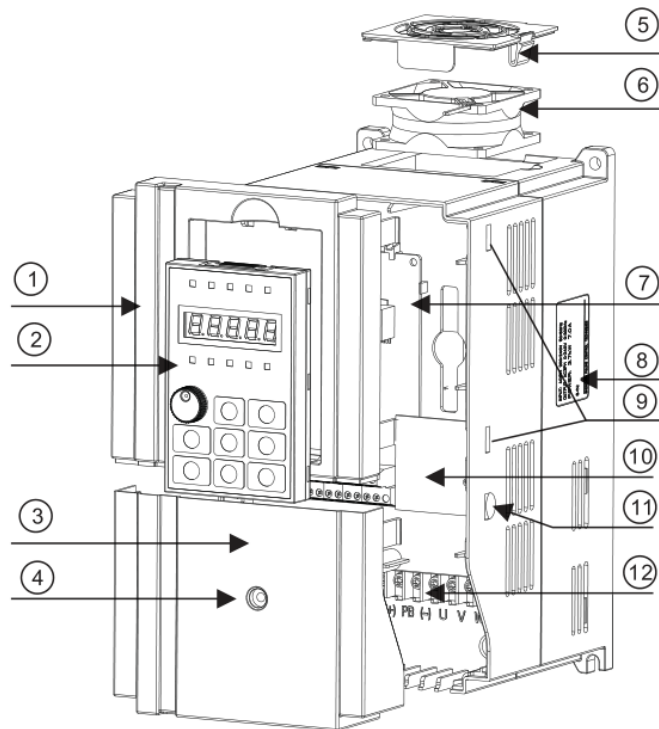


Figure 2-2 Schematic diagram of product structure



BD600 performance characteristics

BD600 series inverter can have good quality with adaptive vector control algorithm.

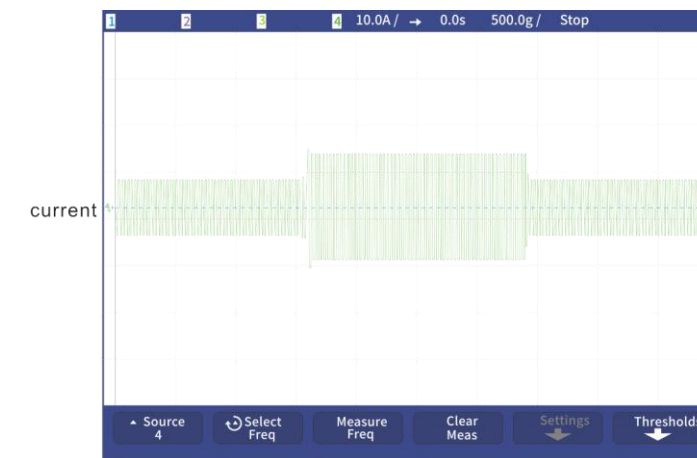
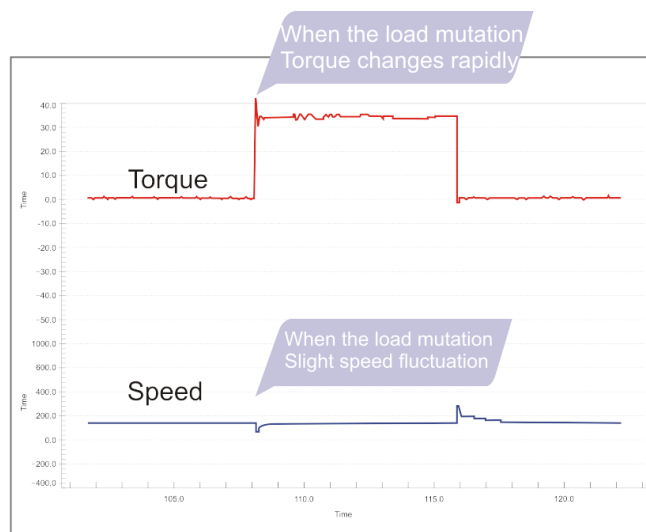
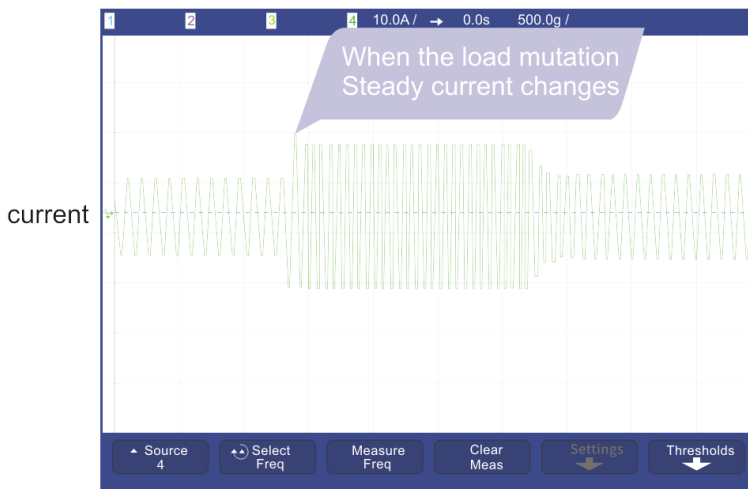


Fast current control:

High dynamic response speed (15ms), fast starting speed, small speed fluctuation

High carrier frequency:

8- 16KHz automatic adjustment, motor work more stable



Wide range vector control:

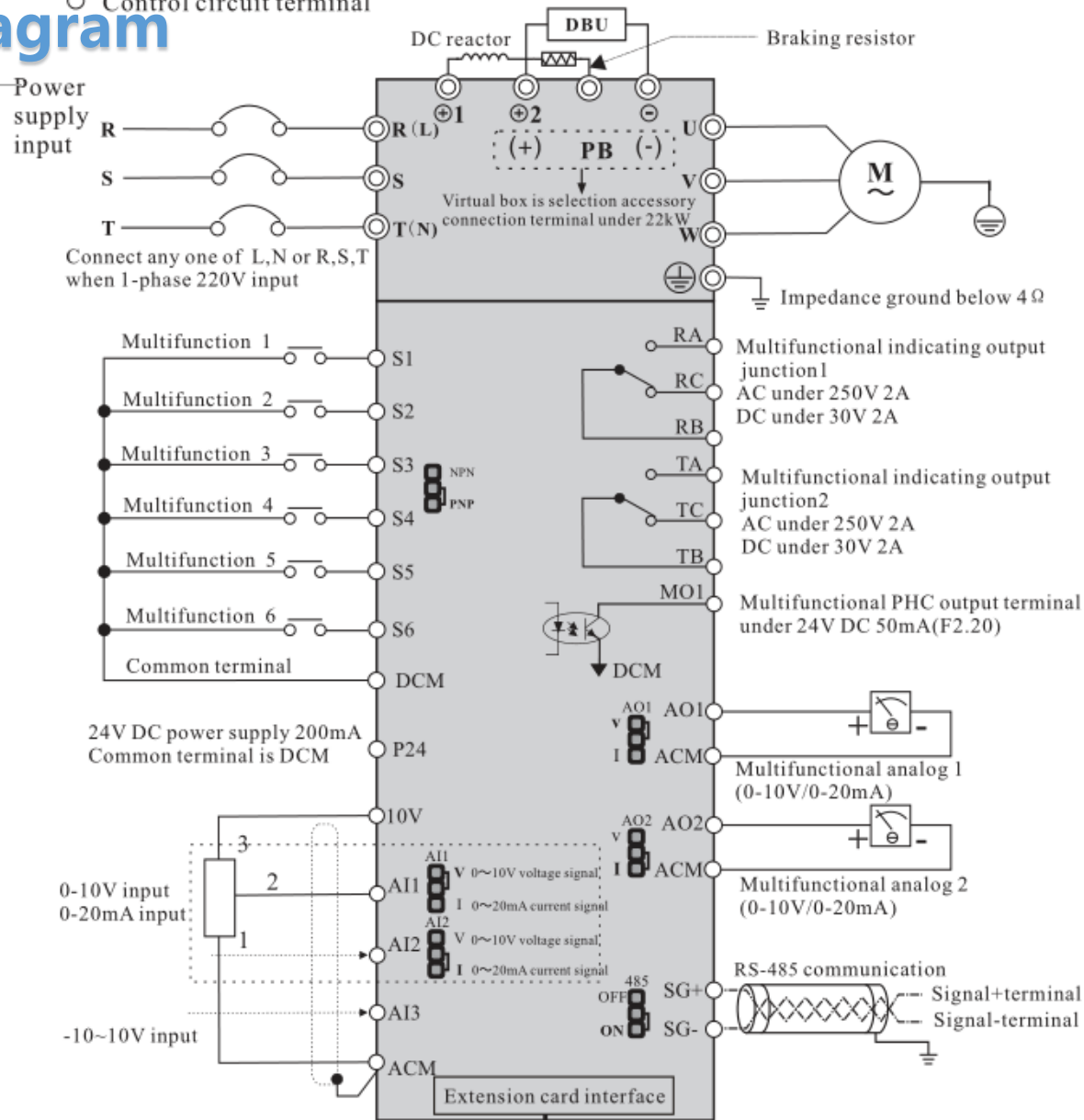
The frequency range of the non-inductive vector control is up to 1000Hz, which can ensure the high-performance operation of the motor.

The waveform of current, torque and speed when add load suddenly and unload with 2Hz 100% rated load

BD600 Wiring Diagram

⊙ Main circuit terminal

○ Control circuit terminal



Extension card: I/O extension card, PG card
(Relay extension card and V/I extension card can be customized as your request.)

BD600 Features

- Torque limit and control

"excavator" character, automatic limit torque when running can prevent over-current trip continually; vector mode can realize torque control

- Equip with two groups of motor parameter, it can realize switching control of two motors.

- Speed sensorless vector control(SVC), sensor vector control(VC), V/F control

- Straight or S-curve acceleration/deceleration mode, 4 types acceleration/deceleration times, it can be switched by terminal

- Total 10 main and auxiliary frequency source, they can be switched and combined flexibly

- A variety of encoder is optional

support different encoder, UVW encoder, transformer, etc

- Analog input increase 2 sets of input current inflection points, more flexible use

- Internal set driving unit in AC drive with power between 0.75-15kw, links to driving electronic resistance if fast stop needed

- Built in PLC or control terminal, achieve up to 16 sets speed automatic cycle switching operation. Hold time and acceleration/deceleration of each step speed can be adjusted

- Built in speed trace function, multiple speed trace mode, the speed of trace can be adjusted




BD600 Technical Features

	Technical Features	Description	
Input	Input voltage range	1AC 220V±15%, 3AC 220V±15%,3AC 380V±15%, 3AC 660V±10%	
	Input frequency range	47 ~ 63Hz	
	Power factor	≥95%	
Control performance	Control mode	V/F control, non-PG vector control(SVC), PG vector control (FVC)	
	V/F control	Line, multiple point , square V/F curve, V/F separation	
	Operation command mode	Keypad control, Terminal control, Serial communication control	
	Frequency Reference Source	Digital,analog,pulse frequency,serial communication,multi-step speed,simple PLC and PID The combination of multi-modes and the different modes can be switched.	
	Overload capacity	G type: 150% rated current 60s,180% rated current 3s P type: 120% rated current 60s, 150% rated current 3s	
	Start torque	G type: 0.5Hz/150%(SVC), 0Hz/180%(FVC) P type: 0.5Hz/100%	
	Speed adjusting range	1:100(SVC)	1:1000(FVC)
	Speed control accuracy	±0.5%(SVC)	±0.02% (FVC)
	Carrier frequency	0.5 to 16.0kHz;automatically adjust carrier frequency according to the load characteristics	
	Frequency resolution	Digital setting:0.01Hz. Analog setting:maximum frequency x 0.025%	
	Torque boost	Automatic torque boost; manual torque boost 0.1~30%	
	Acceleration and deceleration mode	Line or S-curve, 4 types of acceleration/deceleration time with the range of 0.0~6500.0 s	
	DC brake	Supports starting and stopping DC brake;	
	Jogging Control	Jog frequency range:0.0Hz~50.00Hz; Jog Acc/Dec time:0~6500.0s	
	Simple PLC & multi-step speed operation	Built-in PLC or control terminal,16 steps speed can be set	
	Built-in PID	Built-in PID control to easily realize the close loop control for the process parameters (such as pressure, temperature, flow, etc.)	
	Automatic voltage regulation(AVR)	Automatically maintain a constant output voltage when the voltage of electricity grid changes	
	Common DC bus	Common DC bus function: multiple inverters can use a common DC bus	
	Traverse control	Traverse control function:multiple triangular pulse frequency control	
Fixed length control	Setting length control		

Terminals	Input terminals	<ul style="list-style-type: none"> ● 6 programmable digital inputs,it can be extended to 4 digital inputs,one of which supports high speed pulse input; ● 1 analog voltage input 0~10VDC; ● 2 voltage input 0~10VDC or current input 0~20mA
	Output terminals	<ul style="list-style-type: none"> ● 1 open collector output ,it can be extended to 1 high speed pulse output ; ● 2 relay outputs ; ● 2 analog output: voltage output 0~10VDC or current output 0~20mA
Human machine interface	LED Display	Can display setting frequency, output frequency, output voltage, output current, etc.
Environment & Protection class	Protection class	IP20
	Humidity & temperature	90%RH or less (no-condensation),-10℃~40℃ .Inverter will be derated if ambient temperature exceeds 40℃
	Vibration	Under 20Hz 9.8m/s(1G),Over 20Hz5.88m/s(0.6G)
	Store environment	≤1000M,indoor(no corrosive gas and liquid)
	Store temperature	-20℃~60℃
	Cooling Mode	Forced air-cooling

BD600 Model Selection

MODEL: BD600-3R7G/5R5P-4
INPUT: 3PH 380V 50/60Hz
OUTPUT: 3PH 0~380V 0~600Hz
POWER: 3.7/5.5kW 8.5/13A
S/N: 
01B3413A115251001
ZHEJIANG NEW FOLINN ELECTRIC CO.,LTD

Specification
and model

Input

Output

Power

Bar code

Serial number

BD600 - 3R7G/5R5P - 4 - XX

Technology version

Input voltage classes:

2:220V 4:380V

6:660V

Specifications and models:

Heavy load 3.7kW

Light load 5.5kW

Serial code:BD600 Series

Optional instructions:

Installation:

W-wall mount (standard)

G-landed

Protection class : IP20 IP55 IP65

ACC Parts: According to parts list

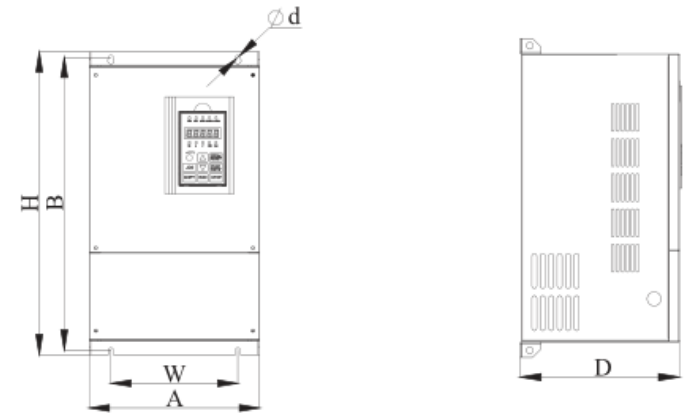
BD600 Selection Guide

Models	Rated power (kW)	Rated input current (A)	Rated output current (A)	Adaptive motor (kW)
3PH 220V±15% 47Hz ~ 63Hz				
BD600-0R5G-2	0.55	3.8	3.2	0.55
BD600-0R7G-2	0.75	4.9	4.1	0.75
BD600-1R5G-2	1.5	8.4	7.0	1.5
BD600-2R2G-2	2.2	11.5	10.0	2.2
BD600-3R7G-2	3.7	18	15	3.7
BD600-5R5G-2	5.5	24	23	5.5
BD600-7R5G-2	7.5	37	31	7.5
BD600-011G-2	11	52	45	11
BD600-015G-2	15	68	58	15
BD600-018G-2	18	84	71	18
BD600-022G-2	22	94	85	22
BD600-030G-2	30	120	115	30
BD600-037G-2	37	160	145	37
BD600-045G-2	45	198	180	45
BD600-055G-2	55	237	215	55
BD600-075G-2	75	317	283	75

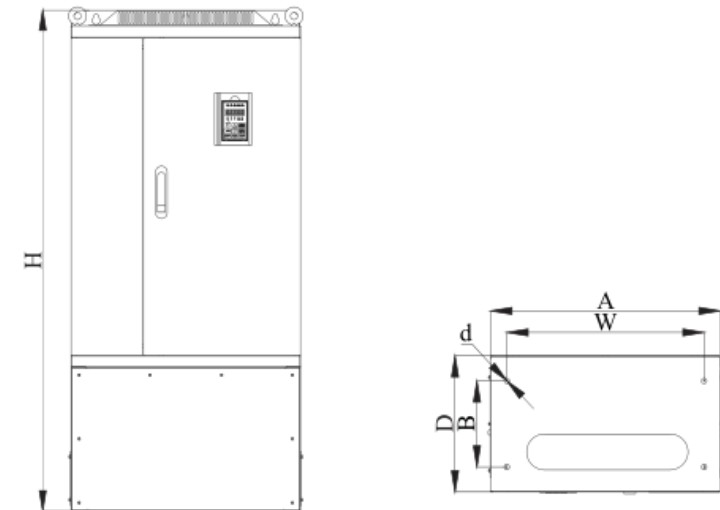
Models	Rated power (kW)	Rated input current (A)	Rated output current (A)	Adaptive motor (kW)
Input 3PH 380V±15% 47Hz ~ 63Hz				
BD600-0R7G/1R5P-4	0.75/1.5	3.4/5.0	2.5/3.7	0.75/1.5
BD600-1R5G/2R2P-4	1.5/2.2	5.0/5.8	3.7/5.0	1.5/2.2
BD600-2R2G/3R7P-4	2.2/3.7	5.8/10.5	5.0/8.5	2.2/3.7
BD600-3R7G/5R5P-4	3.7/5.5	10.5/14.6	8.5/13	3.7/5.5
BD600-5R5G/7R5P-4	5.5/7.5	14.6/20.5	13/18	5.5/7.5
BD600-7R5G/011P-4	7.5/11	20.5/26	18/24	7.5/11
BD600-011G/015P-4	11/15	26/35	24/30	11/15
BD600-015G/018P-4	15/18.5	35/38.5	30/37	15/18.5
BD600-018G/022P-4	18.5/22	38.5/46.5	37/46	18.5/22
BD600-022G/030P-4	22/30	46.5/62	46/58	22/30
BD600-030G/037P-4	30/37	62/76	58/75	30/37
BD600-037G/045P-4	37/45	76/92	75/90	37/45
BD600-045G/055P-4	45/55	92/113	90/110	45/55
BD600-055G/075P-4	55/75	113/157	110/150	55/75
BD600-075G/093P-4	75/93	157/180	150/170	75/93
BD600-093G/110P-4	93/110	180/214	170/210	93/110
BD600-110G/132P-4	110/132	214/256	210/250	110/132
BD600-132G/160P-4	132/160	256/307	250/300	132/160
BD600-160G/200P-4	160/200	307/385	300/380	160/200
BD600-187G/200P-4	187/200	350/385	340/377	187/200
BD600-200G/220P-4	200/220	385/430	380/430	200/220
BD600-220G/250P-4	220/250	430/468	430/465	220/250
BD600-250G/280P-4	250/280	468/525	465/520	250/280
BD600-280G/315P-4	280/315	525/590	520/585	280/315
BD600-315G/350P-4	315/350	590/665	585/650	315/350
BD600-350G/400P-4	350/400	665/785	650/754	350/400
BD600-400G/500P-4	400/500	785/965	754/930	400/500
BD600-500G/630P-4	500/630	965/1210	930/1180	500/630
BD600-630G/710P-4	630/710	1210/1465	1180/1430	630/710

BD600 Size

1.External dimension 1 :wall-mounted housing



2.External dimension 2:wall-mounted/ floor combination housing



Base No.	Model	Power (kW)	Dimensions (mm)						Housing
			A-width	H-height	D-depth	W	B	d	
B10	BD600-0R5G-2	0.55kW	116	175	153	103	165	5	Wall-mounted plastic housing
	BD600-0R7G-2	0.75kW							
	BD600-1R5G-2	1.5kW							
B01	BD600-2R2G-2	2.2kW	134	251	173	121	238	5	
	BD600-3R7G-2	3.7kW							
B02	BD600-5R5G-2	5.5kW	161	274	198	148	261	6	
	BD600-7R5G-2	7.5kW							

BD600 Size

B07-G	BD600-110G-4-01	110kW	420	1108	334	320	230	12	Floor type steel casing housing
	BD600-132G-4-01	132kW							
	BD600-160G-4-01	160kW							
B09-G	BD600-200G-4-01	200kW	640	1400	390	550	240	15	
	BD600-220G-4-01	220kW							
	BD600-250G-4-01	250kW							
	BD600-280G-4-01	280kW							
	BD600-315G-4-01	315kW							
B12-G	BD600-350G-4-01	350kW	950	1652	415	825	245	15	
	BD600-400G-4-01	400kW							
	BD600-450G-4-01	450kW							

Base No.	Model	Power (kW)	Dimensions (mm)						Housing
			A-width	H-height	D-depth	W	B	d	
B10	BD600-0R7G-4	0.75kW	116	175	153	103	165	5	Wall -mounted plastic housing
	BD600-1R5G-4	1.5kW							
	BD600-2R2G-4	2.2kW							
B01	BD600-3R7G-4	3.7kW	134	251	173	121	238	5	
B02	BD600-5R5G-4	5.5kW	161	274	198	148	261	6	
	BD600-7R5G-4	7.5kW							
B03	BD600-011G-4	11kW	210	343	215	195	327	6	
	BD600-015G-4	15kW							
B11	BD600-018G-4	18.5kW	220	395	222	160	378	7	
	BD600-022G-4	22kW							
B04	BD600-030G-4	30kW	255	453	237	190	440	8	
	BD600-037G-4	37kW							
B05	BD600-045G-4	45kW	280	582	295	200	563	9	
	BD600-055G-4	55kW							
B06	BD600-075G-4	75kW	300	685	327	200	667	11	
	BD600-093G-4	93kW							
B07	BD600-110G-4	110kW	420	840	334	150*150	815	11	Wall mounted steel casing housing
	BD600-132G-4	132kW							
	BD600-160G-4	160kW							
	BD600-187G-4	187kW							
B09	BD600-200G-4	200kW	640	1035	390	250*250	1003	11	
	BD600-220G-4	220kW							
	BD600-250G-4	250kW							
	BD600-280G-4	280kW							
	BD600-315G-4	315kW							
B12	BD600-350G-4	350kW	950	1300	415	350*350	1262	15	
	BD600-400G-4	400kW							
	BD600-450G-4	450kW							

ACC parts for optional



AC Reactor



DC Reactor



Brake Units



Brake Resistance

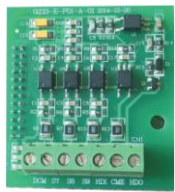


Figure 2 Extension card

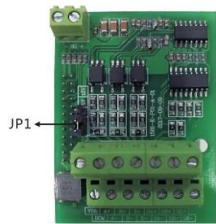
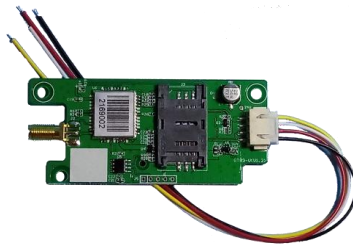


Figure 2 PG card



IOT card



Profinet/Profibus card



Keyboard



EMC filters

Application case

01 Energy ,Power

02 Engraving machine

03 Lift Machine



Air compressor

04

Logistics transportation

05

General industry

06



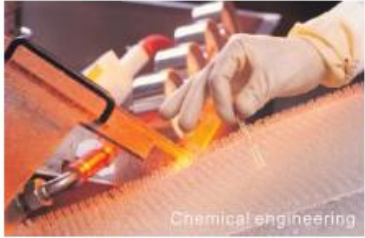
Mining



CNC



Hoisting



Chemical engineering



Ceramics



Oil field



Municipal engineering



Printing and Packaging



Wire and cable



Textile



Lift



Injection moulding



Industry power supply



Wooden machine



Customize a new future

Thank you!

2022-02

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