

ISO9001:2015 CE SGS

Customize the new future

**Zhejiang New Folinn Electric Co., Ltd**

Add: No. 9, 26th Street, Eastern New Area, Wenling, Zhejiang, China  
E-mail: [overseas@chinafuling.com](mailto:overseas@chinafuling.com)  
[www.chinafolinn.com](http://www.chinafolinn.com)



# PRODUCT CATALOG

Driven by your heart to win the future

[WWW.CHINAFOLINN.COM](http://WWW.CHINAFOLINN.COM)



## ABOUT US

Zhejiang New Folin Electric Co., Ltd., which was founded in 1994 with a registered capital of 76 million yuan. It is located in Wenling, Zhejiang, a famous advanced manufacturing base in the Yangtze River Delta. The company focuses on the R&D and manufacturing of frequency inverter. Its sales network and after-sales service agencies have spread all over the major provinces, cities and autonomous regions in China. Its products are exported to Europe, America, Southeast Asia, the Middle East and other countries, and its market share has been in the forefront of the industry.

With more than 20 years of experiences and development, it has been awarded as "Zhejiang High tech Enterprise", "Zhejiang Famous Brand", "Zhejiang Famous Brand Product", and "Top Ten Brands of Domestic Low voltage Frequency Inverter" for many consecutive years, and passed the Zhejiang Manufacturing Certification under the "Product" label in 2021. In 2022, it was recognized as a national specialized, refined, special and new "Little Giant" enterprise.

Folinn Electric always adheres to the service concept of quality first, customer first, relying on the advantages of technology research and development and marketing channels, actively broadening the product line, constantly improve the core competitiveness of products in the market, continuously committed to promoting industrial civilization with advanced technology, and quickly providing customers with more intelligent, more accurate and more cutting-edge electrical products and personalized solutions.

Folinn Electric, customizing the New Future.



## CONTENTS

### 01

#### General AC Drive

H1 series compact AC drive	08
BD600 series high performance vector AC drive	09
FS50L series synchronous servo drive	10
BD330 series vector control AC drive	11
DZB300 series vector control AC drive	12
DZB200M mini type AC drive	13

### 02

#### Dedicated Drive

H110 series carving machine drive	14
DZB312 series carving machine drive	15
BD331 series constant pressure water supply drive	15
BD337 series IP53 drive	16
H440 series high functional cutting machine drive	17
H129 series solar pump drive	18
BD330-PV series solar pump drive	19

### 03

#### Spindle Motor

KE Series Motorized Spindle	20
KZ series CNC Servo Spindle Motor	21
KZB series High-speed CNC Servo Spindle Motor	22



# CORPORATE HISTORY

ISO9001:2015 CE SGS

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 Follin Electric Co., Ltd

2016

Honored as famous brand product of Zhejiang

2020

Hangzhou Operation Center was established

2012

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

2018

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

2022

Won the title of National "specialized, refined, special and new" Small Giant Enterprise

2001

ISO9001:2000 APPROVED/ CE approved

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"

2013

Honored as famous brand product of Zhejiang

2015

SGS approved

2019

Sinopec Yipai certification 18000 approved

2021

Passed the Zhejiang Manufacturing Certification under the "Product" label

1994

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

2004

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

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

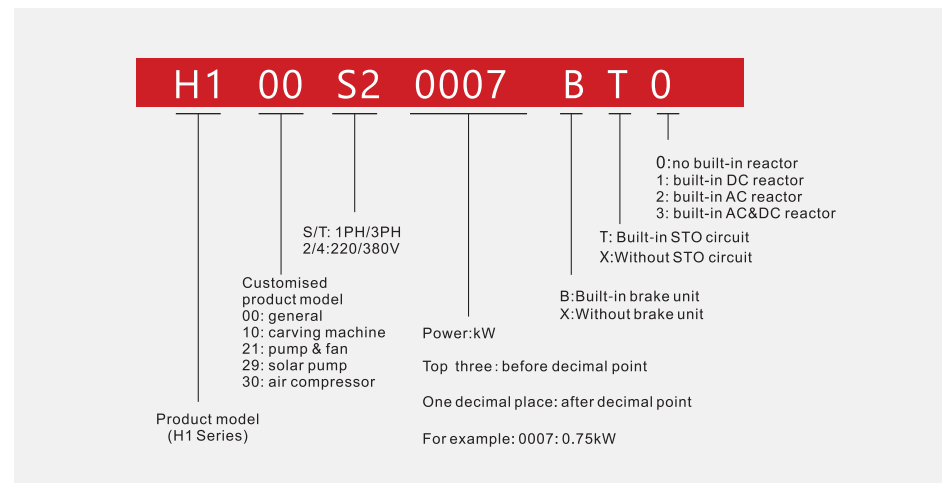
2009

Became "the best Commercial Partner" of Infineon

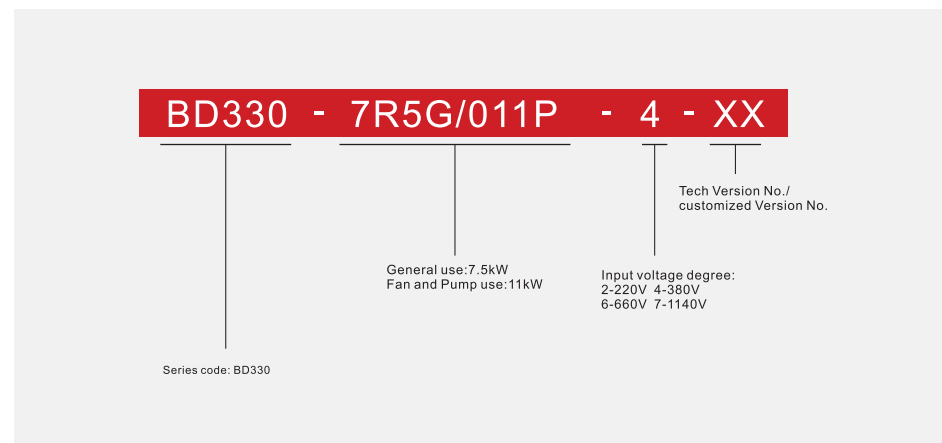
**Driven by your  
heart to  
win the future**



## H1 series AC drive Model Number Naming Regulation



## BD series AC drive Model Number Naming Regulation



## General AC drive

## H1 Series Compact Vector AC Drive



According to the requirements of high stability, small size, easy to debug, we developed a new compact vector control inverter.

Widely used in woodworking machinery, fan, water pump, filling food, ceramic machinery, textile machinery and other equipment.

## FEATURE

- Compatibility drive**  
 Applicable to asynchronous motor, synchronous motor and single motor
- High carrier frequency**  
 Max.16Hz, motor can work more quietly.
- Customization**  
 According to industry customization, remove redundant functions, cost is more reasonable, and quality is more stable
- Integrated design**  
 Reduce the number of boards and flying wires, eliminate potential fault points with the greatest extent, and maximize performance the electrical and EMC with high-efficient
- Bus voltage control**  
 Over-voltage control ensures deceleration at the fastest speed, magnetic flux braking realizes rapid deceleration when there is no braking resistor, and under-voltage control realizes non-stop function when instantaneous power-off
- Adaptive vector control**  
 Vector performance, VF convenience. The motor parameters are not sensitive and do not need self-learning.
- Independent air duct**  
 No forced wind flows through the components, improving environmental adaptability.
- Delicate heat dissipation design**  
 Compact size and easy installation.
- Easy to operate**  
 Select terminal source according to the required function, saving the number and type of terminal
- Flexible function**  
 Flexible combination of setting values and commands, easily adapt to different applications
- Wide range vector control**  
 Frequency range 0-1000Hz, applicable to more motors, and ensures high performance when running with high speed
- Fast current control**  
 High dynamic response speed(15ms), fast start-up speed, small speed fluctuation.

## APPLICATION



- widely used in textile machine, packing machine, carving machine, printing machine, solar water pump, food machinery, woodworking machinery, water pump fan and ceramic machinery, providing better solution



## General AC drive



### BD600 Series High Performance Vector AC Drive

BD600 series is latest version for high functional vector AC drive. Multiple control modes and new speed sensorless vector control (SVC) algorithm can achieve stability at low speed. Stronger load capacity at low frequency, support SVC torque control and multiple PG cards, it can realize close loop control of asynchronous motor. Stronger functions, functional of motor control has clearly raised.

#### FEATURE

- 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(FVC), 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, rotary transformer, etc
- Analog input increase 2 sets of input curve, each group have 4 inflection points, more flexible use
- Internal set driving unit in AC drive with power between 0.75-22kW, 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

#### APPLICATION



- CNC, packaging machinery, wire drawing machine, elevator door-motor
- All kinds of fans and pumping load
- Water extractor, centrifuge, injection molding machine
- Paper manufacturing machinery, lifting machinery, hoist

## General AC drive



### FS50L Series Synchronous Servo Drive

FS50L series high functional synchronous servo drive is specially for speed and torque control of three phase AC permanent magnet synchronous motor, it can open loop vector control without encoder

#### FEATURE

- High functional vector control technology, large torque output at low speed
- Excellent dynamic characteristics. Super overload capacity
- Rich combination function, stable function
- Application to various kinds of automated production equipment
- Energy saving: save energy at max
- Simple PLC function, it can realize multistage speed timing operation function of multiple mode
- Professional open loop synchronous algorithm can provide perfect application solution for different brand of permanent magnet synchronous motor

#### APPLICATION



- CNC workshop, textile machinery, chemical plant

## General AC drive



### BD330 Series Vector Control AC Drive

BD330 is the latest version for high functional vector AC drive based on DZB300, with excellent performance and function, more reasonable structure, better heat dissipation, smaller size, which can satisfy different request from clients, and beautiful appearance.

#### FEATURE

- Newly structure design  
Nice appearance, small size and good heat dissipation
- Built in speed tracking function above 7.5kW:  
shut down with large inertia load and quick restart
- Newly hardware design  
reliable quality
- Wide voltage degnin  
more suitable for grid
- 16 segment, each adjustable either for deceleration  
or speed up
- Two controlling modes: V/F and open loop vector control
- Modular design, suitable for a variety of expansion card
- Internal set driving unit in AC drive with power  
between 0.75-22kW, links to driving electronic  
resistance if fast stop needed
- Main and auxiliary frequency, frequency instruction is  
swappable, operation instruction is swappable

#### APPLICATION



- Metal processing, CNC machine, wire drawing machine  
and other mechanical equipment
- Circulating water pump, water pump, oil field injection water  
pumps, fuel pumps, music fountain
- Boiler, induced draft fan, cyclone machine
- Paper-making equipment, chemical industry, pharmaceutical  
industry, textile industry, etc

## General AC drive



### DZB300 Series Vector Control AC Drive

DZB300 series vector type common AC drive has adopted DSP controlling system, completely optimized speed sensor vector controlling, as well as V/F controlling, multiplied in function. smart in application and stable in reliability, capable of using widely for digital machine tool, metal processing, and other industries or equipments, which require highly on speed control, torque response and low frequency output features.

#### FEATURE

- Supply with multi faults protection  
over-current, over-voltage, over-heating, phase loss  
and over load, etc
- Support multi frequency setting modes  
digital setting, analog quantity setting, PID setting, and  
communication setting
- 2 ways of speed control modes  
non-PG vector control(SVC), V/F control mode
- Starting torque  
non-PG vector control: 0.5Hz/150% ( SVC )
- 8-segment simple PLC, multi speed control, and  
PID control
- It has the function of instantaneous power  
failure without shutdown
- Freely programmed for both input and output  
terminals, the user can form a lot of working modes  
according to actual need
- Internal set DC reactor in AC drive with power  
over 37kW, increases the output side power  
factor, and whole system efficiency and stability
- Internal set driving unit in AC drive with power  
between 0.75-15kW, links to driving electronic  
resistance if fast stop needed

#### APPLICATION



- Metal processing, digital machine tool, wire drawing  
bench and other mechanical equipment
- Paper making equipment, chemistry industry, medicine  
industry and textile industry
- Government project and central air conditionings system
- All kinds of fans and pumping load

## General AC drive



### DZB200M Series Mini AC Drive

DZB200M Mini inverter is a small inverter specially designed for the light industry. It is loved by users for its small size, strong function and convenient installation

Widely used in textile, printing and dyeing, carving, food processing and other industries

#### FEATURE

- Power Range  
0.5kW~ 2.2kW
- Mini design, less space
- Adopt top in and down out wiring, suitable for small control cabinet installation wiring
- Size  
151x117x100(height x width x depth)
- Cost-effective, powerful function

#### APPLICATION



- Textile, printing, packaging machinery, food machinery

## Dedicated Drive



### H110 Series Carving Machine Drive

H110 series carving machine uses AC drive is a high-performance multi-functional AC drive specially developed for engraving machine industry on H1 series AC drive. The product adopts high-performance vector control technology and integrates the application environment of engraving machine industry. It can realize the function of stepless speed regulation and multi-stage speed control arbitrarily switching,

Small size, easy to install, easy operation, convenient for customers to use

#### FEATURE

- Standard 0-1000hz frequency output range, up to 1000Hz, fully meet the debugging range of engraving machine
- The wide voltage design of  $\pm 20\%$  can meet the application situation of large voltage fluctuation, 1phase(160V~240V), 3 phase(320V~440V)
- Compact structure, saving installation space
- Strict quality system management to ensure the stable and reliable operation of products
- Two sets of parameter macro functions are added, which can run normally without adjusting parameters at 400Hz, which is convenient for installation and debugging
- Dynamic torque current control, fast response to load changes
- Through strict EMC test, strong anti-interference ability
- No need debugging, easy wiring

#### APPLICATION



- Woodworking engraving machine, stone engraving machine, process engraving machine, cylinder engraving machine, etc



## Dedicated Drive



### DZB312 Series Carving Machine Drive



#### ● Application

Woodworking engraving machine, advertising carving machine, stone engraving machine, process engraving machine, cylinder engraving machine, etc

#### FEATURE

- Power Range: 0.75kW-11kW
- Adopt independent air dust suitable for dusty occasions
- Unique core algorithm, small external interference
- Output frequency range 0-1000.0Hz
- Automatic torque boost and automatic slip compensation function
- Engraving machine dedicated macro code parameter set before delivery out of factory, convenient for customers to debug

## Dedicated Drive



### BD337 Series IP53 Drive

IP53 AC drive is developed specially for the harsh environment such as moisture of splashing, and heavy dust, etc.

The AC drive shell which meets IEC60529(EN60529) and IP53 standard could present dust and the vertical plane with 60° in the rain

#### FEATURE

- Structure of AC drive is metal shell which used advanced surface dusting spray crafts, delicate color, nice appearance, waterproof paint
- The outward appearance of the AC drive uses metal shell which ensured good cooling
- IP53 fan
- Power range: 2.2kW-500kW

#### APPLICATION



- Applicable industry: plastic, textiles, printing and dyeing, food, machine tools, powder, ventilation equipment, etc

### BD331 Series Constant Pressure Water Supply Drive



#### ● Application

Constant pressure water supply for urban and rural residential, central heating and water supply for urban

Water treatment, water supply pump station, constant pressure oil system. etc

Production water for industrial and mining enterprises, water circulation, and industrial boiler water supply system. etc

#### FEATURE

- A variety of control mode: Support multi pump multi mode control
- Built-in standard 485 communication
- Automatic carrier frequency adjustment, bigger starting torque of motor, high speed running with lower noise
- Timing rotation control, which can effectively prevent rust of pump
- High pressure reach detection, low pressure reach detection, sleep/awake function, lack in water alarm, fire inspection, etc

## Dedicated Drive



## H440 Series High Functional Cutting Machine Drive

H440 series is a four-in-one inverter specially developed for four-process CNC cutting machine based on H1 series.

The four-process CNC cutting machine is an economical multi-function numerical control equipment. It has four spindles, all four spindles can realize punching when producing panel furniture, and the spindles are most 6kW big power spindle especially for slot

### FEATURE

- Cutting machine spindle four-in-one intelligent drive
- Quick start and stop: <1.8s
- Save installation time: <100s
- Quickly switch of station: < 0.2s
- Save installation space: 186\*410\*193
- Simple wiring: 4 power wires+ 16 motor wires+ upper PC

### APPLICATION



- Four-in-one driver

## Dedicated Drive



## BD330-PV Series Solar Pump Drive

BD330-PV series solar water pump AC drive is a high functional inverter special for solar pump based on BD330.

It uses high performance vector control, combined with solar pump application control requirements, can realize excellent PID control function, MPPT function(maximum power point tracking), light weak auto sleep, light intensity auto wake up, under load protection, water shortage alarm, etc. Easy wiring, easy operation.

### FEATURE

- Cost effective  
Built-in motor protection function  
No battery design, adapt for all kinds of application, easy to maintain
- Remote monitoring  
Standard RS-485, with optional GPRS module for remote monitor  
Monitor solar pump system/history parameters anytime and anywhere
- Flexible application  
Adapt for three phase asynchronous motor, mainstream PV modules  
Can switch to city electricity
- Intelligent and reliable  
Advanced motor and pump driving technology, 20 years market application experience  
Built-in intelligent IGBT module, built-in over-voltage, over-load, over-heat and dry rotation protection

### APPLICATION



- Solar water pump

## Dedicated Drive



## H129 Series Solar Pump Drive

H129 series solar water pump AC drive is a high performance multi-function inverter special for solar pump based on H1 series and BD330-PV. It uses high performance vector control, combined with solar pump application control requirements, can realize excellent PID control function, MPPT function(maximum power point tracking), light weak auto sleep, light intensity auto wake up, under load protection, water shortage alarm, etc. Easy wiring, easy operation.

### FEATURE

- **Flexible application**  
Adapt for three phase asynchronous motor, three phase synchronous motor, mainstream PV modules  
Can be connect with a variety of styles of water level switch or water level sensor  
Programmable implementation of complex application functions, the application of macros to simplify custom function calls  
Can switch to city electricity
- **Remote monitoring**  
Standard RS-485, with optional GPRS module for remote monitoring  
Monitor solar pump system/history parameters anytime and anywhere
- **Cost effective**  
Long duration of water  
Small size, can be installed side-by-side with zero distance  
Built-in motor protection function  
No battery design, adapt for all kinds of application, easy to maintain
- **Intelligent and reliable**  
Vector performance, VF inconvenience. Motor parameters insensitive, no need self-learning.  
Advanced motor and pump driving technology, 20 years market application experience.  
Built-in intelligent IGBT module, built-in over-voltage, over-load, over-heat and try rotation protection.

### APPLICATION



- Solar water pump

## Spindle Motor



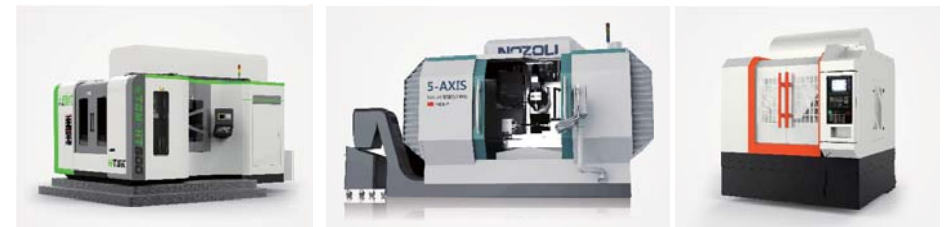
## KE Series Motorized Spindle

Turning, milling, grinding high-speed and stable, low-speed and high torque, realize zero transmission of machine tool spindle system

### FEATURE

- High precision spindle mechanical structure, small spindle cone surface beating, the precision of the end surface beating is higher than similar lathe, used in applications with extremely high precision requirements
- Good control performance, fast servo response, accurate zero-speed locking position, high accuracy of indexing control
- Non-maintenance lubrication structure, high ability protection structure, low operating temperature rise, stable and reliable for a long time
- Optimized winding design and efficient cooling structure, so that the motorized spindle has a strong and agile acceleration ability in the high-speed area
- Improved short time rated power and torque, enhanced short time recutting capability, so that reducing processing time
- High efficiency: higher than IE3 of IEC60034-30-2008 and level 2 energy efficiency of GB18613-2010

### APPLICATION



- High-grade CNC machine tool: for example parallel motion machine tool, pentahedral processing center, small hole and microhole processing machine tool, etc. And also flexible processing motorized spindle, grinding motorized spindle, carving and milling Motorized spindle

## Spindle Motor

### KZ series CNC Servo Spindle Motor



With compact structure, superior performance, beautiful appearance and high efficiency, it is widely used in various fields of mechanical manufacturing.

With the optimized winding design and high efficiency cooling structure, the motor has strong and agile acceleration ability and wide range speed regulation ability in high speed area.

#### FEATURE

- Low motor inertia and fast dynamic response
- Built-in encoder, no need additional C-axis encoder
- Motor installed with independent fan, forced air cooling
- Low noise, low vibration
- Large torque, high dynamic performance (short rise time of slope)
- High efficiency: higher than IE3 of IEC60034-30 and level 2 energy efficiency of GB18613-2012

#### APPLICATION OCCASION



- Machine tools, plastic processing equipment, paper machinery, printing machinery, textile machinery, wood, glass, ceramics and stone processing machinery, packaging machinery, servo press, wire drawing machine, cable winding machine, lifting equipment or crane, test bench, user-designed special machine, seamless steel tube hot continuous rolling system, aluminum foil mill, circular knitting machine, bending hoop machine, automatic pipe cutting machine, metal circle sawing machine, hydraulic press, cleaning machine, rotary cutting machine, automatic shelf (for large e-commerce companies), etc.

## Spindle Motor

### KZG Series High-speed CNC Servo Spindle Motor



Heavy cutting in low speed area, small vibration in high speed area, high precision and fast dynamic response  
It takes only 1.9 from 0 to 20000 rpm

#### FEATURE

- High precision: radial < 0.005, axial < 0.01
- Optimized mechanical design, with high mechanical accuracy and low vibration characteristics, suitable for direct connection with the spindle
- High efficiency: higher than IE3 of IEC60034-30 and level 2 energy efficiency of GB18613-2012
- Built-in encoder, no need additional C-axis encoder
- Good control performance, fast response speed, accurate zero speed position and high indexing control precision
- With the optimized winding design and high efficiency cooling structure, the motor has strong and agile acceleration ability and wide range speed regulation ability in high speed area

#### APPLICATION OCCASION



- High end vertical machining center, Horizontal machining center, Compound high precision machining center