

AC Drive Introduction

GTAKE Electric

Think Without Boundary



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Think Without Boundary

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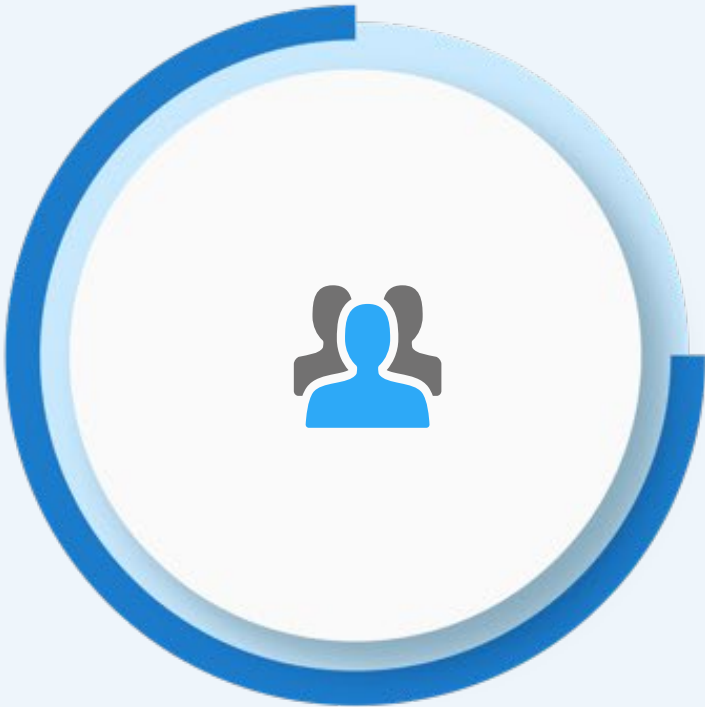
Service
&
Support

2009



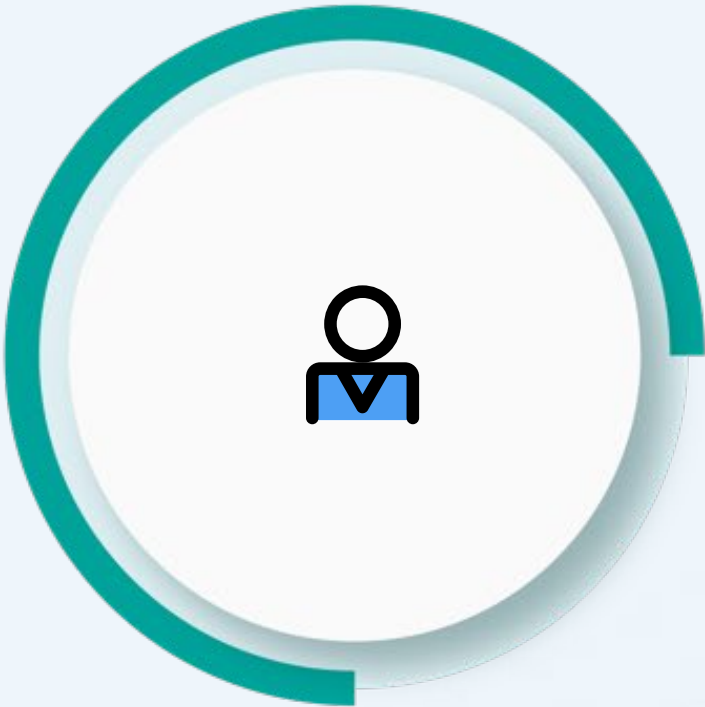
Founded in 2009

650+



650+ employees

200+



200+ engineers

Company Profile

Think Without Boundary

Product Portfolio •

-  EV Motor Controllers
-  High-speed Electric Motorcycle Motor Controllers
-  AC Drives
-  Power Supply System and Drive System for EV Powertrain Test
-  PCS
-  ...

Annual Production •

200,000

EV Motor Controllers

400,000

Motorcycle MCU

400,000

AC Drives

300

Power Supply System



Company Profile



Comple Intellectual Property Rights

- National Hig-tech Enterprise
- Software Enterprise
- Provincial Technical Center



National "Little Giant-Professional, Specialized and Innovative" Enterprise

- Provincial-level Professional, Specialized and Innovative small and medium-sized Enterprise



National 863 Plan:

Responsible for Research on Power Output and Reliability of Distributed Power Generation System



Think Without Boundary

167

National Patents and Software Copyrights

27

National Invention Patents

8

Provincial High-tech Products



Electric Vehicle
Engineering



Technology Center of
Beijing



Institute of
Technology



Quality Supervision
& Inspection



Center (Chongqing
& Shanghai)



IATF 16949:2016



ISO 9001:2015



EU CE Cetification



ISO 14001: 2015



GB /T 18488.1

GB /T 18488.2



ISO 9001:2015

Manufacturing Bases

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SHENZHEN
15000⁺
m²



NANTONG
36000⁺
m²



NANJING
3000⁺
m²



CHINA

50+
service centers and
branches

OVERSEAS

80+
countries and
regions

Metal Processing Machine Tools



Electro-Hydraulic Servo Hybrid



Applications

HVAC, Metal Processing, Air Compressors, Printing and Packaging, Cranes and Hoists, Mining, Steel, Chemical, Paper Making, Ceramics, Textiles, Chip Manufacturing, and etc.

25%+ Years experience

1,000,000+ units delivery

80+ countries and regions

Our Customers

Think Without Boundary





中国重汽



陕汽重卡



东风商用车
DONGFENG TRUCKS



一汽解放



JAC 江淮重工



北奔重卡
BEIBEN TRUCK



东风华神
DONGFENG HUASHEN



潍柴新能源商用车



庆铃汽车



宇通重工



徐工集团



雷沃重工



SANY



中联重科



陕西北人
SHAANXIBEIREN



临工集团
LGMG



合力提升未来



HANGCHA



龙工



中国一拖集团有限公司
YTO GROUP CORPORATION



潍柴雷沃智慧农业



金龙客车
KUND LEUNG



金旅客车



柳工



宝鸡机床



BAOWU



宝信软件
BAOSIGHT



海格汽车



大连机床
[大连广数数控机床]
[原厂制造品质保障]



云南一机太工机械制造有限公司
Yunnan Yi Ji Tai Gong Machinery Manufacturing Co Ltd



网易
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中通客车
ZHONG TONG BUS



绿控传动
www.lvkon.com



特百佳动力
TOP GEAR



潍柴



江苏微特利电机股份有限公司
Jiangsu Weiteli Motor Limited By Share Ltd



ECTEK
Automotive Electronic Systems Co., Ltd.



LEAD 先导



NBT
NEW-TECH
BEYOND
TIME



华依科技
W-lbeda



朗迪



FEV



尼得科



上汽集团
SAIC MOTOR



广汽集团
GAG GROUP



BYD



吉利汽车
GEELY AUTO



SERES
赛力斯汽车



FOTON
福田汽车



TOSHIBA



ekontrol



OLA



ION



KOMATSU



AMPERE



SIMPLE



TORK
MOTORS

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Service
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Product Advantages

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Superior Performance

Torque Response: **5ms**
Speed Accuracy: **±0.02%**

...



Control Mode

V/F, SVC1,
SVC2, VC



Motor Type

PMSMs, ACIMs, Synchronous
Reluctance Motors, Magnetic
Levitation Motors



Thorough Protection

Protection on drive, motor,
braking circuit, and power grid

Product Advantages

- | | |
|---|--|
|  Automatic identification of encoder types;Position display in real-time |  Comprehensive Functions: Speed/Torque/position control, V/F separated control |
|  LCD/LED keypad
PC-based monitoring tool |  Dual encoder feedback |
|  Safety protection function |  Encoder Type
Open-collector, Differential Output, Sine-cosine, Resolver |



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Items ▼	GK900 ▼	V***** AC80B- China ▼	I*** CHV- China ▼
Output Torque at low	0.25Hz ,180%	0.5Hz , 180%	0.5Hz , 180%
Adjustable speed range	1:200 (0-50Hz)	1:100 (0-50Hz)	1:100 (0-50Hz)
Speed control accuracy	±0.2%	±1%	±1%
Frequency adjustment range and accuracy	Range: 0.1-600Hz	Range: 0-600Hz	Range: 0-600Hz
Overload capacity	150%, 1min; 200%, 0.5s	150%, 1min; 180%, 10s	150%, 1min; 180%, 10s
DC braking	DC braking freq.: 0-600Hz DC braking time: 0-60s DC braking current: 0-100% No braking waiting time	DC braking freq.: 0.0-50Hz DC braking current: 0-150% DC braking time: 0-60s	DC braking freq.: 0.0-50Hz DC braking current: 0-150% DC braking time: 0-60s
Motor parameter	Off-line and online	Off-line	Off-line

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GTAKE VS Other Brands

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Series	Description
 GK610	☒ Compact AC drives
 GK620	☒ General Purpose AC drives
 GK820	☒ High Performance Vector Control AC Drives
 GK900	☒ Book-type High Performance Vector Control AC drives
 GK1000	☒ AFE Four Quadrant Drives
 SLR01A	☒ Solar Pump Drives
 GK620E	☒ Elevator Dedicated Drives

GK900 AC Drives

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Typical Features •



Book-Type Design
Reduce installation area up to **70%**



Intelligent Cooling Fan Control
Save energy and minimize the noise



STO Safety Protection
Prevent injury and ensure the safety of
the personnel and equipment



C3 Filter Optional
Meet EMI requirement in accordance with
EN61800-3



Wide Extensibility
Rich options for IO,
communication, and encoders



Leakage Current Detection
Protect the safety of the personnel
and the system



GK610 Compact AC Drives

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Typical Features •

01 Enhanced V/f, SVC1, SVC2

02 Speed accuracy: $\pm 0.2\%$

03 Torque response: 10ms

04 Max. operating ambient temperature: 50°C

05 Speed adjustment ratio: 1:200

06 High power density

07 Fully enclosed housing & independent air duct

08 Start torque: 180% @ 0.25Hz



GK610 Compact AC Drives

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Typical Features •

- | | |
|---|--|
| ☒ Cycle-by-cycle tripping | ☒ Enhanced V/f |
| ☒ Compact and delicate | ☒ Multi-step speed |
| ☒ Parameter display/hide | ☒ Parameter copy |
| ☒ Master-slave command and switch | |
| ☒ PMSM, ACIM | ☒ Dual motor switching |



GK620 General Purpose AC Drives

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Typical Features

01 Enhanced V/f, SVC1, SVC2

02 Speed accuracy: $\pm 0.2\%$

03 Flying start

04 Start torque: 180% @ 0.25Hz

05 Overload capacity: 150%, 1 min.;
180%, 10s

06 Variable carrier frequency auto-adjusting

07 Cycle-by-cycle tripping

08 Open-loop control of ACIM/PMSM

GK620 General Purpose AC Drives

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Typical Features



- | | |
|---|---|
| ☒ Cycle-by-cycle tripping | ☒ Enhanced V/f |
| ☒ Flexible and user-friendly | ☒ Multi-step speed |
| ☒ Simple PLC | ☒ Motor overheat protection |
| ☒ Master-slave command and switch | |
| ☒ I/O option boards | ☒ Dual motor switch |

GK820 High Performance Vector Control AC Drives

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Typical Features •

- | | |
|---|---|
| 01 Closed-loop vector control for ACIM & PMSM | 02 Zero-speed clamping & angular position control |
| 03 Torque response: <5ms | 04 Start torque: 200% at 0 Hz |
| 05 Pulse track control | 06 Pulse track accuracy: ± 1 pulse |



GK820 High Performance Vector Control AC Drives

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Typical Features •

- | | |
|--------------------------------------|-----------------------------|
| ✓ Cycle-by-cycle tripping | ✓ Enhanced V/f |
| ✓ Simple and user-friendly | ✓ Multi-step speed |
| ✓ Simple PLC | ✓ Motor overheat protection |
| ✓ Master-slave command and switching | |
| ✓ Encoder input supported | ✓ Dual motor switching |



GK1000 Four-Quadrant Drives

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Typical Features

- 01 DC Bus voltage auto-adjustment
- 03 Normal operation at 40% input voltage sudden drop
- 05 Four-quadrant operation, feedback to AC grid in real time

THDi < 4%

Regenerated energy feedback to the grid

GK1000 Four-Quadrant Drives

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Typical Features •



Master-slave command and switch



Four-quadrant operation



Enhanced V/f



Motor overtemperature protection



Simple PLC



Multi-step speed



Master-slave command and switch



I/O option boards



Frequency binding

PFQD Four-Quadrant High-Power Parallel Drives

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Typical Features •

- 01 10 modules in parallel. Total capacity: 6MW
- 02 Four-quadrant operation. Regenerated energy feeds back to the grid.
- 03 Normal operation at 40% input voltage sudden drop
- 05 380V/690V input voltage available

Modular design

Four-quadrant operation



PFQD Four-Quadrant High-Power Parallel Drives

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Typical Features •

- ✓ Power Range: 720~6000Kw.10 modules parallel connection via optic fiber
- ✓ 380V/690V four-quadrant operation
- ✓ Redundant control Power units can operate in bypass mode
- ✓ Multi-motor control Power units can drive different motors independently
- ✓ Delivered in cabinets. System reliability assured in parallel connection

720~6000kW

Cabinet parallel connection



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Service
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Service Philosophy: **Customer First**



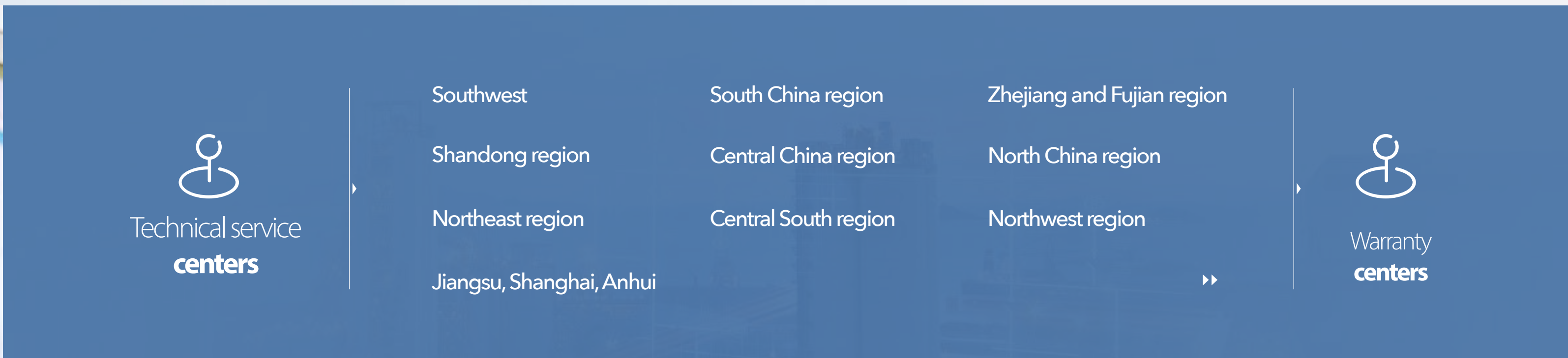
24^h  On-line support

48^h  Provide solution

We attach our great importance to the design, production, testing, packaging and such each station. To ensure the delivery of flowless, quality-consistent products, all the drives and controllers are through strict inspection and test before shipment

Professional team **X** service

Streamlined Processes **X** quick service



Professional phone service
& on-site technical support

Simplified service structure reduces
service process

A photograph of a business meeting with a blue tint. In the center, two people are shaking hands. To the left, a hand holds a pen over a document. In the background, another person is writing. A large, stylized upward-pointing arrow is on the right side. Overlaid on the image is a network of glowing blue and green dots connected by thin lines, resembling a digital or data network. The text "Win-win cooperation" is centered in white, bold font.

Win-win cooperation

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