

GTAKE PRODUCT CATALOG

34.05.0007-E01

**PRODUCT
CATALOG**



Every day, we apply our knowledge, resources, and efforts to create systems and products that perform under incredible demands. We listen, think, and address the challenges our customers face, and consequently deliver solutions that are a prime part of the technology that is changing the world.

We deliver lasting contributions to motor control and clean energy systems, solutions and products, seeking paths to sustainable development for the world. We integrate leading-edge technologies into industrial variable frequency drives, servo drives, winder power converters, solar inverters for industrial and clean energy markets. We also cater for HEV/EV motor controllers for automobiles with remarkable high-efficiency,

reliability and passenger comfortability. Our growth is driven by the increasing demand for better performance, lower emission, and higher intellectualization for the automatic systems and energy management.

We have a clear vision and follow carefully planned long-term strategies. With multiple locations, partners national wide and all over the world, Gtake can respond quickly with solutions tailored to the specific needs of our customers. Our leadership in motor control and optimized system solutions is built on a strong foundation, with a group of veterans over 20-year experience and our strong ties to universities and academic institutions. We are driven by the needs of our customers and guided by our tradition of integrity, wisdoms, and principles.



A VARIETY OF DRIVES AND CONTROLLERS
FOR INDUSTRIAL & CLEAN ENERGY MARKETS



Gtake enhances the global quality of motor control system by optimizing the solutions through improved drive technologies. Our technologies and services on the strength of our cutting-edge technology platform along with stretched know-how on industrial automation are tailored for each customer since we understand not every application is the same across all industries.

Through the combination of motor motion control, electronic control technologies, and understanding of energy distribution and consumption, we are pouring contributions to using fewer facilities, improving the efficiency, raising the precision, increasing energy utilization and prompting the motion and power system integration.



Globally for every human being on earth we are facing the same challenge of increasing pollution produced by the gasoline and diesel-powered vehicles, particularly in the medium and large-sized cities. Hybrid electric vehicles and electric vehicles provide a good solution to minimize the pollution or transfer the pollutant in the form of centralized discharge. The safety, efficiency, reliability and passenger comfortability are the supreme requirement for each vehicle. Gtake HEV/EV motor controllers in the basis of state-of-the-art technology are proved unsurpassed, attributing to not only its knowledge, long-term investigation, deep research, but also its strictly implemented quality control standard ISO 9001 : 2008, ISO/TS 16949 : 2009.



To provide CO2-free renewable energy for all aspects of our life and maintain the sustainability of our habitats should the anticipation of every human being on the earth. Gtake executes its efforts, energy into the sectors of wind power, and solar power solutions, products, including power conversion system, bidirectional wind power converter, solar pump drives, and so forth.



2009

Founded in September 2009

Gtake all investors, employees are dedicated, inventive, and hard-working. They applied those traits, along with outstanding craftsmanship, service, and integrity when they founded what was to become Gtake in 2009.

Those very qualities remain the basis of our business philosophy today. Gtake's leadership in motion control, energy steering and optimized solutions is built on that foundation of strategic vision, quality performance, and its core value - customer first. We build on our proven successes with technologies that redefine the way our customers' industrial system and renewable power equipment operate. We are guided by our strong tradition of integrity, driven by the needs of our customers, and aligned by our strategic vision and goals and hold fast to our core values and principles.

2012

GK600, GK800, GK1000, HEV/EV drives, and wind power converters launched



2013

Turnover up to 7 fold of 2012 FY



2016

Ranked in TOP 30 amid 1048 listed high-tech. companies



2015

Turnover soared up by 3 fold compared to 2014 FY

2014

ISO/TS16949:2009 passed
EU RoHS directive implemented
CE certified by TUV
National High-Tech Enterprise certified



“ZERO TOLERANCE” POLICIES

IN INTEGRITY AND OCCUPATIONAL HEALTH AND SAFETY (OHS).

Gtake creates a prejudice-free environment that cultivates talents, propels self-development, and provides meaningful work. Through our employees and technology, our goal is to provide the highest value and quality systems, products, and services that contribute to our customers' satisfaction and success. We believe Gtake does more than provides jobs in the districts in which we operate.

The promotion and maintenance of occupational health and safety is the primary responsibility of Gtake management. Human and financial resources in line with the importance attached to occupational health and safety are made available to comply with all national relevant Acts and Regulations and to ensure that the workplace is safe and without risk to health. We are always cultivating a spirit of volunteerism in social fraternity by encouraging our employees to be involved in their communities.



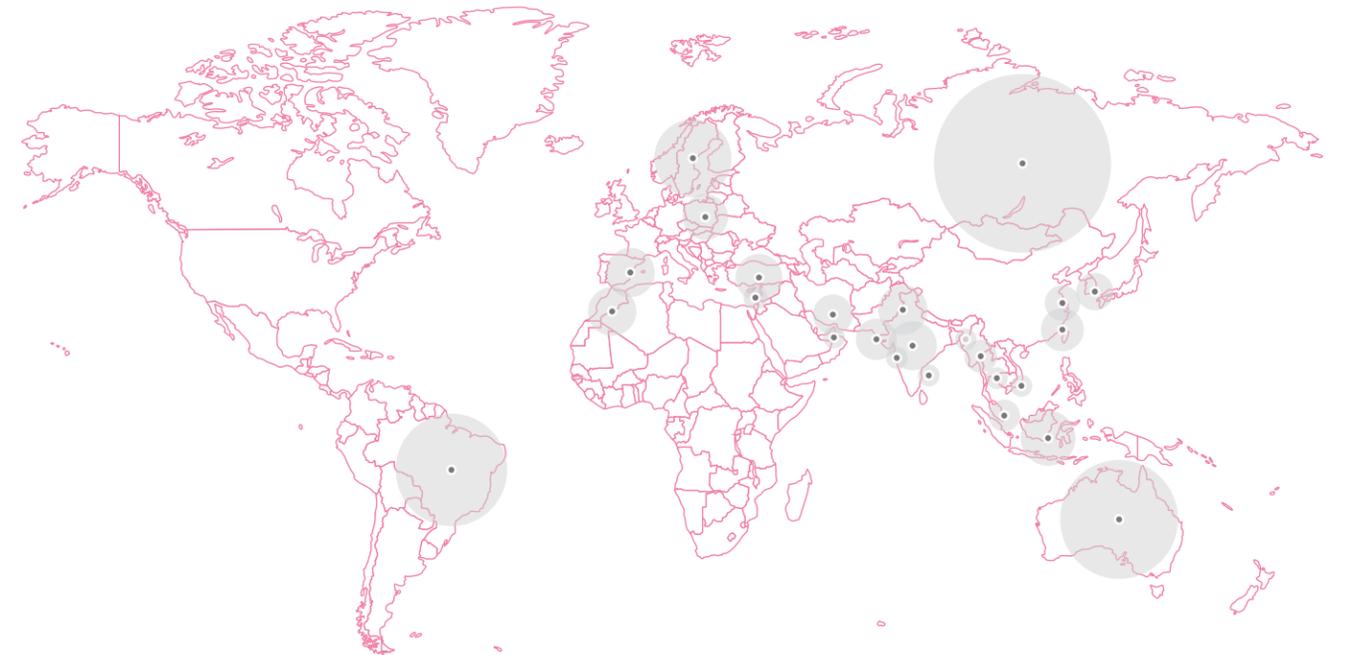
* Contact us for more information of Gtake activities in social responsibility.

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Gtake knows that its customers need to locate in growth areas, so we are right there with them when we are required – designing, manufacturing, and servicing our products. Careful consideration of environmental and cultural differences is the key to establishing Gtake as a concerned global citizen.

Our global presence allows us to respond quickly to the needs of our customers. Customers and the industry at large recognize our people as a competitive advantage through their diverse representation of the global community. Additionally, as a company and as employees, we respond to the needs of our local communities by donating our time, talent, and fund.

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GK500	04	ES101	45	HB	72
GK600	10	GK510	50	EA/ES	84
GK800	24	SLR01/02	56	Customized	86
GK1000	36	GK600E	60		

GTAKE
AC
DRIVE

GTAKE
EV
DRIVE

Options	67	Certifications	87
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GTAKE AC DRIVES

For energy saving , efficiency improvement, and system higher intellectualization.



HELP YOUR SYSTEMS stay efficient, stable, and energy saving

They have the fundamental features of Gtake drives, enabling our customers to have easy, efficient, stable control of any application powered by an AC motor.
The application would be a fan, pump, convey, compressor, central air-conditioning, centrifuge, CNC, hoist, crane, drawbench, etc.



State-of-the-art technology

A ball mill, crane, elevator such heavy duties request bigger start torque than normal duties, users are able to go to Gtake drives without buying a bigger power rating of other brand. This feature of Gtake drives attribute to its state-of-the-art software technology.



Full load tested

Every piece of the boards, electronic and mechanical components, the finished drives are fully inspected, tested before shipment. What we are doing is to make sure every final drive high quality and performance reliable when it is installed at your site.



Major energy saving

Most of applications have their idle time or do not require full-speed operation sometimes. Using Gtake drives, you possess an opportunity to save major energy, saving your cost for electricity consumption and you are protecting our living environment for less emission.



RoHS compliant components

Safe and environmental friendly products are our rudimentary consideration before and during development. In addition to meeting electric safety Standards and Regulations like CE, we along with all our suppliers execute RoHS directives for all the products produced by Gtake, a significant benefit for environment and the users' health.



Macro program operation

In applications when you are using Gtake drives, you are able to save some facilities and enable your system more automated and efficient. Every application has its individual requirement across all industries. Gtake drives provided with macro program, option boards and surrounding equipment, make the drives "just for you".



Overall protection

Protections on the motor, surrounding equipment and the drive itself are significant in nowadays industrial control system. Gtake intelligent drives are equipped with a variety of protections like motor thermal protection, overcurrent, overvoltage, overheat, overload protection and so forth. The warnings and faults can be displayed and output via terminals.

GK500 Mini AC Drive



The GK500 series adopting V/Hz control technology are the most economical drives at Gtake which are applicable to general purpose applications.

POWER RATINGS

1× 220 - 240V	0.4 - 2.2kW
3× 220 - 240V	0.4 - 2.2kW
3× 380 - 480V	0.75 - 3.7kW

COMPATIBILITY

Asynch motor control applicable

CONTROL TECHNOLOGY

V/Hz control

FEATURES

Reliable

Ambient temperature 50° C without derating
Thickened conformal coating
Optimized cooling system

User-friendly

Parameter copy
Detachable control panel
One platform numerous versions

Intelligent

Warning systems
Multiple frequency references
All-sided protection

Benefit

Less need for cooling or oversizing
Resistant to harsh surroundings
Lower temperature rise

Save time for commissioning
Easy for remote control
Save stocks

Warning before stop
Powerful in intelligent applications
Long lifetime & less maintainance cost

APPLICATIONS

Conveyors, centrifuges, food processing machinery, packaging machinery, pumps, fans, etc.



Small in Size, Powerful in Performance

01 Mounting space saving

GK500 adopt book-type frames to save mounting space. Close parallel mounting is permitted without requirement of derating.



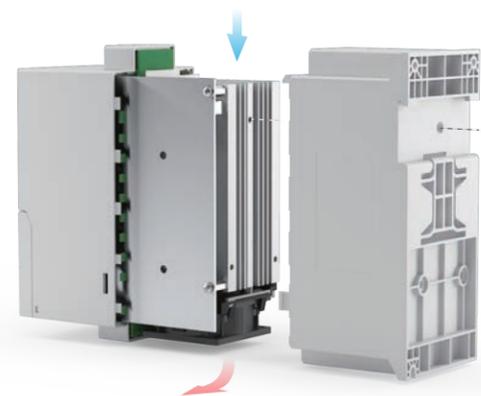
02 Hot pluggable display with potentiometer

GK500 control panel has inbuilt potentiometer and supports hot plug. It also supports parameter copy operated via GK600/GK800 control panel.



03 Optimized design on heat dissipation

Whole back facet covered, and fin-corrugated heat sink has the optimized contribution to heat dissipation. Minimized temperature rise brings about reliable operation and pledges the lifespan of drive components.



04 Minimum penetration of dust

GK500 drives are designed to keep the forced ventilation away from the electronics. Printed circuit boards are well protected inside the drives.



NOTE: GK500 support wall and DIN-Rail mounting.

05**Promoted V/Hz**

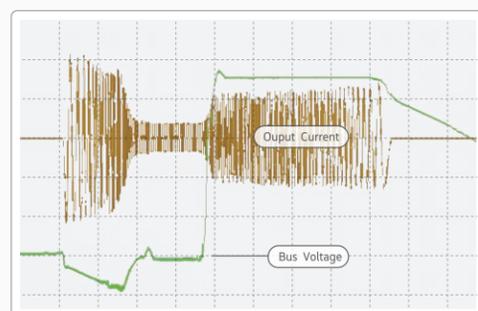
GK500 adopting promoted V/Hz control technique make the start torque reach 180% of the rated at 0.5Hz.

180%**06****Strong adaptability to temperature**

Derating is not required for GK500 at ambient temperature up to 50 C.

50°C**07****Multi-step speed**

8-step speed is supported, two of which accept various frequency references.

8**08****Stall protections**

Overvoltage and undervoltage stall protections are both procurable at GK500, which pledges the operation continuous without trip at ramp down of the large-inertia load, or sudden power loss.

**For more information**

To know more functionalities and capabilities, please refer to GK500 user manual or contact Gtake.

SPECIFICATIONS**Mains supply (L1/L, L2, L3/N)**

Supply voltage	200-240V /380-480V ±10% (lasting), -15%~+10% (short)
Supply frequency	50/60Hz ±5%
True Power Factor (λ)	0.92 nominal at rated load
Displacement Power Factor (cos φ) near unity	(>0.98)
Switching on input supply L1/L, L2,L3/N	Maximum 2 times/min.

Output data (U/T1, V/T2, W/T3)

Output voltage	0-100% of supply voltage
Output frequency	0-600Hz
Switching on output	Unlimited
Ramp times	0-600.00s/6000.0s/60000s

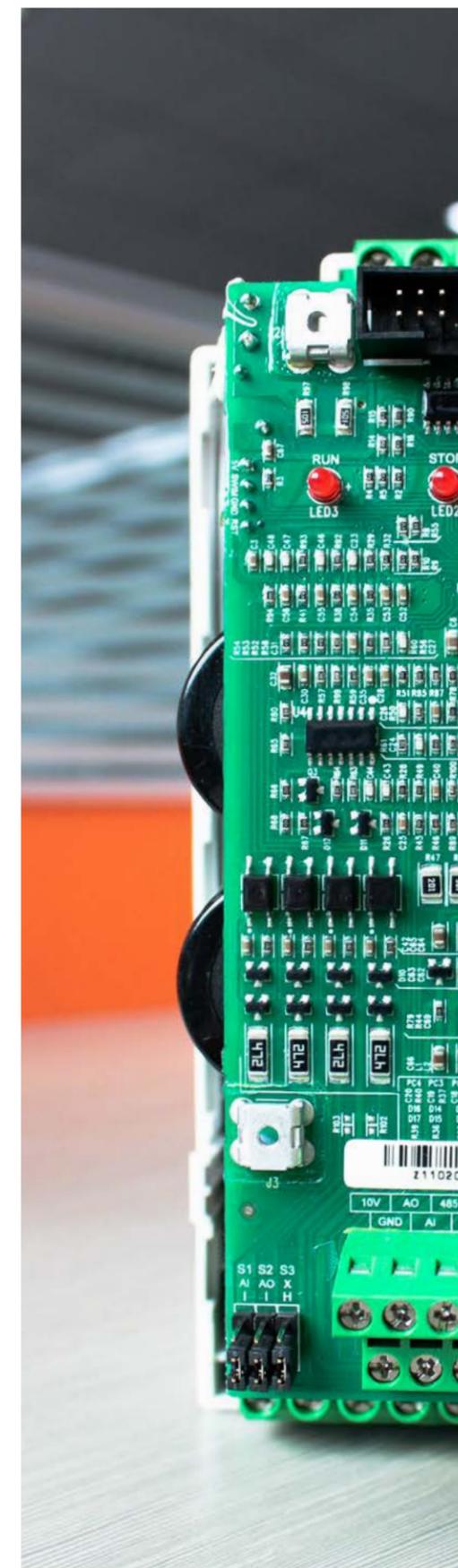
Note: 150% current can be provided for 1 minute, 180% for 10 seconds, 200% for 0.5 second. Higher overload rating is achieved by oversizing the drive.

Digital input

Programmable digital inputs	4
Logic	PNP or NPN
Input	24VDC, 5mA
Frequency range	0-200Hz
Voltage level	22V-26V

Analog input

Analog inputs	1
Modes	Voltage or current
Voltage level	0 to 10V
Current level	0/4 to 20mA (scaleable)



ModBus

Rate	4800/9600/19200/38400/57600
Formats	RTU, ASCII

Digital output

Programmable digital/pulse outputs	1
Voltage level	0-24V
Current level	0-50mA

Relay output

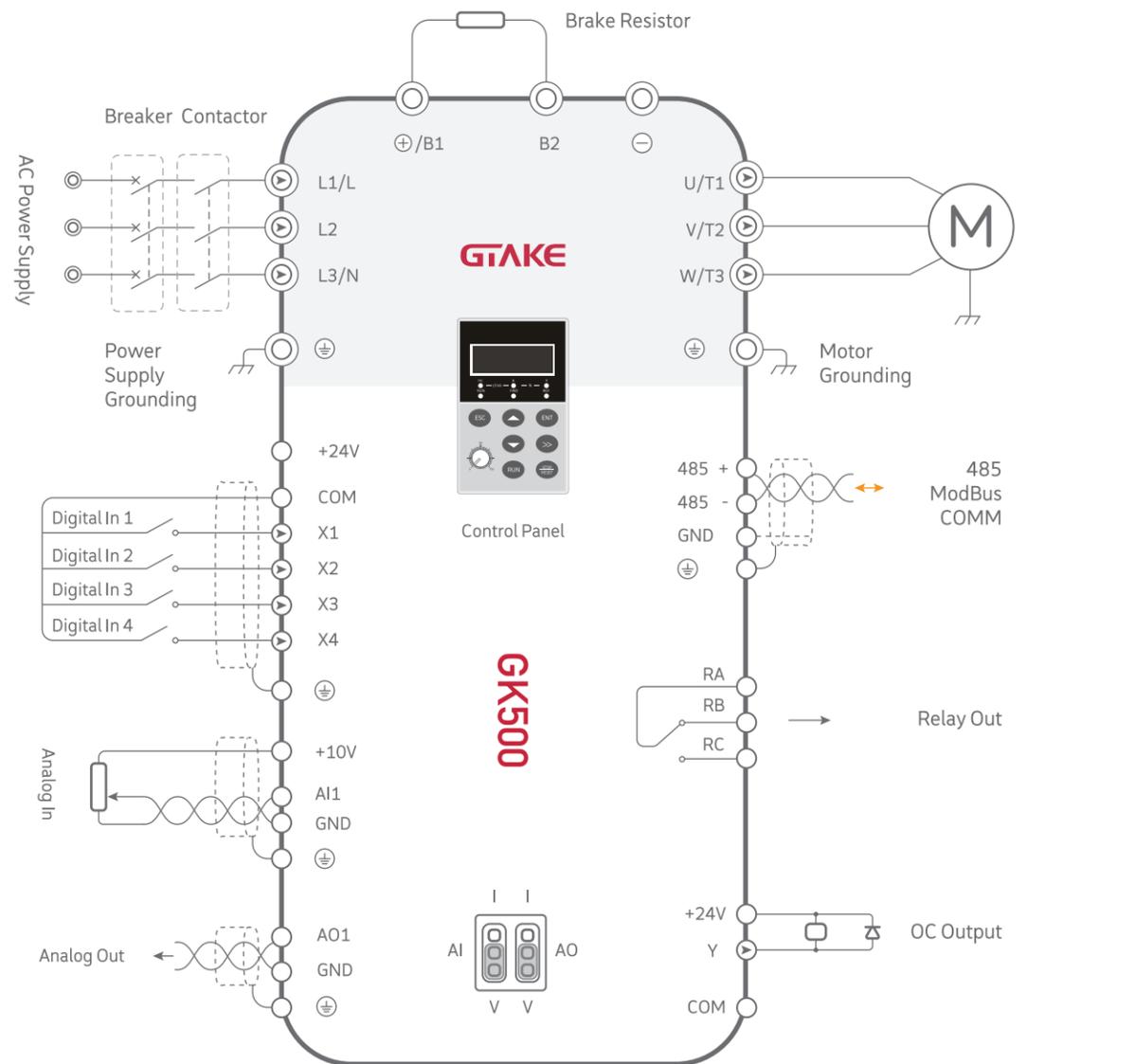
Programmable relay outputs	1
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Remote control panel

Maximum cable length	5m
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BASIC CONNECTION

Following is the default wiring diagram for GK500. Please consult Gtake if customized solution is required.

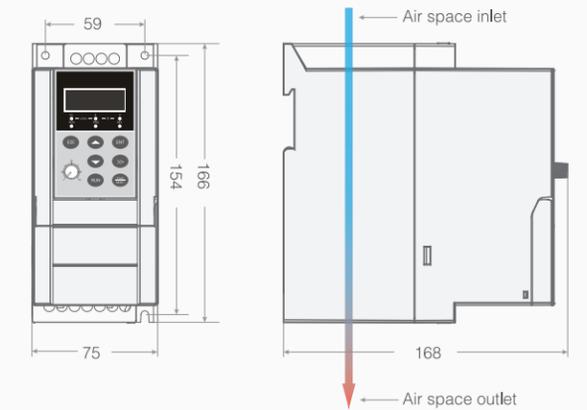


MODEL INFORMATION

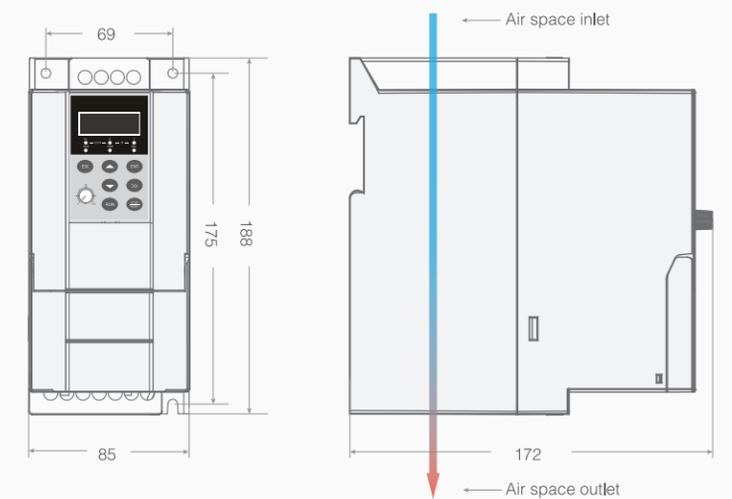
Model ^{*1}	Power Rating (kW)	Rated Output Current (Amps)	Rated Input Current (Amps) ^{*2}	Applicable Motor (kW)	Dimensions Frame NO.
GK500-2T0.4B	0.4	2.6	3.2/5.5	0.4	A
GK500-2T0.75B	0.75	4.5	6.3/9.2	0.75	A
GK500-2T1.5B	1.5	7.5	9/14.5	1.5	B
GK500-2T2.2B	2.2	9.6	15/23	2.2	B
GK500-4T0.75B	0.75	2.5	3.5	0.75	A
GK500-4T1.5B	1.5	3.8	6.2	1.5	A
GK500-4T2.2B	2.2	5.5	9.2	2.2	B
GK500-4T3.7B	3.7	9.0	14.9	3.7	B

NOTE *1: A(/B), A tells triphase input current, B tells single phase input current. *2: 200V drives are applicable to triphase 200V and single-phase 200V.

A



B



GK600 General Purpose AC Drive



The GK600 series are the drives that cover general purpose applications when they are requiring V/Hz and speed sensor-less vector control.

POWER RATINGS

1× 220 - 240V	0.4 - 2.2kW
3× 220 - 240V	0.4 - 110kW
3× 380 - 480V	0.75 - 1200kW
3× 525 - 690V	11-1200kW

COMPATIBILITY

Asynch motor control applicable

CONTROL TECHNOLOGY

V/Hz control
SVC1 SVC2

FEATURES

Reliable

Ambient temperature 45° C without derating
Thickened conformal coating
Optimized cooling system

User-friendly

Parameter copy
Detachable control panel
One platform numerous versions

Intelligent

Warning systems
Multiple frequency references
All-sided protection
Online autotuning
PC-based monitoring software
Extensible features/parameter blocks

Benefit

Less need for cooling or oversizing
Resistant to harsh surroundings
Lower temperature rise

Save time for Commissioning
Easy for remote control
Save stocks

Warning before stop
Powerful in intelligent applications
Long lifetime & less maintaince cost
Intelligent response to delicate variation
Easy to operate
Make the drives "just for you"

APPLICATIONS

Textiles, plastics, ceramics, mining, conveyors, centrifuges, mills, saws, food processing machinery, packaging machinery, elevators and escalators, lifts, air compressors, central air conditioning, pharmaceuticals, pumps, fans, etc.



Multifunctional and Versatile

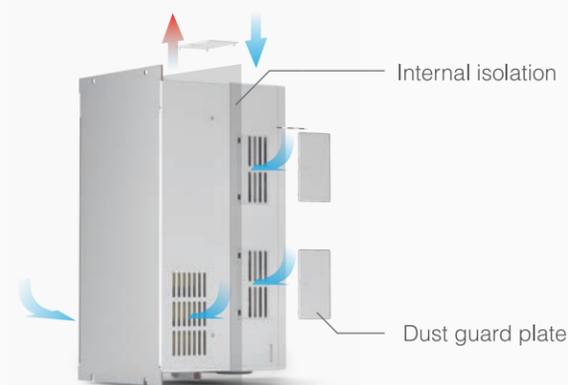
01

Modular, flexible and adaptable

GK600 on the basis of modular design concept aims to provide users multifunctional control for a wide variety of general purpose applications. Functionalities, and output capability of GK600 have been proved to meet the requirements of a vast majority of industrial control. Gtake is providing GK600 single-phase 220V, three-phase 220V to 690V input, and power ratings 0.4kW up to 1.2MW, which means that system designers, OEMs and end users are free to connect the drive to their chosen motor and have confidence that the system will operate to the highest possible standards.

NOTE: Only 0.4 kW-560kW are listed here. Please contact Gtake for more information of other power ratings.

Up to 1.2MW



02

Intelligent heat dissipation

GK600 drives adopt heat dissipation of completely isolated channel, which effectively prevents the air with heavy or conductive dust from entering into the compartment of electronic components. The windows at upper part can be kept open for assistant heat dissipation when the environment carries no heavy or conductive dust, and could be shrouded via the dust covers provided by Gtake for circuit board protection, though the boards are well conformal coated.

03 Hot pluggable and detachable control panel

Quite convenient for users to implement remote control via a cable connection, and the settings are easily transferred via the control panel to another drive or from a PC to a drive with Gtake Drive Monitoring Software



04 Abundant hot-plugged options

One platform millions of version is the basic design concept of GK600. Numerous options are available and can be mounted and tested at factory or be hot-plugged in later for change-over or upgrade.

Fieldbus options

- EPC-CM1 CAN
- EPC-CM2 Profibus
- EPC-CM3 CanOpen

I/O options

- EPC-TM1 Analog and digital
- EPC-TM2 PT100 and relay
- EPC-VD1 Voltage
- EPC-VD2 Bus voltage detection and for optimized flying start
- EPC-IM1 Analog for injection
- EPC-IM2 Current analog
- EPC-RT1 Real-time clock



I/O Expansion

NOTE: See the complete list of options on page 67.

05 Three control modes

GK600 drives are embedded with three control modes, V/Hz control, SVC1 and SVC2, for the purpose of fulfilling a wide variety of industrial applications. SVC1 is the robust open-loop vector control mode accepting static auto-tune, while SVC2, the precise open-loop vector control, requests rotary auto-tune.

Control mode	V/Hz	SVC1	SVC2
Speed adjustable range	1:100	1:100	1:200
Speed accuracy	±0.5%	±0.2%	±0.2%
Speed ripple	/	±0.3%	±0.3%

06 Big start torque

Tailored with optimal algorithm, GK600 drives are able to output up to 180% of rated torque at 0.5Hz of V/Hz mode, SVC1 mode, and output 180% at 0.25Hz of SVC2 mode.

180%

07 Strong overload capability

The GK600 drives won't trip when they output 150% of the rated output current for 1 minute, 180% for 10 seconds, and 200% for 0.5 second, once per 10 minutes.

200%

08 High efficiency

At rated input voltage and rated load condition, the efficiency of GK600 drives are up to 98%.

NOTE: At rated condition, the efficiency of the drives 7.5kW and below is higher than or equals 93%, 11kW till 45kW is higher than or equals 95%, while 55Kw and above, 98%.

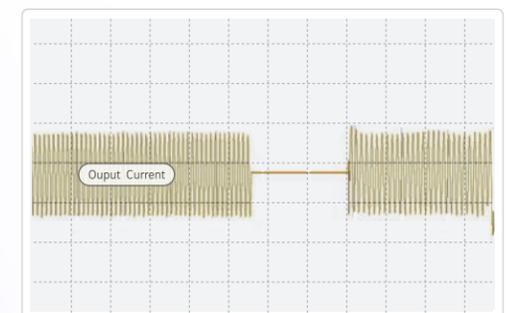
98%

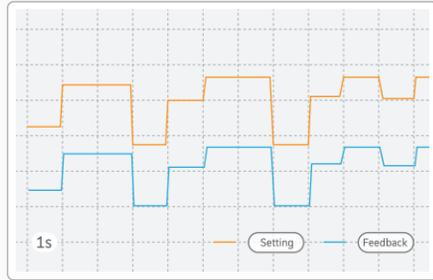
09 Precise autotune

GK600 drives are equipped with precise motor rotary or static autotune. The data of two motors are programmable and the operation to them is switchable.

10 Flying start supported

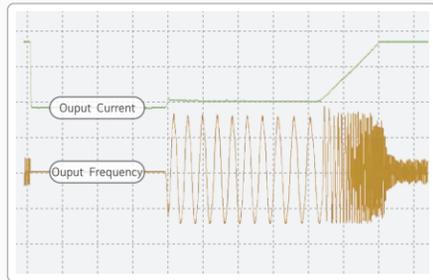
Two kinds of flying start selection are programmable for the smooth restart of a rotary motor. One of the selections is based on software evaluation only, while the other one should be mated with an option board for quite smooth restart without any jerk.





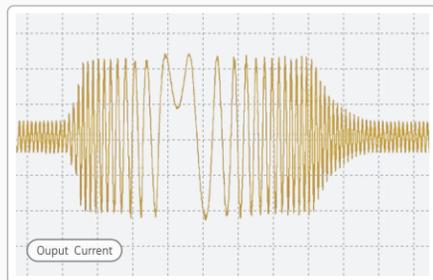
11 Quick dynamic response

Torque response time of GK600 drives is as short as 10ms at SVC1 or SVC2 mode.



12 Cycle-By-Cycle current limit

The GK600 drives are equipped with the function of cycle-by-cycle current limit. The drive knows how to adjust its output frequency and current suitably to avoid trip when there is a saltation at the load.



13 Short dead time between forward and reverse

Even at the setting of deceleration and acceleration time 0.1 second, a GK600 drive can smoothly complete the transition between forward and reverse, popular at applications requiring frequent and fast switchover between forward and reverse.

14 Preeminent field-weakening control

Equipped with field-weakening control, GK600 drives have the preeminent output torque and ramp character.

GK600 drives support future upgrade which typically benefits for the applications when your automation system has a need of upgrade or has a new motional requirement or new request for system adjustment. Gtake can provide the kit for online upgrade operated easily by customers themselves, making "just for you" achieved.

15 V/Hz separated control

Output voltage and output frequency can be controlled separately for the GK600 drives, widely used at variable frequency power sources, torque motors, etc.

SPECIFICATIONS

Mains supply (R/L1, S/L2, T/L3)

Supply voltage	200-240V / 380-480V / 525-690V ±10% (lasting), -15%~+10% (short)
Supply frequency	50/60Hz ±5%
True Power Factor (λ)	0.92 nominal at rated load
Displacement Power Factor (cos φ) near unity	(>0.98)
Switching on input supply R/L1, S/L2,T/L3	Maximum 2 times/min.

Output data (U/T1, V/T2, W/T3)

Output voltage	0-100% of supply voltage
Output frequency	0-600Hz(standard) 0-16kHz or more (customized)
Switching on output	Unlimited
Ramp times	0-600.00s/6000.0s/60000s

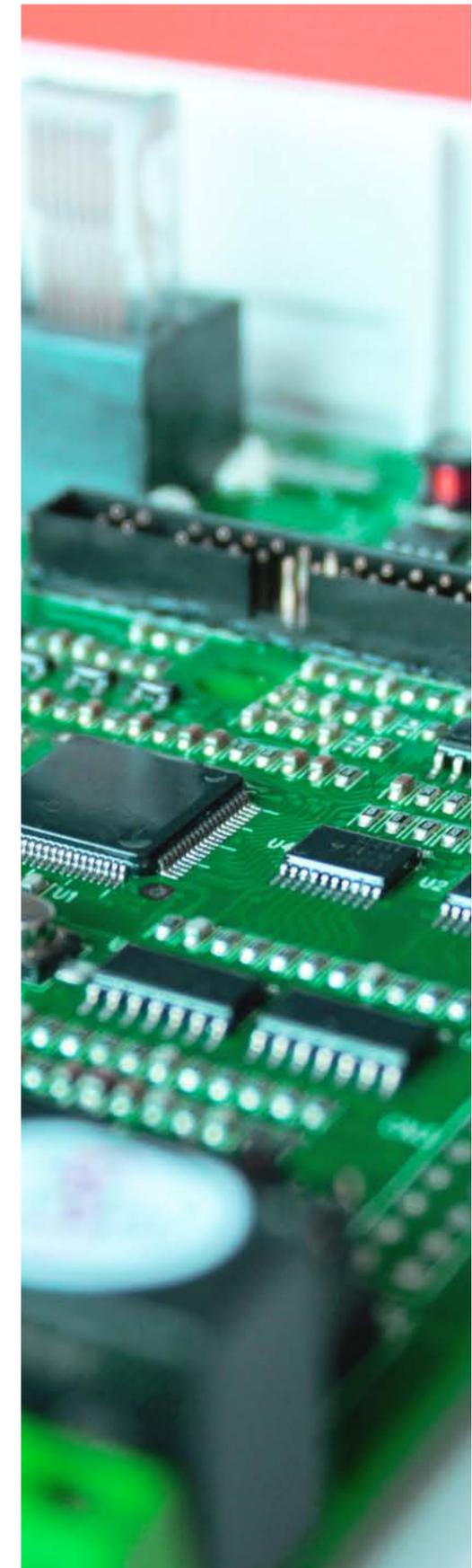
NOTE: 150% current can be provided for 1 minute, 180% for 10 seconds, 200% for 0.5 second. Higher overload rating is achieved by oversizing the drive.

Digital input

Programmable digital inputs	6 (local), 8 (extensible)
Logic	PNP or NPN
Input	24VDC, 5mA
Frequency range	0-200Hz
Voltage level	10V-30V

Analog input

Analog inputs	2 (local), 3 (extensible)
Modes	Voltage or current
Voltage level	0 to +10V, -10 to +10V (scaleable)
Current level	0/4 to 20mA (scaleable)





Pulse input

Programmable pulse inputs	1
Frequency range	0.1Hz-50kHz
Voltage level	10-30V

ModBus

Rate	4800/9600/19200/38400/57600/115200bps
Formats	RTU, ASCII

Relay output

Programmable relay outputs	1 (local), 3 (extensible)
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Digital output

Programmable digital/pulse outputs	2/1
Voltage level	0-24V
Current level	0-50mA
Pulse frequency	0-50kHz

Analog output

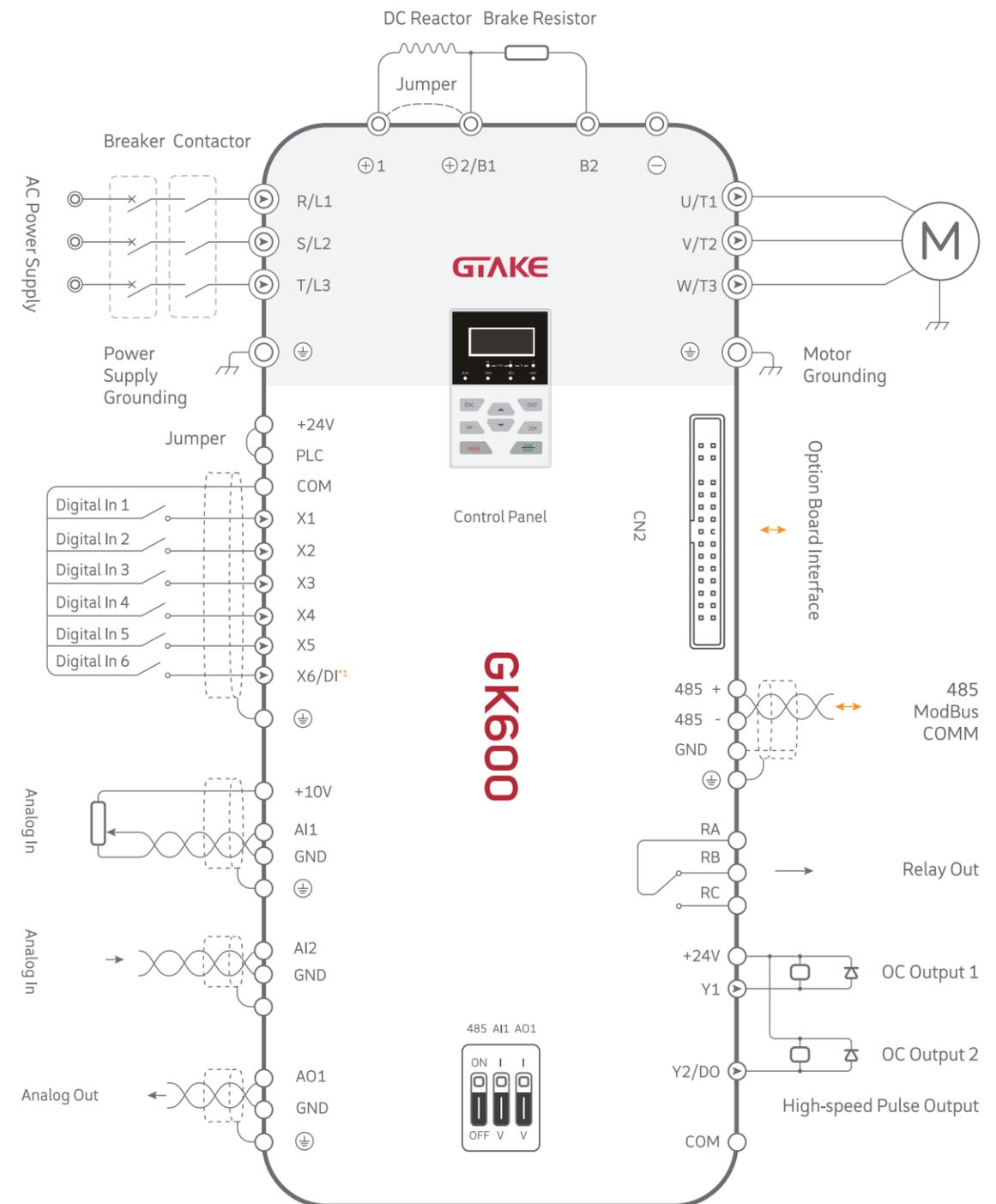
Programmable analog outputs	1 (local), 3 (extensible)
Voltage level	0-10V
Current level	0-20mA

Remote control panel

Maximum cable length	15m
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BASIC CONNECTION

Following is the default wiring diagram for GK600. Please consult Gtake if customized solution is required.



Paired Cable Shielded Cable

NOTE *1:compatible for Pulse In

MODEL INFORMATION

2T

Model ¹		0.4B	0.75B	1.5B	2.2B	3.7B	5.5B	7.5B	11 (B)	15 (B)
	Load ²	HD	HD	HD	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15
Rated Output Current	[A]	2.6	4.5	7.5	11	16.5	24	30	45	60
1AC Rated Input Current	[A]	5.5	9.2	14.5	23	-	-	-	-	-
3AC Rated Input Current	[A]	3.2	6.3	9	15	20.5	29	35	50	65
Applicable Motor	[kW]	0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15
Frame NO.	[/]	A1		B1	B2	B3		C1		

Model		18.5(B)	22(B)	30(B)	37(B)	45	55	75	90	110
	Load ²	HD	HD	HD	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	18.5	22	30	37	45	55	75	90	90
Rated Output Current	[A]	73	91	112	144	176	210	288	350	430
Rated Input Current	[A]	80	95	118	150	160	192	266	326	403
Applicable Motor	[kW]	18.5	22	30	37	45	55	75	90	110
Frame NO.	[/]	C2	C3		D1	D2	E1	E2		

NOTE
 *1: **B - means brake chopper is inbuilt; *(B) - means brake chopper is optionally inbuilt; ** - means brake chopper externally mounted when needed. Take 18.5G/22L for example: the model without brake chopper is GK600-2T18.5, and the model with brake chopper is GK600-2T18.5B. Braking resistor needs to be mounted externally.
 *2: HD - Heavy duty.

4T

Model		0.75G/1.5LB		1.5G/2.2LB		2.2G/3.7LB		3.7G/5.5LB	
	Load	HD	LD	HD	LD	HD	LD	HD	LD
Power Rating	[kW]	0.75	1.5	1.5	2.2	2.2	3.7	3.7	5.5
Rated Output Current	[A]	2.5	3.8	3.8	4.8	5.5	8.0	9.0	11
Rated Input Current	[A]	3.5	5.0	5.0	5.5	6.0	10	10.5	14
Applicable Motor	[kW]	0.75	1.5	1.5	2.2	2.2	3.7	3.7	5.5
Frame NO.	[/]	A1				B1			

Model		5.5G/7.5LB		7.5G/11LB		11G/15LB		15G/18.5LB	
	Load	HD	LD	HD	LD	HD	LD	HD	LD
Power Rating	[kW]	5.5	7.5	7.5	11	11	15	15	18.5
Rated Output Current	[A]	13	16	17	21	24	30	30	36
Rated Input Current	[A]	14.6	20	20.5	25	29	35	35	40
Applicable Motor	[kW]	5.5	7.5	7.5	11	11	15	15	18.5
Frame NO.	[/]	B2				B3			

Model		18.5G/22L (B)		22G/30L (B)		30G/37L (B)		37G/45L (B)	
	Load	HD	LD	HD	LD	HD	LD	HD	LD
Power Rating	[kW]	18.5	22	22	30	30	37	37	45
Rated Output Current	[A]	39	45	45	56	60	72	75	91
Rated Input Current	[A]	44	50	50	60	65	76	80	95
Applicable Motor	[kW]	18.5	22	22	30	30	37	37	45
Frame NO.	[/]	C1				C2			

Model		45G/55L (B)		55G/75L (B)		75G/90L (B)		90G/110L	
	Load	HD	LD	HD	LD	HD	LD	HD	LD
Power Rating	[kW]	45	55	55	75	75	90	90	110
Rated Output Current	[A]	91	112	112	142	150	176	176	210
Rated Input Current ^{*3}	[A]	95	118	118	148	157	180	160	192
Applicable Motor	[kW]	45	55	55	75	75	90	90	110
Frame NO.	[/]	C2		C3				D1	

Model		110G/132L		132G/160L		160G/185L		185G/200L	
	Load	HD	LD	HD	LD	HD	LD	HD	LD
Power Rating	[kW]	110	132	132	160	160	185	185	200
Rated Output Current	[A]	210	250	253	304	310	350	350	380
Rated Input Current ^{*3}	[A]	192	230	232	280	285	326	326	354
Applicable Motor	[kW]	110	132	132	160	160	185	185	200
Frame NO.	[/]	D1		D2				E1	

Model		200G/220L		220G/250L		250G/280L		280G/315L	
	Load	HD	LD	HD	LD	HD	LD	HD	LD
Power Rating	[kW]	200	220	220	250	250	280	280	315
Rated Output Current	[A]	380	430	430	470	470	520	520	590
Input Current ^{*3}	[A]	354	403	403	441	441	489	489	571
Applicable Motor	[kW]	200	220	220	250	250	280	280	315
Frame NO.	[/]	E1						E2	

Model		315G/355L		355G/400L		400G/450L		450G/500L	
	Load	HD	LD	HD	LD	HD	LD	HD	LD
Power Rating	[kW]	315	355	355	400	400	450	450	500
Rated Output Current	[A]	590	650	650	725	725	820	820	860
Rated Input Current ^{*3}	[A]	571	624	624	699	699	790	790	835
Applicable Motor	[kW]	315	355	355	400	400	450	450	500
Frame NO.	[/]							E3	

Model		500G	560G	630G
	Load	HD	HD	HD
Power Rating	[kW]	500	560	630
Rated Output Current	[A]	860	950	1100
Rated Input Current ^{*3}	[A]	835	920	1050
Applicable Motor	[kW]	500	560	630
Frame NO.	[/]	E3		F1

NOTE *3: the green numbers say the rated input currents configured DC reactors. The drives GK600-4T90G/110L - GK600-4T500G are provided with external-mounted DC reactors in shipment as default. Be sure to connect the DC reactor. Failure to comply may result in drive abnormal run. GK600-4T560G and GK600-4T630G are cabinet type, whose DC reactor and output AC reactor are inbuilt as default.

DIMENSIONS

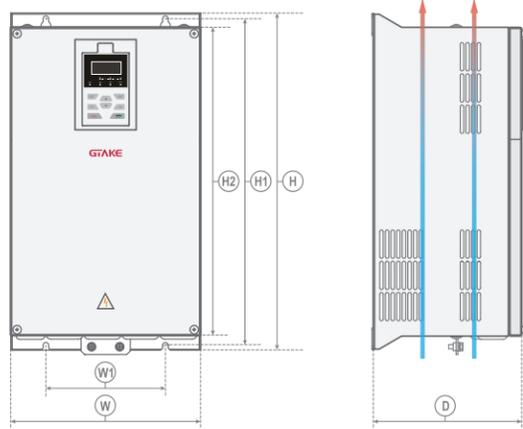
Frames		A1	B1	B2	B3	C1	C2	C3	D1	D2	E1	E2	E3	F1
W	[mm]	93	120	145	190	270	320	385	395	440	500	650	815	1100
W1	[mm]	70	80	105	120	170	220	260	260	300	360	400	600	-
H	[mm]	190	245	280	365	475	568	670	785	900	990	1040	1300	2000
H1	[mm]	180	233	268	353	460	544	640	750	865	950	1000	1252	-
H2	[mm]	172	220	255	335	435	515	600	705	820	900	950	1200	-
D	[mm]	152	169	179	187	220	239	261	291	356	368	406	428	550
Mounting hole dia.	[mm]	4.5	5.5	5.5	6	8	10	12	12	14	14	14	14	-
Weight	[kg]	1.4	2.9	3.9	6.2	15.5	24	37	50	66	88	123	165	515

NOTE: *Please see the GK600 user manual for other frames, available at <http://www.gtake.com.cn>.

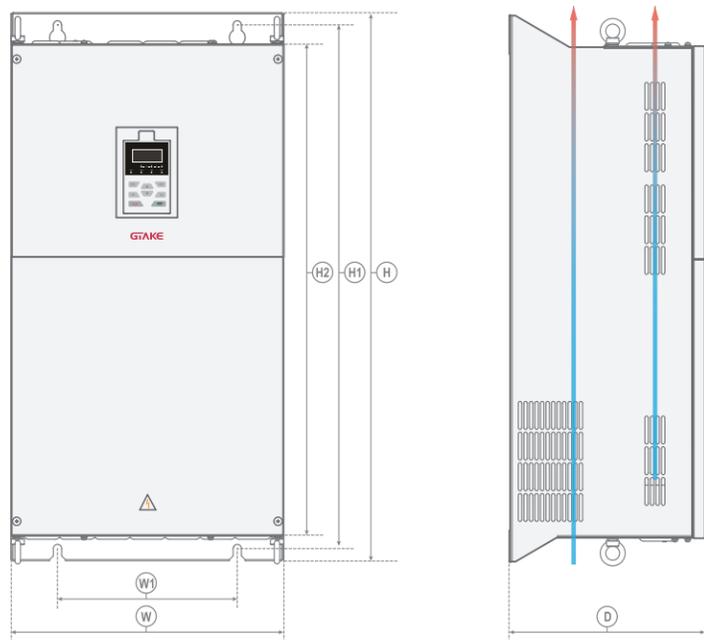


A { A1 }

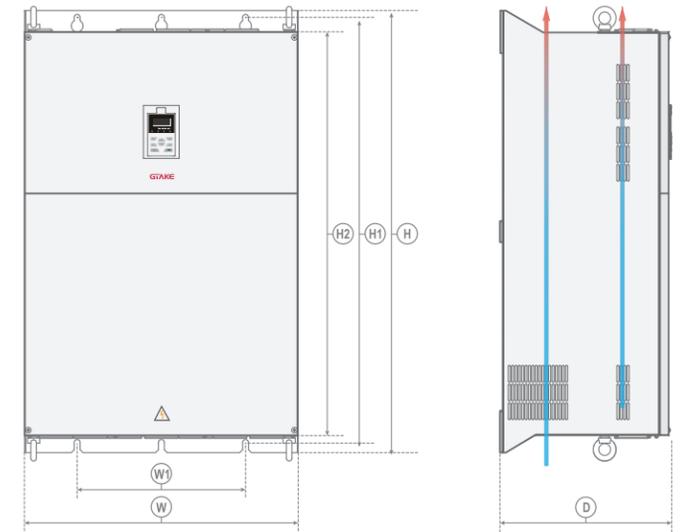
B { B1 B2 B3 }



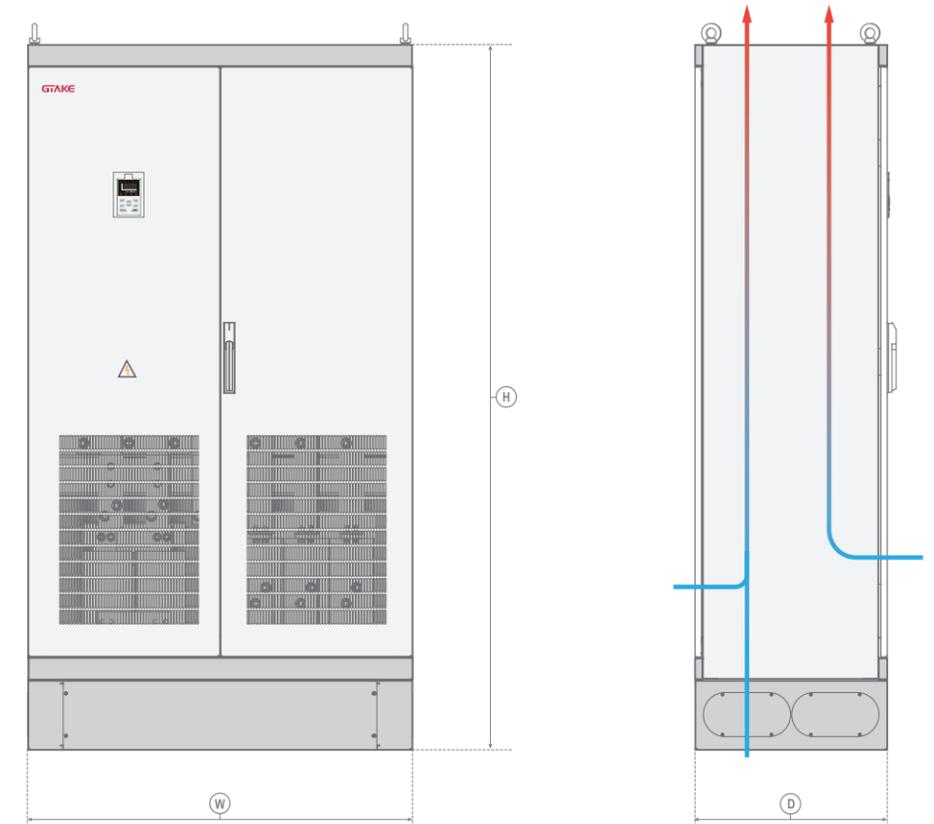
C { C1 C2 C3 }



D { D1 D2 }



E { E1 E2 E3 }



F { F1 }

GK800 High Performance AC Drive



The GK800 series are the drives that cover an entire range of applications, particular in demanding ones that require precise speed control, torque control, tension control, fast response, etc.

POWER RATINGS

1× 220 - 240V	1.5 - 2.2kW
3× 220 - 240V	1.5 - 110kW
3× 380 - 480V	1.5 - 1200kW
3× 525 - 690V	11-1200kW

COMPATIBILITY

Synch motor control applicable
Asynch motor control applicable

CONTROL TECHNOLOGY

V/Hz control
SVC1 SVC2 VC

FEATURES

Reliable

Ambient temperature 45° C without derating
Thickened conformal coating
Optimized cooling system

User-friendly

Parameter copy
Detachable control panel
One platform numerous versions

Intelligent

Warning systems
Multiple frequency references
All-sided protection
Online autotuning
PC-based monitoring software
Extensible features/parameter blocks

Benefit

Less need for cooling or oversizing
Resistant to harsh surroundings
Lower temperature rise

Save time for Commissioning
Easy for remote control
Save stocks

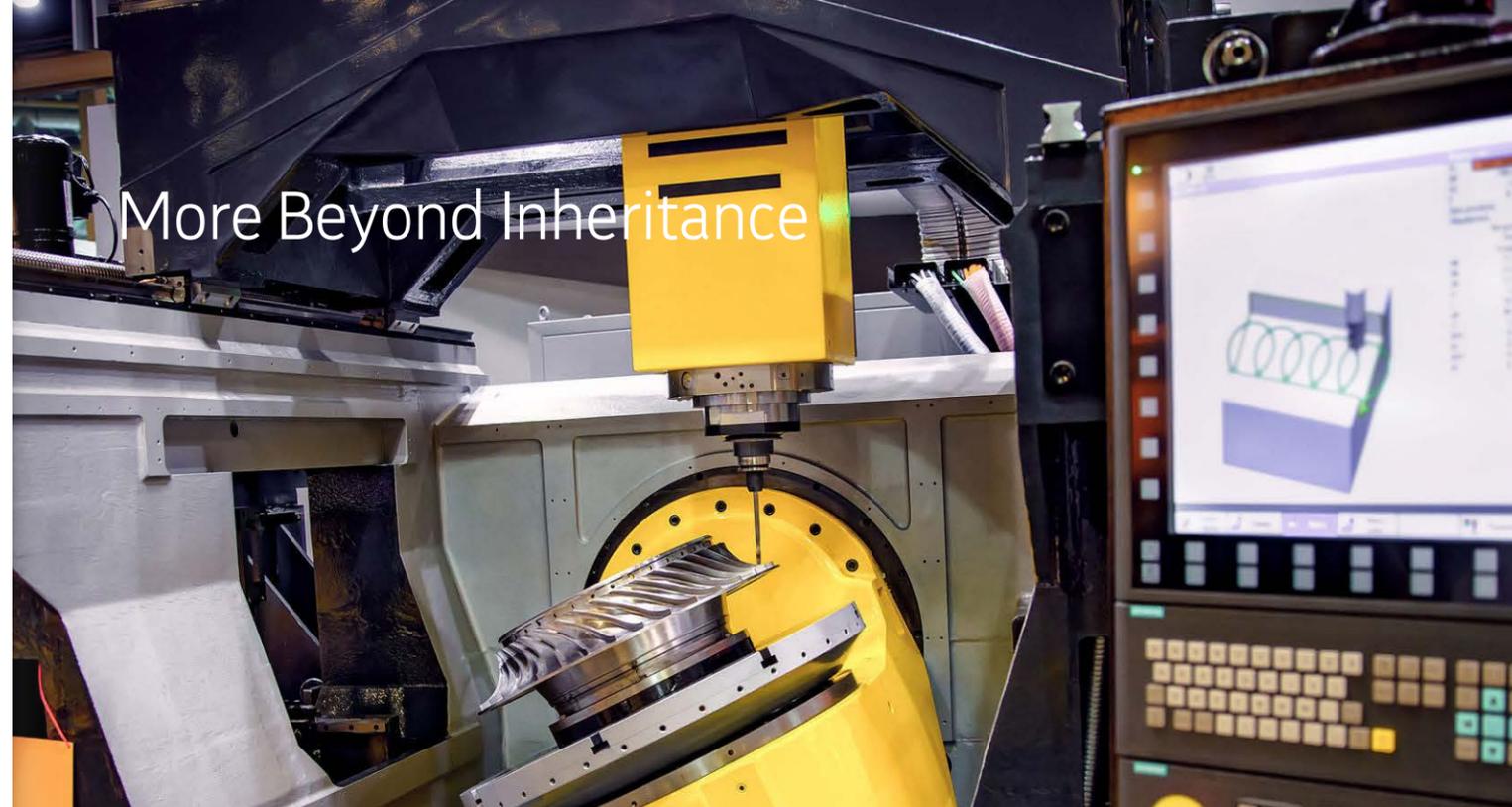
Warning before stop
Powerful in intelligent applications
Long lifetime & less maintaince cost
Intelligent response to delicate variation
Easy to operate
Make the drives "just for you"

APPLICATIONS

Hoists & Cranes, Elevators & Escalators, Machine tool, Drawbench, etc.



More Beyond Inheritance



01

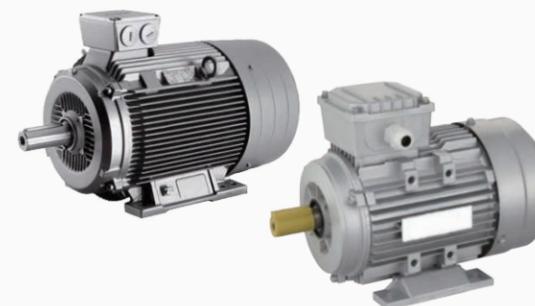
Faster, stronger, more precise

Inheriting all the merits of GK600 drives, GK800 drives are extended more on performance, I/O interfaces and functionalities. Users could choose GK800 drives in demanding applications for bigger output torque, more precise speed and faster response.

NOTE: Only 0.4 kW-560kW are listed here. Please contact Gtake for more information of other power ratings.



Latest dedicated chip



02

One for all

GK800 drives can well control asynchronous motors and permanent magnet synchronous motors. A GK800 drive can be set to control two motors, switched by a programmable terminal or a parameter.

03

Hot pluggable and detachable control panel

Quite convenient for users to implement remote control via a cable connection, and the settings are easily transferred via the control panel to another drive or from a PC to a drive with Gtake Drive Monitoring Software

04

Abundant hot-plugged options

One platform millions of version is the basic design concept of GK800. Numerous options are available and can be mounted and tested at factory or be hot-plugged in later for change-over or upgrade.

Fieldbus options

- EPC-CM1 CAN
- EPC-CM2 Profibus
- EPC-CM3 CanOpen

I/O options

- EPC-TM1 Analog and digital
- EPC-TM2 PT100 and relay
- EPC-VD1 Voltage
- EPC-VD2 Bus voltage detection and for optimized flying start
- EPC-IM1 Analog for injection
- EPC-IM2 Current analog
- EPC-RT1 Real-time clock

Encoder options

- EPC-PG1 ABZ open collect/push-pull encoder
- EPC-PG2 ABZ differential encoder, ABZ differential output
- EPC-PG3 UVW encoder
- EPC-PG4 Resolver, DB15 connection
- EPC-PG5 Sincos encoder
- EPC-PG6 Resolver, push-pull output
- EPC-PG8 ABZ differential encoder, ABZ open collection output
- EPC-PG9 Resolver

NOTE: A maximum of two option boards can be mounted at a GK800 control board. Please contact Gtake for the compatibility and conflict when two option boards need to be mounted at one control board.

CAN
CANopen

PROFI[®]
BUS



I/O Expansion



Encoders

NOTE: See the complete list of options on page 67.

05

Four control modes

GK800 drives are equipped with four kinds of control modes, V/Hz, SVC1, SVC2, VC, fulfilling a wide variety of demanding industrial applications.

Control mode	V/Hz	SVC1	SVC2	VC
Speed adjustable range	1:100	1:100	1:200	1:1000
Speed accuracy	±0.5%	±0.2%	±0.2%	±0.02%
Speed ripple	/	±0.3%	±0.3%	±0.1%

06

Supreme start torque

The drives of GK800 series can output 200% of the rated output torque at 0Hz under VC control mode.

200%

07

Torque control programmable

Speed control and torque control are programmable via parameter or can be switched via terminal digital input at GK800. Torque control accuracy reaches ±5%, while response time is less than 5ms.

5%

08

Four kinds of position control

Under VC control mode, a GK800 drive can undertake the task of zero-speed clamping, angular positioning^{*1}, fixed-length control^{*2}, and positioning via pulse input. The precision of positioning at pulse input reaches ±1 pulse.

*NOTE *1: 4angular positions realizable; *2: 8 fixed-length positions programmable.*

1

09

Flexible electronic gear

Through the function of electronic gear at GK800, closed-loop vector control still can be performed even the encoder is not mounted at the motor shaft, quite convenient for applications when the encoder is not easily to be mounted at the motor shaft.

*NOTE *3: The shaft that the encoder is mounted at should have fixed speed ratio with motor shaft.*



SPECIFICATIONS

Mains supply (R/L1, S/L2, T/L3)

Supply voltage	200-240V / 380-480V / 525-690V ±10% (lasting), -15%~+10% (short)
Supply frequency	50/60Hz ±5%
True Power Factor (λ)	0.92 nominal at rated load
Displacement Power Factor ($\cos \phi$) near unity	(>0.98)
Switching on input supply R/L1, S/L2,T/L3	Maximum 2 times/min.

Output data (U/T1, V/T2, W/T3)

Output voltage	0-100% of supply voltage
Output frequency	0-600Hz(standard) 0-16kHz or more (customized)
Switching on output	Unlimited
Ramp times	0-600.00s/6000.0s/60000s

NOTE: 150% current can be provided for 1 minute, 180% for 10 seconds, 200% for 0.5 second. Higher overload rating is achieved by oversizing the drive.

Digital input

Programmable digital inputs	7 (local), 9 (extensible)
Logic	PNP or NPN
Input	24VDC, 5mA
Frequency range	0-200Hz
Voltage level	10V-30V

Analog input

Analog inputs	3 (local), 4 (extensible)
Modes	Voltage or current
Voltage level	0 to +10V, -10 to +10V (scaleable)
Current level	0/4 to 20mA (scaleable)

Pulse input

Programmable pulse inputs	1
Frequency range	0.1Hz-50kHz
Voltage level	10-30V

Encoder input

Power supply to encoder	5V/12V(local)
Ports	A+, A-, B+, B-

ModBus

Rate	4800/9600/19200/38400/57600/115200bps
Formats	RTU, ASCII

Relay output

Programmable relay outputs	2 (local), 4 (extensible)
----------------------------	---------------------------

Digital output

Programmable digital/pulse outputs	2/1
Voltage level	0-24V
Current level	0-50mA
Pulse frequency	0-50kHz

Analog output

Programmable analog outputs	2 (local), 4 (extensible)
Voltage level	0-10V
Current level	0-20mA

Remote control panel

Maximum cable length	15m
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Adapts to future upgrade

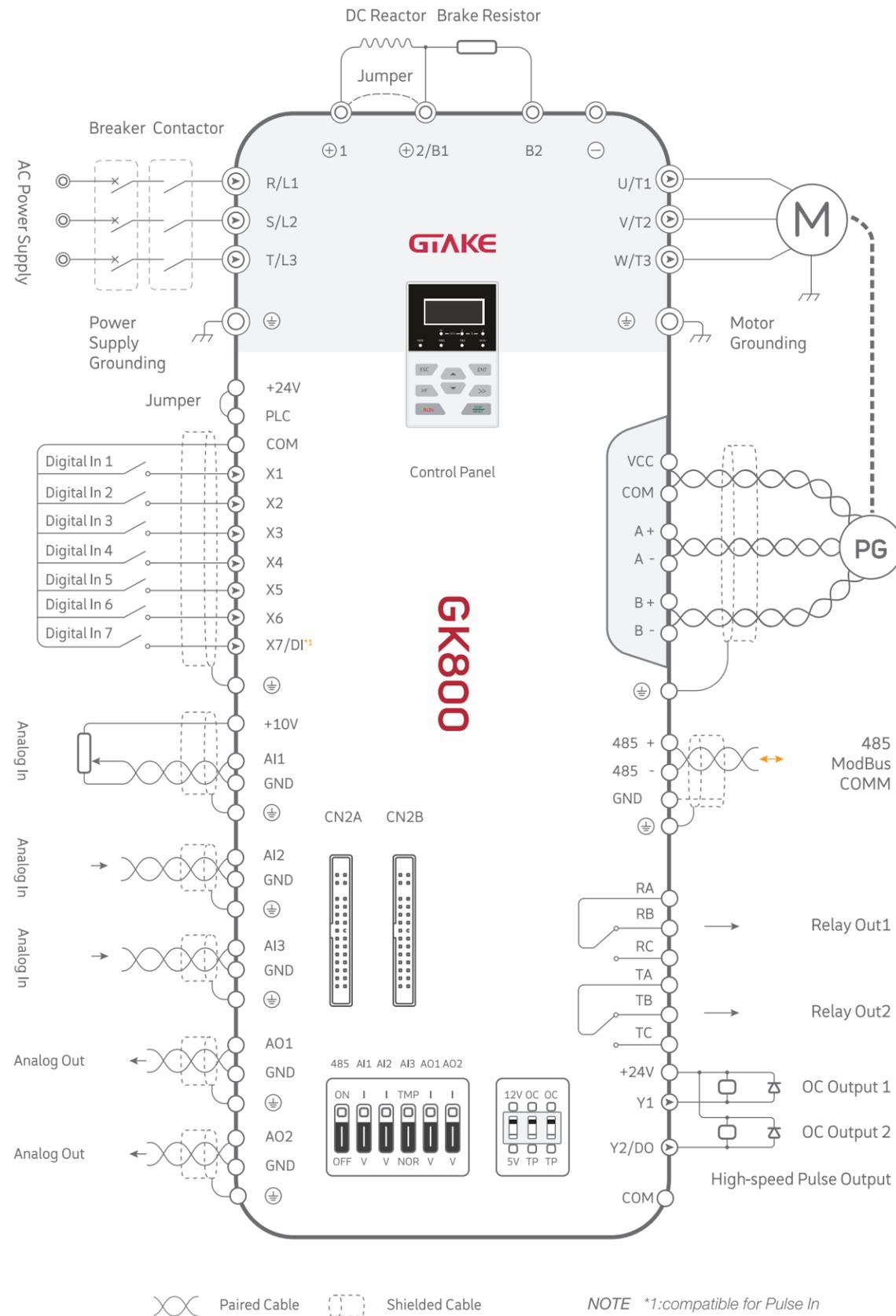
This typically benefits for the applications when your automation system has a need of upgrade or has a new motional requirement or new request for system adjustment. Gtake can provide the kit for online upgrade operated easily by customers themselves, making "just for you" realized.



See the [page 71](#) to learn more ...

BASIC CONNECTION

Following is the default wiring diagram for GK800. Please consult Gtake if customized solution is required.



MODEL INFORMATION

2T

Model ^{*1}		1.5B	2.2B	3.7B	5.5B	7.5B	11 (B)	15 (B)
	Load ^{*2}	HD	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	1.5	2.2	3.7	5.5	7.5	11	15
Rated Output Current	[A]	7.5	11	16.5	24	30	45	60
1Phase-Rated Input Current	[A]	14.5	23	-	-	-	-	-
3Phase-Rated Input Current	[A]	9	15	20.5	29	35	50	65
Applicable Motor	[kW]	1.5	2.2	3.7	5.5	7.5	11	15
Frame NO.	[/]	B1	B1	B2	B3			C1

Model		18.5(B)	22(B)	30(B)	37(B)	45	55	75	90	110
	Load ^{*2}	HD	HD	HD	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	18.5	22	30	37	45	55	75	90	90
Rated Output Current	[A]	73	91	112	144	176	210	288	350	430
Rated Input Current	[A]	80	95	118	150	160	192	266	326	403
Applicable Motor	[kW]	18.5	22	30	37	45	55	75	90	110
Frame NO.	[/]	C2		C3		D1		D2	E1	E2

NOTE

*1: **B - means brake chopper is inbuilt; *(B) - means brake chopper is optionally inbuilt; ** - means brake chopper externally mounted when needed. Take 18.5G/22L for example: the model without brake chopper is GK600-2T18.5, and the model with brake chopper is GK600-2T18.5B. Braking resistor needs to be mounted externally.

*2: HD - Heavy duty.

4T

Model		1.5B	2.2B	3.7B	5.5B	7.5B	11B	15B	18.5(B)
	Load	HD	HD	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	1.5	2.2	3.7	5.5	7.5	11	15	18.5
Rated Output Current	[A]	3.8	5.5	9.0	13	17	24	30	39
Rated Input Current	[A]	5.0	6.0	10.5	14.6	20.5	29	35	44
Applicable Motor	[kW]	1.5	2.2	3.7	5.5	7.5	11	15	18.5
Frame NO.	[/]	A1	B1	B2	B3	C1			

Model		22(B)	30(B)	37(B)	45(B)	55	75	90	110
	Load	HD	HD	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	22	30	37	45	55	75	90	110
Rated Output Current	[A]	45	60	75	91	112	150	176	210
Rated Input Current	[A]	50	65	80	95	118	157	160	192
Applicable Motor	[kW]	22	30	37	45	55	75	90	110
Frame NO.	[/]	C1	C2	C3	D1				

Model		132	160	185	200	220	250	280	315
	Load	HD							
Power Rating	[kW]	132	160	185	200	220	250	280	315
Rated Output Current	[A]	253	310	350	380	430	470	520	590
Rated Input Current	[A]	232	285	326	354	403	441	489	571
Applicable Motor	[kW]	132	160	185	200	220	250	280	315
Frame NO.	[/]	D2	E1	E2	E3				

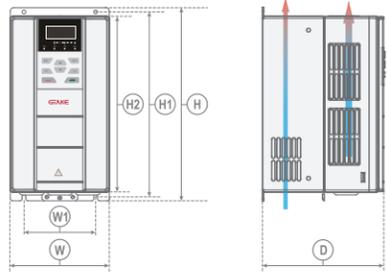
Model		355	400	450	500	560	630
	Load	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	355	400	450	500	560	630
Rated Output Current	[A]	650	725	820	860	950	1100
Rated Input Current	[A]	624	699	790	835	920	1050
Applicable Motor	[kW]	355	400	450	500	560	630
Frame NO.	[/]				E3		F1

NOTE *3: the green numbers say the rated input currents configured DC reactors. The drives GK600-4T90 - GK600-4T500 are provided with external-mounted DC reactors in shipment as default. Be sure to connect the DC reactor. Failure to comply may result in drive abnormal run. GK800-4T560 and GK800-4T630G are cabinet type, whose DC reactor and output AC reactor are inbuilt as default.

DIMENSIONS

Frames		B1	B2	B3	C1	C2	C3	D1	D2	E1	E2	E3	F1
W	[mm]	120	145	190	270	320	385	395	440	500	650	815	1100
W1	[mm]	80	105	120	170	220	260	260	300	360	400	600	-
H	[mm]	245	280	365	475	568	670	785	900	990	1040	1300	2000
H1	[mm]	233	268	353	460	544	640	750	865	950	1000	1252	-
H2	[mm]	220	255	335	435	515	600	705	820	900	950	1200	-
D	[mm]	169	179	187	220	239	261	291	356	368	406	428	550
Mounting hole dia.	[mm]	5.5	5.5	6	8	10	12	12	14	14	14	14	-
Weight	[kg]	2.9	3.9	6.2	15.5	24	37	50	66	88	123	165	515

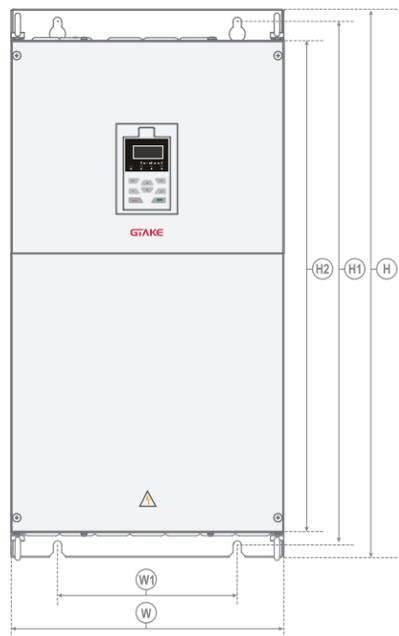
NOTE: *Please see the GK800 user manual for other frames, available at <http://www.gtake.com.cn>.



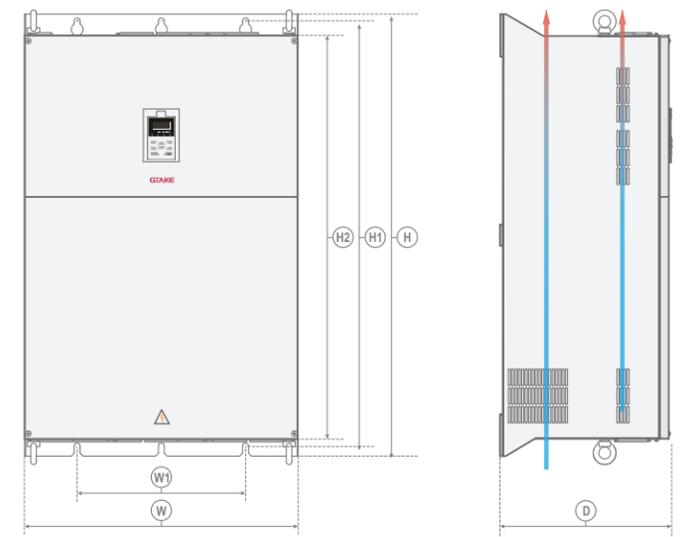
B { B1 B2 B3 }



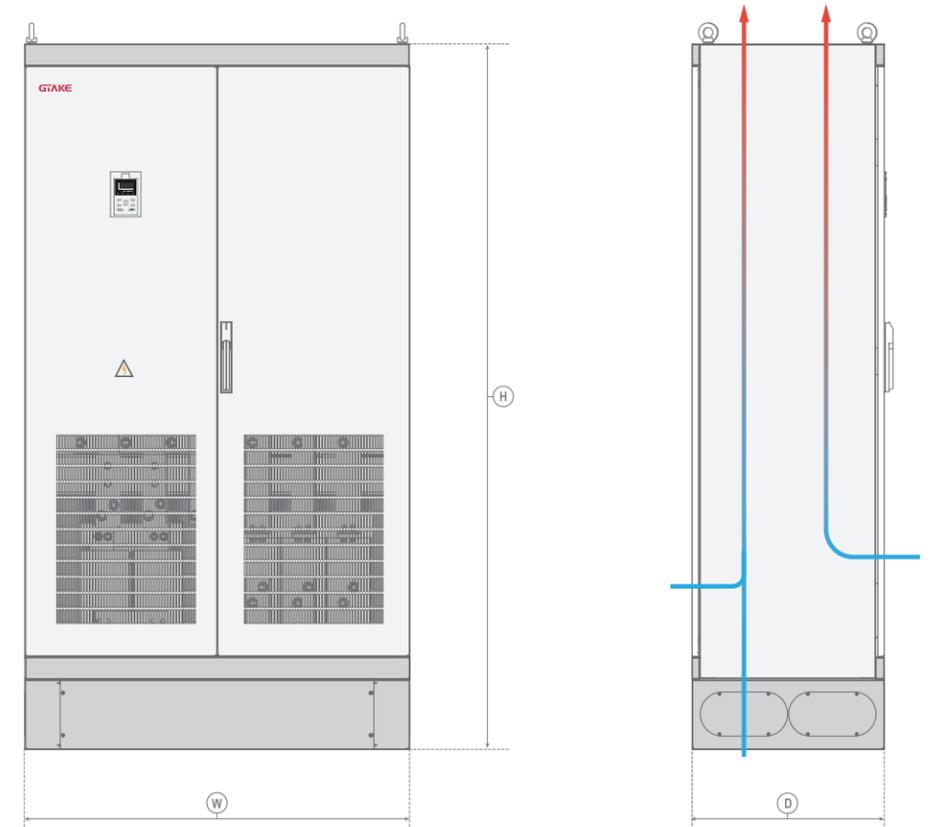
C { C1 C2 C3 }



D { D1 D2 }



E { E1 E2 E3 }



F { F1 }

GK1000 AFE AC Drive



The GK1000 series are the AFE drives that integrate GK800 and AFE unit in the cabinet, to feed back the regenerated energy from motor brake to grid without harmonic interference, realizing much more energy saving than any other drives.

COMPATIBILITY

Synch motor control applicable Asynch motor control applicable

POWER RATINGS

3× 380 - 480V 30 - 630kW
3× 525 - 690V 30 - 630kW

CONTROL TECHNOLOGY

V/Hz control
SVC1 SVC2 VC

FEATURES

Reliable

Ambient temperature 45° C without derating
Thickened conformal coating
Optimized cooling system

User-friendly

Parameter copy
Detachable control panel
One platform numerous versions
Modularized design

Intelligent

Warning systems
Multiple frequency references
All-sided protection
Online autotuning
PC-based monitoring software
Extensible features/parameter blocks

Benefit

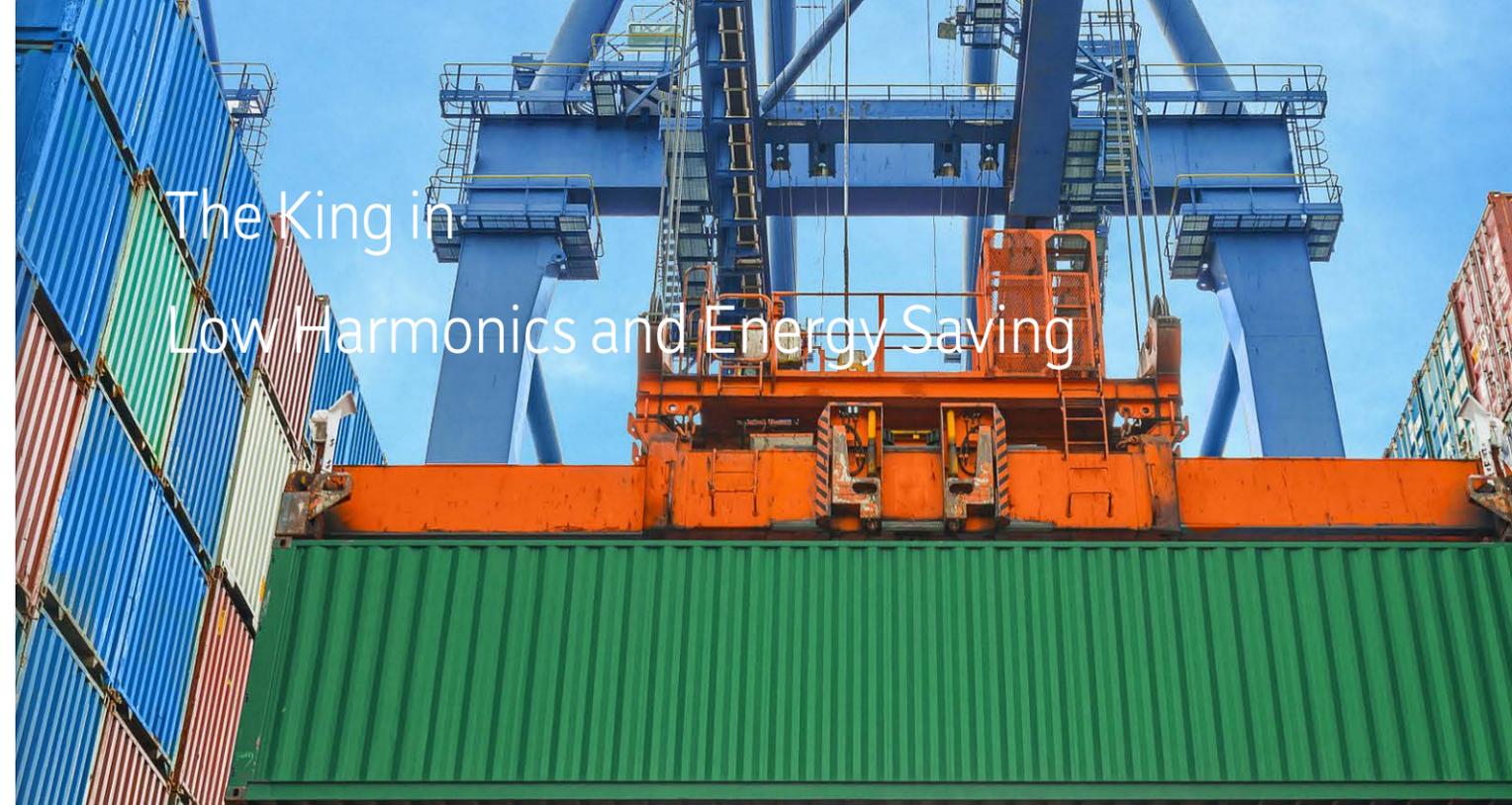
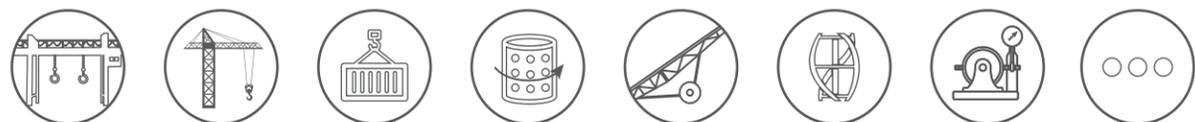
Less need for cooling or oversizing
Resistant to harsh surroundings
Lower temperature rise

Save time for Commissioning
Easy for remote control
Save stocks
Easy for maintenance

Warning before stop
Powerful in intelligent applications
Long lifetime & less maintaince cost
Intelligent response to delicate variation
Easy to operate
Make the drives "just for you"

APPLICATIONS

Conveyor system, hoists & cranes, paper shears, sugar mills, centrifugal, eddy current dynamometers.



The King in
Low Harmonics and Energy Saving

01

Remarkable in energy saving

GK1000 drives, in addition to low harmonics, offer remarkable energy saving in applications with frequent braking, such as cranes, centrifuges, sugar cane mills, test benches and winders. They provide smooth and precise control, and allow interrupted power flow to and from the mains supply. Active front end, a part of GK1000, can be supplied individually when required.

NOTE: Only 132 kW - 160kW are listed here. Please contact for more information of other power ratings.



02

Module design

A GK1000 consists of an active front end and a drive. The AFE and the drive are separately arranged in the cabinet, extremely convenient for operation and maintenance. Users are capable of choosing Gtake AFE only if they prefer to use a drive of another brand.

03

Active Front End - AFE

Active Front End allows real-time regeneration of energy back onto the power line (No demand on phase difference). The active front end also provides power factor control for power quality management and greatly reduces unwanted power harmonics.

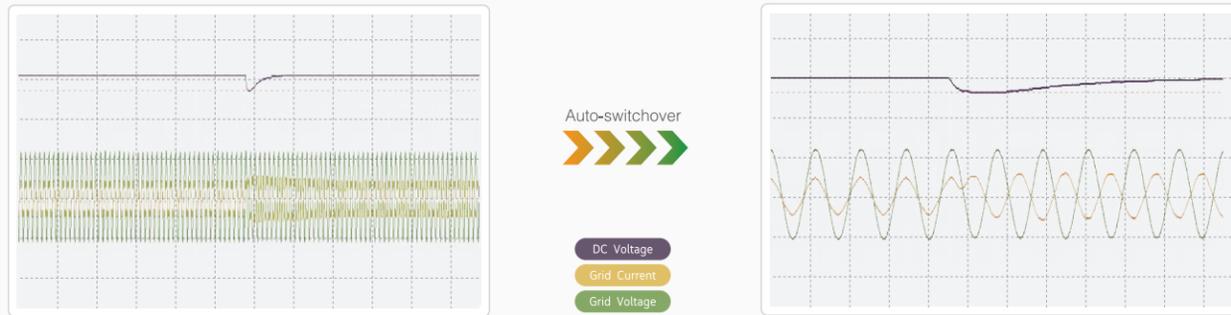


Figure Waveform of regeneration state

Figure Waveform of motoring state

04

Purified output

GK1000 are much greener than general drives since they are equipped with function of active power factor adjustment. The output current THD is less than 2.5%, no pollution to grid power supply according to standard GB14549, GB/Z17625.6-2003.

2.5%

NOTE: Output current THD is 2.18% according the test by a reputed third party. Please contact Gtake to get this report when it is needed.



Figure Waveform of common AC Drives

Figure Waveform of GK1000 AC drives

05

Bus voltage auto adapted

GK1000 AFE drives can auto adjust bus voltage, which ensures the stability of drive output current and motor rotary speed. Even if there is a big fluctuation on power supply voltage for short time, or sudden change on the load, GK1000 bus voltage self adaption can make sure of the system operation without trip, reducing motor temperature rise and prolong the load lifespan.

☆ 40% input voltage drop acceptable

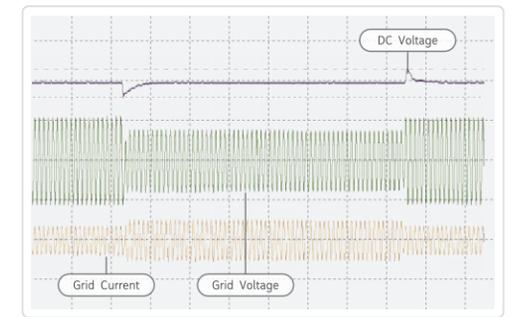


Figure Waveform of grid voltage dropping

06

Marvelous dynamic response

GK1000 AFE drives have quick and marvelous dynamic response to load change, no matter load is added or lessened. The drive can output suited torque simultaneously to a sharp change load.

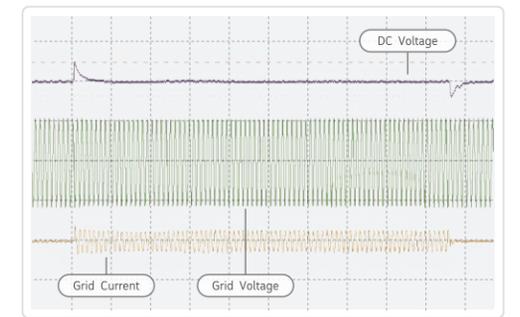


Figure Waveform of grid voltage dropping

07

Four control modes

GK1000 AFE drives are equipped with four control modes, V/Hz, SVC1, SVC2, and VC, fulfilling the requirement of almost all general and demanding industrial systems.

Control mode	V/Hz	SVC1	SVC2	VC
Speed adjustable range	1:100	1:100	1:200	1:1000
Speed accuracy	±0.5%	±0.2%	±0.2%	±0.02%
Speed ripple	/	±0.3%	±0.3%	±0.1%

One platform millions of version is the basic design concept of GK1000. Numerous options are available and can be mounted and tested at factory or be hot-plugged in later for change-over or upgrade.

Fieldbus options

- EPC-CM1 CAN
- EPC-CM2 Profibus
- EPC-CM3 CanOpen

I/O options

- EPC-TM1 Analog and digital
- EPC-TM2 PT100 and relay
- EPC-VD1 Voltage
- EPC-VD2 Bus voltage detection and for optimized flying start
- EPC-IM1 Analog for injection
- EPC-IM2 Current analog
- EPC-RT1 Real-time clock

Encoder options

- EPC-PG1 ABZ open collect/push-pull encoder
- EPC-PG2 ABZ differential encoder, ABZ differential output
- EPC-PG3 UVW encoder
- EPC-PG4 Resolver, DB15 connection
- EPC-PG5 Sincos encoder
- EPC-PG6 Resolver, push-pull output
- EPC-PG8 ABZ differential encoder, ABZ open collection output
- EPC-PG9 Resolver

NOTE: There are two slots for option boards at a GK1000 AFE drive. Please contact Gtake for details of the compatibility and conflict between option boards.

CAN
CANopen

PROFI[®]
BUS



I/O Expansion



Encoders

NOTE: See the complete list of options on page 67.



Adapts to future upgrade

This typically benefits for the applications when your automation system has a need of upgrade or has a new motional requirement or new request for system adjustment. Gtake can provide the kit for online upgrade operated easily by customers themselves, making "just for you" achieved.

SPECIFICATIONS

Mains supply (R/L1, S/L2, T/L3)

Supply voltage	380-480V / 525-690V ±10% (lasting), -15%~+10% (short)
Supply frequency	50/60Hz ±5%
True Power Factor (λ)	1 nominal at rated load
Displacement Power Factor (cos φ)	near unity (>0.98)
Switching on input supply R/L1, S/L2,T/L3	Maximum 2 times/min.

Output data (U/T1, V/T2, W/T3)

Output voltage	0-100% of supply voltage
Output frequency	0-600Hz(standard) 0-16kHz or more (customized)
Switching on output	Unlimited
Ramp times	0-600.00s/6000.0s/60000s

Note: 150% current can be provided for 1 minute, 180% for 10 seconds, 200% for 0.5 second. Higher overload rating is achieved by oversizing the drive.

Digital input

Programmable digital inputs	7 (local), 9 (extensible)
Logic	PNP or NPN
Input	24VDC, 5mA
Frequency range	0-200Hz
Voltage level	10V-30V

Analog input

Analog inputs	3 (local), 4 (extensible)
Modes	Voltage or current
Voltage level	0 to +10 V, -10 to +10V (scaleable)
Current level	0/4 to 20mA (scaleable)



Pulse input

Programmable pulse input	1
Frequency range	0.1Hz-50kHz
Voltage level	10-30V

Encoder input

Power supply to encoder	5V/12V(local)
Ports	A+, A-, B+, B-

ModBus

Rate	4800/9600/19200/38400/57600/115200bps
Formats	RTU, ASCII

Relay output

Programmable relay outputs	2 (local), 4 (extensible)
----------------------------	---------------------------



NOTE

- *1: THD less than 2.5% at rated power.
- *2: Running at unit power factor.
- *3: Consecutive adjustment at rated power.

Analog output

Programmable analog outputs	2 (local), 4 (extensible)
Voltage level	0-10V
Current level	0-20mA

Digital output

Programmable digital/pulse outputs	2/1
Voltage level	0-24V
Current level	0-50mA
Pulse frequency	0-50kHz

Remote control panel

Maximum cable length	15m
----------------------	-----

AFE

DC-side parameters

DC-side voltage setting range	450-750V
Leakage current	<50mA

Grid-side parameters

Allowable voltage range	304-506V
THD	<4% ^{*1}
	≥ 0.99 ^{*2}
Power Factor	0.95(Advanced)-1 ^{*3}
	0.95(Lagged)-1 ^{*3}

MODEL INFORMATION

Model-4T		30	37	45	55	75	90	110	132
	Load	HD	HD	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	30	37	45	55	75	90	110	132
Rated Output Current	[A]	60	75	91	112	150	176	210	253
Rated Input Current	[A]	46	56	68	84	114	137	167	201
Frame NO.	[/]								

Model-4T		160	185	200	220	250	280	315	355
	Load	HD							
Power Rating	[kW]	160	185	200	220	250	280	315	355
Rated Output Current	[A]	310	350	380	430	470	520	590	650
Rated Input Current	[A]	243	281	304	334	380	425	479	539
Frame NO.	[/]								

Model-4T		400	450	500	560	630
	Load	HD	HD	HD	HD	HD
Power Rating	[kW]	400	450	500	560	630
Rated Output Current	[A]	725	820	860	950	1100
Rated Input Current	[A]	608	684	760	851	957
Frame NO.	[/]					



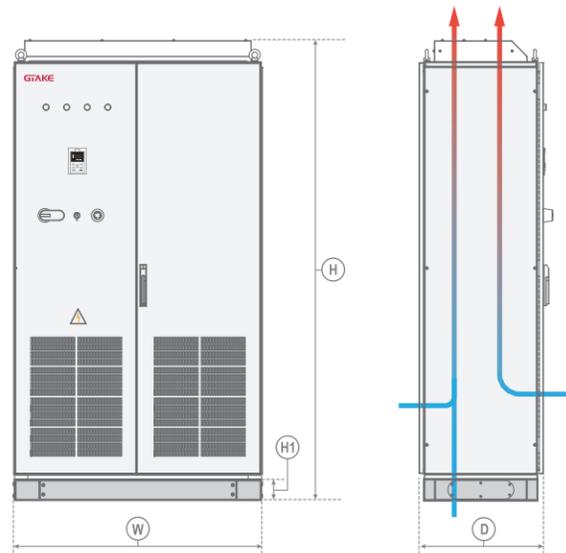
NOTE: These power ratings need to be customized. Please contact Gtake to know their dimensions.

DIMENSIONS

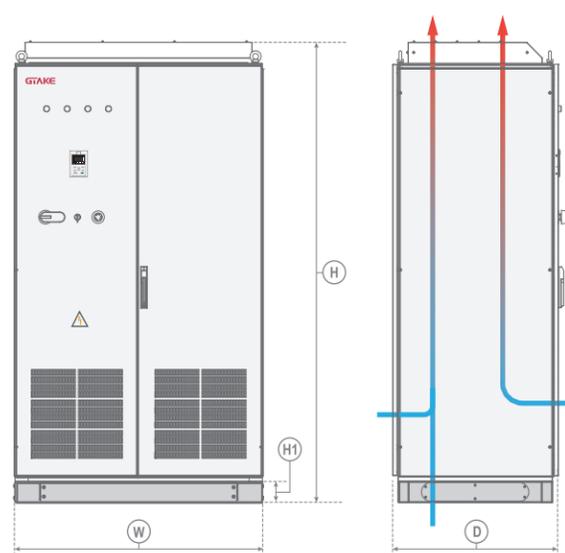
Frames		A	B	a	b
W	[mm]	1200	1200	280	300
H	[mm]	2200	2200	710.5	770.5
D	[mm]	600	800	441.5	651.5

Frames		A	B	a	b
W1	[mm]	-	-	200.5	190
H1	[mm]	100	100	680	740
H2	[mm]	-	-	660	720

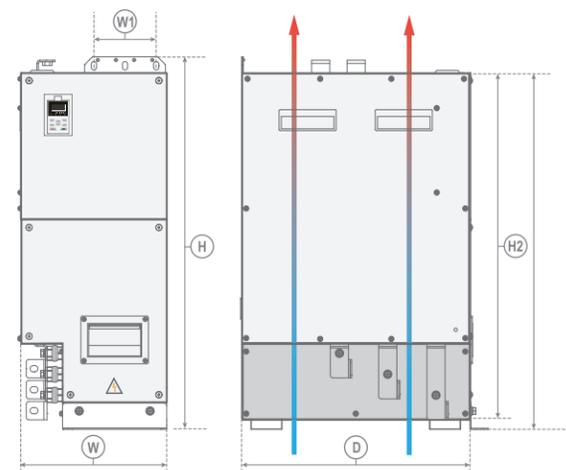
A



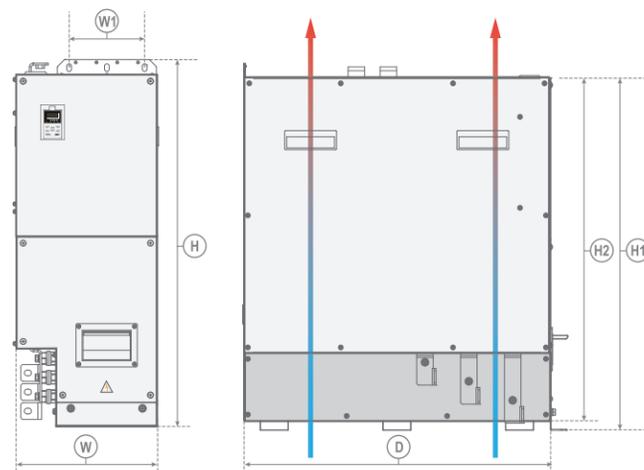
B



a



b



NOTE: Frame A shows the external dimensions, but the figure has been adjusted unproportionally as the space has its constraint here.

GTAKE
AC DRIVE



ES101

Dedicated AC Drive
For injection molding machines

NOTE: ES101 drives can also be applied to die casting machines, and hollow blow molding machines.

ES101 series energy saving cabinet drives are dedicated for injection molding machines.

COMPATIBILITY

Synch motor control applicable
Asynch motor control applicable

POWER RATINGS

3× 220 - 240V 11 - 75kW
3× 380 - 480V 0.75 - 1200kW

CONTROL TECHNOLOGY

V/Hz SVC1 SVC2 VC

FEATURES

01

Cabinet type

The ES101 drives are cabinet type, easy for installation and maintenance. Their IP grade meets IP21, better for human and device protection.

02

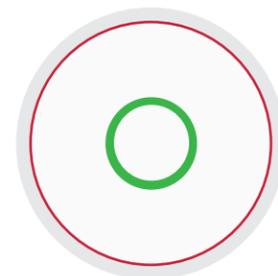
Power frequency / variable frequency switch

An ES101 drive has an external switch using which operator can transfer power supply from AC drive to directly from grid electricity. This switching system pledges a nonstop production even though there is a fault happened to the drive.

03

PID control

ES101 inbuilt PID control makes sure of suitable flow and pressure at any phase of production, which is quite important to ensure the products are always produced in high quality and the system are better in energy saving.



04

Fast dynamic response

ES101 drives are designed with the capability of fast dynamic response. The drive can reach and stabilize the required output torque quickly, ensuring the product quality and system high efficiency.



05

Preeminent control capability

Algorithm inside ES101 is well optimized in accordance with the characteristics of injection molding machines. They have excellent performance in output torque, voltage control, and fast acceleration, even at 0 second ramp-up time setting.



Adapts to future upgrade

This typically benefits for the applications when your automation system has a need of upgrade or has a new motional requirement or new request for system adjustment. Gtake can provide the kit for online upgrade operated easily by customers themselves, making "just for you" achieved.

Option board EPC-IM1 is the default configuration at an ES101 drive, responsible for signal measurement of injection pressure and flow.

Please refer to page 70 for specifications.

01

Basic function like parameter copy, option board supported, protections, etc can also be found at ES101 drives. For more information please refer to ES101 user manual or contact Gtake technicians.

Besides injection molding machines, ES101 are also applied to applications like escalators, central air-conditionings.

02

MODEL INFORMATION

2T

Model-2T ¹		11(B)	15(B)	18.5(B)	22(B)	30(B)	37(B)	45	55	75
	Load ²	HD	HD	HD	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	11	15	18.5	22	30	37	45	55	75
Rated Output Current	[A]	45	60	73	91	112	144	176	210	288
Rated Input Current	[A]	50	65	80	95	118	150	160	192	266
Applicable Motor	[kW]	11	15	18.5	22	30	37	45	55	75
Frame NO.	[/]	A2		A3		A4		A5		A6

4T

Model-4T ¹		11B	15B	18.5(B)	22(B)	30(B)	37(B)	45(B)	55(B)	75(B)
	Load ²	HD	HD	HD	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	11	15	18.5	22	30	37	45	55	75
Rated Output Current	[A]	24	30	39	45	60	75	91	112	150
Rated Input Current	[A]	29	35	44	50	65	80	95	118	157
Applicable Motor	[kW]	11	15	18.5	22	30	37	45	55	75
Frame NO.	[/]	A1		A2			A3		A4	

NOTE

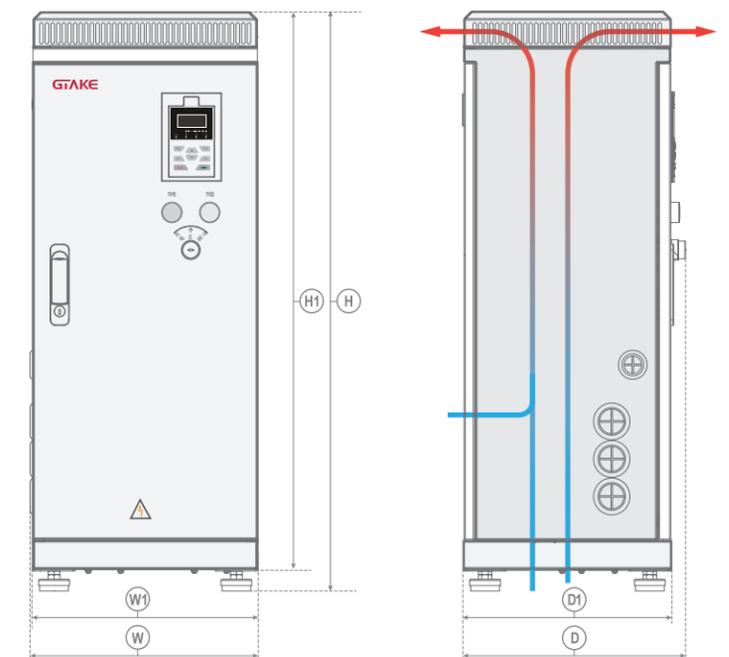
*1: **B - means brake chopper is inbuilt; *(B) - means brake chopper is optionally inbuilt; ** - means brake chopper externally mounted when needed. Take 18.5kW for example: the model without brake chopper is ES101-2T18.5, and the model with brake chopper is ES101-2T18.5B. Braking resistor needs to be mounted externally.

*2: HD - Heavy duty.

DIMENSIONS

Frames		A1	A2	A3	A4	A5	A6
W	[mm]	93	120	145	190	270	320
W1	[mm]	70	80	105	120	170	220
H	[mm]	190	245	280	365	475	568
H1	[mm]	180	233	268	353	460	544
D	[mm]	172	220	255	335	435	515
D1	[mm]	152	169	179	187	220	239
Mounting hole dia.	[mm]	4.5	5.5	5.5	6	8	10
Weight	[kg]	1.4	2.9	3.9	6.2	15.5	24

NOTE: Please see the ES101 user manual for other frames, available at <http://www.gtake.com.cn>.



A1 A2 A3 A4 A5 A6 { A1 A2 A3 A4 A5 A6 }



GK510
Dedicated AC Drive
For textile manufacturing machines

GK510 dedicated drives are tailored for textile industry. These mini drives are powerful in performance and compact in sizes. Their frame dimensions, dedicated function, and type of heat dissipation are all considerate for various textile machines.

COMPATIBILITY

Asynch motor control applicable

POWER RATINGS

1× 200 - 240V	0.75 - 2.2kW
3× 200 - 240V	0.75 - 2.2kW
3× 380 - 480V	0.75 - 2.2kW

CONTROL TECHNOLOGY

V/Hz SVC1

FEATURES

01 Adaptive to textile industry environment

extile industry locations are always filled with cotton fiber and have high ambient temperature. GK510 dedicated drives are equipped with completely separated heat sink, as well as forced air cooling and water cooling are selectable.



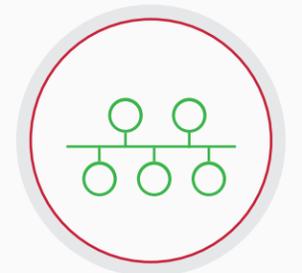
02 Remote control panel supported

GK510 drives support remote control panel operation including parameter copy, a benefit for textile industry and OEM users to reduce the cost of commissioning.



03 Common DC bus

Common DC bus connection is permissible for GK510, a big promotion in the efficiency of energy saving.



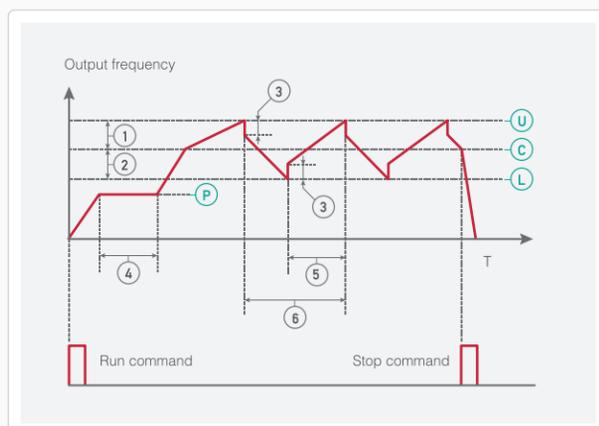
04 Multiple frequency references

GK510 drives support multiple frequency references, a lot of logic and/or hardware combination, meeting a variety of industrial requirement.



05 Stronger wobble frequency

Gtake has a deep investigation and research on textile industry. Optimized wobble frequency inside GK510 enables the drive to have a wider applicability to all kinds of traverse motion.



- U Upper limit of wobble frequency
- C Center frequency
- L Lower limit of wobble frequency
- P Pre-wobble frequency
- 1 Wobble frequency positive amplitude
- 2 Wobble frequency negative amplitude
- 3 Hop frequency
- 4 Pre-wobble frequency holding time
- 5 Triangular wave rise time
- 6 Wobble frequency cycle

All parameters and trigger conditions of wobble function can be set flexibly. Remarkable control capability pledges spindle smooth without bumps.

SPECIFICATIONS

Mains supply (R/L1, S/L2, T/L3)

Supply voltage	200-240V /380-480V ±10% (lasting), -15%~+10% (short)
Supply frequency	50/60Hz ±5%
True Power Factor (λ)	0.92 nominal at rated load
Displacement Power Factor (cos φ) near unity	(>0.98)
Switching on input supply R/L1, S/L2,T/L3	Maximum 2 times/min.

Output data (U/T1, V/T2, W/T3)

Output voltage	0-100% of supply voltage
Output frequency	0-600Hz
Switching on output	Unlimited
Ramp times	0-600.00s/6000.0s/60000s

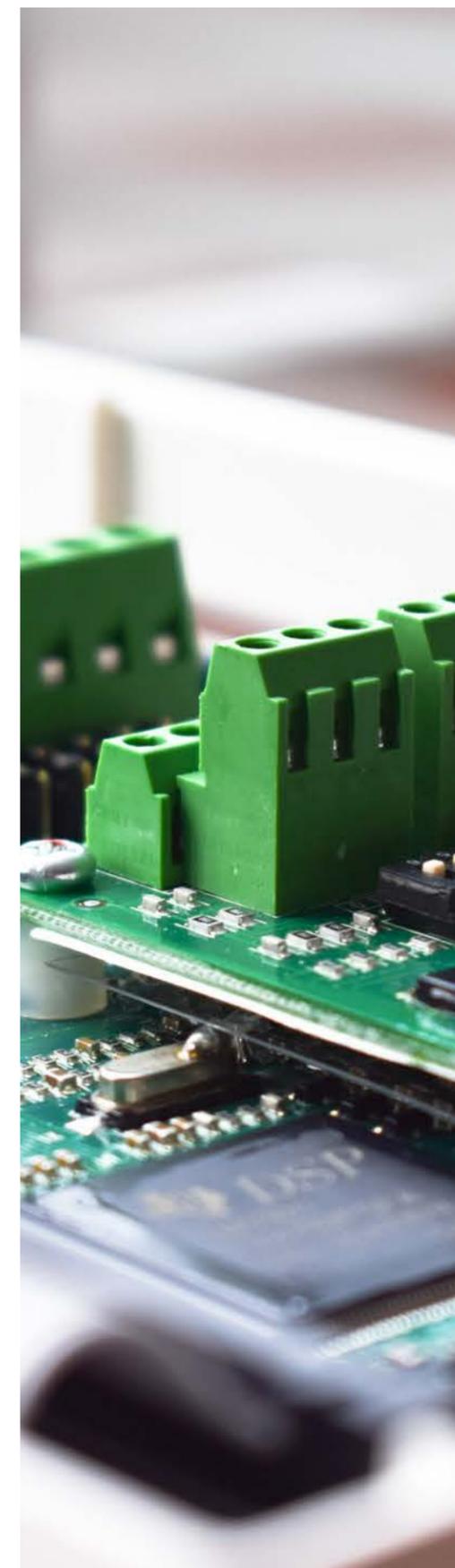
NOTE: 150% current can be provided for 1 minute, 180% for 10 seconds, 200% for 0.5 second. Higher overload rating is achieved by oversizing the drive.

Digital input

Programmable digital inputs	5
Logic	PNP or NPN
Input	24VDC, 5mA
Frequency range	0-200Hz
Voltage level	22V-26V

Analog input

Analog inputs	2
Modes	Voltage or current
Voltage level	0/-10 to 10V
Current level	0/4 to 20mA (scaleable)



ModBus

Rate	4800/9600/19200/38400/57600bps
Formats	RTU, ASCII

Digital output

Programmable digital/pulse outputs	2/1
Voltage level	0-24V
Current level	0-50mA

Relay output

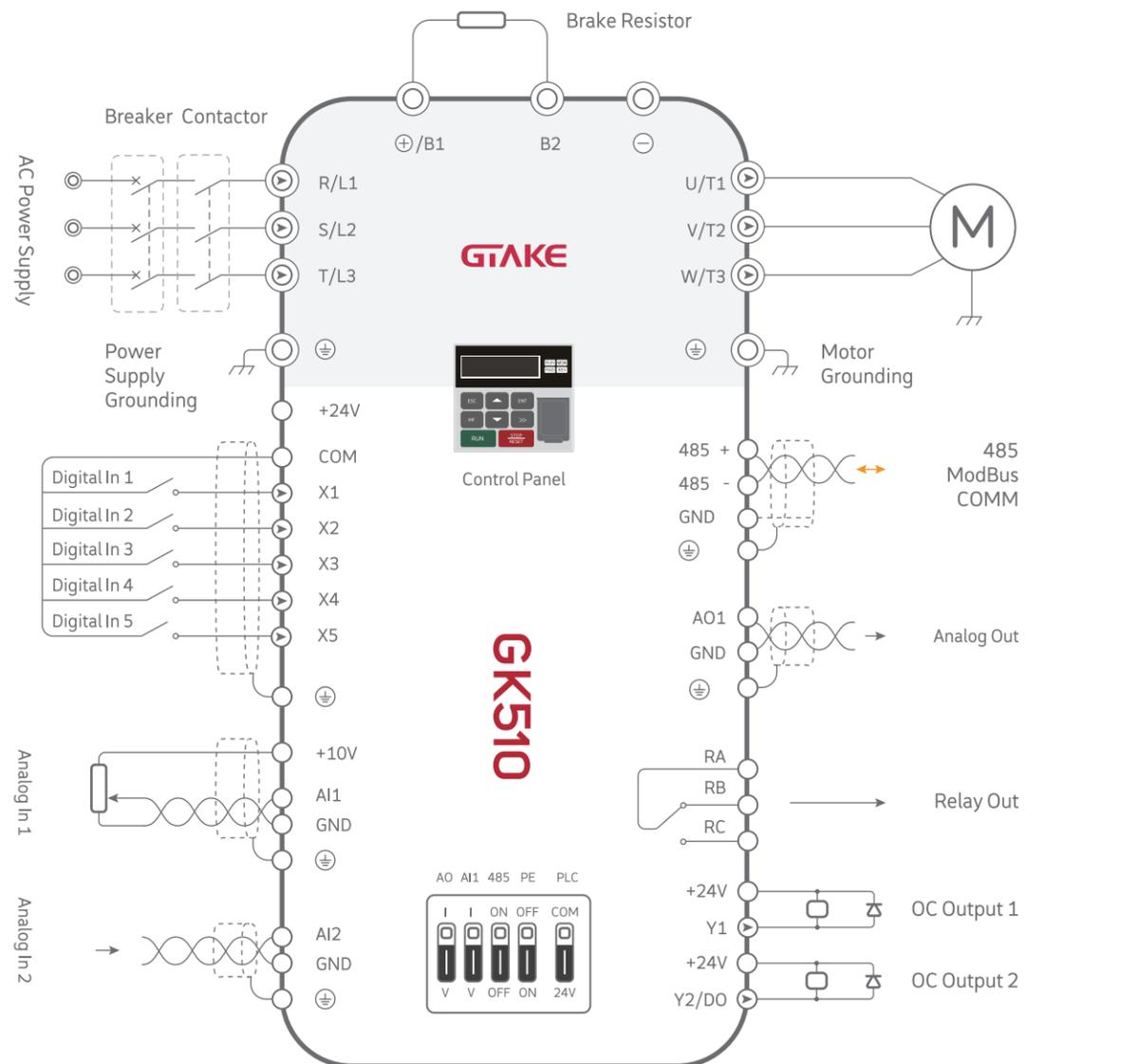
Programmable relay outputs	1
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Remote control panel

Maximum cable length	5m
----------------------	----

BASIC CONNECTION

Following is the default wiring diagram for GK510. Please consult Gtake if customized solution is required.



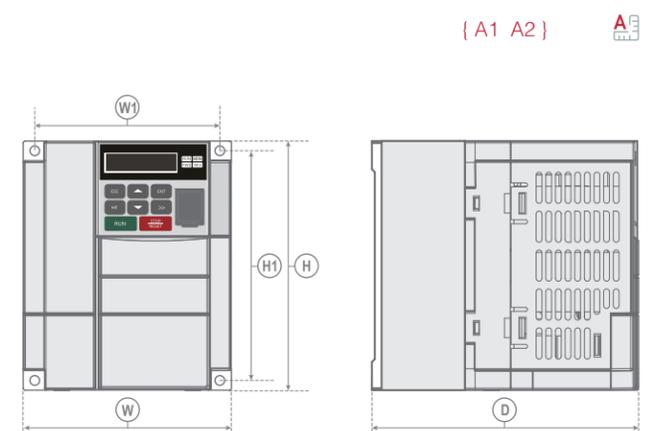
MODEL INFORMATION

Model*		0.75(N)B	1.5(N)B	2.2(N)B	0.75(N)B	1.5(N)B	2.2(N)B	
	Phase	2T	2T	2T	4T	4T	4T	
Power Rating	[kW]	0.75	1.5	2.2	0.75	1.5	2.2	
Rated Output Current	[A]	4.5	7.5	11	2.5	3.8	5.5	
3 Phase Rated Input Current	[A]	6.3	9	15	3.5	5.0	6.0	
1 Phase Rated Input Current	[A]	9.2	14.5	23	-	-	-	
Applicable Motor	[kW]	0.75	1.5	2.2	0.75	1.5	2.2	
Frame NO.	[I]	0.75B / 1.5B / 2.2B			A1		0.75NB / 1.5NB / 2.2NB	A2

NOTE *1: **B - means brake chopper is inbuilt; **NB- means cooling type is natural cooling, while without N means cooling type is forced air cooling.

DIMENSIONS

Frames		A1	A2
W	[mm]	108	120
W1	[mm]	96	96
H	[mm]	128	128
H1	[mm]	118	118
D	[mm]	138	90
Mounting hole dia.	[mm]	5	5
Weight	[kg]	0.9	0.4



NOTE: Please see the GK510 user manual for other frames, available at <http://www.gtake.com.cn>.



STERRING
THE POWER
OF THE SUN



SLR01/02
Dedicated AC Drive
For solar pump

SLR01/02 dedicated AC drive is a decent solution that takes use of solar power as a green and reliable energy source for pumping water.

COMPATIBILITY

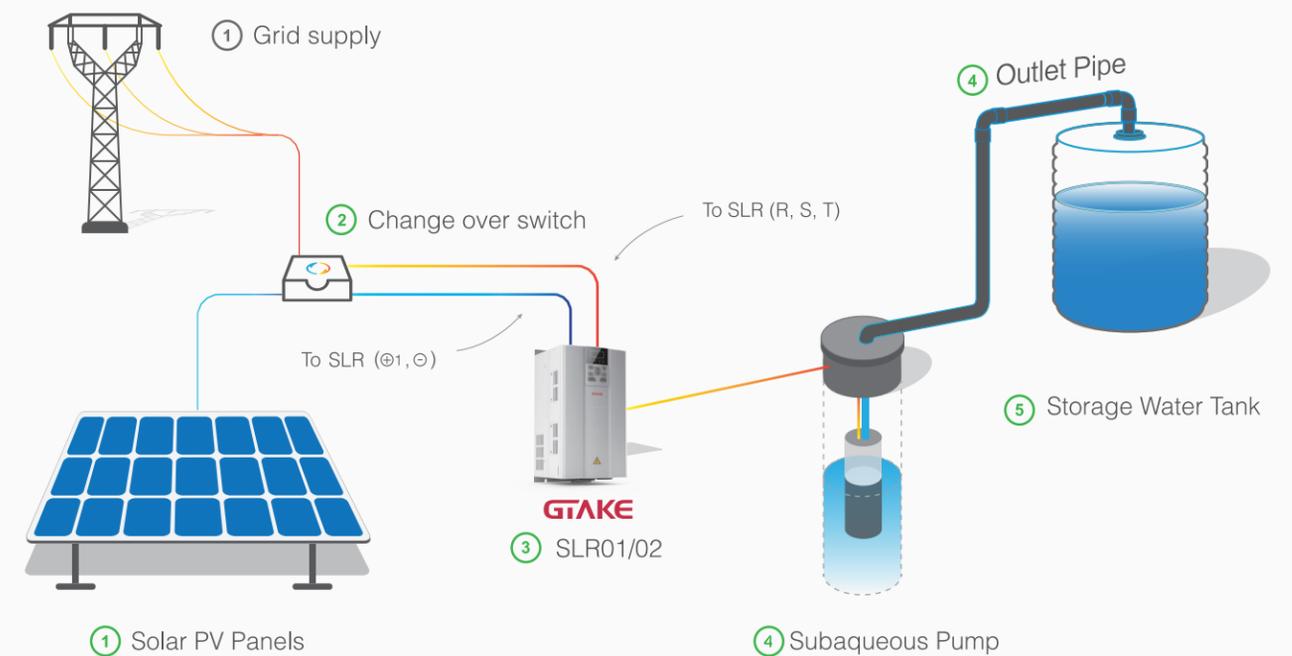
Synch motor control applicable
Asynch motor control applicable

POWER RATINGS

150 - 400VDC / 200 - 240VAC 1Phase	0.4 - 2.2kW
250 - 800VDC / 380 - 460VAC 3Phase	0.4 - 75kW

CONTROL TECHNOLOGY

V/Hz SVC for synch motor



01 MPPT

The SLR solar pump drive is tailored to effectively use the energy from the sunshine. Its inbuilt maximum power point tracking functionality always feeds the maximum amount of power possible from the panels to the pump.



02 Classified user mode

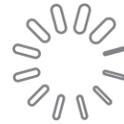
SLR01/02 drives are equipped with three operation modes. **Plug-and-Play Mode** is for robust MPPT operation, while **Senior Mode** for the best performance of MPPT. **Professional Mode** is designed for the users who ask for comprehensive water supply functions.



03

Automatic run/sleep

When sunlight radiation meets the threshold requirement, a SLR01/02 solar pump drive starts automatically, and the pump connected to it begins to run. When the sunshine is weak, the pump will fall into sleep.



04

Dry run protection

Dry run protection is one of quite important functionalities for automatic operation of the water pumping system, realized by Gtake without requirement of signal feedback from any devices.



Flexible control mode

Pressure control mode under AC power supply from grid or diesel generator.

Users would like to use this functionality in some water supply systems, when the pressure is required to be a constant value and the drive is being connected to AC power supply from grid or diesel generator.

Constant speed mode under AC power supply

Users are most likely to use this functionality when sun radiation is not strong enough or unavailable, and the water supply system just simply requires the water to be pumped at the rated output.

Pressure limit mode under power supply from solar panels.

Users need to use this functionality in some water supply systems, when the pressure needs to be limited not to exceed a certain value.

Multistep pressure mode

This functionality is quite useful sometimes for farm irrigation when different area requires different pressures.



SLR01/02

for different motor and power supply

SLR series solar pump dedicated drives are applied to both asynchronous motor and PMSM. The mains input can be solar panel DC, AC single phase, or AC three phase. Users are free to choose a single-phase motor or three-phase motor according to the wish. Thanks to the inbuilt MPPT (Maximal Power Point Tracking) function, SLR drives have a fast response to the sunlight change and reach maximal power point promptly, making the system working at its highest efficiency always.



GTAKE
AC DRIVE



GK600E are specific for passenger and freight elevators installed in residential buildings, shopping malls, and office buildings. The drives can be programmed to have a commendable leveling even they adopt open-loop control, reducing the cost of additional devices. Flexible S-curve program greatly improves comfortability for the elevator users. All elevator parameters gathered in one chapter in the user manual, and well furnished parameter default values make the commissioning easy and fast.

COMPATIBILITY

Asynch motor control applicable

POWER RATINGS

3× 380 - 480V 3.7 - 30kW

CONTROL TECHNOLOGY

V/Hz SVC1 SVC2

FEATURES

01

Safety and reliability

Safety at GK600E has the highest priority since we understand they are dedicated for passenger elevators. Through enable signal, the drive will enable the run of the motor only when the motor run contactor, all safety contactors are well closed. 220V AC UPS power supply, emergency speed, and inspection speed are supported or programmable at GK600E series, a full coverage on the safety requirement at the drive side.

UPS
applicable

02

Dedicated control sequence

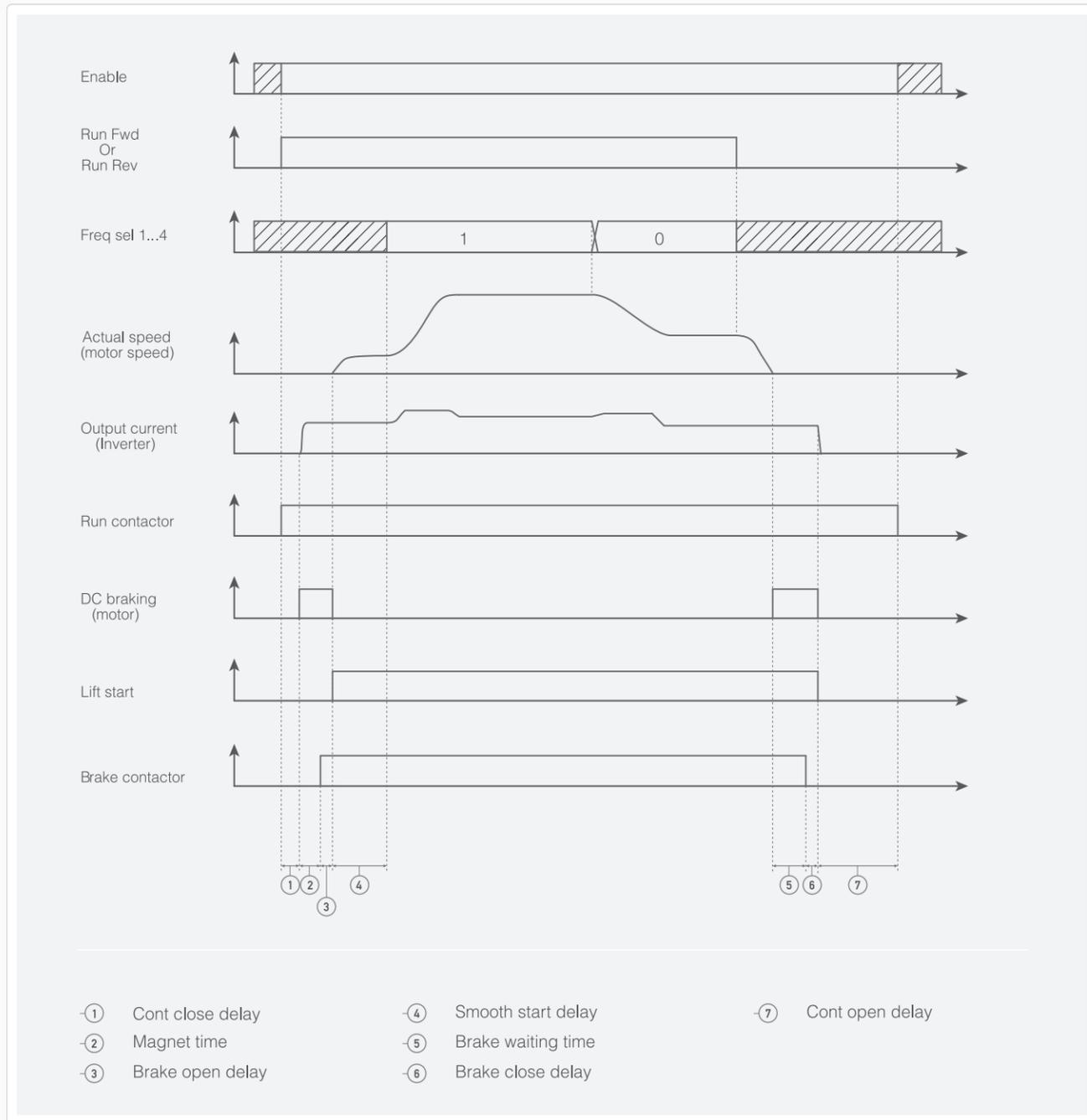
Lift dedicated control sequence, big output torque at low frequency of V/Hz mode, and fast response time make the elevator motion stable and smooth.



GK600E

Dedicated AC Drive

For elevator, escalator and hoist



03 Commendable leveling

Fast response time, programmable S-curve, slip compensation separated for elevator uplink or downlink make the car a commendable leveling for different motor brands.



04 Silky smoothness

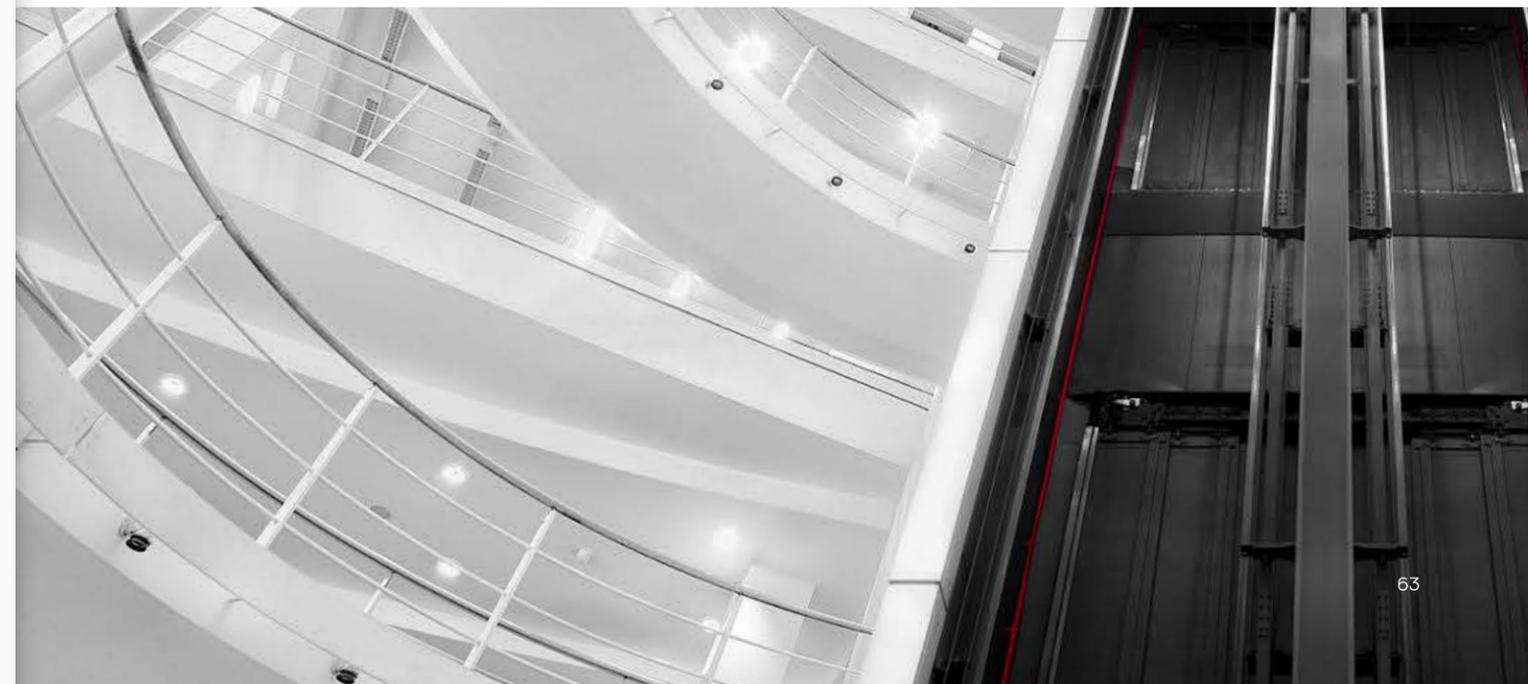
Smoothness at the start and stop is quite important and the main reason for the users to select the drive or not. GK600E have a lot of approaches to program the smoothness at the start and stop, like smooth start frequency, DC injection brake, torque boost, V/Hz mode, brake sequency, and so forth.

05 Emergency and inspection speed programmable

If the grid power supply is suddenly lost, the drive will get into emergency mode and run at the emergency speed via UPS power supply. Inspection speed can also be programmed via multi-speed selections.

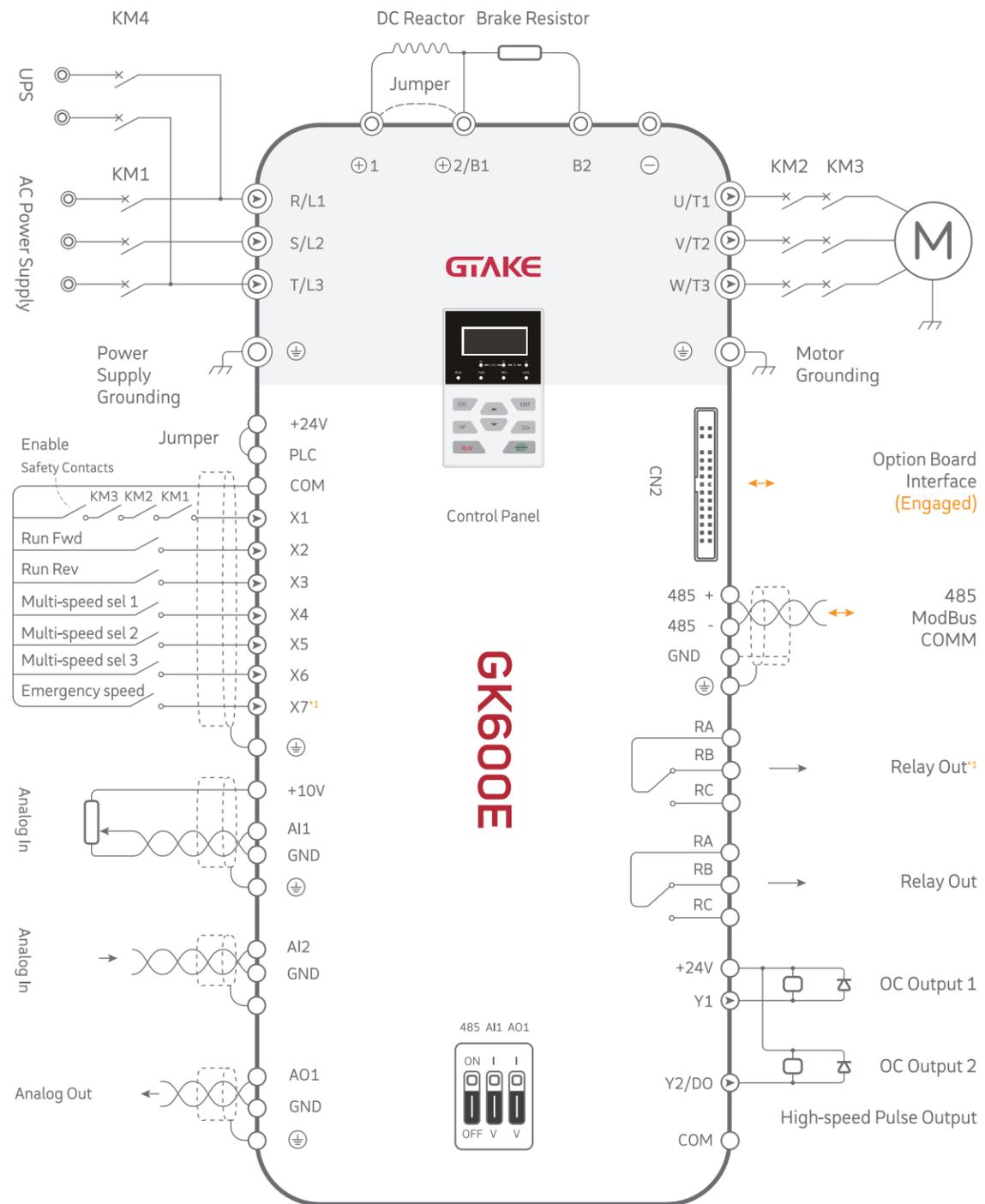
06 Easy commissioning

To reduce the time during commissioning is our consistent pursuit, for which we spent a lot of time in investigation, research and having in-depth conversation with elevator commissioning engineers before launching these elevator dedicated drives. For the majority of elevator applications, well-trained commissioning engineers just need to read through **chapter 5** in GK600E user manual.



BASIC CONNECTION

Following is the default wiring diagram for GK600E. Please consult Gtake if customized solution is required.



MODEL INFORMATION

4T

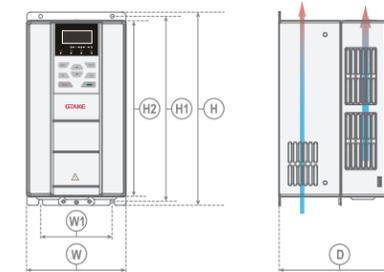
Model		3.7B	5.5B	7.5B	11B	15B	18.5B	22B	30B
	Load	HD	HD	HD	HD	HD	HD	HD	HD
Power Rating	[kW]	3.7	5.5	7.5	11	15	18.5	22	30
Rated Output Current	[A]	9.0	13	17	24	30	39	45	60
Phase Rated Input Current	[A]	10.5	14.6	20.5	29	35	44	50	65
Applicable Motor	[kW]	3.7	5.5	7.5	11	15	18.5	22	30
Frame NO.	[]	B1	B2	B3				C1	

DIMENSIONS

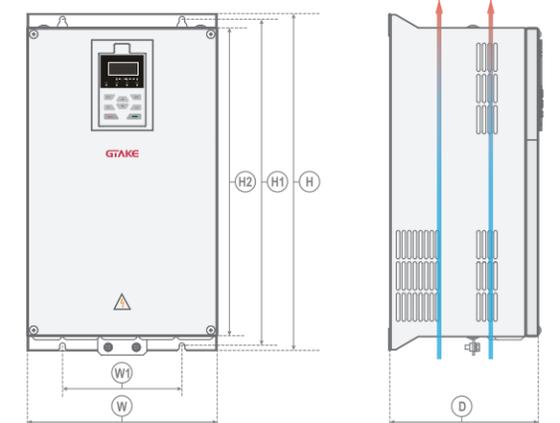
Frames		B1	B2	B3	C1
W	[mm]	120	145	190	270
W1	[mm]	80	105	120	170
H	[mm]	245	280	365	475
H1	[mm]	233	268	353	460

Frames		B1	B2	B3	C1
H2	[mm]	220	255	335	435
D	[mm]	169	179	187	220
Mounting hole dia.	[mm]	5.5	5.5	6	8
Weight	[kg]	2.9	3.9	6.2	15.5

{ B1 B2 B3 }



{ C1 }



Dedicated AC Drive

Tension control
Medium frequency
Water supply control
Winding and unwinding



OPTIONS

Model	GK500	GK600	GK800	GK1000	ES101 ^{*1}	GK510	SLR	GK600E ^{*2}
KBU-DZ1	■					■		
KBU-DZ2		■	■	■	■		■	■
EPC-CM1		■	■	■	■		■	■
EPC-CM2		■	■	■	■		■	■
EPC-CM3		■	■	■	■		■	■
EPC-TM1		■	■	■	■		■	■
EPC-TM2		■	■	■	■		■	■
EPC-VD1		■	■	■	■		■	■
EPC-VD2		■	■	■	■		■	■
EPC-IM1		■	■	■	■	■	■	■
EPC-IM2		■	■	■	■		■	■
EPC-RT1		■	■	■	■		■	■
EPC-PG1			■	■	■		■	
EPC-PG2			■	■	■		■	
EPC-PG3			■	■	■		■	
EPC-PG4			■	■	■		■	
EPC-PG5			■	■	■		■	
EPC-PG6			■	■	■		■	
EPC-PG8			■	■	■		■	
EPC-PG9			■	■	■		■	
Gtake monitoring	■	■	■	■	■	■	■	■
FUT	■	■	■	■	■	■	■	■

NOTE *1: Option EPC-IM1 is the default configuration for ES101; *2: Option EPC-TM1 is the default configuration for GK600E.

Gtake AC drives are tailored for all industrial applications, no matter for general speed regulation for energy saving or precise speed and tension control at demanding applications, such as winding and unwinding, drawbench and so forth. Gtake technicians are devoted to deep investigation and research upon different applications, and are providing just-for-you solution when required. We have already developed dozens of customized models for different applications. Please contact Gtake to acquire the information that you are interested in.



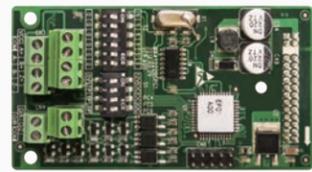
KBU-DZ1

KBU-DZ2

KBU-DZ1/DZ2 is a control panel bracket. When the control panel needs to be fixed remotely on the door of the cabinet, a fitted hole should be opened in the cabinet for mounting this bracket. The control panel can be inserted firmly in the bracket.

■ KBU-DZ1: Applied to GK500

■ KBU-DZ2: Applied to GK600/GK800/GK1000/GK510/ES101/SLR/GK600E



EPC-PG1

Applied to encoder signals of ABZ open collector or push-pull type.

- Frequency dividing output: A/B/Z open collector
- Power supply: 12/24 V
- Wiring method: terminal wiring



EPC-PG2

Applied to encoder of ABZ differential type.

- Frequency dividing output: A/B/Z differential
- Power supply: 5 V
- Wiring method: terminal wiring



EPC-PG3

Applied to encoder of UVW type

- Power supply: 12/24 V
- Wiring method: terminal wiring



EPC-PG4

Applied to resolver

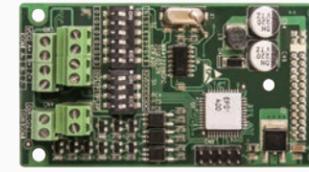
- Power supply: 7 V
- Wiring method: DB15 connector



EPC-PG5

Applied to encoder of SIN/COS type

- Power supply: 5 V
- Wiring method: DB15 connector



EPC-PG8

Applied to encoder of ABZ differential type

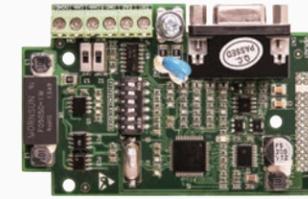
- Frequency dividing output: A/B/Z differential
- Power supply: 5 V
- Wiring method: terminal wiring



EPC-CM1

Communication board

- Supports expanded 232 communiciton.
- Supports expanded CAN communiciton(only for GK800).



EPC-PG6

Applied to resolver

- Frequency dividing output: 5V push-pull output
- Power supply: 7 V
- Wiring method: DB15 connector

- 2 analog inputs expanded, EAI1(can be motor temperature input) & EAI2.
- CAN communicaiton procurable.



EPC-PG9

Applied to resolver

- Frequency dividing output: A/B/Z open-collector/differential
- 2 expanded analog inputs



EPC-CM2

Communication board

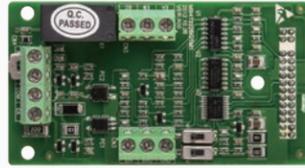
- Supports Profibus-DP communiciton.



EPC-CM3

Communication board

- Supports CAN communication.



EPC-TM1

I/O option board

- 1 analog input.
- 1 digital input.
- 1 relay output.
- 1 analog output.



EPC-TM2

I/O option board

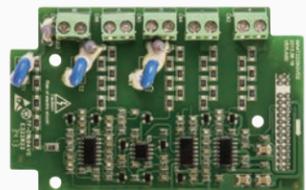
- 2 PT100 temperature detection.
- 2 analog inputs.
- 2 digital inputs.
- 2 relay outputs.



EPC-VD1

Voltage detection board

- Supports input voltage, output voltage detection.



EPC-VD2

Voltage detection board

- Supports output voltage detection, realizing spinning speed tracking.
- Supports bus voltage detection.



EPC-IM1

Analog I/O option board

- 2 analog inputs, voltage or current optional. Current input range: 0-1A; Voltage input range: 0-24V.



EPC-IM2

Analog I/O option board

- 2 current analog inputs. The range of current: 0-1A



EPC-RT1

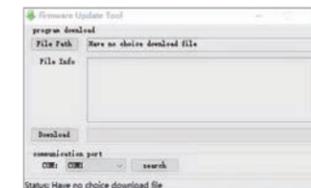
I/O option board

- Real-time clock input.
- 1 analog output.
- 1 relay output.

FUT

Firmware Update Tool

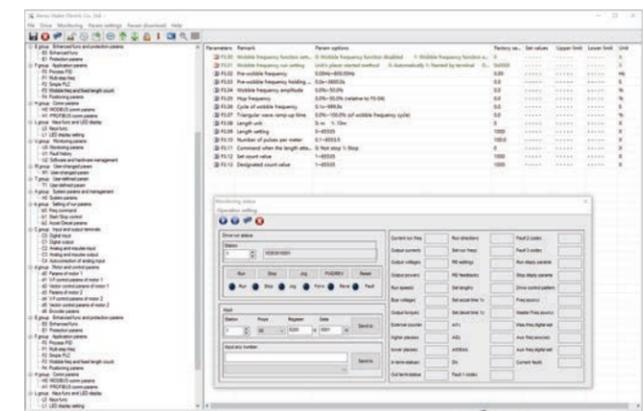
- Firmware update tool for PC.
- Supports all series.



GTK Monitoring

Host software for PC

- This software communication tool can run on personal computers for drive operation, parameter value setting, waveform monitoring, fault alarm, etc.
- Supports all series.





GTAKE EV/HEV DRIVE

For safety, efficiency, reliability and passenger confortability of each electric vehicle.



Applicable to electric buses, hybrid electric buses, low-speed vehicles, electric cars, and electric trucks.



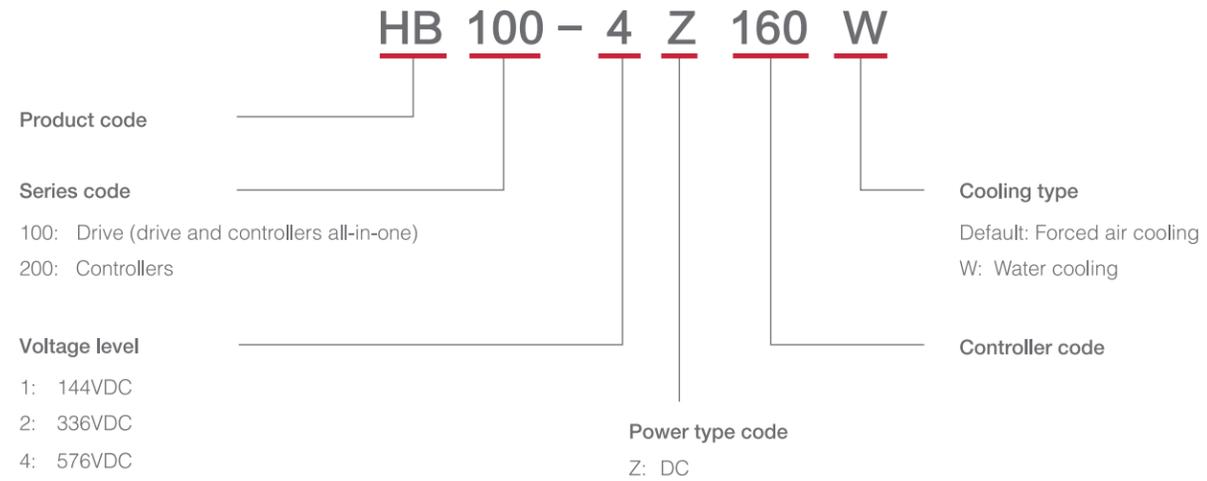
We are providing solutions of drive, single controller, multiply controllers, and drive plus controllers

Module design fulfills

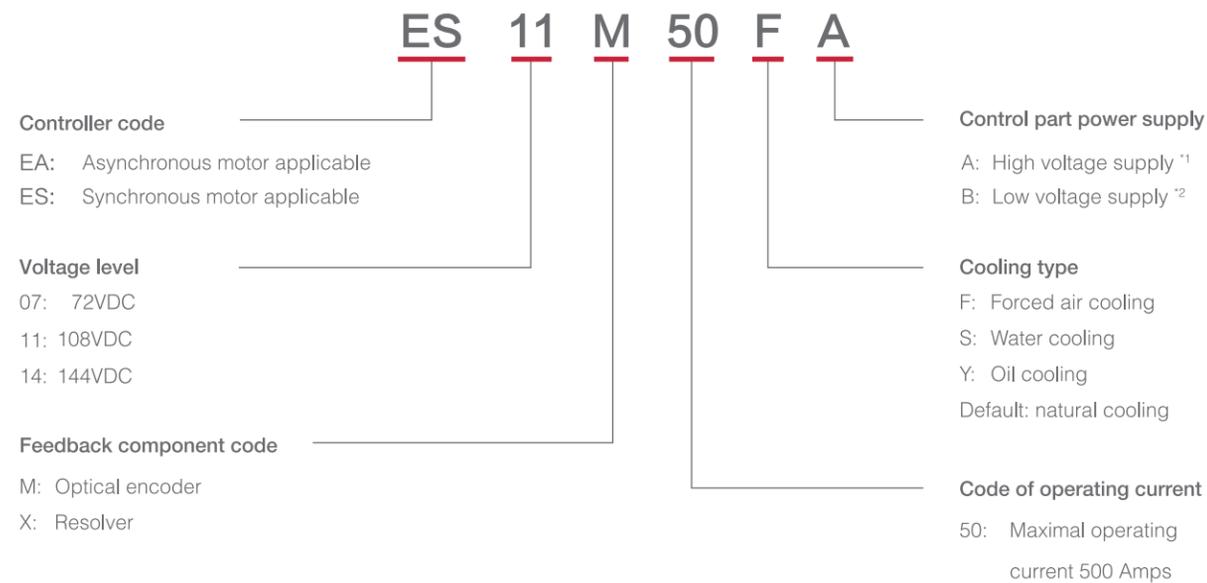
all kinds of EV requirement

Gtake HEV/EV drives and controllers have already spread across all the power ratings of asynchronous motor and synchronous motor in the field of electric vehicle market. We are also catering our customers with customized solutions and customized models. For more information please contact us.

Commercial Vehicle motor controllers



Low-speed vehicle motor controllers



NOTE *1: DC bus power supply; *2: DC 6-16V.

<p>HB100</p> <p>Applicable to buses</p>	Drive	2Z45~4Z280	
	Drive + Controllers	DC/AC DC/DC AC/DC High voltage supply Insulation detection	
<p>EA/ES</p> <p>Applicable to low speed vehicles</p>	Drive	EA07*****~EA11***** ES07*****~ES11*****	
	Single controller	DC/AC DC/DC AC/DC High voltage supply Insulation detection	
<p>HB200</p> <p>Applicable to vehicle controllers</p>	Multiple controllers		

NOTE Above are our standard products. Gtake is catering all kinds of products in the combination of N+N. Do not hesitate to contact us for more.

01 EV dedicated control

The core is dedicated for electric vehicles, with faster response.



02 Reliable components

Adopts the latest IGBT of Infineon whose maximum junction temperature reaches 175 C.



03 Big power, small size

Big power density, compact and light-weighted.



04 Prominent heat dissipation

Optimized mechanical design on the strength of computer thermal simulation technology makes the highest temperature rise not exceed 10 C.



05 High IP grade

Rational placement, delicate material selection, and advanced manufacturing engineering makes the IP grade up to IP67. Well-designed frames and thickened conformal coating protect the products against harsh environment.



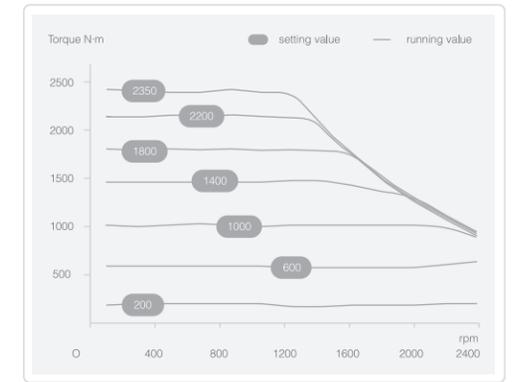
06 High system efficiency

Optimized control algorithm minimizes the motor loss, and insures the high efficiency of the whole motion system.



07 Superior output torque

Gtake EV drives have excellent torque output capacity in the whole speed range. Even in the constant power area (the speed over the rated point), they also can maintain a stable and smooth output torque, until the maximum output capacity of the motor.



08 CAN bus control

Gtake EV drives support terminal control and CAN bus control. The drives can realize CAN node hardware directly connected, with the transmission baud rate up to 1 Mbps, real-time, safe and reliable.

1Mbps

09 Self-adaption to motor temperature

Through the self-adaptive technology, the torque output capability could be maintained no matter at motor cold or hot state.



10 Geared autodrive at low speed

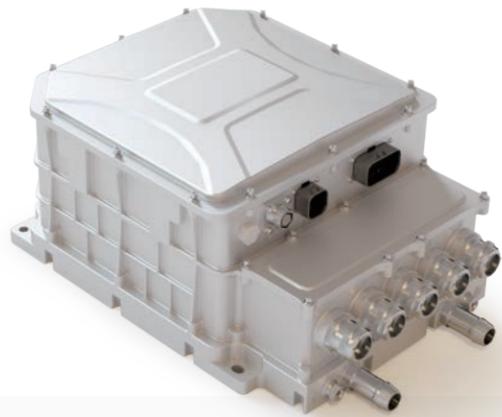
When the vehicle is geared forward, but there is no step-on gas and brake signal, it could run at the set low speed with a matching output torque according to its load and slope degree of the road, shunned from unexpected slope slipping.



11 Overall protection

Gtake EV drives are equipped with capability of protection on short-circuit, over-current, over-voltage, overheating, over-load, and encoder disconnection, etc. Likewise, the battery protection can be well programmed. The drives can adjust feedback power dynamically, thereof battery safety is ensured in case the battery in high voltage.





HB100-2Z45W

KTZ34X26SXX

- ✓ Applicable to electric trucks, buses, and special vehicles.
Compatible with synchronous and asynchronous motor

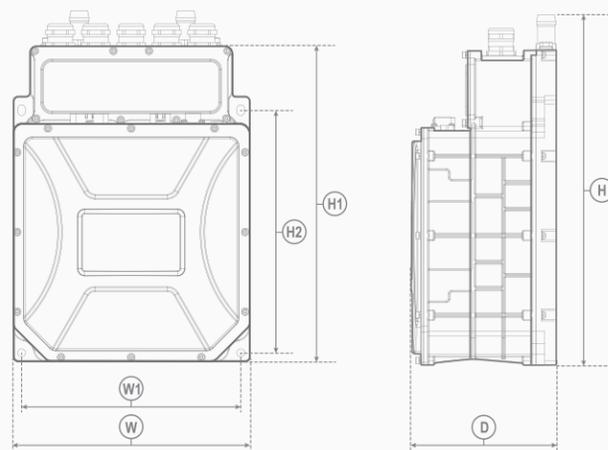
PARAMETERS

Power rating	kW	45
Peak power	kW	68
Rated current	A	176
Peak current	A	264
Input voltage	VDC	200~450
Output voltage	VAC	0~220
Output frequency	Hz	0~600
Efficiency	%	98
Operating ambient temperature	C	-20~65
Weight	kg	18
Cooling method	/	hydrocooling
Protection level	/	IP67

APPLICABLE MOTOR

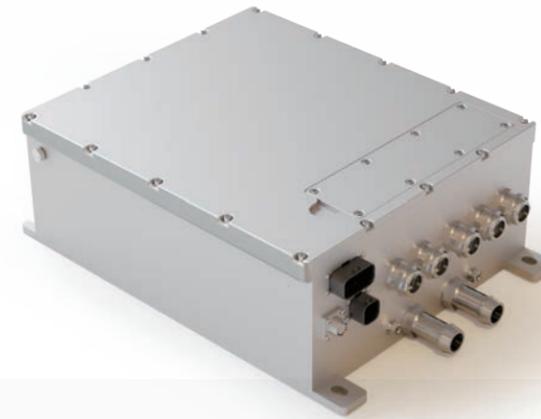
Rated current	A	95
Peak current	A	260
Power rating	kW	40
Peak power	kW	80
Rated torque	N·m	106
Peak torque	N·m	260
Rated voltage	VAC	200
Rated speed	r/min	3600
Peak speed	r/min	8900
Insulation grade	/	H
Protection level	/	IP67
Weight	kg	67

DIMENSIONS



Frame	W	W1	H	H1	H2	D
Unit	mm	mm	mm	mm	mm	mm
A	270	250	396.5	356	274	166

NOTE: Here lists the common application only, and the applicable motor data are the standard configuration. Actually real application is not limited to this. Please refer to Gtake EV Drive Catalog or contact us for more.



HB100-2Z75W

KTZ34X41SXX

- ✓ Applicable to electric LCV less than 6 meters in length, and special vehicles.
Compatible with synchronous and asynchronous motor

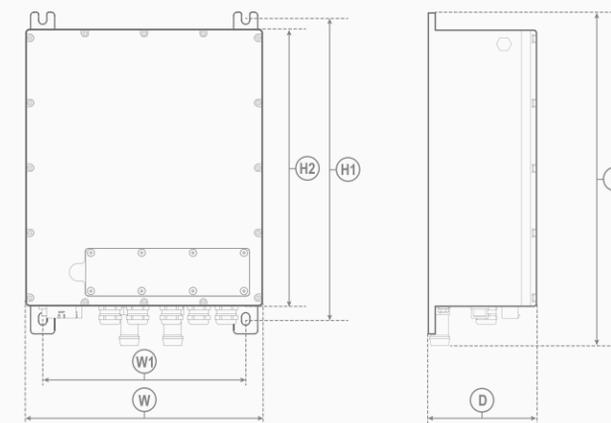
PARAMETERS

Power rating	kW	75
Peak power	kW	113
Rated current	A	253
Peak current	A	410
Input voltage	VDC	200~450
Output voltage	VAC	0~220
Output frequency	Hz	0~600
Efficiency	%	98
Operating ambient temperature	C	-20~65
Weight	kg	21
Cooling method	/	hydrocooling
Protection level	/	IP67

APPLICABLE MOTOR

Rated current	A	160
Peak current	A	410
Power rating	kW	50
Peak power	kW	100
Rated torque	N·m	266
Peak torque	N·m	745
Rated voltage	VAC	240
Rated speed	r/min	1800
Peak speed	r/min	4000
Insulation grade	/	H
Protection level	/	IP67
Weight	kg	113

DIMENSIONS



Frame	W	W1	H	H1	H2	D
Unit	mm	mm	mm	mm	mm	mm
B	343	295	480	430	398	157

NOTE: Here lists the common application only, and the applicable motor data are the standard configuration. Actually real application is not limited to this. Please refer to Gtake EV Drive Catalog or contact us for more.



HB100-4Z90W

KTZ58X26SXX

✓ Applicable to middle-sized EV trucks, and 6 to 8-meter EV commercial vehicles. Compatible with synchronous and asynchronous motor

PARAMETERS

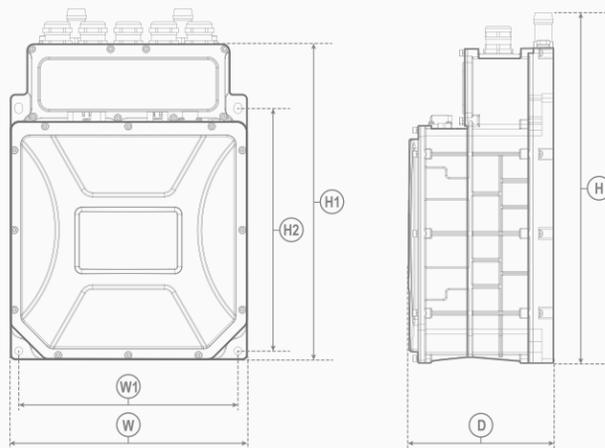
Power rating	kW	90
Peak power	kW	135
Rated current	A	176
Peak current	A	264
Input voltage	VDC	400~800
Output voltage	VAC	0~380
Output frequency	Hz	0~600
Efficiency	%	98
Operating ambient temperature	C	-20~65
Weight	kg	18
Cooling method	/	hydrocooling
Protection level	/	IP67

APPLICABLE MOTOR

Rated current	A	156
Peak current	A	200
Power rating	kW	60
Peak power	kW	90
Rated torque	N·m	250
Peak torque	N·m	350
Rated voltage	VAC	363
Rated speed	r/min	2300
Peak speed	r/min	5500
Insulation grade	/	H
Protection level	/	IP67
Weight	kg	44.3

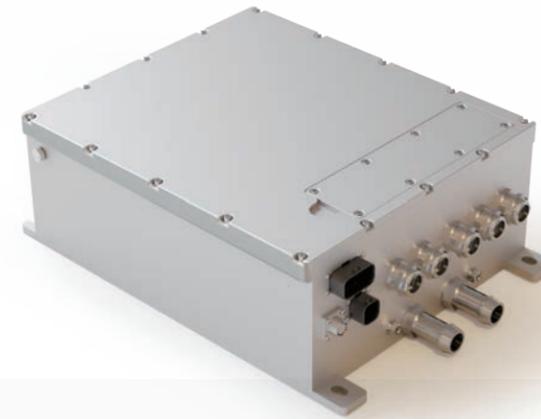
NOTE: In this case, motor is equipped with reduction gearbox with reduction ratio 5.66-0.76

DIMENSIONS



Frame	W	W1	H	H1	H2	D
Unit	mm	mm	mm	mm	mm	mm
A	270	250	396.5	356	274	166

NOTE: Here lists the common application only, and the applicable motor data are the standard configuration. Actually real application is not limited to this. Please refer to Gtake EV Drive Catalog or contact us for more.



HB100-4Z132W

KTZ58X38SXX

✓ Applicable to 8 to 10-meter electric commercial vehicles and special vehicles. Compatible with synchronous and asynchronous motor

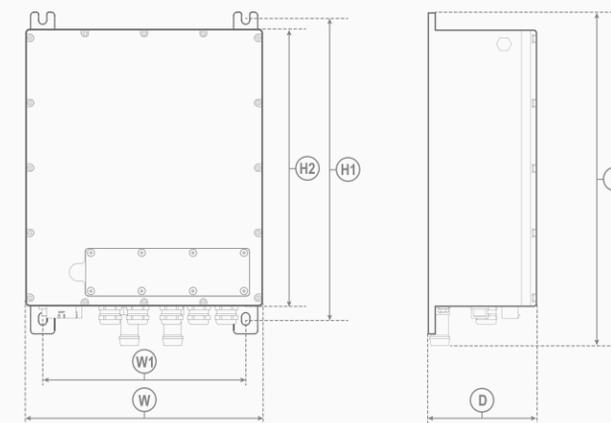
PARAMETERS

Power rating	kW	132
Peak power	kW	198
Rated current	A	253
Peak current	A	380
Input voltage	VDC	400~800
Output voltage	VAC	0~380
Output frequency	Hz	0~600
Efficiency	%	98
Operating ambient temperature	C	-20~65
Weight	kg	21
Cooling method	/	hydrocooling
Protection level	/	IP67

APPLICABLE MOTOR

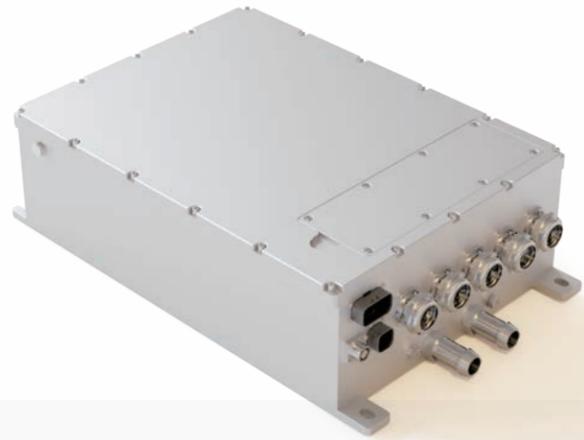
Rated current	A	97
Peak current	A	243
Power rating	kW	55
Peak power	kW	90
Rated torque	N·m	240
Peak torque	N·m	600
Rated voltage	VAC	380
Rated speed	r/min	2000
Peak speed	r/min	4000
Insulation grade	/	F
Protection level	/	IP67
Weight	kg	97

DIMENSIONS



Frame	W	W1	H	H1	H2	D
Unit	mm	mm	mm	mm	mm	mm
B	343	295	480	430	398	157

NOTE: Here lists the common application only, and the applicable motor data are the standard configuration. Actually real application is not limited to this. Please refer to Gtake EV Drive Catalog or contact us for more.



HB100-4Z160W

KTZ58X47SXX

✓ Applicable to 10 to

12-meter electric commercial vehicles

Compatible with synchronous and asynchronous motor

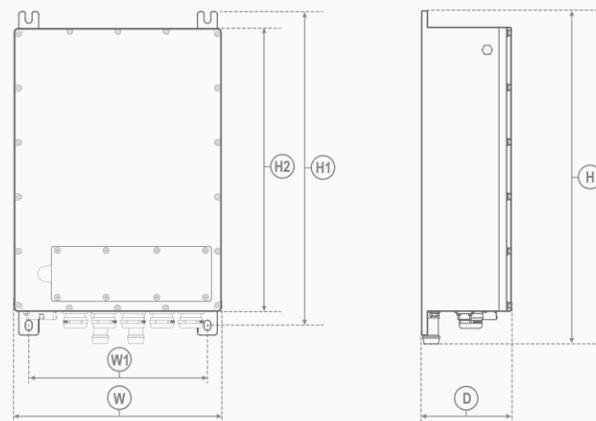
PARAMETERS

Power rating	kW	160
Peak power	kW	240
Rated current	A	310
Peak current	A	465
Input voltage	VDC	400~800
Output voltage	VAC	0~380
Output frequency	Hz	0~600
Efficiency	%	98
Operating ambient temperature	C	-20~65
Weight	kg	28
Cooling method	/	hydrocooling
Protection level	/	IP67

APPLICABLE MOTOR

Rated current	A	210
Peak current	A	420
Power rating	kW	100
Peak power	kW	200
Rated torque	N·m	955
Peak torque	N·m	2500
Rated voltage	VAC	380
Rated speed	r/min	1000
Peak speed	r/min	3000
Insulation grade	/	H
Protection level	/	IP67
Weight	kg	400

DIMENSIONS



Frame	W	W1	H	H1	H2	D
Unit	mm	mm	mm	mm	mm	mm
C	363	315	580	535	494	157

NOTE: Here lists the common application only, and the applicable motor data are the standard configuration. Actually real application is not limited to this. Please refer to Gtake EV Drive Catalog or contact us for more.



HB100-4Z250W

KTZ58X57SXX

✓ Applicable to 12 to 18-meter

electric commercial vehicles and special vehicles.

Compatible with synchronous and asynchronous motor

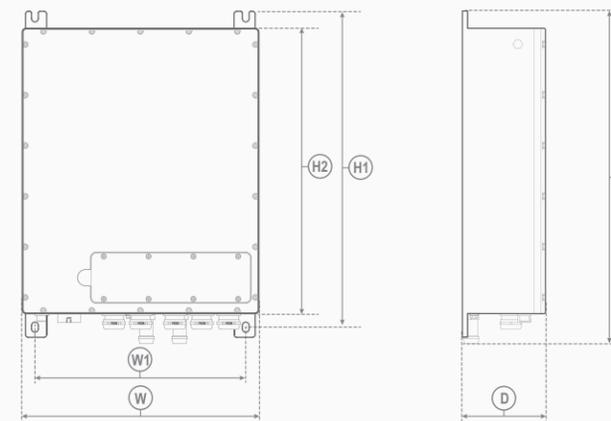
PARAMETERS

Power rating	kW	200
Peak power	kW	300
Rated current	A	380
Peak current	A	570
Input voltage	VDC	400~800
Output voltage	VAC	0~380
Output frequency	Hz	0~600
Efficiency	%	98
Operating ambient temperature	C	-20~65
Weight	kg	34
Cooling method	/	hydrocooling
Protection level	/	IP67

APPLICABLE MOTOR

Rated current	A	253
Peak current	A	480
Power rating	kW	120
Peak power	kW	250
Rated torque	N·m	1146
Peak torque	N·m	2800
Rated voltage	VAC	380
Rated speed	r/min	1000
Peak speed	r/min	3000
Insulation grade	/	H
Protection level	/	IP67
Weight	kg	480

DIMENSIONS



Frame	W	W1	H	H1	H2	D
Unit	mm	mm	mm	mm	mm	mm
D	448.5	400	624.5	580	535	157

NOTE: Here lists the common application only, and the applicable motor data are the standard configuration. Actually real application is not limited to this. Please refer to Gtake EV Drive Catalog or contact us for more.



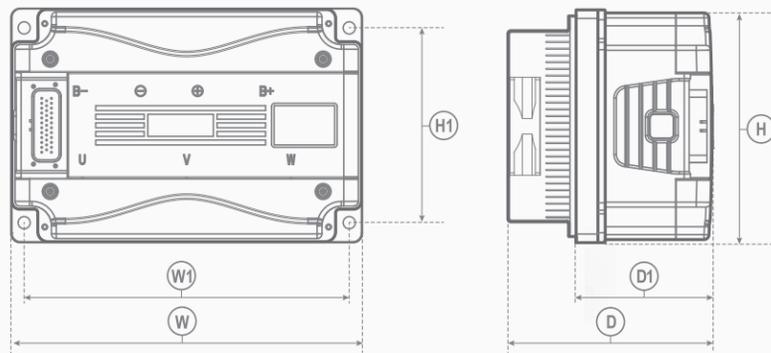
EA/ES

ES/EA series tailored for low-speed electric vehicles fulfill the standard “double 100”. They were born with prominent drive capability and equipped with dedicated functions. The LSV mounted an ES/EA drive always has its highest efficiency in energy utilization and the users are having a quite comfortable driving experience.

- EA asynchronous motor applicable.
- ES synchronous motor applicable.
- ES/EA are all compatible with optical encoder, and resolver.
- ES/EA all support high-voltage supply and low-voltage supply.

Peak current **500^A** Protection level **IP65** System efficiency **98%**

DIMENSIONS



Frame	W	W1	H	H1	D	D1
Unit	mm	mm	mm	mm	mm	mm
E	288	?	190	?	169	113

MODEL INFORMATION

Model	Unit	EA07M50FA	EA07M50FB	EA11M50FA	EA11M50FB	EA14M50FA	EA14M50FB	ES07X50FA	ES07X50FB	ES11X50FA	ES11X50FB	ES14X50FA	ES14X50FB
Power rating	kW	15	15	20	20	20	20	15	15	20	20	20	15
Peak power	kW	30	30	40	40	40	40	30	30	40	40	40	40
Rated current	A	250	250	230	230	150	150	250	250	230	230	150	150
Peak current ^{*1}	A	500	500	500	500	500	500	500	500	500	500	500	500
Input voltage	VDC	50-90	50-90	80-135	80-135	105-180	105-180	50-90	50-90	80-135	80-135	105-180	105-180
Output voltage ^{*2}	VAC	35-64	35-64	56-95	56-95	74-127	74-127	35-64	35-64	56-95	56-95	74-127	74-127
Output frequency	Hz	0-600	0-600	0-600	0-600	0-600	0-600	0-600	0-600	0-600	0-600	0-600	0-600
Temperature ^{*3}	C	-30~55	-30~55	-30~55	-30~55	-30~55	-30~55	-30~55	-30~55	-30~55	-30~55	-30~55	-30~55
Weight	kg	5	5	5	5	5	5	5	5	5	5	5	5
Cooling method	/	✂	✂	✂	✂	✂	✂	✂	✂	✂	✂	✂	✂
Motor type	/	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Encoder type	/	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Power supply type ^{*4}	/	H	L	H	L	H	L	H	L	H	L	H	L

✂ Forced air cooling ⊙ Asynchronous motor ⊙ Synchronous motor ⊙ Photoelectric encoder ⊙ Resolver

NOTE

*1: Lasting 2 minutes

*2: RMS

*3: Operating ambient temperature

*4: Supports low-voltage & high-voltage power supply



Customized Products

We know that different customers have different requirements. For this reason we provide customized solutions **N+N** (drive + controllers) for them when required. Following are all customized products. For more information please contact us.



HB100-2Z75W-K 1+3

Host Drive

DC/DC

DC/AC

High Voltage Distribution

NOTE: Host drive to drive the motor; Auxiliary drive for power steering pump (DC/AC), air pump, etc. Contact us for more.

HB100-4Z160W-J 1+4



Host Drive

DC/DC

DC/AC

High Voltage Distribution

Generator Controller

HB200-4Z5.5WB-C 0+4

DC/DC

DC/AC

DC/AC

High Voltage Distribution



NOTE: For more information of integrated drive models (N+N) and controller models (0+N), please refer to Gtake EV DRIVE CATALOG or contact us.

CERTIFICATIONS



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

We cooperate with reputed third parties to propel all our components, production processes, quality control system, and finished products to meet the standards of automobile industry.



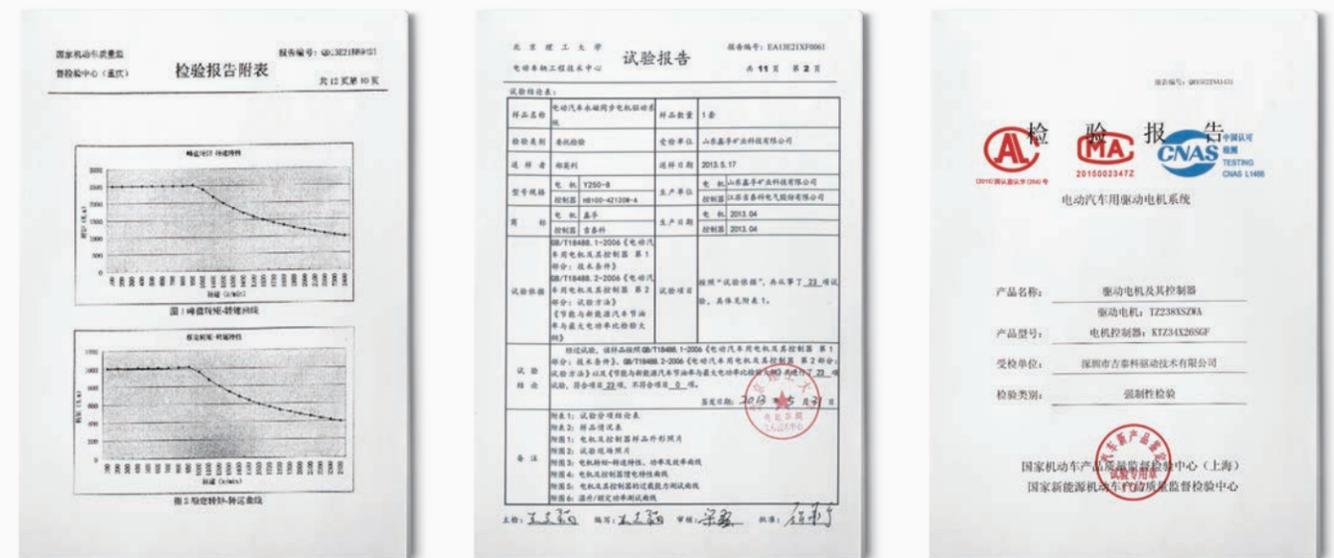
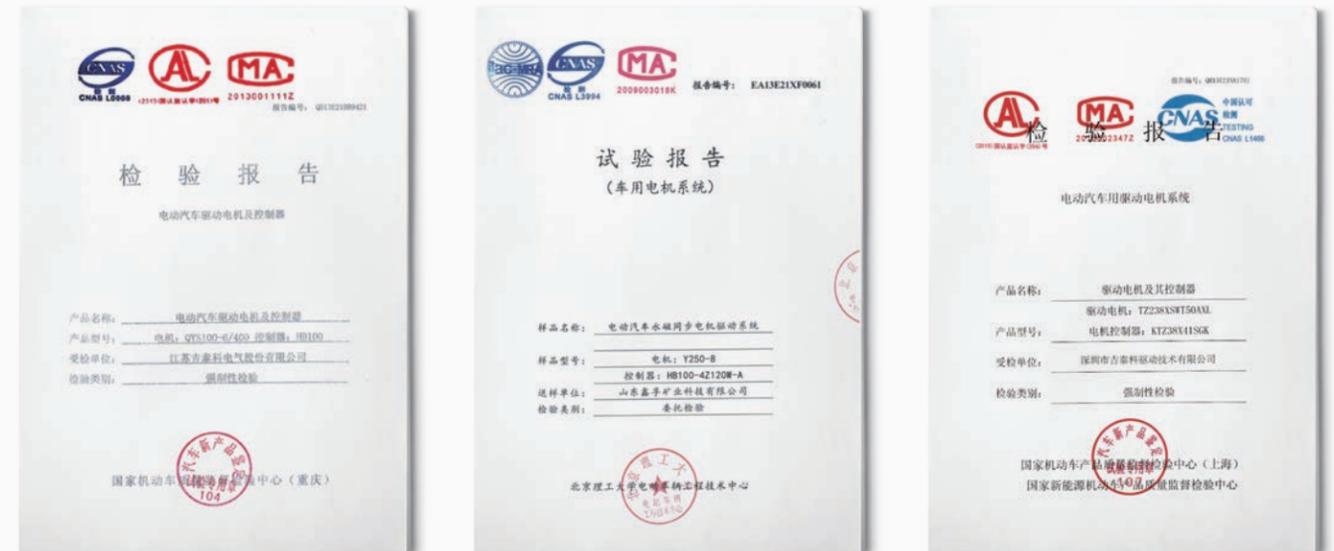
High technology enterprise & product certificates



ISO/TS, CE certificates, etc.



Third party test report



NOTE: Limited to space, we only list a few reports here. For more reports and their content, please contact us.

GTAKE

Think Without Boundary

www.gtake.com.cn



Ac Drive



EV/HEV Drive



Wind power converter



Servo



Wechat QR Code

江苏吉泰科电气股份有限公司
JIANGSU GTAKE ELECTRIC CO., LTD.

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