



GK1000

AFE AC Drives

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.



POWER RATINGS

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

Customization Acceptable

The King in Low Harmonics & Energy Saving

Promoted V/Hz

SVC1

SVC2

VC

Multi-step Freq.

ModBus, CAN, CANopen & ProfiBus

Asynchronous & Synchronous Motor Supported

Frequency Binding

Four-quadrant Operation

Flying Start

Precise autotune

Master & Auxiliary command & switchover

PID

FDT

S-curve

Simple PLC

2 Motor Switchover

Pulse Train Position Control

Fixed Length Control

Droop Control

Feed Forward Control

Preeminent Field-weakening Control

V/Hz Separated Control

Angular Positioning

Over Excitation Brake

Mechanical Brake

Restart Upon Power Loss

Cycle-By-Cycle Current Limit

Motor Thermal Protection

Stall Protections

.....

Start Torque @0Hz

200%

Overload Capability

200%

Speed accuracy ±

0.02%

Ambient Temp °C

50

Speed Regulation

1:1000

Torque Response ms

5

Power Factor >

0.98

True Power Factor

1

THD <

2.5%



TERMINAL

Analog Input	×3 [4]*1	Analog Output	×2 [4]	Relay Output	×2 [4]
Digital Input	×7 [9]	Digital Output*2	×2	Communication Port*3	×1
Option Board Interface	×2	for Fieldbus options , I/O options or Decoder options			

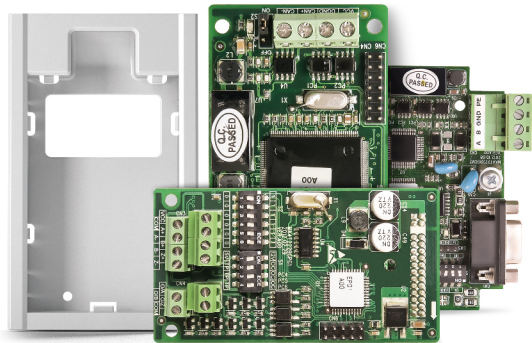
*1 A [B]: A - local B - extensible

*2 One of which (Y2/DO) supports high-speed pulse output

*3 RS485/ModBus ONLY 4800/9600/19200/38400/57600/115200bps Maximum distance - 500m

OPTION

Fieldbus options	Decoder options
EPC-CM1	EPC-PG1~PG9 for ABZ/SIN/COS/UWV Encoder or Resolver
EPC-CM2	
EPC-CM3	



I/O options	
EPC-TM1	Analog & Digital
EPC-TM2	PT100 & Relay
EPC-VD1	Voltage
EPC-VD2	Bus voltage detection & for optimized flying start
EPC-IM1	Analog for injection
EPC-IM2	Current analog
EPC-RT1	Real-time clock

OPTION

Others

KBU-DZ2

APP for PC

APP for PC

Base for keypad

FREE Gtake Monitoring

FREE Firmware Update Tool

MODEL

4T250

Rated power, 250 - 250kW

T: Tri-phase

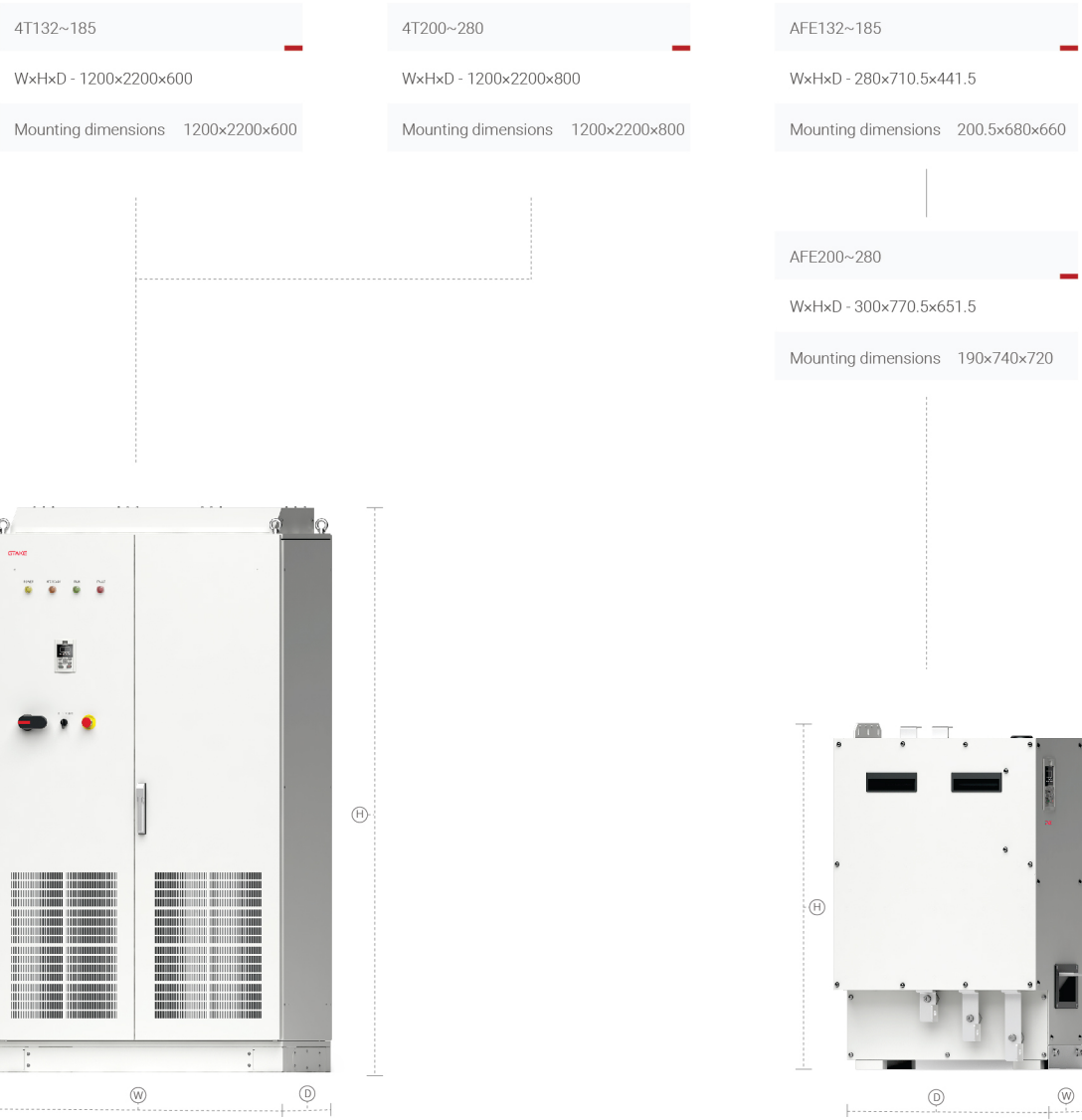
4: 400V level 6: 690V level

Model	Power Rating (kW)	Rated Output Current (Amps)	Rated Input Current (Amps)	Applicable Motor (kW)	Model	Power Rating (kW)	Rated Output Current (Amps)	Rated Input Current (Amps)	Applicable Motor (kW)	
4T30(B)	30	60	65	30	4T220	S	220	430	403	220
4T37(B)	37	75	80	37	4T250	S	250	470	441	250
4T45(B)	45	91	95	45	4T280	S	280	520	489	280
4T55	55	112	118	55	4T315		315	590	571	315
4T75	75	150	157	75	4T355		355	650	624	355
4T90	90	176	160	90	4T400		400	725	699	400
4T110	110	210	192	110	4T450		450	820	790	450
4T132	S	132	250	232	4T500G		500	860	835	500
4T160	S	160	310	285	4T560G		560	950	920	560
4T185	S	185	350	326	4T630G		630	1100	1050	630
4T200	S	200	380	354						4T

S Standard products. The other power ratings need to be customized. Contact GTAKE for information.

DIMENSIONS

Unit, mm

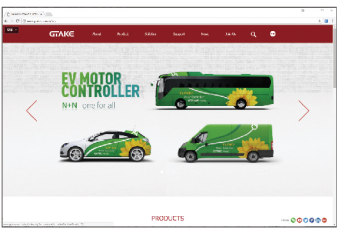


MORE

Further information is procurable through following sources:



PRODUCT CATALOG



OFFICIAL WEBSITE



SOCIAL MEDIA

