



# GK820

## High Performance AC Drives

The GK820 series are the drives that cover an entire range of applications, particularly in demanding ones that require precise speed control, torque control, fast response, etc.



**POWER RATINGS**

3 x 380-480 V 1.5 - 630 kW

### More Beyond Inheritance

- Promoted V/Hz
- SVC1
- SVC2
- VC
- Multi-step Freq.

- ModBus, CAN, CANopen & ProfiBus
- Asynchronous & Synchronous Motor Supported

- Frequency Binding
- Parameter Copy & Backup
- Flying Start
- Precise autotune

- Parameter Displayed & Hidden
- Master & Auxiliary command & switchover
- PID
- FDT
- Zero-speed Clamping
- Simple PLC

- 2 Motor Switchover
- Pulse Train Position Control
- Fixed Length Control
- Droop Control
- Feed Forward Control
- S-curve

- 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  $\pm$   
**0.02%**

Ambient Temp  $^{\circ}$ C  
**50**

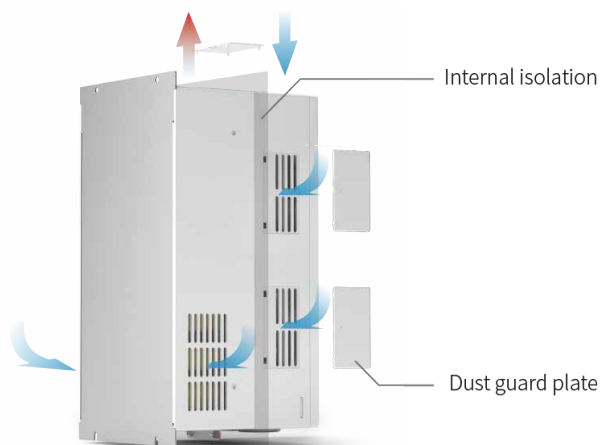
Speed Regulation  
**1:1000**

Torque Response ms  
**5**

Torque accuracy  $\pm$   
**5%**

Speed Fluctuation  $\pm$   
**0.1%**

Positioning accuracy  $\pm$   
**1** pulse



## TERMINAL

Analog Input  $\times 3$  [4]<sup>\*1</sup> Analog Output  $\times 2$  [4] Relay Output  $\times 2$  [4]

Digital Input  $\times 7$  [9] Digital Output<sup>\*2</sup>  $\times 2$  Communication Port<sup>\*3</sup>  $\times 1$

Option Board Interface  $\times 2$  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

EPC-CM1 **CAN**

EPC-CM2 **CANopen**

EPC-CM3 **PROFINET**

### Decoder options

EPC-PG1~PG9 for ABZ/SIN/COS/UWV Encoder or Resolver

### 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

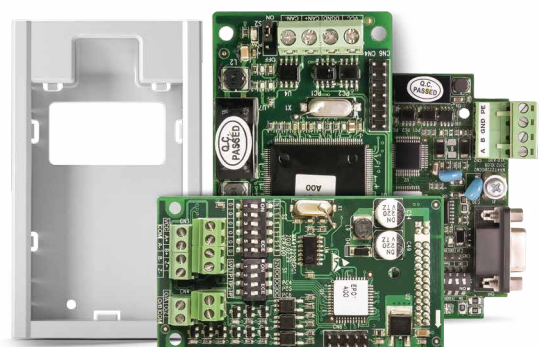
EPC-RT1 Real-time clock

### Others

KBU-DZ2 Base for keypad

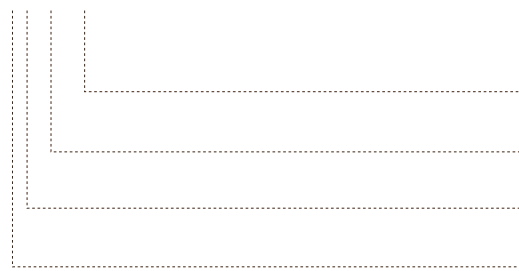
APP for PC **FREE** Gtake Monitoring

APP for PC **FREE** Firmware Update Tool



## MODEL

### 4T7.5B



B: With built-in braking chopper

Rated power, 7.5 - 7.5kW

T: Tri-phase S: Single phase

2: 200V level 4: 400V level 6: 690V level

Model	Power Rating (kW)	Rated Output Current (Amps)	Rated Input Current (Amps) <sup>*4</sup>	Applicable Motor (kW)	Model	Power Rating (kW)	Rated Output Current (Amps)	Rated Input Current (Amps) <sup>*4</sup>	Applicable Motor (kW)
4T1.5B	1.5	3.8	5.0	1.5	4T110	110	210	192	110
4T2.2B	2.2	5.5	6.0	2.2	4T132	132	250	232	132
4T3.7B	3.7	9.0	10.5	3.7	4T160	160	310	285	160
4T5.5B	5.5	13	14.6	5.5	4T185	185	350	326	185
4T7.5B	7.5	17	20.5	7.5	4T200	200	380	354	200
4T11B	11	24	29	11	4T220	220	430	403	220
4T15B	15	30	35	15	4T250	250	470	441	250
4T18.5B	18.5	39	44	18.5	4T280	280	520	489	280
4T22B	22	45	50	22	4T315	315	590	571	315
4T30(B/D/H)	30	60	65	30	4T355	355	650	624	355
4T37(B/D/H)	37	75	80	37	4T400	400	725	699	400
4T45D(H)	45	91	95	45	4T450	450	820	790	450
4T55D(H)	55	112	118	55	4T500G	500	860	835	500
4T75(B)	75	150	157	75	4T560G	560	950	920	560
4T90	90	176	160	90	4T630G	630	1100	1050	630

The rated power bigger than 630kW are customizable. Contact GTAKE for more.

\*4: The green numbers say the rated input currents configured DC reactors.

## DIMENSIONS

Unit, mm

4T1.5B~7.5B

WxHxD - 120x245x169

Mounting dimensions 80x233x169

4T11B

WxHxD - 145x280x179

Mounting dimensions 105x268x179

4T15B~22B

WxHxD - 190x365x187

Mounting dimensions 120x353x187



4T30(B)~37(B) 4T30D(H)~37D(H)

WxHxD - 250x400x235

Mounting dimensions 230x380x235



4T75(B)

WxHxD - 385x670x261

Mounting dimensions 260x640x261



4T45D(H)~55D(H)

WxHxD - 300x545x255

Mounting dimensions 245x523x255



4T90~110

WxHxD - 395x785x291

Mounting dimensions 260x750x291

4T132~160

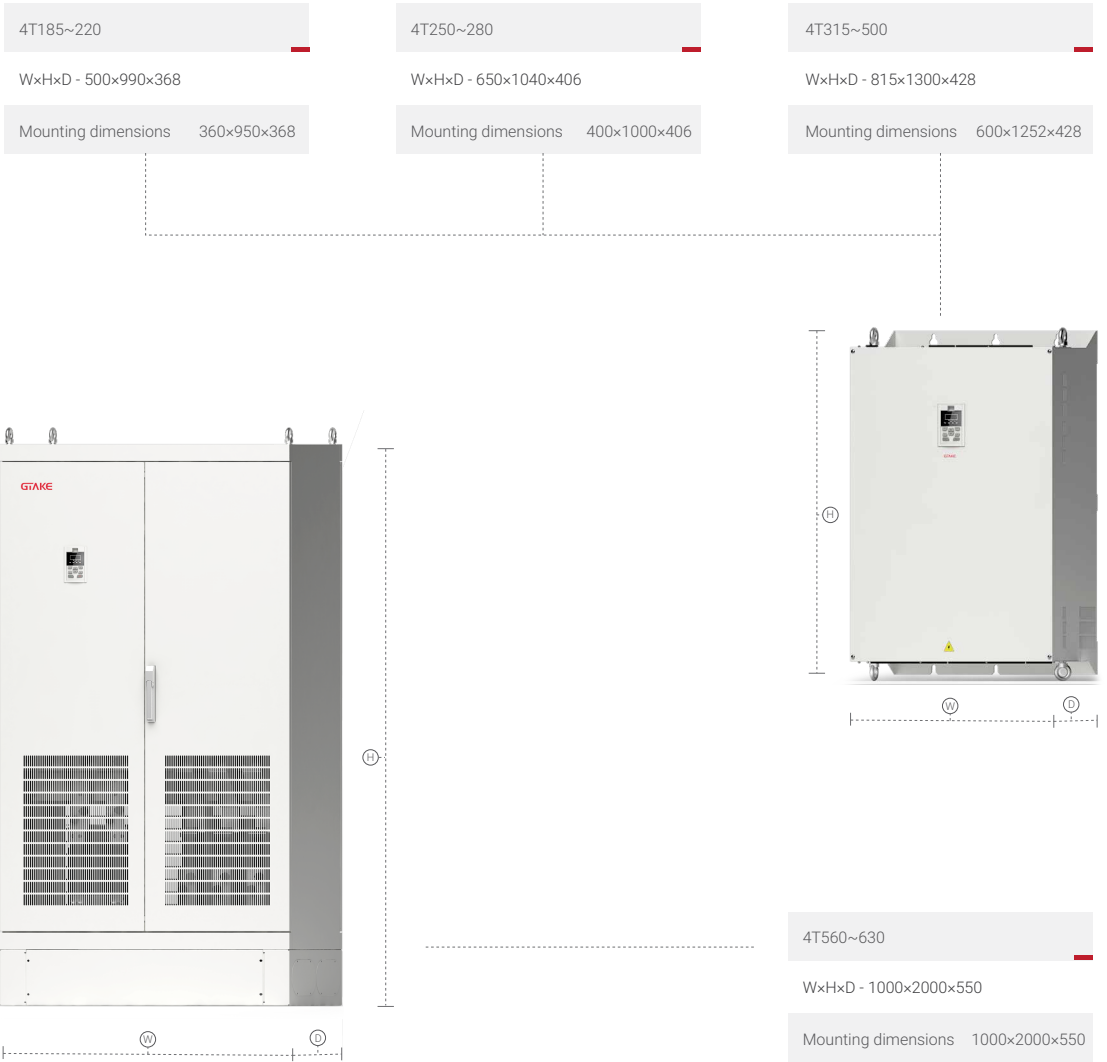
WxHxD - 440x900x356

Mounting dimensions 300x865x356



## DIMENSIONS

Unit, mm



## MORE

Further information is procurable through following sources:



PRODUCT CATALOG



OFFICIAL WEBSITE



SOCIAL MEDIA

