



# GK690

## Medium Voltage Drive

**GK690** series, specifically designed for 690V input voltage, features as high-performance vector control. It provides highly-integrated all-in-one solution which excels in efficient energy conversion and precise motor control, making it a preferred choice across various industries, including mining, metallurgy, petrochemicals, power generation, and renewable energy.

Equipped with advanced features like one-click parameter upload/download, the GK690 facilitates rapid commissioning and remote management, which aligns perfectly with the demands of Industry 4.0 digitalization, providing users with an intuitive interface for effective control.

By integrating energy efficiency, high reliability, and flexible scalability, the **GK690 Medium Voltage Drives** offers high-performance and reliable solution in industrial applications, promoting efficient, stable, and safe production operations.

### POWER RATINGS

3 × 690V (-15%~+15%)

15kW - 2000kW

### COMPATIBILITY

Synch motor  
Asynch motor

### CONTROL TECHNOLOGY

V/Hz control  
SVC1    VC

Dual Engines of Efficiency,  
Steady Command over Mighty Loads



# APPLICATIONS



## Mining

Mine hoists  
Ventilation fans  
.....



## Energy & Chemicals

Oil pump units  
.....



## Chemical Plants

Centrifugal compressors  
.....



## Municipal Water Supply

Deep well pumps  
Booster pumps  
.....



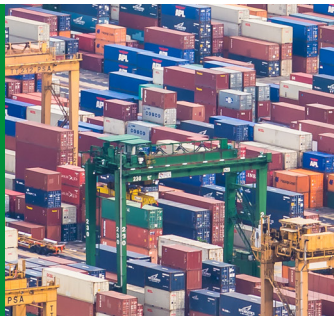
## Thermal Power

Boiler draft fans  
.....



## Ports

Gantry cranes  
.....



## Shipbuilding

Dock pumps  
.....



## Metallurgy

Rolling mills  
Dust removal fans  
.....

## FEATURES

## KEY PERFORMANCE

Start Torque @0.5Hz

**150%**

Overload Capability

**180%**

Speed Regulation

**1:1000**

Speed Control Accuracy

**0.2%**

### Wide Power Range

With a single unit covering 15 – 800kW and parallel configurations reaching up to 2000kW, it meets the needs of both small-scale and large industrial systems.

Min. Rated Power of Single Unit

**15kW**

Max. Rated Power of Single Unit

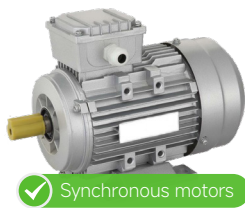
**800kW**

Max. Rated Power of Parallel Configurations

**2000kW**

### Motor Compatibility

Supports both permanent magnet synchronous motors (PMSM) and asynchronous motors, catering to a wide range of applications.



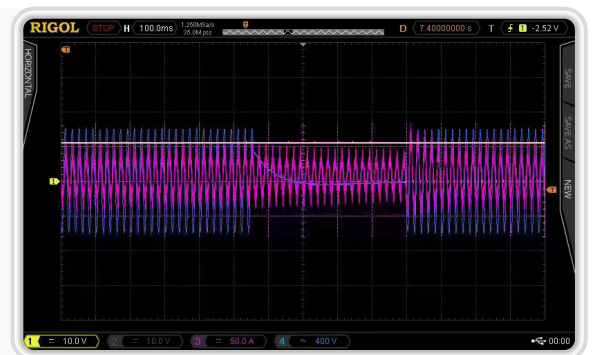
### Master-Slave Synchronization Control

Advanced synchronization control ensures that multiple motors operate in precise coordination, enhancing overall system stability and efficiency — ideal for scenarios requiring exact synchrony.



### Instantaneous Power Failure Ride-Through

Equipped with a unique power failure compensation technology (with millisecond-level switching), the drive can continue operating during unexpected outages, effectively preventing production interruptions.



⊙ Explosion-Proof Design (Optional)

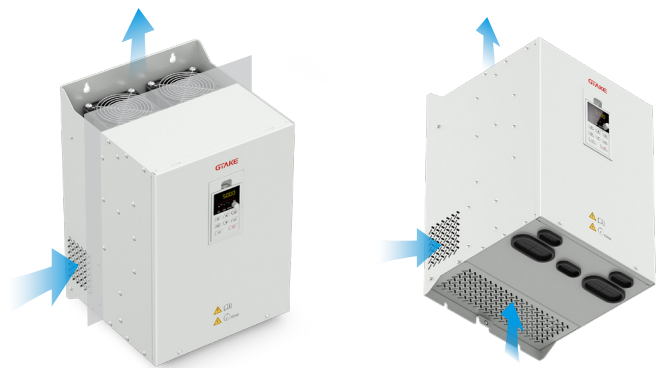
Offers an optional open-frame explosion-proof motor core design that not only improves safety but also enhances adaptability in harsh industrial environments for long-term reliable operation.

⊙ Integrated Braking Unit

An optional built-in braking unit (up to 132kW) simplifies circuit design, saves installation space and costs, and enhances overall system efficiency and reliability.

⊙ Superior Cooling Design

Features independent air channels to isolate heat sources, modular heat sink groups for quick disassembly, dust-proof sealing, and an +85°C heat-resistant coating, making it suitable for high-load scenarios.



⊙ Modular Design

The modular architecture simplifies installation and maintenance, facilitates easy replacement of spare parts, and significantly reduces lifecycle costs.

⊙ Convenient Parameter Management

Supports parameter upload/download via a keypad, greatly streamlining commissioning and maintenance for faster, more efficient setup and optimization.



⊙ Multi-Protocol Communication

Compatible with multiple fieldbus protocols, including Modbus, Profibus-DP, and CANopen, ensuring seamless integration within industrial networks.





## Other Functions



## 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 theirselves, making "just for you" achieved.

## TERMINAL

Analog Input* <sup>1</sup> ×2	Analog Output* <sup>1</sup> ×2	Relay Output ×2
Digital Input* <sup>2</sup> ×8	Digital Output* <sup>3</sup> ×2	Communication Port ×1

\*1 0~10V or 0/4~20mA

\*2 HDI supports high-speed pulse input (Max. 50kHz)      \*3 HDO supports high-speed pulse output (Max. 50kHz)

## MODEL

**GK690 - 030G - 6T**



**T:** Tri-phase    **S:** Single phase

**6:** 690V

**G:** General Purpose      **P:** Fan, water pump type

**030:** 30kW      **1200:** 1200kW

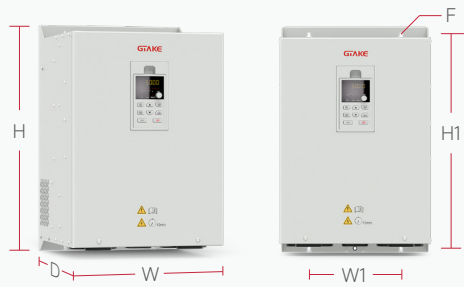
**GK690:** Medium Voltage Drive

SINGAL UNIT

Model	Input Voltage (V)	Rated Output Power (kW)	Rated Output Current (A)	Adaptive Motor (kW)
GK690-015G-6T	690	15	19	15
GK690-018G-6T	690	18	22	18
GK690-022G-6T	690	22	28	22
GK690-030G-6T	690	30	35	30
GK690-037G-6T	690	37	45	37
GK690-045G-6T	690	45	54	45
GK690-055G-6T	690	55	63	55
GK690-075G-6T	690	75	86	75
GK690-090G-6T	690	90	98	90
GK690-110G-6T	690	110	121	110
GK690-132G-6T	690	132	150	132
GK690-160G-6T	690	160	175	160
GK690-185G-6T	690	185	198	185
GK690-200G-6T	690	200	218	200
GK690-220G-6T	690	220	245	220
GK690-255G-6T	690	255	270	255
GK690-280G-6T	690	280	320	280
GK690-315G-6T	690	315	350	315
GK690-355G-6T	690	355	380	355
GK690-400G-6T	690	400	430	400
GK690-450G-6T	690	450	466	450
GK690-500G-6T	690	500	540	500
GK690-560G-6T	690	560	600	560
GK690-630G-6T	690	630	680	630
GK690-710G-6T	690	710	770	710
GK690-800G-6T	690	800	870	800
GK690-1000G-6T	690	1000	1080	1000
GK690-1200G-6T	690	1200	1240	1200
GK690-1400G-6T	690	1400	1460	1400

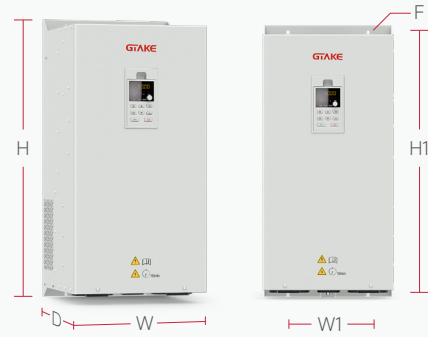
PARALLEL CONFIGURATIONS

\*Models over 1400kW (not included) need to be customized, please contact us for relevant information.



**015G~045G** Unit:mm

W	H	D	W1	H1	F
270	415	282	170	397	Φ6



**055G~132G** Unit:mm

W	H	D	W1	H1	F
270	575	291	170	557	Φ6



**160G** Unit:mm

W	H	D	W1	H1	F
270	575	332	170	557	Φ6



**185G~255G** Unit:mm

W	H	D	W1	H1	F
335	693	354	200	667	Φ10





**280G~400G**

Unit:mm

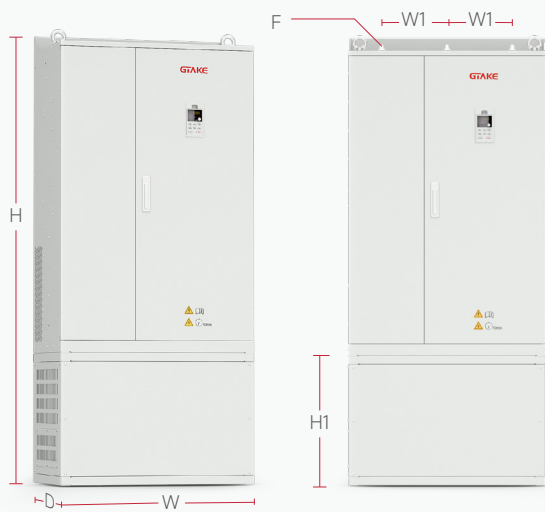
W	H	D	W1	H1	F
490	857	391	180	831	Φ12



**450G~560G**

Unit:mm

W	H	D	W1	H1	F
550	887	391	180	861	Φ12



**630G~800G**

Unit:mm

W	H	D	W1	H1	F
680	1600	375	230	500	Φ12



Keypad (W×H×D, mm) : 59 × 92 × 25

Bracket (W×H×D, mm) : 68 × 118 × 19

- ⦿ Base solutions are available for models 280kW and above, please contact GTAKE for specific dimensional information.
- ⦿ 630kW to 800kW models are available without base, please contact GTAKE for specific dimensioning information.
- ⦿ 1000kW to 2000kW models are customized, please contact GTAKE for product details.

Contact GTAKE for more products and solutions.

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