Guide the Drive Innovation

Intellectualize the Future of Industry

Become a Top-Ranking Supplier of Industrial Automation Products and Solutions

GUIDE

Wuhan Guide Technology Co., Ltd.

Address: No. 6, Ligongyuan Road, WUT Science and Technology Park,
East Lake High-tech Development Zone, Wuhan, China

Tel: +86 27 87920068

Service Hotline: +86 400 0077 570 (Mainland China)

Website: www.guide-tec.com

Email: service@gdetec.com

2025.10

WeChat

GUIDE

Stock Code: 301633

GF630N Series
AC Drive

COMPANY PROFILE

Wuhan Guide Technology Co., Ltd.

Wuhan Guide Technology Co., Ltd. (Stock name: Guide Technology; **Stock code: 301633**) is a nationally accredited "Little Giant" enterprise. It is primarily recognized and supported by the Ministry of Industry and Information Technology with its specialized, professional and innovative high-tech features. It has three subsidiaries: Wuhan Guide Intelligent Technology Co., Ltd., Wuhan Guide Software Information Technology Co., Ltd., and Wuhan Guide Drive Science and Technology Co., Ltd. as well as branches in Shenzhen, Hainan and Shanghai.

GUIDE focuses on the field of industrial automation and informatization. There are three segments of our business: automatic drive products, intelligent control systems, and smart port management system software. GUIDE is committed to the localization of core drive components for various mechanical equipment, the automation of industrial equipment operation procedures, and the digitalization and informatization of enterprise management.

Guide Technology is engaged in the research and development, production, sales, and related technical services of industrial automation products such as VFDs, inverters, regenerative rectifier units, and industry-dedicated drives. Guide Intelligent provides solutions for the intelligent and unmanned operation of lifting and transportation equipment in fields such as ports, cement, metallurgy, railways, and warehousing. Guide Software is devoted to the development and service of software products such as production operation management systems, asset management systems, and integrated control systems. GUIDE has a nationwide sales and service network, and its products and services are widely used in industries such as ports, shield machinery, petroleum, construction machinery, ships, petroleum, cement, metallurgy, overhead cranes, railways, logistics, textiles, mining, chemical engineering, thermoelectricity generation.

GUIDE is recognized as an "Outstanding High-tech Enterprise in Wuhan". It has been successively honored as one of the "Top 10 Intelligent and Informatized Enterprises in the Chinese Cement Industry", one of the "Chinese Top 100 Innovative Construction Enterprises", and an "Advanced Demonstration Enterprise for Port Science and Technology Innovation". The VFD products have won the "Top 3 of China Communications and Transportation Association Science and Technology Progress Award". Its intelligent control system products have garnered the "Champion of China Port Association Science and Technology Award".

GUIDE will uphold the business philosophy of "Quality and Service" continuously, implement our core values of "Achieving Customers, Benefiting Employees, Rewarding Shareholders and Contributing to Society", and develop firmly towards the mission of "Guide the Drive Innovation, Intellectualize the Future of Industry" to realize the vision of "Become a top-ranking supplier of industrial automation products and solutions".

GUIDE

CATALOGUE

GF630N
Series Products

GF630N XX XXX - 4 - XXX + X
① ② ③ ④ ⑤ ⑥

Customized Model

① Product Series

② Type and Structure
Default: Standard Type
01: Mini type
02: Textile
03: Logistics
04: Instant start
05: Overhead crane-dedicated
GS: High-speed permanent magnet

③ Power
Example:
5R5 = 5.5 kW
055 = 55 kW
110 = 110 kW

④ Voltage Level
4: 380 V

⑤ Spare
Optional

⑥ Optional Accessories

Code	Note	Code	Note
DL	Built-in DC reactor		
BU	Built-in braking unit		
LCD	Chinese and English LCD panels		
SW01	Permanent magnet synchronous control software	SW05	Overhead crane anti-sway software
MB01	Modbus RTU communication card	DP01	Profibus DP communication card
PN01	Profinet communication card	CAN01	CANopen communication card
PG02	Incremental encoder card suitable for standard drives	PG03	Incremental encoder card suitable for permanent magnet synchronous drives
PG04	Rotary encoder card suitable for permanent magnet synchronous drives		
IO01 (IO expansion card)	7 DI+4 DO+Modbus RTU communication (Applicable to standard drives)	IO02 (IO expansion card)	5 DI+2 DO (Applicable to standard drives)
IO03 (IO expansion card)	5 DI+2 DO+1AI+Modbus RTU communication (Applicable to permanent magnet synchronous drives)		
PC01 (Logic control card)	20 DI+6 DO+CANopen communication +Modbus RTU communication	PC03 (Logic control card)	20 DI+6 DO

GUIDE

GF630N
Standard AC Drive

GF630N - XXX - 4 + X
① ③ ④ ⑥

Customized Model

① Product Series

③ Power
Example:
5R5 = 5.5 kW
055 = 55 kW
110 = 110 kW

④ Voltage Level
4: 380 V

⑥ Optional Accessories

Code	Note	Code	Note
DL	Built-in DC reactor		
BU	Built-in braking unit		
LCD	Chinese and English LCD panels		
SW01	Permanent magnet synchronous control software		
MB01	Modbus RTU communication card	DP01	Profibus DP communication card
PN01	Profinet communication card	CAN01	CANopen communication card
PG02	Incremental encoder card suitable for standard drives	PG03	Incremental encoder card suitable for permanent magnet synchronous drives
PG04	Rotary encoder card suitable for permanent magnet synchronous drives		
IO01 (IO expansion card)	7 DI+4 DO+Modbus RTU communication (Applicable to standard drives)	IO02 (IO expansion card)	5 DI+2 DO (Applicable to standard drives)
IO03 (IO expansion card)	5 DI+2 DO+1AI+Modbus RTU communication (Applicable to permanent magnet synchronous drives)		
PC01 (Logic control card)	20 DI+6 DO+CANopen communication +Modbus RTU communication	PC03 (Logic control card)	20 DI+6 DO

Example:
1. GF630N-045-4+LCD+PG02: 400 V/45 kW standard drive, no built-in DC reactor, no built-in braking unit, LCD panel, PG02 encoder card;
2. GF630N-110-4+DL+BU: 400 V/110 kW standard drive, with built-in DC reactor, built-in braking unit, and LED panel.

Power and Dimensions of GF630N Standard AC Drive

Model	Light Overload		Heavy Overload		Type	Dimensions [mm] (H*W*D)	Weight (kg)
	Output Current (A)	Applicable Motor Capacity (kW)	Output Current (A)	Applicable Motor Capacity (kW)			
GF630N-0R4-4	1.5	0.4	-	-	N1	260*140*191	3.5
GF630N-0R7-4	2.3	0.75	1.5	0.4			
GF630N-1R1-4	3	1.1	2.3	0.75			
GF630N-1R5-4	3.7	1.5	3	1.1			
GF630N-2R2-4	5.4	2.2	3.7	1.5			
GF630N-3R7-4	9.9	3.7	5.4	2.2	N2	260*140*191	4
GF630N-5R5-4	14	5.5	9.9	3.7			
GF630N-7R5-4	17	7.5	14	5.5			5
GF630N-011-4	23	11	17	7.5			
GF630N-015-4	31	15	23	11	N3	302*180*194	6.5
GF630N-018-4	37	18.5	31	15			
GF630N-022-4	46	22	37	18.5	N4	375*279*236	12.5
GF630N-030-4	64	30	46	22			
GF630N-037-4	74	37	64	30			
GF630N-045-4	93	45	74	37	N5	766*235*345.5	38
GF630N-055-4	114	55	93	45			
GF630N-075-4	154	75	114	55			
GF630N-090-4	187	90	154	75	N6	885*315*331.5	55
GF630N-110-4	214	110	187	90			
GF630N-132-4	264	132	214	110	N7	965*390*345.5	80
GF630N-160-4	302	160	264	132			
GF630N-185-4	364	185	302	160	N8	1093*492*376	120
GF630N-200-4	395	200	364	185			
GF630N-220-4	437	220	395	200			
GF630N-250-4	484	250	437	220	N9	1200*490*395.5	150
GF630N-280-4	544	280	484	250			
GF630N-315-4	609	315	544	280	N10	1305*700*415	240
GF630N-355-4	667	355	609	315			
GF630N-400-4	719	400	667	355			
GF630N-450-4	819	450	719	400			

Note:
1. 0.4 kW-37 kW without built-in DC reactor, 45 kW-450 kW can be optionally equipped with built-in DC reactor;
2. 0.4 kW-37 kW is equiped with an internal braking unit as standard, 45 kW-110 kW can be equipped with an optional built-in braking unit, 132 kW and above do not have a built-in braking unit, and an external braking unit can be separately selected;
3. Standard configuration includes LED digital display panel;
4. Light overload condition: 120% of the rated output current, and an overload is allowed for 1 minute every 5 minutes; heavy overload condition: 150% of the rated output current, and an overload is allowed for 1 minute every 5 minutes.

Technical Parameters of GF630N Standard AC Drive

Item		Description
Input	Input voltage	Three-phase 380 V-480 V
	Rated frequency	50/60 Hz
	Allowable voltage fluctuation	-15% to +10%
	Allowable frequency fluctuation	The allowable range for frequency variation is fLN ±2% (±4% for independent power supply grids). Frequency change rate: ≤2% fLN/s.
Output	Output voltage range	0 V-Input voltage, with an error of less than 5%
	Asymmetry of output voltage	Under normal usage conditions, the asymmetry of the three-phase voltage output should not exceed 1% within the entire output frequency adjustment range, when the loads of each phase are symmetrical.
	Output frequency range	0-300 Hz
Control characteristics	Operation command mode	Panel control, terminal control, communication control.
	Carrier frequency	1 kHz-10 kHz, adjustable according to temperature and load characteristics.
	Frequency resolution	Digital setting: 0.01 Hz, analog setting: maximum frequency ×0.1%
	Control mode	Closed-loop vector control (VC), open-loop vector control (SVC), V/F control.
	V/F control	Linear type, multi-point type, quadratic type.
	Torque control	With PG torque control/without PG torque control.
	Maximum speed	300 Hz, dependent on the electrical and mechanical characteristics of the motor.
	Starting torque	0 Hz/200% (VC and SVC), 0.8 Hz/150% (V/F)
	Torque response	<5 ms (SVC), <5 ms (VC)
	Torque control accuracy	±5% (SVC), ±3% (VC)
	Speed range	1:500(SVC), 1:1000(VC)
	Speed accuracy	±0.02% rated speed (VC), ±0.2% rated speed (SVC), ±0.5% rated speed (V/F).
	Overload capacity	The light overload capacity is 120% of the rated output current, and an overload of 1 minute is allowed every 5 minutes. The heavy overload capacity is 150% of the rated output current, and an overload of 1 minute is allowed every 5 minutes.
	Torque compensation	Automatic torque compensation function.
	Acceleration and deceleration methods	Linear and customized multi-point curves.
	Automatic voltage regulation	When the power grid fluctuates, it can automatically maintain a constant output voltage.
	DC braking mode	DC braking during startup and DC braking during shutdown.
	Built-in process PID	It is convenient to implement a closed-loop control system for process variables such as pressure, temperature, flow rate, etc.
	Bus options	CANopen, Modbus RTU, Profibus DP, Profinet
	Special features	Free functional modules of user programmable applications: logic functional module, mathematical function functional module, timer module, PID module, etc.
		Motion control: multi curve acceleration/deceleration function, timer controlled run/stop control, etc.
		Synchronous control: master/slave synchronous control, speed/torque control.
Input/output terminal	Input terminal	5 digital inputs and 2 analog inputs (voltage 0 to +10 V or current 0 mA/4 mA-20 mA) are standard on the terminal board.
	Output terminal	3 digital outputs (1 collector output and 2 relay outputs), 2 analog outputs (voltage 0 to +10 V or current 0 mA/4 mA-20 mA) is standard on the terminal board.

Technical Parameters of GF630N Standard AC Drive

Item		Description
HMI	Operation panel LED/LCD	It can set and copy relevant parameters, as well as display various parameters such as output frequency, output voltage, output current, etc. The operating status, fault status, and parameter setting status should all have corresponding displays. Content: function, data, unit.
Protection function		Overcurrent protection, overvoltage protection, undervoltage protection, overheating protection, overload protection, etc.
Place of use		Not exposed to direct sunlight, dust-free, and non corrosive environment.
Environment	Altitude	Below 1000 meters, there is no need to downgrade. For places with an altitude exceeding 1000 meters, please reduce the rated power and output current by 1% for every 100 meters increase.When the altitude exceeds 3000 meters, it is necessary to consult the manufacturer for guidance.
	Ambient temperature	-10 ℃ to +40 ℃, if the ambient temperature exceeds 40 ℃, it needs to be downgraded for use. For every 1 ℃ increase in ambient temperature, the rating will be reduced by 1%. When the ambient temperature exceeds 50 ℃, it is necessary to consult the manufacturer for guidance.If the ambient temperature is below -10 ℃, additional auxiliary heating equipment is required.
	Humidity	Less than 95% RH, no condensation.
	Storage	Storage temperature: -20 ℃ to +60 ℃.
Other	Efficiency	> 98%
	Optional accessories	Can connect communication cards, IO expansion cards, and PG cards.
	Other interfaces	External panel interface.
	Ingress protection	IP20
	Cooling method	1.1 kW and below are naturally cooled; 1.5 kW and above are subject to forced air cooling.
	Pollution degree	2

Optional Accessories (With Package)

Item	Code	Specification and Model	Note
LCD Panel	LCD	GDHF-AKZY1	Chinese and English LCD panels
Modbus RTU Communication Card	MB01	GDHF-AMBX1	Modbus RTU communication card
DP Communication Card	DP01	GDHF-ADPX1	Profibus DP communication card
PN Communication Card	PN01	GDHF-APNX1	Profinet communication card
CAN Communication Card	CAN01	GDHF-ACNX1	CANopen communication card
PG Card	PG02	GDHF-APGX1	Incremental encoder card suitable for standard drives
PG Card	PG03	GDHF-BPGX1	Incremental encoder card suitable for permanent magnet synchronous drives
Rotary PG Card	PG04	GDHF-BPGY1	Rotary encoder card suitable for permanent magnet synchronous drives
IO Expansion Card 1	IO01	GDHF-AIOX1	7 DI+4 DO+Modbus RTU communication (Applicable to standard drives)
IO Expansion Card 2	IO02	GDHF-AIOX2	5 DI+2 DO (Applicable to standard drives)
IO Expansion Card 3	IO03	GDHF-BIOX1	5 DI+2 DO+1 AI+Modbus RTU communication (Applicable to permanent magnet synchronous drives)
Logic Control Card 1	PC01	GDHF-AGYZ1	20 DI+6 DO+CANopen communication +Modbus RTU communication
Logic Control Card 3	PC03	GDHF-AGYZ3	20 DI+6 DO

GUIDE

GF630N01 (Mini) AC Drive

GF630N 01-XXX-4+X V2

① ② ③ ④ ⑥

Customized Model

① Product Series

② Type and Structure

01: Mini type

③ Power

Example:

0R4 = 0.4 kW 3R7 = 3.7 kW

5R5 = 5.5 kW

④ Voltage Level

4: 380 V

⑥ Optional Accessories

Code	Note
SW01	Permanent magnet synchronous control software

The GF630N01 (Mini) AC Drive adopts advanced control methods, which can achieve high conversion, high precision, and wide speed range, meeting the requirements of users for general drives.We provide customers with practical PID regulators, simple PLCs, programmable input/output terminal controls, and other functions, which have the advantages of small size, simple operation, and complete functionality.

Power and Dimensions of GF630N01 (Mini) AC Drive

Model	Output Current (A)	Maximum Applicable Motor Power (kW)	Type	Dimensions [mm] (H*W*D)	Weight (kg)
GF630N01-0R4-4 V2 GF630N01-0R4-4+SW01 V2	1.2	0.4	R1	172*86*136	1.1
GF630N01-0R7-4 V2 GF630N01-0R7-4+SW01 V2	2.5	0.75			
GF630N01-1R1-4 V2 GF630N01-1R1-4+SW01 V2	3	1.1			
GF630N01-1R5-4 V2 GF630N01-1R5-4+SW01 V2	3.7	1.5			
GF630N01-2R2-4 V2 GF630N01-2R2-4+SW01 V2	5	2.2			
GF630N01-3R7-4 V2 GF630N01-3R7-4+SW01 V2	9	3.7	R2	203*98*156	1.6
GF630N01-5R5-4 V2 GF630N01-5R5-4+SW01 V2	13	5.5			
GF630N01-7R5-4 V2 GF630N01-7R5-4+SW01 V2	17	7.5	R3	240*128*167	2.7
GF630N01-011-4 V2 GF630N01-011-4+SW01 V2	24	11			
GF630N01-015-4 V2 GF630N01-015-4+SW01 V2	32	15	R4	310*170*185	5.6
GF630N01-018-4 V2 GF630N01-018-4+SW01 V2	37	18			
GF630N01-022-4 V2 GF630N01-022-4+SW01 V2	45	22			

Note: 1. Built-in braking unit; 2. LED digital display panel.

Technical Parameters of GF630N01 (Mini) AC Drive

Item		Description
Input	Input Voltage	Three-phase 380 V-480 V
	Rated frequency	50/60 Hz
	Allowable voltage fluctuations	-15% to +10%
	Allowable frequency fluctuations	The allowable range of frequency variation is fLN ±2% (± 4% for independent power supply grids). Frequency variation rate: ≤2% fLN/s.
Output	Output Voltage Range	0 V-Input voltage, error less than 5%.
	Asymmetry of output voltage	Under normal operating conditions, within the entire range of output frequency adjustment, and with symmetrical load on each phase, the asymmetry of the output three-phase voltage should not exceed 2%.
	Output frequency range	0-300 Hz
Containment characterization	Operation command mode	Panel control, terminal control, communication control.
	Carrier frequency	0.5 kHz-16 kHz , adjustable according to temperature and load characteristics.
	Frequency resolution	Digital setting: 0.01Hz, analog setting: Maximum frequency ×0.1%.
	Control mode	Open-loop vector control (SVC), V/F control.
	V/F control	Linear type, multi-point type, quadratic type.
	Torque control	No PG torque control.
	Maximum speed	300 Hz, dependent on the electrical and mechanical characteristics of the motor.
	Starting torque	0.5 Hz/150% (SVC)
	Speed range	1:100 (SVC)
	Speed accuracy	±0.5% of rated speed (SVC).
	Overload capacity	The overload capacity is 150% of the rated output current, and an overload is allowed for 1 minute every 5 minutes.
	Torque compensation	Automatic torque compensation function.
	Acceleration and deceleration mode	Linear and customized multi-point curves.

GUIDE

Technical Parameters of GF630N01 (Mini) AC Drive

Item		Description
Control characteristics	Automatic voltage regulation	When the power grid experiences fluctuations, it can automatically maintain a constant output voltage.
	DC braking mode	DC braking during startup and DC braking during shutdown.
	Built-in process PID	It can facilitate the implementation of a closed-loop control system for process variables (pressure, temperature, flow rate, etc.).
	Bus Options	Support Modbus bus, other buses can be customized.
	Special features	Instantaneous power failure without stopping: During an instantaneous power failure, the energy is compensated by reducing the frequency and regenerative energy to compensate for the decrease in bus voltage, maintaining the drive's bus voltage without reporting an undervoltage fault shutdown for a short period of time.
		Virtual DIDO: Simple logic control can be achieved through Virtual DIDO.
		Timing function: The drive will automatically shut down after reaching the set operating time.
		Rapid current limiting: Rapid current limiting within a single carrier cycle to prevent frequent overcurrent faults in the drive.
Input/output terminal	Input terminal	7 digital inputs, 2 analog inputs (0-10 V voltage input and 4-20 mA current input), 1 high-speed pulse input (0-50 kHz).
	Output terminal	3 digital outputs (1 relay output, 2 intelligent digital outputs), 1 high-speed pulse output (0-50 kHz), 1 analog output (0-10 V voltage output or 4-20 mA current output).
		CAN or 485 communication.
HMI	Operation panel LED	Relevant parameters can be set, and various parameters such as output frequency, output voltage, and output current can also be displayed. The operating status, fault status, and parameter setting status should all have corresponding displays. The content includes: function, data, and unit.
Protection function		Overcurrent protection, overvoltage protection, undervoltage protection, overheat protection, overload protection, etc.
Place of use		Not exposed to direct sunlight, dust-free, and non corrosive environment.
Environment	Altitude	For locations below 1000 meters, no derating is required. For locations with an altitude exceeding 1000 meters, please reduce the rated voltage and rated output current by 1% for every additional 100 meters. For locations with an altitude exceeding 3000 meters, it is necessary to consult the manufacturer for guidance.
	Ambient temperature	-10 ℃ to + 40℃. If the ambient temperature exceeds 40 ℃, derating is required. For every 1 ℃ increase in ambient temperature, the derating is 1%. When the ambient temperature exceeds 50 ℃, it is necessary to consult the manufacturer for guidance. When the ambient temperature falls below -10 ℃, it is necessary to add additional auxiliary heating equipment.
	Humidity	Less than 95% RH, no condensation.
	Storage	Storage temperature: -20 ℃ to +60 ℃. Due to the characteristics of electrolytic capacitors, if the storage time exceeds 6 months, the VFD needs to be powered on for 10-30 minutes every six months to charge the electrolytic capacitors.
Other	Efficiency	> 98%
	Other interfaces	External panel interface.
	Ingress protection	IP20
	Cooling method	Forced air cooling.
	Pollution degree	2
	Noise	≤60 db

GF630N02 (Textile) AC Drive

GF630N 02 - XXX - 4 +X

① ② ③ ④ ⑥

Customized Model

① Product Series

② Type and Structure
02: Textile

③ Power
Example:
011 = 11 kW
090 = 90 kW

④ Voltage Level
4: 380 V

⑥ Optional Accessories

Code	Note	Code	Note
DL	Built-in DC reactor		
LCD	Chinese and English LCD panels		
MB01	Modbus RTU communication card	DP01	Profibus DP communication card
PN01	Profinet communication card	CAN01	CANopen communication card
PG02	Incremental encoder card suitable for standard drives		
IO01 (IO expansion card)	7 DI+4 DO+Modbus RTU communication (Applicable to standard drives)	IO02 (IO expansion card)	5 DI+2 DO
PC01 (Logic control card)	20 DI+6 DO+CANopen communication +Modbus RTU communication	PC03 (Logic control card)	20 DI+6 DO

Example:
1. GF630N02-011-4+LCD+MB01: 400 V/11 kW drive, without built-in DC reactor, built-in braking unit, LCD panel, Modbus RTU communication card.

Power and Dimensions of GF630N02 (Textile) AC Drive

Model	Light Overload		Heavy Overload		Type	Dimensions [mm] (H*W*D)	Weight (kg)
	Output Current (A)	Applicable Motor Capacity (kW)	Output Current (A)	Applicable Motor Capacity (kW)			
GF630N02-011-4	23	11	17	7.5	S1	340*200*200	6
GF630N02-015-4	31	15	23	11			
GF630N02-018-4	37	18.5	31	15	S2	430*300*235	12
GF630N02-022-4	46	22	37	18.5			
GF630N02-030-4	64	30	46	22			
GF630N02-037-4	74	37	64	30	S3	610*360*315	33
GF630N02-045-4	93	45	74	37			
GF630N02-055-4	114	55	93	45			
GF630N02-075-4	154	75	114	55			
GF630N02-090-4	187	90	154	75			

Note:
1. 11 kW-30 kW without DC reactor, 37 kW-90 kW can be optionally equipped with external DC reactor;
2. Equipped with built-in braking unit as standard;
3. Standard LED digital display panel;
4. Light overload condition: 120% of the rated output current, and an overload is allowed for 1 minute every 5 minutes; heavy overload condition: 150% of the rated output current, and an overload is allowed for 1 minute every 5 minutes.

Technical Parameters of GF630N02 (Textile) AC Drive

Item		Description
Input	Input Voltage	Three-phase 380 V-480 V
	Rated frequency	50/60 Hz
	Allowable voltage fluctuation	-15% to +10%
	Allowable frequency fluctuation	The allowable range of frequency variation is fLN ±2% (±4% for independent power supply grids). Frequency variation rate: ≤2% fLN/s.
Output	Output voltage range	0 V-Input voltage, error less than 5%.
	Asymmetry of output voltage	Under normal usage conditions, the asymmetry of the three-phase voltage output should not exceed 1% within the entire output frequency adjustment range, when the loads of each phase are symmetrical.
	Output frequency range	0-300 Hz
Control characteristics	Operation command mode	Panel control, terminal control, communication control.
	Carrier frequency	1 kHz-10 kHz, adjustable according to temperature and load characteristics.
	Frequency resolution	Digital setting: 0.01 Hz, analog setting: maximum frequency ×0.1%
	Control mode	Closed-loop vector control (VC), open-loop vector control (SVC), V/F control.
	V/F control	Linear type, multi-point type, quadratic type.
	Torque control	There is PG torque control, but there is no PG torque control.
	Maximum speed	300 Hz, dependent on the electrical and mechanical characteristics of the motor.
	Starting torque	0 Hz/200% (VC and SVC), 0.8 Hz/150% (V/F)
	Speed range	1:500 (SVC), 1:1000 (VC)
	Speed accuracy	±0.02% rated speed (VC), ±0.2% rated speed (SVC), ±0.5% rated speed (V/F).
	Overload capacity	The light overload capacity is 120% of the rated output current, and an overload of 1 minute is allowed every 5 minutes. The heavy overload capacity is 150% of the rated output current, and an overload of 1 minute is allowed every 5 minutes.
	Torque compensation	Automatic torque compensation function.
	Acceleration and deceleration methods	Linear and customized multi-point curves.
	Automatic voltage regulation	When the power grid fluctuates, it can automatically maintain a constant output voltage.
	DC braking mode	DC braking during startup and DC braking during shutdown.
	Built-in process PID	It is convenient to implement a closed-loop control system for process variables such as pressure, temperature, flow rate, etc.
	Bus options	CANopen, Modbus RTU, Profibus DP, Profinet
	Special features	Free functional modules of user programmable applications: logic functional module, mathematical function functional module, timer module, PID module, etc.
		Motion control: multi curve acceleration/deceleration function, timer controlled run/stop control, etc.
		Synchronous control: master/slave synchronous control, speed/torque control.
Input/output terminals	Input terminal	5 digital inputs and 2 analog inputs (voltage 0 to +10 V or current 0 mA/4 mA-20 mA) are standard on the terminal board.
	Output terminal	3 digital outputs (1 collector output and 2 relay outputs), 2 analog outputs (voltage 0 to +10 V or current 0 mA/4 mA-20 mA) is standard on the terminal board.

Technical Parameters of GF630N02 (Textile) AC Drive

Item		Description
HMI	Operation panel LED/LCD	It can set and copy relevant parameters, as well as display various parameters such as output frequency, output voltage, output current, etc. The operating status, fault status, and parameter setting status should all have corresponding displays. Content: function, data, unit.
Protection function		Overcurrent protection, overvoltage protection, undervoltage protection, overheating protection, overload protection, etc.
Place of use		Not exposed to direct sunlight, dust-free, and non corrosive environment.
Environment	Altitude	Below 1000 meters, there is no need to downgrade. For places with an altitude exceeding 1000 meters, please reduce the rated power and output current by 1% for every 100 meters increase.When the altitude exceeds 3000 meters, it is necessary to consult the manufacturer for guidance.
	Ambient temperature	-10 ℃ to +40 ℃, if the ambient temperature exceeds 40 ℃, it needs to be downgraded for use. For every 1 ℃ increase in ambient temperature, the rating will be reduced by 1%. When the ambient temperature exceeds 50 ℃, it is necessary to consult the manufacturer for guidance.If the ambient temperature is below -10 ℃, additional auxiliary heating equipment is required.
	Humidity	Less than 95% RH, no condensation.
	Storage	Storage temperature: -20 ℃ to +60 ℃.
Other	Efficiency	> 98%
	Optional accessories	Can connect communication cards, IO expansion cards, and PG cards.
	Other interfaces	External panel interface.
	Ingress protection	IP20
	Cooling method	External air cooling is required.
	Pollution degree	2

Optional Accessories (With Package)

Item	Code	Specification and Model	Note
LCD Panel	LCD	GDHF-AKZY1	Chinese and English LCD panels
Modbus RTU Communication Card	MB01	GDHF-AMBX1	Modbus RTU communication card
DP Communication Card	DP01	GDHF-ADPX1	Profibus DP communication card
PN Communication Card	PN01	GDHF-APNX1	Profinet communication card
CAN Communication Card	CAN01	GDHF-ACNX1	CANopen communication card
PG Card	PG02	GDHF-APGX1	Incremental encoder card suitable for standard drives
IO Expansion Card 1	IO01	GDHF-AIOX1	7 DI+4 DO+Modbus RTU communication (Applicable to standard drives)
IO Expansion Card 2	IO02	GDHF-AIOX2	5 DI+2 DO (Applicable to standard drives)
Logic Control Card 1	PC01	GDHF-AGYZ1	20 DI+6 DO+CANopen communication +Modbus RTU communication
Logic Control Card 3	PC03	GDHF-AGYZ3	20 DI+6 DO

GUIDE

GF630N03
(Logistics) AC Drive

GF630N 03 - XXX - 4+X
① ② ③ ④ ⑥

Customized Model

① Product Series

② Type and Structure
03: Logistics

③ Power
Example:
0R7 = 0.75 kW
5R5 = 5.5 kW

④ Voltage Level
4: 380 V

⑥ Optional Accessories

Code	Note
SW01	Permanent magnet synchronous control software
PN02	Profinet communication card

Example:
1. GF630N03-3R7-4+PN02: 400 V/3.7 kW drive, without built-in DC reactor, built-in braking unit, LED panel, Profinet communication card.

Power and Dimensions of GF630N03 (Logistics) AC Drive

Model	Output Current (A)	Applicable Motor Capacity (kW)	Type	Dimensions [mm] (W*H*D)	Weight (kg)
GF630N03-0R7-4	3.3	0.75	T1	445*215*115	6.8
GF630N03-1R5-4	4.8	1.5			
GF630N03-2R2-4	5.7	2.2			
GF630N03-3R7-4	10.2	3.7	T2		7.2
GF630N03-5R5-4	13.5	5.5			

Note:
1. Equipped with built-in braking unit as standard;
2. Standard LED digital display panel;
3. The overload capacity is 150% of the rated output current, and an overload is allowed for 1 minute every 5 minutes.

Technical Parameters of GF630N03 (Logistics) AC Drive

Item		Description
Input	Input voltage	Three-phase 380 V-480 V
	Rated frequency	50/60Hz
	Allowable voltage fluctuations	-15% to +10%
	Allowable frequency fluctuations	The allowable range of frequency variation is fLN ±2% (±4% for independent power supply grids). Frequency variation rate: ≤2% fLN/s.
Output	Output voltage range	0 V-Input voltage, error less than 5%.
	Asymmetry of output voltage	Under normal usage conditions, the asymmetry of the three-phase voltage output should not exceed 1% within the entire output frequency adjustment range, when the loads of each phase are symmetrical.
	Output frequency range	0-300 Hz
Control characteristics	Operation command mode	Panel control, terminal control, communication control.
	Carrier frequency	1 kHz-10 kHz, adjustable according to temperature and load characteristics.
	Frequency resolution	Digital setting: 0.01 Hz, analog setting: maximum frequency ×0.1%
	Control mode	Open-loop vector control (SVC), V/F control.
	V/F control	Linear type, multi-point type, quadratic type.
	Torque control	No PG torque control.
	Maximum speed	300 Hz, dependent on the electrical and mechanical characteristics of the motor.
	Starting torque	0 Hz/200% (SVC), 0.8 Hz/150% (V/F)
	Speed range	1:500 (SVC)
	Speed accuracy	±0.2% rated speed (SVC), ±0.5% rated speed (V/F).
	Overload capacity	The overload capacity is 150% of the rated output current, and an overload is allowed for 1 minute every 5 minutes.
	Torque compensation	Automatic torque compensation function.
	Acceleration and deceleration methods	Linear or S-shaped acceleration and deceleration.
	Automatic voltage adjustment	When the power grid fluctuates, it can automatically maintain a constant output voltage.
	DC braking mode	DC braking during startup and DC braking during shutdown.
	Built-in process PID	It is convenient to implement a closed-loop control system for process variables such as pressure, temperature, flow rate, etc.
	Bus options	Supports Modbus RTU and Profinet.
	Special features	Instantaneous power failure without stopping: During an instantaneous power failure, the energy is compensated by reducing the frequency and regenerative energy to compensate for the decrease in bus voltage, maintaining the drive's bus voltage without reporting an undervoltage fault shutdown for a short period of time.
		Virtual DIDO: Simple logic control can be achieved through virtual DIDO.
		Timer function: The drive will automatically shut down after reaching the set running time.
		Rapid current limiting: Rapid current limiting within a single carrier cycle to prevent frequent overcurrent faults in the drive.
Input/output terminals	Input terminal	4 digital inputs and 1 analog input (-10 V to +10 V) are standard on the control board.
	Output terminal	2 digital outputs (2 collector outputs) are standard on the control board.

GUIDE

Technical Parameters of GF630N03 (Logistics) AC Drive

Item		Description
HMI	Operation panel LED/LCD	It can set and copy relevant parameters, as well as display various parameters such as output frequency, output voltage, output current, etc. The operating status, fault status, and parameter setting status should all have corresponding displays. Content: function, data, unit.
Protection function		Overcurrent protection, overvoltage protection, undervoltage protection, overheating protection, overload protection, etc.
Environment	Altitude	Below 1000 meters, there is no need to downgrade. For places with an altitude exceeding 1000 meters, please reduce the rated power and output current by 1% for every 100 meters increase.When the altitude exceeds 3000 meters, it is necessary to consult the manufacturer for guidance.
	Ambient temperature	-10 ℃ to +40 ℃, if the ambient temperature exceeds 40 ℃, it needs to be downgraded for use. For every 1 ℃ increase in ambient temperature, the rating will be reduced by 1%. When the ambient temperature exceeds 50 ℃, it is necessary to consult the manufacturer for guidance.If the ambient temperature is below -10 ℃, additional auxiliary heating equipment is required.
	Humidity	Less than 95% RH, no condensation.
	Storage	Storage temperature: -20 ℃ to +60 ℃.
Other	Efficiency	> 98%
	Option card	Can be connected to Profinet communication card.
	Ingress protection	IP54
	Cooling method	2.2 kW and below are naturally cooled; 3.7 kW and above are subject to forced air cooling.
	Pollution degree	2

Optional Accessories (With Package)

Item	Code	Specification and Model	Note
PN Communication Card	PN02	GDHF-APNX3	Profinet communication card

GF630N04
Instant Start AC Drive

GF630N 04 - XXX - 4
① ② ③ ④

Customized Model

① **Product Series**

② **Type and Structure**
04: Instant start

③ **Power**
Example:
022 = 22 kW

④ **Voltage Level**
4: 380 V

Power and Dimensions of GF630N04 Instant Start AC Drive

Model	Peak Current (A)	Applicable Motor Power (kW)	Type	Dimensions [mm] (W*H*D)	Weight (kg)
GF630N04-022-4	160	2.2-3	N3	302*180*194	6.5
GF630N04-037-4	240	3.7-4.5			
GF630N04-045-4	340	5.5-7.5			

Note: Peak current refers to the peak value at which the drive can output the maximum current.

Technical Parameters of GF630N04 Instant Start AC Drive

Item		Description
Input	Input voltage	Three-phase 380 V-480 V
	Rated frequency	50/60 Hz
	Allowable voltage fluctuation	-15% to +10%
	Allowable frequency fluctuation	The allowable range for frequency variation is fLN ±2% (±4% for independent power supply grids). Frequency change rate: ≤2% fLN/s.
Output	Output voltage range	0 V-Input voltage
	Asymmetry of output voltage	Under normal usage conditions, the asymmetry of the three-phase voltage output should not exceed 1% within the entire output frequency adjustment range, when the loads of each phase are symmetrical.
	Output frequency range	0-500 Hz
Control characteristics	Operation command mode	Panel control, terminal control, communication control
	Frequency command mode	Digital setting, analog voltage/current setting, multi-stage speed/pulse setting, communication setting.
	Auxiliary frequency command mode	Ditto. It can flexibly achieve frequency fine-tuning and frequency superposition synthesis.

GUIDE

Technical Parameters of GF630N04 Instant Start AC Drive

Item		Description
Control characteristics	Carrier frequency	2 kHz-8 kHz, adjustable according to temperature and load characteristics.
	Frequency resolution	Digital setting: 0.01 Hz, analog setting: maximum frequency ×0.1%
	Control mode	V/F control (asynchronous motor), SVC (synchronous motor), FVC (synchronous motor)
	V/F control	Linear type, multi-point type, quadratic type
	Maximum speed	500 Hz, dependent on the electrical and mechanical characteristics of the motor.
	Starting torque	0.25 Hz/150% (SVC), 0 Hz/180% (FVC)
	Speed range	1:200(SVC), 1:1000 (FVC)
	Speed accuracy	±0.5% rated speed (SVC), ±0.02% rated speed (FVC)
	Overload capacity	Allow 150% rated current overload for 1 minute or 180% rated current overload for 3 seconds.
	Acceleration and deceleration methods	Linear or S-shaped acceleration and deceleration.
	Automatic voltage adjustment	When the power grid fluctuates, it can automatically maintain a constant output voltage.
	Torque limit	In SVC and FVC modes, the torque during operation can be automatically limited to prevent frequent overcurrent.
	DC braking mode	DC braking during startup and DC braking during shutdown.
	Built-in process PID	It is convenient to implement a closed-loop control system for process variables such as pressure, temperature, flow rate, etc.
	Jogging function	Supports forward/reverse jogging, with adjustable jogging frequency and acceleration/deceleration time.
	Multi speed operation	It can achieve up to 16 speed levels for operation.
	Communication method	Modbus 485
	Special features	Instantaneous power failure without stopping: During an instantaneous power failure, the energy is compensated by reducing the frequency and regenerative energy to compensate for the decrease in bus voltage, maintaining the drive's bus voltage without reporting an undervoltage fault shutdown for a short period of time; Timing function: The drive will automatically shut down after reaching the set operating time; Rapid current limiting: Rapid current limiting within a single carrier cycle to prevent frequent overcurrent faults in the drive.
	Instant start function	When using the instant start function, the motor connection must be a delta connection; otherwise, the thisfunction will fail to start. The instant start function of the drive can achieve delta-start and star-run operation of the motor, while also supporting variable frequency speed control. It can replace the traditional contactor-based delta-star switching, achieving smooth starting with reduced inrush current.
Input/output terminal	Input terminal	5 digital inputs, 2 analog inputs (voltage -10 to +10 V or current 0 mA/4 mA-20 mA or -20 mA-20 mA) standard on terminal board; 5 digital inputs, 1 analog input (voltage -10 to +10 V or current 0 mA/4 mA-20 mA or -20 mA-20mA) is standard on the IO expansion card.
	Output terminal	3 digital outputs (1 collector output and 2 relay outputs), 1 analog output (voltage 0 to +10 V) Or current 0 mA/4 mA-20 mA) is standard on the terminal board, and 2 digital outputs (2 collector outputs) are standard on the IO expansion card.
HMI	Operation panel LED	It can set relevant parameters and display various parameters such as output frequency, output voltage, output current, etc. The operating status, fault status, and parameter setting status should all have corresponding displays. Content: data, unit.
Protection function		Overcurrent protection, overvoltage protection, undervoltage protection, overheating protection, overload protection, etc.

GUIDE

GF630N05
Overhead Crane-dedicated AC Drive

GF630N 05 - XXX - 4+X
① ② ③ ④ ⑥

Customized Model

① Product Series

② Type and Structure
05: Overhead crane-dedicated

③ Power
Example:
0R4 = 0.4 kW
7R5 = 7.5 kW
022 = 22 kW

④ Voltage Level
4: 380 V

⑥ Optional Accessories

Code	Note
SW05	Overhead crane anti-sway software

Power and Dimensions of GF630N05 Overhead Crane-dedicated AC Drive

Model	Output Current (A)	Maximum Applicable Motor Power (kW)	Type	Dimensions [mm] (H*W*D)	Weight (kg)
GF630N05-0R4-4 GF630N05-0R4-4+SW05	1.2	0.4	R1	172*86*136	1.1
GF630N05-0R7-4 GF630N05-0R7-4+SW05	2.5	0.75			
GF630N05-1R1-4 GF630N05-1R1-4+SW05	3	1.1			
GF630N05-1R5-4 GF630N05-1R5-4+SW05	3.7	1.5			
GF630N05-2R2-4 GF630N05-2R2-4+SW05	5	2.2			
GF630N05-3R7-4 GF630N05-3R7-4+SW05	9	3.7	R2	203*98*156	1.6
GF630N05-5R5-4 GF630N05-5R5-4+SW05	13	5.5			
GF630N05-7R5-4 GF630N05-7R5-4+SW05	17	7.5	R3	240*128*167	2.7
GF630N05-011-4 GF630N05-011-4+SW05	24	11			
GF630N05-015-4 GF630N05-015-4+SW05	32	15	R4	310*170*185	5.6
GF630N05-018-4 GF630N05-018-4+SW05	37	18.5			
GF630N05-022-4 GF630N05-022-4+SW05	45	22			

Note: 1. Built-in braking unit; 2. LED digital display panel.

Technical Parameters of GF630N05 Overhead Crane-dedicated AC Drive

Item		Description
Input	Input Voltage	Three-phase 380 V-480 V
	Rated frequency	50/60 Hz
	Allowable voltage fluctuation	-15% to +10%
	Allowable frequency fluctuation	The allowable range of frequency variation is fLN ±2% (±4% for independent power supply grids). Frequency variation rate: ≤2% fLN/s.
Output	Output voltage range	0 V-Input voltage, error less than 5%.
	Asymmetry of output voltage	Under normal operating conditions, within the entire range of output frequency adjustment, and with symmetrical load on each phase, the asymmetry of the output three-phase voltage should not exceed 2%.
	Output frequency range	0-300 Hz
Containment characterization	Operation command mode	Panel control, terminal control, communication control.
	Carrier frequency	1 kHz-16 kHz, adjustable according to temperature and load characteristics.
	Frequency resolution	Digital setting: 0.01Hz, analog setting: maximum frequency ×0.1%.
	Control mode	Closed loop vector control (VC), open-loop vector control (SVC), V/F control.
	V/F control	Linear type, multi-point type, quadratic type.
	Torque control	With PG torque control/without PG torque control.
	Maximum speed	300 Hz, dependent on the electrical and mechanical characteristics of the motor.
	Starting torque	0.5 Hz/200% (VC and SVC), 0.8 Hz/150% (V/F)
	Speed range	1:500 (SVC), 1:1000 (VC)
	Speed accuracy	±0.02% rated speed (VC), ±0.2% rated speed (SVC), ±0.5% rated speed (V/F).
	Overload capacity	The overload capacity is 120% of the rated output current for 1 hour. The overload capacity is 150% of the rated output current, and an overload of 1 minute is allowed every 5 minutes.
	Torque compensation	Automatic torque compensation function.
	Acceleration and deceleration mode	Linear and customized multi-point curves.

Technical Parameters of GF630N05 Overhead Crane-dedicated AC Drive

Item		Description
Control characteristics	Automatic voltage regulation	When the power grid fluctuates, it can automatically maintain a constant output voltage.
	DC braking mode	DC braking during startup and DC braking during shutdown.
	Built-in process PID	It is convenient to implement a closed-loop control system for process variables such as pressure, temperature, flow rate, etc.
	Bus options	Supports Modbus bus.
	Special features	Free functional modules for user programmable applications.
		Logic function module, mathematical function module, timer module, PID module, etc.
		Motion control: multi curve acceleration/deceleration function, timer controlled run/stop control, etc.
		Crane functions: power optimization, opening brake function of the crane, anti-sway function.
Input/output terminal	Input terminal	6 digital inputs and 1 analog input (voltage of 0 to +10 V or current of 0 mA-20 mA).
	Output terminal	2 digital outputs (2 relay outputs) and 1 analog output (voltage 0 to +10 V or current 0 mA-20 mA).
Communication terminal	PG function	PG card supports 4-wire connection method, and the encoder needs to support 24 V power supply.
	485 communication	Supports Modbus protocol.
HMI	Operation panel LED	It can set relevant parameters and display various parameters such as output frequency, output voltage, output current, etc. The operating status, fault status, and parameter setting status should all have corresponding displays. Content: function, data, unit.
Protection function		Overcurrent protection, overvoltage protection, undervoltage protection, overheating protection, overload protection, etc.
Place of use		Not exposed to direct sunlight, dust-free, and non corrosive environment.
Environment	Altitude	Below 1000 meters, there is no need to downgrade.For places with an altitude exceeding 1000 meters, please reduce the rated voltage and rated output current by 1% for every 100 meters increase.When the altitude exceeds 3000 meters, it is necessary to consult the manufacturer for guidance.
	Ambient temperature	-10 ℃ to +40 ℃, if the ambient temperature exceeds 40 ℃, it needs to be downgraded for use. For every 1 ℃ increase in ambient temperature, the rating will be reduced by 1%. When the ambient temperature exceeds 50 ℃, it is necessary to consult the manufacturer for guidance.If the ambient temperature is below -10 ℃, additional auxiliary heating equipment is required.
	Humidity	Less than 95% RH, no condensation.
	Storage	Storage temperature: -20 ℃ to +60 ℃. Due to the characteristics of electrolytic capacitors, if the storage time exceeds six months, the drive needs to be powered on for 10-30 minutes every six months to charge the electrolytic capacitors.
Other	Efficiency	> 98%
	Other interfaces	External panel interface.
	Ingress protection	IP20
	Cooling method	Forced air cooling.
	Pollution degree	2
	Noise	≤65db

GUIDE

GF630NGS
High-speed Permanent Magnet AC Drive

GF630N GS- XXX- 4+X
① ② ③ ④ ⑥

Customized Model

① Product Series

② Type and Structure
GS: High-speed permanent magnet

③ Power
Example:
5R5 = 5.5 kW
055 = 55 kW
110 = 110 kW

④ Voltage Level
4: 380 V

⑥ Optional Accessories

Code	Note	Code	Note
DL	Built-in DC reactor		
BU	Built-in braking unit		
MB01	Modbus RTU communication card	DP01	Profibus DP communication card
PN01	Profinet communication card	CAN01	CANopen communication card
IO01 (IO expansion card)	7 DI+4 DO+Modbus RTU communication (Applicable to standard drives)	IO02 (IO expansion card)	5 DI+2 DO (Applicable to standard drives)

Example:
1. GF630NGS-045-4+PN01: 400 V/45 kW high-speed permanent magnet drive, no built-in DC reactor, no built-in braking unit, Profinet communication card, LED panel.
2. GF630NGS-110-4+DL+BU: 400 V/110 kW high-speed permanent magnet drive, built-in DC reactor, built-in braking unit, LED panel.

Power and Dimensions of GF630NGS High-speed Permanent Magnet AC Drive

Model	Light Overload		Heavy Overload		Type	Dimensions [mm] (H*W*D)	Weight (kg)
	Output Current (A)	Applicable Motor Capacity (kW)	Output Current (A)	Applicable Motor Capacity (kW)			
GF630NGS-0R4-4	1.5	0.4	-	-	N1	260*140*191	3.5
GF630NGS-0R7-4	2.3	0.75	1.5	0.4			
GF630NGS-1R1-4	3	1.1	2.3	0.75			
GF630NGS-1R5-4	3.7	1.5	3	1.1			
GF630NGS-2R2-4	5.4	2.2	3.7	1.5			
GF630NGS-3R7-4	9.9	3.7	5.4	2.2	N2	260*140*191	4
GF630NGS-5R5-4	14	5.5	9.9	3.7			
GF630NGS-7R5-4	17	7.5	14	5.5			5
GF630NGS-011-4	23	11	17	7.5			
GF630NGS-015-4	31	15	23	11	N3	302*180*194	6.5
GF630NGS-018-4	37	18.5	31	15			
GF630NGS-022-4	46	22	37	18.5	N4	375*279*236	12.5
GF630NGS-030-4	64	30	46	22			
GF630NGS-037-4	74	37	64	30			
GF630NGS-045-4	93	45	74	37	N5	766*235*345.5	38
GF630NGS-055-4	114	55	93	45			
GF630NGS-075-4	154	75	114	55			
GF630NGS-090-4	187	90	154	75	N6	885*315*331.5	55
GF630NGS-110-4	214	110	187	90			
GF630NGS-132-4	264	132	214	110	N7	965*390*345.5	80
GF630NGS-160-4	302	160	264	132			
GF630NGS-185-4	364	185	302	160	N8	1093*492*376	120
GF630NGS-200-4	395	200	364	185			
GF630NGS-220-4	437	220	395	200			
GF630NGS-250-4	484	250	437	220	N9	1200*490*395.5	150
GF630NGS-280-4	544	280	484	250			
GF630NGS-315-4	609	315	544	280	N10	1305*700*415	240
GF630NGS-355-4	667	355	609	315			
GF630NGS-400-4	719	400	667	355			
GF630NGS-450-4	819	450	719	400			

Note:
1. 0.4 kW-37 kW without built-in DC reactor, 45 kW-450 kW can be optionally equipped with built-in DC reactor;
2. 0.4 kW-37 kW is equipped with an internal braking unit as standard, 45 kW-110 kW can be equipped with an optional internal braking unit, 132 kW and above do not have an internal braking unit, and an external braking unit can be separately selected;
3. Standard configuration includes LED digital display panel;
4. Light overload condition: 120% of the rated output current, and an overload is allowed for 1 minute every 5 minutes; heavy overload condition: 150% of the rated output current, and an overload is allowed for 1 minute every 5 minutes.

Technical Parameters of GF630NGS High-speed Permanent Magnet AC Drive

Item		Description
Input	Input voltage	Three-phase 380 V-480 V
	Rated frequency	50/60 Hz
	Allowable voltage fluctuation	-15% to +10%
	Allowable frequency fluctuation	The allowable range for frequency variation is fLN ±2% (±4% for independent power supply grids). Frequency change rate: ≤2% fLN/s.
Output	Output voltage range	0 V-Input voltage, with an error of less than 5%
	Asymmetry of output voltage	Under normal usage conditions, the asymmetry of the three-phase voltage output should not exceed 1% within the entire output frequency adjustment range, when the loads of each phase are symmetrical.
	Output frequency range	0-800 Hz
Control characteristics	Operation command mode	Panel control, terminal control, communication control.
	Carrier frequency	1 kHz-8 kHz, adjustable according to temperature and load characteristics.
	Frequency resolution	Digital setting: 0.01Hz, analog setting: maximum frequency ×0.1%
	Control mode	Open loop vector control (SVC), V/F control.
	V/F control	Linear type, multi-point type, quadratic type.
	Maximum speed	800 Hz, dependent on the electrical and mechanical characteristics of the motor.
	Speed range	1:500 (SVC)
	Speed accuracy	±0.2% rated speed (SVC), ±0.5% rated speed (V/F).
	Overload capacity	The light overload capacity is 120% of the rated output current, and an overload of 1 minute is allowed every 5 minutes. The heavy overload capacity is 150% of the rated output current, and an overload of 1 minute is allowed every 5 minutes.
	Torque compensation	Automatic torque compensation function.
	Acceleration and deceleration methods	Linear and customized multi-point curves.
	Automatic voltage adjustment	When the power grid fluctuates, it can automatically maintain a constant output voltage.
	DC braking mode	DC braking during startup and DC braking during shutdown.
	Built-in process PID	It is convenient to implement a closed-loop control system for process variables such as pressure, temperature, flow rate, etc.
	Bus options	CANopen, Modbus RTU , Profibus DP, Profinet
	Special features	Free functional modules of user programmable applications: logic functional module, mathematical function functional module, timer module, PID module, etc.
		Motion control: multi curve acceleration/deceleration function, timer controlled run/stop control, etc.
		Synchronous control: master/slave synchronous control, speed/torque control.
Input/output terminals	Input terminal	5 digital inputs and 2 analog inputs (voltage 0 to +10 V or current 0 mA/4 mA-20 mA) are standard on the terminal board.
	Output terminal	3 digital outputs (1 collector output and 2 relay outputs), 2 analog outputs (voltage 0 to +10 V or current 0 mA/4 mA-20 mA) is standard on the terminal board.

Technical Parameters of GF630NGS high-speed Permanent Magnet AC Drive

Item		Description
HMI	Operation panel LED	It can set and copy relevant parameters, as well as display various parameters such as output frequency, output voltage, output current, etc. The operating status, fault status, and parameter setting status should all have corresponding displays. Content: function, data, unit.
Protection function		Overcurrent protection, overvoltage protection, undervoltage protection, overheating protection, overload protection, etc.
Place of use		Not exposed to direct sunlight, dust-free, and non corrosive environment.
Environment	Altitude	Below 1000 meters, there is no need to downgrade. For places with an altitude exceeding 1000 meters, please reduce the rated power and output current by 1% for every 100 meters increase. When the altitude exceeds 3000 meters, it is necessary to consult the manufacturer for guidance.
	Ambient temperature	-10 ℃ to +40 ℃, if the ambient temperature exceeds 40 ℃, it needs to be downgraded for use. For every 1 ℃ increase in ambient temperature, the rating will be reduced by 1%. When the ambient temperature exceeds 50 ℃, it is necessary to consult the manufacturer for guidance.If the ambient temperature is below -10 ℃, additional auxiliary heating equipment is required.
	Humidity	Less than 95% RH, no condensation.
	Storage	Storage temperature: -20 ℃ to+60 ℃.
Other	Efficiency	> 98%
	Option card	Can connect communication cards, IO expansion cards, and PG cards.
	Other interfaces	External panel interface.
	Ingress protection	IP20
	Cooling method	1.1 kW and below are naturally cooled; 1.5 kW and above are subject to forced air cooling.
	Pollution degree	2

Optional Accessories (With Package)

Item	Code	Specification and Model	Note
Modbus RTU Communication Card	MB01	GDHF-AMBX1	Modbus RTU communication card
DP Communication Card	DP01	GDHF-ADPX1	Profibus DP communication card
PN Communication Card	PN01	GDHF-APNX1	Profinet communication card
CAN Communication Card	CAN01	GDHF-ACNX1	CANopen communication card
IO Expansion Card 1	IO01	GDHF-AIOX1	7 DI+4 DO+Modbus RTU communication
IO Expansion Card 2	IO02	GDHF-AIOX2	5 DI+2 DO