

# PRODUCT CATALOG

INNOVATION DRIVEN • INTELLIGENT CONTROL OF THE FUTURE



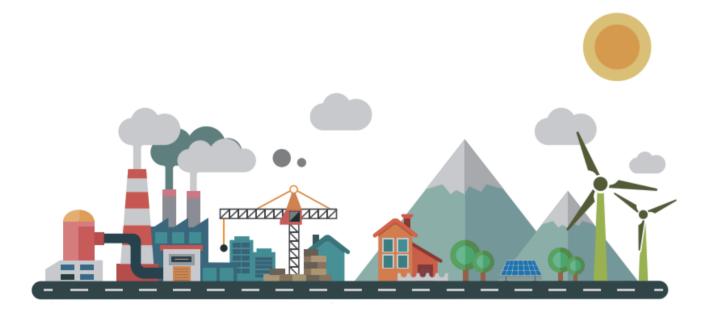
Efficient, Reliable, Stable



## PREFACE

Striving to become the most trusted supplier in the domestic industrial control field !

Thank you all for your continued support and trust in FuGong! We will showcase the advantages of our various product series through a comprehensive product catalog, providing you with an intuitive and convenient channel to access information, to help you understand us more quickly !



#### **Company Profile**

Fugong Power, with its profound accumulation in the fields of industrial control technology and liquid cooling technology, has become a major supplier in the fields of industrial control and liquid cooling, as well as in the drive control of new energy vehicles, possessing a complete product development, manufacturing, sales, and service platform company.

#### Manufacturing

The production workshop covers an area of approximately 30000 m<sup>2</sup>, with advanced automated production equipments and comprehensive testing equipments, with an annual production capacity of 100,000 units.

#### R&D

With more than 1,600 m<sup>2</sup> of R&D space, up to now, we have obtained 161 certified patents, including 2 overseas invention patents. It not only confirms our innovation ability and international vision, but also serves as a solid foundation for our technological advancement and product reliability. The company's AC drives and peripheral products are widely used in photovoltaic, plastics, packaging and printing, food processing machinery, chemical and other industries, covering a power range of 0.4kW to 1000kW, and rich extended features to make the products better adapt to a variety of industrial scenarios. With excellent performance and comprehensive functions, the products have been certified by authoritative testing organizations and have become the mainstream of domestic industrial control field.



### FUGONG







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### Naming Rules

4T:Three phase 380V

### 01 Product Series No. 02 Default: Generic model 1: High-speed motor E: synchronous motor S: Wire Drawing Machine L: Injection moulding machines M: Woodworking Rotary Cutting Machine K: Specialised openers 03 Voltage class 2:Single phase 220V 21:Three phase 220V

### FUGONG

### 04

Adaptable Power G: G-type 55KW motor P: P-type 75KW motor

#### 05 Contains reactor

L: Contains DC reactor I: Contains AC input reactor O: Contains AC output reactor H: Contains AC input and output reactor

#### 06

Built-in Braking Unit Blank: No B: Yes General AC drives

### **FG300** High Performance Vector Drives

Industry-

specific

AC drives

It is a product developed on the high-performance vector technology platform of Fugong Power by adopting the magnetic field orientated vector control technology, which can easily drive the induction motor. Under the premise of high performance and high reliability, the components are reasonably laid out to achieve a book-like narrow body design, equipped with rich expansion interfaces and new expansion accessories, featuring high performance, high reliability, high power density and high applicability.



Power Range

0.75kW~630kW

### **Product Characteristics**



#### Powerful performance

Equipped with vector control technology, it achieves precise speed control and high torque output, especially in low-speed operation.



#### Versatility

Modular design, easy to expand, support for remote operation, simplify the debugging process, equipped with a variety of easy-touse keyboard.



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#### Compact design

Book-type structure, high power density, adapt to a variety of installation methods, optimise the use of space, and enhance the efficiency of heat dissipation.

#### High reliability

Independent air ducts and advanced thermal management to adapt to harsh environments, and rigorous testing to ensure long-term stable operation.

### **Technical Specifications**

	Rated input voltage	200V Voltage Class: 400V Voltage Class:		
Power input	Frequency	50Hz/60Hz±5%		
	Voltage range	-15% ~ +15%, Voltag		
	Output voltage	Three-phase:0%~rate		
Power output	Output frequency	0 ~ 600.00Hz (Can		
	Overload capacity	G type:150% - 60 s, F		
Control	Control mode	SVC、FVC、V/F contr		
characteristics	Starting torque	0.25Hz/150% (SVC)		
Carrier frequency				
	Analog input	2 way AI, 0 ~ 10V or		
	Digital input	5 way DI,DI5 can be		
Input & Output terminals	Analog output	1 way AO,0 ~ 10V c		
	Digital output	1 way DO,Optional h		
	Relay output	1 relay output: T1 (nor AC250V,3A;DC30\		
	Altitude	0~2000m. De-rate 1%		
	Ambient temperature	-10°C ~50°C , The rate 1% for every 1°C when		
Environment	Relative humidity	5 ~ 95%, no conde		
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6		
	Storage temperature	-20°C~ +60°C		





Single/Three-phase 200V ~ 240V; Three-phase 380V~440V

ge out-of-balance rate<3%,

ed input voltage, error < ±3%

be changed by parameter)

P type:120% - 60 s

trol

, 0Hz/200% (FVC)

0.5kHz ~ 16kHz

or 0/4 ~ 20mA are selectable

e equipped with high-speed pulse input as an option., 0~50kHz

or 0/4 ~ 20mA are selectable

high speed pulse output, 0~100kHz

prmally open and normally closed), Contact drive capability:  ${\sf DV}, \ {\sf 5A}$ 

% for every 100m when the altitude is above 1000 meters

ted output current should be derated en the ambient is 40°C ~50°C

ensation

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#### Three phase: 380V ~ 440V

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit	DC reactor
FG300-4T-0.75GB	0.75	2.5	3.5	0.15	≥ 150		
FG300-4T-1.5GB	1.5	3.8	4.6	0.15	≥ 150		
FG300-4T-2.2GB	2.2	5.1	6.3	0.3	≥ 100		
FG300-4T-3.7GB	3.7	9.0	11.5	0.3	≥ 76		
FG300-4T-5.5GB	5.5	13	16.8	0.4	≥ 76	1.1.20	none
FG300-4T-7.5GB	7.5	17	22	0.5	≥ 76	Inbuilt	
FG300-4T-11GB	11	25	32.5	0.8	≥ 40	- - -	
FG300-4T-15GB/18.5PB	15/18.5	32/37	41.5/49.6	1.0	≥ 27		
FG300-4T-18.5GB/22PB	18.5/22	37/45	49.6/59	4.0	≥ 27		
FG300-4T-22GB/30PB	22/30	45/60	59/65	4.5	≥ 27		
FG300-4T-30G/37P	30/37	60/75	65/80	6.0	≥ 16	_	
FG300-4T-37G/45P	37/45	75/91	80/95	7.4	≥ 16		Inbuilt optional
FG300-4T-45G/55P	45/55	91/112	95/118	9.0	≥ 14		
FG300-4T-55G/75P	55/75	112/150	118/157	11	≥ 10	Inbuilt optional	
FG300-4T-75G/90P	75/90	150/176	157/180	15	≥ 8.0	-	
FG300-4T-90G/110P	90/110	176/210	180/214	18	≥ 6.8		
FG300-4T-110G/132P	110/132	210/253	214/256	22	≥ 6.8		
FG300-4T-132G/160P	132/160	253/304	240/287	27	≥ 4.5		
FG300-4T-160G/185P	160/185	304/326	287/306	32	≥ 3.6		
FG300-4T-185G/200P	185/200	326/377	306/365	37	≥ 3.3	Externally mounted when needed	
FG300-4T-200G/220P	200/220	377/426	365/410	40	≥ 3.3		Inbuilt
FG300-4T-220G/250P	220/250	426/465	410/441	44	≥ 2.7		
FG300-4T-250G/280P	250/280	465/520	441/495	50	≥ 2.7		
FG300-4T-280G/315P	280/315	520/585	495/565	56	≥ 2.2		

### **Configuration Parameters**

Single phase: 200V ~ 240V

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit	DC reactor
FG300-2S-0.75GB	0.75	4.0	8.2	0.08	≥ 150		
FG300-2S-1.5GB	1.5	7.0	14	0.1	≥ 100		
FG300-2S-2.2GB	2.2	9.6	23	0.1	≥ 70	Inbuilt	none
FG300-2S-3.7GB	3.7	17	35	0.2	≥ 40		
FG300-2S-5.5GB	5.5	25	50	0.3	≥ 26		
FG300-2S-7.5GB	7.5	32	61.5	0.5	≥ 16		
FG300-2S-11GB	11	45	90	0.8	≥ 11	-	
FG300-2S-15G	15	60	120	1.0	≥ 10	Inbuilt optional	Inbuilt
FG300-2S-18.5G	18.5	75	150	1.4	≥ 8.0		optional

### Three phase:200V ~ 240V

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit	DC reactor
FG300-2T-0.75GB	0.75	4.0	4.8	0.08	≥ 150		
FG300-2T-1.5GB	1.5	7.0	8.8	0.1	≥ 100		
FG300-2T-2.2GB	2.2	9.6	12	0.1	≥ 70	Inbuilt	none
FG300-2T-3.7GB	3.7	16	21	0.2	≥ 40		
FG300-2T-5.5GB	5.5	20	26	0.3	≥ 25		
FG300-2T-7.5GB	7.5	30	39	0.5	≥ 16		
FG300-2T-11GB	11	42	55	0.8	≥ 11		
FG300-2T-15G	15	55	60	1.0	≥ 10	Inbuilt	Inbuilt optional
FG300-2T-18.5G	18.5	70	75	1.4	≥ 8.0	optional	





Industry-

specific

AĊ drives

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)		Brake unit	DC reactor
FG300-4T-315G/355P	315/355	585/650	565/617	63	≥ 1.9		
FG300-4T-355G/400P	355/400	650/725	617/687	70	≥ 1.7	Externally mounted when needed	Inbuilt
FG300-4T-400G/450P	400/450	725/820	687/782	80	≥ 1.6		
FG300-4T-450G/500P	450/500	820/860	790/835	90	≥ 1.3		
FG300-4T-500G/560P	500/560	860/950	835/920	100	≥ 1.2		
FG300-4T-560G/630P	560/630	950/1100	920/1050	120	≥ 1.2		

### Applications

Fan pumps, air compressors, wire drawing machines, injection moulding machines, ball mills, machine tools, centrifuges, industrial washing machines and other industries and equipment.





### FG200 Series Mini AC Drives

This product is a product developed on the latest technology platform of Fugong Power, which is a targeted mini AC drive based on the market demand of small power, small volume and easy speed regulation. As a compact AC drive product with small volume and large capacity, it has significant advantages such as high power density, high EMC specification design and high reliability.

#### Power Range

### **Product Characteristics**



#### Power Control

High-performance vector control technology ensures stable operation at low speeds and high torque output.



#### Flexible Functions

Flexible speed command selection, multiple running command giving methods, support for upper computer operation.









0.4kW~5.5kW



#### Simple & Easy To Use

Compact size, support a variety of installation methods, simplify the installation and debugging.



High Reliability Efficient heat dissipation design, comprehensive protection features.

### **Technical Specifications**

	Rated input voltage	200V Voltage Class:single/three-phase 200V ~ 240V; 400V Voltage Class:Three-phase 380V~440V
Power input	Frequency	50Hz/60Hz±5%
	Voltage range	-15% ~ +15%, Voltage out-of-balance rate<3%
	Output voltage	Three phase: $0\%$ -rated input voltage, error < $\pm 3\%$
Power output	Output frequency	0 ~ 600.00Hz (Can be changed by parameter)
	Overload capacity	150% - 60 s
Control	Control mode	SVC、V/F control
characteristics	Starting torque	0.25Hz/150% (SVC)
Carrier frequency		0.5kHz ~ 16kHz
	Analog input	1 way AI, 0 ~ 10V or 0/4 ~ 20mA are selectable
	Digital input	4 way DI, DI4 can be optionally equipped with a high-speed pulse input., $0\sim 50 \text{kHz}$
Input & Output terminals	Analog output	1 way AO, 0 ~ 10V or 0/4 ~ 20mA are selectable
	Digital output	1 way DO, Pull-up voltage range: 5V~24V, Output Current Range: 0~20mA
	Relay output	2 relay output: T1 (normally open and normally closed), T2 (normally open) optional, Contact drive capability: AC250V, 3A; DC30V, 5A
	Altitude	0~2000m. De-rate 1% for every 100m when the altitude is above 1000 meters
	Ambient temperature	-10°C ~50°C , The rated output current should be derated 1% for every 1°C when the ambient is 40°C ~50°C
Environment	Relative humidity	5 ~ 95%, no condensation
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
	Storage temperature	-20°C ~ +60°C

### **Configuration Parameters**

Mode	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit			
	Single phase: 220V, 50/60Hz Range: -15%~+15%								
FG200-2S-0.4GB	0.4	2.3	5.0	0.08	≥ 150				
FG200-2S-0.75GB	0.75	4.0	8.2	0.08	≥ 150				
FG200-2S-1.5GB	1.5	7.0	14	0.1	≥ 100	Inbuilt			
FG200-2S-2.2GB	2.2	9.6	23	0.1	≥ 70				
	Three p	ohase: 220V, 50/	/60Hz Range: -1	5%~+15%	II				
FG200-2T-0.4GB	0.4	2.3	4.0	0.08	≥ 150				
FG200-2T-0.75GB	0.75	4.0	4.8	0.08	≥ 150	Inbuilt			
FG200-2T-1.5GB	1.5	7.0	8.8	0.1	≥ 100	Indult			
FG200-2T-2.2GB	2.2	9.6	12	0.1	≥ 70				
	Three p	hase: 380V, 50	/60Hz Range: -1	5%~+15%					
FG200-4T-0.4GB	0.4	1.5	1.9	0.15	≥ 150				
FG200-4T-0.75GB	0.75	2.5	3.5	0.15	≥ 150				
FG200-4T-1.5GB	1.5	3.8	4.6	0.15	≥ 150	Inbuilt			
FG200-4T-2.2GB	2.2	5.1	6.3	0.3	≥ 100	Induitt			
FG200-4T-4.0GB	4.0	9.5	12.1	0.3	≥ 76				
FG200-4T-5.5GB	5.5	13	16.8	0.4	≥ 76				

### Applications

Transport belts, automated production lines, automatic doors, wood processing, optical grinding, food processing, pharmaceutical centrifuges, logistics equipment, ceramic equipment, sewage treatment, constant pressure water supply, textiles and other small automated machinery.









Industry-

specific

AC drives

### FG310 High Performance Vector Drives



The product is products are compatible with synchronous and asynchronous motor control, and under the premise of high performance and high reliability, reasonable layout of parts and components to achieve a book-style narrow body design. Strengthen the customer ease of use and industry-specialized design, configured with a wealth of expansion interfaces and new expansion accessories, to achieve high performance, high reliability, high power density, high applicability of the characteristics.

Power Range

0.75kW~1000kW

### **Product Characteristics**



High-performance vector general purpose platform, new motor control algorithms.



Comprehensive full series of book-type design, maximize the installation space savings.



Comprehensive expansion interface, rich selection of accessories, covering a variety of applications.



Integration of synchronous and asynchronous drive, open loop and closed loop.

Hardware and software modular design,

powerful expansion capability.



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New air duct design, full range of DC fan cooling, safe and reliable.

### **Technical Specifications**

	Rated input voltage	200V Voltage Class: 400V Voltage Class:		
Power input	Frequency	50Hz/60Hz±5%		
	Voltage range	-15% ~ +15%, Voltage		
	Output voltage	Three-phase: 0%~rate		
Power output	Output frequency	0 ~ 599.00Hz (chang		
	Overload capacity	G type:150% - 60 s, P		
Control	Control mode	SVC、FVC、V/F contro		
characteristics	Starting torque	0.25Hz/150% (SVC)		
Carrier frequency				
	Analog input	2 way AI, 0 ~ 10V or		
	Digital input	5 way DI,DI5 can be		
Input & Output terminals	Analog output	1 way AO,0 ~ 10V or		
	Digital output	1 way DO,Optional h		
	Relay output	1 relay output: T1 (norr AC250V,3A;DC30V		
	Altitude	0~2000m. De-rate 1%		
	Ambient temperature	-10°C ~50°C , The rate 1% for every 1°C when		
Environment	Relative humidity	5~95%, no condensati		
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6		
	Storage temperature	-20°C~ +60°C		





Single/Three-phase 200V ~ 240V; Three-phase 380V ~ 440V

e out-of-balance rate<3%

ted input voltage, error  $< \pm 3\%$ 

geable by parameter)

v type:120% - 60 s

rol

, 0Hz/200% (FVC)

1.0kHz ~ 16kHz

0/4 ~ 20mA are selectable

e equipped with high-speed pulse input as an option., 0~50kHz

or 0/4 ~ 20mA are selectable

high speed pulse output, 0~100kHz

prmally open and normally closed), Contact drive capability: )V, 5A

for every 100m when the altitude is above 1000 meters

ted output current should be derated en the ambient is 40°C ~50°C

tion

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### Three phase:380V ~ 440V

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit	DC reactor	
FG310-4T-0.75GB/1.5PB	0.75/1.5	2.5/3.8	3.5/4.6	0.15	≥ 150			
FG310-4T-1.5GB/2.2PB	1.5/2.2	3.8/5.1	4.6/6.3	0.15	≥ 150			
FG310-4T-2.2GB/4.0PB	2.2/4.0	5.1/9.0	6.3/11.5	0.3	≥ 100			
FG310-4T-4.0GB/5.5PB	4.0/5.5	9.0/13	11.5/16.8	0.3	≥ 76			
FG310-4T-5.5GB/7.5PB	5.5/735	13/17	16.8/22	0.4	≥ 76	Inbuilt	2020	
FG310-4T-7.5GB/11PB	7.5/11	17/25	22/32.5	0.5	≥ 76		none	
FG310-4T-11GB/15PB	11/15	25/32	32.5/41.5	0.8	≥ 40			
FG310-4T-15GB/18.5PB	15/18.5	32/37	41.5/49.6	1.0	≥ 27			
FG310-4T-18.5GB/22PB	18.5/22	37/45	49.6/59	4.0	≥ 27			
FG310-4T-22GB/30PB	22/30	45/60	59/65	4.5	≥ 27			
FG310-4T-30G/37P	30/37	60/75	65/80	6.0	≥ 16			
FG310-4T-37G/45P	37/45	75/91	80/95	7.4	≥ 16			
FG310-4T-45G/55P	45/55	91/112	95/118	9.0	≥ 14			
FG310-4T-55G/75P	55/75	112/150	118/157	11	≥ 10	Inbuilt optional	Inbuilt optional	
FG310-4T-75G/90P	75/90	150/176	157/180	15	≥ 8.0			
FG310-4T-90G/110P	90/110	176/210	180/214	18	≥ 6.8			
FG310-4T-110G/132P	110/132	210/253	214/256	22	≥ 6.8			
FG310-4T-132G/160P	132/160	253/304	240/287	27	≥ 4.5			
FG310-4T-160G/185P	160/185	304/326	287/306	32	≥ 3.6			
FG310-4T-185G/200P	185/200	326/377	306/365	37	≥ 3.3	Externally mounted when needed		
FG310-4T-200G/220P	200/220	377/426	365/410	40	≥ 3.3		Inbuilt	
FG310-4T-220G/250P	220/250	426/465	410/441	44	≥ 2.7			
FG310-4T-250G/280P	250/280	465/520	441/495	50	≥ 2.7			
FG310-4T-280G/315P	280/315	520/585	495/565	56	≥ 2.2			

### **Configuration Parameters**

Single phase: 200V ~ 240V

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit	DC reactor
FG310-2S-0.75GB	0.75	4.0	8.2	0.08	≥ 150		
FG310-2S-1.5GB	1.5	7.0	14	0.1	≥ 100		
FG310-2S-2.2GB	2.2	9.6	23	0.1	≥ 70		
FG310-2S-4.0GB	3.7	16	33	0.2	≥ 40	Inbuilt	none
FG310-2S-5.5GB	5.5	20	40	0.3	≥ 26		
FG310-2S-7.5GB	7.5	30	58	0.5	≥ 16		
FG310-2S-11GB	11	42	84	0.8	≥ 11		
FG310-2S-15G	15	55	110	1.0	≥ 10	Inbuilt	Inbuilt
FG310-2S-18.5G	18.5	70	140	1.4	≥ 8.0	optional	optional

Three phase:200V ~ 240V

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit	DC reactor
FG310-2T-0.75GB	0.75	4.0	4.8	0.08	≥ 150		
FG310-2T-1.5GB	1.5	7.0	8.8	0.1	≥ 100		
FG310-2T-2.2GB	2.2	9.6	12	0.1	≥ 70		
FG310-2T-4.0GB	3.7	16	21	0.2	≥ 40	Inbuilt	none
FG310-2T-5.5GB	5.5	20	26	0.3	≥ 25		
FG310-2T-7.5GB	7.5	30	39	0.5	≥ 16		
FG310-2T-11GB	11	42	55	0.8	≥ 11		
FG310-2T-15G	15	55	60	1.0	≥ 10	Inbuilt	Inbuilt
FG310-2T-18.5G	18.5	70	75	1.4	≥ 8	optional	optional





Industry-

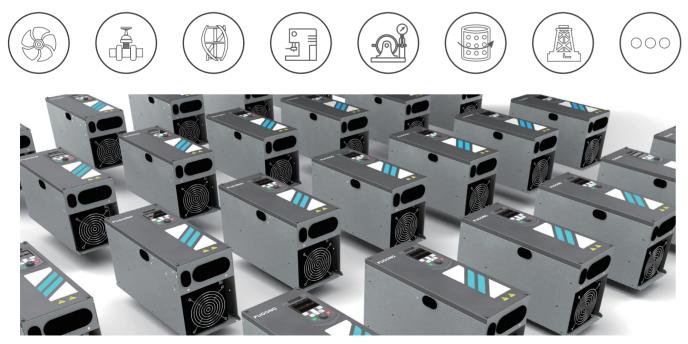
specific

AC drives

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit	DC reactor
FG310-4T-315G/355P	315/355	585/650	565/617	63	≥ 1.9		
FG310-4T-355G/400P	355/400	650/725	617/687	70	≥ 1.7		
FG310-4T-400G/450P	400/450	725/820	687/782	80	≥ 1.6	Externally mounted	الم الم الم
FG310-4T-450G/500P	450/500	820/860	790/835	90	≥ 1.3	when needed	Inbuilt
FG310-4T-500G/560P	500/560	860/950	835/920	100	≥ 1.2		
FG310-4T-560G/630P	560/630	950/1100	920/1050	120	≥ 1.2		
FG310-4T-630G/710P-I	630/710	1100/1260	1050/1198	/	/		
FG310-4T-710G/800P-I	710/800	1260/1500	1198/1426	/	/		C1 1 1
FG310-4T-800G/900P-I	800/900	1500/1620	1426/1539	/	/	1	Standard input reactor
FG310-4T-900G/1000P-I	900/1000	1620/1720	1539/1634	/	/		reactor
FG310-4T-1000P-I	1000	1720	1634	/	/		

### **Applications**

Fans and pumps, air compressors, wire drawing machines, injection moulding machines, ball mills, machine tools, centrifuges, industrial washing machines and other industries and equipment.



### **FG210** Series Economic AC Drives

The products are based on the user's market demand for miniaturization, high reliability and high cost performance. As a book narrow body inverter, FG210 series products have many advantages such as easy installation, small size, low temperature rise, high protection, powerful software performance and so on.

Power Range

### **Product Characteristics**



#### Excellent performance

V/F control, vector control, excellent control performance, adapt to complex operating conditions.



#### Small and Compact

Optimal power density design, effectively minimizing the product volume.

### **Applications**

Transport belts, automated production lines, automatic doors, wood processing, optical grinding, food processing, pharmaceutical centrifuges, logistics equipment, ceramic equipment, sewage treatment, constant pressure water supply, textiles and other small automated machinery.



#### Industryspecific AĊ drives



General

AC drives

0.4kW~22kW

FUGONG



#### Stable and Reliable

High standard EMC design, effectively reduce the external interference, to meet the demand for accurate control.



#### Easy and convenient

Built-in industry professional macro application, support for one-key setup industry parameters; support for external keyboard.

### **Technical Specifications**

	Rated input voltage	200V Voltage Class:single/three-phase 200V ~ 240V; 400V Voltage Class:Three phase 380V~440V
Power input	Frequency	50Hz/60Hz±5%
	Voltage range	-15% ~ +15%, Voltage out-of-balance rate<3%
	Output voltage	Three phase:0%~rated input voltage, error < ±3%
Power output	Output frequency	0 ~ 599.00Hz (Can be changed by parameter)
	Overload capacity	G type:150% - 60 s, P type:120% - 60 s
Control	Control mode	SVC、V/F control
characteristics	Starting torque	0.25Hz/150% (SVC)
Carrier frequency		1.0kHz ~ 16kHz
	Analog input	1 way AI, 0 ~ 10V or 0/4 ~ 20mA are selectable
	Digital input	4 way DI, DI4 can be equipped with high-speed pulse input as an option., $0~50 \text{kHz}$
Input & Output terminals	Analog output	1 way AO, 0 ~ 10V or 0/4 ~ 20mA are selectable
	Digital output	1 way DO, Pull-up voltage range: 5V~24V, Contact drive capability: 0~20mA
	Relay output	2 relay output: T1(normally open and normally closed), T2 (normally open) , Contact drive capability: AC250V, 3A; DC30V, 5A
	Altitude	0~2000m. De-rate 1% for every 100m when the altitude is above 1000 meters
	Ambient temperature	-10°C ~50°C , The rated output current should be derated 1% for every 1°C when the ambient is 40°C ~50°C
Environment	Relative humidity	5~95%, no condensation
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
	Storage temperature	-20°C ~ +60°C

### **Configuration Parameters**

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit	
	Single	phase: 220V, 5	60/60Hz Range	e: -15%~+15%			
FG210-2S-0.4GB	0.4	2.3	5	0.08	≥ 150Ω		
FG210-2S-0.75GB	0.75	4.0	8.2	0.08	≥ 150Ω	1.1.10	
FG210-2S-1.5GB	1.5	7.0	14	0.1	≥ 100Ω	Inbuilt	
FG210-2S-2.2GB	2.2	9.6	23	0.1	≥70Ω		
	Three	phase: 220V, 5	50/60Hz Range	: -15%~+15%			
FG210-2T-0.4GB	0.4	2.3	4.0	0.08	≥ 150		
FG210-2T-0.75GB	0.75	4.0	4.8	0.08	≥ 150	1.1.1.1	
FG210-2T-1.5GB	1.5	7.0	8.8	0.1	≥ 100	Inbuilt	
FG210-2T-2.2GB	2.2	9.6	12	0.1	≥ 70		
	Three	phase: 380V, §	50/60Hz Range	e: -15%~+15%			
FG210-4T-0.4GB/0.75PB	0.4/0.75	1.5/2.2	1.9/3.5	0.15	≥ 150		
FG210-4T-0.75GB/1.5PB	0.75/1.5	2.5/3.8	3.5/4.6	0.15	≥ 150		
FG210-4T-1.5GB/2.2PB	1.5/2.2	3.8/5.1	4.6/6.3	0.15	≥ 150		
FG210-4T-2.2GB/3.0PB	2.2/4	5.1/7.1	6.3/8.6	0.3	≥ 100		
FG210-4T-4.0GB/5.5PB	4.0/5.5	9.5/13	12.1/16.8	0.3	≥ 76		
FG210-4T-5.5GB/7.5PB	5.5/7.5	13/17	16.8/22	0.4	≥ 76	Inbuilt	
FG210-4T-7.5GB/11PB	7.5/11	17/25	22/32.5	0.5	≥ 76		
FG210-4T-11GB/15PB	11/15	25/32	32.5/41.5	0.8	≥ 40		
FG210-4T-15GB/18.5PB	15/18.5	32/37	41.5/49.6	1.0	≥ 27		
FG210-4T-18.5GB/22PB	18.5/22	37/45	49.6/59	4.0	≥ 27		
FG210-4T-22GB/30PB	22/30	45/60	59/65	4.5	≥ 27		







## FS300 Series Intelligent Pump AC Drive

FS300 series intelligent water pump AC Drive, Adopting an advanced integrated design of permanent magnet synchronous and asynchronous, integration of special PID control algorithms, with constant pressure water supply and frequency modulation dual mode of operation, can be flexibly switched to meet the diverse needs. The product body protection level up to IP54, fearless of complex environments, built-in multiple protection mechanisms, stable and reliable operation, to provide a full.

#### • Power Range | Single phase 220V: 0.75 kW ~ 2.2 kW / Three phase 380V: 0.75 kW ~ 22 kW

### **APPLICATIONS**

- Neighborhood Water Supply
- Hotel Water Supply
- Construction Site Water Equipment
- Commercial Building
- Villa Water Supply
- Factory Equipment Boosting
- Municipal Water Supply
- Agricultural Irrigation and Drainage



## Constant Pressure Water Supply All-PRODUCT CHARACTERISTICS Rounder

### Wide Power Range Adaptability, All-Purpose Drive

- 0.75~22kW wide power range, support permanent magnet synchronous and asynchronous motor control, applicable to different types of water pumps.
- Specialized PID control algorithm to meet the needs of water supply, drainage, HVAC and other fields.

#### Water Supply Specialized Functions

- Water supply special function multi-pump intelligent joint control, accurate PID adjustment, efficient master-slave synergy, to ensure stable operation of the pump group.
- Flexible injection, anti-freezing protection, fire override, burst pipe detection, pool level monitoring, dormant mechanism and other rich functions to meet the needs of diversified pumping units.

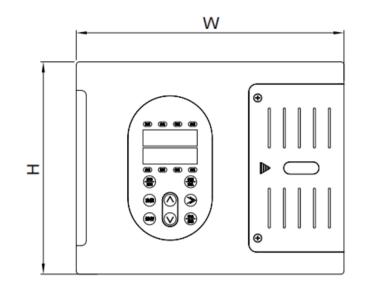
#### Easy to Use, Intelligent Maintenance

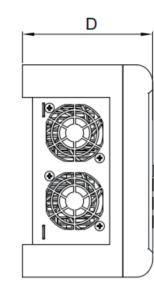
- Backpack fit mounting, small size, light weight, easy to install.
- Support the operation of the upper computer, debugging parameters read with one key, efficient and convenient.
- Equipped with IOT module, it supports remote
- monitoring and management to enhance the efficiency of operation and maintenance.

### Comprehensive Protection, Stable and Carefree

- IP54 high protection level, dustproof and splashproof, applicable to a variety of harsh working environments.
- Multiple protection functions such as high/ low pressure, dry pump, water shortage, water leakage, overload, short circuit, etc. ensure the safe and stable operation of the equipment.

### **DIMENSIONS & CONFIGURATION PARAMETER**





Model	Power rating (kW)	Output current (A)	Input current (A)	External dimension (mm)	Net Weight (Kg)				
Single phase 220V									
FS300-2S-0.75G	0.75	4.0	8.2						
FS300-2S-1.5G	1.5	7.0	14.0	226*189*121	1.8				
FS300-2S-2.2G	2.2	9.6	23.0						
		Three pha	as380V						
FS300-4T-0.75G	0.75	2.5	3.5		1.8				
FS300-4T-1.5G	1.5	3.8	4.6						
FS300-4T-2.2G	2.2	5.1	6.3	226*189*121					
FS300-4T-3.0G	3.0	7.1	9.0						
FS300-4T-4.0G	4.0	9.0	11.5						
FS300-4T-5.5G	5.5	13.0	16.8						
FS300-4T-7.5G	7.5	17.0	22.0	267*212*130	3.2				
FS300-4T-11G	11.0	25.0	32.5						
FS300-4T-15G	15.0	32.0	41.5						
FS300-4T-18.5G	18.5	37.0	49.6	322*276*146	5.3				
FS300-4T-22G	22.0	45.0	59.0						

### **TECHNICAL SPECIFICATIONSONS**

	Rated input voltage	200V Voltage Class: 400V Voltage Class:
Power input	Frequency	50Hz/60Hz
	Voltage rang	-15% ~ +15% ,Voltage
	Output voltage	Three phase: 0%~rate
Power output	Output frequency	0 ~ 600.00Hz, (Can
	Overload capacity	150% - 60s, 180% - 1s
Control	Control mode	SVC、V/F control
characteristics	Starting torque	0.25Hz/150% (SVC)
Carrier frequency		
Input & Output terminals	Input terminals	3 way DI 2 way Al, 0 ~ 10V o
	Output terminals	1 way DO 1 way T1 1 way AO, 0-10V volta
	Communication terminals	1 way 485 communic 1 way CAN communi
	Place of operation	Water supply systems commercial buildings, integrated pump hous
	Altitude	0~2000m. De-rate 1%
Environment	Ambient temperature	-10°C ~50°C , The rate the ambient is 40°C ~
	Relative humidity	1% for every 1°C when
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6
	Storage temperature temperature	-20°C~ +60°C
011	Installation	Backpack, wall-mount
Others	IP grade	IP54





Single phase 200V ~ 240V Three-phase 380V ~ 440V

e out-of-balance rate<3%

ted input voltage, error <  $\pm 3\%$ 

be changed by parameter)

1.0kHz ~ 16kHz

or 0/4 ~ 20mA are selectable.

age or 0/4-20mA are selectable

ication terminal nication terminal

s or automated control systems for residential communities, , agriculture, or factories, installed in factories, basements, or ses outdoors.

6 for every 100m when the altitude is above 1000 meters

ed output current should be derated 1% for every 1°C when ~50°C

en the ambient is 40°C ~50°C

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### **FS200** Series Intelligent Pump AC Drive

FS200 is an efficient and convenient household intelligent water supply helper. Simple and fashionable appearance, compact and lightweight body, support backpack installation; IP54 protection level, adapt to a variety of environments. Integrated small pump frequency control and accurate constant pressure control function, simple operation, stable and reliable performance.

### **APPLICATIONS**

- Domestic Residential Pressurization
- Water purification equipment pressurization
- Solar water heater pressurization
- Circulating water supply system
- Villa water supply
- Micro Irrigation System



#### • Power Range | Single phase 220V: 0.75 kW ~ 2.2 kW

### **PRODUCT CHARACTERISTICS**

#### Precision Constant Pressure, Intelligent Pump Linking

- Precise constant pressure control, automatic adjustment of pump speed, to ensure stable water supply pressure, significantly improve the quality of water supply.
- Equipped with RS485 interface, it supports multi-pump linkage and easily realizes intelligent group control management of small pumps.

### Compact and Lightweight, Intelligent and Convenient

- Small and compact size, supports backpack mounting to save space.
- One-touch pressure setting, easy to use and convenient to control.
- Self-starting on power-up, no manual intervention, efficient and flexible operation.

### Strong adaptability and comprehensive protection

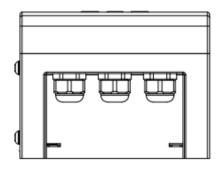
- Wide voltage range for improved device compatibility for demanding grid environments.
- IP54 protection class, dust and splash-proof, adaptable to a variety of environments.
- Multiple protection functions such as high/low pressure, dry pump, water shortage, water leakage, overload, short circuit, etc. ensure the safe and stable operation of the equipment.

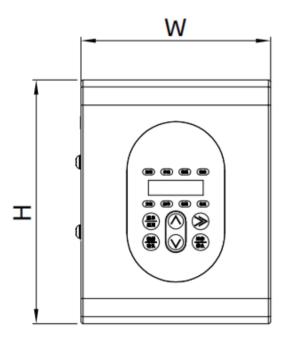


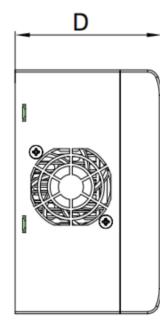




### **DIMENSIONS & CONFIGURATION PARAMETER**







Model	Power rating (kW)	Output current (A)	Input current (A)	External dimension (mm)	Net Weight (Kg)
FS200-2S-0.75G	0.75	4.0	8.2		
FS200-2S-1.5G	1.5	7.0	14.0	136*175*05	1.0
FS200-2S-2.2G	2.2	9.6	23.0		

### **TECHNICAL SPECIFICATIONS**

	Rated input voltage	200V Voltage Class: 400V Voltage Class:
Power input	Frequency	50Hz/60Hz
	Voltage rang	-15% ~ +15% ,Voltage
	Output voltage	Three phase: 0%~rate
Power output	Output frequency	0 ~ 600.00Hz, (Can
	Overload capacity	150% - 60s, 180% - 1s
Control	Control mode	SVC、V/F control
characteristics	Starting torque	0.25Hz/150% (SVC)
Carrier frequency		
	Input terminals	2 way DI 1 way Al, 0 ~ 10V or
Input & Output terminals	Output terminals	1 way AO, 0-10V or
	Communication terminals	1 way 485 communic
	Place of operation	Water supply systems commercial buildings, integrated pump hous
	Altitude	0~2000m. De-rate 1%
Environment	Ambient temperature	-10°C ~50°C , The rate ambient is 40°C ~50°C
	Relative humidity	1% for every 1°C when
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6
	Storage temperature temperature	-20°C ~ +60°C
Othere	Installation	Backpack, wall-mount
Others	IP grade	IP54





Single phase 200V ~ 240V Three-phase 380V ~ 440V

e out-of-balance rate<3%

ated input voltage, error  $< \pm 3\%$ 

n be changed by parameter)

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1.0kHz ~ 16kHz

or 0/4 ~ 20mA are selectable.

0/4-20mA are selectable.

ication terminal

ns or automated control systems for residential communities, s, agriculture, or factories, installed in factories, basements, or uses outdoors.

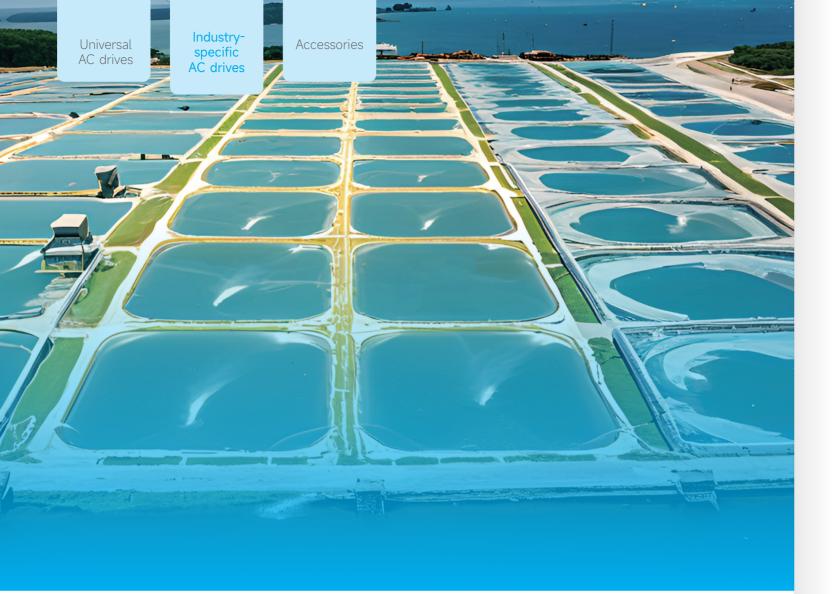
% for every 100m when the altitude is above 1000 meters

ted output current should be derated 1% for every 1°C when the  $^\circ\mathrm{C}$ 

en the ambient is 40°C ~50°C

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Accessories

### **Product Characteristics**



#### Precise control

Algorithm enhancement for precise control of flow and head.



#### Rich energy-saving function

Adopting energy-saving control technology to ensure efficient and energy-saving operation of the motor.



#### Convenient to install and carry

THE lower end in and out of the line design, installation is hassle-free; intimate carrying handle design, more convenient to carry.

### FH300 Series VFD for Outdoor Pumps

This product is specially developed for outdoor water pump application, adopting energysaving, high-efficiency motor control and other advanced technologies. The product adopts high temperature resistant, UV and oxidation resistant plastic casing materials with IP54 protection level for the harsh environment of high temperature, high humidity, high salt and sunshine under long time operation of industrial equipment, and it is equipped with high performance vector control algorithms for permanent magnet synchronous motors and industry-specific logic functions to ensure long term stable operation in outdoor areas.



1.5kW~7.5kW

### **Product Selection List**

Madal	Exter	External dimensions(mm) Installation dimensions (mm)		Output current	Input current		
Model	w	н	D	W1	W2	· (A)	(A)
FH300-4T-1.5G	270	130	151	117	257	3.8	5
FH300-4T-2.2G	270	130	151	117	257	5.1	5.8
FH300-4T-3.0G	270	130	151	117	257	7.1	8.6
FH300-4T-4.0G	270	130	151	117	257	9.0	10.5
FH300-4T-5.5G	270	130	151	117	257	13.6	17.5
FH300-4T-7.5G	270	130	151	117	257	17	22

- 25

Power range

Industryspecific AĊ drives

Universal AC drives

FUGONG



### Enhanced lightning protection design

Special enhanced lightning protection circuit, safety is consolidated again.



### Safety & High Reliability

Safe to use even in harsh environments by adopting long-life design, instantaneous blackout countermeasures, and humidity- and dust-resistant treatments.



#### Remote monitoring

Can be accessed from a remote location via a smartphone and is able to automatically adjust the operating status based on real-time data.



### FG270 Series VFD for Fan & Pump

This product is a special AC drive for fan and pump applications, the whole series adopts book-type structural design, compact structure, powerful and stable performance, and can be applied to sewage treatment, HVAC, chemical industry, metallurgy, electric power and other industries of fan and pump load drive.

Power Range

1.5kW~400kW

### **Product Characteristics**

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#### Compact design

Book-style design for easy installation and a more compact product structure.



**Flexible Configuration** Options for built-in DC reactors and output reactors.



**Energy efficient** Integrated with a brand-new ECO energysaving algorithm to reduce operational costs.



### Easy Debugging

Supports upper computer software for simple and Debugging commissioning.

### **Technical Specifications**

	Rated input voltage	400V Voltage Class:Th
Power input	Frequency	50Hz/60Hz±5%
	Voltage range	-15% ~ +15%, Voltage
	Output voltage	Three-phase:0%~rated
Power output	Output frequency	0 ~ 600.00Hz (Can b
	Overload capacity	120% - 60s
Control	Control mode	SVC、FVC、V/F contro
characteristics	Starting torque	0.25Hz/150% (SVC) ,
Carrier frequency		
	Analog input	2 way Al, 0 ~ 10V or
	Digital input	5 way DI, DI5 can be
Input & Output terminals	Analog output	1 way AO,0 ~ 10V or
	Digital output	1 way DO,Optional hi
	Relay output	1 relay output: T1 (norr AC250V,3A;DC30V
	Altitude	0~2000m. De-rate 1%
	Ambient temperature	-10°C ~50°C , The rate 1% for every 1°C when
Environment	Relative humidity	5~95%, no condensatio
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6
	Storage temperature	-20°C ~ +60°C
	temperature	





hree-phase 380V~440V

e out-of-balance rate<3%

d input voltage, error < ±3%

be changed by parameter)

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, 0Hz/200% (FVC)

0.5kHz ~ 16kHz

0/4 ~ 20mA are selectable

e equipped with high-speed pulse input as an option., 0~50kHz

r 0/4 ~ 20mA are selectable.

nigh speed pulse output, 0~100kHz

mally open and normally closed), Contact drive capability: /, 5A

for every 100m when the altitude is above 1000 meters

ed output current should be derated in the ambient is 40°C ~50°C

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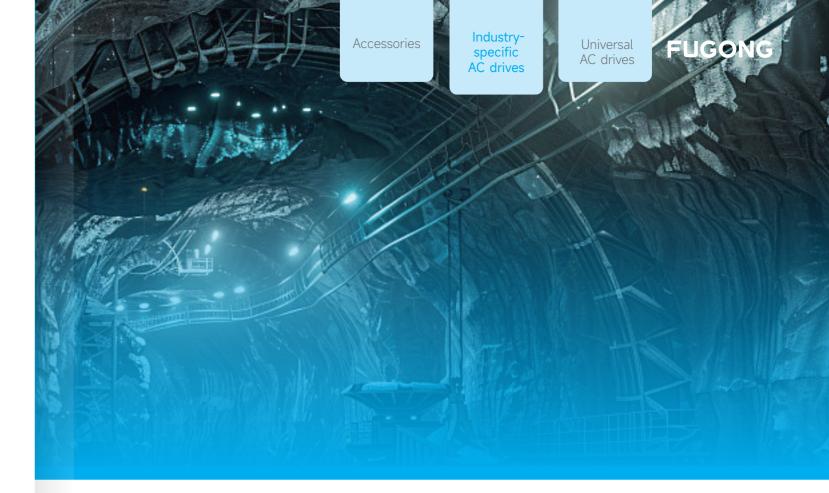
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Universal AC drives

### Configuration parameters

Industry-specific AC drives

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit
FG270-4T-1.5KB	1.5	3.8	4.6	0.15	≥ 150	
FG270-4T-2.2KB	2.2	5.1	6.3	0.15	≥ 150	
FG270-4T-3.7KB	3.7	9.0	11.5	0.3	≥ 100	
FG270-4T-5.5KB	5.5	13	16.8	0.3	≥ 76	
FG270-4T-7.5KB	7.5	17	22	0.4	≥ 76	1.1.1.1.
FG270-4T-11KB	11	25	32.5	0.5	≥ 76	Inbuilt
FG270-4T-15KB	15	32	41.5	0.8	≥ 40	
FG270-4T-18.5KB	18.5	37	49.6	1.0	≥ 27	
FG270-4T-22KB	22	45	59	4.0	≥ 27	
FG270-4T-30KB	30	60	65	4.5	≥ 27	
FG270-4T-37K	37	75	80	6.0	≥ 16	
FG270-4T-45K	45	91	95	7.4	≥ 16	
FG270-4T-55K	55	112	118	9.0	≥ 14	
FG270-4T-75K	75	150	157	11	≥ 10	Inbuilt optiona
FG270-4T-90K	90	176	180	15	≥ 8.0	
FG270-4T-110K	110	210	214	18	≥ 6.8	
FG270-4T-132K	132	253	256	22	≥ 6.8	
FG270-4T-160K	160	304	287	27	≥ 4.5	
FG270-4T-185K	185	326	306	32	≥ 3.6	
FG270-4T-200K	200	377	365	37	≥ 3.3	
FG270-4T-220K	220	426	410	40	≥ 3.3	<b>F</b>
FG270-4T-250K	250	465	441	44	≥ 2.7	Externally mounted when
FG270-4T-280K	280	520	495	50	≥ 2.7	needed
FG270-4T-315K	315	585	565	56	≥ 2.2	
FG270-4T-355K	355	650	617	63	≥ 1.9	
FG270-4T-400K	400	725	687	70	≥ 1.7	





Power Range

### FG300-IP54 High-ingress Protection VFD

This product developed for harsh environments such as high humidity, high dust, high oil pollution, etc. With IP54 protection level, the product supports asynchronous motors and permanent magnet motors. At the same time, it strengthens the reliability and environmental adaptability of the product, as well as the customized and industrialized design, which makes the function more optimized and the application more flexible.

0.75kW~22kW

### **Product Characteristics**



#### **Advanced Protection**

The entire machine has an IP54 protection rating, specifically targeted at applications with high performance and functionality requirements, and high pollution levels.

Industry-

specific

AC drives



### Safe and Reliable

The independent air duct design effectively enhances the protection of the frequency converter, adapting to various complex and harsh on-site environments, and improving product reliability.

### **Configuration parameters**

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit
FG300-4T-0.75GB-IP54	0.75	2.5	3.5	0.15	≥ 150	
FG300-4T-1.5GB-IP54	1.5	3.8	4.6	0.15	≥ 150	
FG300-4T-2.2GB-IP54	2.2	5.1	6.3	0.3	≥ 100	
FG300-4T-3.7GB-IP54	3.7	9.0	11.5	0.3	≥ 76	
FG300-4T-5.5GB-IP54	5.5	13	16.8	0.4	≥ 76	Inbuilt
FG300-4T-7.5GB-IP54	7.5	17	22	0.5	≥ 76	mbuitt
FG300-4T-11GB-IP54	11	25	32.5	0.8	≥ 40	
FG300-4T-15GB-IP54	15	32	41.5	1.0	≥ 27	
FG300-4T-18.5GB-IP54	18.5	37	49.6	4.0	≥ 27	
FG300-4T-22GB-IP54	22	45	59	4.5	≥ 27	

### **Excellent Performance**

Equipped with vector control technology, it achieves precise speed control and high torque output, especially excelling during low-speed operation.



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#### Versatile and Easy to Use

Rich in expansion capabilities, it supports monitoring and commissioning through an upper computer.

### **Technical Specifications**

	Rated input voltage	400V Voltage Class:	
Power input	Frequency	50Hz/60Hz±5%	
	Voltage range	-15% ~ +15%, Voltag	
	Output voltage	Three phase:0%~rated	
Power output	Output frequency	0 ~ 600.00Hz (chan	
	Overload capacity	150% - 60 s	
Control	Control mode	SVC、FVC、V/F contr	
characteristics	Starting torque	0.25Hz/150% (SVC)	
Carrier frequency			
	Analog input	2 way AI, 0 ~ 10V or	
	Digital input	5 way DI,DI5 can be	
Input & Output terminals	Analog output	1 way AO, 0 ~ 10V o	
	Digital output	1 way DO,Optional H	
	Relay output	1 relay output: T1 (nor AC250V,3A;DC30\	
	Altitude	0~2000m. De-rate 1%	
	Ambient temperature	-10°C ~50°C , The rate 1% for every 1°C when	
Environment	Relative humidity	1% for every 1°C when	
	Vibration	Less than5.9 m/s² (0	
	Storage temperature	-20°C~ +60°C	





Three-phase 380V~440V

ge out-of-balance rate<3%

ed input voltage, error < ±3%

ngeable by parameter)

trol

, 0Hz/200% (FVC)

0.5kHz ~ 16kHz

or 0/4 ~ 20mA are selectable

e equipped with high-speed pulse input as an option., 0~50kHz

or 0/4 ~ 20mA are selectable

high speed pulse output, 0~100kHz

prmally open and normally closed), Contact drive capability: DV, 5A

% for every 100m when the altitude is above 1000 meters

ted output current should be derated en the ambient is 40°C ~50°C

en the ambient is 40°C ~50°C

0.6g)



### **FD200** Series VFD for Engraving Machines

The AC drive for engraving machine is a high-performance drive device designed for the spindle system of CNC engraving machine, featuring compact size, high power density, simple operation, stable and reliable operation, and complete protection functions.



0.75kW~15kW

### **Product Characteristics**



#### High frequency accuracy

High frequency up to 1000Hz, frequency control accuracy control within 0.5%, support engraving machine in high-speed state to accurately complete complex processing tasks.



#### Complete protection

Built-in a variety of protection functions to ensure long-term reliable operation of the AC drive; with a fault recording mechanism, easy to maintain later.



#### Communications protocol

Standard RS485 communication interface, with good anti-interference ability, MODBUS RTU protocol, easy to achieve the interconnection of inverter and PLC, industrial control machine and other industrial control equipment.



#### Adaptive control technology

With unique adaptive control technology, automatic current limiting and voltage limiting and under-voltage suppression during operation, ensuring the stability and safety of the engraving machine in different working conditions.

Industryspecific AC drives

Universal AC drives FUGONG



#### Multi-speed operation support

Programmable 16-segment speed operation, each segment of the running time, acceleration and deceleration time, running direction are independently adjustable, according to different processing needs to flexibly adjust the speed, improve production efficiency and processing quality.



#### Highly Reliable

The products are based on a new hardware platform and have passed stringent testing standards for higher reliability.



### Optimised current limiting and frequency reduction processing

In case of high load or overload, the AC drive will automatically perform current limiting and frequency reduction to keep the equipment running stably.



### **Configuration Parameters**

Model	Power rating (kW)	Output current (A)	Input current (A)	Recommended power for brake resistance (kW)	Recommended brake resistance (Ω)	Brake unit
		Single p	phase 220V			
FD200-2S-0.75GB	0.75	4.0	8.2	0.08	≥ 150	
FD200-2S-1.5GB	1.5	7.0	14	0.1	≥ 100	
FD200-2S-2.2GB	2.2	9.6	23	0.1	≥ 70	
FD200-2S-3.0GB	3.0	13	27	0.15	≥ 50	
FD200-2S-4.0GB	4.0	16	33	0.2	≥ 40	Inbuilt
FD200-2S-5.5GB	5.5	20	40	0.3	≥ 26	
FD200-2S-7.5GB	7.5	30	58	0.5	≥ 16	
FD200-2S-9.0GB	9.0	36	72	0.6	≥ 13	
FD200-2S-11GB	11	42	84	0.8	≥ 11	
		Three p	bhase 380V			
FD200-4T-0.75GB	0.75	2.5	3.5	0.15	≥ 150	
FD200-4T-1.5GB	1.5	3.8	4.6	0.15	≥ 150	
FD200-4T-2.2GB	2.2	5.1	6.3	0.3	≥ 100	
FD200-4T-3.0GB	3.0	7.1	8.6	0.3	≥ 100	
FD200-4T-4.0GB	4.0	9.5	12.1	0.3	≥ 76	Inbuilt
FD200-4T-5.5GB	5.5	13	16.8	0.4	≥ 76	Induitt
FD200-4T-7.5GB	7.5	17	22	0.5	≥ 76	
FD200-4T-9.0GB	9.0	20	26	0.6	≥ 60	
FD200-4T-11GB	11	25	32.5	0.8	≥ 40	
FD200-4T-15GB	15	32	41.5	1	≥ 27	

#### Accessories

### **Technical Specifications**

	Rated input voltage	200V Voltage Class: 3 400V Voltage Class:	
Power input	Frequency	50Hz/60Hz±5%	
	Voltage range	-15% ~ +15%, Voltage	
	Output voltage	Three-phase : 0%~ra	
Power output	Output frequency	0 ~ 1000Hz (Can be	
	Overload capacity	150% - 60 s	
Control	Control mode	SVC、V/F control	
characteristics	Starting torque	0.25Hz/150% (SVC)	
Carrier frequency			
	Analog input	1 way AI, 0 ~ 10V or	
	Digital input	4 way DI,DI4 can be	
Input & Output terminals	Analog output	1 way AO, 0 ~ 10V o	
	Digital output	1 way DO,Pull-up vol	
	Relay output	2 relay output: T1(nor drive capability: AC25	
	Altitude	0~2000m. De-rate 1%	
	Ambient temperature	-10°C ~50°C , The rate 1% for every 1°C when	
Environment	Relative humidity	5~95%, no condensati	
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6	
	Storage temperature	-20°C ~ +60°C	





Single phase 200V ~ 240V; Three-phase 380V~440V

ge out-of-balance rate<3%

rated input voltage, error < ±3%

changed by parameter)

1.0kHz ~ 16kHz

0/4 ~ 20mA are selectable

e equipped with high-speed pulse input as an option., 0~50kHz

or 0/4 ~ 20mA are selectable.

oltage range: 5V~24V, Contact drive capability: 0~20mA

formally open and normally closed), T2 (normally open) , Contact 250V, 3A; DC30V, 5A

% for every 100m when the altitude is above 1000 meters

ted output current should be derated en the ambient is 40°C ~50°C

ation

).6g)



### **Product Characteristics**



Intelligent drive All-in-one intelligent drive for the spindle of the opener.



Optimised design Independent air ducts for dusty applications.



#### Flexible

Output frequency range can be selected from 0~600Hz or 0~1200Hz.

### Specification

Project name	
Product Dimension	
Input Voltage	
Control method	
Overload capacity	
Protection class	
HMI	
Main terminals	
Control line terminal	
Motor Parameter Recognition	

## FG300K

## Series All-in-One VFD for Engraving Machines

This product is an all-in-one AC drive specially developed for multi-process CNC openers on the basis of FG300. It adopts high performance spindle motor algorithm and built-in independent motor drive unit.



7.5kW

#### Power Class

Industryspecific AC drives







#### Smooth switching

0 seconds of smooth spindle switching.



#### Open interfaces

Functions and interfaces are fully open, specially made for the opening machine process.



#### Simple and easy to use

4 power cables + 16 motor cables + Upper computer control cable.

#### FG300K Series

387mm\*184mm\*224mm

Three phase 380V

V/F Control

150% Rated current 60s

IP20

Multi-parameter display with two-line LED

1 input terminal (R, S, T), 4 (or 5) output terminals (U, V, W)

4 (or 5) DI control signals, 4 relay signals

Includes static and dynamic identification





### **PV300** Solar Pump Inverter

The PV300 product is specially designed for photovoltaic water pump systems, featuring excellent MPPT technology and a compact, stable structure. It is suitable for a variety of water conservancy applications, providing a green and efficient energy solution.

Power Range	0.75kW~710kW

### **Product Characteristics**



#### MPPT technology

RMON

and mobile APP.

Utilizing top-notch MPPT technology, it achieves high-efficiency photovoltaic power tracking of 99.9%.



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03

#### Powerful protection

Built-in soft-start, over-voltage, overload, under-voltage and weak sunlight protection functions, effectively extending the product life.



### self-adjusting feature

Equipped with a water level detection function for automatic regulation of the water pump.

05

Dry run detection function automatically protects the water pump to prevent motor burnout during operation without water.



One-touch read function



#### Unattended

Capable of automatically switching between photovoltaic DC input and grid AC input, ensuring the water pump operates unattended for 24 hours.



02

Professional upper computer software, debugging parameters read by one key.











### **Technical specifications**

	Voltage	1T: 90V DC ~ 400V DC 2T: 150V DC~ 450V DC 4T: 250V DC ~800V DC/350VDC-800VDC					
Power input	Frequency	50Hz/60Hz±5%					
	Voltage range	-15% ~ +15%, Voltage out-of-balance rate<3%					
	Total Voc range (V) of recommended panels	1T Type:175-380VDC 2T Type:360-430VDC 4T Type:620-750VDC					
	Output voltage	Three-phase:0%~rated input voltage, error < ±3%					
Power output	Output frequency	0 ~ 599.00Hz (Can be changed by parameter)					
	Overload capacity	150% rated current/60s, 180% rated current/10s, 200% rated current/0.5s					
Carrier frequency	1.0kHz ~ 16kHz						
	Analog input	2 way AI, 0 ~ 10V or 0/4 ~ 20mA are selectable					
	Digital input 5 way DI, DI5 can be equipped with high-speed pulse input as an option., 0~50kHz						
Input & Output terminals	Analog output 1 way AO, 0 ~ 10V or 0/4 ~ 20mA are selectable.						
	Digital output	1 way DO, Optional high speed pulse output, 0~100kHz					
	Relay output	1 relay output: T1 (normally open and normally closed),Contact drive capability: AC250V,3A;DC30V,5A					
	Altitude	0~2000m. De-rate 1% for every 100m when the altitude is above 1000 meters					
	Ambient temperature	-10°C ~50°C , The rated output current should be derated 1% for every 1°C when the ambient is 40°C ~50°C					
Environment	Relative humidity	5~95%, no condensation					
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)					
	Storage temperature	-20°C ~ +60°C					

### **Configuration Parameters**

PV300-1TSeries: Input 90-400VDC, 3 Phase 110-230VAC Output, Suitable for AC110V Pumps

Solar Pump Inverter	Pump		Max solar power	Max DC	Recommended	Rated Output	Output
Power (kW)	Rated Power (kW)	Rated Voltage (V)	input (kW)	Input Voltage (V)	Recommended Voc voltage (V)	Current (A)	frequency (Hz)
0.75	0.75	110	1.0	400	175-380	7	0-599.00
1.5	1.5	110	1.95	400	175-380	10.6	0-599.00

#### PV300-2T Series: Input 150-450VDC,3 Phase150-230VAC Output, Suitable forAC220V Pumps

Solar Pump Inverter	Pu	mp	Max solar power	Max DC		Rated Output Current (A)	Output frequency (Hz)
Power (kW)	Rated Power (kW)	Rated Voltage (V)	input (kW)	Input Voltage (V)			
0.75	0.75	220	1.0	450	360-430	4	0-599.00
1.5	1.5	220	1.95	450	360-430	7	0-599.00
2.2	2.2	220	2.86	450	360-430	10.6	0-599.00
4.0	4.0	220	4.81	450	360-430	17	0-599.00

#### PV300-4T Series:Input 250-800VDC, 3 Phase230-460VAC Output ,Suitable for AC380V Pumps

Solar Pump Inverter			Max solar power	Max DC		Rated Output	Output
Power (kW)	Rated Power (kW)	Rated Voltage (V)	input (kW)		Voc voltage (V)	Current (A)	frequency (Hz)
0.75	0.75	380	1.0	800	620-750	2.5	0-599.00
1.5	1.5	380	2.2	800	620-750	3.8	0-599.00
2.2	2.2	380	3.3	800	620-750	5.1	0-599.00
4.0	4.0	380	5.0	800	620-750	10	0-599.00
5.5	5.5	380	8.0	800	620-750	14	0-599.00
7.5	7.5	380	10.0	800	620-750	18	0-599.00
11	11	380	14.3	800	620-750	26	0-599.00



FUGONG

Universal AC drives Industry-

specific AC drives

Solar Pump Inverter	Pu	mp	Max solar power input (kW)	Max DC	Recommended Voc voltage (V)	Rated Output	Output
Power (kW)	Rated Power (kW)	Rated Voltage (V)		Input Voltage (V)			frequency (Hz)
15	15	380	19.5	800	620-750	33	0-599.00
18.5	18.5	380	23.4	800	620-750	38	0-599.00
22	22	380	28.6	800	620-750	46	0-599.00
30	30	380	39.0	800	620-750	61	0-599.00
37	37	380	48.1	800	620-750	76	0-599.00

PV300-4T Series:Input 350-800VDC, 3 Phase230-460VAC Output ,Suitable for AC380V Pumps

Solar Pump Inverter	Pump		Max solar power	Max DC	Recommended	Rated Output	Output
Power (kW)	Rated Power (kW)	Rated Voltage (V)	input (kW)	Input Voltage (V)	Voc voltage (V)	Current (A)	frequency (Hz)
45	45	380	58.5	800	620-750	92	0-599.00
55	55	380	71.5	800	620-750	113	0-599.00
75	75	380	97.5	800	620-750	151	0-599.00
90	90	380	120	800	620-750	177	0-599.00
110	110	380	143	800	620-750	211	0-599.00
132	132	380	171.6	800	620-750	254	0-599.00
160	160	380	208	800	620-750	305	0-599.00
185	185	380	240.5	800	620-750	327	0-599.00
200	200	380	260	800	620-750	378	0-599.00
220	220	380	305	800	620-750	427	0-599.00
250	250	380	335	800	620-750	466	0-599.00
280	280	380	386	800	620-750	521	0-599.00
315	315	380	415	800	620-750	586	0-599.00
355	355	380	466	800	620-750	651	0-599.00
400	400	380	522.5	800	620-750	726	0-599.00
450	450	380	616	800	620-750	821	0-599.00
500	500	380	676	800	620-750	861	0-599.00
560	560	380	726	800	620-750	951	0-599.00
630	630	380	851	800	620-750	1101	0-599.00
710	710	380	959	800	620-750	1261	0-599.00



## Solar Pump Inverter

This product is a mini inverter based on the market demand for small power, small size and easy speed regulation. As a compact inverter product with small volume and large capacity, it has significant advantages such as high power density, high EMC specification design and high reliability.

Power Range

### **Product Characteristics**



Customised PQ curves

Based on the curves, it automatically calculates the parameters of most interest to the user, such as flow rate, daily flow rate, cumulative flow rate, daily power generation and cumulative power generation.



### Intelligent IOT System

IoT data platform, wireless transmission technology (GPRS, Bluetooth or WIFI), intelligent judgement of water and fertiliser demand to achieve smart irrigation.

#### 0.4kW~22kW





### **Technical Specifications**

	Rated input voltage	1T: 90V DC ~ 400V DC 2T: 150V DC~ 450V DC 4T: 250V DC ~800V DC
	Frequency	50Hz/60Hz±5%
Power input	Voltage range	-15% ~ +15%, Voltage out-of-balance rate<3%
	Total Voc range (V) of recommended panels	1T Type:175-380VDC 2T Type:360-430VDC 4T Type:620-750VDC
	Output voltage	3-phase:0%~rated input voltage, error < ±3%
Power output	Output frequency	0 ~ 599.00Hz (Can be changed by parameter)
	Overload capacity	150% rated current/60s, 180% rated current/10s, 200% rated current/0.5s
Carrier frequency		1.0kHz ~ 16kHz
	Analog input	1 way AI, 0 ~ 10V or 0/4 ~ 20mA are selectable
	Digital input	4 way DI, DI4 can be equipped with high-speed pulse input as an option, $0\sim 50 \text{kHz}$
Input & Output terminals	Analog output	1 way AO, 0 ~ 10V or 0/4 ~ 20mA are selectable
	Digital output	1 way DO, Pull-up voltage range: 5V~24V, Output Current Range: 0~20mA
	Relay output	2 relay output: T1(normally open and normally closed), T2 (normally open) , Contact drive capability: AC250V, 3A; DC30V, 5A
	Altitude	0~2000m. De-rate 1% for every 100m when the altitude is above 1000 meters
	Ambient temperature	-10°C ~50°C , The rated output current should be derated 1% for every 1°C when the ambient is 40°C ~50°C
Environment	Relative humidity	5~95%, no condensation
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
	Storage temperature	-20°C ~ +60°C

### **Configuration Parameters**

PV200-1T Series:Input 90-400VDC, 3 Phase 110-230VAC Output,Suitable for AC110V Pumps

Solar Pump Inverter	Pump		Max solar power	nower Max DC		Rated Output		
Power (kW)	Rated Power (kW)	Rated Voltage (V)	input (kW)	put input voltage voc	Voc voltage (V)	Current (A)	frequency (Hz)	
0.75	0.75	110	1.0	400	175-380	7.0	0-599.00	
1.5	1.5	110	1.95	400	175-380	9.6	0-599.00	

#### PV200-2T Series: Input 150-450VDC,3 Phase150-230VAC Output, Suitable forAC220V Pumps

Solar Pump Inverter			Max solar power	Max DC	Recommended			
Power (kW)	Rated Power (kW)	Rated Voltage (V)	input (kW)	Input Voltage (V)	Voc voltage (V)	Current (A)	frequency (Hz)	
0.4	0.4	220	0.55	450	360-430	2.3	0-599.00	
0.75	0.75	220	1.0	450	360-430	4.0	0-599.00	
1.5	1.5	220	1.95	450	360-430	7.0	0-599.00	
2.2	2.2	220	2.86	450	360-430	9.6	0-599.00	

### PV200-4T Series:Input 250-800VDC, 3 Phase230-460VAC Output ,Suitable for AC380V Pumps

Solar Pump Inverter	Pu	Pump		Max DC	Recommended		Output
Power (kW)	Rated Power (kW)	Rated Voltage (V)	Voltage (kW) (V)	Input Voltage (V)	Voc voltage (V)	Current (A)	frequency (Hz)
0.4	0.4	380	0.6	800	620-750	1.5	0-599.00
0.75	0.75	380	1.0	800	620-750	2.5	0-599.00
1.5	1.5	380	2.2	800	620-750	3.8	0-599.00





Universal Inverter

Optional Accessories

Sector-

specific

inverter

Solar Pump Inverter	Pu	Pump		Max DC	Recommended		Output frequency	
Power (kW)	Rated Power (kW)	Rated Voltage (V)	power input (kW)	Input Voltage Voc voltage (V) (V)				
2.2	2.2	380	3.3	800	620-750	5.1	0-599.00	
4.0	4.0	380	5.0	800	620-750	9.5	0-599.00	
5.5	5.5	380	8.0	800	620-750	13	0-599.00	
7.5	7.5	380	10.0	800	620-750	17	0-599.00	
11	11	380	14.3	800	620-750	25	0-599.00	
15	15	380	19.5	800	620-750	32	0-599.00	
18.5	18.5	380	23.4	800	620-750	37	0-599.00	
22	22	380	28.6	800	620-750	45	0-599.00	





## Series VFD for Constant Pressure Water Supply

The FG300B series constant pressure water supply dedicated VFD employs advanced algorithms to ensure stable water pressure without fluctuations. It features multi-pump control that automatically adjusts according to water demand, resulting in significant energy savings. The comprehensive protection functions prevent pump overload and overpressure. The simple and intuitive operation interface facilitates easy debugging and monitoring. It is widely used in residential communities, hotels, and other similar venues.

Power Range

### **CONFIGURATION PARAMETERS**

Input Voltage	Three phase 380V	Control method	Vector Control
Overload capability	150% of rated current 60 s	Protection level	IP20
Human-computer interface (HMI)	Water pressure real-time display	Main terminal	1 input terminal (R, S, T), 1 output terminal (U, V, W)
Control wire terminal	4 (or 5) DI control signals, 1 relay signal	Motor Parameter Recognition	Includes static and dynamic identification

## Industry-specific AC drives

45kW~75kW

#### DIMENSIONS : 411\*562\*271mm

General AC drives		Industry- specific AC drives		Accesso
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				Applicabl	le Models	
Model	Appearances	Instructions	FG300	FG310	FG270	FG300 IP54
IO Expansior	n Card					
PD310I01		1 analog input (AI3) PT100/PT1000/KTY84 temperature detection 1 analog output (AO2) 4 digital inputs (DI6-DI9) 1 digital output (DO2) 2 relay outputs (T2, T3) Note: Cannot be used at the same time as the communication card		•		
PD310IO2		1 analog input (Al3) PT100/PT1000/KTY84 temperature detection 1 analog output (AO2) 4 digital inputs (DI6-DI9) 1 digital output (DO2) 2 relay outputs (T2, T3) Note: Cannot be used at the same time as PG card		•		
FG300IO1		CANopen communication PT100 temperature detection 4 digital input (DI6-DI9) 1 digital output (DO2) 1 normally open relay output (T2)	•		•	•
FG300IO2		CANopen communication 1 digital output (DO2) 1 normally open relay output (T2)	•		•	•
FG3001O3		CANopen communication 1 analog output (AO2) 4 digital inputs (DI6-DI9) 1 digital output (DO2) 1 normally open relay output (T2)	•		•	•
FG300IO4		1 normally open relay output(T2)	•		•	•
FG300IO5		2 normally open relay outputs(T2、 T3)	•		•	•

				Applicab	le Models	
Model	Appearances	Instructions	FG300	FG310	FG270	FG300 IP54
PG Expansior	n Card					
PD310PG1-TTL		1:1 split frequency output (open collector)		•		
PD310PG1-HTL		Incremental Encoder (24V) 1:1 split frequency output (open collector)		•		
PD310PG2		Encoder power supply 5V or 8V Sine Cosine Encoder Sine-cosine with absolute encoder		•		
PD310PG3		Rotary transformer (ratio 0.5)		•		
FG300PG1		Incremental Encoders (5V/12V)	•		•	•
FG300PG2		CANopen communication Incremental encode (5V/12V) 1 analog output (AO2) 1 digital input (DI6) 1 normally open relay output (T2)	•		•	•
FG300PG3		CANopen communication Incremental encoder (5V) Crossover outputs (differential, push- pull, open collector outputs supported)	•		•	•





General AC drives		Industry- specific AC drives		Accessorie
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				Applicabl	le Models	
Model	Appearances	Instructions	FG300	FG310	FG270	FG300 IP54
FG300PG4		CANopen communication Rotary Transformer PT100/PT1000 temperature detection 1 digital input (DI6) 1 analog output (AO2) 1 normally open relay output (T2)	•		•	•
Communicat	ion Expansion Card	I				
PD310PN1		Profinet communication		•		
PD310DP1		Profibus-DP communication		•		
PD310EN1		MODBUS TCP communication		•		
PD350EC1		EtherCAT communication		•		
PD350CAN1		CANopen communication		•		

Model	Appearances	Instructions	Applicable Models			
			FG300	FG310	FG270	FG300 IP54
Keyboard Ac	cessories					
PD210KEY2	MINING CONTRACTOR	Single display Keyboard		•		
FG300KEY5		LCD Keyboard		•		
FG300KEY2		Dual Display Keyboard	•		•	•
PD310KEY7		Dual Display Keyboard		•		
Keyboard Tray		1	•	•	•	•





Due to the continuous upgrading of our company's products, if there are any changes in the content, we will not notify separately.

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