Goodrive300 Series

High Performance Vector Control Inverter

Innovation, Value, Teamwork



invt

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Industrial Automation: ■Frequency Inverter ■Servo & Motion Control ■Motor & Electric Spindle ■PLC ■HMI ■Intelligent Elevator Control System ■Traction Drive

Electric Power: ■SVG ■Solar Inverter ■UPS ■Online Energy Management System

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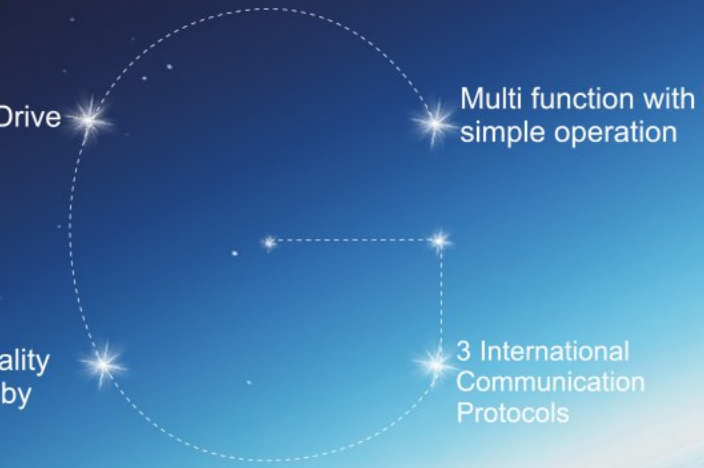
Brief introduction of Goodrive300 inverter

Goodrive300 series inverters are high performance open loop vector inverters for controlling asynchronous AC induction motors and permanent magnet synchronous motors. Applying the most advanced sensorless vector control technology which keeps pace with the leading international technology and DSP control system, the product enhances its reliability to meet the requirement of environment adaptability, customized and industrialized design with more optimized functions, more flexible application and more stable performance.

Ratings

3AC 380V：1.5kW~500kW
3AC 660V：22kW~630kW

Advantages



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Combined Drive



1.Compatible with multiple motors

Vector drive for asynchronous AC induction motors and permanent magnet synchronous motors. Reduce the inventory effectively without considering the motor compatibility.



Remarks:
1.The traditional permanent magnet synchronous motor includes SPM and IPM.
2.The variable frequency motor includes high speed spindle.

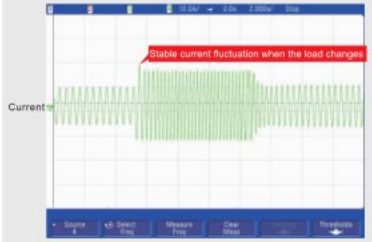
2.More Accurate Motor Autotuning

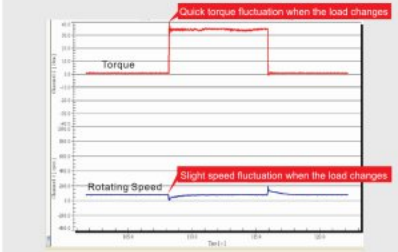
Correct rotating and static motor autotuning.
Convenient debugging,easy operation.

Rotating Autotuning	Static Autotuning
De-couple from the load Applied to the situation with high control accuracy	No need to de-couple from the load Applied when rotating autotuning is not available

3.Optimized SVPWM Control

The current, torque and rotating speed waveforms when sudden loading or unloading in asynchronous motor SVPWM control mode with 2Hz running frequency and full load.





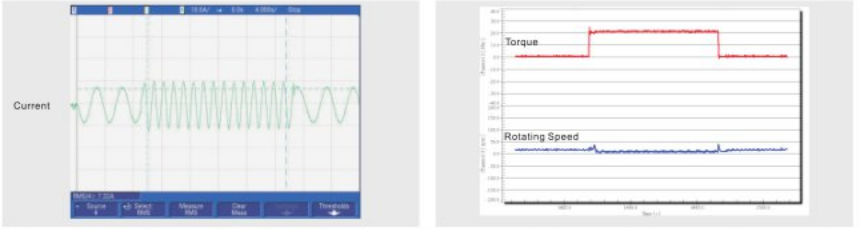
4. Advanced Open Loop Vector Control

(1)Asynchronous Motor

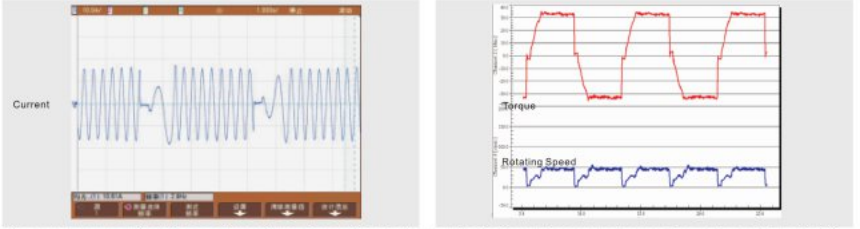
Starting Torque	Dynamic Response	Speed Ratio	Steady Speed Accuracy
0.25Hz/150% of rated torque	<20ms	1：200	±0.2%

(2) Synchronous Motor

Starting Torque	Dynamic Response	Speed Ratio
2.5Hz/150%of rated torque	<40ms	1：20

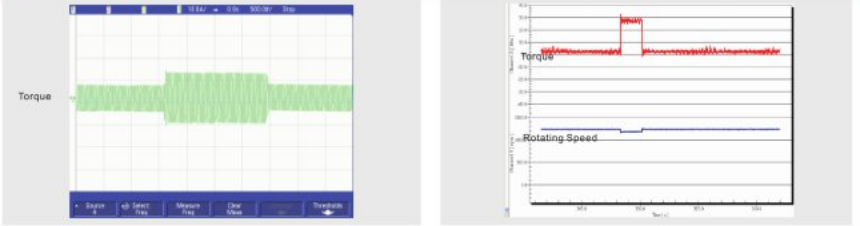


The current, torque and rotating speed waveforms when sudden loading or unloading in asynchronous motor open loop vector control mode with 0.25Hz running frequency and full load.

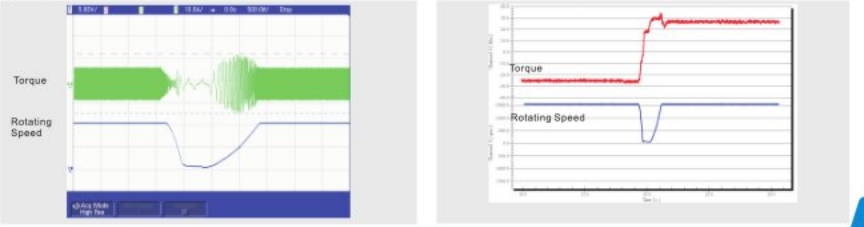


The current, torque and rotating speed waveforms when sudden loading or unloading in synchronous motor open loop vector control mode with 3Hz running frequency and full load.

5.Torque Control Mode(open loop)



The current, torque and rotating speed waveforms when sudden loading or unloading in asynchronous motor torque control mode with full load.

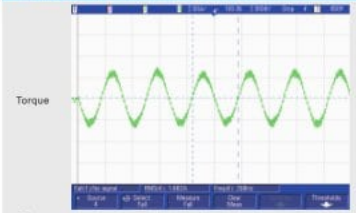


The FWD/REV current, torque and rotating speed waveforms in synchronous motor torque control mode with 100Hz running frequency and full load.

6. More smoother and more quietter running by applying advanced 3-phase modulation



7. Excellent performance on specific motors such as High speed spindle, Direct-control motor



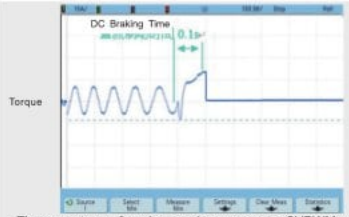
The current waveforms in synchronous motor open loop vector control mode with 300Hz running frequency and full load.

8. Perfect voltage and current control, reducing the fault protection times

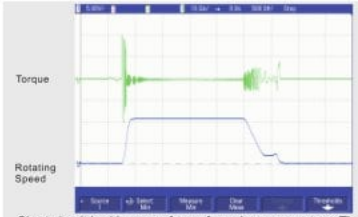
OV Fault	OC Fault
Adjust the output frequency to avoid overvoltage of the DC bus during deceleration	Adjust the output frequency to avoid overcurrent of the inverter during acceleration

9. Multiple braking modes and instant stopping

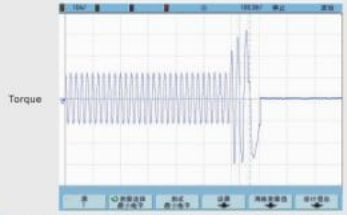
Dynamic Braking	DC Braking	Flux Braking	Short Braking
Configure braking units and resistors	No need to configure braking units and resistors	No need to configure braking units and resistors	No need to configure braking units and resistors: quick braking
Available on the situation of big inertia load and frequent braking	Available on the situation when start the running motor after braking and the situation when keep the moment output after braking to zero speed	Available on the instant stopping situation with big inertia load and no frequent braking	Only available on quick braking of PM motor
Big braking torque and quick braking	Not available on the situation of big inertia load or instant stopping braking in high speed running	Not available on the situation of big inertia load and frequent and braking(the energy consumed on the stator and its cooling is better than DC braking)	The energy consumed on the stator and its cooling is better than DC braking



The current waveform in asynchronous motor SVPWM control mode with 100% braking current when the starting frequency is 10Hz and the braking time is 0.1s.

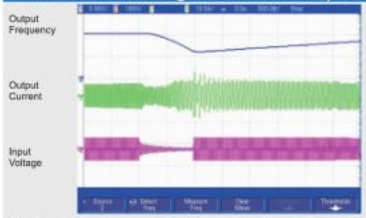


Short circuit braking waveform of synchronous motors. The acceleration time is 0.1s and the deceleration time is 0.4s(rated frequency:100Hz,braking frequency:20Hz,braking time:0.5s)



Flux braking current waveform when the running frequency is 50Hz, deceleration time is 0.1s with full load in asynchronous motor SVPWM control mode

10.Continuous running in instantaneous power off



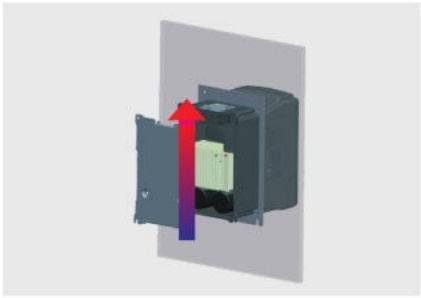
The inverter can keep running if the grid voltage drops and used in the situation with high requirement such as fiberic and textile production line.

Multi–function with simple operation



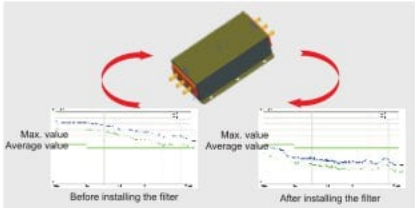
1. Separate Air-duct

The separate air duct prevents the contaminants into the electronic parts/components and greatly improves the protective effect of the inverter, as well as its reliability and service life, to adapt various complicated site environments. It can also facilitate the heat-releasing in control cabinets and the heat-releasing design of the customer.



3. C3 input filters (standard for 380V inverters) and C2 filters(optional for 380V inverters)

For 380V inverters, C3 input filter is embedded in the factory to meet different application requirements, save installation space and avoid the electromagnetic interference caused by incorrect selection and site installation.



Conductive interference test of the power supply terminals

Remarks:
(1)C2 filter: EMC performance of the inverter achieves the limited usage requirement in civil environment.
(2)C3 filter: EMC performance of the inverter achieves the limited usage requirement in industrial environment.

2. Multiple Installation Modes

Wall, flange and floor installation



4. Book Structure

Parallel installation
Little installation space with less cost and beautiful appearance.



5. The rivet design ensures reliable integration connection

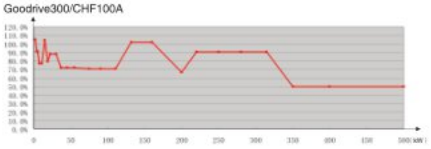
Greener
Stronger corrosion-resistance

Proper grounding
Excellent EMC performance



6. Smaller Size

Due to the thermal simulation and advanced modularized design, the size of our product is reduced greatly. The width ratio between Goodrive300 and CHF100A is shown in the figure below (the Max. percentage is 50%)



7. Various external interfaces and swappable terminal board convenient for replacement and maintenance



Terminals	Quantity	Features
ON–OFF input	8 channels	1KHz NPN and PNP
High speed pulse input	1 channel	50KHz NPN and PNP
Analog input	3 channels	0–10V, 0–20mA,–10V–+10V
ON–OFF output	1 channel	Max. output frequentcy:1KHz
High speed puls output	1 channel	Max. output frequentcy:50KHz
Analog output	2 channels	0–10V, 0–20MA
Relay output	2 channels	3A/250DAC, 1A/30VDC, NO+NC

8. High Performance Keypad

The standard LED keypad supports parameters loading and unloading with Max. length of 200m and digital potentiometer. The optional external LCD keypad supports parameters loading and unloading with displaying 10 lines and 10 rows of Chinese characters and several languages



Standard LED Keypad



Optional LCD Keypad

9. Embedded braking units of 1.5-30kW inverters

Reduce the occupied space and dynamic braking is available if install corresponding braking resistors.



Note: Only for 380V inverters.

10. Supporting common DC bus

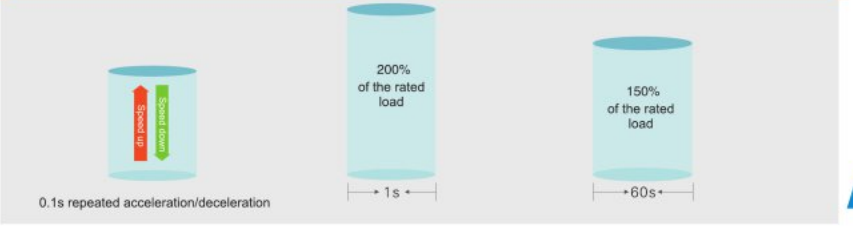
Reduce the power lost on DBR
Note the impact current and the capacity of the input AC system



11. Available on DC power supply



12. Heavy-load Design



13. Various Application Function

Function	Effect
V-f separation setting	Meet the requirement of different power supplied and realize flexible setting to V/F curves
Two sets of motor parameters	Different motors can use the same inverter, reducing the cost, shifting between two motors making electrical control more convenient
Virtual terminal function	Make the middle variables as the local virtual I/O quantity, save the hardware configuration
Speed Tracking	Available on asynchronous motor and permanent magnet synchronous motor and the situation of big inertia load, reversal rotating during starting and continuous frequent shifting
Delay ON/OFF signal, high speed pulse and relay	Provide more programmable and control modes
Energy Displaying	Display the total consumed energy. No need to use the power meter
Stopping Delay	Ensure the motor is under control and stops safely

Reliable quality certificated by TÜV SÜD

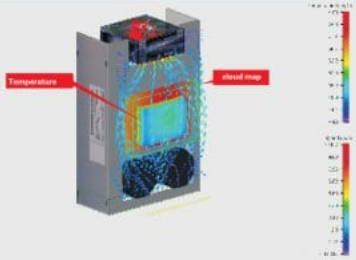


1.The product design follows IEC national standards and passes the CE test of international authority TÜV SÜD, INVT is the unique manufacturer having TÜV-MARK marks in Chinese industrial control field



Remarks: 1.Each Goodrive300 inverter has past the test certification.Only the inverters of 380V has passed CE certification and the inverters of 660V has no CE certification.
2.Visit http://www.tuev-sued.de/industry_and_consumer_products/certificates for the TUV certifications.

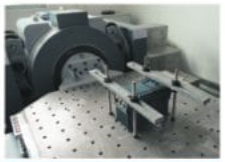
2. Advanced thermal technology makes exact thermal design



3. Perfect and reliable test system ensure products adapt complicated site environments and INVT is the only manufacturer achieved ACT certificate of TÜV SÜD

Experiment Type	Experiment Name	Classification
Mechanical Reliability Experiments	Packaging Experiments	Package compression experiments
		Package Resonance imaging and storage test
		Package random vibration test
		Package dropping test
		Package rolling test
		Package dumping test
		Package inclined impact test
	Impact Test	Half-sine shock test(working and non-working state)
		Trapezoidal wave impulse test(non-working state)
	Vibration Test	Sinusoidal vibration test(working state)
		Random vibration test(working and non-working state)
Climatic Environmental Reliability Test	Temperature Experiment	Low temperature storage test
		High temperature storage test
		Low temperature experiments
		High temperature experiments
		Temperature gradient experiments
		Temperature impact test
	Thermal Test	Constant thermal test
		Alternation thermal test
	Salt Spray Test	Constant salt spray test
		Alternation salt spray test
	Low Air Pressure Test	Low temperature and low pressure test
		High temperature and low pressure test

Remarks :
The full name of ACT is Acceptance of Client's Testing, which means the German TÜV SÜD admit the technology level of the lab and accept their separate testing data and test reports officially.



Electric Vibration System



Low Pressure Test Chamber
Constant temperature and humidity test chamber



Natural Convection Test Chamber
Thermal Shock Test Chamber

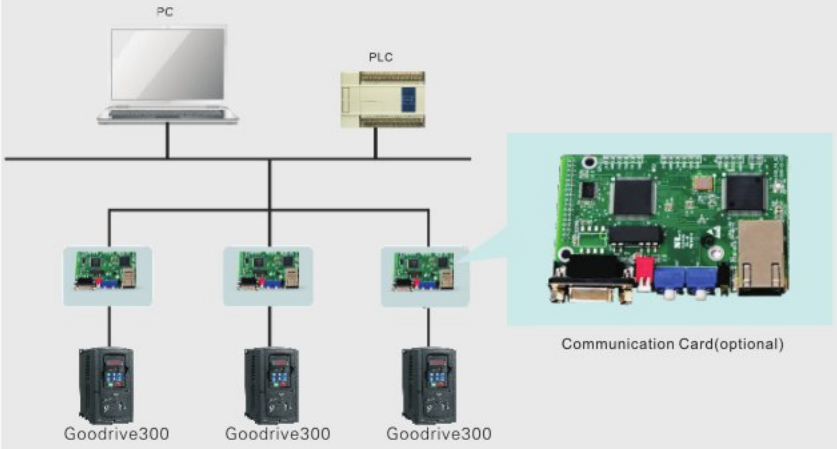
3 International Communication Protocals



1. Various communication modes: MODBUS communication (standard), PROFIBUS+Ethernet and CANopen+Ethernet communication (optional)

Following functions are available through communication cards:

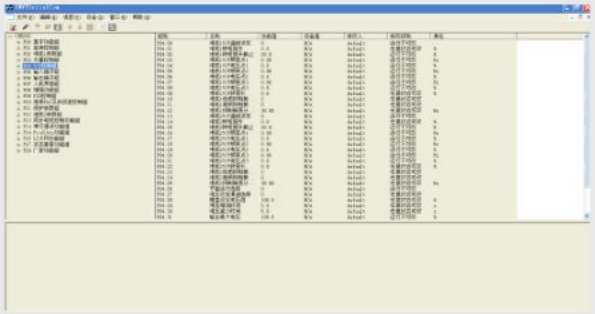
- Send control commands(starting, stopping and fault reset) to the inverter
- Send speed or torque reference signal to the inverter
- Read the state and actual value from the inverter
- Modify the parameters of the inverter

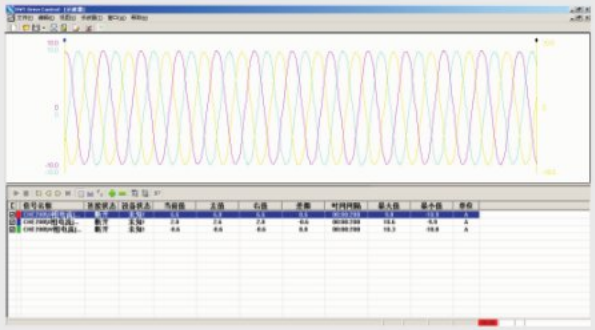


2. PC Software

The software carries out tracking and fault location with the function of oscilloscope, making more convenient debugging and programming and facilltaion the current monitoring, back analysis and engineering management.







Applications

Goodrive300 Applications



Permanent Magnet Synchronous Motor
Screw oil pumps, water pumps, compressors, hoisting, chemical fabric devices, plastic machinery, wood processing machinery and machine tools and so on



Mine
Belt conveyors, air compressors, crushers, ball mills, centrifugal dehydrators and so on



Machines Tools
Lathes, wood processing machinery, drilling machines, grinding machines, milling machines and air compressors and so on



Textile
Carding machines, drawing machines, roving machines, ring spinning and winding machines, warping machines, circle machines, warp knitting machines, dyeing and finishing machines, shuttleless loom machines, non-woven production lines and draw texturing machines, industrial washing machines and so on



Oil
Oil pumps, water injection pumps, compressors and so on



Other Machineries
Hoisting, chemical, industrial, metal processing, EPS and constructive machines and so on

Technical Specifications

Functions		Specifications	
Power input	Input voltage(V)	Voltage degree Un=380V	Voltage degree Un=660V
	Input frequency(Hz)	50Hz/60Hz Allowed range:47 ~ 63Hz	
Power output	Output voltage(V)	0~input voltage	
	Output frequency(Hz)	Standard:0 ~ 400Hz;(380V Goodrive300 special inverters for medium-frequency:0 ~ 3200Hz)	
Technical control feature	Control mode	SVPWM and SVC	
	Motor type	Asynchronous and permanent magnet synchronous motors	
	Speed ratio	Asynchronous motor 1:200 (SVC) synchronous motor 1:20 (SVC)	
	Speed control accuracy	± 0.2% (SVC)	
	Speed fluctuation	± 0.3%(SVC)	
	Torque response	<20ms(SVC)	
	Torque control accuracy	10%(SVC)	
	Starting torquee	Asynchronous motor: 0.25Hz/150%(SVC) Synchronous motor: 2.5 Hz/150%(SVC)	
	Overload capability	150% of rated current: 1 minute 180% of rated current: 10 seconds 200% of rated current: 1 second	
Running control feature	Frequency setting	Digital setting, analog setting, pulse frequency setting, multi-step speed running setting, simple PLC setting, PID setting, MODBUS communication setting, PROFIBUS communication setting and CANopen communication setting. Switch between the combination and single setting channel.	
	Auto-adjustment of the voltage	Keep constant voltage automatically when the grid voltage transients	
	Fault protection	Provide more than 30 fault protection functions: overcurrent, overvoltage, undervoltage, overheating, phase loss and overload, etc.	
	Restart after rotating speed tracking	Smooth starting of the rotating motor	

Technical Specifications

Functions		Specifications
Peripheral interface	Terminal analog input resolution	<20mV
	Terminal switch input resolution	<2ms
	Analog Input	2 (AI1, AI2) 0~10V/0~20mA and 1 (AI3) -10~10V
	Analog output	2 (AO1, AO2) 0~10V /0~20mA
	Digital input	8 common inputs, the Max. frequency: 1kHz, 1 high speed input, the Max. frequency: 50kHz
	Digital output	1 high speed pulse output, the Max. frequency: 50kHz; 1 Y terminal open collector output
	Relay output	2 programmable relay outputs RO1A NO, RO1B NC, RO1C common terminal RO2A NO, RO2B NC, RO2C common terminal Contactor capability: 3A/AC250V,1A/DC30V
Others	Mountable method	Wall, flange and floor mountable
	Temperature of the running environment	-10~50℃derate above 40℃
	Protective degree	Ip20
	Cooling	Air-cooling
	Brake unit	Built-in for inverters of 380V(≤30kW) External for others
	Braking resistor	Optional
	EMC filter	Built-in C3 filter: meet the degree requirement of IEC61800-3 C3 External filter: meet the degree requirement of IEC61800-3 C2

Power Ratings

Model	Rated output power(kW)	Rated input power (A)	Rated output power (A)
U_N=380V			
GD300-1R5G-4	1.5	5.0	3.7
GD300-2R2G-4	2.2	5.8	5
GD300-004G-4	4	13.5	9.5
GD300-5R5G-4	5.5	19.5	14
GD300-7R5G-4	7.5	25	18.5
GD300-011G-4	11	32	25
GD300-015G-4	15	40	32
GD300-018G-4	18.5	47	38
GD300-022G-4	22	56	45
GD300-030G-4	30	70	60
GD300-037G-4	37	80	75
GD300-045G-4	45	94	92
GD300-055G-4	55	128	115
GD300-075G-4	75	160	150
GD300-090G-4	90	190	180
GD300-110G-4	110	225	215
GD300-132G-4	132	265	260
GD300-160G-4	160	310	305
GD300-200G-4	200	385	380
GD300-220G-4	220	430	425
GD300-250G-4	250	485	480
GD300-280G-4	280	545	530
GD300-315G-4	315	610	600
GD300-350G-4	350	625	650
GD300-400G-4	400	715	720
GD300-500G-4	500	890	860

Model	Rated output power(kW)	Rated input power (A)	Rated output power (A)
U_N=660V			
GD300-022G-6	22	35	27
GD300-030G-6	30	40	35
GD300-037G-6	37	47	45
GD300-045G-6	45	52	52
GD300-055G-6	55	65	62
GD300-075G-6	75	85	86
GD300-090G-6	90	95	98
GD300-110G-6	110	118	120
GD300-132G-6	132	145	150
GD300-160G-6	160	165	175
GD300-185G-6	185	190	200
GD300-200G-6	200	210	220
GD300-220G-6	220	230	240
GD300-250G-6	250	255	270
GD300-280G-6	280	286	300
GD300-315G-6	315	334	350
GD300-350G-6	350	360	380
GD300-400G-6	400	411	430
GD300-500G-6	500	518	540
GD300-560G-6	560	578	600
GD300-630G-6	630	655	680

Remarks:

(1)The input current of the inverter 380V 1.5～315kW is tested when the input voltage is 380V and there is no DC reactor and output/input reactor.
(2)The output current of the inverter 380V 350～500kW is tested when the input voltage is 380V and there is input reactor.
(3)Rated output current of 380V inverters is defined when the rated output voltage is 380V.
(4)The input current of the inverter 660V 22～350kW is tested when the input voltage is 660V and there is no DC reactor and output/input reactor.
(5)The output current of the inverter 660V 400～630kW is tested when the input voltage is 660V and there is input reactor.
(6)Rated output current of 660V inverters is defined when the rated output voltage is 380V.

Dimensions (unit: mm)

Installation size

Installation size for wall installation

Inverter model	W1	W2	H1	H2	D1	Installation hole
380V voltage degree						
1.5kW~2.2kW	126	115	193	175	174.5	5
4kW~5.5kW	146	131	263	243.5	181	6
7.5kW~11kW	170	151	331.5	303.5	216	6
15kW~18.5kW	230	210	342	311	216	6
22kW~30kW	255	237	407	384	245	7
37kW~55kW	270	130	555	540	325	7
75kW~110kW	325	200	680	661	365	9.5
132kW~200kW	500	180	870	850	360	11
220kW~315kW	680	230	960	926	380	13
660V voltage degree						
22kW~45kW	270	130	555	540	325	7
55kW~132kW	325	200	680	661	365	9.5
160kW~220kW	500	180	870	850	360	11
250kW~350kW	680	230	960	926	380	13

Installation size for flange installation

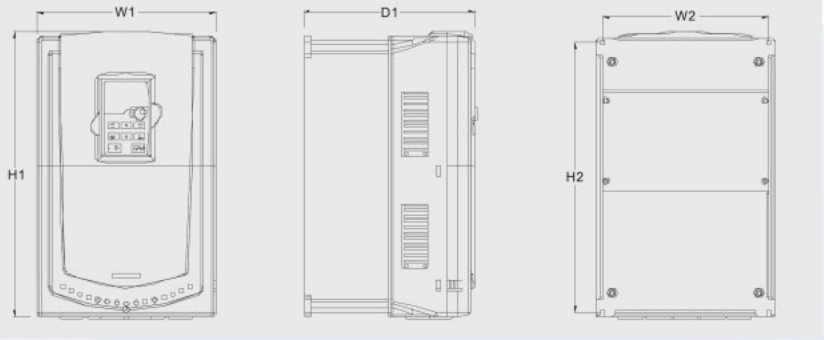
Inverter model	W1	W2	W3	W4	H1	H2	H3	H4	D1	D2	Installation hole
380V voltage degree											
1.5kW~2.2kW	150	115	130	7.5	234	220	190	16.5	174.5	65.5	5
4kW~5.5kW	170	131	150	9.5	292	276	260	10	181	79.5	6
7.5kW~11kW	191	151	174	11.5	370	351	324	15	216.2	113	6
15kW~18.5kW	250	210	234	12	375	356	334	10	216	108	6
22kW~30kW	275	237	259	11	445	426	404	10	245	119	7
37kW~55kW	270	130	261	65.5	555	540	516	17	325	167	7
75kW~110kW	325	200	317	58.5	680	661	626	23	363	182	9.5
132kW~200kW	500	180	480	60	870	850	796	37	358	178.5	11
660V voltage degree											
22kW~45kW	270	130	261	65.5	555	540	516	17	325	167	7
55kW~132kW	325	200	317	58.5	680	661	626	23	363	182	9.5
160kW~220kW	500	180	480	60	870	850	796	37	358	178.5	11

■ Installation size for floor installation

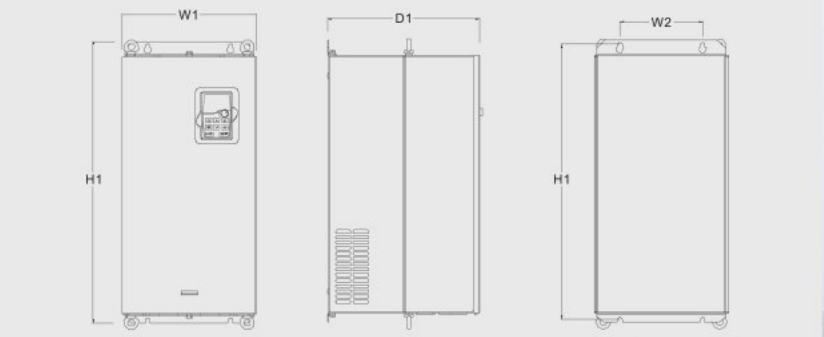
Inverter model	W1	W2	W3	W4	H1	H2	D1	D2	Installation hole
380V voltage degree									
220kW~315kW	750	230	714	680	1410	1390	380	150	13\12
350kW~500kW	620	230	573	–	1700	1678	560	240	22\12
660V voltage degree									
250kW~350kW	750	230	714	680	1410	1390	380	150	13\12
400kW~630kW	620	230	573	–	1700	1678	560	240	22\12

Installation diagram

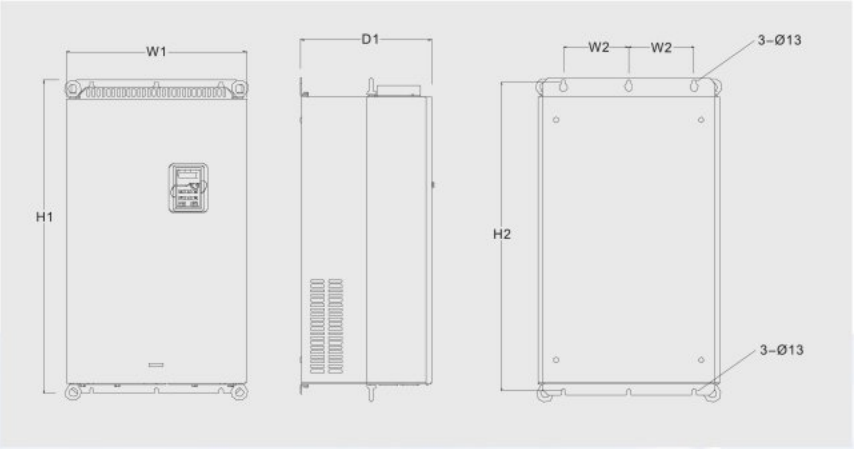
■ Wall installation diagram for inverters of 380V 1.5 ~ 30kW



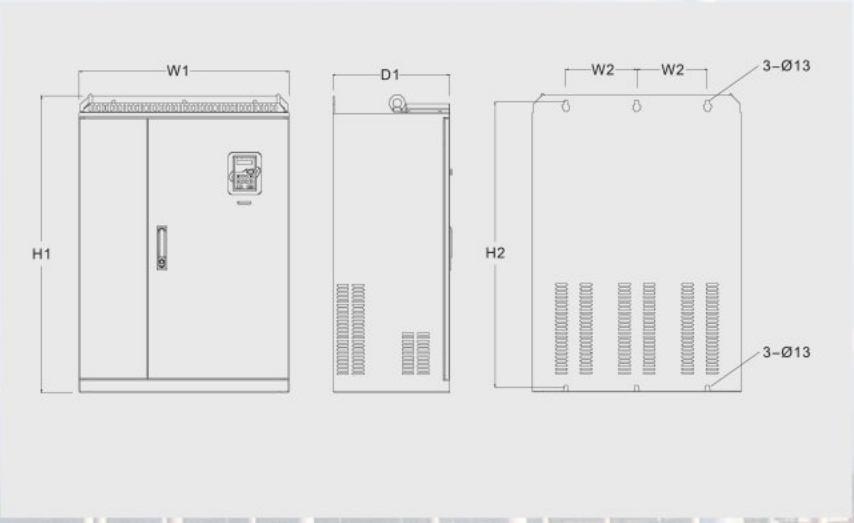
■ Wall installation diagram for inverters of 380V 37 ~ 110kW(660V 22 ~ 132kW)



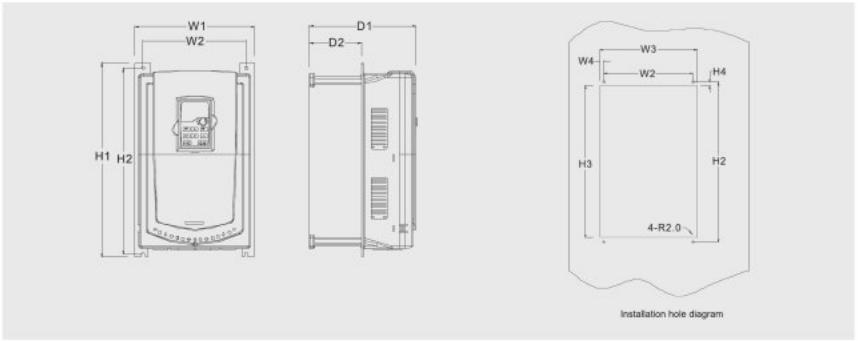
■ Wall installation diagram for inverters of 380V 132 ~ 200kW(660V 160 ~ 220kW)



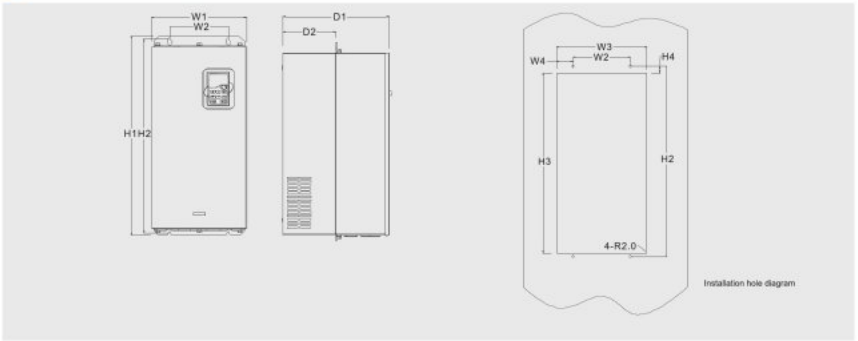
■ Wall installation diagram for inverters of 380V 220 ~ 315kW(660V 250 ~ 350kW)



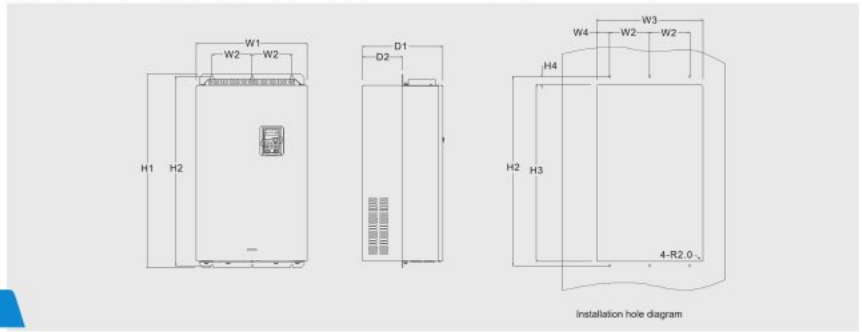
Flange installation diagram for inverters of 380V 1.5 ~ 30kW



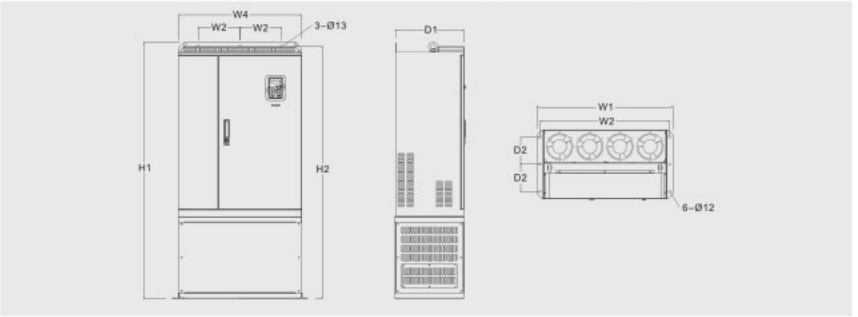
Flange installation diagram for inverters of 380V 37 ~ 110kW(660V 22 ~ 132kW)



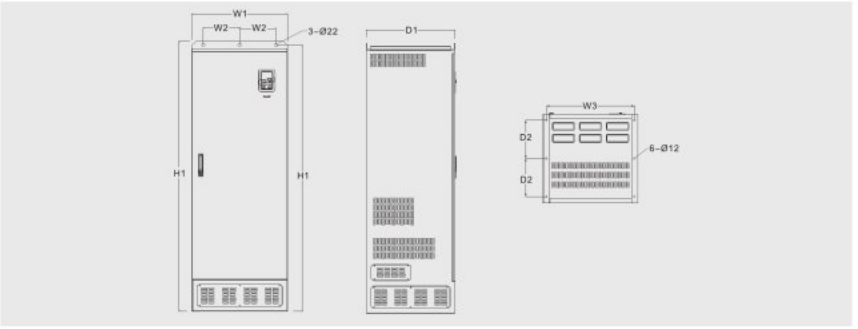
Flange installation diagram for inverters of 380V 132 ~ 200kW(660V 160 ~ 220kW)



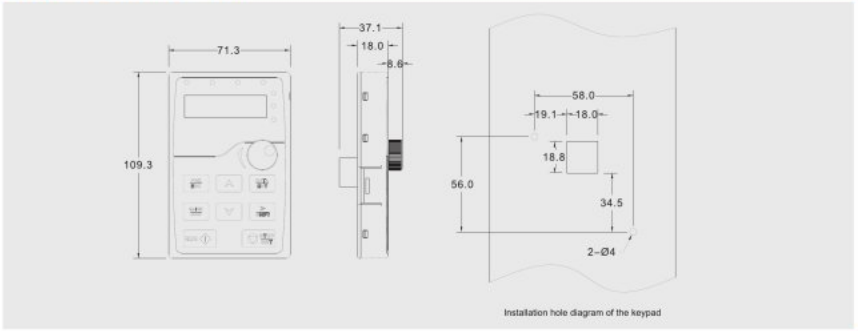
Floor installation diagram for inverters of 380V 220 ~ 315kW(660V 250 ~ 350kW)



Floor installation diagram for inverters of380V 350 ~ 500kW(660V 400 ~ 630kW)



Keypad appearance diagram



Optional Parts

1. Flange Mounting Panel

Optional for inverters of 380V 1.5～30kW in flange installation; not optional for inverters of 380V 37～200kW(660V 22～220kW) in flange installation



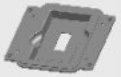
2. Installation Base

Only optional for inverters of 380V 220～315kW(660V 250kW～350kW) An input AC reactor (or DC reactor) and an output AC reactor can be embedded in the base



3. Installation bracket for the keypad

Use M3 screws or installation bracket to fix the keypad. The installation bracket of 380V 1.5～30kW inverters are optional, others are standard.



4. Heat-relaeasing Hole

Inverter needs to derate when selecting a cover Consult with the INVT technicians for the detailed information.



5. LCD keypad

10 rows of DH displaying
Compatible with the LED keypad



6. Communication Card

PROFIBUS+Ethernet communication card

CANopen +Ethernet communication card



7. Assistant Power (AC single phase 220V)

Provide for a safer and more convenient inverter debugging when the main power supply is power off(note as non-standard assistant power supply)

8. Reactor

The inverters of 380V 37kW or above and 660V can be connected with DC reactors. The reactor can improve the power factor and avoid damage to the recitifier bridge caused by overcurrent and damage to the rectifier circuit by harmonic

Model	Input reactor	DC reactor	Output reactor
380V voltage degree			
GD300-1R5G-4	ACL2-1R5-4	–	OCL2-1R5-4
GD300-2R2G-4	ACL2-2R2-4	–	OCL2-2R2-4
GD300-004G-4	ACL2-004-4	–	OCL2-004-4
GD300-5R5G-4	ACL2-5R5-4	–	OCL2-5R5-4
GD300-7R5G-4	ACL2-7R5-4	–	OCL2-7R5-4
GD300-011G-4	ACL2-011-4	–	OCL2-011-4
GD300-015G-4	ACL2-015-4	–	OCL2-015-4
GD300-018G-4	ACL2-018-4	–	OCL2-018-4
GD300-022G-4	ACL2-022-4	–	OCL2-022-4
GD300-030G-4	ACL2-030-4	–	OCL2-030-4

Model	Input reactor	DC reactor	Output reactor
380V voltage degree			
GD300-037G-4	ACL2-037-4	DCL2-037-4	OCL2-037-4
GD300-045G-4	ACL2-045-4	DCL2-045-4	OCL2-045-4
GD300-055G-4	ACL2-055-4	DCL2-055-4	OCL2-055-4
GD300-075G-4	ACL2-075-4	DCL2-075-4	OCL2-075-4
GD300-090G-4	ACL2-090-4	DCL2-090-4	OCL2-090-4
GD300-110G-4	ACL2-110-4	DCL2-110-4	OCL2-110-4
GD300-132G-4	ACL2-132-4	DCL2-132-4	OCL2-132-4
GD300-160G-4	ACL2-160-4	DCL2-160-4	OCL2-160-4
GD300-200G-4	ACL2-200-4	DCL2-200-4	OCL2-200-4
GD300-220G-4	ACL2-250-4	DCL2-250-4	OCL2-250-4
GD300-250G-4	ACL2-250-4	DCL2-250-4	OCL2-250-4
GD300-280G-4	ACL2-280-4	DCL2-280-4	OCL2-280-4
GD300-315G-4	ACL2-315-4	DCL2-315-4	OCL2-315-4
GD300-350G-4	Standard	DCL2-350-4	OCL2-350-4
GD300-400G-4	Standard	DCL2-400-4	OCL2-400-4
GD300-500G-4	Standard	DCL2-500-4	OCL2-500-4
660V voltage degree			
GD300-022G-6	ACL2-022G-6	DCL2-022G-6	OCL2-022G-6
GD300-030G-6	ACL2-030G-6	DCL2-030G-6	OCL2-030G-6
GD300-037G-6	ACL2-037G-6	DCL2-037G-6	OCL2-037G-6
GD300-045G-6	ACL2-045G-6	DCL2-045G-6	OCL2-045G-6
GD300-055G-6	ACL2-055G-6	DCL2-055G-6	OCL2-055G-6
GD300-075G-6	ACL2-075G-6	DCL2-075G-6	OCL2-075G-6
GD300-090G-6	ACL2-090G-6	DCL2-090G-6	OCL2-090G-6
GD300-110G-6	ACL2-110G-6	DCL2-110G-6	OCL2-110G-6
GD300-132G-6	ACL2-132G-6	DCL2-132G-6	OCL2-132G-6
GD300-160G-6	ACL2-160G-6	DCL2-160G-6	OCL2-160G-6
GD300-185G-6	ACL2-185G-6	DCL2-185G-6	OCL2-185G-6
GD300-200G-6	ACL2-200G-6	DCL2-200G-6	OCL2-200G-6
GD300-220G-6	ACL2-220G-6	DCL2-220G-6	OCL2-220G-6

Model	Input reactor	DC reactor	Output reactor
660V voltage degree			
GD300-250G-6	ACL2-250G-6	DCL2-250G-6	OCL2-250G-6
GD300-280G-6	ACL2-280G-6	DCL2-280G-6	OCL2-280G-6
GD300-315G-6	ACL2-315G-6	DCL2-315G-6	OCL2-315G-6
GD300-350G-6	ACL2-350G-6	DCL2-350G-6	OCL2-350G-6
GD300-400G-6	Standard	DCL2-400G-6	OCL2-400G-6
GD300-500G-6	Standard	DCL2-500G-6	OCL2-500G-6
GD300-560G-6	Standard	DCL2-560G-6	OCL2-560G-6
GD300-630G-6	Standard	DCL2-630G-6	OCL2-630G-6

9. Filter

Model	Input filter	Output filter
380V voltage degree		
GD300-1R5G-4	FLT-P04006L-B	FLT-L04006L-B
GD300-2R2G-4		
GD300-004G-4	FLT-P04016L-B	FLT-L04016L-B
GD300-5R5G-4		
GD300-7R5G-4	FLT-P04032L-B	FLT-L04032L-B
GD300-011G-4		
GD300-015G-4	FLT-P04045L-B	FLT-L04045L-B
GD300-018G-4		
GD300-022G-4	FLT-P04065L-B	FLT-L04065L-B
GD300-030G-4		
GD300-037G-4	FLT-P04100L-B	FLT-L04100L-B
GD300-045G-4		
GD300-055G-4	FLT-P04150L-B	FLT-L04150L-B
GD300-075G-4		
GD300-090G-4	FLT-P04200L-B	FLT-L04200L-B
GD300-110G-4	FLT-P04250L-B	FLT-L04250L-B
GD300-132G-4		
GD300-160G-4	FLT-P04400L-B	FLT-L04400L-B
GD300-200G-4		

Model	Input filter	Output filter
380V voltage degree		
GD300-220G-4	FLT-P04600L-B	FLT-L04600L-B
GD300-250G-4		
GD300-280G-4		
GD300-315G-4	FLT-P04800L-B	FLT-L04800L-B
GD300-350G-4		
GD300-400G-4		
GD300-500G-4	FLT-P041000L-B	FLT-L041000L-B
660V voltage degree		
GD300-022G-6	FLT-P06050H-B	FLT-L06050H-B
GD300-030G-6		
GD300-037G-6		
GD300-045G-6	FLT-P06100H-B	FLT-L06100H-B
GD300-055G-6		
GD300-075G-6		
GD300-090G-6		
GD300-110G-6	FLT-P06200H-B	FLT-L06200H-B
GD300-132G-6		
GD300-160G-6		
GD300-185G-6		
GD300-200G-6	FLT-P06300H-B	FLT-L06300H-B
GD300-220G-6		
GD300-250G-6		
GD300-280G-6		
GD300-315G-6	FLT-P06400H-B	FLT-L06400H-B
GD300-350G-6		
GD300-400G-6	FLT-P061000H-B	FLT-P061000H-B
GD300-500G-6		
GD300-560G-6		
GD300-630G-6		

Remark:
(1) Input EMI can meet C2 standard after installing input filters.
(2)Above parts and options are external, so it is necessary to order.

10. Braking system

The inverters of 380V 30kW and below are embedded internal braking units and the inverters of 380V 37kW and above need external braking units ,please select the braking units according to actual use .
External braking unit is needed for inverters of 660V. Please select the braking resistor according to site operation and torque requirements.

Model	Model of braking unit	Available braking resistor at 100% braking torque (Ω)	Dissipation power of braking resistor (kW) (10% braking)	Dissipation power of braking resistor (kW) (50% braking)	Dissipation power of braking resistor (kW) (80% braking)	Mini braking resistor (Ω)
380V voltage degree						
GD300-1R5G-4	Internal braking unit	326	0.23	1.1	1.8	170
GD300-2R2G-4		222	0.33	1.7	2.6	130
GD300-004G-4		122	0.6	3	4.8	80
GD300-5R5G-4		89	0.75	4.1	6.6	60
GD300-7R5G-4		65	1.1	5.6	9	47
GD300-011G-4		44	1.7	8.3	13.2	31
GD300-015G-4		32	2	11	18	23
GD300-018G-4		27	3	14	22	19
GD300-022G-4		22	3	17	26	17
GD300-030G-4		16	5	23	36	17
GD300-037G-4	DBU100H-060-4	13	6	28	44	11.7
GD300-045G-4	DBU100H-110-4	10	7	34	54	6.4
GD300-055G-4		8	8	41	66	
GD300-075G-4		6.5	11	56	90	
GD300-090G-4	DBU100H-160-4	5.4	14	68	108	4.4
GD300-110G-4		4.5	17	83	132	
GD300-132G-4	DBU100H-220-4	3.7	20	99	158	3.2
GD300-160G-4	DBU100H-320-4	3.1	24	120	192	2.2
GD300-200G-4		2.5	30	150	240	
GD300-220G-4	DBU100H-400-4	2.2	33	165	264	1.8
GD300-250G-4		2.0	38	188	300	
GD300-280G-4	Two DBU100H-320-4	3.6*2	21*2	105*2	168*2	2.2*2
GD300-315G-4		3.2*2	24*2	118*2	189*2	
GD300-350G-4		2.8*2	27*2	132*2	210*2	
GD300-400G-4		2.4*2	30*2	150*2	240*2	
GD300-500G-4	Two DBU100H-400-4	2*2	38*2	186*2	300*2	1.8*2

Model	Model of braking unit	Available braking resistor at 100% braking torque (Ω)	Dissipation power of braking resistor (kW) (10% braking)	Dissipation power of braking resistor (kW) (50% braking)	Dissipation power of braking resistor (kW) (80% braking)	Mini braking resistor (Ω)
660V voltage degree						
GD300-022G-6	DBU100H-110-6	55	4	17	27	170
GD300-030G-6		40.3	5	23	36	130
GD300-037G-6		32.7	6	28	44	80
GD300-045G-6		26.9	7	34	54	60
GD300-055G-6		22.0	8	41	66	47
GD300-075G-6		16.1	11	56	90	31
GD300-090G-6		13.4	14	68	108	23
GD300-110G-6		11.0	17	83	132	19
GD300-132G-6	DBU100H-160-6	9.2	20	99	158	17
GD300-160G-6		7.6	24	120	192	17
GD300-185G-6	DBU100H-220-6	6.5	28	139	222	11.7
GD300-200G-6		6.1	30	150	240	6.4
GD300-220G-6		5.5	33	165	264	
GD300-250G-6	DBU100H-320-6	4.8	38	188	300	
GD300-280G-6		4.3	42	210	336	4.4
GD300-315G-6		3.8	47	236	378	
GD300-350G-6		3.5	53	263	420	3.2
GD300-400G-6	DBU100H-400-6	3.0	60	300	480	2.2
GD300-500G-6	Two DBU100H-320-6	4.8*2	38*2	188*2	300*2	
GD300-560G-6		4.3*2	42*2	210*2	336*2	1.8
GD300-630G-6		3.8*2	47*2	236*2	378*2	

Sales Network



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