

GD350-UL Series

High-performance Multi-function VFD





Introduction

GD350-UL is a brand new high-performance VFD which integrates the speed, torque, and position control. It has built-in STO function and standard LCD keypad. And it's highly extensible and flexible with quantities of extension cards. GD350-UL is widely available to satisfy in plastics, textiles, machine tools, food packaging, chemicals, printing, building materials, etc.

Features

Full-motion and all-round



Drive multiple motors



Keep running when power off

Safe and reliable



Built-in STO function

Multi-function



Enhanced extension Performance



Industrial communication protocol



Secondary development



Two HDIs

Ease of use



IoT platform



LCD operation panel



Wireless commissioning



Standard USB interface

Applications



CNC



Textile



Chemistry

Model Selection

GD350-045G/055P-4-UL

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Filed	Sign	Description	Contents
Abbreviation of product series	①	Abbreviation of product series	GD350: Goodrive350 high-performance multi-function VFD
Rated power	②	Power range+ load type	045: 45kW 055: 55kW G— Constant torque load P— Variable torque load
Voltage level	③	Voltage level	2: 3PH 200V-240V Rated voltage: 220V 4: 3PH 380V-480V Rated voltage: 460V 6: 3PH 520V-600V Rated voltage: 575V
Certification marking	④	Used in America	Certified by UL and CUL

Power Ratings

Model	Rated output power (kW)	Rated output horsepower (HP)	Rated input current (A)	Rated output current (A)	Dimension W*H*D (mm)
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3PH 200V-240V

GD350-0R7G-2-UL	0.75	1	5	4.5	126*186*185
GD350-1R5G-2-UL	1.5	2	7.7	7	146*256*192
GD350-2R2G-2-UL	2.2	3	11	10	170*320*219
GD350-004G-2-UL	4	5	17	16	
GD350-5R5G-2-UL	5.5	7.5	21	20	230*330*217
GD350-7R5G-2-UL	7.5	10	31	30	
GD350-011G-2-UL	11	15	43	42	
GD350-015G-2-UL	15	20	56	55	255*400*242
GD350-018G-2-UL	18.5	25	71	70	
GD350-022G-2-UL	22	30	81	80	270*555*325
GD350-030G-2-UL	30	40	112	110	
GD350-037G-2-UL	37	50	132	130	
GD350-045G-2-UL	45	60	163	160	325*680*365
GD350-055G-2-UL	55	75	200	200	

3PH 380V-480V

GD350-1R5G-4-UL	1.5	2	5	3.7	126*186*185
GD350-2R2G-4-UL	2.2	3	5.8	5	146*256*192
GD350-004G/5R5P-4-UL	4/5.5	5/7.5	13.5/19.5	9.5/14	
GD350-5R5G/7R5P-4-UL	5.5/7.5	7.5/10	19.5/25	14/18.5	

Power Ratings

Model	Rated output power (kW)	Rated output horsepower (HP)	Rated input current (A)	Rated output current (A)	Dimension W*H*D (mm)
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3PH 380V~480V

GD350-7R5G/011P-4-UL	7.5/11	10/15	25/32	18.5/25	170*320*219
GD350-011G/015P-4-UL	11/15	15/20	32/40	25/32	
GD350-015G/018P-4-UL	15/18.5	20/25	40/47	32/38	230*330*217
GD350-018G/022P-4-UL	18.5/22	25/30	47/56	38/45	
GD350-022G/030P-4-UL	22/30	30/40	56/70	45/60	255*400*242
GD350-030G/037P-4-UL	30/37	40/50	70/80	60/75	
GD350-037G/045P-4-UL	37/45	50/60	80/94	75/92	270*555*325
GD350-045G/055P-4-UL	45/55	60/75	94/128	92/115	
GD350-055G-4-UL	55	75	128	115	325*680*365
GD350-075P-4-UL	75	100	160	150	
GD350-075G/090P-4-UL	75/90	100/120	160/190	150/180	325*680*365
GD350-090G/110P-4-UL	90/110	120/150	190/225	180/215	
GD350-110G-4-UL	110	150	225	215	500*870*360
GD350-132P-4-UL	132	175	265	260	
GD350-132G/160P-4-UL	132/160	175/215	265/310	260/305	500*870*360
GD350-160G/185P-4-UL	160/185	215/250	310/345	305/340	
GD350-185G/200P-4-UL	185/200	250/270	345/385	340/380	750*1410*380
GD350-200G/220P-4-UL	200/220	270/300	385/430	380/425	
GD350-220G/250P-4-UL	220/250	300/340	430/485	425/480	750*1410*380
GD350-250G/280P-4-UL	250/280	340/375	485/545	480/530	
GD350-280G/315P-4-UL	280/315	375/425	545/610	530/600	620*1700*560
GD350-315G/350P-4-UL	315/350	425/465	610/625	600/650	
GD350-350G/400P-4-UL	350/400	465/535	625/715	650/720	620*1700*560
GD350-400G-4-UL	400	535	715	720	
GD350-500P-4-UL	500	670	890	860	620*1700*560
GD350-500G-4-UL	500	670	890	860	

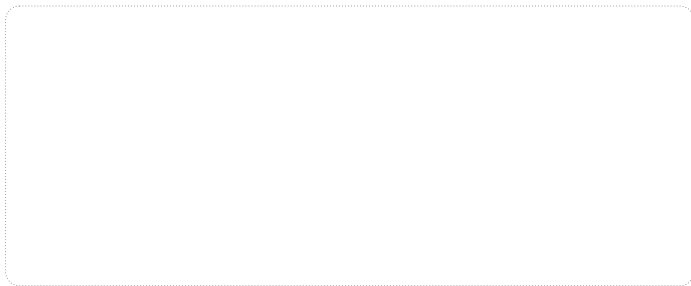
3PH 520V~600V

GD350-018G-6-UL	18.5	25	35	27	270*555*325
GD350-022G-6-UL	22	30	40	35	
GD350-030G-6-UL	30	40	47	45	325*680*365
GD350-037G-6-UL	37	50	52	52	
GD350-045G-6-UL	45	60	65	62	325*680*365
GD350-055G-6-UL	55	75	85	86	
GD350-075G-6-UL	75	100	95	98	325*680*365
GD350-090G-6-UL	90	120	118	120	
GD350-110G-6-UL	110	150	145	150	325*680*365

Technical specification

Power input	Input voltage(V) & Power	3PH 200V~240V Rated voltage: 220V 0.75~55kW(1~75HP) 3PH 380V~480V Rated voltage: 460V 1.5~500kW(2~670HP) 3PH 520V~600V Rated voltage: 575V 18.5~110kW(25~150HP) Allowable voltage fluctuation: -15%~+10%
	Input frequency(Hz)	50Hz or 60Hz, allowable range: 47~63Hz
Power output	Output voltage(V)	0~input voltage
	Output frequency(Hz)	0~400Hz
Technical control performance	Control mode	SVPWM control, SVC, VC
	Motor type	Asynchronous motor, permanent-magnet synchronous motor
	Speed regulation ratio	Asynchronous motor 1: 200 (SVC); Synchronous motor 1: 20 (SVC). 1:1000(VC)
	Speed control precision	±0.2%(SVC), ±0.02%(VC)
	Speed fluctuation	± 0.3%(SVC)
	Torque response	<20msSVC) , <10ms(VC)
	Torque control precision	10%(SVC) , 5%(VC)
	Starting torque	Asynchronous motor: 0.25Hz/150% (SVC) Synchronous motor: 2.5 Hz/150% (SVC) . 0Hz/200% (VC)
	Overload capacity	G type: 150%: 60s 180%: 10s 200%: 1s P type: 120%: 60s 150%: 10s 180%: 1s
Running control performance	Frequency setting mode	Digital, analog, pulse frequency, multi-step speed running, simple PLC, PID, Modbus communication, PROFIBUS communication, etc.
	Automatic voltage regulation	Keep the output voltage constant when grid voltage changes
	Fault protection function	Provide over 30 kinds of fault protection functions: overcurrent, overvoltage, undervoltage, over-temperature, phase loss and overload, etc.
	Speed tracking restart	Realize impact-free starting of the motor in rotating. It's available for power ≥4kW
Peripheral interface	Analog input	2 inputs, AI1: 0~10V/0~20mA; AI2: -10~10V
	Analog output	1 output, AO1: 0~10V /0~20mA
	Digital input	4 regular inputs; max. frequency: 1kHz; internal impedance:3.3kΩ 2 high-speed inputs; max. frequency: 50kHz; supports quadrature encoder input
	Digital output	1 high-speed pulse output; max. frequency: 50kHz 1 Y terminal open collector output
	Relay output	2 programmable relay outputs. Contact capacity: 3A/AC250V, 1A/DC30V
	STO(Safety torque off)	Integrates safety function-STO, SIL2
	Standard LCD keypad	Maximum 16 lines text display as well as graphical display, Wizard Mode.
Optional Expansion cards	Expansion interface	Maximum 3 expansion interfaces:SLOT1, SLOT2, SLOT3
	Expansion I/O card	4 DI, 1 AI, 1 AO, 1 DO, 2 RO
	Communication card	Optional Profibus-DP, CANopen, Profinet, EtherCAT, Ethernet/IP, etc.
	PG card	EC-PG503-05: 5V Differential Incremental (H2) EC-PG504-00: Resolver type PG card (D1) EC-PG505-12: 5V/12V Multifunctional Incremental (H1) EC-PG505-24: 24V Incremental PG card EC-PG502: SIN/COS PG card EC-PG507-12: Multifunctional Incremental PG card
	Programmable card	PLC card, 1 AI, 6 DI, 1 AO, 2 Relay, 1 RS485
	Wireless communication	Bluetooth, WiFi, realize wireless communication
Others	Installation mode	Support wall-mounting, floor-mounting and flange-mounting
	Temperature	-10~50°C (Derating is required if the ambient temperature exceeds 40°C)
	Protection level	IP20 (With Optional Kits can support NEMA1)
	Cooling mode	Air cooling
	Reactor	3-phase 380~480: 220kW-500kW, standard built-in AC input reactors
	Brake unit	Built-in for VFDs of 220V (≤15kW) and 460V(≤30kW); Optional for VFDs of 220V (18.5~55kW), 460V(≥37kW), and 575V
	EMC filter	The VFDs of 460V are configured with built-in C3 filters, meeting the requirements of IEC61800-3 C2.

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