




















## Optional Cards

I/O Card, PLC card			
			
I/O extension card EC-IO501-00 EC-O502-00	PLC card EC-PC502		
Communication Card			
			
Bluetooth communication card EC-TX501-1 EC-TX501-2	WIFI communication card EC-TX502-1 EC-TX502-2	CANopen communication card EC-TX505	CAN master-slave control communication card EC-TX511
			
Ethernet communication card EC-TX504	Ethernet/IP communication card EC-TX510	EtherCAT communication card EC-TX508	PROFINET communication card EC-TX509
			
PROFIBUS-DP communication card EC-TX503	Modbus TCP communication card EC-TX515		
PG Card			
			
24V incremental PG card EC-PG505-24	UVW incremental PG card EC-PG503-05	Resolver PG card EC-PG504-00	Sin/Cos PG card EC-PG502
			
Multi-function incremental PG card EC-PG505-12	Multi-function incremental PG card EC-PG507-12		
GPRS card			
			
GPRS card EC-IC501-2G			

# Goodrive350A Series

High-performance Multi-function VFD

Your trusted industry automation solution provider



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- |                               |  |                                       |                            |                                   |
|-------------------------------|--|---------------------------------------|----------------------------|-----------------------------------|
| <b>Industrial Automation:</b> | • Frequency AC Drive                         | • Servo & Motion Control              | • Motor & Electric Spindle | • PLC                             |
|                               | • HMI  | • Intelligent Elevator Control System | • Traction Drive           |                                   |
| <b>Electric Power:</b>        | • SVG  | • Solar Pump Controller               | • UPS                      | • Online Energy Management System |
|                               | • New Energy Vehicle Electric Control System |                                       |                            |                                   |

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## Introduction

GD350A takes advantage of dedicated processor for motor control. It enhances scalability and usability with SVC, VC, STO, LCD keypad, etc. The unity of G/P models can accommodate most operational requirements. Besides, GD350A supports mobile APP operation and has secondary development function.

GD350A integrates versatile functions into drive, to meet various load and diversified needs.



## Features

-  High precision data
-  Entire drive
-  Fire mode
-  Flexible secondary development
-  Standard STO(SIL2)
-  Optional wireless communication (Bluetooth/ WIFI)

## Type Selection

### GD350A - 5R5G/7R5P - 4

Sign	Description	Remark
①	Abbreviation of product series	GD350A: Goodrive350A high-performance multi-function VFD
②	Power range+load type	5R5G/7R5P: 5.5kW G: Constant torque load P: Fan and water pump
③	Voltage level	4: AC 3PH 380V(-15%)-440V(+10%) Rated voltage: 380V

## Power Ratings

Model	Rated power (kW)	Rated input current (A)	Rated output current (A)	Dimension W*H*D(mm)		Gross weight (kg)	
				Product	Package	Net	Gross
GD350A-1R5G/2R2P-4	1.5/2.2	5.0/5.8	3.7/5	126*186*185	290*210*265	2	3
GD350A-2R2G/003P-4	2.2/3	5.8/11	5/7				
GD350A-004G/5R5P-4	4/5.5	13.5/19.5	9.5/12.5				
GD350A-5R5G/7R5P-4	5.5/7.5	19.5/23	14/17	126*186*201	290*210*265	2.5	3.5
GD350A-7R5G/011P-4	7.5/11	25/30	18.5/23				
GD350A-011G/015P-4	11/15	32/40	25/32				
GD350A-015G/018P-4	15/18.5	40/45	32/38	170*320*220	430*275*325	6	7
GD350A-018G/022P-4	18.5/22	45/51	38/45				
GD350A-022G/030P-4	22/30	51/64	45/60				
GD350A-030G/037P-4	30/37	64/80	60/75	200*340.6*208	490*315*315	8.5	10.5
GD350A-037G/045P-4	37/45	80/98	75/92				
GD350A-045G/055P-4	45/55	98/128	92/115				
GD350A-055G/075P-4	55/75	128/139	115/150	282*560*258	680*425*380	25	29
GD350A-075G/090P-4	75/90	139/168	150/170				
GD350A-090G/110P-4	90/110	168/201	180/215				
GD350A-110G/132P-4	110/132	201/265	215/260	338*554*330	675*470*575	41	52
GD350A-132G/160P-4	132/160	265/310	260/305				
GD350A-160G/185P-4	160/185	310/345	305/340				
GD350A-185G/200P-4	185/200	345/385	340/380	500*870*360	971*631*565	85	110
GD350A-200G/220P-4	200/220	385/430	380/425				
GD350A-220G/250P-4	220/250	430/460	425/480				
GD350A-250G/280P-4	250/280	460/500	480/530	680*960*380	1086*826*595	135	165
GD350A-280G/315P-4	280/315	500/580	530/600				
GD350A-315G/355P-4	315/355	580/625	600/650				
GD350A-355G/400P-4	355/400	625/715	650/720	620*1700*560	1850*840*820	350	407
GD350A-400G/450P-4	400/450	715/840	720/820				
GD350A-450G/500P-4	450/500	840/890	820/860				
GD350A-500G-4	500	890	860				

## Technical Specification

Function description		Specification
Power input	Input voltage (V)	AC 3PH 380V (-15%)-440V (+10%) rated voltage: 380V
	Input current (A)	Refer to Rated value
	Input frequency (Hz)	50Hz or 60Hz, allowable range: 47-63Hz
Power output	Output voltage (V)	0-input voltage
	Output current (A)	Refer to Rated value
	Output power (kW)	Refer to Rated value
	Output frequency (Hz)	0-400Hz

Function description		Specification
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	<20ms (SVC) , <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	150% of rated current: 1min(G) 120% of rated current: 1min(P)	
Running control performance	Frequency setup mode	Digital, analog, pulse frequency, multi-step speed Simple PLC, PID, Modbus communication.
	Automatic voltage regulation function	Keep the output voltage constant when grid voltage changes.
	Fault protection function	Fault protection function Provide over 30 kinds of fault protection functions: overcurrent, overvoltage, under-voltage, over-temperature, phase loss and overload, etc.
Speed tracking restart function	Realize impact-free starting of the motor in rotating Note: This function is available for 004G/5R5P and above models	
Peripheral Interface	Terminal analog input	No more than 20mV
	Terminal digital input resolution	No more than 2ms
	Analog input	2 inputs, AI1: 0-10V/0-20mA; AI2: -10-10V
	Analog output	1 output, AO1: 0-10V /0-20mA
	Digital input	Four regular inputs; Max. frequency: 1kHz; Internal impedance: 3.3kΩ Two high-speed inputs; Max. frequency: 50kHz; supports quadrature encoder input; Speed measurement function
	Digital output	One high-speed pulse output; max. frequency: 50kHz One Y terminal open collector output
	Relay output	Two programmable relay outputs RO1A NO, RO1B NC, RO1C common port RO2A NO, RO2B NC, RO2C common port Contact capacity: 3A/AC250V, 1A/DC30V
	Extension interface	Three extension interfaces: SLOT1, SLOT2, SLOT3 Expandable PG card, programmable extension card, communication card, I/O card, etc.
Others	Installation mode	Support wall-mounting, floor-mounting and flange-mounting
	Temperature of running environment	-10-50°C, derating is required if the ambient temperature exceeds 40°C
	Protection level	IP20
	Pollution level	Level 2
	Cooling mode	Air cooling
	Brake unit	The VFD models of 037G/045P and lower contain built-in braking units. The braking units are optional parts for the 045G/055P-055/075P VFD models, and the braking units can be built in or externally connected.
Certification	380V models fulfill the requirements of IEC61800-3 C3 Optional external filter should meet the requirements of IEC61800-3 C2	