

Best Value For Your Application

GA700

The Smart Drive Series for A Smart Generation



YASKAWA's focus on the core technology of Motion Control is a step ahead with GA700.

The all new GA series is developed keeping in mind the need of the future and the SMART WORLD –Universe of Connectivity.

The GA700 is **Powerful** yet compact, **Easy to use** and incredibly **Reliable**.



Effortless Network Integration

- Supports all major networks with a new cost effective network integration feature
- Maintain network communications even during loss of main input power
- Gateway Connection System-Able to control up to maximum of five inverters with one communication card

Smartphone Application DriveWizardMobile

- Parameter Management via Cloud
- Access to control and change parameters from a distance without opening the panel using Bluetooth Keypad
- Parameter Setting/ Drive Operation using Mobile App

Flexible Design

- **Horizontal Placement** -Choice of horizontal or vertical placement of the inverter for space saving. (for up to 75 kW)
- Designed with flexibility to simplify installation

Quick & Easy Set-up

- Reduce set-up time with an intuitive keypad, navigation and start-up wizards

One for All

- Precise and tuning-less motor control with one drive controlling any induction, permanent magnet or synchronous reluctance motorQuick

Integrated Functional Safety

- Increased safety and reliability with STO SIL3 functional safety

Additionally

- Voltage/Current Switching Analog Output
- Torque Control Even Without an Encoder
- Built-in braking transistor up to 75 kW (HD)
- 24 VDC supply to power auxiliary sensors
- Virtual I/O Functions -virtually wires the I/O terminal of the drive internally
- Built-in Real-time Clock
- microSD Slot for data logging

Specifications

Control Method	<ul style="list-style-type: none"> V/f Control Closed Loop V/f Control Open Loop Vector Control Closed Loop Vector Control Advanced Open Loop Vector Control PM Open Loop Vector Control PM Advanced Open Loop Vector Control PM Closed Loop Vector Control EZ Open Loop Vector Control
Speed Control Range	<ul style="list-style-type: none"> V/f Control 1:40 Closed Loop V/f Control 1:40 Open Loop Vector Control 1:200 Closed Loop Vector Control 1:1500 Advanced Open Loop Vector Control 1:200 PM Open Loop Vector Control 1:20 PM Advanced Open Loop Vector Control 1:100 PM Closed Loop Vector Control 1:1500 EZ Open Loop Vector Control 1:100
Main Control Functions	Torque Control, Droop Control, Speed/Torque Control switch, Feed Forward Control, Zero Servo Control, Momentary Power Loss Ride-Thru, Speed Search, Overtorque Detection, torque limit, 17 Step Speed (max.), accel/decelswitch, S-curve accel/decel, 3-wire sequence, Auto-Tuning (rotational, stationary), Dwell, cooling fan on/off switch, slip compensation, torque compensation, Frequency Jump, Upper/lower limits for frequency reference, DC Injection Braking at start and stop, OverexcitationDeceleration, High Slip Braking, PID control (with Sleep function), Energy Saving Control, MEMOBUS/Modbus communications. (RS-485, max. 115.2 kbps), Fault Restart, Application Presets, DriveWorksEZ(customized functions), Parameter Backup Function, Online Tuning, KEB, Over excitation Deceleration, Inertia Tuning and ASR Tuning, Overvoltage Suppression, High Frequency Injection, etc.
Ambient Temperature	-10°C to +50°C (Derating at 2%/ C over 50°C up to 60°C)
Areas of use	Chemical gas: IEC60721-3-3: 3C2 Solid particle: IEC60721-3-3: 3S2

400 V Class

Model CIPR-GA70 D4□□□		140	168	208	250	296	371	389	453*1	568*1	675*1	
Max. Applicable Motor Capacity kW	HD	55	75	90	110	132	160	200	220	250	315	
	ND	75	90	110	132	160	200	220	250	315	355	
Input Rated Input Current A	HD	105	142	170	207	248	300	373	410	465	584	
	ND	142	170	207	248	300	373	410	465	584	657	
Output Rated Output Current A	HD	112	150	180	216	260	304	371	414	453	605	
	ND	140	168	208	250	296	371	389	453	568	675	
Output	Overload Tolerance	<ul style="list-style-type: none"> HD Rating: 150% of rated output current for 60 s ND Rating: 110% of rated output current for 60 s Note: Derating may be required for applications that start and stop frequently.										
	Carrier Frequency	Derating the output current enables a maximum of 10 kHz to be set.					Derating the output current enables a maximum of 5 kHz to be set.					
	Max. Output Voltage	Three-phase 380 to 480 V Note: The maximum output voltage is proportional to the input voltage.										
	Max. Output Frequency	590 Hz The frequencies that can be set vary depending on the control mode used.										
Power	Rated Voltage/ Rated Frequency	<ul style="list-style-type: none"> Three-phase AC power supply 380 V to 480 V 50/60 Hz DC power supply 513 V to 679 V 										
	Allowable Voltage Fluctuation	-15% to 10%										
	Allowable Frequency Fluctuation	±5%										
	Power Supply kVA	HD	84	113	136	165	198	239	297	327	370	465
	ND	113	136	165	198	239	297	327	370	465	523	

*1: Standard modules are 6 pulse. 12 pulse modules are optional