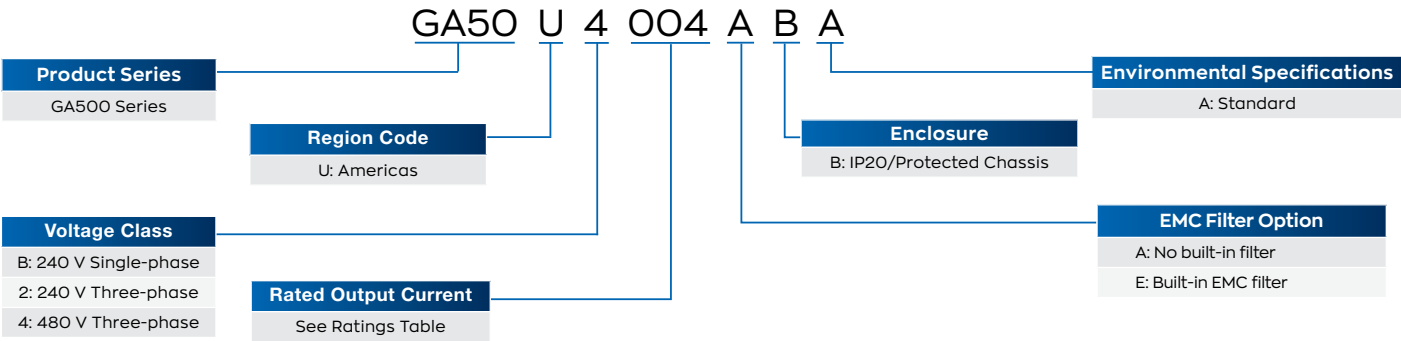


SPECIFICATIONS

Catalog Code Designation



RATINGS

Power Output (HP)		240 V Models								480 V Models			
		Single-Phase				Three-Phase				Three-Phase			
Normal Duty (ND)	Heavy Duty (HD)	Catalog Code	Output Amps		Frame	Catalog Code	Output Amps		Frame	Catalog Code	Output Amps		Frame
			ND	HD			ND	HD			ND	HD	
1/6	1/6	GA50UB001ABA	1.2	0.8	1.1	GA50U2001ABA	1.2	0.8	1.1				
1/4	1/4	GA50UB002ABA	1.9	1.6	1.1	GA50U2002ABA	1.9	1.6	1.1				
1/2	1/2									GA50U4001ABA	1.2	1.2	2.1
3/4	1/2	GA50UB004ABA	3.5	3	1.3	GA50U2004ABA	3.5	3	1.2				
1	3/4									GA50U4002ABA	2.1	1.8	2.2
1.5	1	GA50UB006ABA	6	5	2.4	GA50U2006ABA	6	5	1.4				
2	2									GA50U4004ABA	4.1	3.4	2.4
3	2	GA50UB010ABA	9.6	8	2.5	GA50U2010ABA	9.6	8	2.3				
3	3	GA50UB012ABA	12.2	11	3.2					GA50U4005ABA	5.4	4.8	2.5
4	3					GA50U2012ABA	12.2	11	2.4	GA50U4007ABA	7.1	5.6	2.5
5	4									GA50U4009ABA	8.9	7.3	2.5
N/A	5	GA50UB018ABA	N/A	17.6	4								
7.5	5					GA50U2021ABA	21	17.6	3.1	GA50U4012ABA	11.9	9.2	3.1
10	7.5					GA50U2030ABA	30	25	5				
10	10									GA50U4018ABA	17.5	14.8	5
15	10					GA50U2042ABA	42	33	5	GA50U4023ABA	23.4	18	5
20	15					GA50U2056ABA	56	47	6	GA50U4031ABA	31	24	6
25	20					GA50U2070ABA	70	60	7	GA50U4038ABA	38	31	6
30	25					GA50U2082ABA	82	75	7	GA50U4044ABA	44	39	8
40	30									GA50U4060ABA	60	45	8

APPROXIMATE DIMENSIONS

Frame Size	1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	2.5	3.1	3.2	4	5	6	7	8
Height	5.04 (128)												10.24 (260)	11.81 (300)	13.78 (350)	
Width	2.68 (68)				4.25 (108)				5.51 (140)		6.69 (170)	5.51 (140)	7.09 (180)	8.66 (220)	7.48 (190)	
Depth	2.99 (76)	4.25 (108)	4.65 (118)	5.04 (128)	3.19 (81)	3.90 (99)	5.08 (129)	5.41 (137)	6.06 (154)	5.63 (143)	6.42 (163)	7.09 (180)	5.51 (140)	5.63 (143)	7.36 (187)	8.03 (204)

Dimensions shown in inches (mm).
Information on this page represents IP20/Protected Chassis type enclosures without the built-in EMC filter.
For other enclosure types and enclosure adapters, please visit [yaskawa.com](https://www.yaskawa.com).



SPECIFICATIONS

Operating Environment	
Ambient Temperature	-10 to +50°C (IP20/Protected Chassis), -10 to +40°C (IP20/UL Type 1), up to +60°C with derating
Storage Temperature	-40 to +70°C (short-term temperature during transportation)
Humidity	95% RH or less (non-condensing)
Altitude	Up to 1000 m without derating, up to 4000 m with derating
Shock	10 to 20 Hz: 9.8 m/s² 20 to 55 Hz: 5.9 m/s²
Protection Design	IP20/Protected Chassis (Standard), IP20/UL Type 1 kit (Optional)
Mounting	Side-by-side, DIN rail, external heatsink
Conformal Coating (PCBs)	IEC 60721-3-3, Class 3C2 (chemical gases), Class 3S2 (solid particles)
Standards	CE, UL, cUL, KC, RCM, EAC, RoHS
Functional Safety	IEC/EN 61800-5-2: STO, IEC/EN 61508: SIL3, EN ISO 13849-1: PL _e
Power Ratings	
Overload Capacity	110%/1 min. (Normal Duty) or 150%/1 min. (Heavy Duty)
Rated Voltage	200 to 240 V, -15 to +10% 380 to 480 V, -15 to +10%
Capacity Range	240 V, Single-phase: 1/6 to 5 HP (0.1 to 3.7 kW) 240 V, Three-Phase: 1/6 to 30 HP (0.1 to 22 kW) 480 V, Three-Phase: 1/4 to 40 HP (0.2 to 30 kW)
Input Frequency	50/60 Hz, +/-5%
Output Voltage Accuracy	+/-5%
Output Frequency	0 to 590 Hz (special software for up to 1000 Hz)
Control Method	V/f, Open Loop (IM/PM), Advanced Open Loop (PM), EZ Open Loop Vector
Motor Control	Induction Motor (IM), Interior or Surface Permanent Magnet Motor (IPM/SPM), Synchronous Reluctance Motor (SynRM)
Standard I/O	(7) multi-function digital inputs (24 VDC) (2) multi-function analog inputs (0 +/-10 VDC, 4-20 mA) (1) multi-function pulse input (2) Safe Torque Off (STO) inputs (1) fault relay output (form C) (2) multi-function photocoupler outputs (1) multi-function analog output (0 - 10 VDC, 4-20 mA) (1) multi-function pulse output (1) RS-485 (Modbus RTU)
Additional Functions	Integrated PID controller with sleep function, automatic load distribution for multiple axes (droop control), automatic main power loss ride through, speed search function for smooth start of coasting motors, braking with over-magnetization for fast stop without braking resistors, energy-saving function, automatic restart after failure, overvoltage suppression, virtual input/output custom configuration, application presets, vibration suppression
Options	
Communications (Requires Additional Mounting Kit)	CANopen®, CC-Link, DeviceNet™, EtherCAT®, Ethernet/IP™, Ethernet/IP Dual Port, MECHATROLINK-II, MECHATROLINK-III, Modbus/TCP, Modbus/TCP dual port, PROFIBUS-DP®, PROFINET®, LONWORKS
Additional Options	Bluetooth keypad, LCD keypad, Attachment for external heatsink, External EMC filters, AC reactors, DC chokes, Network communications adapter, LCD keypad attachment, braking resistors



To learn more about the GA500 and see how it can make your day-to-day life easier, please visit <https://www.yaskawa.com/ga500>.