



In our pursuit to create drives optimized for variable speed needs in compact applications, the J1000 is the solution. This micro-drive is simple and reliable with Yaskawa quality. Demand continues to increase for compact drives with hassle-free maintenance. Yaskawa drives have earned a reputation for high performance, high functionality, and high quality.

Great Things Come in Small Packages!

Performance Features

- Ratings:
 - 1/8 to 3 HP at 200-240 VAC 1-Ph.
 - 1/8 to 5 HP at 200-240 VAC 3-Ph.
 - 1/2 to 7.5 HP (ND) at 380-480 VAC 3-Ph.
- Overload Capacity:
 - 150% for 60 sec. (Heavy Duty)
 - 120% for 60 sec. (Normal Duty)
- Control Methods: V/f Control
- DC injection braking, ramp to stop
- Electronic reversing
- Adjustable accel/decel: 0.0 to 6000.0 seconds
- Controlled speed range: 40:1
- Speed Regulation:
 - ± 0.5 to 1% with slip compensation
- Displacement power factor: 0.98
- Output frequency: 0 to 400 Hz
- Frequency resolution:
 - 0.01 Hz with digital reference
 - 0.06 / 60 Hz with analog reference
- Frequency accuracy:
 - 0.01% with digital command
 - 0.5% with analog command
- Volts / hertz ratio: infinitely adjustable pattern
- DC Injection braking: adjustable amplitude, duration, current limited
- Torque boost: full range, auto
- Power loss ride-thru: 0.5 sec.
- Speed search
- Auto restart
- 2 Critical frequency rejection settings
- Slip Compensation

Design Features

- 16-bit microprocessor logic
- Digital keypad operator, 5 digits
- LED status display
- Remote Mount Keypad Capability
- 5 multifunction digital inputs
- 1 multifunction digital output
- Programmable form C output contact for customer use: 1A at 250 VAC or 30 VDC
- 24 VDC control logic compatible with sourcing or sinking outputs (PNP or NPN)
- Carrier frequency: 15 kHz max; swing PWM
- 8 multi-speed settings plus jog speed
- 1 Remote speed reference:
 - 0-10 VDC (20 kohms) or isolated 4-20 mA (250 ohms)
- Signal follower: bias and gain
- Analog monitor output:
- 0-10 VDC proportional to output frequency or output current
- Approximately 140 parameters and monitors
- Cooling fan controlled by drive run/stop
- UL recognized electronic overload
- MTBF: 28 years
- Built-in Dynamic Braking Transistor
- Protected Chassis
- Side-by-Side mounting
- Maintenance monitors

Protective Features

- Current limit, stall prevention during accel, decel, and run
- Motor and drive overload
- Over voltage prevention function
- Instantaneous over current
- Short circuit
- Under voltage
- Heatsink overheat
- Ground fault protection
- Over/under torque
- Short circuit current rating: 30kA rms sym.

Service Conditions

- Ambient service temperature:
 - 10° to 50°C (+14° to 122°F)
- Ambient storage temperature:
 - 20° to 60°C (-4° to 140°F)
- Humidity: to 95% non-condensing
- Altitude: to 3300 ft; higher by derating
- Service factor: 1.0
- Input voltage: -15% to +10%
 - 200 to 240 VAC, 380 to 480 VAC
- Input frequency: +/-5%; 50/60 Hz
- Input phase sequence insensitive

Options

- Dynamic Braking resistor (external)
- Remote LED Operator w/ copy function
- Modbus 232/422/485 Communications
- Analog Potentiometer Card
- DriveWizard Plus
- DIN rail mounting kit
- USB Copy Unit (Y-Stick)
- Reactors, 3% and 5%
- EMC filters, C1 and C3

Standards

- UL 508C (Power Conversion)
- CSA 22.2 No. 14-95 (Industrial Control Equipment)
- UL, cUL listed; CE marked
- RoHS compliant
- EN 50178 (LVD)
- EN 50081-2, EN 50082-2 (EMC)
- EN 61800-3
- IEC 529, 146
- FCC CFR 47 Part 15 Subpart B (w/ External Filter)

Rated Input Voltage	Drive Model Number CIMR-JU	Normal Duty ⁽¹⁾		Heavy Duty ⁽¹⁾	
		Rated Output Current (Amps)	Nominal HP ⁽²⁾	Rated Output Current (Amps)	Nominal HP ⁽²⁾
200-240V 1-Phase	BA0001BAA	1.2	1/8 & 1/4	0.8	1/8
	BA0002BAA	1.9	1/4	1.6	1/4
	BA0003BAA	3.3	1/2 & 3/4	3.0	1/2
	BA0006BAA	6.0	1	5.0	3/4 & 1
	BA0010BAA	9.6	2 & 3	8.0	2
200-240V 3-Phase	2A0001BAA	1.2	1/8 & 1/4	0.8	1/8
	2A0002BAA	1.9	1/4	1.6	1/4
	2A0004BAA	3.3	1/2 & 3/4	3.0	1/2
	2A0006BAA	6.0	1	5.0	3/4 & 1
	2A0010BAA	9.6	2 & 3	8.0	2
	2A0012BAA	12.0	3	11.0	3
	2A0020BAA	19.6	5	17.5	5
380-480V 3-Phase	4A0001BAA	1.2	1/2	1.2	1/2
	4A0002BAA	2.1	3/4 & 1	1.8	3/4
	4A0004BAA	4.1	2	3.4	1 & 2
	4A0005BAA	5.4	3	4.8	3
	4A0007BAA	6.9	4	5.5	3
	4A0009BAA	8.8	5	7.2	4
	4A0011BAA	11.1	7.5	9.2	5

- (1) Normal Duty overload current rating is 120% of rated output current for 60 seconds; Heavy Duty overload current rating is 150% of rated output current for 60 seconds
- (2) Horsepower rating is based on 230-volt and 460-volt induction-type squirrel-cage NEMA B 4-pole motors as represented in NEC table 430.250 Full-Load Current, Three-Phase Alternating Current Motors

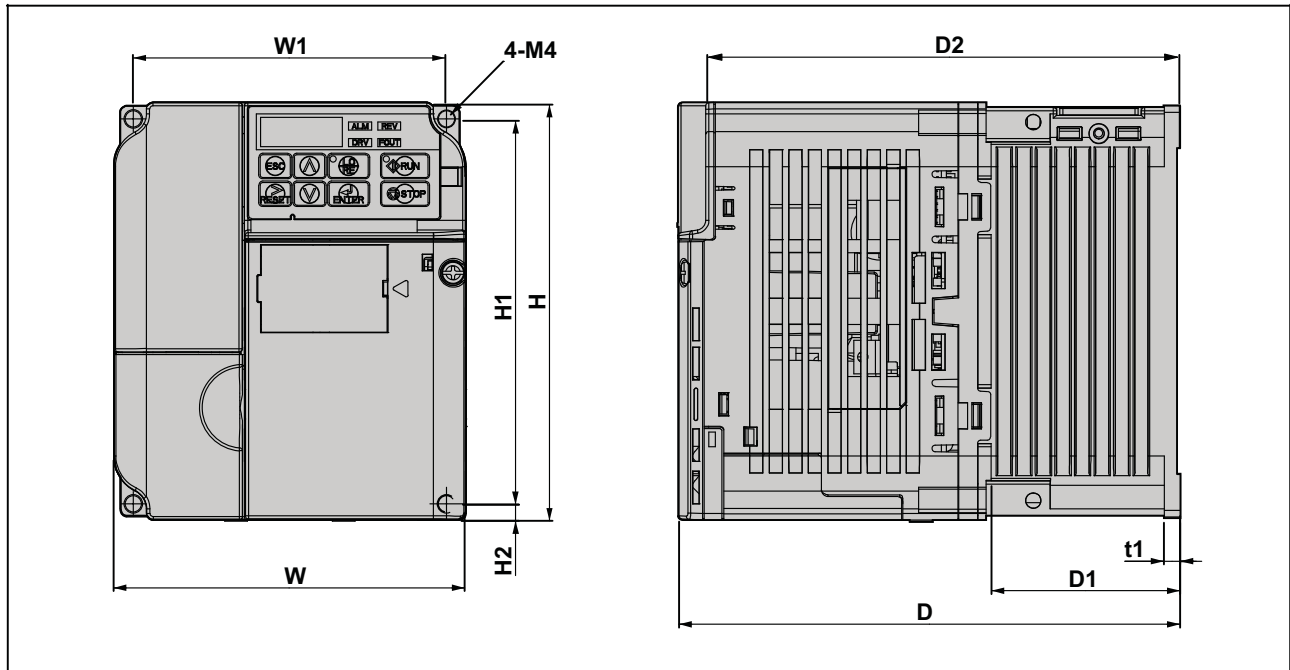
Dimensions and Data

Rated Input Voltage	Drive Model Number CIMR-JU	Normal Duty		Heavy Duty		Physical Dimensions (in.)			Mounting Dimensions (in.)		Weight (lbs.) ⁽¹⁾
		Rated Output Current (Amps)	Nominal HP	Rated Output Current (Amps)	Nominal HP	H	W	D	H1	W1	
200-240V 1-Phase	BA0001BAA	1.2	1/8 & 1/4	0.8	1/8	5.00	2.68	2.99	4.60	2.20	1.3
	BA0002BAA	1.9	1/4	1.6	1/4	5.00	2.68	2.99	4.60	2.20	1.3
	BA0003BAA	3.3	1/2 & 3/4	3.0	1/2	5.00	2.68	4.65	4.60	2.20	2.2
	BA0006BAA	6.0	1 & 1.5	5.0	3/4 & 1	5.00	4.25	5.41	4.60	3.78	3.5
	BA0010BAA	9.6	2 & 3	8.0	2	5.00	4.25	6.06	4.60	3.78	4.0
200-240V 3-Phase	2A0001BAA	1.2	1/8 & 1/4	0.8	1/8	5.00	2.68	2.99	4.60	2.20	1.3
	2A0002BAA	1.9	1/4	1.6	1/4	5.00	2.68	2.99	4.60	2.20	1.3
	2A0004BAA	3.5	1/2 & 3/4	3.0	1/2	5.00	2.68	4.25	4.60	2.20	2.0
	2A0006BAA	6.0	1 & 1.5	5.0	3/4 & 1	5.00	2.68	5.04	4.60	2.20	2.4
	2A0010BAA	9.6	2 & 3	8.0	2	5.00	4.25	5.08	4.60	3.78	3.8
	2A0012BAA	12.0	3	11.0	3	5.00	4.25	5.41	4.60	3.78	3.8
	2A0020BAA	19.6	5	17.5	5	5.00	5.51	5.63	4.60	5.04	5.3
380-480V 3-Phase	4A0001BAA	1.2	1/2	1.2	1/2	5.00	4.25	3.19	4.60	3.78	2.2
	4A0002BAA	2.1	3/4 & 1	1.8	3/4	5.00	4.25	3.90	4.60	3.78	2.7
	4A0004BAA	4.1	2	3.4	1 & 2	5.00	4.25	5.41	4.60	3.78	3.8
	4A0005BAA	5.4	3	4.8	3	5.00	4.25	6.06	4.60	3.78	3.8
	4A0007BAA	6.9	4	5.5	3	5.00	4.25	6.06	4.60	3.78	3.8
	4A0009BAA	8.8	5	7.2	4	5.00	4.25	6.06	4.60	3.78	3.8
	4A0011BAA	11.1	7.5	9.2	5	5.00	5.51	5.63	4.60	5.04	5.3

(1) This data represents the drive weight only, not shipping weight.

Dimension Drawing

DD.J1000.02
Protected Chassis



Voltage Class	Drive Model CIMR-J□	Dimensions (in)									Weight (lb.)
		W	H	D	W1	H1	H2	D1	D2	t1	
Single-Phase 200 V Class	BA0006B	4.3	5.0	5.4	3.8	4.6	0.2	2.3	5.1	0.2	3.8
	BA0010B	4.3	5.0	6.1	3.8	4.6	0.2	2.3	5.7	0.2	4.0
Three-Phase 200 V Class	2A0010B	4.3	5.0	5.1	3.8	4.6	0.2	2.3	4.7	0.2	3.8
	2A0012B	4.3	5.0	5.4	3.8	4.6	0.2	2.3	5.1	0.2	3.8
	2A0020B	5.5	5.0	5.6	5.0	4.6	0.2	2.6	5.3	0.2	5.3
Three-Phase 400 V Class	4A0001B	4.3	5.0	3.2	3.8	4.6	0.2	0.4	2.9	0.2	2.2
	4A0002B	4.3	5.0	3.9	3.8	4.6	0.2	1.1	3.6	0.2	2.7
	4A0004B	4.3	5.0	5.4	3.8	4.6	0.2	2.3	5.1	0.2	3.8
	4A0005B	4.3	5.0	6.1	3.8	4.6	0.2	2.3	5.7	0.2	3.8
	4A0007B	4.3	5.0	6.1	3.8	4.6	0.2	2.3	5.7	0.2	3.8
	4A0009B	4.3	5.0	6.1	3.8	4.6	0.2	2.3	5.7	0.2	3.8
	4A0011B	5.5	5.0	5.6	5.0	4.6	0.2	2.6	5.3	0.2	5.3