

P1000 Industrial Fan and Pump Drive

240V Class: $\frac{3}{4}$ to 175 HP

480V Class: $\frac{3}{4}$ to 1000 HP

600V Class: 2 to 250 HP



The P1000 is the next generation in Industrial Fan and Pump control, designed specifically for variable torque applications. Simple to use, intuitive, and user friendly are key features in the P1000 design. The P1000 supports a wide range of network and control options providing for the most flexible and cost effective solution.

LCD Operator with Real Time Clock

5-Line, 16-character alpha-numeric display with time and date stamping for events, along with timer controls for starting, stopping, and speed changes without the need for external controls.

Application Macros

Choose from pre-configured fan and pump setup macros to match the application for quick and easy set up.

Selectable Engineering Units

Allows for easy configuration of keypad display to match process and feedback devices such as PSI, GPM, Feet.

Underload Detection

Monitors load and will shut system down in the event of a fan belt or pump shaft breakdown.

Parameter Storage and Removable Terminal Board

Allows for easy replacement of control card without removing control wires, and stores all drive settings without the need for a copy device.

PI Feature

Maintains a set point for closed loop control of fans and pumps for pressure, flow, or temperature regulation, and eliminates the need for a closed loop output signal from a BAS. Independent PI to control an external device in the system.

Harmonic Mitigation

DC chokes are built in as standard above 30HP to reduce input harmonics.

Dynamic Noise Control

Monitors the load at all times and reduces the output voltage automatically, reducing motor audible noise.

Networking Options and Auxiliary Control Power Unit

Allows for remote monitoring and control using DeviceNet, EtherCAT, EtherNet/IP, MECHATROLINK-II, MECHATROLINK-III, Modbus TCP/IP, PROFIBUS-DP, PROFINET. Optional external power supply will maintain network communications while main power is removed.

Specifications

Overload Capacity

- 120% for 60 seconds

Output Frequency

- 0.01 to 400 Hz

Control Methods

- V/Hz Control

Enclosures

- NEMA Type 1 / IP20:
 - 240V: $\frac{3}{4}$ - 75 HP
 - 480V: $\frac{3}{4}$ - 125 HP
 - 600V: 2 - 100 HP
- Open Type / IP00:
 - 240V: 100 - 175 HP
 - 480V: 150 - 1000 HP
 - 600V: 125 - 250HP

Ambient Operating Temperature

- -10°C to 40°C (14°F to 104°F)

Global Certification

- UL, CSA, CE, RoHS

Standard I/O

- (8) multi-function digital inputs (24Vdc)
- (3) multi-function analog inputs (0-10 VDC, 4-20 mA)
- (1) multi-function pulse input
- (1) fault relay output (form C)
- (1) multi-function relay (form C)
- (2) multi-function relay outputs (form A)
- (2) multi-function analog outputs (0 +/- 10 VDC, 4-20mA)
- Sensor feedback (+24Vdc @ 150mA supply)
- 120V converter for 8 standard digital inputs (option)

Network Communications

- Built-in: Modbus RTU, RS-422/485, 115 kbps
- Optional: DeviceNet, EtherCAT, EtherNet/IP, MECHATROLINK-II, MECHATROLINK-III, Modbus TCP/IP, PROFIBUS-DP, PROFINET

P1000 Industrial Fan and Pump Drive

240V Class: ¾ to 175 HP

480V Class: ¾ to 500 HP

600V Class: 2 to 250 HP

200-240V / 3-Phase

Model Number CIMR-PU	Rated Output Current (Amps)	HP	Dimensions (in.)		
			H	W	D
2A0004FAA	3.5	3/4	11.81	5.51	5.79
2A0006FAA	6.0	1			
2A0008FAA	8.0	2			
2A0010FAA	9.6	3			
2A0012FAA	12.0	3			6.46
2A0018FAA	17.5	5			
2A0021FAA	21.0	7.5			
2A0030FAA	30.0	10			
2A0040FAA	40.0	15	6.57		
2A0056FAA	56.0	20	13.39	7.09	7.36
2A0069FAA	69.0	25	15.75	8.66	7.76
2A0081FAA	81.0	30			
2A0110FAA	110	40	21.02	10.00	10.16
2A0138FAA	138	50	24.17	10.98	
2A0169FAA	169	60	28.74	12.95	11.14
2A0211FAA	211	75			
2A0250AAA	250	100	27.76	17.72	12.99
2A0312AAA	312	125			
2A0360AAA	360	150	31.50	19.69	13.78
2A0415AAA	415	175			

380-480V / 3-Phase

Model Number CIMR-PU	Rated Output Current (Amps)	HP	Dimensions (in.)			
			H	W	D	
4A0002FAA	2.1	1	11.81	5.51	5.79	
4A0004FAA	4.1	2				
4A0005FAA	5.4	3				
4A0007FAA	6.9	4				
4A0009FAA	8.8	5			6.46	
4A0011FAA	11.1	7.5				
4A0018FAA	17.5	10				
4A0023FAA	23.0	15				
4A0031FAA	31.0	20	13.39	7.09	6.57	
4A0038FAA	38.0	25				
4A0044FAA	44.0	30	15.75	8.66	7.76	
4A0058FAA	58.0	40	18.31	10.00	10.16	
4A0072FAA	72.0	50	20.28	10.98		
4A0088FAA	88.0	60	24.80	12.95		11.14
4A0103FAA	103	75				
4A0139FAA	139	100	28.74	17.95	12.99	
4A0165FAA	165	125				
4A0208AAA	208	150	27.76	17.95	12.99	
4A0250AAA	250	200	31.50	19.84	13.78	
4A0296AAA	296	250				
4A0362AAA	362	300	37.40	19.69	14.57	
4A0414AAA	414	350				
4A0515AAA	515	400 - 450	44.88	26.38		
4A0675AAA	675	500 - 550				
4A0930AAA	930	600 - 800	54.33	49.21		
4A1200AAA	1200	1000				

500-600V / 3-Phase

Model Number CIMR-PU	Rated Output Current (Amps)	HP	Dimensions (in.)		
			H	W	D
5A0003FAA	2.7	1 - 2	11.81	5.51	5.79
5A0004FAA	3.9	3			
5A0006FAA	6.1	5			
5A0009FAA	9.0	7.5			
5A0011FAA	11.0	10			6.46
5A0017FAA	17.5	15			
5A0022FAA	22.0	20			
5A0027FAA	27.0	25			
5A0032FAA	32.0	30	13.39	7.09	7.36
5A0041FAA	41.0	40			
5A0052FAA	52.0	50	15.75	8.66	7.76
5A0062FAA	62.0	60			
5A0077FAA	77.0	75	20.28	10.98	10.16
5A0099FAA	99.0	100			
5A0125AAA	125	125	28.74	12.95	11.14
5A0144AAA	144	150			
5A0192AAA	192	200	37.8	17.95	12.99
5A0242AAA	242	250			

FREE Estimating Tools

- Energy Savings Predictor
- Harmonics Estimator
- Carbon Footprint Calculator



iTunes App

Energy savings app for the iPhone and the iPod touch is available at iTunes.com - search for Yaskawa.

