

FP605

IP55/UL TYPE 12 AC DRIVES FOR INDUSTRIAL FAN & PUMP APPLICATIONS

Yaskawa's FP605 drive provides easy-to-use, flexible, and sustainable motor control for variable torque loads in an IP55/UL Type 12 and IP55/UL Type 12 with switch enclosure.

The FP605 is the most advanced general purpose fan and pump drive in the market, taking integration and startup to the next level using its high contrast keypad for simple, efficient setup. The FP605 improves efficiency, saves energy, and reduces startup time and maintenance, making it the right choice for industrial motor control.



RATINGS

240 V Models				
Power Output (HP)	Output Amps	Frame	Catalog Code FP65U□□□□□□□□	
			IP55/UL Type 12	IP55/UL Type 12 with switch
3	10.6	1	2011AVA	2011ATA
5	16.7	1	2017AVA	2017ATA
7.5	24.2	2	2024AVA	2024ATA
10	30.8	2	2031AVA	2031ATA
15	46.2	3	2046AVA	2046ATA
20	59.4	3	2059AVA	2059ATA
25	74.8	4	2075AVA	2075ATA
30	88	4	2088AVA	2088ATA
40	114	4	2114AVA	2114ATA
50	143	6	2143AVA	2143ATA
60	169	6	2169AVA	2169ATA

480 V Models				
Power Output (HP)	Output Amps	Frame	Catalog Code FP65U□□□□□□□□	
			IP55/UL Type 12	IP55/UL Type 12 with switch
3	4.8	1	4005AVA	4005ATA
7.5	11	1	4011AVA	4011ATA
10	14	1	4014AVA	4014ATA
15	21	2	4021AVA	4021ATA
20	27	2	4027AVA	4027ATA
25	34	2	4034AVA	4034ATA
30	40	3	4040AVA	4040ATA
40	52	3	4052AVA	4052ATA
50	65	3	4065AVA	4065ATA
60	77	4A	4077AVA	4077ATA
75	96	4A	4096AVA	4096ATA
100	124	4A/4B	4124AVA	4124ATA
125	156	6	4156AVA	4156ATA

APPROXIMATE DIMENSIONS

Enclosure Option V (without switch)			
Frame Size	Height	Width	Depth
1	14.1	4.9	9.0
2	17.6	4.9	9.6
3	20.1	7.9	9.7
4	21.3	10.0	10.7
6	30.14	14.26	16.14

Enclosure Option T (with switch)			
Frame Size	Height	Width	Depth
1	20.4	4.9	9.0
2	24.5	4.9	9.6
3	28.9	7.9	9.7
4A	37.4	10.0	10.7
4B	37.85	13.95	13.82
6	39.89	14.26	16.14

Dimensions shown in inches

Information on this page represents IP55/UL Type 12 enclosures. For other enclosure types and enclosure adaptors, please visit yaskawa.com.

FP605 SPECIFICATIONS

SPECIFICATIONS

Item	Specification
Input Voltage	Three-phase 200 to 240 VAC, 380 to 480 VAC, +10%/-15%, 50/60 Hz +/-5%
Ambient Operating Temperature	-10 to +40°C (IP55/Type 12) Up to +50°C (with derate)
Ambient Storage	-20°C to +70°C (-4°F to 158°F)
Overload Capacity	110% for 60 sec., 140% for 2 sec., 175% instantaneous
Output Frequency	0 to 400 Hz
Control Methods	Open Loop V/f Open Loop Vector (PM motors only) EZ Open Loop Vector
Motor Types	Induction Permanent Magnet Synchronous Reluctance
Environmental	1,000 meters altitude, up to 4,000 meters with derating Class 3C2 and 3S2 operation for IP20/Type 1 & IP20/Protected Chassis 95% humidity, non-condensing
Harmonics	5% split choke built in both positive and negative DC bus leg as standard (3% DC link on positive BUS for IP20/Protective Chassis designs)
Protective Design Types	IP55/UL Type 12 IP55/UL Type 12 with switch
Global Certifications	UL, cUL, CE, RoHS 2, WEEE, TUV SUD
Functional Safety	Safe Torque Off, SIL3 according to IEC 62061, PLe according to ISO 13849-1
Interface	LCD keypad and Status Ring, Bluetooth® is optional
Standard I/O	(8) multi-function digital inputs (24Vdc) (3) multi-function analog inputs (0 +/- 10 VDC, 4-20 mA) (1) multi-function pulse inputs (2) Safe Torque Off inputs (2) fault relay output (form C) (2) multi-function relay outputs (form A) (2) multi-function analog output (0 +/- 10 VDC, 4-20mA)
24 VDC Power	External supply input to maintain communications without main power 150 mA output for customer use
I/O Expansion	(3) Analog Inputs -10 to +10V, 13 bit plus sign, 4 to 20mA (16) Digital Inputs (2) Analog Outputs (-10 to +10V, 11 bit magnitude) (8) Digital Outputs (6 transistor, 2 relay)
Network Communication	Standard: Modbus RTU, RS-485, 115 kbps Optional: EtherNet/IP, DeviceNet, Modbus TCP/IP, PROFINET, PROFIBUS-DP
Software Support Tools	DriveWizard® Industrial DriveWizard® Mobile Programming Simulator Energy Savings Predictor Harmonics Estimator Product Selector

DriveWizard® is a registered trademark of Yaskawa America, Inc.

Bluetooth® is a registered trademark of Bluetooth SIG, Inc. USA.

IT'S PERSONAL

YASKAWA

Yaskawa America, Inc. 1-800-YASKAWA | Email: info@yaskawa.com | yaskawa.com
Document No. DT.FP605.03 | 05/01/2025 | © 2022 Yaskawa America, Inc.