



PowerFlex[®] 700H

PowerFlex[®] 700H AC Drive

Product Description

The PowerFlex[®] family of AC drives is expanding to include the new PowerFlex 700H high power AC drive. The PowerFlex 700H is available in power ratings from 200 to 450 hp (132 kW to 250 kW) normal duty, at input voltages from 380V to 500V. This new drive features the same powerful performance and flexible control customers have come to expect from the PowerFlex family of drives.

Product Features

Excellent Speed Control Performance

- Good open-loop speed control with slip compensation
- Excellent torque at low speeds for demanding speed control applications
- Configurable for Volts-per-Hertz or Sensorless Vector control modes for a wide variety of applications

Flexible Programming, Hardware, and Communication Interfaces

- Advanced features and parameter set modeled after the PowerFlex[®] 700 AC drive
- Standard I/O includes either 24V or 115V digital I/O plus analog I/O
- NetLinx[™] communication options, including DeviceNet[™], ControlNet[™], and EtherNet/IP networks

Easy to Use

- Full-featured LCD Human Interface Module (HIM) with multi-line and multi-lingual display simplifies programming
- S.M.A.R.T. Start and assisted startup routines in the LCD HIM allow for easy configuring and tuning of the drive
- Pull-apart control terminal blocks allow for easy wiring and quick disconnect of I/O wiring



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- Easy-to-remove control module is common among all PowerFlex 700H power ratings
- Optimized global voltage settings designed to worldwide standards allow quick set-up anywhere in the world
- Excellent PC software tools, such as DriveExplorer[™] and DriveTools[™] SP make programming, configuration, monitoring and troubleshooting a snap

Industry-Standard Packaging

- Modular design and high degree of power structure commonality with equivalent PowerFlex[®] 700S AC drive ratings for reduced spare parts stocking
- Standard floor-standing cabinet designs (frame 10 and larger) for compact stand-alone drive applications or multi-drive lineups
- Option of internally mounted, or door-mounted NEMA 1 or NEMA 4/12 operator interface



Application Logic	<ul style="list-style-type: none"> • Sensorless Vector or Volts-per-Hertz Control • Slip Compensation • Process PI Loop • Auto-economizer 	<ul style="list-style-type: none"> • Flying Start • DC Braking • DC Bus Regulation • S-Curve Accel and Decel
Operator Interface	• LCD HIM places drive information in a 7-line by 21-character display that supports a variety of languages	
Standards	<ul style="list-style-type: none"> • CSA/cUL • UL • CE 	
	- EMC	EN61800-3
	- Low Voltage	EN60204-1 / EN50178
Input Specifications	3-Phase Voltage:	380-480V +/- 10%
	Frequency:	47 to 63 Hz
Output Specifications	Voltage:	Adjustable from 0V to rated motor voltage
	Frequency Range:	0-320 Hz
	Peak Current:	Typically 200% of the heavy duty rating for 2 sec.
Enclosure and Ambient Operating Temperatures	NEMA Type 1/ IP21	Frame 10 Normal Duty Ratings 0 to 40° C
	Frame 9 Normal Duty Ratings 0 to 40° C	
	Frame 9 Heavy Duty Ratings 0 to 50° C	

Dimensions mm (in) & Ratings

Output Power		400 Volt Class				Frame Size	480 Volt Class			Frame Size
		Output Current			Output Current					
kW	HP	Cont. ND (HD)	1 min. ND (HD)	2 sec. ND (HD)		Cont. ND (HD)	1 min. ND (HD)	2 sec. ND (HD)		
132 (110)	200 (150)	261 (205)	287 (308)	410 (410)	9	261 (205)	287 (308)	410 (410)	9	
160 (132)	250 (200)	300 (225)	330 (338)	450 (490)	9	300 (245)	330 (368)	450 (490)	9	
200 (160)	300 (250)	385 (300)	424 (450)	600 (600)	10	385 (300)	424 (450)	600 (600)	10	
250 (200)	350 (300)	460 (385)	506 (578)	770 (770)	10	460 (385)	506 (578)	770 (770)	10	
250 (200)	450 (350)	500 (420)	550 (630)	750 (840)	10	500 (420)	550 (630)	750 (840)	10	

Dimensions			
Frame Size	Height mm (in.)	Width mm (in.)	Depth mm (in.)
9	1150 (45.28)	480 (18.9)	362 (14.25)
10 ¹	2275 (89.6)	600 (23.62)	600 (23.62)

Notes:

1) Free standing Rittal enclosure

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