

ADJUSTABLE SPEED DRIVES

Fractional HP Drives .25 Through 1.5 HP Models FD-2541 Through FD-9523



Description

Fractional horsepower Drives are air-cooled, adjustable speed AC induction motors. The drive transmits constant torque at variable speeds. There is no physical contact between input and output members.

Features & Benefits

- The mechanical unit is self-contained and requires no special hookup for easy installation.
- Torque is transmitted by a magnetic field without friction or wear providing longer life and less downtime.
- Tachometer feedback maintains the output speed within 2% for load changes from 0-75%. Controls speed accurately.
- Approximately 200% rated torque capability is standard for starting and high peak loads. Meets demanding overload requirements.
- Rugged AC motor is the main drive member. Permanently lubricated bearings provide minimal maintenance.
- Available in single phase or three phase. Compatible with existing machinery wiring and plant power.
- Double output shaft and double 56C-Face allow brakes and gears to be easily added. Flexible modifications after drive is in service. Brake mounting on drive rather than on driven machine.

Ordering Information

Selection Table – 1 Phase – 60Hz			
HP	Speed Range (RPM)	Model Number	1 Phase
.25	1650-50	FD-2541-4001	115/230
.50	3300-65	FD-5021-4001	115/230
	1600-50	FD-5041-4001	115/230
.75	3300-65	FD-7521-4001	115/230
	1600-50	FD-7541-4001	115/230
1	1600-50	FD-9941-4001	115/230

Selection Table – 3 Phase – 60Hz			
HP	Speed Range (RPM)	Model Number	3 Phase
.25	1650-50	FD-2543-4001	230/460
.50	3300-65	FD-5023-4001	230/460
	1600-50	FD-5043-4001	230/460
.75	3300-65	FD-7523-4001	230/460
	1600-50	FD-7543-4001	230/460
1	3300-65	FD-9923-4001	230/460

Selection Table – 1 Phase – 50Hz			
HP	Speed Range (RPM)	Model Number	1 Phase
.25	1650-50	FD-2541-4002	115/230
.50	3300-65	FD-5021-4002	115/230
	1290-50	FD-5041-4002	115/230
.75	2700-65	FD-7521-4002	115/230
	1350-50	FD-7541-4002	115/230
.50	2700-65	FD-5023-4002	220/380
	1290-50	FD-5043-4002	220/380
.75	2700-65	FD-7523-4002	220/380
	1270-50	FD-7543-4002	220/380
1	2600-65	FD-9923-4002	220/380
	1300-380	FD-9943-4002	220/380
1.5	2700-490	FD-9523-4002	220/380

	1600-50	FD-9943-4001	230/460
1.5	3300-65	FD-9523-4001	230/460



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Fractional HP Drives .25 through 1.5 HP Specifications for FD-2541 Through FD-9523

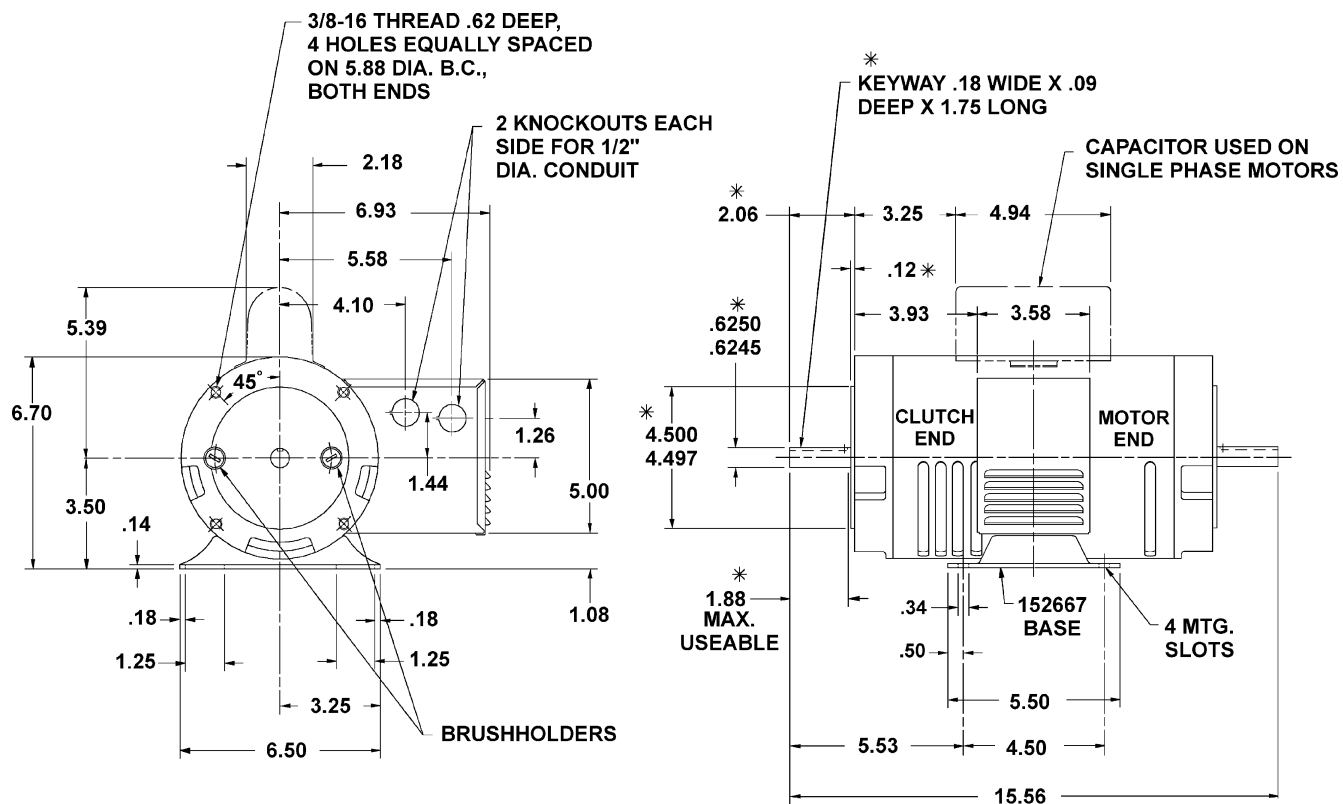
MOTOR	HP and RPM	See Ordering Information
	TEFC Unit	Standard
	NEMA Design B	Standard
	Class F Insulation, Class B Rise	Standard
	1.15 Service Factor	Standard
	Frame Type	56C
	Input Power Options	115/230V, 1 Phase, 60 Hz – Standard 230/460V, 3 Phase, 60 Hz - Standard
	Controller transformer winding, 80	Standard
CLUTCH	Coil Voltages	40 VDC – Standard; 90 VDC – Optional
	Rated for Constant Torque	Standard
	Starting Torque	Approximately 200%
	Intermittent Torque	Approximately 200%
	AC Tachometer Generator	Standard
	Cooling	100% Self-Ventilated
CONTROLLER	Model 15-47 Integral (Solid State)	Standard
	Model 15-80 Wall Mounted (Solid State)	Optional
	Closed Loop Speed Control	Standard
	Speed Regulation	Standard
	Regulated Speed Range	34 to 1 available
	Input Power	Motor Transformer Winding - Standard (40 V controller only)
	Wall Mounted Enclosure	Optional
	Output Voltage; Current to Clutch Coil	40VDC; 1.25 AMP
STATUS INDICATION	Speed Indicating Signal	0-40 VAC from Tachometer Generator for Optional Meter
ENVIRONMENTAL RATINGS	Storage Temperature	-20° to 65° C (-4° to 149° F) Standard
	Operating Temperature	0° to 40° C (32° to 104° F) Standard
	Maximum Operating Temperature	65° C – Optional
	Altitude	1000m (3300 Ft.) Standard
CODES & STANDARDS	Mechanical NEMA as applicable	Standard
	Mechanical 100% Dynamometer Tested	Standard
	Controllers (sold separately) Pre-Tested Components Printed Circuit Thermal Stress Cycle Computer Test and Pre-Calibrated PCBs	All Standard
Reliability Testing	Mechanical 100% dynamometer Tested Controllers	Standard
	Pre-tested components	Standard
	Printed circuit thermal stress cycle Computer	Standard
	Test and pre-calibrated PCB's	Standard

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Fractional HP Drives .25 through 1.5 HP

Outline Drawings

Fractional Horsepower Drive with Base



* THESE DIMENSIONS TYPICAL BOTH ENDS

Approx. net weight: 51 lbs.

DIMENSIONS ARE IN INCHES