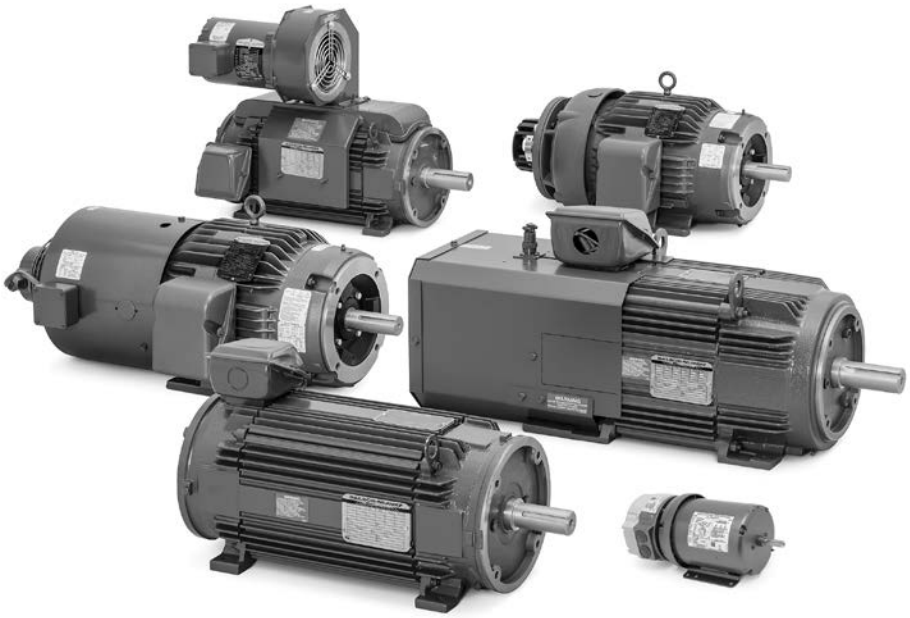
Variable Speed AC motors

Baldor-Reliance® variable speed motors are specifically designed for variable speed control. The platform provides constant torque across the entire operating speed range in traditional NEMA and IEC designs or a power dense laminated steel square frame. Controlling a motor with variable frequency power has never been easier when using a Baldor-Reliance variable speed motor.



Designed specifically for adjustable frequency power operation and full compliance with MG-1 Part 31.

1/3 - 1000 Horsepower

Product line - DPG-FV, TEBC, TEFC, TENV enclosures	EC Titanium™	RPM AC	RPM AC PM	Inverter Duty® V*S Master
Frame sizes	140, 180, 210	FL/RL180 -FL/RL440	FL180 - FL280	56C - 449T
Electrical features				
Designed for adjustable frequency power and complies with MG1 - part 31 for corona free operation	S	S	S	S
Constant torque performance down to zero speed 1000:1	–	S	S	S
Provisions for encoder mounting	–	S	S	S
Vector Duty® - stocked with encoder mounted	–	S	S	S
Class H insulation	–	S	S	–
Class F insulation	S	–	–	S
Class F insulation, Class B Temperature Rise	S	–	–	–
PM synchronous rotor technology for improved efficiency and increased power density	S	–	S	–
Low rotor inertia for high dynamic performance	–	S	S	–
Suitable for across the line operation	–	–	(2)	(2)
Internal Shaft Grounding Brush for common mode voltage free operation	S	–	–	–
Winding thermal protection with quantity 3 N/C thermostats, one per phase	–	S	S	S
F rise or better for longer motor life	–	–	S	S
Mechanical features				
Laminated steel frame RL/FL 210 - 440	–	S	S	–
Cast iron frame 180 - 440	–	–	–	S
Rolled Steel frame 140 - 210	S	–	–	–
Power dense designs - fits where other motors can't	S	S	S	–
Standard NEMA mounting for ease interchangability	S	–	–	S
DPG-FV enclosure	–	S	S	–
TEBC enclosure	–	S	S	S
TEFC enclosure	S	S	S	S
TENV enclosure	–	S	S	S

S = Standard
(1) Provided with power drive ratings
(2) Some models

Variable Speed AC motors – Speed range capabilities
EC Titanium™, V*S Master and RPMAC motors

EC Titanium™, V*S Master and RPMAC motors exceed all requirements of NEMA MG-1 Parts 30 and 31 for AC induction motors powered from adjustable speed inverter control. Satisfactory motor performance depends on proper drive setup.

Super-E® motors: Super-E motors are inverter-ready and meet NEMA MG 1 Part 31.4.4.2. Super-E motors are suitable for use with inverter drives. Motor inverter setup is unique to each specific application. Proper setup and wiring procedures must be closely followed.

Application considerations: It is necessary that motor-drive applications are commissioned by persons familiar with the operation and setup of adjustable speed drives, applicable electrical codes and any other regulations.

Each drive must be tuned to the motor for the specific application. System operating parameters must be checked, including voltage at motor power leads, to insure that motor/drive setup has been successfully completed.

Applications that are not properly setup can lead to substandard performance and failure of system components. In some installations, shaft grounding and isolated bearings may prevent bearing fluting and are available as an option or through Mod Express®.

Reference the chart below for constant torque and variable torque capabilities for each product family. Torque performance depends upon proper drive setup.

Motors 48 body style and smaller are suitable for maximum 230V inverter operation.

Efficiency savings: Significant energy savings can be achieved when applying inverter-ready motors such as the Baldor-Reliance® Super-E to centrifugal load applications (fan and centrifugal pump) and running at reduced speed taking advantage of the affinity laws where motor load and corresponding energy consumption is reduced by the cube of the speed.

Family	Enclosure	Frame Size	Constant Torque	Variable Torque	Comments
EC Titanium motor 230/460 and 460					
Motor Only (TEFC)	TEFC	140, 180, 210	20:1	20:1	EC Titanium Motor
EC Titanium Integrated drive and motor 115, 230 and 460					
IMD (TOP / AXIAL)	TEFC	140, 180, 210	10:1	10:1	EC Titanium Integrated Motor & Drive
Super-E® motors 230, 460 and 575 volts (2)					
EM	TEFC	56-210 (1)	20:1	20:1	General purpose premium efficient
		250-320	10:1	20:1	
		360-400	4:1	20:1	
		444-449	2:1	20:1	
EM	ODP	56-210 (1)	10:1	20:1	General purpose premium efficient
		250-320	5:1	20:1	
		360 - 449	2:1	20:1	
ECP/XEX and ECP8/841XL	TEFC	**Please refer to the Severe duty section**			Severe duty premium efficient
EWDM/Paint Free	TENV, TEFC	56-256 (1)	20:1	20:1	Washdown duty premium efficient
FS/ESS	TEFC	56-250 (5)	2:1	10:1	Stainless steel washdown duty
	TENV	56-140 (5)	4:1	20:1	
Standard-E motors 230/460 and 575 volts (2) (3)					
M (TEFC)		56-326T frames (1)	4:1	20:1	General purpose motors
		360T - 449T	2:1	20:1	
M (ODP)		56-326T frames (1)	4:1	20:1	
		360T - 449T	2:1	20:1	
CP/XT		145T frames	4:1	20:1	Severe duty
		180T-445T frames	2:1	20:1	
		447T-449T frames	2:1	20:1	
WDM		56-215T frames (1)	4:1	20:1	Washdown duty
V*S Master motors 230, 460 and 575 volts					
IDCSWDM	TENV	56-140	5:1	10:1	Inverter Duty, paint free
IDCSWDM	TEFC	56-215	3:1	10:1	Inverter Duty, paint free
IDM	TEBC	143-5009	1000:1	1000:1	Inverter Duty, blower cooled
IDNM	TENV	143-256	1000:1	1000:1	Inverter Duty, totally enclosed non-ventilated
ZDM	TEBC	143-5009	1000:1	1000:1	Vector Duty, blower cooled
ZDNM	TENV	143-256	1000:1	1000:1	Vector Duty, non-ventilated
IDWNM	TENV	143-254	1000:1	1000:1	Inverter Duty, washdown, non-ventilated
ZDWNM	TENV	143-254	1000:1	1000:1	Vector Duty, washdown, non-ventilated
IDNVSM	TENV	56-256	1000:1	1000:1	Inverter Duty, TENV, V*S Master
IDVSM	TEFC	182-449	1000:1	1000:1	Inverter Duty, TEFC, V*S Master
ZDNVSM	TENV	56-256	1000:1	1000:1	Vector Duty, TENV, V*S Master
ZDVSM	TEFC	182-449	1000:1	1000:1	Vector Duty, TEFC, V*S Master
ZDVSCP	TEFC-XT	143-326	1000:1	1000:1	Vector Duty, TEFC-XT, V*S Master
RPMAC motors 230 & 460					
IDNRPM	TENV	FL180-FL210	1000:1	1000:1	Inverter Duty, TENV, RPMAC
IDxRPM	TEFC, TEBC, DPG-FV	FL180-FL440	1000:1	1000:1	Inverter Duty, TEFC, TEBC, DPG-FV, RPMAC
IDCRPM	TEFC	FL180-FL280	1000:1 (4)	1000:1	Inverter Duty, TEFC, caged-IPM, RPMAC
ZDNRPM	TENV	FL180-FL210	1000:1	1000:1	Vector Duty, TENV, RPMAC
ZDxRPM	TEFC, TEBC	FL180-L400	1000:1	1000:1	Vector Duty, TEFC & TEBC, RPMAC
ZDPM	TEBC	FL180 - FL440	1000:1	1000:1	Vector Duty, TEBC, PM, RPMAC

Notes: (1) Baldor-Reliance type 35M frames and larger
(2) For greater speed range capabilities, please select an Inverter Duty®, Vector Duty®, V*S Master or RPM AC type motor, or contact your local sales office for a custom motor design.
(3) Standard-E EPAct efficient motors are suitable for use in adjustable speed applications per NEMA MG 1 Part 30.
(4) Except for IDCRPM281254 which is 4:1
(5) Speed ranges may vary by model. Contact your sales representative to ensure the motor needed will meet the turndown requirements.

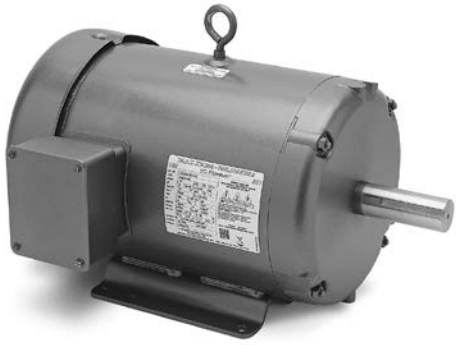
NEW!

EC Titanium™ motor, Inverter Duty®, three phase, totally enclosed

1 to 20 Hp

BALDOR · RELIANCE
SHAFT GROUNDING BRUSH INSTALLED
LB1508

IP54



Features:

- IE5+ Motor Efficiency
- FASR - Ferrite Assisted Synchronous Reluctance Rotor
- Class F Insulation with Class B Motor temperature rise
- IP54 Motor Enclosure with shaft seal
- Internal grounding brush for bearing current mitigation on DE retainer ring
- For inverter use only per NEMA MG1 Part 31.4.4.2
- 1.5 Service Factor Design
- Designed for longevity with 3 year warranty

Applications:

- Fans
- Pumps
- Blowers
- Unit Handling
- HVAC Systems
- Variable Speed Applications
- General Purpose Applications
- Compressors

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number (b)	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes (a)
1	1800	4000	143T	TEFC	**ECS101M0H1DF4**	1,032	EC1	12.29	28	89.3%	230/460	2.3/1.2	1, 37
2	1800	4000	145T	TEFC	**ECS101M0H2DF4**	1,132	EC1	12.29	35	90.7%	230/460	4.5/2.3	1, 37
3	1800	4000	145T	TEFC	**ECS101M0H3DF4**	1,187	EC1	13.29	44	91.4%	230/460	7.0/3.5	1, 37
3	1800	4000	182T	TEFC	**ECS101M0H3EF4**	1,241	EC1	16.54	59	92.8%	230/460	7.3/3.7	1
5	1800	4000	145T	TEFC	**ECS101M0H5DF4**	1,290	EC1	15.54	64	93.0%	230/460	10.4/5.2	1, 37
5	1800	4000	184T	TEFC	**ECS101M0H5EF4**	1,338	EC1	16.54	68	93.7%	230/460	10.5/5.3	1
7 1/2	1800	4000	184T	TEFC	**ECS101M0H7EF4**	1,611	EC1	18.04	92	94.0%	230/460	17.5/8.8	1
7 1/2	1800	3000	213T	TEFC	**ECS101M0H7FF4**	1,884	EC1	17.89	105	94.0%	230/460	17.4/8.7	1
10	1800	3000	213T	TEFC	**ECS101M0H10FF4**	2,228	EC1	19.02	123	94.8%	230/460	22.0/11.0	1
15	1800	3000	215T	TEFC	**ECS101M0H15FF4**	3,094	EC1	21.96	168	95.6%	230/460	34.8/17.4	1
20	1800	3000	215T	TEFC	**ECS101M4H20FF4**	3,365	EC1	23.51	218	95.9%	460	21.6	1, 82

(a) See notes on inside back flap.
(b) FASR – Ferrite Assisted Permanent Magnet, Syncronous Reluctance Rotor
Red catalog number indicates **NEW** product.
For EC Titanium Mod Express®, contact your local sales office.

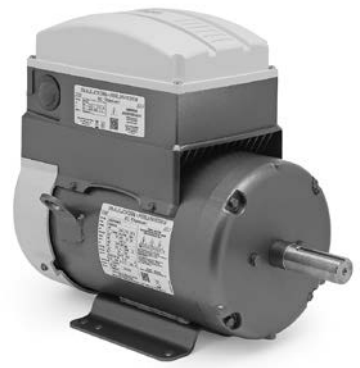
NEW!

EC Titanium™, Top Mount Integrated Drive Motor, three phase, totally enclosed

1 to 10 Hp

BALDOR · RELIANCE
SHAFT GROUNDING BRUSH INSTALLED
LB1508

IP54



Features:

- Permanenant Magnet PWM AC Drive Control
- IP54 Gasket Plastic Cover Enclosure
- Built-in ABB Ability and Bluetooth communications
- Serial Modbus RJ45 Interface
- 2 Digital Inputs, 2 Configurable Inputs (Analog or Digital)
- 1 Relay Ouput
- IE5+ Motor Efficiency
- Class F Insulation with Class B Motor temperature
- Internal grounding brush for bearing current mitigation
- Motor rated for inverter use per NEMA MG1 Part 31.4.4.2

Applications:

- Fans
- Pumps
- Blowers
- Unit Handling
- HVAC Systems
- Variable Speed Applications
- General Purpose Applications
- Compressors

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Motor Input Amps	Drive Module (b)	Drive Output Amps	Notes (a)
1-phase 100V...115V AC (+/-10%) - 3 Phase 230V Output															
1	1800	4000	143T	TEFC	**ECS100T1H1DF4**	1,725	EC2	12.37	35	89.3%	115	2.4	ECI1A3P2	3.2	2, 37, 68
1-phase 200...240V AC (+/-10%) - 3 Phase 230V Output															
1	1800	4000	143T	TEFC	**ECS100T8H1DF4**	1,725	EC2	12.37	35	89.3%	230	2.4	ECI8A7P0	7.0	2, 37, 68
2	1800	4000	145T	TEFC	**ECS100T8H2DF4**	2,004	EC2	12.37	41	90.7%	230	4.4	ECI8A7P0	7.0	2, 37, 68
3-phase 200...240V AC (+/-10%) - 3 Phase 230V Output															
1	1800	4000	143T	TEFC	**ECS100T2H1DF4**	1,725	EC2	12.37	35	89.3%	230	2.4	ECI2A4P3	4.3	2, 37, 68
2	1800	4000	145T	TEFC	**ECS100T2H2DF4**	2,004	EC2	12.37	41	90.7%	230	4.3	ECI2A7P0	7.0	2, 37, 68
3	1800	4000	182T	TEFC	**ECS100T2H3EF4**	2,267	EC2	16.71	66	92.8%	230	7.3	ECI2A10P5	10.5	2, 68
5	1800	4000	184T	TEFC	**ECS100T2H5EF4**	2,400	EC2	16.71	77	93.7%	230	10.5	ECI2A10P5	10.5	2, 68
3-phase 380...480V AC (+/-10%) - 3 Phase 460V Output															
1	1800	4000	143T	TEFC	**ECS100T4H1DF4**	1,725	EC2	12.37	35	89.3%	460	1.2	ECI4A2P2	2.2	2, 37, 68
2	1800	4000	145T	TEFC	**ECS100T4H2DF4**	1,883	EC2	12.37	41	90.7%	460	2.2	ECI4A2P2	2.2	2, 37, 68
3	1800	4000	145T	TEFC	**ECS100T4H3DF4**	2,254	EC2	13.37	47	91.4%	460	3.5	ECI4A4P1	4.1	2, 37, 68
3	1800	4000	182T	TEFC	**ECS100T4H3EF4**	2,267	EC2	16.71	66	92.8%	460	3.7	ECI4A4P1	4.1	2, 68
5	1800	4000	184T	TEFC	**ECS100T4H5EF4**	2,400	EC2	16.71	77	93.7%	460	5.3	ECI4A5P8	5.8	2, 68
7 1/2	1800	4000	184T	TEFC	**ECS100T4H7EF4**	2,988	EC2	18.21	106	94.0%	460	8.8	ECI4A9P5	9.5	2, 68
7 1/2	1800	3000	213T	TEFC	**ECS100T4H7FF4**	3,208	EC2	18.10	111	94.7%	460	8.6	ECI4A9P5	9.5	2, 68
10	1800	3000	215T	TEFC	**ECS100T4H10FF4**	3,779	EC2	19.23	132	94.8%	460	11.0	ECI4A12P0	12.0	2, 68

(a) See notes on inside back flap.
(b) Integrated Drive Model – available as a renewal parts replacement assembly
Red catalog number indicates **NEW** product.
For EC Titanium Mod Express®, contact your local sales office.

NEW!

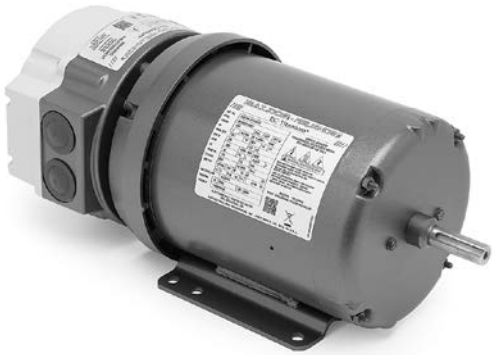
NEW!

EC Titanium™, Axial Mount Integrated Drive Motor, three phase, totally enclosed

1 to 7.5 Hp

BALDOR · RELIANCE
SHAFT GROUNDING BRUSH INSTALLED
LB1508

IP54



Features:

- Permanenant Magnet PWM AC Drive Control
- IP54 Gasket Plastic Cover Enclosure
- Built-in ABB Ability and Bluetooth communications
- Serial Modbus RJ45 Interface
- 2 Digital Inputs, 2 Configurable Inputs (Analog or Digital)
- 1 Relay Ouput
- IE5+ Motor Efficiency
- Class F Insulation with Class B Motor temperature
- Internal grounding brush for bearing current mitigation
- Motor rated for inverter use per NEMA MG1 Part 31.4.4.2

Applications:

- Fans
- Pumps
- Blowers
- Unit Handling
- HVAC Systems
- Variable Speed Applications
- General Purpose Applications
- Compressors

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Motor Input Amps	Drive Input Voltage	Drive Module (b)	Drive Output Amps	Notes (a)
1-phase 100V...115V AC (+/-10%) - 3 Phase 230V Output															
1	1800	4000	143T	TEFC	**ECS100A1H1DF4**	1,725	EC3	16.71	35	89.3%	2.4	115	ECI1A3P2	3.2	2, 37, 68
1-phase 200...240V AC (+/-10%) - 3 Phase 230V Output															
1	1800	4000	143T	TEFC	**ECS100A8H1DF4**	1,725	EC3	16.71	35	89.3%	2.4	230	ECI8A7P0	7.0	2, 37, 68
2	1800	4000	145T	TEFC	**ECS100A8H2DF4**	2,004	EC3	16.71	38	90.7%	4.4	230	ECI8A7P0	7.0	2, 37, 68
3-phase 200...240V AC (+/-10%) - 3 Phase 230V Output															
1	1800	4000	143T	TEFC	**ECS100A2H1DF4**	1,725	EC3	16.71	35	89.3%	2.4	230	ECI2A4P3	4.3	2, 37, 68
2	1800	4000	145T	TEFC	**ECS100A2H2DF4**	2,004	EC3	16.71	38	90.7%	4.3	230	ECI2A7P0	7.0	2, 37, 68
3	1800	4000	182T	TEFC	**ECS100A2H3EF4**	2,267	EC3	22.25	66	92.8%	7.3	230	ECI2A10P5	10.5	2, 68
5	1800	4000	184T	TEFC	**ECS100A2H5EF4**	2,400	EC3	22.25	76	93.7%	10.5	230	ECI2A10P5	10.5	2, 68
3-phase 380...480V AC (+/-10%) - 3 Phase 460V Output															
1	1800	4000	143T	TEFC	**ECS100A4H1DF4**	1,725	EC3	16.71	35	89.3%	1.2	460	ECI4A2P2	2.2	2, 37, 68
2	1800	4000	145T	TEFC	**ECS100A4H2DF4**	1,883	EC3	16.71	38	90.7%	2.2	460	ECI4A2P2	2.2	2, 37, 68
3	1800	4000	145T	TEFC	**ECS100A4H3DF4**	2,254	EC3	16.71	46	91.4%	3.5	460	ECI4A4P1	4.1	2, 37, 68
3	1800	4000	182T	TEFC	**ECS100A4H3EF4**	2,267	EC3	22.25	66	92.8%	3.7	460	ECI4A4P1	4.1	2, 68
5	1800	4000	182T	TEFC	**ECS100A4H5EF4**	2,400	EC3	22.25	76	93.7%	5.3	460	ECI4A5P8	5.8	2, 68
7 1/2	1800	4000	184T	TEFC	**ECS100A4H7EF4**	2,988	EC3	23.76	101	94.0%	8.8	460	ECI4A9P5	9.5	2, 68

(a) See notes on inside back flap.
(b) Integrated Drive Model – available as a renewal parts replacement assembly
Red catalog number indicates **NEW** product.
For EC Titanium Mod Express®, contact your local sales office.

NEW!

NEW!

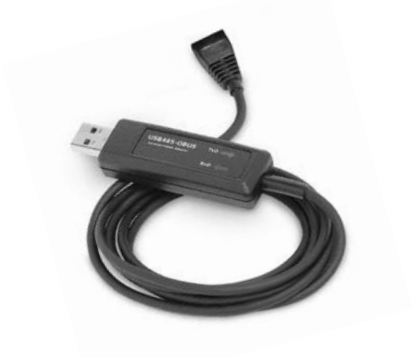
EC Titanium™ programming keypad and cable kits

Remote keypad ECS100L

- Designed for programming and control of the EC Titanium™.
- Kits comes with a 3-meter RJ45 cable

Copysticks ECS100B

- The COPYSTICK2 is used for fast and accurate repeat drive programming.
- Includes Bluetooth capability and communication status LED indication.
- LED indicators for parameter upload and download.
- Lock/Unlock function to prevent parameter overwrite.



RJ45 to USB Cable ECS100U

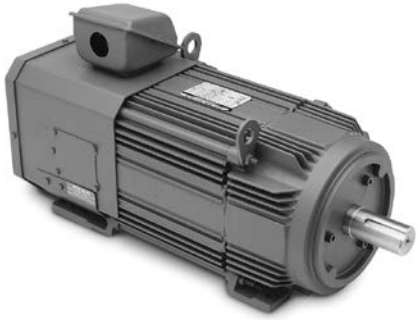
- PC Connection Kit, Isolated RJ45 to USB 3-meter Cable for ECM Software Tools.
- This kit is used when programming the drive with the PC Software Tools.
- High quality electrical separation between PC and Drive.
- Isolation voltage 2.5 vrms / 1 minute
- +/-15 kV ESD protection on RS485 pins
- Visual indicators (LED): 2 (Rx and Tx)
- Speed: up to 1 Mbps

Catalog Number	Description	List Price	Disc. Sym.	Ap'x Shpg. Wgt.
ECS100L	Remote Keypad	100	SVC	1
ECS100B	Copystick	220	SVC	1
ECS100U	RJ45 to USB Cable	445	SVC	1

Red catalog number indicates **NEW** product.

RPM AC, Inverter Duty®, three phase

5 thru 1000 Hp



Features:

- Power dense square laminated frame
- 1000:1 constant torque
- Class H, 40C, 1.0 SF
- 3 thermostats, one per phase
- For use on inverter only
- Induction and caged-IPM rotors

Applications:

- Extruders, conveyors, crane and hoist
- Web processing, process control, test stands
- Winders
- Centrifugal pumps and fans

Hp	Base Speed RPM	NEMA Frame	Enclosure	Catalog Number (b)	List Price	Disc. Sym.	Rotor Typer	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes (a)
5	1800	FL1838C	TENV	**IDNRPM18054C**	3,776	RP4	Induction	18.37	143	230/460	7.2	90
7 1/2	1800	FL1852C	TENV	**IDNRPM18074C**	4,341	RP4	Induction	21.87	194	230/460	11	91
10	1800	FL1844C	TEFC	**IDFRPM18104C**	4,757	RP3	Induction	23.26	179	230/460	13.9	91
		FL1838	TEFC	**IDCRPM18104**	5,708	RP3	Caged-IPM	21.76	158	460	10	106
		FL2162C	TENV	**IDNRPM21104C**	5,140	RP4	Induction	23.11	280	230/460	13.6	91
15	1800	FL1844C	TEBC	**IDBRPM18154C**	4,658	RP2	Induction	25.33	180	460	21	92
		FL1844C	TEFC	**IDCRPM18154**	7,109	RP3	Caged-IPM	23.26	180	460	15	106
		FL2162C	TEFC	**IDFRPM21154C**	5,924	RP3	Induction	26.49	290	460	20	92
20	1800	FL1852C	TEBC	**IDBRPM18204C**	5,132	RP2	Induction	27.33	209	460	27	92
		FL1848	TEFC	**IDCRPM18204**	7,109	RP3	Caged-IPM	24.26	194	460	20	106
		FL2162C	TEFC	**IDFRPM21204C**	5,924	RP3	Induction	26.49	290	460	27	92
25	1800	FL2162C	TEBC	**IDBRPM21254C**	5,974	RP2	Induction	28.55	290	460	34	92
		FL1844C	DPG-FV	**IDDRPM18254C**	5,401	RP1	Induction	19.87	200	460	33	92
		FL2158	TEFC	**IDCRPM21254**	7,678	RP3	Caged-IPM	25.49	270	460	25	106
		FL2173C	TEFC	**IDFRPM21254C**	6,398	RP3	Induction	29.50	355	460	34	92
30	1800	FL2162C	TEBC	**IDBRPM21304C**	5,974	RP2	Induction	28.55	290	460	40	92
		FL1852C	DPG-FV	**IDDRPM18304C**	5,620	RP1	Induction	21.87	230	460	39	92
		FL2162C	TEFC	**IDCRPM21304**	8,081	RP3	Caged-IPM	26.49	290	460	30	106
		FL2570C	TEFC	**IDFRPM25304C**	6,734	RP3	Induction	29.79	475	460	39	92
40	1800	FL2173	TEBC	**IDBRPM21404**	6,601	RP2	Induction	31.31	355	460	51	93
		RL2162	DPG-FV	**IDDRPM21404**	6,547	RP1	Induction	23.12	305	460	52	93
		FL2562	TEFC	**IDCRPM25404**	8,790	RP3	Caged-IPM	27.79	410	460	40	106
		FL2586	TEFC	**IDFRPM25404**	7,325	RP3	Induction	33.79	605	460	51	93
50	1800	FL2570	TEBC	**IDBRPM25504**	7,361	RP2	Induction	31.85	475	460	65	93
		RL2168	DPG-FV	**IDDRPM21504**	8,813	RP1	Induction	24.62	345	460	62	93
		FL2570	TEFC	**IDCRPM25504**	12,000	RP3	Caged-IPM	29.79	475	460	50	106
		FL2882	TEFC	**IDFRPM28504**	12,511	RP3	Induction	34.59	720	460	64	93
	1200	RL2570	DPG-FV	**IDDRPM25506**	10,583	RP1	Induction	26.38	480	460	64	93
60	1800	FL2578	TEBC	**IDBRPM25604**	10,865	RP2	Induction	33.85	540	460	75	93
		FL2873	TEFC	**IDCRPM28604**	15,014	RP3	Caged-IPM	32.34	635	460	60	106
		RL2168	DPG-FV	**IDDRPM21604**	8,813	RP1	Induction	24.62	345	460	74	93
		FL2890	TEFC	**IDFRPM28604**	12,511	RP3	Induction	36.59	795	460	76	93
	1200	RL2578	DPG-FV	**IDDRPM25606**	12,832	RP1	Induction	28.38	545	460	73	93
75	1800	FL2586	TEBC	**IDBRPM25754**	12,977	RP2	Induction	35.85	605	460	95	93
		RL2570	DPG-FV	**IDDRPM25754**	10,583	RP1	Induction	26.38	480	460	95	93
		FL2882	TEFC	**IDCRPM28754**	17,397	RP3	Caged-IPM	34.59	720	460	75	106
		FL2898	TEFC	**IDFRPM28754**	14,947	RP3	Induction	38.59	880	460	94	93
	1200	RL2586	DPG-FV	**IDDRPM25756**	17,004	RP1	Induction	30.38	615	460	91	93
100	1800	FL2890	TEBC	**IDBRPM281004R1**	14,687	RP2	Induction	41.11	805	460	124	93
		FL2890	TEFC	**IDCRPM281004**	22,782	RP3	Caged-IPM	38.59	880	460	100	106
		RL2578	DPG-FV	**IDDRPM251004**	12,832	RP1	Induction	28.38	545	460	119	93
	1200	RL2882	DPG-FV	**IDDRPM281006**	18,985	RP1	Induction	31.14	770	460	124	93

(a) See notes on inside back flap.
(b) The "R1" suffix indicates the latest revision FL or RL from the previous L frame design
Red catalog number indicates **NEW** product.
All TEBC and DPG-FV have integral blower rated 230/460 volts 3 phase. All TENV, TEFC and TEBC have top mounted conduit box. All DPG-FV are F1.
Encoder mounting provisions - include machined ODE bracket and shaft tapped for stub shaft.
For closed loop control see encoder feedback kits for use with ID-RPM AC motors.
For RPM AC Mod Express®, contact your local sales office.

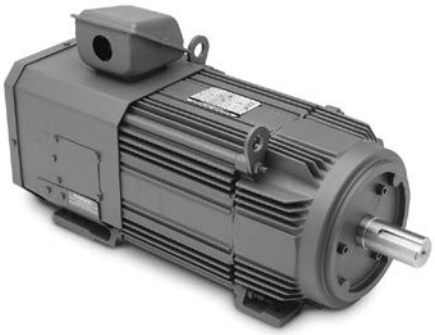
RPM AC, Inverter Duty®, three phase

Hp	Base Speed RPM	NEMA Frame	Enclosure	Catalog Number (b)	List Price	Disc. Sym.	Rotor Typer	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes (a)
125	1800	FL2898	TEBC	**IDBRPM281254**	15,542	RP2	Induction	43.11	890	460	156	93
		FL2898	TEFC	**IDCRPM281254**	27,226	RP3	Caged-IPM	38.59	880	460	125	106
		RL2586	DPG-FV	**IDDRPM251254**	17,004	RP1	Induction	30.38	615	460	148	93
	1200	RL2898	DPG-FV	**IDDRPM281256**	24,751	RP1	Induction	35.14	930	460	150.9	93
150	1800	FL3203	TEBC	**IDBRPM321504R1**	21,768	RP2	Induction	55.13	1310	460	177	93
		RL2882	DPG-FV	**IDDRPM281504**	18,985	RP1	Induction	31.14	770	460	180	93
	1200	RL3203	DPG-FV	**IDDRPM321506R1**	29,124	RP1	Induction	39.88	1185	460	180	93
200	1800	FL3698	TEBC	**IDBRPM362004R1**	30,155	RP2	Induction	56.30	1950	460	227	93
		RL2898	DPG-FV	**IDDRPM282004**	24,751	RP1	Induction	35.14	930	460	237	93
	1200	RL3213	DPG-FV	**IDDRPM322006R1**	33,915	RP1	Induction	42.38	1325	460	236	93
250	1800	FL3614	TEBC	**IDBRPM362504R1**	32,217	RP2	Induction	43.47	2000	460	283	93
		RL3203	DPG-FV	**IDDRPM322504R1**	29,124	RP1	Induction	39.88	1185	460	295	93
	1200	RL3698	DPG-FV	**IDDRPM362506R1**	36,923	RP1	Induction	39.47	1680	460	289	93
300	1800	FL4034	TEBC	**IDBRPM403004R1**	40,338	RP2	Induction	65.46	2620	460	336	93
		RL3213	DPG-FV	**IDDRPM323004R1**	33,915	RP1	Induction	42.38	1325	460	350	93
	1200	RL3614	DPG-FV	**IDDRPM363006R1**	42,946	RP1	Induction	43.47	2000	460	360	93
350	1800	RL3698	DPG-FV	**IDDRPM363504R1**	36,923	RP1	Induction	39.47	1680	460	401	93
400	1800	RL3614	DPG-FV	**IDDRPM364004R1**	42,947	RP1	Induction	43.47	2000	460	477	93
		FL4440	TEBC	**IDBRPM444004**	61,911	RP2	Induction	78.57	3940	460	479	93
	1200	RL4034	DPG-FV	**IDDRPM404006R1**	56,693	RP1	Induction	48.62	2530	460	451	93
500	1800	FL4451	TEBC	**IDBRPM445004**	69,936	RP2	Induction	78.57	4260	460	591	93
		RL4022	DPG-FV	**IDDRPM405004R1**	49,818	RP1	Induction	45.62	2260	460	557	93
	1200	RL4461	DPG-FV	**IDDRPM445006R1**	108,101	RP1	Induction	63.61	3505	460	669	93
600	1800	RL4046	DPG-FV	**IDDRPM406004R1**	69,117	RP1	Induction	48.62	2530	460	666	93
700	1800	RL4058	DPG-FV	**IDDRPM407004R1**	72,570	RP1	Induction	54.62	3080	460	875	94
1000	1800	RL4461	DPG-FV	**IDDRPM4410004R1**	108,101	RP1	Induction	63.61	3505	460	1202	94

(a) See notes on inside back flap.
(b) The "R1" suffix indicates the latest revision FL or RL from the previous L frame design
Red catalog number indicates **NEW** product.
All TEBC and DPG-FV have integral blower rated 230/460 volts 3 phase. All TENV, TEFC and TEBC have top mounted conduit box. All DPG-FV are F1.
Encoder mounting provisions - include machined ODE bracket and shaft tapped for stub shaft.
For closed loop control see encoder feedback kits for use with ID-RPM AC motors.
For RPM AC Mod Express®, contact your local sales office.

RPM AC, Vector Duty®, three phase, totally enclosed

5 thru 200 Hp



Features:

- Power dense square laminated frame
- 1000:1 constant torque
- Class H, 40C, 1.0 SF
- 3 thermostats, one per phase
- Speed feedback device included (b)
- For use on inverter only
- Induction and salient pole-IPM rotors

Applications:

- Extruders, conveyors, crane and hoist, winders
- Web processing, process control, test stands
- Centrifugal pumps and fans

Hp	Base Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Disc. Sym.	Rotor Type	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes (a)
5	1800	FL1838C	TENV	**ZDNRPM18054C**	5,863	RP4	Induction	17.87	143	230/460	7.2	90
7 1/2	1800	FL1852C	TENV	**ZDNRPM18074C**	6,428	RP4	Induction	21.87	194	230/460	11	91
10	1800	FL1844C	TEFC	**ZDFRPM18104C**	6,959	RP3	Induction	23.26	179	230/460	13.9	91
		FL1831C	TEBC	**ZDPM18010C-BV**	7,233	RP2	IPM	22.08	132	230/460	10.6	91
		FL2162C	TENV	**ZDNRPM21104C**	7,228	RP4	Induction	22.73	280	230/460	13.6	91
15	1800	FL1844C	TEBC	**ZDBRPM18154C**	6,744	RP2	Induction	25.33	180	460	21	92
		FL1838C	TEBC	**ZDPM18015C-BV**	7,315	RP2	IPM	22.71	158	460	16	92
20	1800	FL1852C	TEBC	**ZDBRPM18204C**	7,220	RP2	Induction	27.96	209	460	27	92
		FL1844C	TEBC	**ZDPM18020C-BV**	8,892	RP2	IPM	25.96	180	460	21.7	92
		FL2162C	TEFC	**ZDFRPM21204C**	8,508	RP3	Induction	28.55	290	460	27	92
25	1800	FL2173C	TEFC	**ZDFRPM21254C**	8,600	RP3	Induction	31.31	355	460	34	92
		FL1852C	TEBC	**ZDPM18025C-BV**	8,913	RP2	IPM	27.96	209	460	26.6	92
30	1800	FL2162C	TEBC	**ZDBRPM21304C**	8,062	RP2	Induction	28.55	290	460	40	92
		FL1852C	TEBC	**ZDPM18030C-BV**	8,913	RP2	IPM	27.96	209	460	32.3	92
		FL2570C	TEFC	**ZDFRPM25304C**	8,936	RP3	Induction	29.54	475	460	39	92
40	1800	FL2173	TEBC	**ZDBRPM21404**	8,489	RP2	Induction	31.31	355	460	51	93
		FL2162	TEBC	**ZDPM21040-BV**	9,339	RP2	IPM	28.55	290	460	43.2	93
		FL2586	TEFC	**ZDFRPM25404**	9,318	RP3	Induction	35.85	605	460	51	93
50	1800	FL2570	TEBC	**ZDBRPM25504**	9,250	RP2	Induction	31.85	475	460	65	93
		FL2168	TEBC	**ZDPM21050-BV**	9,674	RP2	IPM	30.06	325	460	53.4	93
60	1800	FL2578	TEBC	**ZDBRPM25604**	12,754	RP2	Induction	33.85	540	460	75	93
		FL2173	TEBC	**ZDPM21060-BV**	10,597	RP2	IPM	31.31	355	460	65.7	93
75	1800	FL2586	TEBC	**ZDBRPM25754**	14,865	RP2	Induction	35.85	605	460	95	93
		FL2578	TEBC	**ZDPM25075-BV**	17,411	RP2	IPM	33.85	540	460	81.8	93
100	1800	FL2890	TEBC	**ZDBRPM281004R1**	16,574	RP2	Induction	41.27	805	460	124	93
		FL2586	TEBC	**ZDPM25100-BV**	18,448	RP2	IPM	35.85	605	460	110.6	93
125	1800	FL2898	TEBC	**ZDBRPM281254**	17,431	RP2	Induction	43.27	890	460	156	93
		FL2882	TEBC	**ZDPM28125-BV**	19,486	RP2	IPM	39.27	730	460	137	93
150	1800	FL2890	TEBC	**ZDPM28150-BV**	20,523	RP2	IPM	41.27	805	460	168	93

(a) See notes on inside back flap.
(b) Induction motor feedback BEI HS35 1024PPR encoder, IPM motor feedback Dynapar HS25 resolver.
Red catalog number indicates **NEW** product.
All TEBC have integral blower rated 230/460 volts 3 phase.
Continuous constant torque to zero speed

Encoder feedback kits

Includes all mounting hardware and mating connector.
The following kits for use with RPM AC motors on previous pages.

Catalog Number	Motor Enclosure	Manufacturer	Type	PPR	Frame Size	Mag or Optical	Conn Type	Input Voltage VDC	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
417077-136	TENV, DPFV	BEI	HS35	1024	FL180 - FL/RL440	O	MS-ST	5 - 15	1,442	SVC	5
417077-208TL	TENV, DPFV	BEI	HS35	1024	FL180 - FL/RL440	O	MS-TL	5 - 28	1,442	SVC	5
417077-153	TENV, DPFV	Dynapar	H20	1024	FL180 - FL/RL440	O	MS-ST	5 - 15	1,598	SVC	9
417077-156	TENV, DPFV	Dynapar	ST67	1024	FL180 - FL/RL440	M	Latch	5 - 15	2,367	SVC	9
417077-242TL	TENV, DPFV	Dynapar	HS35R	1024	FL180 - FL/RL440	O	MS-TL	5 - 26	1,442	SVC	6
417077-170	TENV, DPFV	Avtron	HS35M	1024	FL180 - FL/RL440	M	MS-ST	5 - 24	1,442	SVC	10
417077-133	TEFC	BEI	HS35	1024	FL180 - FL440	O	MS-ST	5 - 15	1,442	SVC	5
417077-165	TEBC	BEI	HS35	1024	FL180	O	MS-ST	5 - 15	1,442	SVC	10
417077-188	TEBC	BEI	HS35	1024	FL210	O	MS-ST	5 - 15	1,442	SVC	15
417077-189	TEBC	BEI	HS35	1024	FL250	O	MS-ST	5 - 15	1,442	SVC	15
417077-212TL	TEBC	BEI	HS35	1024	FL250	O	MS-TL	5 - 28	1,442	SVC	15
417077-213TL	TEBC	BEI	HS35	1024	FL280	O	MS-TL	5 - 28	1,442	SVC	15
417077-244	TEBC	BEI	HS35	1024	FL320 - FL440	O	MS-TL	5 - 28	1,442	SVC	5
417077-167	TEBC	Dynapar	H20	1024	FL180	O	MS-ST	5 - 15	1,598	SVC	10
417077-151	TEBC	Dynapar	H20	1024	FL210	O	MS-ST	5 - 15	2,060	SVC	20
417077-191	TEBC	Dynapar	H20	1024	FL250	O	MS-ST	5 - 15	2,060	SVC	20
417077-168	TEBC	Dynapar	ST67	1024	FL180	M	Latch	5 - 15	2,367	SVC	20
417077-192	TEBC	Dynapar	ST67	1024	FL210	M	Latch	5 - 15	2,367	SVC	20
417077-168	TEBC	Dynapar	ST67	1024	FL250	M	Latch	5 - 15	2,367	SVC	20
417077-206	TEBC	Dynapar	ST67	1024	FL280	M	Latch	5 - 15	2,367	SVC	20
417077-245	TEBC	Dynapar	ST67	1024	FL320 - FL440	M	Latch	5 - 15	2,250	SVC	9
417077-173	TEBC	Avtron	HS35M	1024	FL180	M	MS-ST	5 - 24	2,150	SVC	10
417077-182	TEBC	Avtron	HS35M	1024	FL210	M	MS-ST	5 - 24	2,150	SVC	15
417077-183	TEBC	Avtron	HS35M	1024	FL250	M	MS-ST	5 - 24	2,150	SVC	15
417077-205	TEBC	Avtron	HS35M	1024	FL280	M	MS-ST	5 - 24	2,150	SVC	15
417077-246	TEBC	Avtron	HS35M	1024	FL320 - FL440	M	MS-ST	5 - 24	2,150	SVC	10
417077-300	TENV, DPFV	Avtron	HS35M	2048	FL180 - FL/RL440	M	Latch	5-24V	2,595	SVC	5
417077-301	TEBC	Avtron	HS35M	2048	FL180	M	Latch	5-24V	3,420	SVC	13
417077-302	TEBC	Avtron	HS35M	2048	FL210	M	Latch	5-24V	3,420	SVC	15
417077-303	TEBC ONLY	Avtron	HS35M	2048	FL250	M	Latch	5-24V	3,420	SVC	15
417077-304	TEBC ONLY	Avtron	HS35M	2048	FL280	M	Latch	5-24V	3,420	SVC	15
417077-305	TEBC ONLY	Avtron	HS35M	2048	FL320	M	Latch	5-24V	3,220	SVC	5

Encoder feedback kits RPM AC designs

Catalog Number	Motor Enclosure	Type	Frame Size	Mfg.	Mag or Optical	Conn Type	Input Voltage VDC	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
417077-153	DPFV	H20	FL180-RL280 (2)	Dynapar	O	MS-ST	5-15	1,598	SVC	9
417708-85	DPFV	H20	L280-L400	Dynapar	O	MS-ST	5-15	1,598	SVC	5
417077-156	DPFV	RL67	FL180-RL280 (2)	Dynapar	M	Latch	5-15	2,060	SVC	9
417708-87	DPFV	RL67	L280-L400	Dynapar	M	Latch	5-15	2,060	SVC	6
417708-120	DPFV	RL67	L440	Dynapar	M	Latch	5-15	2,060	SVC	23

(1) Includes FL180, FL210, FL250, RL210, RL250, FL280, RL280, FDL11, FDL13, FDL16, FDL18, RDL13, RDL16 and RDL18.
(2) Includes FL180, RL210, RL250, RL280, FDL11, RDL13, RDL16 and RDL18

Encoder mounting kits – no encoder

Kit includes stub shaft only (no encoder)
Unmounted – for RPM AC motor frames FL180-L440

Encoder (reference)	Frame	Enclosure	Catalog Number	List Price	Disc. Sym.
BEI HS35 (1 inch dia.)	FL180-FL/RL250 (3)	DPFV,TENV,TEFC,TEBC (2)	**417708-201**	340	SVC
	FL/RL280 thru L400	DPFV & TEBC (2)	**417708-202**	340	SVC
	L440	DPFV & TEAO-P/B	**417708-203**	340	SVC

(2) Note: encoder addition requires an extended blower cover on TEBC motors in all frames except L320. Cover is included in complete kits only.
(3) Includes FL180, FL210, FL250, RL210, RL250

Encoder mounting kits – no encoder

Kit to include 5/8" dia. stub shaft and extended blower shroud when required

Catalog Number	Motor Enclosure	Type	Frame Size	Mfg.	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
417708-184	TENV, DPFV	HS35M	FL180 - FL/RL440	Avtron	687	SVC	3
417708-185	TEBC	HS35M	FL180-FL440	Avtron	796	SVC	11
417708-186	TEBC	HS35M	FL210	Avtron	801	SVC	13
417708-187	TEBC	HS35M	FL250	Avtron	882	SVC	13
417708-188	TEBC	HS35M	FL280	Avtron	868	SVC	13
417708-189	TEBC	HS35M	FL320-FL440	Avtron	594	SVC	3

RPM AC slide bases

Application: Used for adjustable belt tension on belted application not suitable for wall or ceiling mounting.

Frame	Catalog Number	List Price	Disc. Sym.	Dimension Sheet	Approx. Wt. (Lb.)
FL1831	**419914-9A**	469	SVC	609957-9	13
FL1838	**419914-9B**	469	SVC	609957-9	14
FL1844	**419914-9C**	469	SVC	609957-9	15
FL1852	**419914-9D**	469	SVC	609957-9	17
FL/RL2153	**419914-10A**	469	SVC	609957-10	39
FL/RL2158	**419914-10B**	469	SVC	609957-10	27
FL/RL2162	**419914-10D**	547	SVC	609957-10	48
FL/RL2168	**419914-10L**	547	SVC	609957-10	52
FL/RL2173	**419914-10M**	547	SVC	609957-10	28
FL/RL2570	**419914-10G**	547	SVC	609957-10	55
FL/RL2578	**419914-10N**	1,525	SVC	609957-10	58
FL/RL2586	**419914-10P**	1,485	SVC	609957-10	56
FL/RL/L2882	**419914-10K**	1,006	SVC	609957-10	80
FL/RL/L2890	**419914-10R**	1,006	SVC	609957-10	80
FL/RL/L2898	**419914-10S**	1,006	SVC	609957-10	90
FL/RL3203	**419914-11P**	1,110	SVC	609977-10	90
FL/RL3213	**419914-11R**	1,110	SVC	609977-10	90
UFL/URL3698	**419914011M**	1,300	SVC	609977-10	105
UFL/URL3614	**419914-11N**	1,300	SVC	609977-10	124
UFL/URL4034	**419914011F**	2,476	SVC	609977-10	132
UFL/URL4046	**419914-11G**	2,476	SVC	609977-10	141
UFL/URL4429	**419914011H**	4,672	SVC	609977-10	140
UFL/URL4440	**419914011J**	4,672	SVC	609977-10	150
UFL/URL4451	**419914011K**	4,672	SVC	609977-10	160
UFL/URL4461	**419914011L**	4,672	SVC	609977-10	165

Red catalog number indicates **NEW** product.

RPM AC filter kits

Application: For use with DPFV enclosures

Frame	Catalog Number	List Price	Disc. Sym.	Description	Approx. Wt. (Lb.)
FL180	**417077-57**	911	SVC	Washable Wire Mesh Canister Type	2
RL210	**417077-59**	911	SVC	Washable Wire Mesh Canister Type	4
RL250	**417077-59**	911	SVC	Washable Wire Mesh Canister Type	4
RL280	**417077-59**	911	SVC	Washable Wire Mesh Canister Type	4
RL320	**417077-59**	911	SVC	Washable Wire Mesh Canister Type	4
RL360	**417077-102**	1,165	SVC	Washable Wire Mesh Canister Type	6
RL400	**417077-102**	1,642	SVC	Washable Wire Mesh Canister Type	6
RL440	**417077-124**	1,893	SVC	Square Replaceable Polyester Type	18

RPM AC mounting conversion kits for FL180 - FL280 frames

Kits are for relocation of the conduit box of stock FL180 - FL280 frame motors as noted.
Installation of this kit requires complete disassembly/reassembly of motor. Price is for kit only.

Frame	Catalog Number	List Price	Disc. Sym.	Enclosure	Relocate Conduit Box:
For FL180-FL280 frames					
FL180	**417077-184**	836	SVC	TENV, TEBC, TEFC	From Top to F-1 or F-2
FL180	**417077-185**	1,188	SVC	DPFV	From F-1 to F-2
FL210	**417077-186**	836	SVC	TENV, TEBC, TEFC	From Top to F-1 or F-2
FL250	**417077-187**	870	SVC	TENV, TEBC, TEFC	From Top to F-1 or F-2
FL280	**417077-201**	1,730	SVC	TENV, TEBC, TEFC	From Top to F-1 or F-2
For RL210-RL280 frames					
RL250 thru RL2586	**417077-131**	875	SVC	DPFV	From F-1 to F-2
RL2153 thru RL2173	**417077-130**	695	SVC	DPFV	From Top to F-1 or F-2
RL2882 thru RL2898	**417077-202**	875	SVC	DPFV	From F-1 to F-2

Replacement blower kits for DPG-FV RPM AC motors

Kit includes blower motor and shroud, blower wheel and all mounting hardware. Filter is not included.

DPFV Frame	Catalog Number	List Price	Disc. Sym.
RL210	**417077-144**	897	SVC
RL250	**417077-145**	1,753	SVC
RL280	**419947-40**	1,747	SVC
RL360	**419947-41**	2,123	SVC
RL400	**419947-42**	2,324	SVC

Kit includes terminal box and blower motor only.

TEBC Frame	Catalog Number	List Price	Disc. Sym.
FL180 (3)	**417077-143**	897	SVC
FL/RL210-320(3)	**417077-141**	1,142	SVC

(3) Compact inline blower used on stock models (IP44 rating)
(4) Being phased out

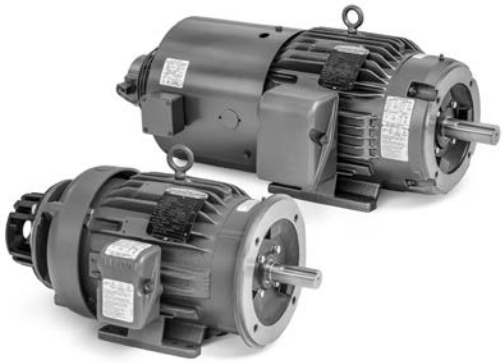
Roller bearing kits for RPM AC motors

Catalog Number	Frame	Description	List	Disc. Sym.
418057-645	FL/RL280	Kit – Convert FL/RL280 to roller bearing	985	SVC
418057-786	FL/RL320	Kit – Convert FL/RL320 to roller bearing	972	SVC
418057-764	FL/RL360&400	Kit – Convert FL/RL360 & 400 to roller bearing	1,663	SVC
418057-501	FL/RL440	Kit – Convert FL/RL440 to roller bearing	2,766	SVC

Red catalog number indicates **NEW** product.

V*S Master Inverter Duty® motors, three phase, totally enclosed

1/3 thru 300 Hp



Features:

- TENV, TEFC and TEBC, 1000:1CT
- Provisions for encoder mounting
- 3 thermostats, one per phase
- Standard NEMA frame sizes

Applications:

- Extruders, conveyors, crane and hoist, winders
- Web processing, process control, test stands
- Centrifugal pumps and fans

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
1/3	1800	2700	56C	TENV	**IDVSNM3534**	510	VS4	13.84	32	80	230/460	0.6	2, 48
			56C	TENV	**IDNM3534**	510	VS4	13.84	33	80	230/460	0.6	2, 8, 60,106
1/2	1800	2700	56C	TENV	**IDVSNM3538**	596	VS4	13.84	35	84	230/460	0.9	2, 48
			56C	TENV	**IDNM3538**	596	VS4	13.84	31	80	230/460	0.8	2, 8, 60,106
			56C	TENV	**IDVSNM3538-5**	596	VS4	13.84	31	84	575	0.6	2,48
3/4	1800	2700	56C	TENV	**IDVSNM3542**	664	VS4	13.84	36	84	230/460	1.2	2, 48
			56C	TENV	**IDNM3542**	664	VS4	13.84	33	78.5	230/460	1.4	2, 8, 60,106
			56C	TENV	**IDVSNM3542-5**	664	VS4	13.84	35	84	575	0.9	2,48
1	1800	2700	56C	TENV	**IDVSNM3546**	1,079	VS4	14.84	45	87.5	230/460	1.5	2, 48
			56C	TENV	**IDVSNM3546-5**	1,079	VS4	14.84	45	87.5	575	1.2	2,48
			143TC	TENV	**IDVSNM3581T**	1,354	VS4	14.65	58	85.5	230/460	1.5	2, 48
			143TC	TENV	**IDNM3581T**	1,354	VS4	14.65	58	85.5	230/460	1.5	2, 8, 60,106
			143TC	TENV	**IDVSNM3581T-5**	1,354	VS4	14.65	58	85.5	575	1.2	2, 48
			143TC	TEBC	**IDM3581T**	1,789	VS2	19.00	65	87.5	230/460	1.5	2, 8,106
			143TC	TEBC	**IDM3581T-5**	1,789	VS2	19.02	65	85.5	575	1.2	2, 8,106
	1200	2800	145TC	TENV	**IDVSNM3582T**	2,097	VS4	14.65	61	82.5	230/460	1.8	2, 48
			145TC	TEBC	**IDM3582T**	2,101	VS2	19.02	68	82.5	230/460	1.8	2, 8,106
1 1/2	1800	2700	145TC	TENV	**IDVSNM3584T-5**	1,495	VS4	14.65	64	86.5	575	1.7	2, 48
			145TC	TENV	**IDVSNM3584T**	1,495	VS4	14.65	64	82.5	230/460	2.1	2, 48
			145TC	TENV	**IDNM3584T**	1,495	VS4	14.65	58	84	230/460	2.3	2, 8, 60,106
			145TC	TEBC	**IDM3584T**	1,892	VS2	19.02	70	88.5	230/460	2.1	2, 8,106
			145TC	TEBC	**IDM3584T-5**	1,892	VS2	19.02	70	88.5	575	1.7	2, 8,106
	1200	1800	182TC	TEBC	**IDM3667T**	2,507	VS2	21.71	107	87.5	230/460	2.5	2, 8,106
2	1800	2700	145TC	TENV	**IDVSNM3587T-5**	1,561	VS4	14.65	62	86.5	575	2.3	2, 48
			145TC	TENV	**IDVSNM3587T**	1,561	VS4	14.65	63	86.5	230/460	2.8	2, 48
			145TC	TEBC	**IDM3587T**	2,023	VS2	19.02	72	88.5	230/460	2.7	2, 8,106
			145TC	TEBC	**IDM3587T-5**	2,023	VS2	19.02	73	88.5	575	2.3	2, 8,106
			145TC	TENV	**IDNM3587T**	1,561	VS4	14.65	67	86.5	230/460	2.8	2, 8, 60,106
			182TC	TENV	**IDNM3669T**	1,812	VS4	17.21	94	84	230/460	2.9	2, 8, 60,106
	1200	1800	184TC	TEBC	**IDM3664T**	2,427	VS2	21.71	124	88.5	230/460	3.2	2, 8,106
3	1800	2700	182TC	TEFC	**IDVSM3661T**	1,724	VS3	20.23	105	89.5	230/460	4.1	2, 48
			182TC	TENV	**IDVSNM3661T**	2,046	VS4	17.85	111	89.5	230/460	4.3	2, 48
			184TC	TEBC	**IDM3661T**	2,046	VS2	21.71	111	89.5	230/460	4.1	2, 8,106
			184TC	TEBC	**IDM3661T-5**	2,046	VS2	21.71	112	89.5	575	3.3	2, 8,106
			184TC	TENV	**IDNM3661T-5**	2,046	VS4	17.85	108	88.5	575	3.4	2,48
			184TC	TENV	**IDNM3661T**	2,046	VS4	17.21	108	88.5	230/460	4.2	2, 8, 60,106
	1200	1800	213TC	TEBC	**IDM3764T**	3,174	VS2	29.14	187	90.2	230/460	4.5	2, 8, 70,106

(a) See notes on inside back flap.

Cast iron frame

Continuous constant torque to zero speed

V*S Master Inverter Duty® motors, three phase, totally enclosed

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
5	1800	2700	L184TC	TEFC	**IDVSM3665T**	1,999	VS3	20.23	120	89.5	230/460	6.6	2, 48
			L184TC	TENV	**IDVSNM3665T**	2,281	VS4	17.85	124	89.5	230/460	6.6	2, 48
			184TC	TEFC	**IDVSM3665T-5**	1,999	VS3	20.23	118	90.2	575	5.2	2, 48
			184TC	TEBC	**IDM3665T**	2,734	VS2	21.71	124	90.2	230/460	6.5	2,8,106
			184TC	TEBC	**IDM3665T-5**	2,734	VS2	21.71	124	90.2	575	5.2	2, 8,106
			184TC	TENV	**IDNM3665T-5**	2,281	VS4	17.21	116	89.5	575	5.2	2,48
			184TC	TENV	**IDNM3665T**	2,281	VS4	17.21	116	89.5	230/460	6.6	2, 8, 60,106
			213TC	TENV	**IDNM3767T**	2,543	VS4	20.40	170	89.5	230/460	6.7	2, 8, 60,106
	1200	1800	215TC	TEBC	**IDM3768T**	3,885	VS2	29.14	226	90.2	230/460	7.3	2, 8, 70,106
7 1/2	1800	2700	213TC	TEFC	**IDVSM3770T**	2,572	VS3	24.59	180	91.7	230/460	9.5	2, 48
			L215TC	TENV	**IDVSNM2237T**	2,644	VS4	20.86	212	91.7	230/460	10.1	2, 48
			213TC	TEBC	**IDM3770T**	3,296	VS2	29.14	170	91.7	230/460	9.5	2, 8, 70,106
			213TC	TEBC	**IDM3770T-5**	3,296	VS2	30.07	170	91.7	575	7.5	2, 8, 70,106
			215TC	TENV	**IDVSNM2237T-5**	2,644	VS4	20.46	196	91.7	575	8.2	2,48
			254TC	TENV	**IDNM2237T**	3,163	VS4	24.05	242	90.2	230/460	9.1	2, 8, 60,106
			213TC	TENV	**IDNM3770T**	2,640	VS4	20.40	196	91.7	230/460	10.1	2, 8, 60,106
	1200	1800	254TC	TEBC	**IDM2276T**	5,586	VS2	33.07	332	91	230/460	10.7	2, 8, 70,106
10	1800	2700	L215TC	TEFC	**IDVSM3774T**	3,353	VS3	24.59	231	92.4	230/460	12.5	2, 48
			254TC	TENV	**IDVSNM2238T**	3,627	VS4	24.05	305	91.7	230/460	13	2, 48
			215TC	TEBC	**IDM3774T**	3,531	VS2	29.14	231	92.4	230/460	12.5	2, 8, 70,106
			215TC	TEBC	**IDM3774T-5**	3,531	VS2	30.07	231	92.4	575	10	2, 8, 70,106
			215TC	TEFC	**IDVSM3774T-5**	3,353	VS3	24.59	231	92.4	575	10	2,48
			256TC	TENV	**IDNM2238T**	3,627	VS4	24.05	286	91.7	230/460	13	2, 8, 60,106
	1200	1800	256TC	TEBC	**IDM2332T**	6,825	VS2	33.07	352	91.7	230/460	14.2	2, 8, 70,106
15	1800	2700	254TC	TEFC	**IDVSM2333T**	3,901	VS3	26.71	291	92.4	230/460	18	2, 48
			256TC	TENV	**IDVSNM2333T**	4,362	VS4	24.05	284	93.6	230/460	18.5	2, 48
			256TC	TEBC	**IDM2333T**	3,838	VS2	33.07	318	92.4	230/460	18.1	2, 8, 70,106
			256TC	TEBC	**IDM2333T-5**	3,838	VS2	34.15	318	92.4	575	14.5	2, 8, 70,106
			256TC	TENV	**IDVSNM2333T-5**	4,362	VS4	24.05	284	93.6	575	14.8	2,48
			254TC	TENV	**IDNM2333T**	4,362	VS4	24.05	286	93.6	230/460	18.5	2, 8, 60,106
	1200	1800	284T	TEBC	**IDM4100T**	8,091	VS2	36.48	450	93	230/460	19.7	2, 8, 45, 70,106
20	1800	2700	256TC	TEFC	**IDVSM2334T**	4,229	VS3	26.71	321	93	230/460	24	2, 48
			256TC	TEBC	**IDM2334T**	4,099	VS2	33.07	333	93	230/460	24	2, 8, 70,106
			256TC	TEBC	**IDM2334T-5**	4,099	VS2	34.15	333	93	575	19	2, 8, 70,106
			256TC	TEFC	**IDVSM2334T-5**	4,229	VS3	26.71	321	93	575	19.2	2,48
			284T	TENV	**IDNM2334T**	4,710	VS4	27.36	406	94.5	230/460	25.5	2, 8, 45, 60,106
	1200	1800	286T	TEBC	**IDM4102T**	9,109	VS2	36.48	455	93	230/460	26	2, 8, 45, 70,106
25	1800	2700	284TC	TEFC	**IDVSM4103T**	5,370	VS3	30.42	446	93.6	230/460	30	2, 48
			286T	TEBC	**IDM4103T**	5,055	VS2	36.48	417	93.6	230/460	30	2, 8, 45, 70,106
	1200	1800	324T	TEBC	**IDM4111T**	10,381	VS2	39.24	557	93	230/460	32	2, 8, 45, 70,106
30	1800	2700	286TC	TEFC	**IDVSM4104T**	5,867	VS3	30.42	457	94.1	230/460	36	2, 48
			286T	TEBC	**IDM4104T**	5,798	VS2	36.48	464	93.6	230/460	38	2, 8, 45, 70,106
	1200	1800	326T	TEBC	**IDM4117T**	11,554	VS2	39.24	628	93	230/460	39	2, 8, 45, 70,106
40	1800	2700	324T	TEFC	**IDVSM4110T**	6,768	VS3	30.44	619	94.1	230/460	50	2, 48
			324T	TEBC	**IDM4110T**	7,840	VS2	39.24	605	94.5	230/460	47	2, 8, 45, 70,106
50	1800	2700	326T	TEFC	**IDVSM4115T**	8,272	VS3	30.28	670	94.5	230/460	60	2, 48
			326T	TEBC	**IDM4115T**	8,799	VS2	39.24	622	94.5	230/460	57	2, 8, 45, 70,106
60	1800	2700	364T	TEFC	**IDVSM4314T**	10,246	VS3	33.44	869	94.2	230/460	71.2	2, 48
75	1800	2700	365T	TEFC	**IDVSM4316T**	12,833	VS3	33.44	873	94.3	230/460	89.2	2, 48
100	1800	2700	405T	TEFC	**IDVSM4400T-4**	16,585	VS3	38.31	1218	94.1	460	115	2, 48
125	1800	2700	444T	TEFC	**IDVSM4410T-4**	20,587	VS3	44.62	1637	94.1	460	150	2, 48
150	1800	2700	445T	TEFC	**IDVSM4406T-4**	24,569	VS3	44.62	1789	95	460	177	2, 48
200	1800	2700	447T	TEFC	**IDVSM4407T-4**	29,111	VS3	48.40	2189	95.4	460	226	2, 48
250	1800	2700	449T	TEFC	**IDVSM4408T-4**	41,144	VS3	53.40	2511	95.8	460	277	2, 48
300	1800	2700	449T	TEFC	**IDVSM44304T-4**	41,144	VS3	53.40	2816	96.2	460	338	2, 48

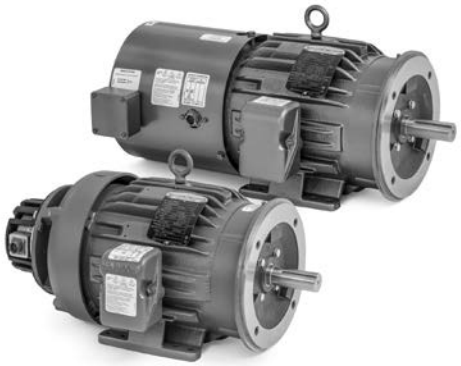
(a) See notes on inside back flap.

Cast iron frame

Continuous constant torque to zero speed

V*S Master Vector Duty®, three phase, totally enclosed

1/2 thru 300 Hp



Features:

- TENV & TEFC, 1000:1CT without blower
- HS35 Encoder, 1024 PPR unless Note 107 (HS25) is indicated below
- 3 thermostats, one per phase
- Standard NEMA frame sizes

Applications:

- Extruders, conveyors, crane and hoist, winders
- Web processing, process control, test stands
- Centrifugal pumps and fans

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
1/2	1800	2700	56C	TENV	**ZDVSNM3538**	2,200	VS4	13.84	37	84	230/460	0.9	2, 46, 48, 107
3/4	1800	2700	56C	TENV	**ZDVSNM3542**	2,267	VS4	13.84	38	82.5	230/460	1.1	2, 46, 48, 107
1	1800	2700	145TC	TENV	**ZDVSNM3581T**	2,958	VS4	14.65	59	85.5	230/460	1.5	2, 46, 48, 107
			143TC	TEBC	**ZDM3581T**	3,390	VS2	19.02	66	87.5	230/460	1.5	2, 8, 46, 60, 106, 107
			143TC	TEBC	**ZDM3581T-5**	3,390	VS2	19.02	65	85.5	575	1.2	2, 8, 46, 106, 107
			143TC	TENV	**ZDNM3581T**	2,958	VS4	14.65	59	85.5	230/460	1.5	2, 8, 46, 106, 107
	1200	1800	143TC	TEBC	**ZDM3582T**	3,702	VS2	19.02	62	82.5	230/460	1.8	2, 8, 46, 106, 107
1 1/2	1800	2700	145TC	TENV	**ZDVSNM3584T**	3,096	VS4	14.65	70	86.5	230/460	2.1	2, 46, 48, 107
			145TC	TEBC	**ZDM3584T**	3,494	VS2	19.02	70	88.5	230/460	2.1	2, 8, 46, 60, 106, 107
			145TC	TEBC	**ZDM3584T-5**	3,494	VS2	19.02	62	87.5	575	1.7	2, 8, 46, 106, 107
			145TC	TENV	**ZDNM3584T**	3,096	VS4	14.65	58	84	230/460	2.3	2, 8, 46, 106, 107
	1200	1800	182TC	TEBC	**ZDM3667T**	3,964	VS2	21.71	99	87.5	230/460	2.5	2, 8, 46, 106, 107
2	1800	2700	145TC	TENV	**ZDVSNM3587T**	3,414	VS4	14.65	66	86.5	230/460	2.8	2, 46, 48, 107
			145TC	TEBC	**ZDM3587T**	3,623	VS2	19.02	75	88.5	230/460	2.8	2, 8, 46, 106, 107
			145TC	TEBC	**ZDM3587T-5**	3,623	VS2	19.02	74	88.5	575	2.3	2, 8, 46, 106, 107
			182TC	TENV	**ZDNM3669T**	3,414	VS4	17.21	95	84	230/460	2.9	2, 8, 46, 60, 106, 107
	1200	1800	184TC	TEBC	**ZDM3664T**	4,030	VS2	21.71	113	88.5	230/460	3.2	2, 8, 46, 106, 107
3	1800	2700	182TC	TEFC	**ZDVSM3661T**	3,613	VS3	20.23	118	89.5	230/460	4.1	2, 46, 48
			182TC	TENV	**ZDVSNM3661T**	3,663	VS4	17.85	111	89.5	230/460	4.3	2, 46, 48
			182TC	TEBC	**ZDM3661T**	4,187	VS2	21.71	112	89.5	230/460	4.1	2, 8, 46, 106, 107
			182TC	TEBC	**ZDM3661T-5**	4,187	VS2	21.71	110	89.5	575	3.2	2, 8, 46, 106, 107
			184TC	TENV	**ZDNM3661T**	3,649	VS4	17.21	104	88.5	230/460	4.2	2, 8, 46, 60, 106, 107
	1200	1800	213TC	TEBC	**ZDM3764T**	4,775	VS2	29.14	187	90.2	230/460	4.5	2, 8, 46, 70, 106, 107
5	1800	2700	L184TC	TEFC	**ZDVSM3665T**	3,886	VS3	20.23	129	89.5	230/460	6.6	2, 46, 48
			L184TC	TENV	**ZDVSNM3665T**	3,943	VS4	17.85	124	89.5	230/460	6.6	2, 46, 48
			184TC	TEBC	**ZDM3665T**	4,335	VS2	21.71	125	90.2	230/460	6.5	2, 8, 46, 106, 107
			184TC	TEBC	**ZDM3665T-5**	4,335	VS2	21.71	125	90.2	575	5.2	2, 8, 46, 106, 107
			213TC	TENV	**ZDNM3767T**	4,145	VS4	20.40	173	91	230/460	6.7	2, 8, 46, 60, 106, 107
	1200	1800	215TC	TEBC	**ZDM3768T**	5,488	VS2	29.14	226	90.2	230/460	7.3	2, 8, 46, 70, 106, 107
7 1/2	1800	2700	213TC	TEFC	**ZDVSM3770T**	4,459	VS3	24.59	184	91.7	230/460	9.5	2, 46, 48
			L215TC	TENV	**ZDVSNM2237T**	4,531	VS4	20.86	211	91.7	230/460	10.1	2, 46, 48
			213TC	TEBC	**ZDM3770T**	4,897	VS2	29.14	170	91.7	230/460	9.5	2, 8, 46, 70, 106, 107
			213TC	TEBC	**ZDM3770T-5**	4,897	VS2	30.07	170	91.7	575	7.5	2, 8, 46, 70, 106, 107
			256TC	TENV	**ZDNM2237T**	4,766	VS4	24.05	242	90.2	230/460	9.1	2, 8, 46, 60, 106
	1200	1800	254TC	TEBC	**ZDM2276T**	7,188	VS2	33.07	333	91	230/460	10.7	2, 8, 46, 70, 106
10	1800	2700	L215TC	TEFC	**ZDVSM3774T**	5,241	VS3	24.59	210	92.4	230/460	12.5	2, 46, 48
			254TC	TENV	**ZDVSNM2238T**	5,515	VS4	24.05	325	91.7	230/460	13	2, 46, 48
			215TC	TEBC	**ZDM3774T**	5,131	VS2	29.14	231	92.4	230/460	12.5	2, 8, 46, 70,106
			215TC	TEBC	**ZDM3774T-5**	5,131	VS2	30.07	231	92.4	575	10	2, 8, 46, 70, 106, 107
			256TC	TENV	**ZDNM2238T**	5,515	VS4	24.05	284	91.7	230/460	13	2, 8, 46, 60, 106, 107
	1200	1800	256TC	TEBC	**ZDM2332T**	8,425	VS2	33.07	356	91.7	230/460	14.2	2, 8, 46, 70, 106

(a) See notes on inside back flap.

Cast iron frame

Continuous constant torque to zero speed

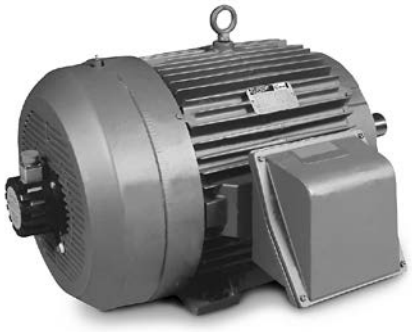
V*S Master Vector Duty®, three phase, totally enclosed

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
15	1800	2700	254TC	TEFC	**ZDVSM2333T**	5,789	VS3	26.83	295	92.4	230/460	18	2, 46, 48
			256TC	TENV	**ZDVSNM2333T**	6,251	VS4	24.05	348	93.6	230/460	18.5	2, 46, 48
			256TC	TEBC	**ZDM2333T**	5,440	VS2	33.07	317	92.4	230/460	18.1	2, 8, 46, 70, 106
			256TC	TEBC	**ZDM2333T-5**	5,440	VS2	34.15	289	92.4	575	14.5	2, 8, 46, 70, 106
			254TC	TENV	**ZDNM2333T**	6,251	VS4	24.05	286	92.4	230/460	18.5	2, 8, 46, 60, 106
	1200	1800	284T	TEBC	**ZDM4100T**	9,691	VS2	36.48	445	93	230/460	19.7	2, 8, 45, 46, 70, 106
20	1800	2700	256TC	TEFC	**ZDVSM2334T**	6,117	VS3	26.83	317	93	230/460	24	2, 46, 48
			256TC	TEBC	**ZDM2334T**	5,703	VS2	33.07	342	93	230/460	24	2, 8, 46, 70, 106
			256TC	TEBC	**ZDM2334T-5**	5,703	VS2	34.15	340	93	575	19	2, 8, 46, 70, 106
			284T	TENV	**ZDNM2334T**	6,313	VS4	27.36	405	94.5	230/460	25.5	2, 8, 45, 46, 60, 106
	1200	1800	286T	TEBC	**ZDM4102T**	10,713	VS2	36.48	462	93	230/460	26	2, 8, 45, 46, 70, 106
25	1800	2700	284TC	TEFC	**ZDVSM4103T**	7,257	VS3	30.42	458	93.6	230/460	30	2, 46, 48
			284T	TEBC	**ZDM4103T**	6,655	VS2	36.48	416	93.6	230/460	30	2, 8, 45, 46, 70, 106
	1200	1800	324T	TEBC	**ZDM4111T**	11,985	VS2	38.92	615	93	230/460	32	2, 8, 45, 46, 70, 106
30	1800	2700	286TC	TEFC	**ZDVSM4104T**	7,754	VS3	30.42	472	94.1	230/460	36	2, 46, 48
			286T	TEBC	**ZDM4104T**	7,402	VS2	36.48	445	93.6	230/460	38	2, 8, 45, 46, 70, 106
	1200	1800	326T	TEBC	**ZDM4117T**	13,156	VS2	38.92	624	93	230/460	39	2, 8, 45, 46, 70, 106
40	1800	2700	324T	TEFC	**ZDVSM4110T**	8,656	VS3	33.14	716	94.1	230/460	50	2, 46, 48
			324T	TEBC	**ZDM4110T**	9,441	VS2	38.92	610	94.5	230/460	47	2, 8, 45, 46, 70, 106
50	1800	2700	326T	TEFC	**ZDVSM4115T**	10,159	VS3	33.14	721	94.5	230/460	60	2, 46, 48
			326T	TEBC	**ZDM4115T**	10,402	VS2	38.92	631	94.5	230/460	57	2, 8, 45, 46, 70, 106
60	1800	2700	364T	TEFC	**ZDVSM4314T**	12,134	VS3	33.44	907	94.2	230/460	71.2	2, 46, 48
75	1800	2700	365T	TEFC	**ZDVSM4316T**	14,721	VS3	33.44	944	94.3	230/460	89.2	2, 46, 48
100	1800	2700	405T	TEFC	**ZDVSM4400T-4**	18,473	VS3	38.31	1230	94.1	460	115	2, 46, 48
125	1800	2700	444T	TEFC	**ZDVSM4410T-4**	22,474	VS3	49.07	1667	94.1	460	150	2, 46, 48
150	1800	2700	445T	TEFC	**ZDVSM4406T-4**	26,456	VS3	49.07	1806	95	460	177	2, 46, 48
200	1800	2700	447T	TEFC	**ZDVSM4407T-4**	30,999	VS3	52.36	2203	95.4	460	226	2, 46, 48
250	1800	2700	449T	TEFC	**ZDVSM4408T-4**	43,032	VS3	57.56	2550	95.8	460	277	2, 46, 48
300	1800	2700	449T	TEFC	**ZDVSM44304T-4**	43,032	VS3	57.56	2817	96.2	460	338	2, 46, 48

(a) See notes on inside back flap.
Cast iron frame
Continuous constant torque to zero speed

V*S Master severe duty vector drive, three phase, totally enclosed

1 thru 50 Hp



Features:

- Designed for harsh, severe duty environments
- TENV & TEFC, 1000:1CT without blower
- HS25 encoder (1 to 2 Hp) or HSD38 encoder (3 Hp and up), 1024 PPR
- 3 thermostats, one per phase
- Standard NEMA frame sizes

Applications:

- Extruders, conveyors, crane and hoist, winders
- Web processing, process control, test stands
- Centrifugal pumps and fans

Hp	Base Speed RPM	C.H. Speed RPM	NEMA Frame	Enclosure	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
1	1800	2700	143TC	TENV	**ZDVSNCP3581T**	3,106	VS4	14.61	65	87.5	230/460	1.5	2, 46, 48
1 1/2	1800	2700	145TC	TENV	**ZDVSNCP3584T**	3,245	VS4	14.61	72	86.5	230/460	2.1	2, 46, 48
2	1800	2700	145TC	TENV	**ZDVSNCP3587T**	3,563	VS4	14.61	73	86.5	230/460	2.8	2, 46, 48
3	1800	2700	182TC	TEFC	**ZDVSCP3661T**	4,019	VS3	20.23	135	89.5	230/460	4.1	2, 46, 48
5	1800	2700	L184TC	TEFC	**ZDVSCP3665T**	4,361	VS3	20.23	128	89.5	230/460	6.6	2, 46, 48
7 1/2	1800	2700	213TC	TEFC	**ZDVSCP3770T**	5,052	VS3	24.58	201	91.7	230/460	9.5	2, 46, 48
10	1800	2700	L215TC	TEFC	**ZDVSCP3774T**	5,529	VS3	24.58	218	92.4	230/460	12.5	2, 46, 48
15	1800	2700	254TC	TEFC	**ZDVSCP2333T**	6,614	VS3	28.14	374	92.4	230/460	18	2, 46, 48
20	1800	2700	256TC	TEFC	**ZDVSCP2334T**	7,024	VS3	28.14	388	93	230/460	24	2, 46, 48
25	1800	2700	284TC	TEFC	**ZDVSCP4103T**	8,402	VS3	30.79	481	93.6	230/460	30	2, 46, 48
30	1800	2700	286TC	TEFC	**ZDVSCP4104T**	9,023	VS3	30.79	494	94.1	230/460	36	2, 46, 48
40	1800	2700	324T	TEFC	**ZDVSCP4110T**	10,348	VS3	33.14	762	94.1	230/460	50	2, 46, 48
50	1800	2700	326T	TEFC	**ZDVSCP4115T**	12,228	VS3	33.14	757	94.5	230/460	60	2, 46, 48

(a) See notes on inside back flap.
Continuous constant torque to zero speed
Cast iron frame

V*S Master encoder feedback kits 360-440 frame size

Encoder kits below feature 1024 pulses per revolution unless otherwise noted in the encoder type column. Connector styles include the MS twist lock (MS-TL), military style 10 pin screw tight (MS-ST), and the EPIC latch style (Latch). HS35, RAHS35M and HSD35 feature hollow shaft mounting. The HSD35 carry the Northstar brand. Encoder kits include the encoder and all mounting hardware. IDVSM & IDRPM kits include the mating connector.

Catalog Number	Motor Enclosure	Type	PPR	Frame Size	Mfg.	Mag or Optical	Conn Type	Input Voltage VDC	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
K99G72	TENV	HS35	1024	360-440	BEI	O	MS-ST	5-15	1,442	SVC	6
K99G74	TENV	HS35-2048	2048	360-440	BEI	O	MS-ST	5-15	1,442	SVC	6
K99G76	TENV	HS35	1024	360-440	BEI	O	MS-ST	5-24	1,442	SVC	6
K99G70	TENV	RAHS35M	1024	360-440	Avtron	M	MS-ST	5-24	1,442	SVC	9
K99G82	TENV	HS35R	1024	360-440	Dynapar	O	MS-TL	5-26	2,183	SVC	6
K99G78	TENV	HSD35	1024	360-440	Dynapar	O	Latch	5-26	1,622	SVC	8
K99G73	TEFC	HS35	1024	360-440	BEI	O	MS-ST	5-15	1,442	SVC	6
K99G75	TEFC	HS35-2048	2048	360-440	BEI	O	MS-ST	5-24	1,442	SVC	6
K99G77	TEFC	HS35	1024	360-440	BEI	O	MS-ST	5-24	1,442	SVC	6
K99G71	TEFC	RAHS35M	1024	360-440	Avtron	M	MS-ST	5-24	1,442	SVC	9
K99G83	TEFC	HS35R	1024	360-440	Dynapar	O	MS-TL	5-26	2,183	SVC	6
K99G79	TEFC	HSD35	1024	360-440	Dynapar	O	Latch	5-26	1,622	SVC	8
K99G80	TENV	HS35	1024	360-440	BEI	O	MS-TL	5-28	1,442	SVC	6
K99G81	TEFC	HS35	1024	360-440	BEI	O	MS-TL	5-28	1,442	SVC	6

Note: For 56-320 IDVSM frame sizes use the kits from the IDM product table.

Feedback cable assembly with MS connector

Features:

- Cables with MS twist lock connectors
- Various lengths
- Twisted pair shielded for electrical noise protection

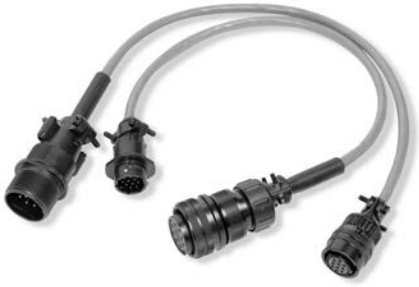
Applications:

- For any MS twist lock encoder connector
- AC or DC motor applications

Catalog Number	Cable Extension Length	List Price	Disc. Sym.	Ap'x Shpg. Wgt.
CBL015ZD-2	5 Ft = 1.5 Meters	198	SVC	1
CBL030ZD-2	10 Ft = 3 Meters	230	SVC	1
CBL046ZD-2	15 Ft = 4.6 Meters	263	SVC	2
CBL061ZD-2	20 Ft = 6.1 Meters	291	SVC	2
CBL091ZD-2	30 Ft = 9.1 Meters	355	SVC	3
CBL152ZD-2	50 Ft = 15.2 Meters	477	SVC	6
CBL229ZD-2	75 Ft = 22.9 Meters	632	SVC	8
CBL305ZD-2	100 Ft = 30.5 Meters	787	SVC	8
CBL455ZD-2	150 Ft = 45.5 Meters	1,023	SVC	15
CBL606ZD-2	200 Ft = 60.6 Meters	1,407	SVC	16

Connector transition (patch) cables

MS Twist Lock (MS-TL) to MS Screw Tight (MS-ST)
MS Screw Tight (MS-ST) to MS Twist Lock (MS-TL)



Features:

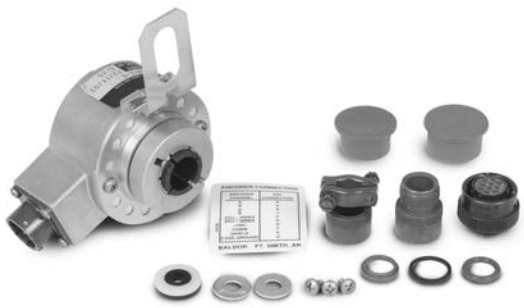
- Transition from MS twist-lock (female) to MS screw- tight (male)
- Transition from MS screw-tight (female) to MS twist-lock (male)
- 10 pin connector style

Applications:

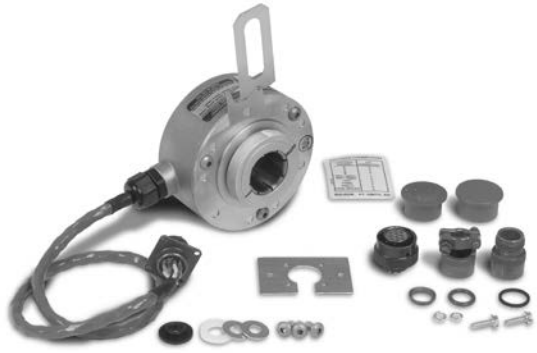
- MS-ST to MS-TL compatible with stock cable lengths up to 200 feet

Catalog Number	Type	List Price	Disc. Sym.	Ap'x Shpg. Wgt.
CBLTL2ST	MS-TL to MS-ST	400	SVC	2
CBLST2TL	MS-ST to MS-TL	400	SVC	2

Encoder feedback kits for IDM, IDNM and IDWNM motors



ENC00NV-B1



ENC02BC-B2

Does not fit some legacy 180-440 EM, CP or ECP motors. Contact your local sales office.

Features:

- 1024 Encoder with MS twist lock connector
- HS35, HS35M, HS35R and HS25

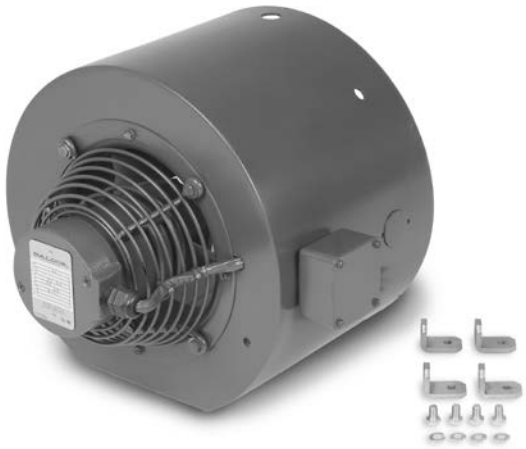
Applications:

- For IDM, IDNM and IDWNM motors

Catalog Number	Type Enclosure	Description	Magnetic or Optical	Connector Type	Input Voltage	Output Voltage Limited	NEMA Frame	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
ENC00NV-A2	TENV	HS35M Avtron	Magnetic	TL	5-24 VDC	24	213T-215T	1,442	SVC	1
ENC00NV-B1	TENV	HS25 BEI	Optical	TL	5-15 VDC	15	56-215T	1,442	SVC	2
ENC00NV-D2	TENV	HS35R Dynapar	Optical	TL	5-26 VDC	26	56-215T	2,158	SVC	4
ENC00NV-D1 (1)	TENV	HS35 Dynapar	Optical	TL	5-24 VDC	5	56-215T	1,622	SVC	4
ENC01BC-B1	TEBC	HS25 BEI	Optical	TL	5-15 VDC	15	143T-215T	1,442	SVC	3
ENC01BC-D2	TEBC	HS35R Dynapar	Optical	TL	5-26 VDC	26	56-215T	2,158	SVC	4
ENC01NV-A2	TENV	HS35M Avtron	Magnetic	TL	5-24 VDC	24	254T-256T	1,442	SVC	1
ENC01NV-B2	TENV	HS35 BEI	Optical	TL	5-15 VDC	15	254T-284T	1,442	SVC	2
ENC01NV-D2	TENV	HS35R Dynapar	Optical	TL	5-26 VDC	26	254T-256T	2,158	SVC	4
ENC02BC-A2	TEBC	HS35M Avtron	Magnetic	TL	5-24 VDC	24	254T-447T	1,442	SVC	1
ENC02BC-B2	TEBC	HS35 BEI	Optical	TL	5-15 VDC	15	254T-447T	1,631	SVC	2
ENC02BC-D2	TEBC	HS35R Dynapar	Optical	TL	5-26 VDC	26	254T-447T	1,622	SVC	4

Note: For 56 and 140 IDVSM frame sizes use the kits from the table above.
(1) Being phased out

Constant velocity blower cooling conversion kits



Does not fit some legacy 180-440 EM, CP or ECP motors. Contact your local sales office.

Features:

- Convert TENV & TEFC to TEBC

Applications:

- Not suitable for some EM, CP or ECP motors

Voltage	Phase	NEMA Frame	Catalog Number	List Price	Disc. Sym.	Ap'x. Shpg. Wgt.
115	1	143TC-145TC	**BLWL05-L**	814	SVC	7
		182TC-184TC	**BLWL06-L**	917	SVC	8
		213TC-215TC	**BLWL07-L**	1,750	SVC	21
		254TC-256TC	**BLWL09-L**	1,825	SVC	28
		284TC-286TC	**BLWL10-L**	1,850	SVC	35
		324TC-326TC	**BLWL12-L**	1,850	SVC	46
		364TC-365TC	**BLWL14-L**	1,850	SVC	55
230/380/460	3	213TC-215TC	**BLWM07-F**	1,160	SVC	20
		254TC-256TC	**BLWM09-F**	1,160	SVC	30
		284TC-286TC	**BLWM10-F**	1,160	SVC	35
		324TC-326TC	**BLWM12-F**	1,260	SVC	46
		364TC-365TC	**BLWM14-F**	1,260	SVC	55
		404TC-405TC	**BLWM16-F**	1,704	SVC	70
		444TC-447TC	**BLWM18-F**	2,387	SVC	87

Note: Blower cooling conversion kits should be further selected by Baldor-Reliance® motor type as noted within the catalog number. As an example: BLWM10-F fits a 310M type also built as a 324-326TC. Does not fit Athens-built 180-440 M, CP or ECP motors.