

# Variable Speed AC



# Variable Speed AC

ABB's Baldor-Reliance variable speed motors provide precise control and efficiency. Tailored for variable speed environments, they offer options like encoders for accurate speed feedback and enhanced bearing protection. Ideal for HVAC systems, pumps, conveyors, cranes, extruders and winders, they optimize performance and reduce energy consumption.



RPM AC Inverter Duty



RPM AC Vector Duty



RPM AC Extruder Duty



RPM XE, eXtreme efficiency



RPM AC Accessories



V\*S Master Inverter duty



V\*S Master Vector duty



V\*S Master Severe Duty,  
Vector drive



V\*S Master® Accessories



EC Titanium motor (General  
Purpose SP5+)

Inverter Duty Product Line		RPM AC	RPM AC PM	V*S Master	EC Titanium
Frame Sizes	Frame size range for stock products	FL/RL180 - FL5800/ RL5000	FL/RL180 - FL5800/ RL5000	56C - 449T	143-215
Electrical features					
Inverter	Designed for adjustable frequency power and complies with MG1 – Part 31 for corona free operation	S	S	S	S
Torque	Constant torque performance	1000:1	1000:1	1000:1	10:1
Feedback device	Provisions for encoder mounting	S	S	S	-
	Vector Duty - stocked with encoder mounted	S	S	S	-
Insulation	Class H insulation	S	S	-	-
	Class F insulation	-	-	S	S
Temp rise	Class F insulation, Class B Temperature Rise	-	-	-	-
	F rise or better for longer motor life	-	S	S	S
Rotor	PM synchronous rotor technology for improved efficiency and increased power density	-	S	-	S
	Low rotor inertia for high dynamic performance	S	S	-	-
Shaft Ground	Internal Shaft Grounding Brush for common mode voltage free operation	S	S	-	S
Winding protection	Winding thermal protection with quantity 3 N/C thermostats, one per phase	S	S	S	-
Mechanical features					
Frame	Laminated steel frame RL/FL180 - RL/FL5800	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	-	-
Mounting	Standard NEMA mounting for ease interchangeability	-	-	S	S
Enclosure	DPG-FV enclosure	S	S	-	-
	TEBC enclosure	S	S	S	-
	TEFC enclosure	S	S	S	S
	TENV enclosure	S	S	S	-

S = Standard A = Available through Mod Express® or as custom

# RPM AC Inverter Duty

## 5 thru 1750 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
- Shaft Grounding Brush
- Optimum Pole designs
- QR Code provides motor data for inverter configuration

### Applications

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

### RPM AC, Inverter Duty, Induction rotor, DPG-FV



Drip-proof guarded force ventilated The RPM AC DPFV is the ultimate power dense machine. Utilizing laminate square frame technology, up to 1750 horsepower can be packed into a 5000 frame. Commonly used in some of the most demanding industrial applications such as paper and converting, steel processing, extruders, traction, or oil well drilling, the RPM AC force ventilated design is the motor choice.

\*All RPM AC RL440 and 5000 frames include as standard premium VPI insulation, an insulated opposite drive end bearing, mill conduit box and PLS bearing system.

Hp	Frame	Encl.	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes
460 volt											
25	FL1844CZ	DPFV	1800	IDDRPM18254C	9,664	RP1	27.96	240	460	33.0	58
30	FL1852CZ	DPFV	1800	IDDRPM18304C	10,023	RP1	23.01	265	460	39.0	58
40	RL2162Z	DPFV	1800	IDDRPM21404	10,282	RP1	23.12	407	460	52.0	
50	RL2168Z	DPFV	1800	IDDRPM21504	13,572	RP1	24.62	410	460	62.0	
	RL2570Z	DPFV	1200	IDDRPM25506	15,740	RP1	25.64	480	460	64.0	
60	RL2168Z	DPFV	1800	IDDRPM21604	13,108	RP1	24.62	412	460	74.0	
	RL2578Z	DPFV	1200	IDDRPM25606	19,085	RP1	36.67	545	460	73.0	
75	RL2570Z	DPFV	1800	IDDRPM25754	15,740	RP1	34.58	574	460	95.0	
	RL2586Z	DPFV	1200	IDDRPM25756	25,291	RP1	30.38	615	460	91.0	
100	RL2578Z	DPFV	1800	IDDRPM251004	19,085	RP1	36.67	545	460	119.0	
	RL2882Z	DPFV	1200	IDDRPM281006	28,237	RP1	38.43	770	460	124.0	
125	RL2586Z	DPFV	1800	IDDRPM251254	25,291	RP1	30.38	615	460	148.0	
	RL2898Z	DPFV	1200	IDDRPM281256	36,813	RP1	42.43	930	460	150.9	
150	RL2882Z	DPFV	1800	IDDRPM281504	28,237	RP1	38.43	892	460	180.0	
	RL3203Z	DPFV	1200	IDDRPM321506R1	43,317	RP1	38.64	1238	460	180.0	
200	RL2898Z	DPFV	1800	IDDRPM282004	36,813	RP1	42.43	954	460	237.0	
	RL3213Z	DPFV	1200	IDDRPM322006R1	50,443	RP1	41.14	1356	460	236.0	
250	RL3203Z	DPFV	1800	IDDRPM322504R1	43,317	RP1	46.10	1152	460	291.0	
	RL3698	DPFV	1200	IDDRPM362506R1	54,917	RP1	39.22	1518	460	298.0	
300	RL3213Z	DPFV	1800	IDDRPM323004R1	50,443	RP1	41.14	1352	460	351.0	
	RL3614	DPFV	1200	IDDRPM363006R1	63,875	RP1	43.22	1790	460	352.0	
350	RL3614Z	DPG-FV	1800	IDDRPM363504R2	63,877	E2	43.47	2000	460	398.0	
400	RL3614	DPFV	1800	IDDRPM364004R1	63,877	RP1	43.22	1728	460	459.0	
	RL4034	DPFV	1200	IDDRPM404006R1	84,322	RP1	48.62	2230	460	460.0	

**RPM AC, Inverter Duty, Induction rotor, DPG-FV**

Drip-proof guarded force ventilated The RPM AC DPFV is the ultimate power dense machine. Utilizing laminate square frame technology, up to 1750 horsepower can be packed into a 5000 frame. Commonly used in some of the most demanding industrial applications such as paper and converting, steel processing, extruders, traction, or oil well drilling, the RPM AC force ventilated design is the motor choice.  
 \*All RPM AC RL440 and 5000 frames include as standard premium VPI insulation, an insulated opposite drive end bearing, mill conduit box and PLS bearing system.

Hp	Frame	Encl.	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes
460 volt											
500	RL4034Z	DPG-FV	1800	<b>IDDRPM405004R2</b>	84,322	E2	45.62	2262	460	548.0	
	RL4058Z	DPFV	1200	<b>IDDRPM405006</b>	108,400	RP1	54.62	3128	460	567.0	43
600	RL4046	DPFV	1800	<b>IDDRPM406004R1</b>	102,800	RP1	48.62	2296	460	673.0	43
	RL4451Z	DPFV	1200	<b>IDDRPM446006</b>	150,429	RP1	62.15	3635	460	743.0	43
700	RL4058	DPFV	1800	<b>IDDRPM407004R1</b>	107,936	RP1	54.62	2820	460	777.0	43
	RL4473Z	DPFV	1200	<b>IDDRPM447006</b>	172,045	RP1	67.64	4440	460	870.0	43
800	RL4440Z	DPFV	1800	<b>IDDRPM448004</b>	139,619	RP1	59.39	3408	460	12.0	43
	RL5020Z	DPFV	1200	<b>IDDRPM508006</b>	181,004	RP1	61.57	4350	460	927.0	43
900	RL4461Z	DPG-FV	1800	<b>IDDRPM449004R1</b>	160,783	E2	63.61	3910	460	1077.0	43
	RL5024Z	DPFV	1200	<b>IDDRPM509006</b>	191,106	RP1	65.51	4870	460	1031.0	43
1000	RL4473Z	DPG-FV	1800	<b>IDDRPM4410004R2</b>	172,045	E2	66.61	4440	460	1196.0	43
	RL5024Z	DPFV	1200	<b>IDDRPM5010006</b>	191,106	RP1	65.51	4870	460	1152.0	43
1250	RL5024Z	DPFV	1800	<b>IDDRPM5012504</b>	191,106	RP1	65.51	4870	460	1403.0	43
	RL5035Z	DPFV	1200	<b>IDDRPM5012506</b>	217,614	RP1	77.32	6730	460	1407.0	43
1400	RL5035Z	DPFV	1200	<b>IDDRPM5014006</b>	217,614	RP1	77.32	6730	460	1574.0	43
1500	RL5030Z	DPFV	1800	<b>IDDRPM5015004</b>	203,631	RP1	71.42	5500	460	1686.0	43
600 volt											
1750	RL5035Z	DPFV	1800	<b>IDDRPM5017504</b>	217,614	RP1	77.32	6730	600	1512.0	43

**RPM AC, Inverter Duty, Induction rotor, totally enclosed**



For applications requiring totally enclosed protection, RPM AC motors are available in non-ventilated, fan cooled, and in-line blower cooled construction. IP55 Extra Tough - XT construction is available for outdoor, washdown, corrosive or harsh environment  
 \*All RPM AC FL440 and 5800 frames include as standard premium VPI insulation, an insulated ODE bearing, mill conduit box and PLS bearing system.

Hp	Frame	Encl.	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes
230/460 volt											
5	FL1838C	TENV	1800	<b>IDNRPM18054C</b>	6,178	RP4	17.87	165	230/460	7.2	54
7 1/2	FL1852CZ	TENV	1800	<b>IDNRPM18074C</b>	7,102	RP4	21.87	209	230/460	11.0	55
10	FL1844CZ	TEFC	1800	<b>IDFRPM18104C</b>	7,783	RP3	23.26	179	230/460	13.9	55
	FL2162C	TENV	1800	<b>IDNRPM21104C</b>	7,645	RP4	23.71	280	230/460	13.6	55
460 volt											
15	FL1844CZ	TEBC	1800	<b>IDBRPM18154C</b>	8,449	RP2	23.89	200	460	21.0	58
	FL2162CZ	TEFC	1800	<b>IDFRPM21154C</b>	8,811	RP3	26.74	290	460	20.0	58
20	FL1852C	TEBC	1800	<b>IDBRPM18204C</b>	9,224	RP2	27.96	366	460	27.0	58
	FL2162CZ	TEFC	1800	<b>IDFRPM21204C</b>	8,811	RP3	26.74	329	460	27.0	58
25	FL2162CZ	TEBC	1800	<b>IDBRPM21254C</b>	9,638	RP2	28.80	290	460	34.0	58
	FL2173CZ	TEFC	1800	<b>IDFRPM21254C</b>	9,516	RP3	29.50	355	460	34.0	58
30	FL2162CZ	TEBC	1800	<b>IDBRPM21304C</b>	9,638	RP2	28.80	330	460	40.0	58
	FL2570C	TEFC	1800	<b>IDFRPM25304C</b>	10,016	RP3	29.54	513	460	39.0	58
40	FL2173Z	TEBC	1800	<b>IDBRPM21404</b>	10,914	RP2	31.31	355	460	51.0	
	FL2586Z	TEFC	1800	<b>IDFRPM25404</b>	10,895	RP3	33.77	655	460	51.0	
50	FL2570Z	TEBC	1800	<b>IDBRPM25504</b>	11,412	RP2	31.83	475	460	65.0	
	FL2882Z	TEFC	1800	<b>IDFRPM28504</b>	18,608	RP3	34.59	758	460	64.0	
60	FL2578Z	TEBC	1800	<b>IDBRPM25604</b>	16,624	RP2	33.85	591	460	75.0	
	FL2890Z	TEFC	1800	<b>IDFRPM28604</b>	18,608	RP3	36.59	848	460	76.0	
75	FL2586Z	TEBC	1800	<b>IDBRPM25754</b>	19,765	RP2	35.85	648	460	95.0	
	FL2898Z	TEFC	1800	<b>IDFRPM28754</b>	22,231	RP3	38.59	922	460	94.0	
100	FL2890Z	TEBC	1800	<b>IDBRPM281004R1</b>	22,309	RP2	46.80	870	460	124.0	
125	FL2898Z	TEBC	1800	<b>IDBRPM281254</b>	23,580	RP2	46.87	945	460	156.0	
150	FL3203Z	TEBC	1800	<b>IDBRPM321504R1</b>	32,840	RP2	55.48	1307	460	179.0	
200	FL3698	TEBC	1800	<b>IDBRPM362004R1</b>	45,316	RP2	56.06	1580	460	234.0	
250	FL3614	TEBC	1800	<b>IDBRPM362504R1</b>	48,385	RP2	60.05	1874	460	286.0	
300	FL4034	TEBC	1800	<b>IDBRPM403004R1</b>	60,460	RP2	65.46	2461	460	341.0	
400	FL4440Z	TEBC	1800	<b>IDBRPM444004</b>	92,547	RP2	78.57	3699	460	479.0	
500	FL4461Z	TEBC	1800	<b>IDBRPM445004</b>	104,482	RP2	83.82	3978	460	597.0	
600	FL5824Z	TEBC	1800	<b>IDBRPM586004</b>	232,371	RP2	98.80	7240	460	716.0	
700	FL5824Z	TEBC	1800	<b>IDBRPM587004</b>	232,371	RP2	98.80	7240	460	818.0	
800	FL5826Z	TEBC	1800	<b>IDBRPM588004</b>	243,205	RP2	100.80	7510	460	934.0	
900	FL5830Z	TEBC	1800	<b>IDBRPM589004</b>	264,880	RP2	104.80	8210	460	1041.0	
1000	FL5832Z	TEBC	1800	<b>IDBRPM5810004</b>	275,718	RP2	106.80	8540	460	1151.0	

**RPM AC, Inverter Duty, Caged-IPM rotor, totally enclosed**

Interior salient pole permanent magnet (PM) rotor construction for torque density and higher efficiency. Synchronous speed performance matched with ABB PM drive control.  
 Super Premium (IE4) efficiency when operated on a VFD  
 Ultra Premium (IE5) efficiency when run across the line. Operates at true synchronous speed regardless of load.

Hp	Frame	Encl.	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
460 volt												
10	FL1838Z	TEFC	1800	<b>IDCRPM18104</b>	9,849	RP3	21.76	187	94.6	460	10.0	28
15	FL1844Z	TEFC	1800	<b>IDCRPM18154</b>	12,141	RP3	23.26	226	94.9	460	15.0	28
20	FL1848Z	TEFC	1800	<b>IDCRPM18204</b>	12,608	RP3	24.26	225	94.9	460	20.0	28
25	FL2158Z	TEFC	1800	<b>IDCRPM21254</b>	13,072	RP3	25.49	310	95.4	460	25.2	28
30	FL2162Z	TEFC	1800	<b>IDCRPM21304</b>	13,732	RP3	26.49	290	95.4	460	30.0	28
40	FL2562Z	TEFC	1800	<b>IDCRPM25404</b>	14,892	RP3	27.79	410	96.4	460	40.0	28
50	FL2570Z	TEFC	1800	<b>IDCRPM25504</b>	20,143	RP3	29.79	536	96.6	460	49.0	28
60	FL2873Z	TEFC	1800	<b>IDCRPM28604</b>	22,795	RP3	32.34	668	97.0	460	60.0	28
75	FL2882Z	TEFC	1800	<b>IDCRPM28754</b>	26,339	RP3	34.59	826	97.3	460	74.0	28
100	FL2890Z	TEFC	1800	<b>IDCRPM281004</b>	34,349	RP3	36.59	880	97.3	460	98.0	28
125	FL2898Z	TEFC	1800	<b>IDCRPM281254</b>	40,958	RP3	38.59	880	97.3	460	124.0	28



# RPM AC Vector Duty

## 5 thru 150 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
- For use on inverter only
- Induction and salient pole-IPM rotor
- Shaft Grounding Brush
- ABB Ability Smart Sensor Mounting Provisions
- QR Code provides motor data for inverter configuration

### Applications

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

### RPM AC, Vector Duty, induction rotor, totally enclosed

Induction motor feedback BEI HS35 1024PPR encoder included



Hp	Frame	Encl.	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes
230/460 volt											
5	FL1838C	TENV	1800	<b>ZDNRPM18054C</b>	10,006	RP4	17.87	180	230/460	7.2	54
7 1/2	FL1852CZ	TENV	1800	<b>ZDNRPM18074C</b>	10,931	RP4	26.37	221	230/460	11.0	55
10	FL1844C	TEFC	1800	<b>ZDFRPM18104C</b>	11,611	RP3	25.33	201	230/460	13.9	55
	FL2162C	TENV	1800	<b>ZDNRPM21104C</b>	11,125	RP4	25.61	334	230/460	13.6	55
460 volt											
15	FL1844CZ	TEBC	1800	<b>ZDBRPM18154C</b>	11,449	RP2	23.89	216	460	21.0	58
20	FL1852C	TEBC	1800	<b>ZDBRPM18204C</b>	12,225	RP2	27.96	280	460	27.0	58
	FL2162CZ	TEFC	1800	<b>ZDFRPM21204C</b>	12,291	RP3	29.62	290	460	27.0	58
25	FL2173C	TEFC	1800	<b>ZDFRPM21254C</b>	12,995	RP3	31.75	392	460	34.0	58
30	FL2162CZ	TEBC	1800	<b>ZDBRPM21304C</b>	12,366	RP2	33.30	341	460	41.0	58
	FL2570C	TEFC	1800	<b>ZDFRPM25304C</b>	13,642	RP3	32.84	515	460	39.0	58
40	FL2173Z	TEBC	1800	<b>ZDBRPM21404</b>	13,010	RP2	35.81	418	460	51.0	
	FL2586Z	TEFC	1800	<b>ZDFRPM25404</b>	14,087	RP3	37.07	652	460	51.0	
50	FL2570Z	TEBC	1800	<b>ZDBRPM25504</b>	14,140	RP2	36.33	532	460	65.0	
60	FL2578Z	TEBC	1800	<b>ZDBRPM25604</b>	19,352	RP2	38.35	540	460	75.0	
75	FL2586Z	TEBC	1800	<b>ZDBRPM25754</b>	22,493	RP2	40.33	654	460	95.0	
100	FL2890Z	TEBC	1800	<b>ZDBRPM281004R1</b>	25,036	RP2	46.06	905	460	124.0	
125	FL2898Z	TEBC	1800	<b>ZDBRPM281254</b>	26,308	RP2	48.06	890	460	156.0	



**RPM AC, Vector Duty, Caged-IPM rotor, totally enclosed**

IPM motor feedback Dynapar HS25 resolver included  
Interior salient pole permanent magnet (PM) rotor construction for torque density and higher efficiency. Synchronous speed performance matched with ABB PM drive control.

Hp	Frame	Encl.	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes
230/460 volt											
10	FL1831C	TEBC	1800	<b>ZDPM18010C-BV</b>	16,760	RP2	22.08	170	230/460	10.6	55
460 volt											
15	FL1838C	TEBC	1800	<b>ZDPM18015C-BV</b>	16,868	RP2	24.46	220	460	16.0	58
20	FL1844C	TEBC	1800	<b>ZDPM18020C-BV</b>	17,622	RP2	25.96	235	460	21.7	58
25	FL1852C	TEBC	1800	<b>ZDPM18025C-BV</b>	18,959	RP2	27.96	382	460	26.6	58
30	FL1852C	TEBC	1800	<b>ZDPM18030C-BV</b>	18,959	RP2	28.05	275	460	32.3	58
40	FL2162Z	TEBC	1800	<b>ZDPM21040-BV</b>	17,742	RP2	33.06	354	460	43.2	
50	FL2168Z	TEBC	1800	<b>ZDPM21050-BV</b>	18,141	RP2	34.56	325	460	53.4	
60	FL2173Z	TEBC	1800	<b>ZDPM21060-BV</b>	19,239	RP2	33.75	355	460	66.5	
75	FL2578Z	TEBC	1800	<b>ZDPM25075-BV</b>	27,348	RP2	36.29	540	460	81.8	
100	FL2586Z	TEBC	1800	<b>ZDPM25100-BV</b>	28,294	RP2	41.85	692	460	110.6	
125	FL2882	TEAO	1800	<b>ZDPM28125-BV</b>	29,817	RP2	47.94	730	460	137.0	
150	FL2890Z	TEBC	1800	<b>ZDPM28150-BV</b>	31,051	RP2	46.06	920	460	168.0	

# RPM AC Extruder Duty

## 100 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
- Grease relief valve
- Shaft grounding brush
- Robust extruder duty insulation system
- Winding RTDs
- Premium mill spec conduit box

### Applications

- Extruder
- Pulp and Paper

IP23

### RPM AC, Extruder Duty, Induction rotor DPG-FV

Robust extruder duty insulation system. F1 mounting conduit box. Standard features include insulated bearings, ground brush, winding RTDs and extruder duty nameplate.



Hp	Frame	Encl.	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	Notes
460 volt											
100	RL2586Z	DPG-FV	1800	<b>IDDRPM251004ED</b>	41,863	E2	30.38	615	460	118.0	
125	RL2882Z	DPG-FV	1800	<b>IDDRPM281254ED</b>	45,457	RP1	31.14	810	460	154.0	
150	RL2898Z	DPG-FV	1800	<b>IDDRPM281504ED</b>	54,031	E2	35.14	930	460	185.0	
200	RL3203Z	DPG-FV	1800	<b>IDDRPM322004ED</b>	61,329	RP1	39.88	1320	460	231.0	
250	RL3203Z	DPG-FV	1800	<b>IDDRPM322504R1ED</b>	61,329	E2	39.88	1320	460	283.0	
300	RL3213Z	DPG-FV	1800	<b>IDDRPM323004R1ED</b>	68,454	E2	42.38	1470	460	344.0	
350	RL3614Z	DPG-FV	1800	<b>IDDRPM363504R2ED</b>	76,436	E2	43.47	2000	460	386.0	
400	RL3614Z	DPG-FV	1800	<b>IDDRPM364004R1ED</b>	76,436	RP1	52.70	1775	460	450.0	
500	RL4034Z	DPG-FV	1800	<b>IDDRPM405004R2ED</b>	97,371	E2	45.62	2530	460	548.0	
600	RL4046Z	DPG-FV	1800	<b>IDDRPM406004R1ED</b>	115,844	E2	48.62	2800	460	660.0	43
700	RL4058Z	DPG-FV	1800	<b>IDDRPM407004R1ED</b>	120,979	E2	54.62	2680	460	763.0	43
800	RL4440Z	DPG-FV	1800	<b>IDDRPM448004ED</b>	148,245	E2	54.62	3400	460	983.0	43
900	RL4461Z	DPG-FV	1800	<b>IDDRPM449004R1ED</b>	169,860	E2	61.11	3910	460	1056.0	43
1000	RL4473Z	DPG-FV	1800	<b>IDDRPM4410004R2ED</b>	180,663	E2	63.61	4750	460	1173.0	43

Red catalog number indicates **NEW** product

## RPM XE, eXtreme efficiency

### 10 thru 100 Hp

#### Features

- Efficiency two to four levels above NEMA premium
- Power dense and standard NEMA frame sizes
- Designed for across the line operation
- Suitable for adjustable frequency power in scalar mode
- Super Premium (IE4) Efficiency when operated with VFD
- Operates at true synchronous speed regardless of load
- Ultra Premium (IE5) efficiency when run across the line
- Shaft Grounding Brush

#### Applications

- Applications demanding reduced weight or inertia
- Centrifugal fan and pump applications
- Compressors
- Continuous applications demanding the ultimate efficiency

**IP54**

#### RPM XE, three phase, TEFC, foot mounted



Hp	RPM	Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Full Load Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
460 volt											
10	1800	HL215T	<b>XEFRPM21104</b>	9,816	RP5	21.72	188	94.6	460	10.0	
15	1800	HL254T	<b>XEFRPM25154</b>	10,634	RP5	23.89	210	94.9	460	15.0	
20	1800	HL256T	<b>XEFRPM25204</b>	11,452	RP5	24.89	231	94.9	460	20.0	
25	1800	HL284T	<b>XEFRPM28254</b>	12,271	RP5	26.38	290	95.4	460	25.2	
30	1800	HL286T	<b>XEFRPM28304</b>	13,089	RP5	27.37	365	95.4	460	30.0	
40	1800	HL324T	<b>XEFRPM32404</b>	14,096	RP5	28.81	480	96.4	460	40.0	
50	1800	HL326T	<b>XEFRPM32504</b>	15,046	RP5	30.81	571	96.6	460	49.0	
60	1800	HL364T	<b>XEFRPM36604</b>	20,168	RP5	32.93	746	97.0	460	60.0	
75	1800	HL365T	<b>XEFRPM36754</b>	23,559	RP5	35.19	856	97.3	460	74.0	
100	1800	HL405T	<b>XEFRPM401004</b>	30,931	RP5	40.56	983	97.3	460	98.0	

# RPM AC Accessories

## Features

## Applications

- RPM AC Motors

### Encoder feedback kits

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



Catalog Number	Enclosures	Type	PPR	NEMA Frame	Mfg.	M/O	Conn. Type	Voltage	List Price	Disc. Sym.	Aprx. Wt. (lb)
<b>417077-264</b>	TEBC	DGS80 (HS35)	1024	FL180	SICK	O	MS-ST	5 - 30	2,762	SVC	10
<b>417077-265</b>	TEBC	DGS80 (HS35)	1024	FL210	SICK	O	MS-ST	5 - 30	2,057	SVC	15
<b>417077-266</b>	TEBC	DGS80 (HS35)	1024	FL250	SICK	O	MS-ST	5 - 30	2,113	SVC	15
<b>417077-267</b>	TEBC	DGS80 (HS35)	1024	FL280	SICK	O	MS-ST	5 - 30	1,795	SVC	15
<b>417077-268</b>	TEBC	DGS80 (HS35)	1024	FL320-FL5800	SICK	O	MS-ST	5 - 30	1,488	SVC	15
<b>417077-151</b>	TEBC	H20	1024	FL210	Dynapar	O	MS-ST	5 - 15	2,503	SVC	12
<b>417077-167</b>	TEBC	H20	1024	FL180	Dynapar	O	MS-ST	5 - 15	2,503	SVC	16
<b>417077-192</b>	TEBC	H20	1024	FL250	Dynapar	O	MS-ST	5 - 15	2,997	SVC	10
<b>417077-165</b>	TEBC	HS35	1024	FL180	BEI	O	MS-ST	5 - 15	1,752	SVC	14
<b>417077-189</b>	TEBC	HS35	1024	FL210	BEI	O	MS-ST	5 - 15	1,752	SVC	10
<b>417077-191</b>	TEBC	HS35	1024	FL250	BEI	O	MS-ST	5 - 15	2,503	SVC	9
<b>417077-213TL</b>	TEBC	HS35	1024	FL250	BEI	O	MS-TL	5 - 28	1,752	SVC	6
<b>417077-242TL</b>	TEBC	HS35	1024	FL280	BEI	O	MS-TL	5 - 28	2,173	SVC	5
<b>417077-245</b>	TEBC	HS35	1024	FL320 - FL5800	BEI	O	MS-TL	5 - 28	2,855	SVC	9
<b>417077-182</b>	TEBC	HS35M	1024	FL180	Avtron	M	MS-ST	5 - 24	2,612	SVC	15
<b>417077-183</b>	TEBC	HS35M	1024	FL210	Avtron	M	MS-ST	5 - 24	2,612	SVC	15
<b>417077-188</b>	TEBC	HS35M	1024	FL250	Avtron	M	MS-ST	5 - 24	1,752	SVC	10
<b>417077-206</b>	TEBC	HS35M	1024	FL280	Avtron	M	MS-ST	5 - 24	2,997	SVC	5
<b>417077-300</b>	TEBC	HS35M	1024	FL320 - FL5800	Avtron	M	MS-ST	5 - 24	3,152	SVC	6
<b>417077-168</b>	TEBC	ST67	1024	FL180	Dynapar	M	Latch	5 - 15	2,997	SVC	10
<b>417077-170</b>	TEBC	ST67	1024	FL250	Dynapar	M	Latch	5 - 15	2,173	SVC	5
<b>417077-205</b>	TEBC	ST67	1024	FL210	Dynapar	M	Latch	5 - 15	2,612	SVC	19
<b>417077-208TL</b>	TEBC	ST67	1024	FL280	Dynapar	M	Latch	5 - 15	1,752	SVC	4
<b>417077-246</b>	TEBC	ST67	1024	FL320 - FL5800	Dynapar	M	Latch	5 - 15	2,612	SVC	2
<b>417077-262</b>	TEFC	DGS80 (HS35)	1024	FL180-FL/RL580	SICK	O	MS-ST	5 - 30	1,965	SVC	5
<b>417077-133</b>	TEFC	HS35	1024	FL180 - FL/RL5800	BEI	O	MS-ST	5 - 15	1,752	SVC	4
<b>417077-260</b>	TENV, DPFV	DGS80 (HS35)	1024	FL180-FL/RL580	SICK	O	MS-ST	5 - 30	1,860	SVC	5
<b>417077-153</b>	TENV, DPFV	H20	1024	FL180 - FL/RL5800	Dynapar	O	MS-ST	5 - 15	2,393	SVC	7
<b>417077-136</b>	TENV, DPFV	HS35	1024	FL180 - FL/RL5800	BEI	O	MS-ST	5 - 15	1,752	SVC	4
<b>417077-212TL</b>	TENV, DPFV	HS35	1024	FL180 - FL/RL5800	BEI	O	MS-TL	5 - 28	1,752	SVC	6
<b>417077-173</b>	TENV, DPFV	HS35M	1024	FL180 - FL/RL5800	Avtron	M	MS-ST	5 - 24	2,612	SVC	12
<b>417077-244</b>	TENV, DPFV	HS35R	1024	FL180 - FL/RL5800	Dynapar	O	MS-TL	5 - 26	1,752	SVC	4
<b>417077-156</b>	TENV, DPFV	ST67	1024	FL180 - FL/RL5800	Dynapar	M	Latch	5 - 15	2,997	SVC	14
<b>417077-269</b>	TEBC	DGS80 (HS35)	2048	FL180	SICK	O	MS-ST	5 - 30	2,762	SVC	5

Red catalog number indicates **NEW** product

**Encoder feedback kits**

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

Catalog Number	Enclosures	Type	PPR	NEMA Frame	Mfg.	M/O	Conn. Type	Voltage	List Price	Disc. Sym.	Aprx. Wt. (lb)
<b>417077-270</b>	TEBC	DGS80 (HS35)	2048	FL210	SICK	O	MS-ST	5 - 30	2,057	SVC	5
<b>417077-271</b>	TEBC	DGS80 (HS35)	2048	FL250	SICK	O	MS-ST	5 - 30	2,113	SVC	5
<b>417077-272</b>	TEBC	DGS80 (HS35)	2048	FL280	SICK	O	MS-ST	5 - 30	1,795	SVC	5
<b>417077-273</b>	TEBC	DGS80 (HS35)	2048	FL320-FL5800	SICK	O	MS-ST	5 - 30	1,488	SVC	5
<b>417077-302</b>	TEBC	HS35M	2048	FL180	Avtron	M	Latch	5 - 24	4,155	SVC	15
<b>417077-303</b>	TEBC	HS35M	2048	FL210	Avtron	M	Latch	5 - 24	4,155	SVC	18
<b>417077-304</b>	TEBC	HS35M	2048	FL250	Avtron	M	Latch	5 - 24	4,155	SVC	15
<b>417077-305</b>	TEBC	HS35M	2048	FL280	Avtron	M	Latch	5 - 24	3,912	SVC	5
<b>417077-263</b>	TEFC	DGS80 (HS35)	2048	FL180-FL/RL580	SICK	O	MS-ST	5 - 30	1,801	SVC	5
<b>417077-261</b>	TENV, DPFV	DGS80 (HS35)	2048	FL180-FL/RL580	SICK	O	MS-ST	5 - 30	1,860	SVC	5
<b>417077-301</b>	TENV, DPFV	HS35M	2048	FL180 - FL/RL5800	Avtron	M	Latch	5 - 24	4,155	SVC	13

Red catalog number indicates **NEW** product

**Encoder feedback kits RPM AC designs**

Catalog Number	Enclosures	Type	PPR	NEMA Frame	Mfg.	M/O	Conn. Type	Voltage	List Price	Disc. Sym.	Aprx. Wt. (lb)
<b>417708-85</b>	DPFV	H20	1024	L280-L400	Dynapar	O	MS-ST	5 - 15	2,306	SVC	5
<b>417708-120</b>	DPFV	RL67	1024	L440	Dynapar	M	Latch	5 - 15	2,997	SVC	23
<b>417708-87</b>	DPFV	RL67	1024	L280-L400	Dynapar	M	Latch	5 - 15	2,745	SVC	6

**Encoder mounting kits - Stub Shaft**

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

Catalog Number	Enclosures	Type	NEMA Frame	List Price	Disc. Sym.	Aprx. Wt. (lb)
417708-203	DPFV & TEAO-P/B	BEI HS35	L440	577	SVC	0
417708-202	DPFV & TEBC	BEI HS35	FL/RL280 thru L400	577	SVC	0
417708-201	DPFV,TENV,TEFC,TEBC	BEI HS35	FL180-FL/RL250	577	SVC	0

**Encoder mounting kits - Stub Shaft and blower shroud when required**

Kit to include 1" dia. stub shaft and extended blower shroud when required

Catalog Number	Enclosures	Type	NEMA Frame	List Price	Disc. Sym.	Aprx. Wt. (lb)
417708-185	TEBC	Avtron HS35M	FL180	966	SVC	11
417708-186	TEBC	Avtron HS35M	FL210	973	SVC	13
417708-187	TEBC	Avtron HS35M	FL250	1,071	SVC	13
417708-188	TEBC	Avtron HS35M	FL280	1,054	SVC	13
417708-189	TEBC	Avtron HS35M	FL320-FL440	721	SVC	3
417708-184	TENV, DPFV	Avtron HS35M	FL180 - FL/RL5800	834	SVC	3

**RPM AC filter kits**

For use with DPFV enclosures



NEMA Frame	Catalog Number	Additional Details	List Price	Disc. Sym.	Aprx. Wt. (lb)
FL180	417077-57	Washable Wire Mesh Canister Type	1,107	SVC	2
RL210, RL250, RL280, RL320	417077-59	Washable Wire Mesh Canister Type	1,107	SVC	4
RL360, RL400	417077-102	Washable Wire Mesh Canister Type	1,415	SVC	6
RL440 - RL5000	417077-124	Square Replaceable Polyester Type	2,300	SVC	17

**RPM AC slide bases**

Used for adjustable belt tension on belted application,  
Not suitable for wall or ceiling mounting,



NEMA Frame	Catalog Number	List Price	Disc. Sym.	Aprx. Wt. (lb)
FL1831	419914-9A	899	SVC	13
FL1838	419914-9B	899	SVC	14
FL1844	419914-9C	899	SVC	15
FL1852	419914-9D	899	SVC	17
FL/RL2153	419914-10A	899	SVC	30
FL/RL2158	419914-10B	899	SVC	27
FL/RL2162	419914-10D	1,020	SVC	48
FL/RL2168	419914-10L	1,020	SVC	32
FL/RL2173	419914-10M	1,020	SVC	48
FL/RL2570	419914-10G	1,154	SVC	67
FL/RL2578	419914-10N	1,853	SVC	38
FL/RL2586	419914-10P	1,804	SVC	50
FL/RL3203	419914-11P	1,849	SVC	108
FL/RL3213	419914-11R	1,849	SVC	130
FL/RL/L2882	419914-10K	1,222	SVC	80
FL/RL/L2890	419914-10R	1,727	SVC	42
FL/RL/L2898	419914-10S	1,727	SVC	90
UFL/URL3614	419914-11N	2,168	SVC	124
UFL/URL3698	419914011M	1,970	SVC	105
UFL/URL4034	419914011F	3,008	SVC	5
UFL/URL4046	419914-11G	4,580	SVC	141
UFL/URL4429	419914011H	5,675	SVC	140
UFL/URL4440	419914011J	5,675	SVC	150
UFL/URL4451	419914011K	5,675	SVC	160
UFL/URL4461	419914011L	5,675	SVC	100



**RPM AC mounting conversion kits**

Kits are for relocation of the conduit box of stock FL180 - FL/RL280 frame motors as noted. Installation of this kit requires complete disassembly/reassembly of motor.

NEMA Frame	Catalog Number	List Price	Disc. Sym.	Enclosures	Additional Details
FL180	<b>417077-185</b>	1,443	SVC	DPFV	From F-1 to F-2
FL180	<b>417077-250</b>	1,221	SVC	TEBC, TEFC	From Top to F-1
FL180	<b>417077-254</b>	1,221	SVC	TEBC, TEFC	From Top to F-2
FL180	<b>417077-184</b>	1,443	SVC	TENV	From Top to F-1 or F-2
FL210	<b>417077-251</b>	1,484	SVC	TEBC, TEFC	From Top to F-1
FL210	<b>417077-255</b>	1,484	SVC	TEBC, TEFC	From Top to F-2
FL210	<b>417077-186</b>	1,276	SVC	TENV	From Top to F-1 or F-2
FL250	<b>417077-252</b>	1,653	SVC	TEBC, TEFC	From Top to F-1
FL250	<b>417077-256</b>	1,653	SVC	TEBC, TEFC	From Top to F-2
FL250	<b>417077-187</b>	1,443	SVC	TENV	From Top to F-1 or F-2
FL280	<b>417077-201</b>	2,102	SVC	TENV	From Top to F-1 or F-2
RL210	<b>417077-130</b>	1,367	SVC	DPFV	From F-1 to F-2
RL250	<b>417077-131</b>	1,367	SVC	DPFV	From F-1 to F-2
RL280	<b>417077-202</b>	1,519	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.



NEMA Frame	Catalog Number	List Price	Disc. Sym.	Aprx. Wt. (lb)
FL180	<b>417077-143</b>	1,090	SVC	5
FL210-250	<b>417077-141</b>	1,387	SVC	6
RL210	<b>417077-144</b>	1,387	SVC	72
RL250	<b>417077-145</b>	2,130	SVC	79
RL280	<b>419947-40</b>	2,122	SVC	105
RL320	<b>419947-43</b>	2,361	SVC	100
RL360	<b>419947-41</b>	2,579	SVC	110
RL400	<b>419947-42</b>	2,823	SVC	116

TOC  
INFO  
SP4  
GP  
SD  
WD  
XP  
PUMP  
HVAC  
FARM  
DP  
UH  
BRM  
VSAC  
IMD  
DCPM  
DCSW  
GRDS  
BUFF  
LATH  
GBPA  
ACPA  
DCPA  
ACC  
MDEX  
INDX  
NOTE

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**Roller bearing kits for RPM AC motors**


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NEMA Frame	Catalog Number	Additional Details	List Price	Disc. Sym.	Aprx. Wt. (lb)
FL/RL280	<b>418057-645</b>	Kit – Convert FL/RL280 to roller bearing	1,197	SVC	5
FL/RL320	<b>418057-786</b>	Kit – Convert FL/RL320 to roller bearing	1,181	SVC	2
FL/RL360&400	<b>418057-764</b>	Kit – Convert FL/RL360 & 400 to roller bearing	2,020	SVC	2
FL/RL440	<b>418057-501</b>	Kit – Convert FL/RL440 to roller bearing	3,360	SVC	1

# V\*S Master Inverter duty

## 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

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

### V\*S Master®, Inverter Duty, TEFC

designed to operate continuously at zero speed without over heating.  
 [Encoder Provisions]: 182T-326T frames: solid state shaft (non removable) with shaft cover. 364T-L449 frames: drilled and tapped for stub shaft



Hp	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
230/460 volt												
3	2700	182TC	1800	IDVSM3661T	2,564	VS3	20.23	105	89.5	230/460	4.1	2, 48
5	2700	184TC	1800	IDVSM3665T	2,973	VS3	20.23	120	89.5	230/460	6.6	2, 48
7 1/2	2700	213TC	1800	IDVSM3770T	3,825	VS3	24.59	180	91.7	230/460	9.5	2, 48
10	2700	215TC	1800	IDVSM3774T	4,987	VS3	24.59	231	92.4	230/460	12.5	2, 48
15	2700	254TC	1800	IDVSM2333T	5,802	VS3	26.91	291	92.4	230/460	18.1	2, 48
20	2700	256TC	1800	IDVSM2334T	6,290	VS3	26.91	334	93.0	230/460	24.0	2, 48
25	2700	284TC	1800	IDVSM4103T	7,987	VS3	30.42	446	93.6	230/460	31.0	2, 48
30	2700	286TC	1800	IDVSM4104T	8,726	VS3	30.42	457	93.6	230/460	38.0	2, 48
40	2700	324T	1800	IDVSM4110T	10,066	VS3	33.14	619	94.1	230/460	48.0	2, 48
50	2700	326T	1800	IDVSM4115T	12,303	VS3	33.14	670	94.5	230/460	58.0	2, 48
60	2700	364T	1800	IDVSM4314T	15,239	VS3	33.44	869		230/460	69.1	2, 48
75	2700	365T	1800	IDVSM4316T	19,087	VS3	33.48	873	95.4	230/460	86.0	2, 48
460 volt												
100	2700	405T	1800	IDVSM4400T-4	24,667	VS3	38.04	1218	94.1	460	112.0	2, 48
125	2700	444T	1800	IDVSM4410T-4	30,620	VS3	44.75	1637	94.1	460	140.0	2, 48
150	2700	445T	1800	IDVSM4406T-4	36,542	VS3	44.75	1789		460	165.0	2, 48
200	2700	447T	1800	IDVSM4407T-4	43,298	VS3	48.24	2189	95.4	460	218.0	2, 48
250	2700	449T	1800	IDVSM4408T-4	61,195	VS3	53.24	2701	95.8	460	272.0	2, 48
300	2700	449T	1800	IDVSM44304T-4	61,195	VS3	53.24	2816	96.2	460	322.0	2, 48
575 volt												
5	2700	184TC	1800	IDVSM3665T-5	2,973	VS3	20.23	118	90.2	575	5.2	2, 48
10	2700	215TC	1800	IDVSM3774T-5	4,987	VS3	24.59	231	91.7	575	9.8	2, 48

Cast iron frame

**V\*S Master®, Inverter Duty, TENV**

1.0 Service factor. Designed to operate continuously at zero speed without over heating.  
 [Encoder Provisions]: 182T-326T frames: solid state shaft (non removable) with shaft cover. 364T-  
 L449 frames: machined ODE bracket in addition to hole drilled and tapped for stub shaft.



Hp	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
230/460 volt												
1/3	2700	56C	1800	<b>IDNM3534</b>	759	VS4	13.84	33	75.5	230/460	0.9	8, 28
		56C	1800	<b>IDVSNM3534</b>	759	VS4	13.84	32	75.5	230/460	0.9	48
1/2	2700	56C	1800	<b>IDNM3538</b>	886	VS4	13.84	31	78.2	230/460	0.9	8, 28
		56C	1800	<b>IDVSNM3538</b>	886	VS4	13.84	35	78.2	230/460	0.9	48
3/4	2700	56C	1800	<b>IDNM3542</b>	988	VS4	13.84	33	82.5	230/460	1.1	8, 28
		56C	1800	<b>IDVSNM3542</b>	988	VS4	13.84	36	82.5	230/460	1.1	48
1	2700	56C	1800	<b>IDVSNM3546</b>	1,605	VS4	14.84	45	87.5	230/460	1.5	48
		143TC	1800	<b>IDNM3581T</b>	2,014	VS4	14.65	58	85.5	230/460	1.6	8, 28
		143TC	1800	<b>IDVSNM3581T</b>	2,014	VS4	14.65	58	85.5	230/460	1.6	48
1 1/2	2700	145TC	1800	<b>IDVSNM3582T</b>	3,119	VS4	14.65	61	82.5	230/460	1.8	48
		145TC	1800	<b>IDNM3584T</b>	2,224	VS4	14.65	57	86.5	230/460	2.3	8, 28
		145TC	1800	<b>IDVSNM3584T</b>	2,224	VS4	14.65	64	80.0	230/460	2.0	48
2	2700	145TC	1800	<b>IDNM3587T</b>	2,322	VS4	14.65	67	86.5	230/460	2.7	8, 28
		145TC	1800	<b>IDVSNM3587T</b>	2,322	VS4	14.65	63	86.5	230/460	2.7	48
		182TC	1800	<b>IDNM3669T</b>	2,695	VS4	17.22	94	88.5	230/460	3.0	8, 28
3	2700	182TC	1800	<b>IDVSNM3661T</b>	3,043	VS4	17.85	111	89.5	230/460	4.3	48
		184TC	1800	<b>IDNM3661T</b>	3,043	VS4	17.22	108	89.5	230/460	4.3	8, 28
5	2700	184TC	1800	<b>IDNM3665T</b>	3,393	VS4	17.22	116	89.5	230/460	6.6	8, 28
		184TC	1800	<b>IDVSNM3665T</b>	3,393	VS4	17.85	124	89.5	230/460	6.6	48
		213TC	1800	<b>IDNM3767T</b>	3,782	VS4	20.40	172	89.5	230/460	6.7	8, 28
7 1/2	2700	213TC	1800	<b>IDNM3770T</b>	3,927	VS4	20.40	196	92.4	230/460	8.9	8, 28
		215TC	1800	<b>IDVSNM2237T</b>	3,933	VS4	20.86	212	92.4	230/460	8.9	48
		254TC	1800	<b>IDNM2237T</b>	4,704	VS4	24.11	258	91.7	230/460	9.1	8, 28
10	2700	254TC	1800	<b>IDVSNM2238T</b>	5,395	VS4	24.11	305	91.7	230/460	13.0	48
		256TC	1800	<b>IDNM2238T</b>	5,395	VS4	24.11	286	91.7	230/460	13.0	8, 28
15	2700	254TC	1800	<b>IDNM2333T</b>	6,488	VS4	24.11	287	92.4	230/460	18.5	8, 28
		256TC	1800	<b>IDVSNM2333T</b>	6,488	VS4	24.11	284	92.4	230/460	18.5	48
20	2700	284T	1800	<b>IDNM2334T</b>	7,005	VS4	27.36	406	93.0	230/460	26.0	8, 45, 28
575 volt												
1/2	2700	56C	1800	<b>IDVSNM3538-5</b>	886	VS4	13.84	31	80.0	575	0.8	48
3/4	2700	56C	1800	<b>IDVSNM3542-5</b>	988	VS4	13.84	35	82.5	575	0.9	48
1	2700	56C	1800	<b>IDVSNM3546-5</b>	1,605	VS4	14.84	45	85.5	575	1.3	48
		143TC	1800	<b>IDVSNM3581T-5</b>	2,014	VS4	14.65	58	85.5	575	1.3	48
1 1/2	2700	145TC	1800	<b>IDVSNM3584T-5</b>	2,224	VS4	14.65	64	86.5	575	1.7	48
2	2700	145TC	1800	<b>IDVSNM3587T-5</b>	2,322	VS4	14.65	62	86.5	575	2.2	48
3	2700	182TC	1800	<b>IDNM3661T-5</b>	3,043	VS4	17.22	108	90.2	575	3.4	48
5	2700	184TC	1800	<b>IDNM3665T-5</b>	3,393	VS4	17.22	116	90.2	575	5.2	48
7 1/2	2700	213TC	1800	<b>IDVSNM2237T-5</b>	3,933	VS4	20.86	196	91.7	575	7.8	48
15	2700	256TC	1800	<b>IDVSNM2333T-5</b>	6,488	VS4	24.11	284	92.4	575	14.8	48
20	2700	256TC	1800	<b>IDVSM2334T-5</b>	6,290	VS3	26.91	321	93.0	575	19.2	48

Cast iron frame

**V\*S Master®, Inverter Duty, TEBC**

1.0 service factor, Class "H" Insulated  
Suitable for sinewave operation



Hp	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
230/460 volt												
1	2700	143TC	1800	<b>IDM3581T</b>	2,661	VS2	19.15	65	85.5	230/460	1.6	
	2800	145TC	1200	<b>IDM3582T</b>	3,125	VS2	19.08	68	82.5	230/460	1.8	
1 1/2	2700	145TC	1800	<b>IDM3584T</b>	2,814	VS2	19.02	70	86.5	230/460	2.3	
	1800	182TC	1200	<b>IDM3667T</b>	3,729	VS2	21.71	107	87.5	230/460	2.5	
2	2700	145TC	1800	<b>IDM3587T</b>	3,009	VS2	19.15	72	86.5	230/460	2.8	
	1800	184TC	1200	<b>IDM3664T</b>	3,610	VS2	21.71	124	88.5	230/460	3.2	
3	2700	184TC	1800	<b>IDM3661T</b>	3,043	VS2	21.71	111	89.5	230/460	4.1	
	1800	215TC	1200	<b>IDM3764T</b>	4,721	VS2	25.58	187	90.2	230/460	4.5	70
5	2700	184TC	1800	<b>IDM3665T</b>	4,066	VS2	21.71	124	90.2	230/460	6.5	
	1800	215TC	1200	<b>IDM3768T</b>	5,778	VS2	25.58	226	90.2	230/460	7.3	70
7 1/2	2700	213TC	1800	<b>IDM3770T</b>	4,902	VS2	25.58	170	91.7	230/460	9.5	70
	1800	254TC	1200	<b>IDM2276T</b>	8,308	VS2	29.22	332	91.0	230/460	10.7	70
10	2700	215TC	1800	<b>IDM3774T</b>	5,252	VS2	25.58	231	92.4	230/460	12.5	70
	1800	256TC	1200	<b>IDM2332T</b>	10,151	VS2	29.22	339	91.0	230/460	14.2	70
15	2700	256TC	1800	<b>IDM2333T</b>	5,708	VS2	29.22	268	92.4	230/460	18.1	70
	1800	284T	1200	<b>IDM4100T</b>	12,034	VS2	34.47	450	91.7	230/460	21.0	45, 70
20	2700	256TC	1800	<b>IDM2334T</b>	6,097	VS2	29.22	333	93.0	230/460	24.0	70
	1800	286T	1200	<b>IDM4102T</b>	13,548	VS2	34.47	455	91.7	230/460	27.0	45, 70
25	2700	286T	1800	<b>IDM4103T</b>	7,518	VS2	34.47	417	93.6	230/460	31.0	45, 70
	1800	324T	1200	<b>IDM4111T</b>	15,440	VS2	36.92	557	93.0	230/460	32.0	45, 70
30	2700	286T	1800	<b>IDM4104T</b>	8,624	VS2	34.47	464	93.6	230/460	38.0	45, 70
	1800	326T	1200	<b>IDM4117T</b>	17,185	VS2	36.92	611	93.0	230/460	39.0	45, 70
40	2700	324T	1800	<b>IDM4110T</b>	11,661	VS2	36.92	605	94.1	230/460	48.0	45, 70
50	2700	326T	1800	<b>IDM4115T</b>	13,087	VS2	36.92	645	94.5	230/460	58.0	45, 70
575 volt												
1	2700	143TC	1800	<b>IDM3581T-5</b>	2,661	VS2	19.02	60	85.5	575	1.2	
1 1/2	2700	145TC	1800	<b>IDM3584T-5</b>	2,814	VS2	19.02	70	86.5	575	1.7	
2	2700	145TC	1800	<b>IDM3587T-5</b>	3,009	VS2	19.02	73	86.5	575	2.2	
3	2700	184TC	1800	<b>IDM3661T-5</b>	3,043	VS2	21.71	112	89.5	575	3.3	
5	2700	184TC	1800	<b>IDM3665T-5</b>	4,066	VS2	21.71	121	90.2	575	5.2	
7 1/2	2700	213TC	1800	<b>IDM3770T-5</b>	4,902	VS2	25.58	170	91.7	575	7.5	70
10	2700	215TC	1800	<b>IDM3774T-5</b>	5,252	VS2	25.58	231	92.4	575	10.0	70
15	2700	256TC	1800	<b>IDM2333T-5</b>	5,708	VS2	29.41	318	92.4	575	14.6	70
20	2700	256TC	1800	<b>IDM2334T-5</b>	6,097	VS2	29.41	329	93.0	575	19.2	70

Cast iron frame

## V\*S Master Vector duty

### 1/2 thru 300 Hp

#### Features

- Rated torque from zero to base speed
- 1024 PPR encoder
- TENV, TEFC, TEBC 1000:1 CT Speed range
- Three thermostats (1 N.C. per phase)
- Large selection of encoder types available non stock
- Insulated bearing on all 440T frames opposite drive end
- 1.0 Service Factor

#### Applications

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

#### V\*S Master®, Vector Duty, TEFC



Hp	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
230/460 volt												
3	2700	182TC	1800	ZDVSM3661T	5,374	VS3	20.23	118	89.5	230/460	4.1	48
5	2700	184TC	1800	ZDVSM3665T	5,780	VS3	20.23	129	89.5	230/460	6.6	48
7 1/2	2700	213TC	1800	ZDVSM3770T	6,632	VS3	24.59	184	91.7	230/460	9.5	48
10	2700	215TC	1800	ZDVSM3774T	7,795	VS3	24.59	210	92.4	230/460	12.5	48
15	2700	254TC	1800	ZDVSM2333T	8,610	VS3	26.91	295	92.4	230/460	18.1	48
20	2700	256TC	1800	ZDVSM2334T	9,098	VS3	26.91	317	93.0	230/460	24.0	48
25	2700	284TC	1800	ZDVSM4103T	10,794	VS3	30.42	458	93.6	230/460	31.0	48
30	2700	286TC	1800	ZDVSM4104T	11,533	VS3	30.42	472	93.6	230/460	38.0	48
40	2700	324T	1800	ZDVSM4110T	12,874	VS3	33.14	715	94.1	230/460	48.0	48
50	2700	326T	1800	ZDVSM4115T	15,110	VS3	33.14	721	94.5	230/460	58.0	48
60	2700	364T	1800	ZDVSM4314T	18,047	VS3	36.75	907		230/460	69.1	48
75	2700	365T	1800	ZDVSM4316T	21,895	VS3	36.75	944		230/460	85.6	48
460 volt												
100	2700	405T	1800	ZDVSM4400T-4	27,476	VS3	42.40	1297	94.1	460	112.0	48
125	2700	444T	1800	ZDVSM4410T-4	33,426	VS3	49.07	1667		460	140.0	48
150	2700	445T	1800	ZDVSM4406T-4	39,349	VS3	49.07	1806		460	165.0	48
200	2700	447T	1800	ZDVSM4407T-4	46,106	VS3	52.74	2203	95.4	460	218.0	48
250	2700	449T	1800	ZDVSM4408T-4	64,003	VS3	56.66	2768	95.8	460	272.0	48
300	2700	449T	1800	ZDVSM44304T-4	64,003	VS3	56.66	2817	96.2	460	322.0	48

Cast iron frame

**V\*S Master®, Vector Duty, TENV**



Hp	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
230/460 volt												
1/2	2700	56C	1800	<b>ZDVSNM3538</b>	3,272	VS4	13.84	37	78.2	230/460	0.9	48, 32
3/4	2700	56C	1800	<b>ZDVSNM3542</b>	3,372	VS4	13.84	38	82.5	230/460	1.1	48, 32
1	2700	143TC	1800	<b>ZDNM3581T</b>	4,400	VS4	14.65	59	85.5	230/460	1.6	8, 32
		145TC	1800	<b>ZDVSNM3581T</b>	4,400	VS4	14.65	59	85.5	230/460	1.6	48, 32
1 1/2	2700	145TC	1800	<b>ZDNM3584T</b>	4,605	VS4	14.65	58	86.5	230/460	2.3	8, 32
		145TC	1800	<b>ZDVSNM3584T</b>	4,605	VS4	14.65	70	86.5	230/460	2.3	48, 32
2	2700	145TC	1800	<b>ZDVSNM3587T</b>	5,078	VS4	14.65	66	86.5	230/460	2.7	48, 32
		182TC	1800	<b>ZDNM3669T</b>	5,078	VS4	17.21	95	88.5	230/460	3.0	8, 60, 32
3	2700	182TC	1800	<b>ZDVSNM3661T</b>	5,448	VS4	17.85	111	89.5	230/460	4.3	48
		184TC	1800	<b>ZDNM3661T</b>	5,427	VS4	17.21	101	88.5	230/460	4.2	8, 60, 32
5	2700	184TC	1800	<b>ZDVSNM3665T</b>	5,865	VS4	17.85	124	89.5	230/460	6.6	48
		213TC	1800	<b>ZDNM3767T</b>	6,165	VS4	20.40	173	89.5	230/460	6.2	8, 60, 32
7 1/2	2700	215TC	1800	<b>ZDVSNM2237T</b>	6,739	VS4	20.86	211	92.4	230/460	8.9	48
		256TC	1800	<b>ZDNM2237T</b>	7,089	VS4	24.11	242	91.7	230/460	9.1	8, 60
10	2700	254TC	1800	<b>ZDVSNM2238T</b>	8,203	VS4	24.11	325	91.7	230/460	13.0	48
		256TC	1800	<b>ZDNM2238T</b>	8,203	VS4	24.11	284	91.7	230/460	13.0	8, 60, 32
15	2700	254TC	1800	<b>ZDNM2333T</b>	9,297	VS4	24.11	286	92.4	230/460	18.5	8, 60
		256TC	1800	<b>ZDVSNM2333T</b>	9,297	VS4	24.11	278	92.4	230/460	18.5	48
20	2700	284T	1800	<b>ZDNM2334T</b>	9,390	VS4	27.36	405	93.0	230/460	26.0	8, 45, 60

Cast iron frame

TOC  
INFO  
SP4  
GP  
SD  
WD  
XP  
PUMP  
HVAC  
FARM  
DP  
UH  
BRM  
VSAC  
IMD  
DCPM  
DCSW  
GRDS  
BUFF  
LATH  
GBPA  
ACPA  
DCPA  
ACC  
MDEX  
INDX  
NOTE



**V\*S Master®**, Vector Duty, TEBC

Class "H" Insulated  
Suitable for sinewave operation



Hp	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
230/460 volt												
1	2700	143TC	1800	<b>ZDM3581T</b>	5,042	VS2	19.15	66	85.5	230/460	1.6	60, 32
	1800	143TC	1200	<b>ZDM3582T</b>	5,506	VS2	19.02	62	82.5	230/460	1.7	32
1 1/2	2700	145TC	1800	<b>ZDM3584T</b>	5,197	VS2	19.02	70	86.5	230/460	2.3	60, 32
	1800	182TC	1200	<b>ZDM3667T</b>	5,896	VS2	21.71	108	87.5	230/460	2.5	32
2	2700	145TC	1800	<b>ZDM3587T</b>	5,389	VS2	19.02	75	86.5	230/460	2.8	32
	1800	184TC	1200	<b>ZDM3664T</b>	5,994	VS2	21.71	113	88.5	230/460	3.2	32
3	2700	182TC	1800	<b>ZDM3661T</b>	6,227	VS2	21.71	112	89.5	230/460	4.1	32
	1800	215TC	1200	<b>ZDM3764T</b>	7,102	VS2	25.58	187	90.2	230/460	4.5	70, 32
5	2700	184TC	1800	<b>ZDM3665T</b>	6,448	VS2	21.71	125	90.2	230/460	6.5	32
	1800	215TC	1200	<b>ZDM3768T</b>	8,163	VS2	25.58	226	90.2	230/460	7.3	70, 32
7 1/2	2700	213TC	1800	<b>ZDM3770T</b>	7,283	VS2	25.58	170	91.7	230/460	9.5	70, 32
	1800	254TC	1200	<b>ZDM2276T</b>	10,691	VS2	29.22	333	91.0	230/460	10.7	70
10	2700	215TC	1800	<b>ZDM3774T</b>	7,632	VS2	25.58	231	92.4	230/460	12.5	70
	1800	256TC	1200	<b>ZDM2332T</b>	12,531	VS2	29.41	356	91.0	230/460	14.2	70
15	2700	256TC	1800	<b>ZDM2333T</b>	8,091	VS2	29.22	317	92.4	230/460	18.1	70
	1800	284T	1200	<b>ZDM4100T</b>	14,414	VS2	34.47	412	91.7	230/460	21.0	45, 70
20	2700	256TC	1800	<b>ZDM2334T</b>	8,482	VS2	29.22	335	93.0	230/460	24.0	70
	1800	286T	1200	<b>ZDM4102T</b>	15,934	VS2	34.47	462	91.7	230/460	27.0	45, 70
25	2700	284T	1800	<b>ZDM4103T</b>	9,898	VS2	34.47	416	93.6	230/460	31.0	45, 70
	1800	324T	1200	<b>ZDM4111T</b>	17,826	VS2	36.92	605	93.0	230/460	32.0	45, 70
30	2700	286T	1800	<b>ZDM4104T</b>	11,009	VS2	34.47	445	93.6	230/460	38.0	45, 70
	1800	326T	1200	<b>ZDM4117T</b>	19,567	VS2	36.92	604	93.0	230/460	39.0	45, 70
40	2700	324T	1800	<b>ZDM4110T</b>	14,042	VS2	36.92	610	94.1	230/460	48.0	45, 70
50	2700	326T	1800	<b>ZDM4115T</b>	15,471	VS2	36.92	631	94.5	230/460	58.0	45, 70
575 volt												
1	2700	143TC	1800	<b>ZDM3581T-5</b>	5,042	VS2	19.02	61	85.5	575	1.2	32
1 1/2	2700	145TC	1800	<b>ZDM3584T-5</b>	5,197	VS2	19.15	62	87.5	575	1.7	32
2	2700	145TC	1800	<b>ZDM3587T-5</b>	5,389	VS2	19.15	74	86.5	575	2.2	32
3	2700	182TC	1800	<b>ZDM3661T-5</b>	6,227	VS2	21.71	110	89.5	575	3.2	32
5	2700	184TC	1800	<b>ZDM3665T-5</b>	6,448	VS2	21.71	125	90.2	575	5.2	32
7 1/2	2700	213TC	1800	<b>ZDM3770T-5</b>	7,283	VS2	25.58	170	91.7	575	7.5	70, 32
10	2700	215TC	1800	<b>ZDM3774T-5</b>	7,632	VS2	25.58	231	92.4	575	10.0	70, 32
15	2700	256TC	1800	<b>ZDM2333T-5</b>	8,091	VS2	29.22	289	92.4	575	14.6	70
20	2700	256TC	1800	<b>ZDM2334T-5</b>	8,482	VS2	29.22	340	93.0	575	19.2	70

Cast iron frame

## V\*S Master Severe Duty, Vector drive 1 thru 50 Hp

### Features

- Designed for severe duty applications
- TENV, TEFC, 1000:1 CT
- Rated torque from zero to base speed
- 1024 encoder
- 3 thermostats, one per phase
- Class H insulation

### Applications

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

### V\*S Master®, Severe Duty, Vector drive

1.0 Service Factor  
Includes phase insulation. Suitable for use on inverter.



Hp	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
230/460 volt												
1	2700	143TC	1800	ZDVSNCP3581T	4,620	VS4	14.61	65	87.5	230/460	1.5	
1 1/2	2700	145TC	1800	ZDVSNCP3584T	4,826	VS4	14.61	72	86.5	230/460	2.3	
2	2700	145TC	1800	ZDVSNCP3587T	5,299	VS4	14.61	73	86.5	230/460	2.7	
3	2700	182TC	1800	ZDVSCP3661T	5,978	VS3	20.23	135	89.5	230/460	4.1	
5	2700	184TC	1800	ZDVSCP3665T	6,486	VS3	20.23	128	89.5	230/460	6.6	
7 1/2	2700	213TC	1800	ZDVSCP3770T	7,514	VS3	25.03	201	91.7	230/460	9.5	
10	2700	215TC	1800	ZDVSCP3774T	8,223	VS3	25.03	218	92.4	230/460	12.5	
15	2700	254TC	1800	ZDVSCP2333T	9,837	VS3	28.14	374	92.4	230/460	18.1	
20	2700	256TC	1800	ZDVSCP2334T	10,447	VS3	28.14	381	93.0	230/460	24.0	
25	2700	284TC	1800	ZDVSCP4103T	12,497	VS3	30.79	481	93.6	230/460	31.0	
30	2700	286TC	1800	ZDVSCP4104T	13,420	VS3	30.79	494	93.6	230/460	38.0	
40	2700	324T	1800	ZDVSCP4110T	15,391	VS3	33.14	762	94.1	230/460	48.0	
50	2700	326T	1800	ZDVSCP4115T	18,187	VS3	33.14	757	94.5	230/460	58.0	

Cast iron frame

## V\*S Master® Accessories

### Features

- 1024 pulses per revolution (unless otherwise noted in PPR column)
- Connector style include the MS twist lock (MS-TL), military style 10 pin screw tight (MS-ST), and the EPIC latch style (EPIC)
- HS35, RAHS35M and HSD35 feature hollow shaft mounting
- Encoder kits include the encoder and all mounting hardware
- IDVSM & IDVSNM kits include the mating connector

### Applications

- V\*S Master® motors

### V\*S Master® encoder feedback kits for IDVSM and IDVSNM motors

Connector styles include the MS twist lock (MS-TL), military style 10 pin screw tight (MS-ST), and the EPIC latch style (EPIC).  
Encoder kits include the encoder and all mounting hardware.

Catalog Number	Enclosures	Type	PPR	NEMA Frame	Mfg.	M/O	Conn. Type	Voltage	List Price	Disc. Sym.	Aprx. Wt. (lb)
K99G73	TEFC	HS35	1024	180T-440T	BEI	O	MS-ST	5 - 15	1,751	SVC	4
K99G77	TEFC	HS35	1024	180T-440T	BEI	O	MS-ST	5 - 24	1,751	SVC	5
K99G81	TEFC	HS35	1024	180T-440T	BEI	O	MS-TL	5 - 28	1,751	SVC	5
K99G83	TEFC	HS35R	1024	180T-440T	Dynapar	O	MS-TL	5 - 26	2,652	SVC	6
K99G79	TEFC	HSD35	1024	180T-440T	Dynapar	O	EPIC	5 - 26	1,970	SVC	6
K99G71	TEFC	RAHS35M	1024	180T-440T	Avtron	M	MS-ST	5 - 24	1,751	SVC	9
K99G72	TENV	HS35	1024	180T-250T	BEI	O	MS-ST	5 - 15	1,751	SVC	4
K99G76	TENV	HS35	1024	180T-250T	BEI	O	MS-ST	5 - 24	1,751	SVC	5
K99G80	TENV	HS35	1024	180T-250T	BEI	O	MS-TL	5 - 28	1,751	SVC	5
K99G82	TENV	HS35R	1024	180T-250T	Dynapar	O	MS-TL	5 - 26	2,652	SVC	6
K99G78	TENV	HSD35	1024	180T-250T	Northstar	O	EPIC	5 - 26	1,970	SVC	3
K99G70	TENV	RAHS35M	1024	180T-250T	Avtron	M	MS-ST	5 - 24	1,751	SVC	9
K99G75	TEFC	HS35-2048	2048	180T-440T	BEI	O	MS-ST	5 - 24	1,751	SVC	9
K99G74	TENV	HS35-2048	2048	180T-250T	BEI	O	MS-ST	5 - 15	1,751	SVC	4

**Encoder feedback kits for IDM, IDNM, and IDWNM motors**

Does not fit some legacy 180-440 EM, CP or ECP motors.



Catalog Number	Enclosures	Type	PPR	NEMA Frame	Mfg.	M/O	Conn. Type	Voltage	List Price	Disc. Sym.	Aprx. Wt. (lb)
ENC01BC-B1	TEBC	HS25	1024	143T-215T	BEI	O	TL	5 - 15	1,751	SVC	1
ENC02BC-B2	TEBC	HS35	1024	254T-447T	BEI	O	TL	5 - 15	1,981	SVC	2
ENC02BC-A2	TEBC	HS35M	1024	254T-447T	Avtron	M	TL	5 - 24	2,713	SVC	2
ENC01BC-D2	TEBC	HS35R	1024	56-215T	Dynapar	O	TL	5 - 26	2,622	SVC	4
ENC02BC-D2	TEBC	HS35R	1024	254T-447T	Dynapar	O	TL	5 - 26	1,970	SVC	4
ENC00NV-B1	TENV	HS25	1024	56-215T	BEI	O	TL	5 - 15	1,751	SVC	2
ENC01NV-B2	TENV	HS35	1024	254T-284T	BEI	O	TL	5 - 15	1,751	SVC	2
ENC00NV-D1	TENV	HS35	1024	56-215T	Dynapar	O	TL	5 - 24	1,970	SVC	2
ENC00NV-A2	TENV	HS35M	1024	213T-215T	Avtron	M	TL	5 - 24	1,751	SVC	1
ENC01NV-A2	TENV	HS35M	1024	254T-256T	Avtron	M	TL	5 - 24	1,751	SVC	3
ENC00NV-D2	TENV	HS35R	1024	56-215T	Dynapar	O	TL	5 - 26	2,621	SVC	4
ENC01NV-D2	TENV	HS35R	1024	254T-256T	Dynapar	O	TL	5 - 26	2,622	SVC	4

**Feedback cable assembly with MS connector**

Twisted pair shielded for electrical noise protection.



Catalog Number	Additional Details	List Price	Disc. Sym.	Aprx. Wt. (lb)
CBL015ZD-2	5 Ft = 1.5 Meters	240	SVC	1
CBL030ZD-2	10 Ft = 3 Meters	279	SVC	1
CBL046ZD-2	15 Ft = 4.6 Meters	319	SVC	2
CBL061ZD-2	20 Ft = 6.1 Meters	440	SVC	2
CBL091ZD-2	30 Ft = 9.1 Meters	552	SVC	3
CBL152ZD-2	50 Ft = 15.2 Meters	861	SVC	6
CBL229ZD-2	75 Ft = 22.9 Meters	1,197	SVC	6
CBL305ZD-2	100 Ft = 30.5 Meters	1,220	SVC	8
CBL455ZD-2	150 Ft = 45.5 Meters	1,695	SVC	15
CBL606ZD-2	200 Ft = 60.6 Meters	2,115	SVC	16

**Connector transition (patch) cables**

Transition from MS twist-lock (female) to MS screw-tight (male)  
 Transition from MS screw-tight (female) to MS twist-lock (male)

Catalog Number	Additional Details	List Price	Disc. Sym.	Aprx. Wt. (lb)
<b>CBLST2TL</b>	MS-ST to MS-TL	486	SVC	2
<b>CBLTL2ST</b>	MS-TL to MS-ST	486	SVC	1

**Constant velocity blower cooling conversion kits**

Convert TENV & TEFC to TEBC  
 Does not fit some legacy 180-440 EM, CP or ECP motors.

Voltage	Phase	NEMA Frame	Catalog Number	List Price	Disc. Sym.	Aprx. Wt. (lb)
115	Single Phase	143TC-145TC	<b>BLWL05-L</b>	1,099	SVC	7
115	Single Phase	182TC-184TC	<b>BLWL06-L</b>	1,276	SVC	8
115	Single Phase	213TC-215TC	<b>BLWL07-L</b>	2,126	SVC	21
115	Single Phase	254TC-256TC	<b>BLWL09-L</b>	2,217	SVC	28
115	Single Phase	284TC-286TC	<b>BLWL10-L</b>	2,247	SVC	35
115	Single Phase	324TC-326TC	<b>BLWL12-L</b>	2,247	SVC	46
230/380/460	Three Phase	213TC-215TC	<b>BLWM07-F</b>	1,409	SVC	19
230/380/460	Three Phase	254TC-256TC	<b>BLWM09-F</b>	1,525	SVC	30
230/380/460	Three Phase	284TC-286TC	<b>BLWM10-F</b>	1,761	SVC	26
230/380/460	Three Phase	324TC-326TC	<b>BLWM12-F</b>	1,761	SVC	46
230/380/460	Three Phase	364TC-365TC	<b>BLWL14-L</b>	2,247	SVC	55
230/380/460	Three Phase	364TC-365TC	<b>BLWM14-F</b>	2,900	SVC	55
230/380/460	Three Phase	404TC-405TC	<b>BLWM16-F</b>	3,371	SVC	70
230/380/460	Three Phase	444TC-447TC	<b>BLWM18-F</b>	3,517	SVC	166

# EC Titanium motor (General Purpose SP5+)

## 1 to 20 Hp



IP54

### Features

- IE5+
- FASR - Ferrite Assisted Synchronous Reluctance Rotor
- Class F Insulation with Class B Motor temperature rise
- IP55 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
- Designed for longevity with 3 year warranty

### Applications

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

### EC Titanium™, three phase, TEFC, foot mounted



Hp	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
230/460 volt												
1	4000	143T	1800	<b>ECS101M0H1DF4</b>	1,535	EC1	12.29	28		230/460	1.2	37
2	4000	145T	1800	<b>ECS101M0H2DF4</b>	1,684	EC1	12.29	35	90.4	230/460	2.4	37
3	4000	145T	1800	<b>ECS101M0H3DF4</b>	1,765	EC1	13.29	44	91.0	230/460	3.4	37
		182T	1800	<b>ECS101M0H3EF4</b>	1,846	EC1	16.54	59	92.8	230/460	3.7	
5	4000	145T	1800	<b>ECS101M0H5DF4</b>	1,919	EC1	15.54	64	93.0	230/460	5.2	37
		184T	1800	<b>ECS101M0H5EF4</b>	1,990	EC1	16.54	68		230/460	5.3	
7.5	4000	184T	1800	<b>ECS101M0H7EF4</b>	2,396	EC1	18.04	95	94.0	230/460	8.8	
		213T	1800	<b>ECS101M0H7FF4</b>	2,802	EC1	17.89	105	94.0	230/460	8.7	
10	4000	215T	1800	<b>ECS101M0H10FF4</b>	3,314	EC1	19.02	123	94.8	230/460	11.0	
15	4000	215T	1800	<b>ECS101M0H15FF4</b>	4,602	EC1	21.96	168	95.6	230/460	17.4	
460 volt												
20	4000	215T	1800	<b>ECS101M4H20FF4</b>	5,005	EC1	23.51	218		460	21.6	82

Red catalog number indicates **NEW** product

**EC Titanium™, three phase, TEFC, C-face foot mounted**


Hp	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
230/460 volt												
1	4000	143TC	1800	<b>ECS101M0H1DB4</b>	1,577	EC1	13.29	48	89.3	230/460	1.2	37
2	4000	145TC	1800	<b>ECS101M0H2DB4</b>	1,725	EC1	13.29	42	90.4	230/460	2.4	37
3	4000	145TC	1800	<b>ECS101M0H3DB4</b>	1,807	EC1	13.29	51	91.0	230/460	3.4	37
		182TC	1800	<b>ECS101M0H3EB4</b>	1,887	EC1	16.54	85	92.8	230/460	3.7	
5	4000	145TC	1800	<b>ECS101M0H5DB4</b>	1,960	EC1	15.54	70	93.0	230/460	5.2	37
		184TC	1800	<b>ECS101M0H5EB4</b>	2,032	EC1	16.54	98	93.7	230/460	5.3	
7 1/2	4000	184TC	1800	<b>ECS101M0H7EB4</b>	2,438	EC1	18.04	151	94.0	230/460	8.8	
		213TC	1800	<b>ECS101M0H7FB4</b>	2,844	EC1	18.63	167	94.0	230/460	8.9	
10	4000	215TC	1800	<b>ECS101M0H10FB4</b>	3,355	EC1	19.75	131	94.8	230/460	11.2	
15	4000	215TC	1800	<b>ECS101M0H15FB4</b>	4,643	EC1	22.69	262	95.6	230/460	17.8	
460 volt												
20	4000	215TC	1800	<b>ECS101M4H20FB4</b>	5,047	EC1	24.24	235	95.9	460	22.0	82

Red catalog number indicates **NEW** product

**EC Titanium™, three phase, TEFC, C-face footless**


Hp	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
230/460 volt												
1	4000	143TC	1800	<b>ECS101M0H1DC4</b>	1,577	EC1	12.29	48	89.3	230/460	1.2	37
2	4000	145TC	1800	<b>ECS101M0H2DC4</b>	1,725	EC1	12.29	42	90.4	230/460	2.4	37
3	4000	145TC	1800	<b>ECS101M0H3DC4</b>	1,807	EC1	13.29	51	91.0	230/460	3.4	37
		182TC	1800	<b>ECS101M0H3EC4</b>	1,887	EC1	16.54	85	92.8	230/460	3.7	
5	4000	145TC	1800	<b>ECS101M0H5DC4</b>	1,960	EC1	15.54	70	93.0	230/460	5.2	37
		184TC	1800	<b>ECS101M0H5EC4</b>	2,032	EC1	16.54	98	93.7	230/460	5.3	
7 1/2	4000	184TC	1800	<b>ECS101M0H7EC4</b>	2,438	EC1	18.04	151	94.0	230/460	8.8	
		213TC	1800	<b>ECS101M0H7FC4</b>	2,844	EC1	18.63	167	94.0	230/460	8.9	
10	4000	215TC	1800	<b>ECS101M0H10FC4</b>	3,355	EC1	19.75	131	94.8	230/460	11.2	
15	4000	215TC	1800	<b>ECS101M0H15FC4</b>	4,643	EC1	22.69	262	95.6	230/460	17.8	
460 volt												
20	4000	215TC	1800	<b>ECS101M4H20FC4</b>	5,047	CVS	24.24	235	95.9	460	22.0	82

Red catalog number indicates **NEW** product



**EC Titanium™, three phase, TEFC, IEC frame B3**



kW	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
190/380 volt, 50Hz												
0.75	3000	D90S	1500	<b>ECS101M0K0P8DF4</b>	1,819	EC1	12.95	47	87.7	190/380	1.3	
1.5	3000	D90S	1500	<b>ECS101M0K1P5DF4</b>	1,901	EC1	12.95	42	89.5	190/380	2.6	
2.2	3000	D90S	1500	<b>ECS101M0K2P2DF4</b>	1,981	EC1	12.95	51	91.8	190/380	3.6	
		D112S	1500	<b>ECS101M0K2P2EF4</b>	2,356	EC1	16.16	84	91.5	190/380	4.0	
3	3000	D112S	1500	<b>ECS101M0K3EF4</b>	2,520	EC1	16.16	97	92.4	190/380	5.3	
4	3000	D112S	1500	<b>ECS101M0K4EF4</b>	2,645	EC1	16.16	97	91.6	190/380	6.8	
5.5	3000	D132M	1500	<b>ECS101M0K5P5FF4</b>	3,325	EC1	17.62	162	92.7	190/380	10.9	
7.5	3000	D132S	1500	<b>ECS101M0K7P5FF4</b>	4,150	EC1	18.75	131	93.7	190/380	14.4	
11	3000	D132S	1500	<b>ECS101M0K11FF4</b>	5,135	EC1	18.75	256	94.2	190/380	23.9	

Red catalog number indicates **NEW** product

**EC Titanium™, three phase, TEFC, IEC frame B14**



kW	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
190/380 volt, 50Hz												
0.75	3000	D90C	1500	<b>ECS101M0K0P8DC4</b>	2,052	EC1	12.75	47	87.7	190/380	1.3	
1.5	3000	D90C	1500	<b>ECS101M0K1P5DC4</b>	2,131	EC1	12.75	42	89.5	190/380	2.6	
2.2	3000	D90C	1500	<b>ECS101M0K2P2DC4</b>	2,211	EC1	13.75	51	91.8	190/380	3.6	
		D112C	1500	<b>ECS101M0K2P2EC4</b>	2,586	EC1	15.88	84	91.5	190/380	4.0	
3	3000	D112C	1500	<b>ECS101M0K3EC4</b>	2,856	EC1	15.88	97	92.4	190/380	5.3	
4	3000	D112C	1500	<b>ECS101M0K4EC4</b>	3,013	EC1	15.88	97	91.6	190/380	5.3	
5.5	3000	D132D	1500	<b>ECS101M0K5P5FC4</b>	3,982	EC1	17.63	162	92.7	190/380	10.7	
7.5	3000	D132C	1500	<b>ECS101M0K7P5FB4</b>	4,475	EC1	18.75	131	93.7	190/380	14.1	
11	3000	D132C	1500	<b>ECS101M0K11FB4</b>	5,365	EC1	21.69	256	94.2	190/380	23.9	

Red catalog number indicates **NEW** product

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**EC Titanium™, three phase, TEFC, IEC frame B5**


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kW	C.H. Speed RPM	Frame	Base Speed	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Eff.	Voltage	Full Load Amps	Notes
190/380 volt, 50Hz												
0.75	3000	D90D	1500	<b>ECS101M0K0P8DD4</b>	2,138	EC1	12.00	47	87.7	190/380	1.3	
1.5	3000	D90D	1500	<b>ECS101M0K1P5DD4</b>	2,203	EC1	12.00	42	89.5	190/380	2.6	
2.2	3000	D90D	1500	<b>ECS101M0K2P2DD4</b>	2,301	EC1	12.95	51	91.8	190/380	3.6	
		D112D	1500	<b>ECS101M0K2P2ED4</b>	2,646	EC1	17.91	84	91.5	190/380	4.0	
3	3000	D112D	1500	<b>ECS101M0K3ED4</b>	2,920	EC1	17.91	97	92.4	190/380	5.3	
4	3000	D112D	1500	<b>ECS101M0K4ED4</b>	3,075	EC1	17.91	97	91.6	190/380	6.8	
5.5	3000	D132D	1500	<b>ECS101M0K5P5FD4</b>	4,044	EC1	17.62	162	92.7	190/380	10.7	
7.5	3000	D132D	1500	<b>ECS101M0K7P5FE4</b>	4,537	EC1	18.75	131	93.7	190/380	14.1	
11	3000	D132D	1500	<b>ECS101M0K11FE4</b>	5,427	EC1	21.69	256	94.2	190/380	23.9	

Red catalog number indicates **NEW** product