

## AC Motor Adjustable Speed Range Capabilities

### Inverter Drive, Vector Drive, V\*S Master and RPMAC Motors

Inverter Drive, Vector Drive, 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 Super-E to centrifugal load applications (fan and centrifugal pump) and running at reduced speed taking advantage of the affinity laws.

Motor load and corresponding energy consumption is reduced by the cube of the speed.



Family	Enclosure	Frame Size	Constant Torque	Variable Torque	Comments
<b>Super E Motors 230, 460 and 575 Volts</b>					
EM	TEFC	56-210(1)	20:1	20:1	General Purpose Premium Efficient
		250-320	10:1	20:1	
		360-445	4:1(2)	20:1	
		447-449	2:1(2)	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/XX and ECP8/841XL (4)	TEFC	140	20:1	20:1	Severe Duty Premium Efficient
		180-210	10:1	10:1	
		250-449	4:1(2)	10:1	
EWDM	TENV,TEFC	56-256(1)	20:1	20:1	Washdown Duty Premium Efficient
SSS/ESS/SSE	TEFC	56-250	2:1	10:1	Stainless Steel Washdown Duty
	TENV	56-140	4:1	10:1	
<b>Inverter Duty and Vector Duty Motors 230, 460 and 575 Volts</b>					
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
IDXM	TEXP	182-405	2:1	10:1	Inverter Duty, Explosion Proof
(2 families)		56-405	10:1	10:1	
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
<b>V*S Master Motors 230 &amp; 460 Volts</b>					
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
<b>RPMAC Motors 230 &amp; 460</b>					
IDRPMN	TENV	FL180-FL210	1000:1	1000:1	Inverter Duty, TENV, RPMAC
IDRPMN	TEFC, TEBC, DPG-FV	FL180-FL440	1000:1	1000:1	Inverter Duty, TEFC, TEBC, DPG-FV, RPMAC
ZDNRPM	TENV	FL180-FL210	1000:1	1000:1	Vector Duty, TENV, RPMAC
ZDRPM	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

(1) Baldor type 35M frames and larger

(3) CT, 2:1 available with fan change thru Mod Express. Specific ratings may be capable of greater CT range

(2) CT, 10:1 available most ratings with fan change thru Mod Express

(4) May not meet IEEE-841 temperature rise limits when applied to adjustable frequency power

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes

**RPM AC,  
Salient Pole  
PM Rotor,  
Three Phase,  
TEBC**

**10 thru 150 Hp**

**FL1831C thru FL2890**

**Applications:** Extruders, conveyors, crane & hoist systems, converting, pumps, web processing, test stands, traction duty, winders, printing.

**Features:** Above premium efficient design utilizing salient pole PM rotor technology to achieve high efficiency, low FLA and optimized power factor. Synchronous speed performance in a compact square frame design FL180 aluminum and FL210-280 laminated steel frame design. Must be applied with drive from page 217-218 specifically designed for permanent magnet rotor performance. Speed feedback and rotor positioning provided via Tamagawa resolver (800123-5A). Continuous constant torque from base speed down to zero speed 1000:1 turn down. Premium class H insulation 40 C ambient, 1.0 S.F., ball bearings, three normally closed thermostats (one per phase). Surpasses the requirements of MG1, Part 31. Exclusive optimum pole Inverter Duty - not for across the line operation.



Hp	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency <sup>(a)</sup>	Voltage	Full Load Amps <sup>(b)</sup>	Rotor Inertia lb-ft <sup>2</sup>	EISA Status <sup>(a)</sup>	Notes <sup>(a)</sup>
10	1800	FL1831C	ZDPM18010C-BV	5,395	E2	27.50	185	94	230/460	11.2	0.46	C	8, 77, 91
15	1800	FL1838C	ZDPM18015C-BV	5,452	E2	29.00	143	94.6	460	16.2	0.63	C	8, 77, 92
20	1800	FL1844C	ZDPM18020C-BV	5,859	E2	30.50	180	94.7	460	22.5	0.77	C	8, 77, 92
25	1800	FL1852C	ZDPM18025C-BV	6,580	E2	32.50	209	95.1	460	26.7	0.96	C	8, 77, 92
30	1800	FL1852C	ZDPM18030C-BV	6,580	E2	32.50	209	94.7	460	32.6	0.96	C	8, 77, 92
40	1800	FL2162	ZDPM21040-BV	6,880	E2	33.50	290	94.5	460	44.7	2.14	C	8, 77, 93
50	1800	FL2168	ZDPM21050-BV	7,117	E2	35.00	330	94.8	460	54.8	2.60	C	8, 77, 93
60	1800	FL2173	ZDPM21060-BV	7,768	E2	36.00	355	94.8	460	66.8	2.99	C	8, 77, 93
75	1800	FL2578	ZDPM25075-BV	12,575	E2	38.50	540	95.8	460	82.3	4.90	C	8, 77, 93
100	1800	FL2586	ZDPM25100-BV	13,306	E2	40.50	605	96.8	460	110.4	5.83	C	8, 77, 93
125	1800	FL2882	ZDPM28125-BV	14,038	E2	43.61	730	95.9	460	136.9	9.43	C	8, 77, 93
150	1800	FL2890	ZDPM28150-BV	14,771	E2	45.61	805	96	460	163.4	11.16	C	8, 77, 93

<sup>(a)</sup> See notes on inside back flap.

<sup>(b)</sup> The data - including efficiency - is for fundamental sinewave components of amps and volts and does not include losses due to inverter pwm waveshapes.

All TEBC have integral blower rated 230/460 volts 3 phase.  
See VS1PM Drives on next page for matched performance drive.

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Start & Dynamic Brakes

**VS1PM Permanent Magnet Drive**

**10 Hp  
10 thru 200 Hp**

**230 VAC  
460 VAC**

**3 Phase - 50/60 Hz  
3 Phase - 50/60 Hz**



**Applications:** Constant or Variable Torque Applications. New installations and original equipment manufactures (OEM).

**Features:** Exclusively for use with our RPMAC Interior Permanent Magnet Motors. Very high efficiency motor/drive packages. NEMA 1 Enclosures. Output frequency 0 to 66 Hz with peak overload capacity of 175%. Built-in two and three input PID process control loop. Automatically tuned to Baldor RPMAC Interior PM Motors. Uses same Graphic Keypad and Expansion Boards as the VS1SP/GV Families.

<b>Output Ratings</b>	Horsepower	10 HP @ 230VAC, 3PH; 10-200 HP @ 460VAC, 3PH
	Overload Capacity	Heavy Duty (Constant Torque) = 150% for 60 seconds, 175% for 3 seconds Normal Duty (Variable Torque) = 115% for 60 seconds
	Frequency	0-66 Hz
<b>Input Ratings</b>	Voltage	0-Maximum input voltage (RMS)
	Frequency	50 or 60 Hz ±5%
	Voltage	230 = 180-234 & 460 = 340-528
<b>Control Spec</b>	Phase	Three Phase (single phase with derating)
	Impedance	1% minimum from mains connection
	Control Method	Microprocessor controlled PWM, selectable closed loop vector
	PWM Frequency	Adjustable 4-5 kHz STD, 5-16 kHz quiet
	Speed Setting	±5 VDC, 0-5 VDC ±10 VDC, 0-10 VDC, 4-20 mA or 0-20 mA; digital (keypad), Serial Comms/USB 2.0, and Modbus RTU
	Accel/Decel	0-3600 sec
	Brake Torque	20% standard on Sizes AA and B, 1% standard on Size C, D, E requires external resistor
	Motor Matching	Automatic tuning to motor with manual override
	PC Setup Software	Mint WorkBench Software available using the USB 2.0 port for commissioning wizard, firmware download, parameter viewer scope capture and cloning,
	Maximum Output Frequency	66 Hz
<b>Motor Feedback Protective Functions</b>	Selectable Operating Modes	Keypad, Standard Run, 2-Wire, Standard Run 3-Wire, 15 Preset Speeds, Fan Pump 2-Wire, Fan Pump 3-Wire, Process Control, 3-SPD ANA 2-Wire, 3-SPD ANA 3-Wire, Electronic Pot 2-Wire, Electronic Pot 3-Wire, Network Profile Run, Bipolar
	Feedback Type	Resolver Feedback (Std.); Optional Incremental Encoder Feedback for VT Loads.
	Trip	Missing control power, over current, over voltage, under voltage, over temperature (motor or control), output shorted or grounded, motor overload, encoder loss.
	Stall Prevention	Over voltage suppression, overcurrent suppression
	External Output	LED trip condition indicators, 4 assignable logic outputs, 2 assignable analog outputs
	Short Circuit	Phase to phase, phase to ground
<b>Environmental Conditions</b>	Electronic Motor Overload	Meets UL508C (I <sup>2</sup> T)
	Temperature	10 to 45°C. Derate 3% per °C to maximum ambient temperature of 55°C.
	Cooling	Forced air
	Enclosure	NEMA 1 (-1B, -1T)
	Altitude	Sea level to 3300 Feet (1000 Meters) Derate 2% per 1000 Feet (303 Meters) above 3300 Feet
	Humidity	NEMA 1: 10 to 90% RH Non-Condensing
	Shock/Vibration	1G / 0.5G at 10Hz to 60Hz
<b>Keypad Display</b>	Storage Temperature	-10 to +65°C
	Display	LCD Graphical 128x64 Pixel
	Keys	14 key membrane with tactile feedback
	Functions	Output status monitoring, Digital speed control, Parameter setting and display, Diagnostic and Fault log display, Motor run and jog, Local/Remote toggle, One-step tuning
	LED Indicators	Forward run command, Reverse run command, Stop command, Jog active
	Remote Mount	200 feet (60.6m) maximum from control, NEMA 4 Rated
<b>Analog Inputs</b>	Trip	Separate message and trace log for each trip, last 10 trips retained in memory
	One Differential	±5VDC, ±10VDC, 4-20 mA and 0-20 mA, 11-bit + sign
	One Single Ended	0 - 10 VDC, 11-bit
<b>Analog Outputs</b>	Input Impedance	80 kOhms (Volt mode); 500 Ohms (Current mode)
	Analog Outputs	2 Assignable
	Full Scale Range	AOUT1 (0-5V, 0-10V, 0-20mA or 4-20mA), AOUT2 (+5V, +10V)
	Source Current	1 mA maximum (volt mode), 20mA (current mode)
<b>Digital Inputs</b>	Resolution	9 bits
	Opto-isolated Inputs	8 Assignable, 1 dedicated input (Drive Enable)
	Rated Voltage	10 - 30 VDC (closed contacts std)
	Input Impedance	4.71 k Ohms
	Leakage Current	10 mA maximum
	Update Rate	16 msec
<b>Digital Outputs (2 Opto Outputs)</b>	Rated Voltage	5 to 30VDC
	Maximum Current	60 mA Maximum
	ON Voltage Drop	2 VDC Maximum
	OFF Leakage Current	0.1 mA Maximum
	Output Conditions	31 Conditions
<b>Digital Outputs (2 Relay Outputs)</b>	Rated Voltage	5 to 30VDC or 240VAC
	Maximum Current	5A Maximum non-inductive
	Output Conditions	31 Conditions

**VS1PM Permanent Magnet Drive Output Ratings**

Catalog Number	Size	Heavy Duty			Normal Duty			List Price	Mult. Sym.
		Hp/kW	Continuous	Peak	Hp/kW	Continuous	Peak		
<b>460 Volts - Three Phase</b>									
VS1PM410-1B	AA	10/7.5	11.9	20.8	10/7.5	11.9	13.7	3,055	EC
VS1PM415-1B	B	15/11	17.9	31.2	20/15	23.0	26.4	3,830	EC
VS1PM420-1B	B	20/15	23.0	40.2	25/18.7	28.9	33.2	4,469	EC
VS1PM425-1B	B	25/18.7	28.9	50.6	30/22	34.0	39.1	5,638	EC
VS1PM430-1B	C	30/22	35.2	61.6	40/30	45.1	51.9	6,596	EC
VS1PM440-1B	C	40/30	44.2	77.4	50/37	55.3	63.5	8,298	EC
VS1PM450-1B	C	50/37	55.3	96.7	60/45	65.5	75.3	9,787	EC
VS1PM460-1B	D	60/45	74.2	129.9	75/55	90.8	104.4	10,532	EC
VS1PM475-1B	D	75/55	90.8	158.9	100/75	116.6	134.0	12,340	EC
VS1PM4100-1B	D	100/75	106.9	187.1	125/93	136.3	156.8	14,255	EC
VS1PM4125-1B	D	125/93	137.3	240.2	125/93	143.8	165.4	15,106	EC
VS1PM4150-1T *	E	150/112	153.0	262.8	200/150	204.0	234.6	18,150	EC
VS1PM4200-1T *	E	200/150	204.0	357.0	250/187	256.7	295.2	24,200	EC
VS1PM4250-1T *	E	250/187	256.7	449.2	300/224	306.7	352.9	30,250	EC

\* VS1PM "-1T" drives include an internal braking transistor. An integral braking resistor is not included.

**Dimensions in/(mm)**

Size	Outside			Mounting		Ap'x Shpg. Wgt. Lbs. (kg)
	Height	Width	Depth	Height	Width	
AA	12.27(312)	7.97(202)	8.21(209)	11.75(298)	7.38(187)	20(9.1)
B	18.00(457)	9.10(231)	9.77(248)	17.25(438)	7.00(178)	30(13.6)
C	22.00(559)	9.10(231)	9.77(248)	21.25(540)	7.00(178)	60(27.2)
D	28.00(711)	11.50(292)	13.00(330)	27.25(692)	9.50(241)	120(54.4)
E	41.00(1041)	18.75(476)	16.00(406)	39.75(1010)	15.75(400)	250(113.4)

**RPM AC,  
Inverter Duty,  
Three Phase**

**5 thru 1000 Hp**

**FL1838 thru L446I**

**Applications:** Extruders, conveyors, crane & hoist systems, converting, pumps, web processing, test stands, traction duty, winders, printing.



**Features:** Compact square laminated steel frame FL210-L440 (FL180 is extruded aluminum) for inverter duty and vector duty 1000:1 constant torque. Premium class H insulation, 40 C ambient, 1.0 S.F. Ball bearing. Three normally closed thermostats (one per phase). Surpasses the requirements of MG1, Part 31. VPI insulation & insulated O.D.E. bearing is standard on all L440 frames. Exclusive optimum pole Inverter Duty - not for across the line operation.

Hp	RPM	Max. RPM	NEMA Frame	Encl.	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	EISA Status (a)	Notes (a)
5	1800	3500	FL1838C	TENV	IDNRP18054C	3,232	E2	17.87	170	230/460	7.4	C	90
7 1/2	1800	3500	FL1852C	TENV	IDNRP18074C	3,716	E2	21.87	225	230/460	11	C	91
10	1800	3500	FL1844C	TEFC	IDFRPM18104C	3,858	E2	23.26	208	230/460	13.9	C	91
			FL2162C	TENV	IDNRP21104C	4,400	E2	23.11	300	230/460	13.6	C	91
15	1800	3500	FL1844C	TEBC	IDBRPM18154C	3,987	E2	23.89	200	460	21	C	92
			FL2162C	TEFC	IDFRPM21154C	4,805	E2	26.74	310	460	20	C	92
20	1800	3500	FL1852C	TEBC	IDBRPM18204C	4,394	E2	25.89	235	460	12.5	C	92
			FL2162C	TEFC	IDFRPM21204C	4,805	E2	26.74	318	460	27	C	92
25	1800	3500	FL2162C	TEBC	IDBRPM21254C	5,114	E2	26.74	320	460	34	C	92
		2600	FL1844C	DPG-FV	IDDRPM18254C	4,624	E2	22.32	246	460	33	C	92
		3500	FL2173C	TEFC	IDFRPM21254C	5,190	E2	29.50	380	460	34	C	92
30	1800	3500	FL2162C	TEBC	IDBRPM21304C	5,114	E2	26.74	215	460	40	C	92
		3475	FL1852C	DPG-FV	IDDRPM18304C	4,811	E2	23.32	248	460	39	C	92
		3500	FL2570C	TEFC	IDFRPM25304C	5,462	E2	29.54	500	460	38	C	92
40	1800	3500	FL2173	TEBC	IDBRPM21404	5,651	E2	29.25	382	460	51	C	93
		2000	RL2162	DPG-FV	IDDRPM21404	5,604	E2	23.12	400	460	50	C	93
		3550	FL2586	TEFC	IDFRPM25404	5,942	E2	33.79	650	460	51	C	93
50	1800	3500	FL2570	TEBC	IDBRPM25504	6,302	E2	29.79	530	460	65	C	93
		2000	RL2168	DPG-FV	IDDRPM21504	7,544	E2	24.62	432	460	62	C	93
		3550	FL2882	TEFC	IDFRPM28504	10,149	E2	34.59	775	460	64	C	93
60	1800	1300	RL2570	DPG-FV	IDDRPM25506	9,060	E2	26.38	560	460	64	C	93
		3500	FL2578	TEBC	IDBRPM25604	9,302	E2	31.79	610	460	75	C	93
		2200	RL2168	DPG-FV	IDDRPM21604	7,544	E2	24.62	426	460	74	C	93
75	1800	3550	FL2890	TEFC	IDFRPM28604	10,149	E2	36.59	855	460	76	C	93
		1300	RL2578	DPG-FV	IDDRPM25606	10,985	E2	28.38	624	460	73	C	93
		3500	FL2586	TEBC	IDBRPM25754	11,109	E2	33.79	670	460	92	C	93
100	1800	2500	RL2570	DPG-FV	IDDRPM25754	9,060	E2	26.38	565	460	96	C	93
		3550	FL2898	TEFC	IDFRPM28754	12,125	E2	38.59	800	460	94	C	93
		1300	RL2586	DPG-FV	IDDRPM25756	14,557	E2	30.38	608	460	91	C	93
125	1800	3550	FL2890	TEBC	IDBRPM281004R1	12,573	E2	41.11	785	460	124	C	93
		2000	RL2578	DPG-FV	IDDRPM251004	10,985	E2	28.38	630	460	119	C	93
		1450	RL2882	DPG-FV	IDDRPM281006	16,253	E2	31.14	785	460	124	C	93
150	1800	3550	FL2898	TEBC	IDBRPM281254	13,305	E2	43.11	890	460	156	C	93
		3500	L3203	TEBC	IDBRPM321254	18,636	E2	44.25	1205	460	150	C	93
		2000	RL2586	DPG-FV	IDDRPM251254	14,557	E2	30.38	700	460	148	C	93
150	1200	1600	RL2898	DPG-FV	IDDRPM281256	21,189	E2	35.14	810	460	159	C	93
		3500	L3213	TEBC	IDBRPM321504	24,933	E2	46.75	1360	460	177	C	93
150	1200	2000	RL2882	DPG-FV	IDDRPM281504	16,253	E2	31.14	770	460	156	C	93
		1600	L3203	DPG-FV	IDDRPM321506	24,933	E2	39.88	1180	460	180	C	93

(a) See notes on inside back flap.

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 ON PAGES 222 AND 223 FOR USE WITH ID-RPM AC MOTORS. FOR RPM AC MOD EXPRESS, CONTACT YOUR BALDOR•RELIANCE DISTRICT OFFICE.**

**RPM AC, Inverter Duty, Three Phase**

Hp	RPM	Max. RPM	NEMA Frame	Encl.	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	EISA Status <sup>(a)</sup>	Notes <sup>(a)</sup>
200	1800	3500	L3614	TEBC	<b>IDBRPM362004</b>	27,583	E2	42.75	1835	460	227	C	93
			L4022	TEBC	<b>IDBRPM402004</b>	29,761	E2	42.12	1996	460	227	C	93
		2700	RL2898	DPG-FV	<b>IDDRPM282004</b>	21,189	E2	35.14	940	460	241	C	93
250	1800	3500	L3213	DPG-FV	<b>IDDRPM322006</b>	29,035	E2	42.38	1295	460	236	C	93
			L4034	TEBC	<b>IDBRPM402504</b>	34,534	E2	45.12	2244	460	283	C	93
		2945	L3203	DPG-FV	<b>IDDRPM322504</b>	24,933	E2	39.88	1220	460	290	C	93
300	1800	3500	L3614	DPG-FV	<b>IDDRPM362504</b>	36,767	E2	45.00	1690	460	289	C	93
			L4046	TEBC	<b>IDBRPM403004</b>	42,365	E2	48.12	2511	460	336	C	93
		2500	L3213	DPG-FV	<b>IDDRPM323004</b>	29,035	E2	42.88	1360	460	350	C	93
350	1800	2200	L4034	DPG-FV	<b>IDDRPM403006</b>	48,538	E2	52.00	2289	460	360	C	93
			L3614	DPG-FV	<b>IDDRPM363504</b>	36,767	E2	45.00	1812	460	401	C	93
		2000	L4046	DPG-FV	<b>IDDRPM404006</b>	59,172	E2	55.00	2485	460	451	C	93
400	1800	2400	L4034	DPG-FV	<b>IDDRPM405004</b>	48,538	E2	52.00	2285	460	557	C	94
			L4461	DPG-FV	<b>IDDRPM445006</b>	92,546	E2	63.63	3875	460	669	C	95
		2380	L4046	DPG-FV	<b>IDDRPM406004</b>	59,172	E2	55.00	2535	460	666	C	94
500	1800	2300	L4429	DPG-FV	<b>IDDRPM447004</b>	73,848	E2	55.63	3180	460	875	C	94
			L4461	DPG-FV	<b>IDDRPM4410004</b>	92,546	E2	63.63	3890	460	1,202	C	94
		2000	L4461	DPG-FV	<b>IDDRPM4410004</b>	92,546	E2	63.63	3890	460	1,202	C	94

<sup>(a)</sup> See notes on inside back flap.

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 ON PAGES 222 AND 223 FOR USE WITH ID-RPM AC MOTORS. FOR RPM AC MOD EXPRESS, CONTACT YOUR BALDOR•RELIANCE DISTRICT OFFICE.**

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Start & Dynamic Brakes

**RPM AC,  
Vector Duty,  
Three Phase,  
Totally Enclosed**

**5 thru 200 Hp**

**FL1838 thru L4022**

**Applications:** Test stands, extruders, conveyors, crane & hoist systems, converting, web processing, traction duty, winders, printing.



**Features:** Compact square laminated steel frame FL210-L440 (FL180 is extruded aluminum) for vector duty 1000:1 constant torque. Premium class H insulation, 40 C ambient, 1.0 S.F. Ball bearing. Three normally closed thermostats (one per phase). Surpasses the requirements of MG1, Part 31. VPI insulation & insulated O.D.E. bearing is standard on all L440 frames. Exclusive optimum pole Inverter Duty - not for across the line operation. Includes BEI HS35 1024 ppr hollow shaft encoder with MS twist lock connector, mating connector and protective cover.

Hp	RPM	Max. RPM	NEMA Frame	Encl.	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	EISA Status <sup>(a)</sup>	Notes <sup>(a)</sup>
5	1800	3500	FL1838C	TENV	ZDNRPM18054C	5,019	E2	17.87	165	230/460	7.4	C	90
7 1/2	1800	3500	FL1852C	TENV	ZDNRPM18074C	5,503	E2	21.87	220	230/460	11	C	91
10	1800	3500	FL1844C	TEFC	ZDFRPM18104C	5,645	E2	23.23	200	230/460	13.9	C	91
			FL2162C	TENV	ZDNRPM21104C	6,187	E2	23.11	305	230/460	13.6	C	91
15	1800	3500	FL1844C	TEBC	ZDBRPM18154C	5,774	E2	28.93	218	460	21	C	92
			FL1852C	TEBC	ZDBRPM18204C	6,181	E2	30.39	275	460	27	C	92
20	1800	2500	FL2162C	TEFC	ZDFRPM21204C	6,901	E2	26.74	318	460	27	C	92
			FL2173C	TEFC	ZDFRPM21254C	6,976	E2	29.50	415	460	34	C	92
30	1800	3500	FL2162C	TEBC	ZDBRPM21304C	6,901	E2	31.24	375	460	40	C	92
			FL2570C	TEFC	ZDFRPM25304C	7,249	E2	29.54	542	460	40	C	92
40	1800	3500	FL2173	TEBC	ZDBRPM21404	7,267	E2	33.75	425	460	52	C	93
			FL2586	TEFC	ZDFRPM25404	7,558	E2	33.79	675	460	52	C	93
50	1800	3500	FL2570	TEBC	ZDBRPM25504	7,919	E2	34.26	560	460	61	C	93
60	1800	3500	FL2578	TEBC	ZDBRPM25604	10,919	E2	36.29	615	460	74	C	93
75	1800	3500	FL2586	TEBC	ZDBRPM25754	12,726	E2	38.29	612	460	94	C	93
100	1800	3550	FL2890	TEBC	ZDBRPM281004R1	14,189	E2	45.61	805	460	124	C	93
125	1800	3500	FL2898	TEBC	ZDBRPM281254	14,922	E2	47.61	985	460	156	C	93
			L3203	TEBC	ZDBRPM321254	20,252	E2	44.25	1170	460	150	C	93
150	1800	3500	L3213	TEBC	ZDBRPM321504	26,550	E2	46.75	1310	460	177	C	93
200	1800	3500	L3614	TEBC	ZDBRPM362004	29,199	E2	46.75	1830	460	240	C	93
			L4022	TEBC	ZDBRPM402004	31,375	E2	49.12	2030	460	240	C	93

<sup>(a)</sup> See notes on inside back flap.

All TEBC have integral blower rated 230/460 volts 3 phase.

**CONTINUOUS CONSTANT TORQUE TO ZERO SPEED**

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes

**BALDOR • RELIANCE**

**Encoder Feedback Kits**

1024 PPR, Includes all Mounting Hardware and Mating Connector

The following kits for use with RPM AC motors on pages 219-220.

Catalog Number	Motor Enclosure	Type	Frame Size	Mfg.	Mag or Optical	Conn Type	Input Voltage VDC	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
417077-136	TENV	HS35	FL180-FL/RL280 (1)	BEI	0	MS-ST	5-15	1,400	E8	4
417077-208TL	TENV	HS35	FL180-FL280 (1)	BEI	0	MS-TL	5-28	1,400	E8	6
417708-361	TENV	HSD35	FL180-FL/RL280 (1)	Dynapar	0	Latch	5-26	1,575	E8	5
417077-153	TENV	H20	FL180-FL/RL280 (1)	Dynapar	0	MS-ST	5-15	1,551	E8	9
417077-156	TENV	RL67	FL180-FL/RL280 (1)	Dynapar	M	Latch	5-15	2,000	E8	9
417077-170	TENV	HS35M	FL180-FL/RL280 (1)	Avtron	M	MS-ST	5-24	1,400	E8	10
417077-133	TEFC	HS35	FL180-FL/RL280 (1)	BEI	0	MS-ST	5-15	1,400	E8	5
417077-209TL	TEFC	HS35	FL180-FL280 (1)	BEI	0	MS-TL	5-28	1,400	E8	6
417077-180	TEFC	HS35M	FL180-FL/RL280 (1)	Avtron	M	MS-ST	5-24	1,400	E8	8
417077-165	TEBC	HS35	FL180	BEI	0	MS-ST	5-15	1,400	E8	15
417077-210TL	TEBC	HS35	FL180	BEI	0	MS-TL	5-28	1,400	E8	6
417077-188	TEBC	HS35	FL210 Only	BEI	0	MS-ST	5-15	1,400	E8	10
417077-211TL	TEBC	HS35	FL210	BEI	0	MS-TL	5-28	1,400	E8	6
417077-189	TEBC	HS35	FL250 Only	BEI	0	MS-ST	5-15	1,400	E8	10
417077-212TL	TEBC	HS35	FL250	BEI	0	MS-TL	5-28	1,400	E8	6
417077-204	TEBC	HS35	FL280	BEI	0	MS-ST	5-15	1,400	E8	6
417077-213TL	TEBC	HS35	FL280	BEI	0	MS-TL	5-28	1,400	E8	6
417708-131	TEBC	HS35	L280	BEI	0	MS-ST	5-15	1,400	E8	10
417708-140	TEBC	HS35	L320	BEI	0	MS-ST	5-15	1,400	E8	10
417077-214TL	TEBC	HS35	L320	BEI	0	MS-TL	5-28	1,400	E8	6
417077-215TL	TEBC	HS35	L360	BEI	0	MS-TL	5-28	1,400	E8	6
417708-142	TEBC	HS35	L400	BEI	0	MS-ST	5-15	1,400	E8	15
417077-216TL	TEBC	HS35	L400	BEI	0	MS-TL	5-28	1,400	E8	6
417077-173	TEBC	HS35M	FL180	Avtron	M	MS-ST	5-24	1,400	E8	10
417077-182	TEBC	HS35M	FL210 Only	Avtron	M	MS-ST	5-24	1,400	E8	10
417077-183	TEBC	HS35M	FL250 Only	Avtron	M	MS-ST	5-24	1,400	E8	15
417077-205	TEBC	HS35M	FL280	Avtron	M	MS-ST	5-24	1,400	E8	9
417077-176	TEBC	HS35M	L280	Avtron	M	MS-ST	5-24	1,400	E8	15
417077-177	TEBC	HS35M	L320	Avtron	M	MS-ST	5-24	1,400	E8	35
417077-178	TEBC	HS35M	L360	Avtron	M	MS-ST	5-24	1,400	E8	15
417077-179	TEBC	HS35M	L400	Avtron	M	MS-ST	5-24	1,400	E8	35
417077-167	TEBC	H20	FL180	Dynapar	0	MS-ST	5-15	1,551	E8	20
417077-190	TEBC	H20	FL210 Only	Dynapar	0	MS-ST	5-15	1,551	E8	10
417077-191	TEBC	H20	FL250 Only	Dynapar	0	MS-ST	5-15	1,551	E8	10
417077-203	TEBC	H20	FL280	Dynapar	0	MS-ST	5-15	1,551	E8	6
417708-90	TEBC	H20	L280	Dynapar	0	MS-ST	5-15	1,551	E8	13
417708-91	TEBC	H20	L320	Dynapar	0	MS-ST	5-15	1,551	E8	15
417077-168	TEBC	RL67	FL180	Dynapar	M	Latch	5-15	2,000	E8	10
417077-192	TEBC	RL67	FL210 Only	Dynapar	M	Latch	5-15	2,000	E8	10
417077-193	TEBC	RL67	FL250 Only	Dynapar	M	Latch	5-15	2,000	E8	10
417077-206	TEBC	RL67	FL280	Dynapar	M	Latch	5-15	2,000	E8	6
417077-136	DPFV	HS35	FL180-RL280 (2)	BEI	0	MS-ST	5-15	1,400	E8	4
417077-208TL	DPFV	HS35	FL180-RL280 (2)	BEI	0	MS-TL	5-28	1,400	E8	6
417708-130	DPFV	HS35	L280-L400	BEI	0	MS-ST	5-15	1,400	E8	5
417077-218TL	DPFV	HS35	L320-L400	BEI	0	MS-TL	5-28	1,400	E8	6
417077-170	DPFV	HS35M	FL180-RL280 (2)	Avtron	M	MS-ST	5-24	1,400	E8	10
417077-171	DPFV	HS35M	L280-L400	Avtron	M	MS-ST	5-24	1,400	E8	5
417077-172	DPFV	HS35M	L440	Avtron	M	MS-ST	5-24	1,400	E8	5



## Encoder Feedback Kits RPM AC Designs

Catalog Number	Motor Encl	Type	Frame Size	Mfg.	Mag or Optical	Conn Type	Input Voltage VDC	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
417077-153	DPFV	H20	FL180-RL280 (2)	Dynapar	0	MS-ST	5-15	1,551	E8	9
417708-85	DPFV	H20	L280-L400	Dynapar	0	MS-ST	5-15	1,551	E8	5
417077-156	DPFV	RL67	FL180-RL280 (2)	Dynapar	M	Latch	5-15	2,000	E8	9
417708-87	DPFV	RL67	L280-L400	Dynapar	M	Latch	5-15	2,000	E8	6
417708-120	DPFV	RL67	L440	Dynapar	M	Latch	5-15	2,000	E8	23

(1) Includes FL180, FL210, FL250, RL210, RL250, FL280 and RL280

(2) Includes FL180, RL210, RL250 and RL280

## 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	Mult. Sym.
BEI HS35 (1 inch dia.)	FL180-FL/RL250 (3)	DPFV, TENV, TEFC, TEBC (2)	417708-201	160	E8
	FL/RL280 thru L400	DPFV & TEBC (2)	417708-202	160	E8
	L440	DPFV & TEAO-P/B	417708-203	160	E8

(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

**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	Mult. Symbol	Dimension Sheet	Approx. Wt. (Lb.)
FL1831	419914-9A	455	E8	609957-9	13
FL1838	419914-9B	455	E8	609957-9	14
FL1844	419914-9C	455	E8	609957-9	15
FL1852	419914-9D	455	E8	609957-9	17
FL/RL2153	419914-10A	455	E8	609957-10	39
FL/RL2158	419914-10B	455	E8	609957-10	27
FL/RL2162	419914-10D	531	E8	609957-10	48
FL/RL2168	419914-10L	531	E8	609957-10	52
FL/RL2173	419914-10M	531	E8	609957-10	28
FL/RL2570	419914-10G	531	E8	609957-10	55
FL/RL2578	419914-10N	682	E8	609957-10	58
FL/RL2586	419914-10P	682	E8	609957-10	56
L2875	419914-10J	682	E8	609957-10	37
FL/RL/L2882	419914-10K	976	E8	609957-10	80
FL/RL/L2890	419914-10R	976	E8	609957-10	80
FL/RL/L2898	419914-10S	976	E8	609957-10	90
L3203	419914-11P	1,077	E8	609977-10	90
L3213	419914-11R	1,077	E8	609977-10	90
UL3698	419914-11M	1,262	E8	609977-10	105
UL3699	419914-11C	1,262	E8	609977-10	105
UL3607	419914-11D	1,262	E8	609977-10	74
UL3614	419914-11N	1,262	E8	609977-10	124
UL4022	419914-11E	2,404	E8	609977-10	105
UL4034	419914-11F	2,404	E8	609977-10	132
UL4046	419914-11G	2,404	E8	609977-10	141
UL4429	419914-11H	4,536	E8	609977-10	140
UL4440	419914-11J	4,536	E8	609977-10	150
UL4451	419914-11K	4,536	E8	609977-10	160
UL4461	419914-11L	4,536	E8	609977-10	165

**RPM AC Filter Kits**

**Application:** For use with DPFV enclosures

Frame	Catalog Number	List Price	Mult. Symbol	Description	Approx. Wt. (Lb.)
FL180	417077-57	795	A8	Washable Wire Mesh Canister Type	2
RL210	417077-59	795	A8	Washable Wire Mesh Canister Type	4
RL250	417077-59	795	A8	Washable Wire Mesh Canister Type	4
RL/L280	417077-59	795	A8	Washable Wire Mesh Canister Type	4
L320	417077-59	795	A8	Washable Wire Mesh Canister Type	4
L360	417077-65	1,017	A8	Washable Wire Mesh Canister Type	7
L400	417077-102	1,434	A8	Washable Wire Mesh Canister Type	6
L440	417077-124	1,653	A8	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	Mult. Sym.	Enclosure	Relocate Conduit Box:
<b>For FL180-FL280 Frames</b>					
FL180	<b>417077-184</b>	488	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
FL180	<b>417077-185</b>	488	E8	DPFV	From F-1 to F-2
FL210	<b>417077-186</b>	573	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
FL250	<b>417077-187</b>	573	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
FL280	<b>417077-201</b>	613	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
<b>For RL210-RL280 Frames</b>					
RL2153 thru RL2173	<b>417077-129</b>	488	E8	DPFV	From F-1 to F-2
RL250 thru RL2586	<b>417077-131</b>	488	E8	DPFV	From F-1 to F-2
RL2153 thru RL2173	<b>417077-130</b>	573	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
RL2570 thru RL2586	<b>417077-132</b>	573	E8	TENV, TEBC, TEFC	From Top to F-1 or F-2
RL2882 thru RL2898	<b>417077-202</b>	613	E8	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	Mult. Sym.
RL210	<b>417077-144</b>	871	E8
RL250	<b>417077-145</b>	1,702	E8
RL and L280	<b>419947-31</b>	1,696	E8
L320	<b>419947-33</b>	1,887	E8
L360	<b>417077-127</b>	1,854	A8
L400	<b>417077-75</b>	2,030	A8
L440	<b>417077-126</b>	4,139	A8

Kit includes terminal box and blower motor only.

TEBC Frame	Catalog Number	List Price	Mult. Sym.
FL180 (3)	<b>417077-143</b>	871	E8
FL/RL210-320(3)	<b>417077-141</b>	1,108	E8

(3) Compact inline blower used on stock models (IP44 rating)

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes

**V\*S Master  
Inverter Drive,  
Three Phase,  
Totally Enclosed**

**1/3 thru 300 Hp**

**NEMA 56C thru 449T**

**Applications:** Conveyors, extruders, printing lines, converting, test stands, anywhere constant torque is required over a wide speed range.

**Features:** Designed specifically for Inverter operation where up to 1000:1 constant torque speed range is required. Includes provisions for stub shaft for hollow shaft encoder, three thermostats, and all 440T frames include an ODE insulated bearing. Insulation system exceeds NEMA MG 1-2006, Part 31.4.4.2. Continuous constant torque to zero speed.



Hp	RPM	Max. RPM	NEMA Frame	Encl.	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	EISA Status (a)	Notes (a)
1/3	1800	6000	56C	TENV	IDVSNM3534	436	E2	13.84	35	230/460	0.6	C	2, 48
1/2	1800	6000	56C	TENV	IDVSNM3538	510	E2	13.84	35	230/460	0.8	C	2, 48
3/4	1800	6000	56C	TENV	IDVSNM3542	568	E2	13.84	34	230/460	1.2	C	2, 48
1	1800	6000	56C	TENV	IDVSNM3546	924	K	14.84	45	230/460	1.4	C	
			143TC	TENV	IDVSNM3581T	1,159	E2	14.65	62	230/460	1.5	C	2, 48
1 1/2	1800	6000	145TC	TENV	IDVSNM3584T	1,279	E2	14.65	66	230/460	2.1	C	2, 48
2	1800	6000	145TC	TENV	IDVSNM3587T	1,336	E2	14.65	69	230/460	2.7	C	2, 48
3	1800	2700	182TC	TEFC	IDVSM3661T	1,476	E2	15.56	126	230/460	3.8	C	2, 48
			182TC	TENV	IDVSNM3661T	1,518	E2	14.69	126	230/460	3.8	C	2, 48
5	1800	2700	L184TC	TEFC	IDVSM3665T	1,711	E2	17.12	144	230/460	6.4	C	2, 48
			L184TC	TENV	IDVSNM3665T	1,759	E2	16.19	148	230/460	6.4	C	2, 48
7 1/2	1800	2700	213TC	TEFC	IDVSM3770T	2,201	E2	19.25	181	230/460	9.6	C	2, 48
			L215TC	TENV	IDVSNM2237T	2,263	E2	19.25	175	230/460	9.2	C	2, 48
10	1800	2700	L215TC	TEFC	IDVSM3774T	2,870	E2	20.12	200	230/460	12.4	C	2, 48
			254TC	TENV	IDVSNM2238T	3,104	E2	23.78	296	230/460	12.7	C	2, 48
15	1800	2700	254TC	TEFC	IDVSM2333T	3,339	E2	24.50	329	230/460	18.4	C	2, 48
			256TC	TENV	IDVSNM2333T	3,734	E2	23.78	331	230/460	18.7	C	2, 48
20	1800	2700	256TC	TEFC	IDVSM2334T	3,620	E2	24.50	356	230/460	25.5	C	2, 48
25	1800	2700	284TC	TEFC	IDVSM4103T	4,597	E2	27.44	437	230/460	31	C	2, 48
30	1800	2700	286TC	TEFC	IDVSM4104T	5,022	E2	27.44	450	230/460	38.1	C	2, 48
40	1800	2700	324T	TEFC	IDVSM4110T	5,794	E2	30.44	672	230/460	49.8	C	2, 48
50	1800	2700	326T	TEFC	IDVSM4115T	7,081	E2	30.44	627	230/460	62.5	C	2, 48
60	1800	2700	364T	TEFC	IDVSM4314T	8,772	E2	33.44	889	230/460	71.2	C	2, 48
75	1800	2700	365T	TEFC	IDVSM4316T	10,986	E2	33.44	888	230/460	89.2	C	2, 48
100	1800	2700	405T	TEFC	IDVSM4400T-4	14,198	E2	38.31	1257	460	116	C	2, 48
125	1800	2700	444T	TEFC	IDVSM4410T-4	17,624	E2	44.62	1657	460	150	C	2, 48
150	1800	2700	445T	TEFC	IDVSM4406T-4	21,033	E2	44.62	1822	460	177	C	2, 48
200	1800	2700	447T	TEFC	IDVSM4407T-4	24,922	E2	48.13	2275	460	226	C	2, 48
250	1800	2700	449T	TEFC	IDVSM4408T-4	35,224	E2	53.13	2650	460	277	C	2, 48
300	1800	2700	449T	TEFC	IDVSM44304T-4	35,224	E2	53.13	2808	460	338	C	2, 48

(a) See notes on inside back flap.

**CONTINUOUS CONSTANT TORQUE TO ZERO SPEED**

■ Cast Iron Frame

**V\*S Master  
Vector Drive,  
Three Phase,  
Totally Enclosed**

**1/2 thru 300 Hp**

**NEMA 56C thru 449T**

**Applications:** Conveyors, extruders, printing lines, converting, test stands, anywhere constant torque is required over a wide speed range.



**Features:** Designed specifically for Inverter operation where up to 1000:1 constant torque speed range is required. Includes 1024 ppr hollow shaft encoder, three thermostats, and all 440T frames include an ODE insulated bearing. Insulation system exceeds NEMA MG 1-2006, Part 31.4.4.2. Continuous constant torque to zero speed.

Hp	RPM	Max. RPM	NEMA Frame	Encl.	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	EISA Status (a)	Notes (a)
1/2	1800	6000	56C	TENV	ZDVSNM3538	1,883	E2	13.84	37	230/460	0.8	C	2, 46, 48
3/4	1800	6000	56C	TENV	ZDVSNM3542	1,940	E2	13.84	40	230/460	1.2	C	2, 46, 48
1	1800	6000	145TC	TENV	ZDVSNM3581T	2,532	E2	14.65	65	230/460	1.5	C	2, 46, 48
1 1/2	1800	6000	145TC	TENV	ZDVSNM3584T	2,650	E2	14.65	67	230/460	2.1	C	2, 46, 48
2	1800	6000	145TC	TENV	ZDVSNM3587T	2,923	E2	14.65	69	230/460	2.7	C	2, 46, 48
3	1800	2700	182TC	TEFC	ZDVSM3661T	3,093	E2	15.62	125	230/460	3.8	C	2, 46, 48
			182TC	TENV	ZDVSNM3661T	3,135	E2	14.69	139	230/460	3.8	C	2, 46, 48
5	1800	2700	L184TC	TEFC	ZDVSM3665T	3,327	E2	17.12	152	230/460	6.4	C	2, 46, 48
			L184TC	TENV	ZDVSNM3665T	3,375	E2	16.19	151	230/460	6.4	C	2, 46, 48
7 1/2	1800	2700	213TC	TEFC	ZDVSM3770T	3,817	E2	19.25	184	230/460	9.6	C	2, 46, 48
			L215TC	TENV	ZDVSNM2237T	3,879	E2	19.25	211	230/460	9.2	C	2, 46, 48
10	1800	2700	L215TC	TEFC	ZDVSM3774T	4,486	E2	20.12	204	230/460	12.4	C	2, 46, 48
			254TC	TENV	ZDVSNM2238T	4,721	E2	23.78	359	230/460	12.7	C	2, 46, 48
15	1800	2700	254TC	TEFC	ZDVSM2333T	4,955	E2	24.50	328	230/460	18.4	C	2, 46, 48
			256TC	TENV	ZDVSNM2333T	5,351	E2	23.78	378	230/460	18.7	C	2, 46, 48
20	1800	2700	256TC	TEFC	ZDVSM2334T	5,237	E2	24.50	346	230/460	25.5	C	2, 46, 48
25	1800	2700	284TC	TEFC	ZDVSM4103T	6,213	E2	27.44	445	230/460	31	C	2, 46, 48
30	1800	2700	286TC	TEFC	ZDVSM4104T	6,638	E2	27.44	450	230/460	38.1	C	2, 46, 48
40	1800	2700	324T	TEFC	ZDVSM4110T	7,410	E2	30.44	696	230/460	49.8	C	2, 46, 48
50	1800	2700	326T	TEFC	ZDVSM4115T	8,697	E2	30.44	693	230/460	62.5	C	2, 46, 48
60	1800	2700	364T	TEFC	ZDVSM4314T	10,388	E2	33.44	884	230/460	71.2	C	2, 46, 48
75	1800	2700	365T	TEFC	ZDVSM4316T	12,602	E2	33.44	944	230/460	89.2	C	2, 46, 48
100	1800	2700	405T	TEFC	ZDVSM4400T-4	15,815	E2	38.31	1247	460	116	C	2, 46, 48
125	1800	2700	444T	TEFC	ZDVSM4410T-4	19,240	E2	44.62	1744	460	150	C	2, 46, 48
150	1800	2700	445T	TEFC	ZDVSM4406T-4	22,649	E2	44.62	1892	460	177	C	2, 46, 48
200	1800	2700	447T	TEFC	ZDVSM4407T-4	26,538	E2	48.13	2275	460	226	C	2, 46, 48
250	1800	2700	449T	TEFC	ZDVSM4408T-4	36,840	E2	53.13	2650	460	277	C	2, 46, 48
300	1800	2700	449T	TEFC	ZDVSM44304T-4	36,840	E2	53.13	2820	460	338	C	2, 46, 48

(a) See notes on inside back flap.

**CONTINUOUS CONSTANT TORQUE TO ZERO SPEED**

■ Cast Iron Frame

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes

**V\*S Master Severe Duty Vector Drive, Three Phase, Totally Enclosed**

1/2 thru 50 Hp

NEMA 140T thru 320T

**Applications:** Conveyors, extruders, printing lines, converting, test stands, anywhere constant torque is required over a wide speed range. These Severe Duty motors are designed for harsh industrial environments by protecting motor components from moisture, chemicals, corrosion and abrasives.

**Features:** Designed specifically for Inverter operation where up to 1000:1 constant torque speed range is required. Includes 1024 ppr hollow shaft encoder and three thermostats. Uses Dynapar HSD38M encoder on 180 frame and up. Insulation system exceeds NEMA MG 1-2006, Part 31.4.4.2. Continuous constant torque to zero speed.



Hp	RPM	Max. RPM	NEMA Frame	Encl.	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	Full Load Amps	EISA Status (a)	Notes (a)
1	1800	6000	143TC	TENV	ZDVSNCP3581T	2,659	E2	14.61	62	230/460	1.5	C	2, 46, 48
1 1/2	1800	6000	145TC	TENV	ZDVSNCP3584T	2,777	E2	14.61	64	230/460	2.1	C	2, 46, 48
2	1800	6000	145TC	TENV	ZDVSNCP3587T	3,050	E2	14.61	71	230/460	2.7	C	2, 46, 48
3	1800	2700	182TC	TEFC	ZDVSCP3661T	3,440	E2	15.62	131	230/460	3.8	C	2, 46, 48
5	1800	2700	L184TC	TEFC	ZDVSCP3665T	3,733	E2	17.12	154	230/460	6.4	C	2, 46, 48
7 1/2	1800	2700	213TC	TEFC	ZDVSCP3770T	4,325	E2	19.25	198	230/460	9.6	C	2, 46, 48
10	1800	2700	L215TC	TEFC	ZDVSCP3774T	4,733	E2	20.12	216	230/460	12.4	C	2, 46, 48
15	1800	2700	254TC	TEFC	ZDVSCP2333T	5,662	E2	24.50	356	230/460	18.4	C	2, 46, 48
20	1800	2700	256TC	TEFC	ZDVSCP2334T	6,013	E2	24.50	364	230/460	25.5	C	2, 46, 48
25	1800	2700	284TC	TEFC	ZDVSCP4103T	7,192	E2	27.44	469	230/460	31	C	2, 46, 48
30	1800	2700	286TC	TEFC	ZDVSCP4104T	7,724	E2	27.44	479	230/460	38.1	C	2, 46, 48
40	1800	2700	324T	TEFC	ZDVSCP4110T	8,859	E2	30.44	737	230/460	49.8	C	2, 46, 48
50	1800	2700	326T	TEFC	ZDVSCP4115T	10,468	E2	30.44	746	230/460	62.5	C	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**

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	Mult. Sym.	Ap'x. Shpg. Wgt.
K99G72	TENV	HS35	1024	180T-250T	BEI	0	MS-ST	5-15	1,400	E8	6
K99G74	TENV	HS35-2048	2048	180T-250T	BEI	0	MS-ST	5-15	1,400	E8	6
K99G76	TENV	HS35	1024	180T-250T	BEI	0	MS-ST	5-24	1,400	E8	6
K99G70	TENV	RAHS35M	1024	180T-250T	Avtron	M	MS-ST	5-24	1,400	E8	9
K99G78	TENV	HSD35	1024	180T-250T	Dynapar	0	Latch	5-26	1,575	E8	8
K99G73	TEFC	HS35	1024	180T-440T	BEI	0	MS-ST	5-15	1,400	E8	6
K99G75	TEFC	HS35-2048	2048	180T-440T	BEI	0	MS-ST	5-24	1,400	E8	6
K99G77	TEFC	HS35	1024	180T-440T	BEI	0	MS-ST	5-24	1,400	E8	6
K99G71	TEFC	RAHS35M	1024	180T-440T	Avtron	M	MS-ST	5-24	1,400	E8	9
K99G79	TEFC	HSD35	1024	180T-440T	Dynapar	0	Latch	5-26	1,575	E8	8
K99G80	TENV	HS35	1024	180T-250T	BEI	0	MS-TL	5-28	1,400	E8	6
K99G81	TEFC	HS35	1024	180T-440T	BEI	0	MS-TL	5-28	1,400	E8	6

**NOTE:** For 56 and 140 IDVSM frame sizes use the kits from the IDM product table.

**Inverter,  
Three Phase,  
TEBC and TENV,  
C-Face,  
Foot Mounted**

**1/3 thru 200 Hp**

**NEMA 56C thru 447T**

**Applications:** Conveyors, pumps, fans, metal processing, compressors, test stands, and material handling equipment.

**Features:** Designed for inverter or vector applications where up to a 1000:1 constant torque speed range is required. Compatible with optional encoder feedback devices for use in closed loop velocity or position control. Meets NEMA MG 1, Part 31. Encoder has mating connector.



Hp	RPM	Max. RPM	NEMA Frame	Encl.	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	EISA Status (a)	Notes (a)	
1/3	1800	6000	56C	TENV	IDNM3534	436	E2	13.84	29	76	230/460	0.6	C	2, 8, 60	
1/2	1800	6000	56C	TENV	IDNM3538	510	E2	13.84	32	75.5	230/460	0.8	C	2, 8, 60	
3/4	1800	6000	56C	TENV	IDNM3542	568	E2	13.84	31	78.5	230/460	1.4	C	2, 8, 60	
1	1800	6000	143TC	TEBC	IDM3581T	1,531	E2	19.15	64	87.5	230/460	1.5	A	2, 8, 55, 70	
			143TC	TEBC	IDM3581T-5	1,531	E2	19.15	61	86.5	575	1.1	A	2, 8, 55, 70	
			143TC	TENV	IDNM3581T	1,159	E2	14.65	59	81.5	230/460	1.6	C	2, 8, 60	
1 1/2	1800	6000	145TC	TEBC	IDM3582T	1,798	E2	19.15	67	82.5	230/460	1.8	A	2, 8, 55, 70	
			145TC	TEBC	IDM3584T	1,619	E2	19.15	69	88.5	230/460	2.1	A	2, 8, 55, 70	
			145TC	TEBC	IDM3584T-5	1,619	E2	19.15	62	87.5	575	1.7	A	2, 8, 55, 70	
2	1800	6000	145TC	TENV	IDNM3584T	1,279	E2	14.65	57	84	230/460	2.3	C	2, 8, 60	
			182TC	TEBC	IDM3667T	2,022	E2	21.71	111	86.5	230/460	2.6	A	2, 8, 55, 70	
			145TC	TEBC	IDM3587T	1,731	E2	19.15	73	88.5	230/460	2.7	A	2, 8, 55, 70	
3	1800	6000	145TC	TEBC	IDM3587T-5	1,731	E2	19.15	71	86.5	575	2	A	2, 8, 55, 70	
			145TC	TENV	IDNM3587T	1,336	E2	14.65	64	84	230/460	2.7	C	2, 8, 60	
			182TC	TENV	IDNM3669T	1,551	E2	17.21	96	84	230/460	2.9	C	2, 8, 60	
5	1800	6000	184TC	TEBC	IDM3664T	2,077	E2	21.71	116	87.5	230/460	3.6	A	2, 8, 55, 70	
			184TC	TEBC	IDM3661T	2,212	E2	21.71	109	89.5	230/460	4	A	2, 8, 55, 70	
			184TC	TEBC	IDM3661T-5	2,212	E2	21.71	103	89.5	575	3.2	A	2, 8, 55, 70	
7 1/2	1800	6000	184TC	TENV	IDNM3661T	1,751	E2	17.21	105	88.5	230/460	4	C	2, 8, 60	
			213TC	TEBC	IDM3764T	2,717	E2	29.14	172	89.5	230/460	5	A	2, 8, 70	
			184TC	TEBC	IDM3665T	2,340	E2	21.71	120	90.2	230/460	6.5	A	2, 8, 55, 70	
10	1800	6000	184TC	TEBC	IDM3665T-5	2,340	E2	21.71	120	90.2	575	5.2	A	2, 8, 55, 70	
			184TC	TENV	IDNM3665T	1,953	E2	17.21	112	89.5	230/460	6.6	C	2, 8, 60	
			213TC	TENV	IDNM3767T	2,177	E2	20.40	166	89.5	230/460	6.7	C	2, 8, 60	
15	1800	6000	215TC	TEBC	IDM3768T	3,326	E2	29.14	200	88.5	230/460	8	A	2, 8, 70	
			213TC	TEBC	IDM3770T	2,821	E2	29.14	176	91.7	230/460	9.5	A	2, 8, 70	
			213TC	TEBC	IDM3770T-5	2,821	E2	30.07	185	91.7	575	7.5	A	2, 8, 70	
20	1800	6000	213TC	TENV	IDNM3770T	2,260	E2	20.40	196	91.7	230/460	10.1	C	2, 8, 60	
			254TC	TENV	IDNM2237T	2,708	E2	24.05	238	90.2	230/460	9.1	C	2, 8, 60	
			254TC	TEBC	IDM2276T	4,782	E2	33.07	286	91.7	230/460	10.7	A	2, 8, 70	
25	1800	6000	254TC	TEBC	IDM3774T	3,022	E2	29.14	219	92.4	230/460	12.5	A	2, 8, 70	
			4000	215TC	TEBC	IDM3774T-5	3,022	E2	30.07	196	92.4	575	9.8	A	2, 8, 70
			5000	256TC	TENV	IDNM2238T	2,833	E2	24.05	281	91.7	230/460	13	C	2, 8, 60
30	1800	6000	256TC	TEBC	IDM2332T	5,842	E2	33.07	328	91.7	230/460	14.2	A	2, 8, 70	
			5000	254TC	TENV	IDNM2333T	2,918	E2	24.05	286	94.1	230/460	18.5	C	2, 8, 60
			5000	256TC	TEBC	IDM2333T	3,285	E2	33.07	255	92.4	230/460	18.5	A	2, 8, 70
40	1800	6000	256TC	TEBC	IDM2333T-5	3,285	E2	34.15	255	92.4	575	14.8	A	2, 8, 70	
			4000	284T	TEBC	IDM4100T	6,926	E2	36.48	422	93	230/460	19.7	A	2, 8, 45, 70
			5000	256TC	TEBC	IDM2334T	3,509	E2	33.07	286	93	230/460	24	A	2, 8, 70
50	1800	6000	256TC	TEBC	IDM2334T-5	3,509	E2	34.15	286	93	575	19	A	2, 8, 70	
			4000	284T	TENV	IDNM2334T	4,032	E2	27.36	410	94.5	230/460	25.5	C	2, 8, 45, 60
			4000	286T	TEBC	IDM4102T	7,798	E2	36.48	451	93	230/460	26	A	2, 8, 45, 70

(a) See notes on inside back flap.

Constant velocity fan: 115 volts, single phase from 143TC through 184TC and all 575 volt drive motors.

Constant velocity fan: 230/460, three phase from 213 TC through 447T.

May be converted to C-Face in Mod Express or built as custom motors.

Consult District Office for availability of 2 pole motors and C-Face motors for 284T through 5009L frames.

**1000:1 CONSTANT TORQUE SPEED RANGE**

Cast Iron Frame

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes

**Inverter, Three Phase, TEBC and TENV, C-Face, Foot Mounted**

Hp	RPM	Max. RPM	NEMA Frame	Encl.	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	EISA Status <sup>(a)</sup>	Notes <sup>(a)</sup>
25	1800	4000	286T	TEBC	<b>IDM4103T</b>	4,327	E2	36.48	424	93.6	230/460	30	A	2, 8, 45, 70
	1200	3900	324T	TEBC	<b>IDM4111T</b>	8,887	E2	39.24	565	93	230/460	32	A	2, 8, 45, 70
30	1800	4000	286T	TEBC	<b>IDM4104T</b>	4,963	E2	36.48	455	94.1	230/460	36	A	2, 8, 45, 70
	1200	3900	326T	TEBC	<b>IDM4117T</b>	9,891	E2	39.24	596	93	230/460	38	A	2, 8, 45, 70
40	1800	3900	324T	TEBC	<b>IDM4110T</b>	6,712	E2	39.24	608	94.5	230/460	47	A	2, 8, 45, 70
50	1800	3900	326T	TEBC	<b>IDM4115T</b>	7,533	E2	39.24	632	94.5	230/460	57	A	2, 8, 45, 70
75	1200	2800	405T	TEBC	<b>IDM4404T</b>	17,902	E2	46.68	1165	95	230/460	88	A	2, 8, 45, 70
150	1800	2400	445T	TEBC	<b>IDM4406T-4</b>	23,285	E2	51.98	1630	95.8	460	173	A	2, 8, 45, 70

<sup>(a)</sup> See notes on inside back flap.

Constant velocity fan: 115 volts, single phase from 143TC through 184TC and all 575 volt drive motors.

Constant velocity fan: 230/460, three phase from 213 TC through 447T.

May be converted to C-Face in Mod Express or built as custom motors.

Consult District Office for availability of 2 pole motors and C-Face motors for 284T through 5009L frames.

**1000:1 CONSTANT TORQUE SPEED RANGE**

■ Cast Iron Frame

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Start & Dynamic Brakes



**Inverter Motor,  
Paint Free,  
Three Phase,  
Totally Enclosed,  
C-Face**

**1/2 thru 10 Hp**

**NEMA 56C thru 215TC**

**Applications:** Conveyors, pumps and other equipment in food processing and severe environments where motors receive washdown on a regular basis.

**Features:** Includes all the advantages of our standard "Paint Free" washdown duty motors. Specifically designed and built for use on adjustable speed drives. For adjustable speed applications not requiring full torque at zero speed. Not encoder adaptable. 1.00 Service Factor. Class "H" insulated.



Hp	RPM	Max. RPM	NEMA Frame	Encl.	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	EISA Status (a)	Notes (a)
<b>C-Face, Foot Mounted</b>														
1/2	1800	6000	56C	TENV	<b>IDCSWDM3538</b>	1,367	E2	11.06	29	82.5	208-230/460	0.8	C	48
3/4	1800	6000	56C	TENV	<b>IDCSWDM3542</b>	1,548	E2	11.06	36	82.5	208-230/460	1.1	C	48
1	1800	3600	56C	TENV	<b>IDCSWDM3546</b>	1,607	E2	12.06	39	85.5	208-230/460	1.4	C	48
			143TC	TENV	<b>IDCSWDM3546T</b>	1,607	E2	12.12	42	85.5	208-230/460	1.4	C	48
1 1/2	1800	4000	56C	TEFC	<b>IDCSWDM3554</b>	1,719	E2	14.12	45	88.5	230/460	2.1	C	48
			145TC	TEFC	<b>IDCSWDM3554T</b>	1,719	E2	14.17	44	88.5	230/460	2.1	A	48
2	1800	3600	56C	TEFC	<b>IDCSWDM3558</b>	1,836	E2	14.12	47	86.5	230/460	2.5	C	48
		4500	145TC	TEFC	<b>IDCSWDM3558T</b>	1,836	E2	13.29	52	86.5	230/460	2.9	A	48
3	1800	6000	182TC	TEFC	<b>IDCSWDM3611T</b>	2,014	E2	16.56	74	89.5	230/460	4	A	48
5	1800	6000	184TC	TEFC	<b>IDCSWDM3615T</b>	2,343	E2	18.06	93	90.2	230/460	6.4	A	48
7 1/2	1800	6000	213TC	TEFC	<b>IDCSWDM3710T</b>	3,548	E2	19.81	140	91.7	230/460	9.5	A	48
10	1800	6000	215TC	TEFC	<b>IDCSWDM3714T</b>	4,057	E2	21.31	187	92.4	230/460	12.5	A	48
<b>C-Face, Footless</b>														
1/2	1800	6000	56C	TENV	<b>IDVSWDM3538</b>	1,356	E2	11.07	29	82.5	230/460	0.8	C	48
3/4	1800	6000	56C	TENV	<b>IDVSWDM3542</b>	1,541	E2	12.06	36	78.5	230/460	1	C	48
1	1800	3600	56C	TENV	<b>IDVSWDM3546</b>	1,599	E2	12.06	39	85.5	208-230/460	1.4	C	48
		6000	143TC	TENV	<b>IDVSWDM3546T</b>	1,599	E2	12.12	39	85.5	208-230/460	1.5	C	48
1 1/2	1800	4000	56C	TEFC	<b>IDVSWDM3554</b>	1,710	E2	14.12	49	88.5	230/460	2.1	C	48
			145TC	TEFC	<b>IDVSWDM3554T</b>	1,710	E2	14.17	51	88.5	230/460	2.1	B	48
2	1800	3600	56C	TEFC	<b>IDVSWDM3558</b>	1,821	E2	14.12	49	86.5	230/460	2.5	C	48
		4500	145TC	TEFC	<b>IDVSWDM3558T</b>	1,821	E2	13.29	49	86.5	230/460	2.9	B	48
3	1800	6000	182TC	TEFC	<b>IDVSWDM3611T</b>	1,915	E2	16.56	73	89.5	230/460	4	B	48
5	1800	6000	184TC	TEFC	<b>IDVSWDM3615T</b>	2,232	E2	18.06	101	90.2	230/460	6.4	B	48

(a) See notes on inside back flap.

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes

**Inverter,  
Explosion Proof,  
Three Phase, TEFC,  
Class I, Group D**

**1/2 thru 75 Hp**

**NEMA 56C thru 405T**

**Applications:** Designed for use in hazardous locations with Inverters.



**Features:** UL and CSA approved for hazardous locations. 1/3 through 2 Hp Class I, Group D, Class II, Groups F & G, Temperature Code T3C (160°C). 3 Hp and larger, Class I, Group D only, Temperature Code T2B (280°C). Class F insulation, ISR (Inverter Spike Resistant) magnet wire, 1.0 service factor, thermostats. All ratings constant horsepower 60 to 90 Hz. Not encoder adaptable. Meets NEMA MG 1, Part 31.

Hp	RPM	Max. RPM	NEMA Frame	Catalog Number	XP <sup>(a)</sup> Cls/Grp	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	EISA Status <sup>(b)</sup>	Notes <sup>(b)</sup>
<b>2:1 Constant Torque, 10:1 Variable Torque Ratings</b>														
3	1800	2700	182TC	<b>IDXM7142T</b>	Ⓢ	1,512	E2	18.24	142	88.5	230/460	4.2	A	2, 20
5	1800	2700	184TC	<b>IDXM7144T</b>	Ⓢ	1,798	E2	18.24	158	89.5	230/460	6.5	A	2, 20
7 1/2	1800	2700	213TC	<b>IDXM7147T</b>	Ⓢ	2,261	E2	20.69	228	91	230/460	9.5	A	2, 20
10	1800	2700	215TC	<b>IDXM7170T</b>	Ⓢ	3,100	E2	20.69	196	92.4	208-230/460	12.5	A	2, 20
15	1800	2700	254TC	<b>IDXM7054T</b>	Ⓢ	3,550	E2	26.00	356	92.4	230/460	18	A	2, 20
20	1800	3600	256TC	<b>IDXM7056T</b>	Ⓢ	4,606	E2	26.00	393	93	230/460	24	A	2, 20
25	1800	2700	284T	<b>IDXM7058T</b>	Ⓢ	5,458	E2	28.61	541	93.6	230/460	30.5	A	2, 20
30	1800	2700	286T	<b>IDXM7060T</b>	Ⓢ	6,657	E2	28.61	561	94.1	230/460	36	A	2, 20
40	1800	2700	324T	<b>IDXM7062T</b>	Ⓢ	8,917	E2	32.12	782	94.5	230/460	46	A	2, 20
50	1800	2700	326T	<b>IDXM7064T</b>	Ⓢ	10,374	E2	32.12	785	94.5	230/460	57	A	2, 20
60	1800	2700	364T	<b>IDXM7066T</b>	Ⓢ	11,845	E2	33.25	967	95	230/460	69	A	2, 20
75	1800	2700	405T	<b>IDXM7068T</b>	Ⓢ	13,131	E2	38.75	1259	94.1	230/460	85	A	2, 20, 45
<b>10:1 Constant Torque and Variable Torque Ratings</b>														
1/3	1800	2700	56C	<b>IDXM7002</b>	Ⓢ	1,049	E2	14.30	45	80	230/460	0.6	C	2, 20
1/2	1800	2700	56C	<b>IDXM7006</b>	Ⓢ	1,078	E2	14.30	39	82.5	230/460	0.8	C	2, 20
3/4	1800	2700	56C	<b>IDXM7010</b>	Ⓢ	1,102	E2	14.30	43	84	230/460	1.1	C	2, 20
1	1800	2700	143TC	<b>IDXM7014T</b>	Ⓢ	1,227	E2	15.23	51	87.5	230/460	1.5	A	2, 20
1 1/2	1800	2700	145TC	<b>IDXM7034T</b>	Ⓢ	1,271	E2	16.10	60	88.5	230/460	2.1	A	2, 20
2	1800	2700	145TC	<b>IDXM7037T</b>	Ⓢ	1,390	E2	17.48	67	88.5	230/460	2.6	A	2, 20
3	1800	2700	182TC	<b>IDXM7542T</b>	Ⓢ	1,586	E2	18.24	147	89.5	230/460	4	A	2, 20
5	1800	2700	213TC	<b>IDXM7544T</b>	Ⓢ	2,311	E2	20.65	212	90.2	230/460	6.3	A	2, 20
7 1/2	1800	2700	215TC	<b>IDXM7547T</b>	Ⓢ	3,249	E2	20.65	225	91.7	230/460	9.5	A	2, 20
10	1800	2700	254TC	<b>IDXM7570T</b>	Ⓢ	3,636	E2	26.00	378	91.7	230/460	13	A	2, 20
15	1800	2700	256TC	<b>IDXM7554T</b>	Ⓢ	4,715	E2	26.00	381	92.4	230/460	17	A	2, 20
20	1800	2700	284T	<b>IDXM7556T</b>	Ⓢ	5,718	E2	28.61	523	90.2	230/460	24.5	A	2, 20
25	1800	2700	324T	<b>IDXM7558T</b>	Ⓢ	6,885	E2	32.12	742	91.7	230/460	30	A	2, 20
30	1800	3900	326T	<b>IDXM7560T</b>	Ⓢ	8,013	E2	32.12	747	94.5	230/460	35	A	2, 20
40	1800	2700	364T	<b>IDXM7562T</b>	Ⓢ	8,963	E2	33.25	913	93.6	230/460	46	A	2, 20
50	1800	2700	365T	<b>IDXM7564T</b>	Ⓢ	11,181	E2	33.25	971	93.6	230/460	61	A	2, 20
60	1800	2700	405T	<b>IDXM7566T</b>	Ⓢ	13,245	E2	38.75	1265	93.6	230/460	69	A	2, 20

<sup>(a)</sup> See explosion proof symbols on inside back flap.

<sup>(b)</sup> See notes on inside back flap.

■ Cast Iron Frame

**Vector,  
Three Phase,  
TEBC and TENV,  
C-Face**

**1 thru 150 Hp**

**NEMA 56 thru 445T**

**Applications:** Test stands, material handling, packaging equipment, printing presses, etc.

**Features:** Applications requiring adjustable speed operation with full torque from zero to base speed and constant horsepower to maximum speed. Includes HS25 or HS35 encoder feedback with MS connector. Meets NEMA MG 1, Part 31.



Hp	RPM	Max. RPM	NEMA Frame	Encl.	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	EISA Status <sup>(a)</sup>	Notes <sup>(a)</sup>	
1	1800	6000	143TC	TEBC	ZDM3581T	2,902	E2	19.15	65	87.5	230/460	1.5	A	2, 8, 46, 55, 60, 70	
			143TC	TEBC	ZDM3581T-5	2,902	E2	19.15	64	86.5	575	1.1	A	2, 8, 46, 55, 70	
			143TC	TENV	ZDNM3581T	2,532	E2	14.65	56	81.5	230/460	1.6	C	2, 8, 46, 55	
1 1/2	1800	6000	143TC	TEBC	ZDM3582T	3,169	E2	19.15	66	82.5	230/460	1.8	A	2, 8, 46, 55, 70	
			145TC	TEBC	ZDM3584T	2,991	E2	19.15	63	88.5	230/460	2.1	A	2, 8, 46, 55, 60, 70	
			145TC	TEBC	ZDM3584T-5	2,991	E2	19.15	68	87.5	575	1.7	A	2, 8, 46, 55	
1 1/2	1200	2800	145TC	TENV	ZDNM3584T	2,650	E2	14.65	58	84	230/460	2.3	C	2, 8, 46, 55	
			182TC	TEBC	ZDM3667T	3,394	E2	21.71	110	86.5	230/460	2.6	A	2, 8, 46, 55, 70	
			145TC	TEBC	ZDM3587T	3,101	E2	19.02	75	88.5	230/460	2.8	A	2, 8, 46, 55, 70	
2	1800	6000	145TC	TEBC	ZDM3587T-5	3,101	E2	19.15	69	86.5	575	2	A	2, 8, 46, 55, 70	
			182TC	TENV	ZDNM3669T	2,923	E2	17.21	94	84	230/460	2.9	C	2, 8, 46, 55, 60	
			184TC	TEBC	ZDM3664T	3,450	E2	21.71	118	87.5	230/460	3.6	A	2, 8, 46, 55, 70	
2	1200	2800	182TC	TEBC	ZDM3661T	3,584	E2	21.71	106	89.5	230/460	4	A	2, 8, 46, 55, 70	
			182TC	TEBC	ZDM3661T-5	3,584	E2	21.71	105	89.5	575	3.2	A	2, 8, 46, 55, 70	
			184TC	TENV	ZDNM3661T	3,124	E2	17.21	108	88.5	230/460	4	C	2, 8, 46, 55, 60	
3	1800	6000	213TC	TEBC	ZDM3764T	4,088	E2	29.14	174	89.5	230/460	5	A	2, 8, 46, 70	
			184TC	TEBC	ZDM3665T	3,711	E2	21.71	121	90.2	230/460	6.5	A	2, 8, 46, 55, 70	
			184TC	TEBC	ZDM3665T-5	3,711	E2	21.71	123	90.2	575	5.2	A	2, 8, 46, 55, 70	
3	1200	2800	213TC	TENV	ZDNM3767T	3,548	E2	20.40	167	91	230/460	6.7	C	2, 8, 46, 60	
			215TC	TEBC	ZDM3768T	4,698	E2	29.14	200	88.5	230/460	8	A	2, 8, 46, 70	
			213TC	TEBC	ZDM3770T	4,192	E2	29.14	177	91.7	230/460	9.5	A	2, 8, 46, 70	
7 1/2	1800	4000	213TC	TEBC	ZDM3770T-5	4,192	E2	30.07	169	91.7	575	7.5	A	2, 8, 46, 70	
			256TC	TENV	ZDNM2237T	4,080	E2	24.05	250	90.2	230/460	9.1	C	2, 8, 46, 60	
			254TC	TEBC	ZDM2276T	6,154	E2	33.07	282	91.7	230/460	10.7	A	2, 8, 46, 70	
10	1800	6000	215TC	TEBC	ZDM3774T	4,393	E2	29.14	196	92.4	230/460	12.5	A	2, 8, 46, 70	
			4000	215TC	TEBC	ZDM3774T-5	4,393	E2	30.07	196	92.4	575	9.8	A	2, 8, 46, 70
			5000	256TC	TENV	ZDNM2238T	4,206	E2	24.05	289	91.7	230/460	13	C	2, 8, 46, 60
10	1200	2800	256TC	TEBC	ZDM2332T	7,213	E2	33.07	324	91.7	230/460	14.2	A	2, 8, 46, 70	
			254TC	TENV	ZDNM2333T	4,290	E2	24.05	286	94.1	230/460	18.5	C	2, 8, 46, 60	
			256TC	TEBC	ZDM2333T	4,657	E2	33.07	301	92.4	230/460	18.5	A	2, 8, 46, 70	
15	1800	5000	256TC	TEBC	ZDM2333T-5	4,657	E2	34.15	310	92.4	575	14.8	A	2, 8, 46, 70	
			284T	TEBC	ZDM4100T	8,296	E2	36.48	426	93	230/460	19.7	A	2, 8, 45, 46, 70	
			256TC	TEBC	ZDM2334T	4,882	E2	33.07	326	93	230/460	24	A	2, 8, 46, 70	
20	1800	5000	256TC	TEBC	ZDM2334T-5	4,882	E2	34.15	286	93	575	19	A	2, 8, 46, 70	
			284T	TENV	ZDNM2334T	5,404	E2	27.36	420	94.5	230/460	25.5	C	2, 8, 45, 46, 60	
			4000	286T	TEBC	ZDM4102T	9,171	E2	36.48	476	93	230/460	26	A	2, 8, 45, 46, 70
25	1800	4000	284T	TEBC	ZDM4103T	5,697	E2	36.48	424	93.6	230/460	30	A	2, 8, 45, 46, 70	
			3900	324T	TEBC	ZDM4111T	10,260	E2	39.24	566	93	230/460	32	A	2, 8, 45, 46, 70
30	1800	4000	286T	TEBC	ZDM4104T	6,336	E2	36.48	452	94.1	230/460	36	A	2, 8, 45, 46, 70	
			3900	326T	TEBC	ZDM4117T	11,263	E2	39.24	594	93	230/460	38	A	2, 8, 45, 46, 70
40	1800	3900	324T	TEBC	ZDM4110T	8,082	E2	39.24	606	94.5	230/460	47	A	2, 8, 45, 46, 70	
50	1800	3900	326T	TEBC	ZDM4115T	8,905	E2	39.24	679	94.5	230/460	57	A	2, 8, 45, 46, 70	
150	1800	2400	445T	TEBC	ZDM4406T-4	24,658	E2	51.98	1798	95.8	460	173	A	2, 8, 45, 46, 70	

<sup>(a)</sup> See notes on inside back flap.  
Consult District Office for availability of 2 pole motors and C-Face motors for 284T through 5009L frames.

**FULL TORQUE AT ZERO SPEED, 1000:1 CONSTANT TORQUE SPEED RANGE.**

■ Cast Iron Frame

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes

**BALDOR • RELIANCE**

**Inverter Motor,  
Three Phase,  
TENV, C-Face,  
Foot Mounted**

**1 thru 10 Hp**

**NEMA 143TC thru 254TC**

**Applications:** Conveyors, pumps and other equipment in food processing and other wet environments.



**Features:** Designed for inverter or vector applications where up to a 1000:1 constant torque speed range is required. Provisions for mounting optional HS25 encoder feedback devices shown on page 236 for use in closed loop velocity or position control. Meets NEMA MG 1, Part 31. 1.00 Service Factor. Class "H" insulated.

Hp	RPM	Max. RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	EISA Status (a)	Notes (a)
1	1800	6000	143TC	IDWNM3546T	1,367	E2	14.90	39	86.5	230/460	1.4	C	48
1 1/2	1800	4500	145TC	IDWNM3554T	1,506	E2	15.78	50	86.5	230/460	2.1	C	48
2	1800	6000	182TC	IDWNM3609T	1,659	E2	17.77	69	84	230/460	2.9	C	48
3	1800	6000	184TC	IDWNM3611T	1,807	E2	17.77	80	88.5	230/460	4	C	48
5	1800	4000	213TC	IDWNM3707T	2,045	E2	19.84	122	89.5	230/460	6.7	C	48
7 1/2	1800	5000	254TC	IDWNM22937T	3,168	E2	23.92	242	91	230/460	9.1	C	48
10	1800	5000	254TC	IDWNM22938T	3,710	E2	23.92	291	91.7	230/460	12	C	48

(a) See notes on inside back flap.

**1000:1 CONSTANT TORQUE SPEED RANGE.**

**Vector Motor,  
Three Phase,  
TENV, C-Face,  
Foot Mounted**

**1 thru 10 Hp**

**NEMA 143TC thru 254TC**

**Applications:** Material handling, packaging equipment in food processing and other wet environments.



**Features:** Designed for inverter or vector applications where up to a 1000:1 constant torque speed range is required. Motors include 1024 PPR HS25 encoder feedback with MS connector. Meets NEMA MG 1, Part 31. 1.00 Service Factor. Class "H" insulated.

Hp	RPM	Max. RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	EISA Status (a)	Notes (a)
1	1800	6000	143TC	ZDWNM3546T	2,739	E2	14.90	42	85.5	230/460	1.5	C	48
1 1/2	1800	4500	145TC	ZDWNM3554T	2,878	E2	15.78	55	86.5	230/460	2.1	C	48
2	1800	6000	182TC	ZDWNM3609T	3,031	E2	17.77	71	84	230/460	2.9	C	48
3	1800	6000	184TC	ZDWNM3611T	3,182	E2	17.77	79	88.5	230/460	4	C	48
5	1800	6000	213TC	ZDWNM3707T	3,419	E2	19.84	125	89.5	230/460	6.7	C	48
7 1/2	1800	5000	254TC	ZDWNM22937T	4,543	E2	23.92	240	91	230/460	9.1	C	48
10	1800	5000	254TC	ZDWNM22938T	5,085	E2	23.92	292	91.7	230/460	12	C	48

(a) See notes on inside back flap.

**1000:1 CONSTANT TORQUE SPEED RANGE.**

## Inverter Gear Motor - 3/8 Hp Right Angle and Parallel Shaft -TEFC



**Applications:** Ideally suited for conveyors, material handling, packaging equipment applications requiring adjustable speed and no maintenance. Available in a broad range of gear ratios to meet your demanding application needs.

**Features:** Superior insulation system designed to comply with NEMA MG-1 part 31 for inverter power. IP44 environmental protection. Designed for use on Baldor Series 15J, 15P and Series 5 Inverters operating on 230 volts output. Both Parallel shaft and Right Angle gearmotors are lubricated for life and require no routine maintenance. Right Angle gearmotors feature our internal oil expansion bladder which eliminates the need for a breather while allowing the gearmotor to be mounted in any position (see note below).

Input Motor Hp	Output RPM 60 Hz.	Gear Ratio	Speed Range	Maximum Safe Torque In-Lbs @ 60 Hz	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.	Motor Type & Gear Style	Volt Code
<b>Right Angle</b>										
3/8	22	75	3.4-33	315	<b>IDGM2509</b>	675	E2	22	2528M-K	C
	28	60	4.5-41	252	<b>IDGM2508</b>	675	E2	22	2528M-K	C
	41	40	6.6-62	228	<b>IDGM2506</b>	675	E2	22	2528M-K	C
	83	20	12-123	138	<b>IDGM2503</b>	675	E2	22	2528M-K	C
	165	10	23-246	105	<b>IDGM2501</b>	675	E2	22	2528M-K	C
	330	5	43-490	68	<b>IDGM2500</b>	675	E2	22	2528M-K	C
<b>Parallel Shaft</b>										
3/8	55	30	8.0-82	350	<b>IDGMP2505</b>	654	E2	20	2528M-PS	C
	83	20	12-123	233	<b>IDGMP2503</b>	616	E2	20	2528M-PS	C
	165	10	23-246	116	<b>IDGMP2501</b>	616	E2	20	2528M-PS	C
	330	5	43-490	58	<b>IDGMP2500</b>	616	E2	20	2528M-PS	C

**NOTE:** Avoiding those positions where the high speed oil seal is immersed in oil, will provide greater security against seal wear. Vertical motor below gearbox mounting is possible with modification, contact Baldor for details. Voltage: @ 60 Hz: C = 230 volts

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes

## Feedback Cable Assembly with MS Connector



For the convenience of our customers, we offer a connector plug/cable assembly for Vector and DC motors. This assembly provides the connection from the encoder to the control. The twisted pair shielded cable provides additional noise protection. The assembly decreases installation time and effort. Recommended for Vector Drive and DC applications. For ZDM, ZDNM, ZDWNM, ZDNRPM, ZDBRPM and ZDVS motors. Uses Baldor style MS twist lock connector.

Catalog Number	Cable Extension Length	List Price	Mult. Sym.	Ap'x Shpg. Wgt.
<b>CBL015ZD-2</b>	5 Ft = 1.5 Meters	192	E8	1
<b>CBL030ZD-2</b>	10 Ft = 3 Meters	223	E8	1
<b>CBL046ZD-2</b>	15 Ft = 4.6 Meters	255	E8	2
<b>CBL061ZD-2</b>	20 Ft = 6.1 Meters	282	E8	2
<b>CBL091ZD-2</b>	30 Ft = 9.1 Meters	344	E8	3
<b>CBL152ZD-2</b>	50 Ft = 15.2 Meters	463	E8	6
<b>CBL229ZD-2</b>	75 Ft = 22.9 Meters	613	E8	8
<b>CBL305ZD-2</b>	100 Ft = 30.5 Meters	764	E8	12
<b>CBL379ZD-2</b>	125 Ft = 37.9 Meters	915	E8	14
<b>CBL455ZD-2</b>	150 Ft = 45.5 Meters	993	E8	2
<b>CBL606ZD-2</b>	200 Ft = 60.6 Meters	1,366	E8	16

## Encoder Feedback Kits for IDM, IDNM and IDWNM Motors

**For use with Legacy Baldor Motor Designs**



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, HS35M and HSD35 feature hollow shaft mounting. The HSD35 carry the Northstar brand. The H20 is a couple mount encoder. The RL67 and SL85 are bearingless encoders and both carry the Northstar brand. Encoder kits include the encoder and all mounting hardware.

Catalog Number	Type Enclosure	Description	Magnetic or Optical	Input Voltage	NEMA Frame	List Price	Ap'x. Mult. Sym.	Shpg. Wgt.
<b>ENC00NV-A2</b>	TENV	HS35M Avtron	Magnetic	5-24 VDC	213T-215T	1,400	E8	1
<b>ENC00NV-B1</b>	TENV	HS25 BEI	Optical	5-15 VDC	56-215T	1,400	E8	2
<b>ENC00NV-D1</b>	TENV	HS35 Dynapar	Optical	5-24 VDC	56-215T	1,575	E8	4
<b>ENC01BC-B1</b>	TEBC	HS25 BEI	Optical	5-15 VDC	143T-215T	1,400	E8	3
<b>ENC01BC-D1</b>	TEBC	HS35 Dynapar	Optical	5-24 VDC	56-215T	1,575	E8	4
<b>ENC01NV-A2</b>	TENV	HS35M Avtron	Magnetic	5-24 VDC	254T-256T	1,400	E8	1
<b>ENC01NV-B2</b>	TENV	HS35 BEI	Optical	5-15 VDC	254T-284T	1,400	E8	4
<b>ENC01NV-D1</b>	TENV	HS35 Dynapar	Optical	5-24 VDC	254T-256T	1,575	E8	4
<b>ENC02BC-A2</b>	TEBC	HS35M Avtron	Magnetic	5-24 VDC	254T-447T	1,400	E8	1
<b>ENC02BC-B2</b>	TEBC	HS35 BEI	Optical	5-15 VDC	254T-447T	1,400	E8	2
<b>ENC02BC-D1</b>	TEBC	HS35 Dynapar	Optical	5-24 VDC	254T-447T	1,575	E8	4

**NOTE:** For 56 and 140 IDVSM frame sizes use the kits from the table above.

**Constant Velocity Blower Cooling Conversion Kits**

**NEMA 143TC thru 447TC**

**For use with Legacy Baldor Motor Designs**



These kits convert TENV or TEFC AC motors to a Totally Enclosed Blower Cooled (TEBC) design. This is advantageous where continuous cooling is required regardless of motor shaft speed. These kits can be mounted on the back of the motor after removing the fan guard and fan. Removing the TEFC fan shaft is not required. Does not fit Athens-built 180-440 M, CP or ECP motors

Voltage	Phase	NEMA Frame	Catalog Number	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
115	1	143TC-145TC	<b>BLWL05-L</b>	790	E8	7
		182TC-184TC	<b>BLWL06-L</b>	890	E8	8
		213TC-215TC	<b>BLWL07-L</b>	934	E8	13
		254TC-256TC	<b>BLWL09-L</b>	959	E8	5
		284TC-286TC	<b>BLWL10-L</b>	1,037	E8	35
		324TC-326TC	<b>BLWL12-L</b>	1,101	E8	46
		364TC-365TC	<b>BLWL14-L</b>	1,171	E8	55
230/380/460	3	213TC-215TC	<b>BLWM07-F</b>	934	E8	20
		254TC-256TC	<b>BLWM09-F</b>	970	E8	27
		284TC-286TC	<b>BLWM10-F</b>	1,037	E8	35
		324TC-326TC	<b>BLWM12-F</b>	1,101	E8	46
		364TC-365TC	<b>BLWM14-F</b>	1,183	E8	55
		404TC-405TC	<b>BLWM16-F</b>	1,654	E8	70
		444TC-447TC	<b>BLWM18-F</b>	2,317	E8	87

**NOTE:** Blower cooling conversion kits should be further selected by Baldor 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.

Farm Duty Motors

Definite Purpose Motors

Unit Handling Motors

Brake Motors

200 & 575 Volt Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Soft Starters & Dynamic Brakes

**BALDOR • RELIANCE**

**BSM-Series  
Brushless Motors  
with Hall Feedback  
C-Face with base**

**1/4 thru 3 Hp**

**NEMA 42-56C**

**Applications:** Conveyors, Pumps, Mixers, Packaging Machinery



**Features:** NEMA 42/56 foot/base mount, Hall sensor feedback, Face/Foot mount, High energy Neodymium magnets, Premium 200°C moisture resistant wire, ABEC Quality Class 3 bearings, High 155°C winding temperature design, UL/CE/cUL. Speed range to 7,000 RPM

Hp/Kw	RPM	NEMA Frame	Catalog Number	List Price	Mult. Sym.	"C" Dim.	Aprx. Wt. (lb)	Voltage	EISA Status <sup>(a)</sup>	Notes <sup>(a)</sup>
<b>C-Face, Footless</b>										
0.25/0.18	1800	42C	<b>BSM25C-1177MHC</b>	326	E4	7.95	13	320	C	
0.5/0.37	1800	42C	<b>BSM25C-2177MHC</b>	340	E4	8.41	9	320	C	
<b>C-Face, Foot Mounted</b>										
0.5/0.37	1800	56C	<b>BSM33C-2177MHQ</b>	549	E4	8.76	33	320	C	
1/0.75	1800	56C	<b>BSM33C-3177MHQ</b>	605	E4	9.86	22	320	C	
1.5/1.13	1800	56C	<b>BSM33C-4177MHQ</b>	692	E4	12.20	25	320	C	
2/1.5	1800	56C	<b>BSM33C-5177MHQ</b>	756	E4	15.20	30	320	C	
3/2.25	1800	56C	<b>BSM33C-6177MHQ</b>	927	E4	16.70	31	320	C	

<sup>(a)</sup> See notes on inside back flap.

**BMC-Series  
Adjustable Speed  
Brushless Control**

**Applications:** Conveyors, Pumps, Mixers, Packaging Machinery



**Features:** Speed regulation better than 0.5%, Peak current two times continuous, Jumper selections: line voltage, motor poles, automatic/manual start, braking, Diagnostic LED's, Industry standard speed command of +/- 10 Vdc or pot input, Diagnostic LEDs, Trimpot adjustments, Accel/decel time 0.1 - 30 sec

Rating Hp/Kw	Input Vac 50/60Hz	Phase	Output			Catalog Number	List Price	Mult. Sym.	Height in/mm	Width in/mm	Length in/mm
			VDC	Cont.Amps	Peak Amps						
.25/0.18	115/208/230	1	320	1.5	3	<b>BMC6A01</b>	399	E3	2.75/70	4.05/103	5.4/136
.05/0.37	115/208/230	1	320	2.4	4.8	<b>BMC6A02</b>	435	E3	2.75/70	4.05/103	5.4/136
1/0.75	115/208/230	1	320	4.0	8	<b>BMC6A04</b>	479	E3	5/127	4.05/103	6.8/172
1.5/1.13	115/208/230	1	320	5.5	11	<b>BMC6A05</b>	515	E3	4.5/114	4.05/103	6.8/172
2/1.5	208/230	1,3	320	6.7	13.4	<b>BMC2A06</b>	626	E3	4.45/113	4.05/103	8.6/217
3/2.25	208/230	3	320	9.0	18	<b>BMC2A09</b>	718	E3	4.45/113	4.05/103	8.6/217