

**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.
<b>417077-153</b>	DPFV	H20	FL180-RL280 (2)	Dynapar	0	MS-ST	5-15	1,551	E8	9
<b>417708-85</b>	DPFV	H20	L280-L400	Dynapar	0	MS-ST	5-15	1,551	E8	5
<b>417077-156</b>	DPFV	RL67	FL180-RL280 (2)	Dynapar	M	Latch	5-15	2,000	E8	9
<b>417708-87</b>	DPFV	RL67	L280-L400	Dynapar	M	Latch	5-15	2,000	E8	6
<b>417708-120</b>	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)	<b>417708-201</b>	160	E8
	FL/RL280 thru L400	DPFV & TEBC (2)	<b>417708-202</b>	160	E8
	L440	DPFV & TEAO-P/B	<b>417708-203</b>	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

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**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

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**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)

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