

**BALDOR® • RELIANCE** 

**Product Information Packet**

**ZDBRPM25504**

**50HP, 1750, 460V, FL2570, TEBC, F3**

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	L3380A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617573-382	Poles:	04	Created Date:	11-10-2021
Base:		Eff. Date:	01-19-2022	Leads:			

Specs			
Catalog Number:	ZDBRPM25504		
Enclosure:	TEBC		
Frame:	FL2570Z		
Frame Material:	Exposed Laminations		
Motor Letter Type:	Three Phase		
Output @ Frequency:	50.000 HP @ 60 HZ		
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ		
Voltage @ Frequency:	460.0 V @ 60 HZ		
Agency Approvals:	CCSA US		
Auxillary Box:	No Auxillary Box		
Base Indicator:	Rigid		
Bearing Grease Type:	Polyrex EM (-20F +300F)		
Current @ Voltage:	65.000 A @ 460.0 V		
Duty Rating:	CONT		
Feedback Device:	ENCODER		
Frame Prefix:	FL		
Heater Indicator:	No Heater		
Insulation Class:	H		

<b>IP Rating:</b>	NONE		
<b>Mounting Arrangement:</b>	F3		
<b>Product Family:</b>	General Industrial		
<b>Pulley End Bearing Type:</b>	Ball		
<b>Pulley Face Code:</b>	Standard		
<b>Shaft Ground Indicator:</b>	Shaft Grounding		
<b>Shaft Rotation:</b>	Reversible		
<b>Motor Standards:</b>	NEMA		
<b>Thermal Device - Bearing:</b>	None		
<b>Thermal Device - Winding:</b>	Normally Closed Thermostat		

Nameplate 000613006MY										
	<b>DUTY</b>	<b>HP</b>	<b>RPM</b>	<b>AMPS</b>	<b>VOLTS</b>	<b>HZ</b>				
	CONT	50	1775	65	460	60				
	CONT	50	3545	60	460	120				
<b>CAT.NO.</b>	ZDBRPM25504		<b>SPEC. NO.</b>		F25-A000-0414					
<b>SER.NO.</b>			<b>FR</b>	FL2570Z	<b>INSUL</b>	H				
<b>PH.</b>	3		<b>MAX SAFE SPEED</b>	5000	<b>AMB.</b>	40			<b>MIN. AMB.</b>	-25
<b>DESIGN NO.</b>	L3380A		<b>TYPE</b>		<b>ENCL.</b>	TEAO-BC				
<b>S.F.</b>	1.00		<b>D.E. BRG.</b>	65BC03JPP30A						
<b>ENCL MOD</b>			<b>O.D.E. BRG.</b>	50BC03JPP30A						
	IP44									

Parts List		
Part Number	Description	Quantity
WS393485	WS F25-A000-0414	1.000 EA
RA390013	RA F25-A000-0414	1.000 EA
418018122A	LABEL	2.000 EA
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 EA
000613006MY	NP-RPMAC INVERTER DUTY	1.000 EA
000692000NH	LABEL DIRECTION AIR FL	1.000 EA
418056062B	NP AC BLOWER DATA	1.000 EA
LB1613	LABEL, QR CODE, ADHESIVE LABEL	1.000 EA
000692000XM	LABEL QR CODE	1.000 EA
422927001	C/D LABEL	1.000 EA
807582004AAB	BRKT,ODE,L250	1.000 EA
807582003AAA	BRKT,DE,250AC	1.000 EA
BP5068BJ01	BRUSH, .187 X .187 X 1.00	2.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
400638001H	SPRING WASHER (Customer number 43699)	1.000 EA
036610010AB	MHSLW M10 PLATED	4.000 EA
036000016DB	HHCS	4.000 EA
036100080KA	M10-1.50X 80MM HXSOCHDCS	3.000 EA
418057491A	LIFTING LUG	2.000 EA
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 EA
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 EA
609830005ACL	STUD FRAME .375X11.38	4.000 EA
BP5248	BP5248	2.000 EA

Parts List (continued)		
Part Number	Description	Quantity
613450002E	BLOWER WITH TERMINAL BOX	1.000 EA
415000103D	T/LUG #4AWG-1/0AWG W/HOLE FOR .250 BOLT	1.000 EA
422962051BW	STUB SHAFT	1.000 EA
607980192B	RF,BEI,HS35,TWISTLOCK	1.000 EA
418057367A	CLIP, BEI TACH	2.000 EA
706310640B	BACKPLATE GASKET C/BOX 706310-637	1.000 EA
417733004AC	GASK C/BOX	1.000 EA
708534051A	FL250 FAN GRILL	1.000 EA
032018010DK	HHCS 1/2-13X1-1/4 PLATED	2.000 EA
418057260A	SCREW PHILLIPS PAN HD	4.000 EA
708534050B	GRILL, FAN COVER	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	3.000 EA
708534003A	BAFFLE, FAN/BLOWER	1.000 EA
418057256F	HHCS M6 12MM ZINCPLAT	1.000 EA
032018008DK	HHCS 1/2-13X1 PLATED	4.000 EA
418057373A	SCREW SHEET METAL	7.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 EA
708533003A	PLATE, BTM FAN/BLOWER	2.000 EA
406673002C	.75 CAP PLUG	1.000 EA
036620009AB	M8 EXTERNAL LK WASHER	1.000 EA
706310638A	BACK PLATE FOR 706310-637 WITH 3.12" BOL	1.000 EA
036310010FB	RHMS TERM/BLK MTG	2.000 EA
418057169A	LKNUT CAMER	1.000 EA
418057499A	PLATE	1.000 EA

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423709011A	WASHER	8.000 EA
418057381A	CONDUIT WASHER	1.000 EA
036320008CB	M2.5 SCREW	4.000 EA
418057056A	ADAPTER ENGLISH CAMER	1.000 EA
036500006AB	M4-0.7 METRIC HEX NUT	2.000 EA
706310637A	C/BOX, MILL, RPMAC,9X9X4, 375IN^3	1.000 EA
706310641A	LIPPED CBOX LID FOR 706310-642	1.000 EA
706310640A	LID GASKET C/BOX 706310-637	1.000 EA
036010012HB	HHCS T/BOX BRACE	16.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	4.000 EA
034180024GA	KEY 1/2X1/2X3 L	1.000 EA
000640000P	TAG WINDING THERMOST	1.000 EA
004824007CQR	C2 PAINT SYSTEM MEDIUM GRAY CHARCOAL MET	0.100 EA
LB1549	LABEL, BLANK 1.375 X 2.250 IMPRINTABLE	1.000 EA

REL. S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE
FRAME	FL2570	AMPS	65	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)
HP	50	DUTY	CONT	IM (AMPS)	34	R1 .0778 X1 .380
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.049/.795	R2 .0486 X2 .480
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK <sup>2</sup> (LB-FT <sup>2</sup> )	3.84	XM 8.13

**RATED FULL LOAD DATA**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1774	50.0	148	460	60	65.1
MAX SPEED	3542	50.0	74	460	120	59.8
MIN SPEED	0	0	148	14.6	.875	65.1

**LOAD PERFORMANCE AT BASE SPEED**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	33.0
1/4	1794	12.5	37	460	60	36.0
1/2	1787	25.0	74	460	60	43.4
3/4	1781	37.5	111	460	60	53.4
FULL LOAD	1774	50.0	148	460	60	65.1
O/L	1741	98.1	296	460	60	122

**BLOWER DATA**

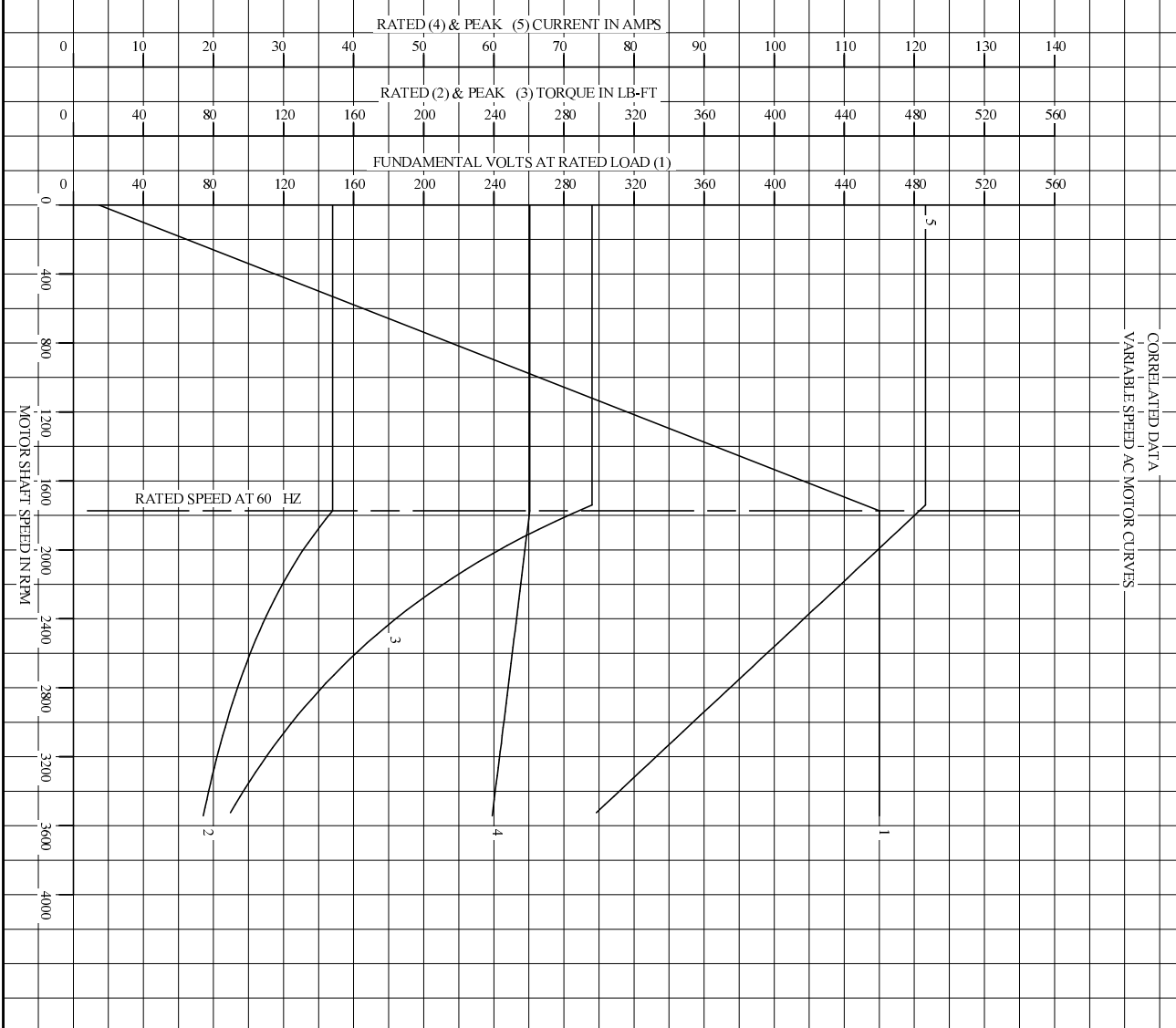
VOLTS	PH/HZ	FL AMPS	LR AMPS	FRAME	CFM

REMARKS: TYPICAL DATA  
CORRELATED DATA

	DR. BY	B. GRANT	<b>A-C MOTOR PERFORMANCE DATA</b> L3380A ISSUE DATE 8-14-06
	CK. BY	T. CUER	
	APP. BY	8-14-06	



REL. S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE
FRAME	FL2570	AMPS	65	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)
HP	50	DUTY	CONT	IM (AMPS)	34	X1 .380
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.049/.795	R2 .0486 X2 .480
PHASE/HERTZ	3/60	AMB C/INSUL	40/H	WK <sup>2</sup> (LB-FT <sup>2</sup> )	3.84	XM 8.13



REMARKS: TYPICAL DATA  
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

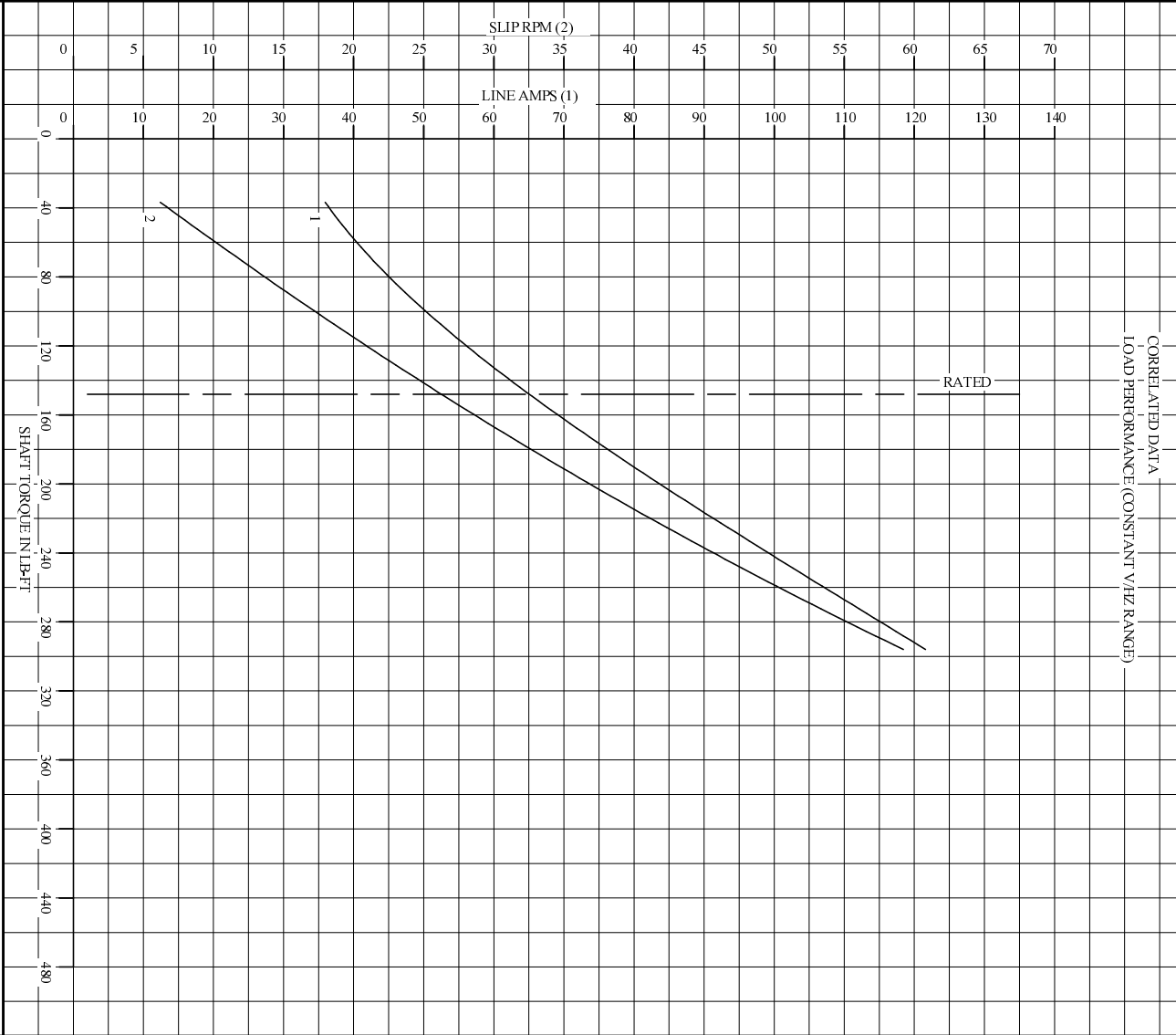
**BALDOR**  
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DR. BY B. GRANT  
CK. BY B. GRANT  
APP. BY T. CURR  
DATE 8-14-06

**A-C MOTOR**  
PERFORMANCE  
CURVES

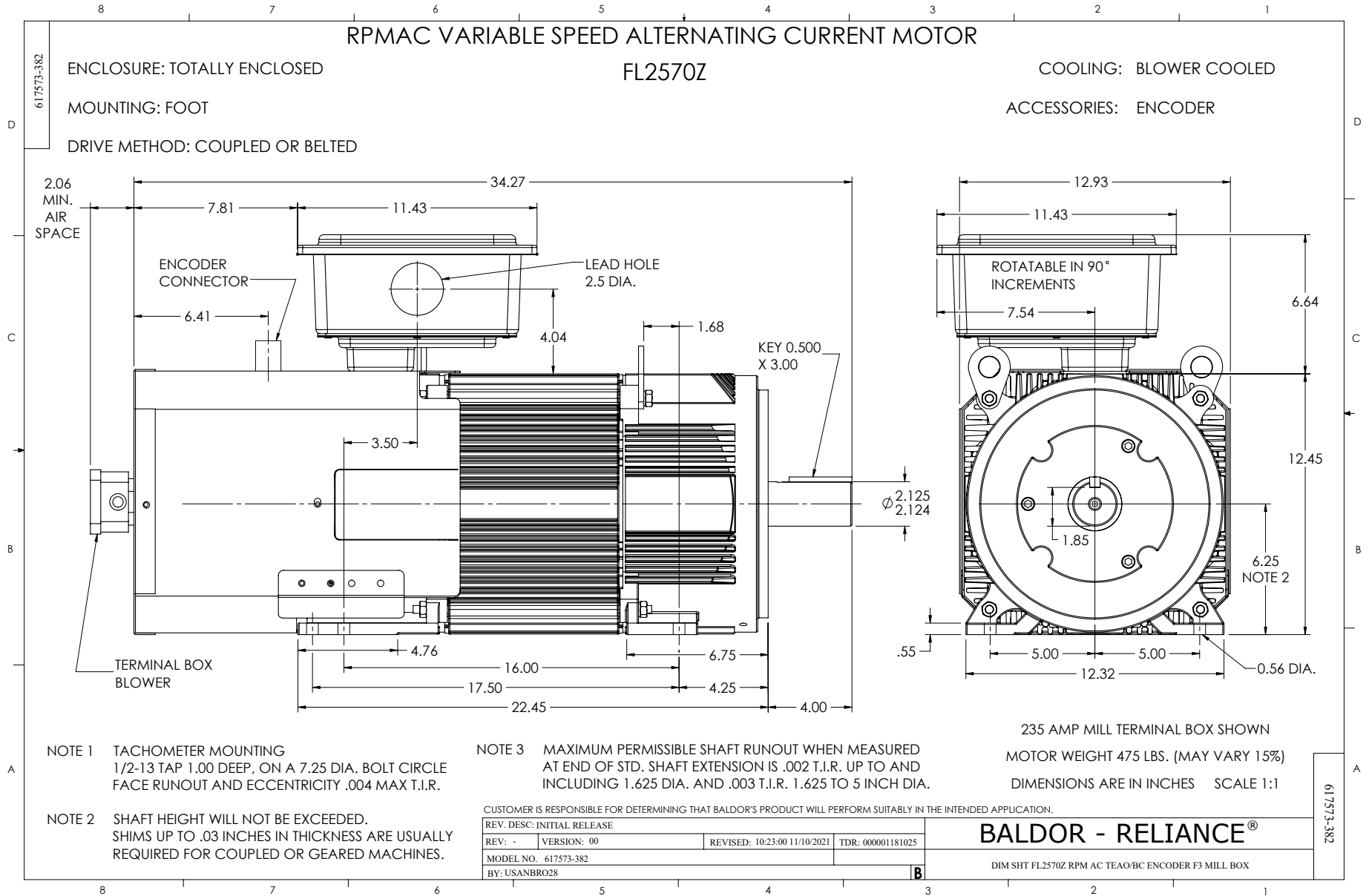
L3380A  
SH 1 OF 2  
ISSUE DATE 8-14-06

REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE
FRAME	FL2570	AMPS	65	MAX SAFE RPM	5000	(AT BASE RATING, 25°C)
HP	50	DUTY	CONT	IM (AMPS)	34	R1 .0778 X1 .380
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.049/.795	R2 .0486 X2 .480
PHASE/HERTZ	3/60	AMB C/INSUL	40/H	WK <sup>2</sup> (LB-FL <sup>2</sup> )	3.84	XN 8.13



REMARKS: TYPICAL DATA  
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

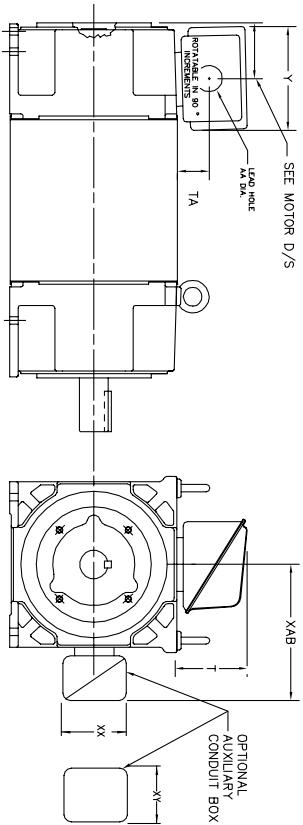
	DR. BY	B. GRANT	<b>A-C MOTOR</b> <b>PERFORMANCE</b> <b>CURVES</b>	<b>L3380A</b> SH20F2 ISSUE DATE 8-14-06
	CK. BY	B. GRANT		
	APP. BY	T. CURR		
	DATE	8-14-06		



# INDUSTRIAL ALTERNATING CURRENT MOTORS

RPM AC

STEEL, CAST IRON, MILL AND TERMINAL BOARD CONDUIT BOX DIMENSIONS  
 NEMA FRAMES RL210 thru RL280 and IEC FRAMES RDL132 thru RDL180  
 NEMA FRAMES FL180 thru FL280 and IEC FRAMES FDL112 thru FDL180



FRAME	TYPE	TERMINAL STRIPS	AMPS	C/BOX	Y	TA	T	AA
FL180	STEEL	N	40	706320003A	5.00	1.62	3.00	1.12
FL180	STEEL	Y/N	75	706320003A	6.12	2.38	4.38	1.75/2.00
FL180	CAST IRON	N	208	706320007A	7.62	2.00	7.00	2.50/3.00
FL180 & FDL11	CAST IRON	Y/N	60	706320004C	5.75	2.38	4.38	1.0 TAP
FL180 & FDL11	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16

FL210 & RL210	STEEL	N	61	075452000B	6.34	2.00	4.12	1.75
FL210 & RL210	STEEL	N	121	075454001AJ	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	305	075460026B	7.00	4.12	8.44	4.59
FL210 & RL210	CAST IRON	N	110	075460026B	7.63	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310226R	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310226R	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y/N	235	706310637A	11.42	4.00	6.72	2.50

FL250 & RL250	STEEL	N	61	075452000B	6.34	2.00	4.12	1.75
FL250 & RL250	STEEL	N	121	075454001AJ	7.69	2.38	5.25	1.94
FL250 & RL250	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL250 & RL250	CAST IRON	N	110	075460026B	7.25	2.50	3.25	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320013A	10.50	4.88	9.00	4.0 TAP
FL250 & RL250	MILL	Y	100	706310226R	7.75	2.30	4.40	PG29/PG16
FL250 & RL250	MILL	Y	160	706310226R	9.00	3.06	5.40	PG36/PG16
FL250 & RL250	MILL	Y/N	235	706310637A	11.42	4.00	6.72	2.50
FL250 & RL250	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FL280 & RL280	STEEL	N	160	706320009A	7.25	3.50	7.06	2.50
FL280 & RL280	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL280 & RL280	STEEL	N	500	706320017G	14.92	7.56	12.70	5.00
FL280 & RL280	CAST IRON	N	210	706320013A	10.50	4.88	9.00	3.0 TAP
FL280 & RL280	CAST IRON	N	510	706320014D	15.00	7.56	12.81	5.0 TAP
FL280 & RL280	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL280 & RL280	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL280 & RL280	MILL	Y/N	235	706310637A	11.42	4.00	6.72	2.50
FL280 & RL280	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FRAME SIZE	XAB	XX	XY	PART NUMBER	FRAME SIZE	XAB	XX	XY	PART NUMBER
FL210/RL210/FL210/ML180	7.38	4.25	4.25	602B07-26-A	FL210/RL210/FL210/ML180	10.88	8.00	8.00	706310-3-B
FL250/RL250/FL250/ML180	8.44	4.25	4.25	602B07-26-A	FL250/RL250/FL250/ML180	11.88	8.00	8.00	706310-3-B
FL280/RL280/FL280/ML180	9.12	4.25	4.25	602B07-26-A	FL280/RL280/FL280/ML180	12.62	8.00	8.00	706310-3-B

- (1) 1/4" CONDUIT
- (2) 1/2" CONDUIT
- (3) CUSTOMER TO PROVIDE HOLE FOR CONDUIT
- (4) 2" DN -5A OR 1" TAP DN -4C

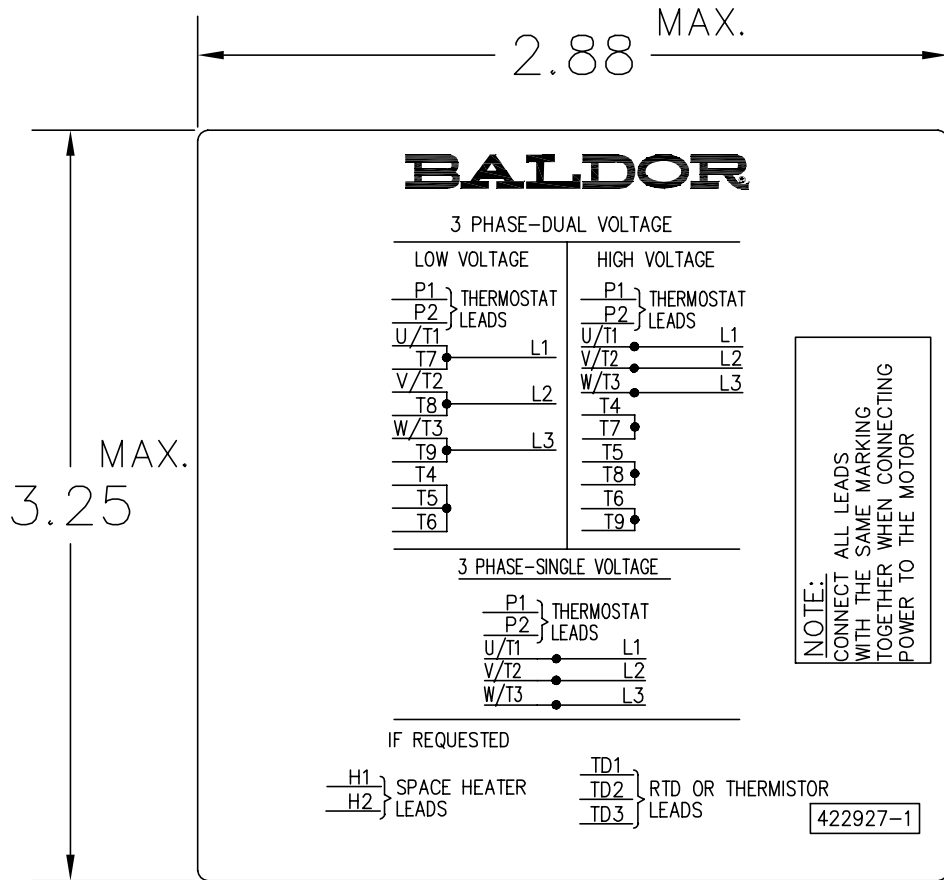
TERMINAL BOX CAN BE REPAIRED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.  
 TERMINAL BOX LOCATED ON REPAIR SIDE WHEN F-2, W-2, W-3, W-7,  
 OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: ADD 706310-637 & 639 BOX	TDR: 00001180260
REV. LTR: F	VERSION: 06
FILE: \RGG\00003\692	REVISED: 11:08:56 10/26/2021
MTL: 1	BY: RGRW

**BALDOR - RELIANCE®**  
 DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180  
 SH 1 of 1

422927-001



NOTE:  
DATA TO BE SIZED  
SO THAT IT FITS INTO  
MATERIAL DECAL  
DIMENSIONS. MAKE  
LETTERS & NUMBERS  
AS LARGE AS POSSIBLE.

MATERIAL: CERAMATIC DGF-P4  
PERMA GRIP ADHESIVE

ALL LETTERS, NUMBERS  
AND LINES TO BE BLACK  
ON WHITE BACKGROUND.

422927-001

REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE		
REV. LTR: B	VERSION: 02	TDR: 000000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

**BALDOR**

EXTERNAL CONNECTION LABEL

SH 1 of 1

Marketing maintained PDF of MN406:

<http://www.baldor.com/support/Literature/Load.ashx/MN406?ManNumber=MN406>