

**BALDOR® • RELIANCE** 

**Product Information Packet**

**IDBRPM281004R1**

**100HP, 1780/3555, 3PH, FL2890, TEAO-BC, F3**

Part Detail							
Revision:	B	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	L4052A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617531-034	Poles:	04	Created Date:	04-10-2015
Base:		Eff. Date:	10-22-2019	Leads:			

Specs			
Catalog Number:	IDBRPM281004R1		
Enclosure:	TEBC		
Frame:	FL2890		
Frame Material:	Exposed Laminations		
Output @ Frequency:	100.000 @ 60 HZ		
	100.000 HP @ 60 HZ		
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ		
Voltage @ Frequency:	460.0 V @ 60 HZ		
	460 V @ 60 HZ		
Agency Approvals:	CCSA US		
	UR		
Auxillary Box:	No Auxillary Box		
Base Indicator:	Rigid		
Bearing Grease Type:	Polyrex EM (-20F +300F)		
Current @ Voltage:	124.000 A @ 460.0 V		
Duty Rating:	CONT		
Feedback Device:	NO FEEDBACK		
Frame Prefix:	FL		

<b>Heater Indicator:</b>	No Heater		
<b>Insulation Class:</b>	H		
<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>	No 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 000613006NN										
	<b>DUTY</b>	<b>HP</b>	<b>RPM</b>	<b>AMPS</b>	<b>VOLTS</b>	<b>HZ</b>				
	CONT	100	1780	124	460	60				
	CONT	100	3555	120	460	120				
<b>CAT.NO.</b>	IDBRPM281004R1		<b>SPEC. NO.</b>	P28T0307						
<b>SER.NO.</b>			<b>FR</b>	FL 2890	<b>INSUL</b>	H				
<b>PH.</b>	3		<b>MAX SAFE SPEED</b>	5000	<b>AMB.</b>	45			<b>MIN. AMB.</b>	-25
<b>DESIGN NO.</b>	L4052A		<b>TYPE</b>		<b>ENCL.</b>	TEAO-BC				
<b>S.F.</b>	1.0		<b>D.E. BRG.</b>	75BC02J30X						
<b>ENCL MOD</b>			<b>O.D.E. BRG.</b>	55BC02J30X						

Parts List		
Part Number	Description	Quantity
WS286667	WS P28T0307	1.000 EA
RA282875	RA P28T0307	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
000692000NH	LABEL DIRECTION AIR FL	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
418018122A	LABEL	2.000 EA
418057747A	METAL FASTENER	8.000 EA
000613006NN	RPM AC WITH CERTIFIED LOGOS	1.000 EA
422927001	C/D LABEL	1.000 EA
004824015A	GREASE POLYREX EM	0.300 LB
034693001AB	PPLG - G508- use 034692001AB	1.000 EA
034693001AB	PPLG - G508- use 034692001AB	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
036100070JA	HSHCS M8 70MM UNPLATED	3.000 EA
036100070KA	METRIC HSHCS	3.000 EA
036140001D	EYEBOLT - 360	2.000 EA
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 EA
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 EA
036600014AB	FLTW MOTOR MTG.	2.000 EA
400638001G	WAVEN (Customer number 43699)	1.000 EA
418150003A	GREASE FITTING CAP	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

Parts List (continued)		
Part Number	Description	Quantity
609830005G	TBOLT VERSION 3	4.000 EA
610490001A	.5HP,3450//2850RPM,3PH,60//50HZ,56C,3420	1.000 EA
807583003AAA	BRKT,DE,FL280	1.000 EA
807583004AAB	BRKT,ODE,FL280	1.000 EA
036000016KB	HHCSM10-1.5X16MM PLTD-280	2.000 EA
036610008AB	METRIC LCKW M6 PLTD-G508	4.000 EA
418057373A	SCREW SHEET METAL	7.000 EA
036000045JB	M8-1.25 X 45MM HXHCS	4.000 EA
036620009AB	M8 EXTERNAL LK WASHER	1.000 EA
034630001AJ	1/8" PIPE COUPLING	1.000 EA
034017014AB	LCKW 3/8 STD. PLATED	4.000 EA
034530016AB	P/NIP 1/8X2 PLATED - 320	1.000 EA
036620010AB	M10 EXT. TOOTH LK WASHER	2.000 EA
074875000A	CONDUIT BOX COVER	1.000 EA
402731000A	GASK 320-400	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	4.000 EA
415000103G	TLUG	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	3.000 EA
000613006NT	NAME PLATE IEC	1.000 EA
600164003A	WHEEL, BLOWER	1.000 EA
036600008AB	MFWSH M6 PLATED	4.000 EA
417733004J	GASKT	2.000 EA
609843001K	GASKET HANDHOLE COVER FE	1.000 EA
708535017A	FAN COVER,GRILL	1.000 EA

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036000025HB	HHCS M6-1.0X25L PLTD.	4.000 EA
032018006CK	HHCS 3/8-16X3/4L PLATED	4.000 EA
036500008AB	METRIC H.NUT M6-1.0 PLTD	4.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	3.000 EA
706320009A	CB, 2.00 CONDUIT, METRIC, SHEET METAL	1.000 EA
708533003A	PLATE, BTM FAN/BLOWER	2.000 EA
706313063A	BLOWER HOUSING	1.000 EA
410978010A	FLANGE, INLET BLOWER	1.000 EA
410978011A	GRILL, INLET BLOWER HSG	1.000 EA
406673002C	.75 CAP PLUG	1.000 EA
708535010A	FAN COVER FL280	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	3.000 EA
000640000P	TAG WINDING THERMOST	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA
034180032HA	KEY 5/8X5/8X4 L bin stocked	1.000 EA
418014004A	ADAPT	1.000 EA

REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE	CONN EQ	CKT OHMS	PER PHASE	
FRAME	FL2890	AMPS	124	MAX SAFE RPM	4800	(AT BASE RATING, 25 °C)	R1	.0288	X1	.200
HP	100	DUTY	CONT	IM (AMPS)	59	R2	.0185	X2	.254	
BASE SPEED	1780	S.F.	1.0	P.F. @NL/FL	.035/.805	XM	4.49			
PHASE/HERTZ	3/60	AMB °C/INSUL	45/H	WK <sup>2</sup> (lb-ft <sup>2</sup> )	9.7					


**RATED FULL LOAD DATA**

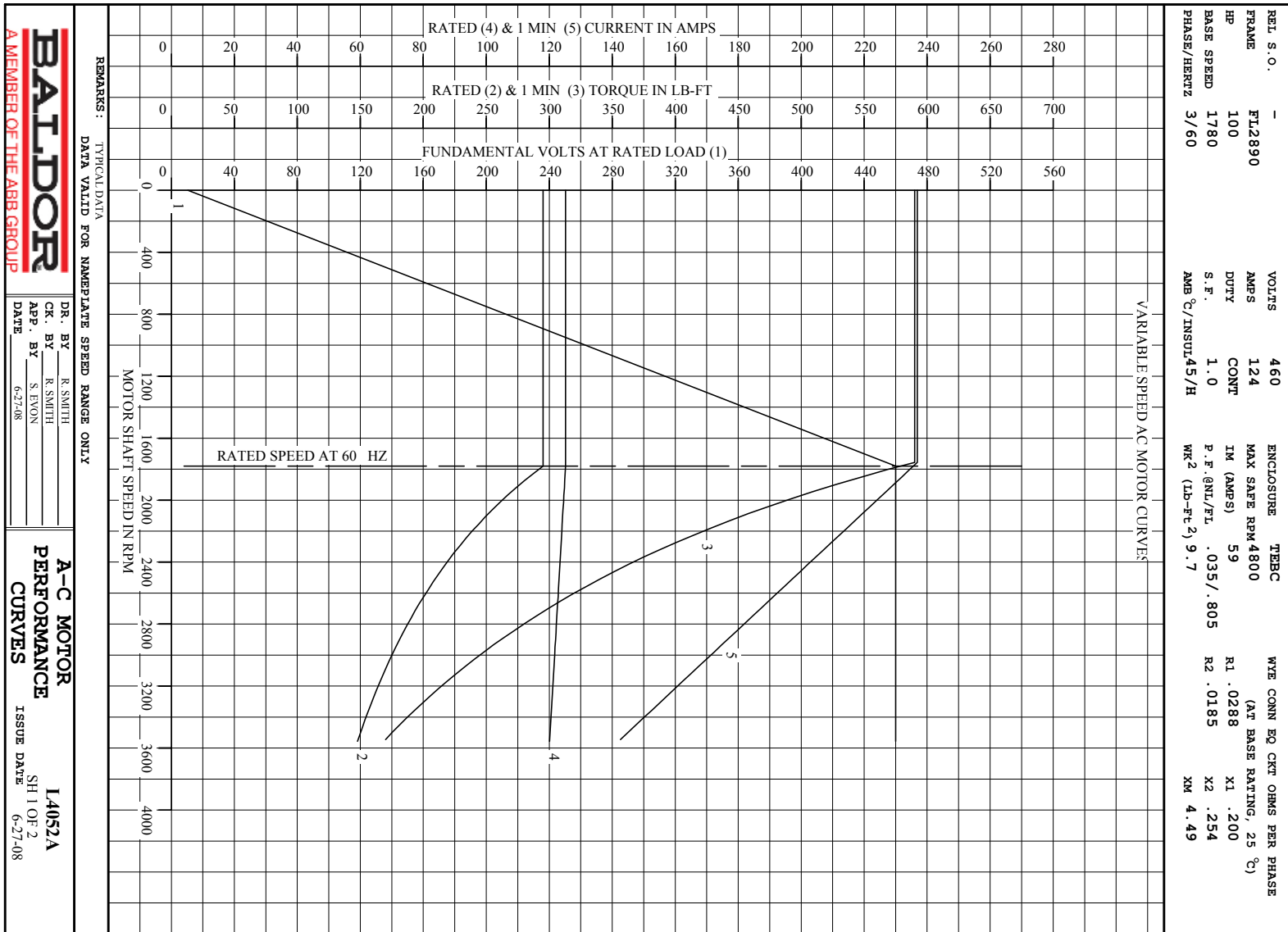
	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1781	100	295	460	60	125
MAX SPEED	3556	100	148	460	120	120
MIN SPEED	0	0	295	10.5	.648	125

**LOAD PERFORMANCE AT BASE SPEED**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	58.3
1/4	1795	25.0	73	460	60	65.8
1/2	1791	50.1	147	460	60	81.0
3/4	1786	74.9	220	460	60	101
FULL LOAD	1781	100	295	460	60	125
O/L	1756	197	590	460	60	237

REMARKS: TYPICAL DATA

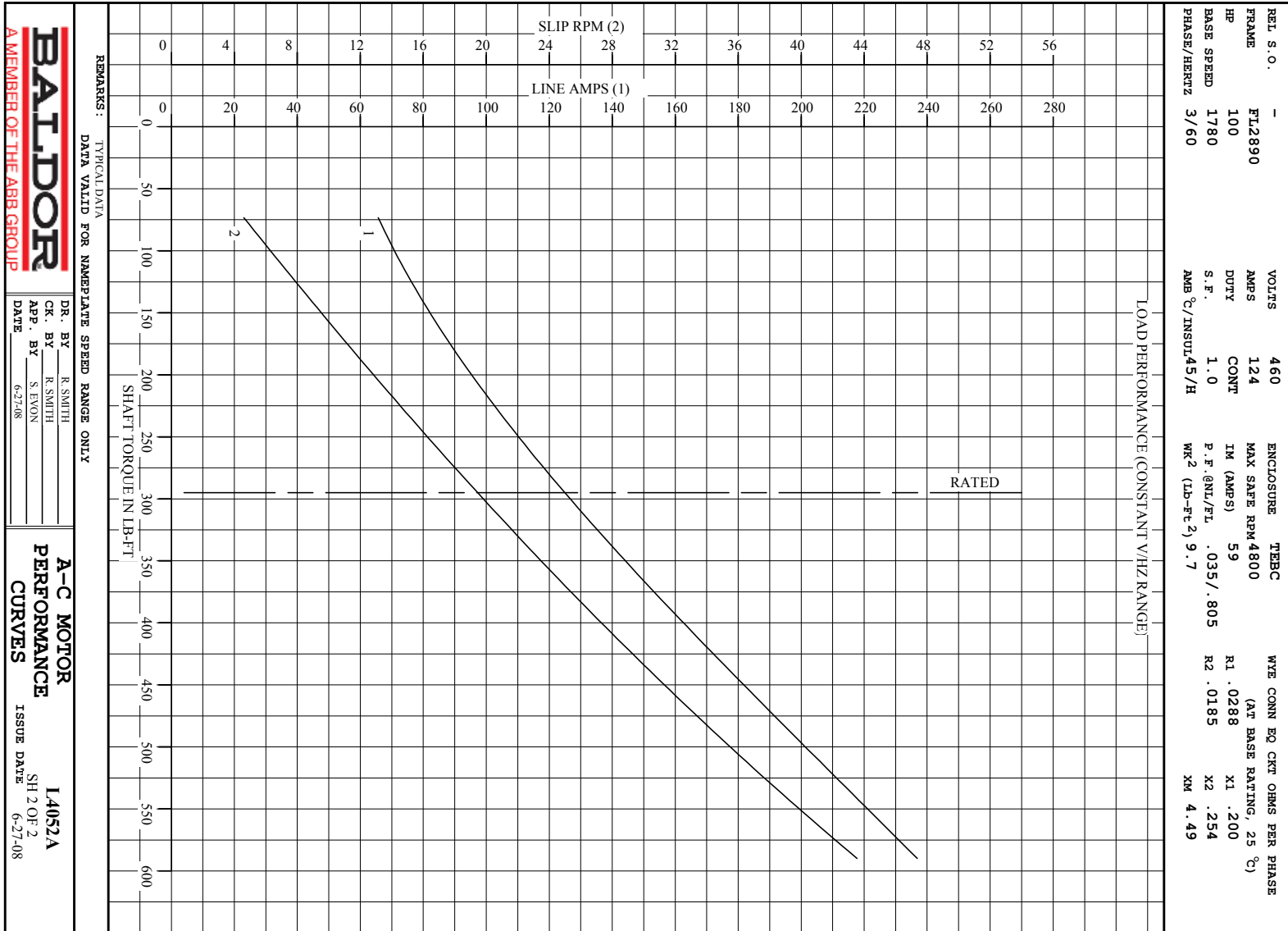
 <p><b>A MEMBER OF THE ABB GROUP</b></p>	DR. BY	R. SMITH	<p><b>A-C MOTOR</b> <b>PERFORMANCE</b> <b>DATA</b></p> <p>ISSUE DATE 6-27-08</p>
	CR. BY	R. SMITH	
	APP. BY	S. EVON	
	DATE	6-27-08	

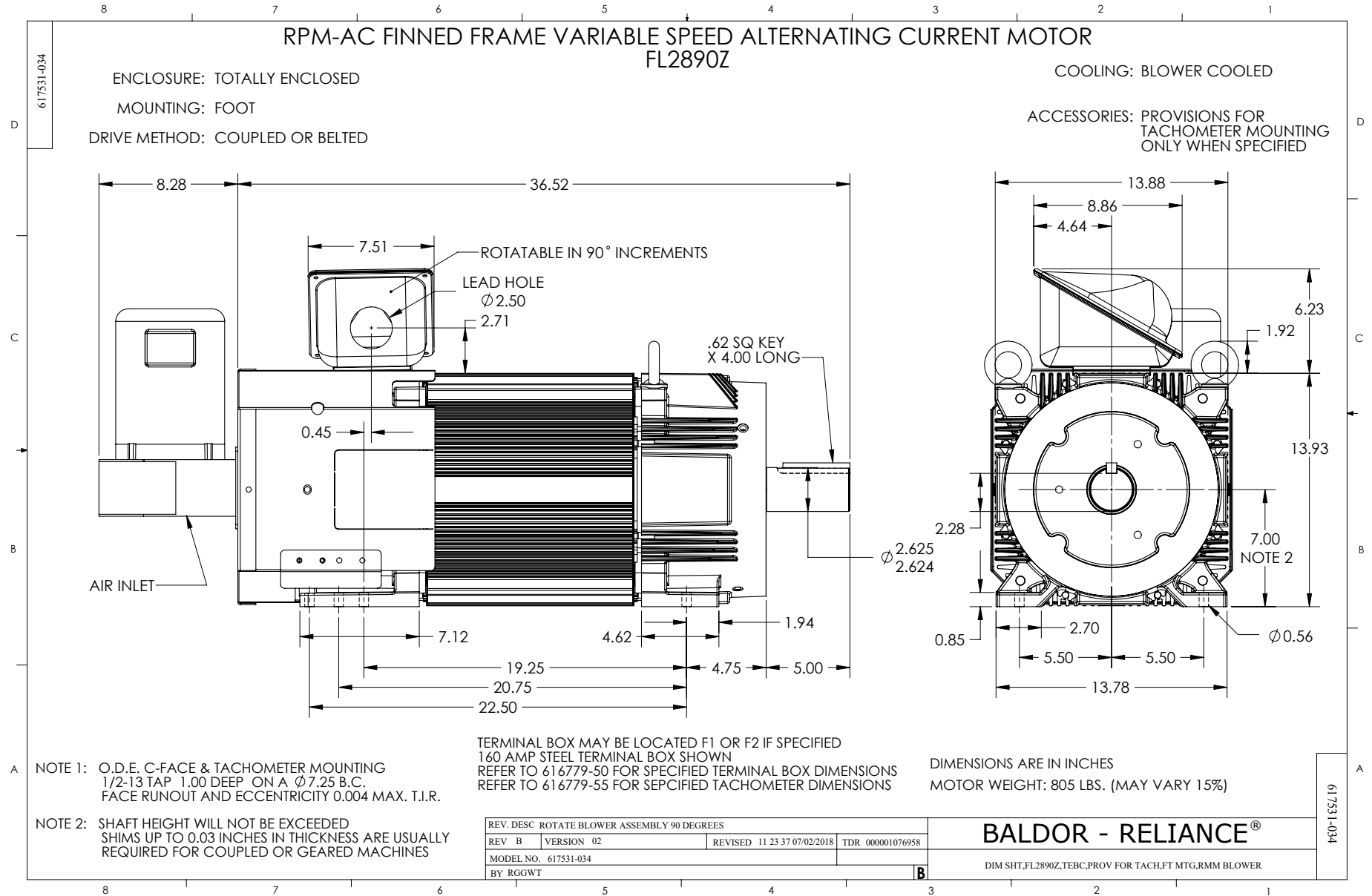


**BALDOR**  
A MEMBER OF THE ABB GROUP

DR. BY R. SMITH  
CR. BY R. SMITH  
APP. BY S. EVON  
DATE 6-27-08

**A-C MOTOR**  
**PERFORMANCE**  
**CURVES**  
ISSUE DATE 6-27-08  
**14052A**  
SH 1 OF 2



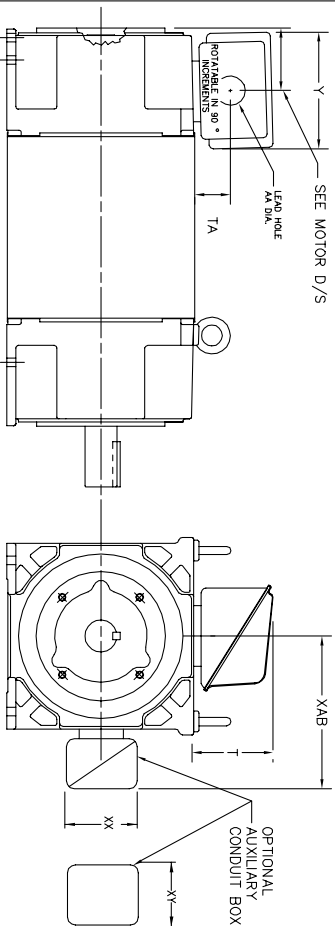


616779-050

# 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 STRIP	AMPS	C/BOX	Y	TA	T	AA
FL180	STEEL	N	40	706320003A	5.00	1.62	3.00	1.12
FL180	STEEL	Y/N	7/5	706320005A	6.12	2.38	4.38	1.75/2.00
FL180	STEEL	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	706320016A	9.00	4.12	8.44	4.59
FL210 & RL210	CAST IRON	N	110	075460062B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310225R	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	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

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	075460062B	7.25	2.50	5.25	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320013A	10.50	4.88	9.00	4.0 TAP
FL250 & RL250	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL250 & RL250	MILL	Y	160	706310225R	7.75	2.30	4.40	PG29/PG16
FL250 & RL250	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
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	702658001C	14.62	7.56	12.70	5.00
FL280 & RL280	CAST IRON	N	140	706320012B	9.25	4.81	8.56	3.0 TAP
FL280 & RL280	CAST IRON	N	210	706320013A	10.50	4.88	9.00	4.0 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	160	706310056B	9.00	3.06	5.40	PG36/PG16
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
FL180/TL180/RL280/VL132	7.38	4.25	4.25	603C007-26-A	FL210/TL180/RL280/VL132	10.88	8.00	8.00	706310-3-B
FL180/TL180/RL280/VL160	8.44	4.25	4.25	603C007-26-A	FL250/TL180/RL280/VL160	11.88	8.00	8.00	706310-3-B
FL280/TL180/RL280/VL180	9.12	4.25	4.25	603C007-26-A	FL280/TL180/RL280/VL180	12.62	8.00	8.00	706310-3-B

- (1) TAP CONDUIT
- (2) TAP PIPE TAP
- (3) CUSTOMER TO PROVIDE HOLE FOR CONDUIT.
- (4) 2" DN -5A or 1" TAP DN -4C

TERMINAL BOX CAN BE KEPT FOR LEAD OUTLET AT TOP SIDES OR BOTTOM TERMINAL BOX CAN BE KEPT FOR LEAD OUTLET AT TOP SIDES OR BOTTOM SIDE WHEN SPECIFIED. DIM LOCATED ON TOP WHEN SPECIFIED.

050-667919

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

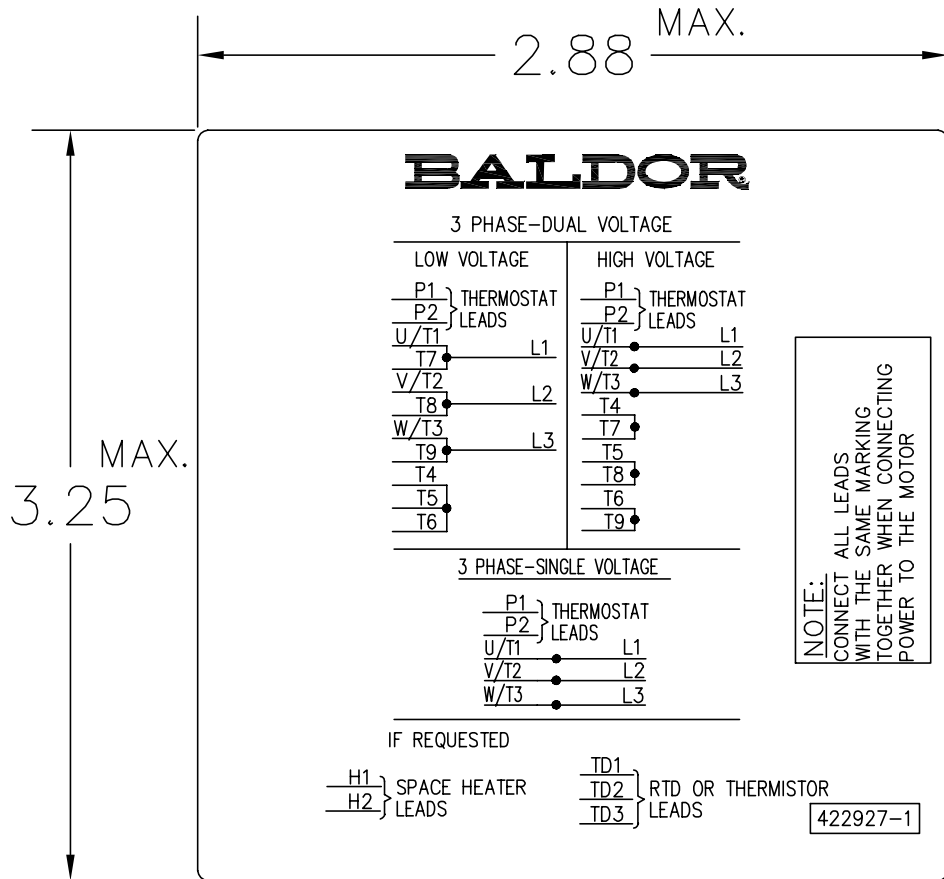
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REV. LTR: E	REVISED: 07: 27: 52 12/18/2018	BY: RGGWT
FILE: \RGG\00003\692		
MTL: -		

**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

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