

BALDOR® • RELIANCE 

Product Information Packet

IDBRPM21404

40 HP 1750 TEBC FL2173 460 V

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	L3311A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617525-001	Poles:	04	Created Date:	04-10-2015
Base:		Eff. Date:	04-13-2015	Leads:			

Specs			
Catalog Number:	IDBRPM21404		
Enclosure:	TEBC		
Frame:	FL2173Z		
Frame Material:	Exposed Laminations		
Output @ Frequency:	40.000 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:	No Grease		
Current @ Voltage:	51.000 A @ 460.0 V		
Duty Rating:	CONT		
Feedback Device:	NO FEEDBACK		
Frame Prefix:	FL		
Heater Indicator:	No Heater		
Insulation Class:	H		
Mounting Arrangement:	F3		

Product Family:	General Industrial		
Pulley End Bearing Type:	Ball		
Pulley Face Code:	Standard		
Shaft Ground Indicator:	No Shaft Grounding		
Shaft Rotation:	Reversible		
Motor Standards:	NEMA		
Thermal Device - Bearing:	NONE (OLD)		
Thermal Device - Winding:	Normally Closed Thermostat		

		DUTY	HP	RPM	AMPS	VOLTS	HZ				
	CONT		40	1770	51	460	60				
	CONT		40	3525	49	460	120				
CAT.NO.	IDBRPM21404			SPEC. NO.		P21T0285					
SER.NO.				FR	FL 2173Z	INSUL	H				
PH.	3			MAX SAFE SPEED	5000	AMB.	40				
DESIGN NO.	L3311A			TYPE		ENCL.	TEAO-BC				
S.F.	1.0			D.E. BRG.	50BC03JPP30A						
ENCL MOD				O.D.E. BRG.	45BC02JPP30A						
										MIN. AMB.	0

Parts List		
Part Number	Description	Quantity
WS286743	WS P21T0285	1.000 EA
RA282951	RA P21T0285	1.000 EA
000613006NS	RPM AC WITH CERTIFIED LOGO	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
000692000NH	LABEL DIRECTION AIR FL	1.000 EA
036170004EA	ROUND HEAD DRIVE SCREW	4.000 EA
411716004A	219P039 - 219P039 - LA	1.000 EA
418018122A	LABEL	2.000 EA
418056062B	NP AC BLOWER DATA	1.000 EA
422927001	C/D LABEL	1.000 EA
036100080KA	M10-1.50X 80MM HXSOCHDCS	3.000 EA
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 EA
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 EA
036610010AB	MHSLW M10 PLATED	4.000 EA
400638001AB	WASHER SPRING - 210	1.000 EA
418057491A	LIFTING LUG	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
609830005ACH	STUD FRAME .375X13 LG	4.000 EA
807581003AAA	BRKT,DE,FL210	1.000 EA
807581004AAB	BRKT,FL210,DE 807581-2WCB	1.000 EA
032018004AK	HHCS 1/4-20X1/2 PLATED	2.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	3.000 EA
036000020HB	HHCS M6-1.0X20MM PLATED	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
036620008AB	M6 METRIC EXT LOCKWASHER	1.000 EA
065564000B	GASK 250-280	1.000 EA
075452000B	C/BOX, PAINTED 210-250	1.000 EA
075453000A	CBOXC, PAINTED 250-280	1.000 EA
406673002C	.75 CAP PLUG	1.000 EA
415000103A	T/LUG #14AWG-#4AWG W/HOLE FOR .250 BOLT	1.000 EA
417733004T	GASKET CONDUIT BOX	2.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 EA
418057260A	SCREW PHILLIPS PAN HD	4.000 EA
418057373A	SCREW SHEET METAL	7.000 EA
417077-141	BLWR MTR	1.000 EA
708533003A	PLATE, BTM FAN/BLOWER	2.000 EA
708533050A	COVER, FAN	1.000 EA
708533051A	GRILL, FAN COVER	1.000 EA
000640000P	TAG WINDING THERMOST	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA
034180020GA	KEY 1/2X1/2X2-1/2 L	1.000 EA

REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE	CONN EQ	CKT OHMS	PER PHASE	
FRAME	FL2173	AMPS	51	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)	R1	.108	X1	.495
HP	40	DUTY	CONT	IM (AMPS)	20	R2	.0747	X2	.632	
BASE SPEED	1770	S.F.	1.0	P.F. @NL/FL	.060/.820	XM	11.5			
PHASE/HERTZ	3/60	AMB °C/INSUL	50/H	WK ² (lb-ft ²)	2.64					


RATED FULL LOAD DATA

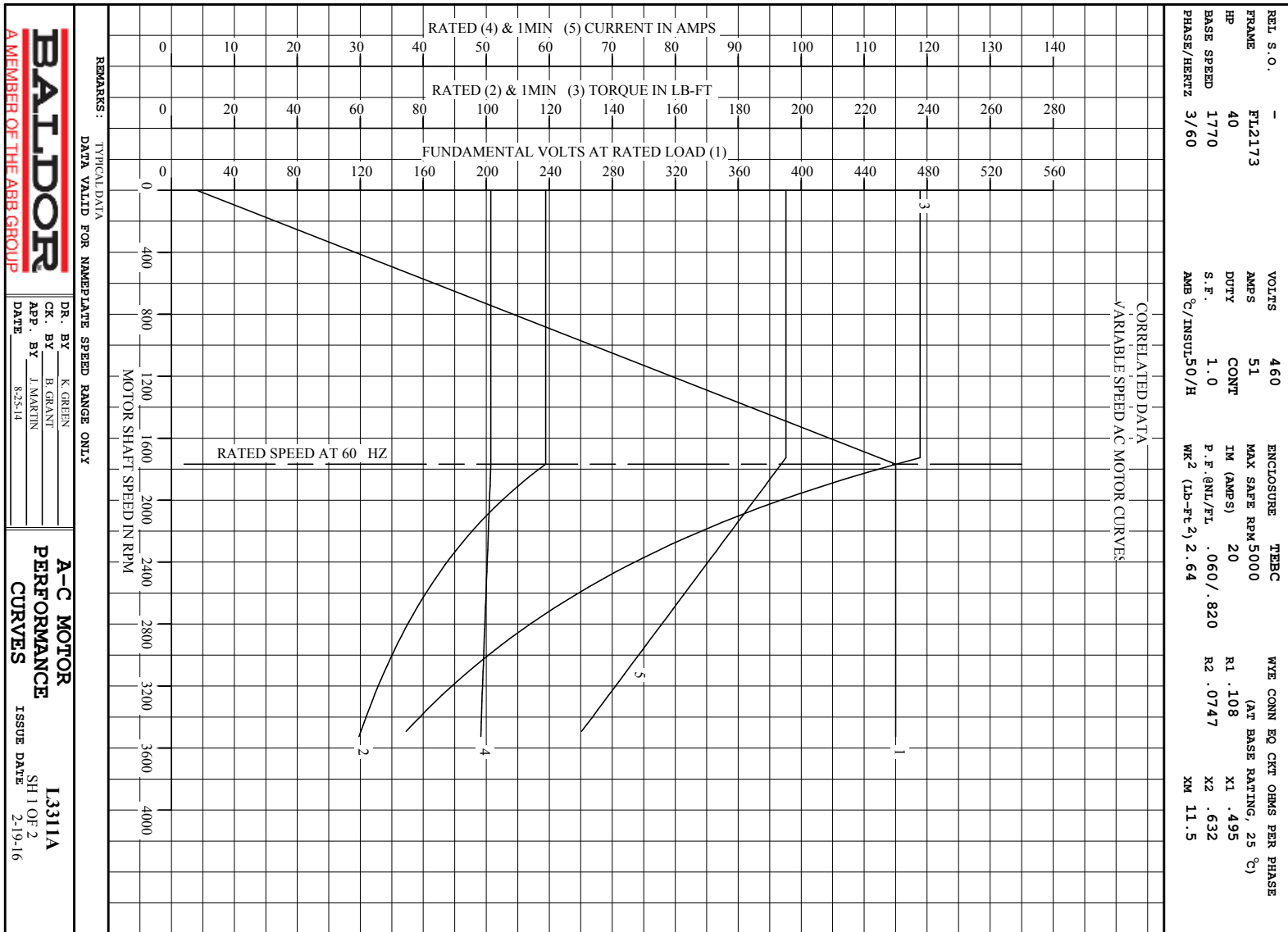
	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1768	40.0	119	460	60	50.7
MAX SPEED	3526	40.0	60	460	120	49.1
MIN SPEED	0	0	119	16.1	1.08	50.7

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	22.9
1/4	1792	10.0	29	460	60	25.9
1/2	1785	20.0	59	460	60	32.3
3/4	1776	30.0	89	460	60	40.8
FULL LOAD	1768	40.0	119	460	60	50.7
O/L	1726	78.1	238	460	60	97.6

REMARKS: TYPICAL DATA
CORRELATED DATA

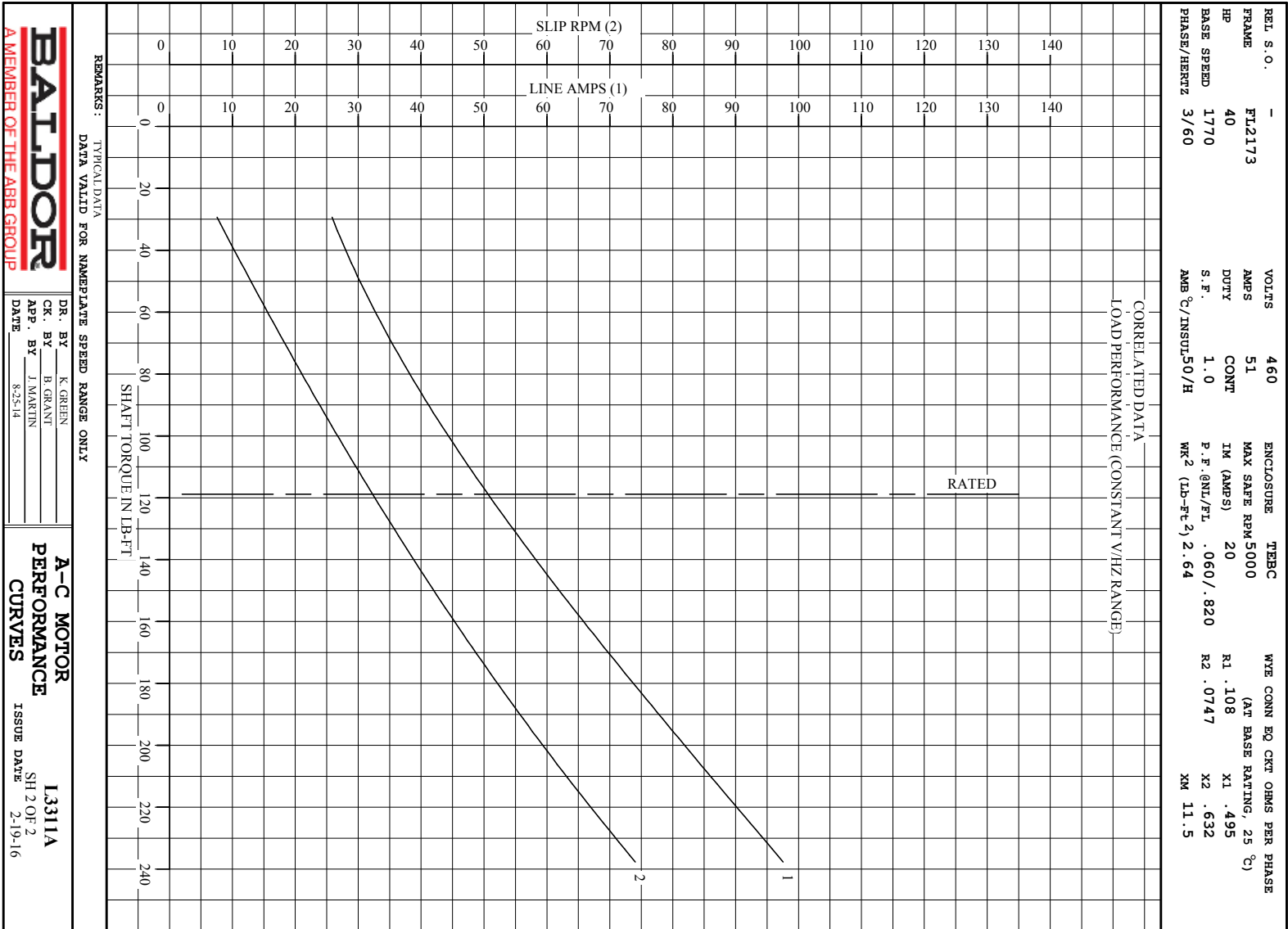
 <p>A MEMBER OF THE ABB GROUP</p>	DR. BY	K. GREEN	<p>A-C MOTOR PERFORMANCE DATA</p> <p>I3311A 2-19-16</p>
	CR. BY	B. GRANT	
	APP. BY	J. MARTIN	
	DATE	8-25-14	



BALDOR
A MEMBER OF THE ABB GROUP

DR. BY K GREEN
CR. BY B GRANT
APP. BY J MARTIN
DATE 8-25-14

A-C MOTOR
PERFORMANCE
CURVES
I3311A
SH 1 OF 2
ISSUE DATE 2-19-16



BALDOR
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DR. BY K GREEN
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A-C MOTOR
PERFORMANCE
CURVES

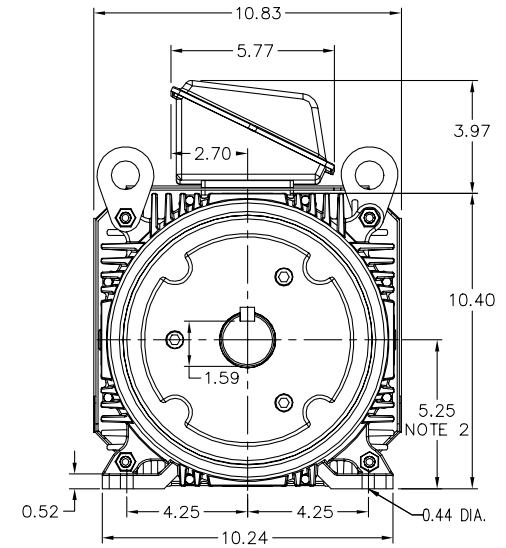
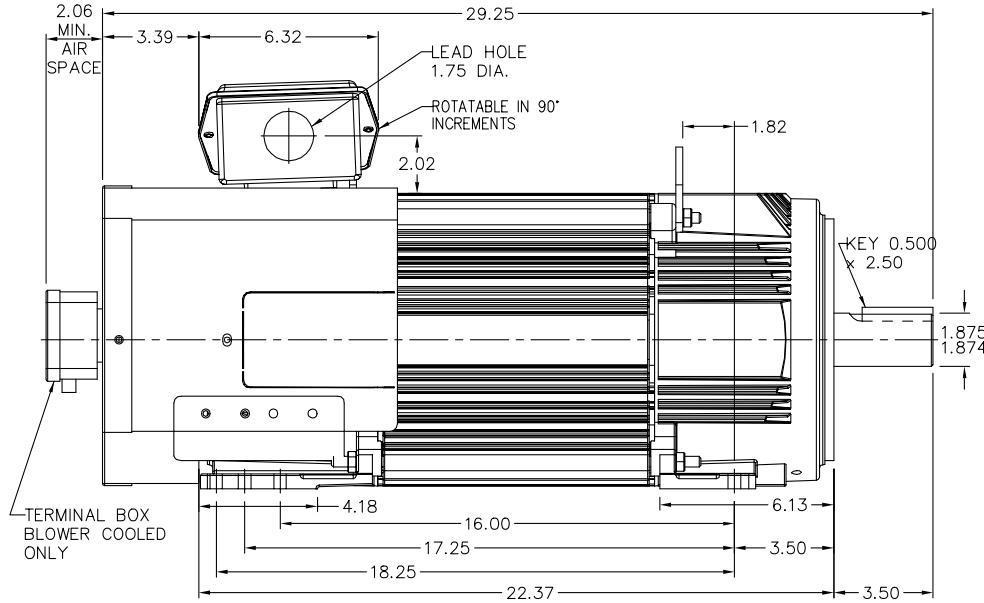
I3311A
SH 2 OF 2
ISSUE DATE 2-19-16

617525-001

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR
FL2173Z

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT
DRIVE METHOD: COUPLED OR BELTED

COOLING: BLOWER COOLED or FAN COOLED
ACCESSORIES: PROVISIONS FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED



NOTE 1: C-FACE & TACHOMETER MOUNTING
1/2-13 TAP, 1.00 DEEP, ON A 7.25 DIA. BOLT CIRCLE
FACE RUNOUT AND ECCENTRICITY 0.004 MAX. T.I.R.

NOTE 2: SHAFT HEIGHT WILL NOT BE EXCEEDED
SHIMS UP TO 0.03 INCHES IN THICKNESS ARE USUALLY
REQUIRED FOR COUPLED OR GEARED MACHINES

TERMINAL BOX MAY BE LOCATED F1 OR F2 IF SPECIFIED
61 AMP STEEL TERMINAL BOX SHOWN
REFER TO 616779-50 FOR SPECIFIED TERMINAL BOX DIMENSIONS
REFER TO 616779-55 FOR SPECIFIED TACHOMETER DIMENSIONS

MOTOR WEIGHT: 355 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

617525-001

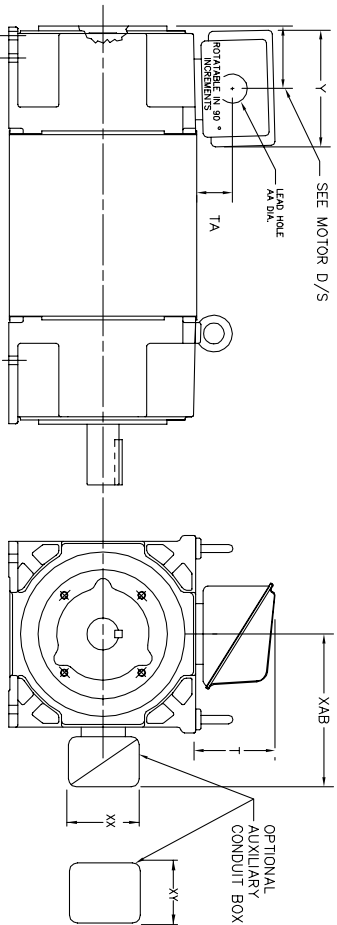
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: ASSIGNED TO BUSLOAD		
REV. LTR: -	VERSION: 00	TDR: 000000480001
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MTL: -		

BALDOR • DODGE • RELIANCE
DIM SHT FL2173Z RPM AC TEBC/FC PROV FOR TACH WHEN SPEC
SH 1 of 1

INDUSTRIAL ALTERNATING CURRENT MOTORS RPM AC

STEEL, CAST IRON, MILL AND TERMINAL BOARD CONDUIT BOX DIMENSIONS
NEMA FRAMES FL210 thru FL280 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	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	0754520008	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	0754600628	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	CAST IRON	N	210	0754500092B	7.25	2.50	5.25	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320015K	10.50	4.88	9.00	4.0 TAP
FL16 & RDL16	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29 /PG16
FL250 & RL250	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36 /PG16
FL16 & RDL16	MILL	Y	400	7063100638	14.39	7.43	12.15	BLANK

FL250 & RL250	STEEL	N	61	0754520008	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	0754600628	7.25	2.50	5.25	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320015K	10.50	4.88	9.00	4.0 TAP
FL16 & RDL16	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29 /PG16
FL250 & RL250	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36 /PG16
FL16 & RDL16	MILL	Y	400	7063100638	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	7063200128	9.25	4.81	8.58	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
FL18 & RDL18	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29 /PG16
FL18 & RDL18	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36 /PG16
FL280 & RL280	MILL	Y	400	7063100638	14.39	7.43	12.15	BLANK

FRAME SIZE	OPTIMAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)								
	XAB	XX	XY	PART NUMBER	FRAME SIZE	PART NUMBER			
FL180/FL180/RL280/FL180	7.38	4.25	4.25	603C007-26-A	FL180/FL180/RL280/FL180	10.88	8.00	8.00	706310-3-B
FL210/FL210/RL280/FL210	8.44	4.25	4.25	603C007-26-A	FL210/FL210/RL280/FL210	11.88	8.00	8.00	706310-3-B
FL250/FL250/RL280/FL250	9.12	4.25	4.25	603C007-26-A	FL250/FL250/RL280/FL250	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 SIZES OR BOTTOM SIZES AT LEAD INLET. LEAD INLET SIZES SPECIFIED IN DIM LOCATED ON TYP WHEN SPECIFIED. DR C-1 KNOTLINE IS SPECIFIED.

050-667919

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

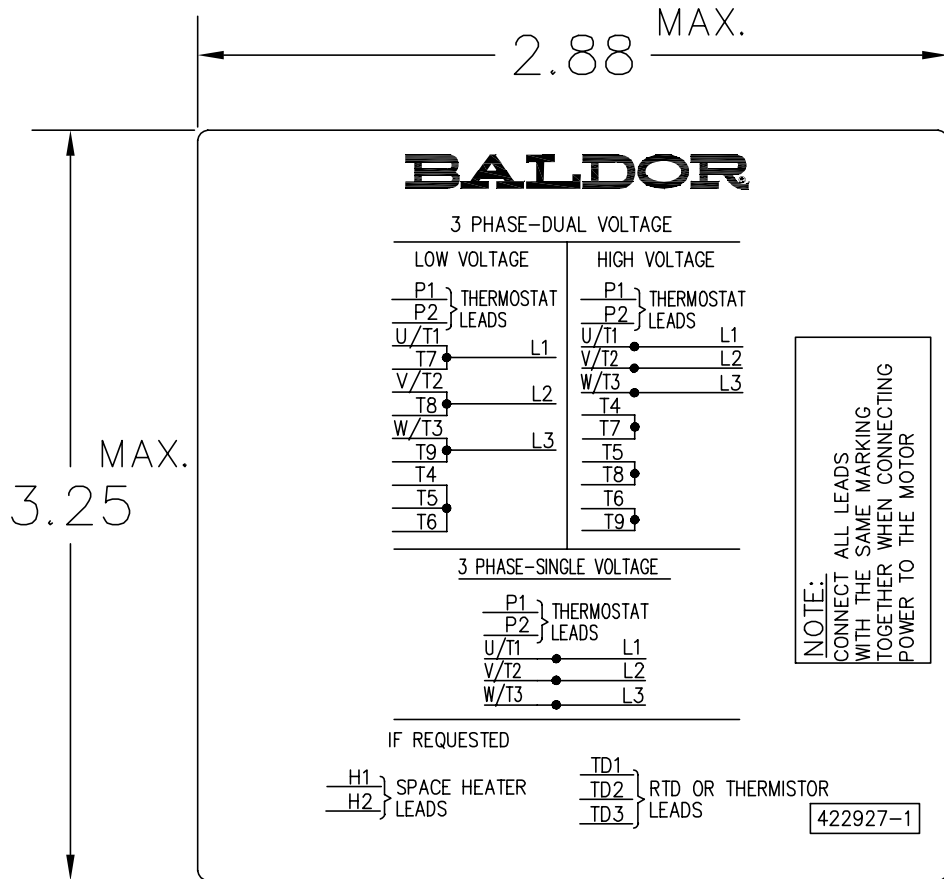
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MTL: 1		

BALDOR

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.

NOTE:
CONNECT ALL LEADS
WITH THE SAME MARKING
TOGETHER WHEN CONNECTING
POWER TO THE MOTOR

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

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