

# **ABB BALDOR RELIANCE III**

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## **Customer information packet** ZDBRPM18154C

15HP, 1750RPM, 3PH, 60HZ, 1844C, TEBC, FOOT

**Specifications**

<b>Enclosure</b>	TEAO
<b>Frame</b>	FL1844CZ
<b>Frame Material</b>	Aluminum
<b>Frequency</b>	60.00 Hz
<b>Output @ Frequency</b>	15.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1800 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	460.0 V @ 60 HZ
<b>Agency Approvals</b>	CCSA US
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Current @ Voltage</b>	21.000 A @ 460.0 V
<b>Duty Rating</b>	CONT
<b>Feedback Device</b>	TACHOMETER
<b>Frame Prefix</b>	FL
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	21.0 a
<b>Insulation Class</b>	H
<b>Motor Standards</b>	NEMA
<b>Mounting Arrangement</b>	F3
<b>Overall Length</b>	23.89 IN
<b>Product Family</b>	General Industrial
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	1.625 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	1760 rpm
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	Normally Closed Thermostat

**Part Detail**

<b>Revision</b>	B
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	L3220A
<b>Layout</b>	617232-329
<b>Eff. date</b>	12-21-2021
<b>CD Diagram</b>	422927-001
<b>Poles</b>	04
<b>Leads</b>	
<b>Proprietary</b>	False
<b>Created date</b>	04-10-2015

**Nameplate**

**000613006MY**

	<b>DUTY</b>	<b>HP</b>	<b>RPM</b>	<b>AMPS</b>	<b>VOLTS</b>	<b>HZ</b>	
	CONT	15	1760	21	460	60	
	CONT	15	3660	19	460	125	
<b>CAT.NO.</b>	ZDBRPM18154C		<b>SPEC. NO.</b>	P18T0372			
<b>SER.NO</b>		<b>FR</b>	FL 1844CZ	<b>INSUL</b>	H		
<b>PH.</b>	3	<b>MAX SAFE SPEED</b>	7200	<b>AMB.</b>	40	<b>MIN. AMB.</b>	-25
<b>DESIGN NO.</b>	L3220A	<b>TYPE</b>		<b>ENCL.</b>	TEAO-BC		
<b>S.F.</b>	1.0	<b>D.E. BRG.</b>	45BC02JPP30A				
<b>ENCL MOD</b>		<b>O.D.E. BRG.</b>	35BC02JPP30A				

FRAME	FL1844	AMPS	21	MAX SAFE SPEED	7200				
HP	15	DUTY	CONT	IM (AMPS)	12	R1	.348	X1	1.18
BASE SPEED	1760	S.F.	1.0	P.F. @NL / FL	.061/.776	R2	.245	X2	1.31
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	.645			XM	22.9

**RATED FULL LOAD DATA**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1759	15.0	45	460	60	20.7
MAX SPEED	3657	15.0	22	460	125	18.4
MIN SPEED	0	0	45	20.7	1.36	20.7

**LOAD PERFORMANCE AT BASE SPEED**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	11.7
1/4	1791	3.76	11	460	60	12.7
1/2	1781	7.50	22	460	60	14.4
3/4	1770	11.3	33	460	60	17.3
FULL LOAD	1759	15.0	45	460	60	20.7
0/L	1706	29.1	90	460	60	38.1

REMARKS:  
TYPICAL DATA



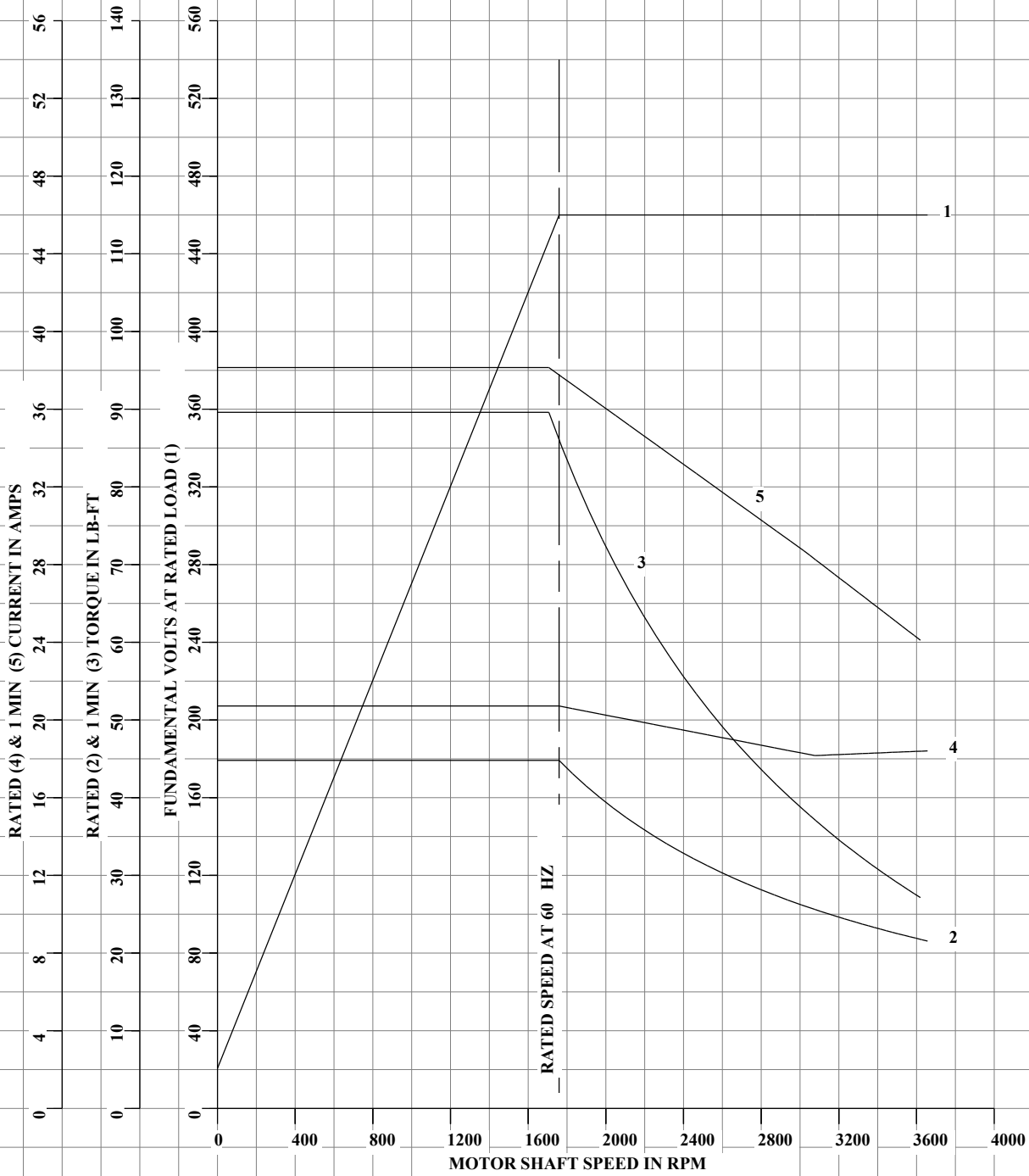
DRAWN BY: B. GRANT  
CHECKED BY: B. GRANT  
APPROVED BY: T. CUFR  
DATE: 3-7-06

AC MOTOR  
PERFORMANCE  
DATA

**L3220A**  
ISSUE DATE 2-13-20

FRAME	FL1844	VOLTS	460	ENCLOSURE	TEBC	WYE CONNECTIONS PER PHASE (AT BASE RATING, 25°C)			
HP	15	AMPS	21	MAX SAFE SPEED	7200	R1	.348	X1	1.18
BASE SPEED	1760	DUTY	CONT	IM (AMPS)	12	R2	.245	X2	1.31
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.061/.776			XM	22.9
		AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	.645				

VARIABLE SPEED AC MOTOR CURVES



TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



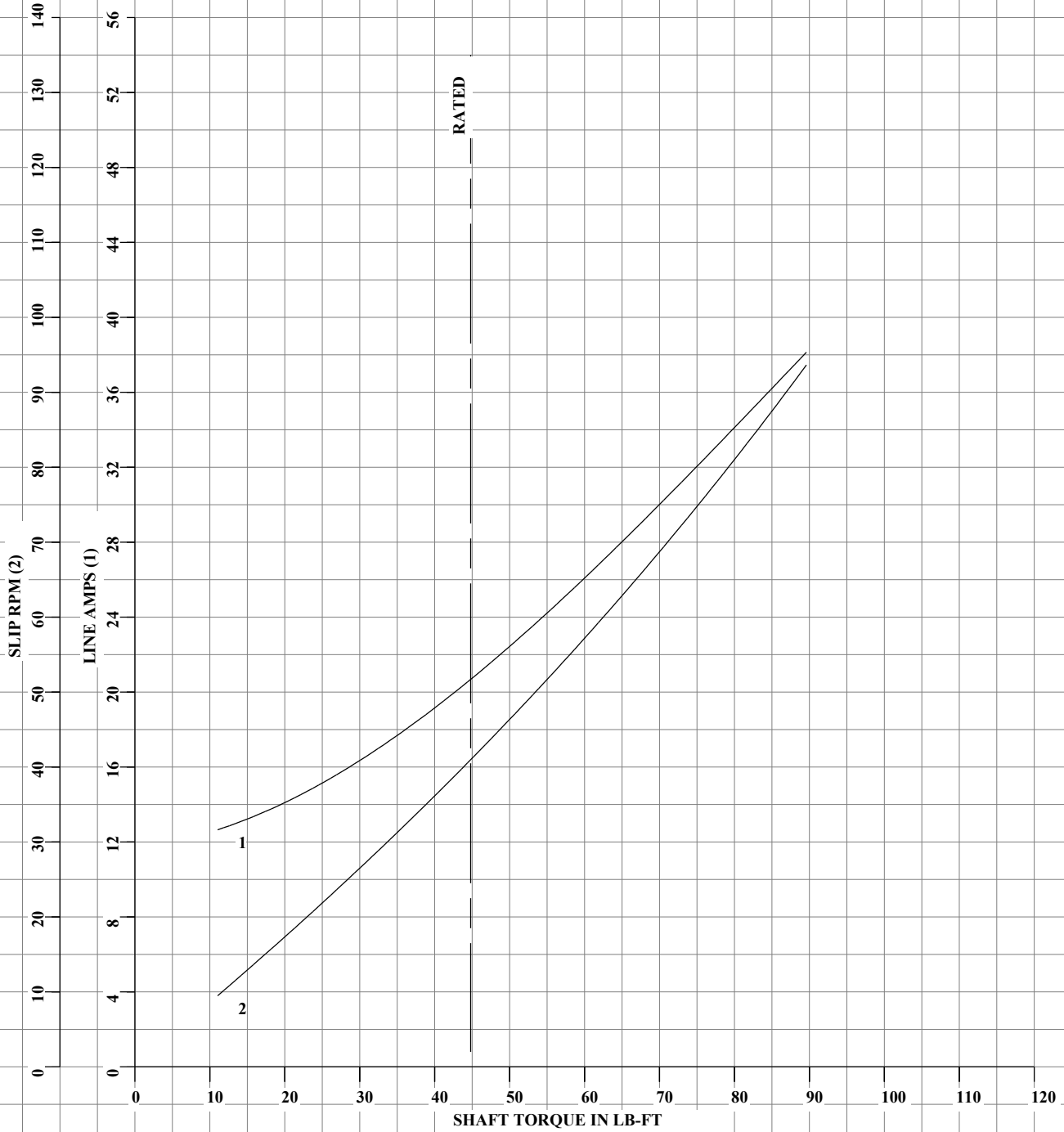
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AC MOTOR  
 PERFORMANCE  
 DATA

**L3220A**  
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FRAME	FL1844	VOLTS	460	ENCLOSURE	TEBC	WYE CONNECTIONS PER PHASE			
HP	15	AMPS	21	MAX SAFE SPEED	7200	(AT BASE RATING, 25°C)			
BASE SPEED	1760	DUTY	CONT	IM (AMPS)	12	R1	.348	X1	1.18
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.061/.776	R2	.245	X2	1.31
		AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	.645			XM	22.9

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



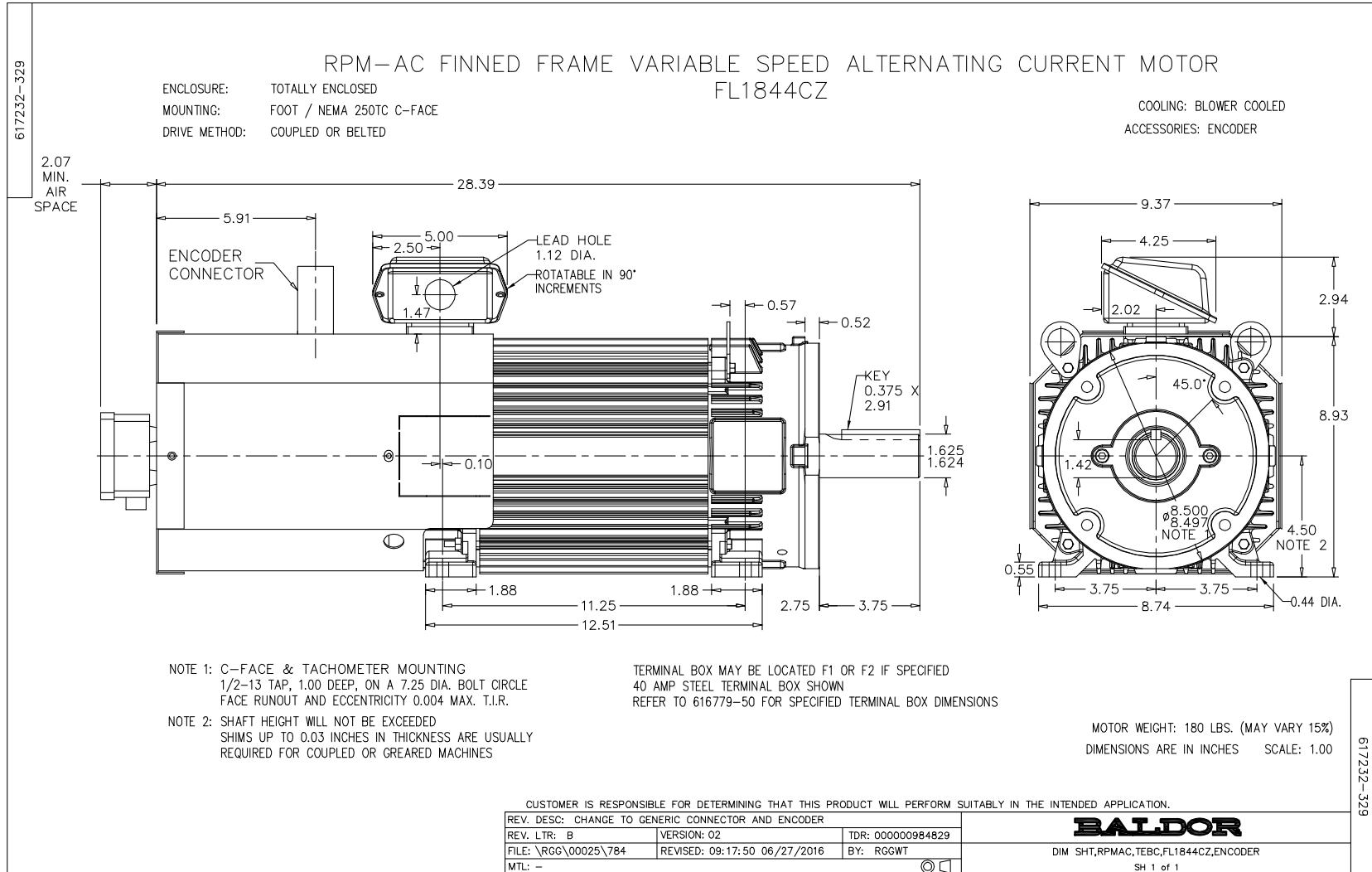
TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



DRAWN BY: B. GRANT  
 CHECKED BY: B. GRANT  
 APPROVED BY: T. CUFR  
 DATE: 3-7-06

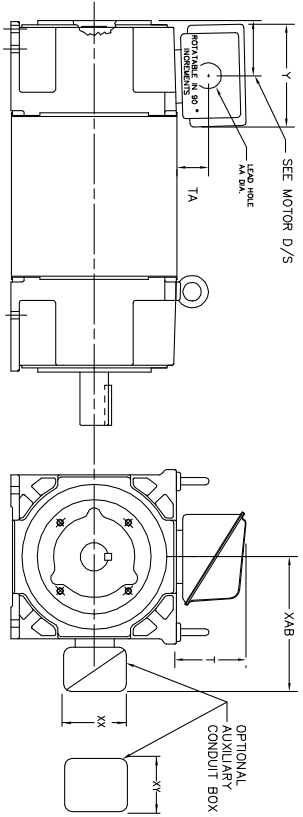
AC MOTOR  
 PERFORMANCE  
 DATA

**L3220A**  
 ISSUE DATE: 2-13-20



**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	N	75	706320003A	6.12	2.38	4.38	1.75/2.00
FL180	CAST IRON	N	208	706320007A	6.82	2.00	7.00	2.50/2.00
FL180 & FDL11	CAST IRON	Y/N	40	706320004A	5.75	2.38	4.38	1.50/1.75
FL180 & FDL11	MILL	Y	100	706310028A	7.75	2.30	4.40	PC39/PG16

FL210 & RL210	STEEL	N	61	0754520009	6.34	2.00	4.12	1.75
FL210 & RL210	STEEL	N	121	0754520010	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	125	0754520011	7.69	2.38	5.25	1.94
FL210 & RL210	CAST IRON	N	110	0754600028	7.20	2.16	6.24	1.5 TAP
FL210 & RL210	CAST IRON	N	210	706320007A	6.50	4.88	9.00	4.0 TAP
FL210 & RL210	MILL	Y	100	7063100225A	7.75	2.30	4.40	PC39/PG16
FL210 & RL210	MILL	Y	160	706310056A	9.00	3.06	5.40	PC36/PG16
FL210 & RL210	MILL	Y/N	235	706310056B	11.42	4.00	6.72	2.50

FL250 & RL250	STEEL	N	61	0754520009	6.34	2.00	4.12	1.75
FL250 & RL250	STEEL	N	121	0754520010	7.69	2.38	5.25	1.94
FL250 & RL250	STEEL	N	125	0754520011	7.69	2.38	5.25	1.94
FL250 & RL250	CAST IRON	N	110	0754600028	7.20	2.16	6.24	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320007A	6.50	4.88	9.00	4.0 TAP
FL250 & RL250	MILL	Y	100	7063100225A	7.75	2.30	4.40	PC39/PG16
FL250 & RL250	MILL	Y	160	706310056A	9.00	3.06	5.40	PC36/PG16
FL250 & RL250	MILL	Y/N	235	706310056B	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	300	706320010A	8.00	4.13	8.44	3.00
FL280 & RL280	STEEL	N	500	706320011A	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	PC39/PG16
FL280 & RL280	MILL	Y	160	706310056B	9.00	3.06	5.40	PC36/PG16
FL280 & RL280	MILL	Y/N	235	706310057A	11.42	4.00	6.72	2.50
FL280 & RL280	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FRAME SIZE	OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)								
	XAB	XX	XY	PART NUMBER	FRAME SIZE	PART NUMBER			
FL180/FL160/FL140/FL132	7.38	4.25	4.25	602007-26-A	FL180/FL160/FL140/FL132	10.88	8.00	8.00	706310-3-B
FL250/FL180/FL160/FL140	8.44	4.25	4.25	602007-26-A	FL250/FL180/FL160/FL140	11.88	8.00	8.00	706310-3-B
FL280/FL180/FL160/FL140	9.12	4.25	4.25	602007-26-A	FL280/FL180/FL160/FL140	12.62	8.00	8.00	706310-3-B

- (1) 1/4" PIPE TAP
- (2) 1/2" PIPE TAP
- (3) CUSTOMER TO PROVIDE WIRE TYPE CONDUIT.
- (4) 2" DIA. SA OR 1" DIA. DN -40

TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.  
TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-1, V-4, V-5, V-7,  
OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

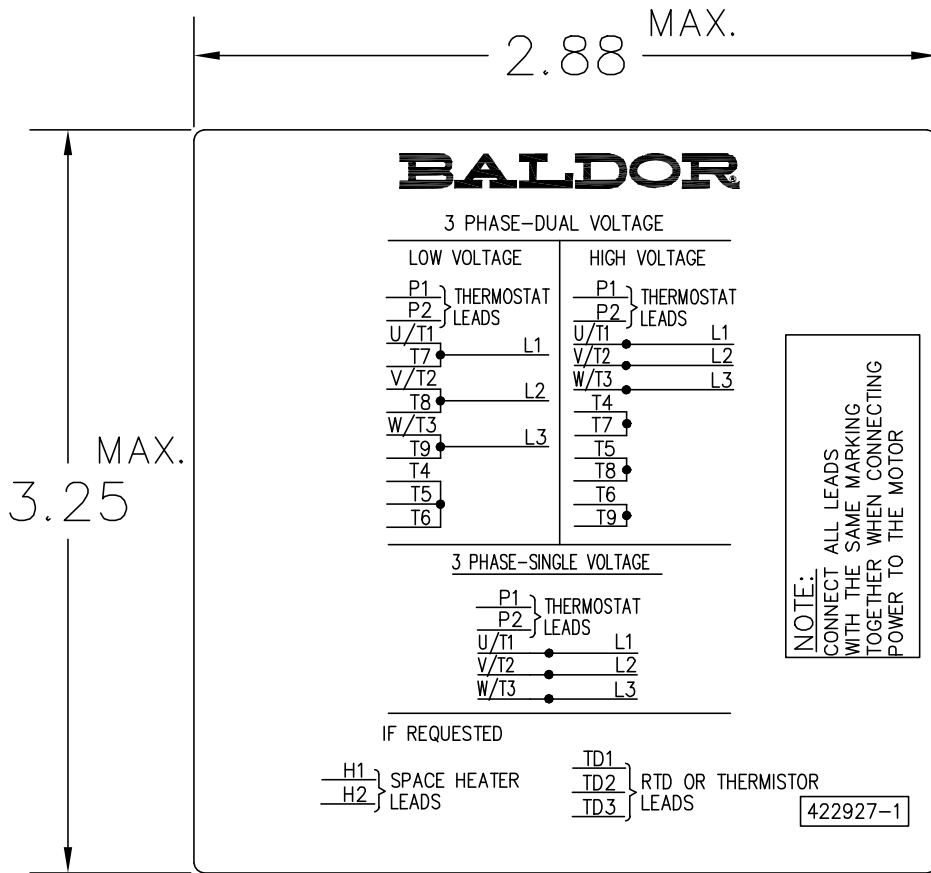
050-677919

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

REV. DESC: ADD 706310-637 & 639 BOX	VERSION: 06	TDR: 000001180260
REV. LTR: F	REVISED: 11: 08: 56 10/26/2021	BY: RCGRWM
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.

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

422927-1

422927-001

REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE		
REV. LTR: B	VERSION: 02	TDR: 00000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

**BALDOR**

EXTERNAL CONNECTION LABEL

SH 1 of 1