

ABB BALDOR RELIANCE III



Customer information packet IDNRPM18074C

7.50HP, 1775RPM, 3PH, 60HZ, 1852C, TENV, FT/2

Specifications

Enclosure	TENV
Frame	FL1852CZ
Frame Material	Aluminum
Frequency	60.00 Hz
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US UR
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	11.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	11.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	21.87 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1775 rpm
Thermal Device - Bearing	None

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L3222A
Layout	617234-013
Eff. date	01-21-2022
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	04-10-2015

Thermal Device - Winding

Normally Closed Thermostat

Nameplate

000613006MY

	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	7.5	1775	11	460	60	
	CONT	7.5	3560	9	460	120.5	
	CONT	7.5	1775	22	230	60	
	CONT	7.5	3560	18	230	120.5	
CAT.NO.	IDNRPM18074C		SPEC. NO.	P18T0349			
SER.NO		FR	FL 1852CZ	INSUL	H		
PH.	3	MAX SAFE SPEED	7200	AMB.	40	MIN. AMB.	-25
DESIGN NO.	L3222A	TYPE		ENCL.	TENV		
S.F.	1.0	D.E. BRG.	45BC02JPP30A				
ENCL MOD		O.D.E. BRG.	35BC02JPP30A				

FRAME	FL1852	AMPS	11	MAX SAFE SPEED	7200				
HP	7.5	DUTY	CONT	IM (AMPS)	6.5	R1	.425	X1	1.56
BASE SPEED	1775	S.F.	1.0	P.F. @NL / FL	.061/.742	R2	.324	X2	2.31
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	.8			XM	40.3

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1774	7.51	22	460	60	10.9
MAX SPEED	3557	7.51	11	460	120.5	9.84
MIN SPEED	0	0	22	13.0	.8780	10.9

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	6.38
1/4	1793	1.88	6	460	60	6.96
1/2	1787	3.75	11	460	60	7.92
3/4	1780	5.63	17	460	60	9.26
FULL LOAD	1774	7.51	22	460	60	10.9
0/L	1744	14.8	44	460	60	18.6

REMARKS:
TYPICAL DATA



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

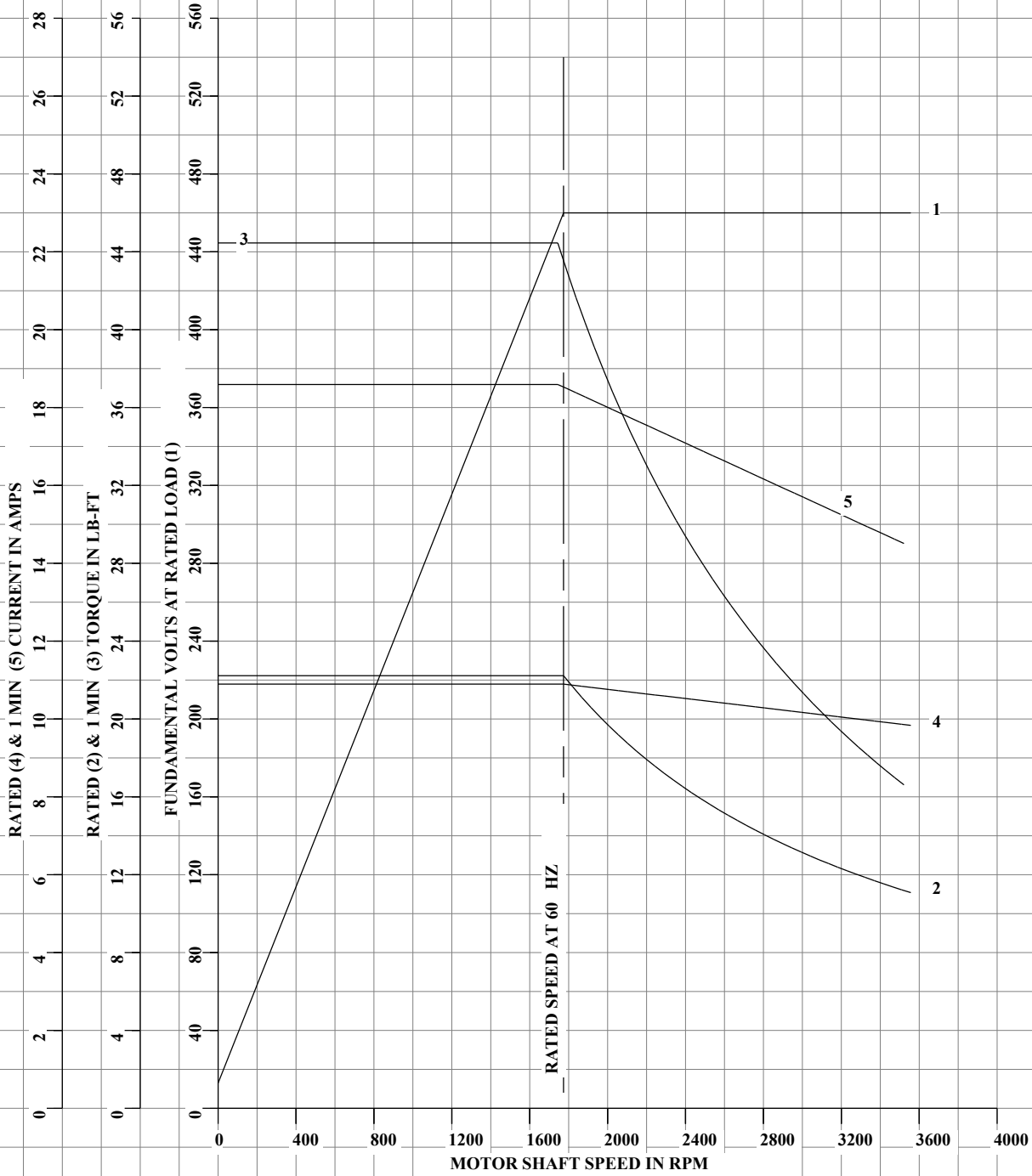
AC MOTOR
PERFORMANCE
DATA

L3222A

ISSUE DATE 3-16-20

FRAME	FL1852	VOLTS	460	ENCLOSURE	TENV	WYE CONN EQ CRT OHMS PER PHASE (AT BASE RATING, 25°C)		
HP	7.5	AMPS	11	MAX SAFE SPEED	7200	R1	.425	X1 1.56
BASE SPEED	1775	DUTY	CONT	IM (AMPS)	6.5	R2	.324	X2 2.31
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.061/.742			XM 40.3
		AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	.8			

VARIABLE SPEED AC MOTOR CURVES



TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



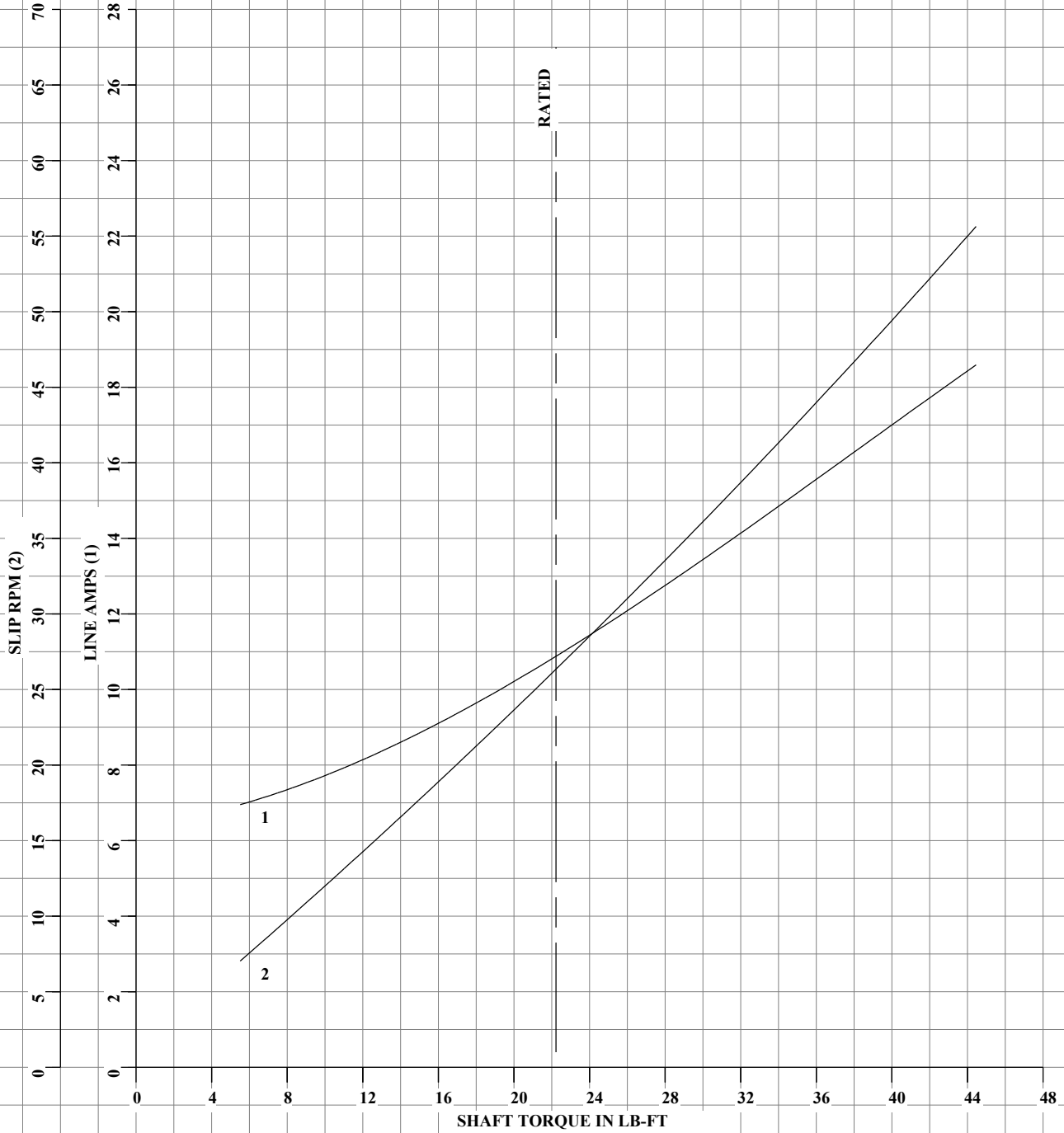
DRAWN BY: B. GRANT
 CHECKED BY: B. GRANT
 APPROVED BY: T. CUFR
 DATE: 3-7-06

AC MOTOR
 PERFORMANCE
 DATA

L3222A
 ISSUE DATE: 3-16-20

FRAME	FL1852	VOLTS	460	ENCLOSURE	TENV	WYE CONNECTIONS OHMS PER PHASE (AT BASE RATING, 25°C)			
HP	7.5	AMPS	11	MAX SAFE SPEED	7200	R1	.425	X1	1.56
BASE SPEED	1775	DUTY	CONT	IM (AMPS)	6.5	R2	.324	X2	2.31
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.061/.742			XM	40.3
		AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	.8				

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



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 APPROVED BY: T. CUFR
 DATE: 3-7-06

AC MOTOR
 PERFORMANCE
 DATA

L3222A
 ISSUE DATE: 3-16-20

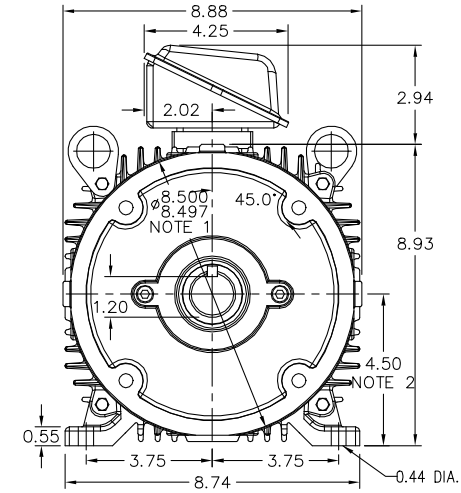
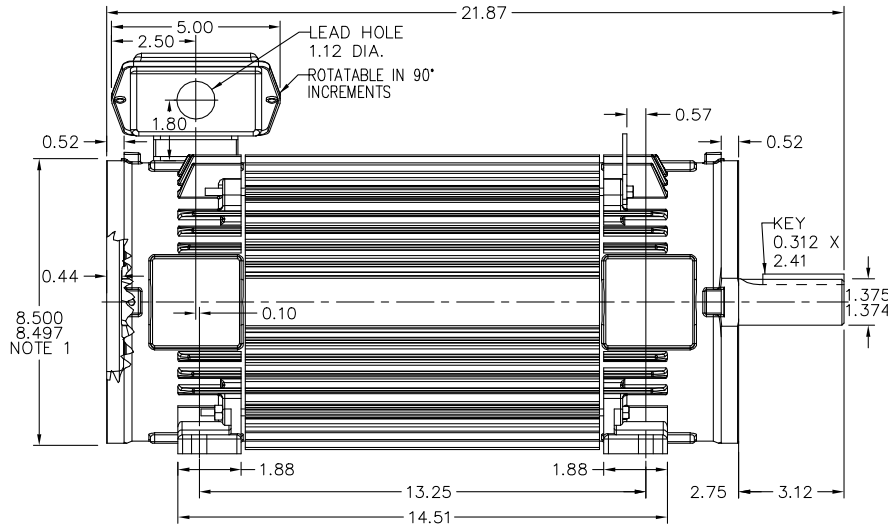
RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR
FL1852CZ

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT / NEMA 210TC C-FACE
DRIVE METHOD: COUPLED OR BELTED

COOLING: NON-VENTILATED

ACCESSORIES: PROVISIONS FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

617234-013



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 GREARED MACHINES

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

MOTOR WEIGHT: 194 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

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

REV. DESC: LOADED TO BUS		
REV. LTR: -	VERSION: 00	TDR: 000000481267
FILE: \RGG\00003\410	REVISED: 11:13:35 11/14/2008	BY: CONBAT
MTL: -		

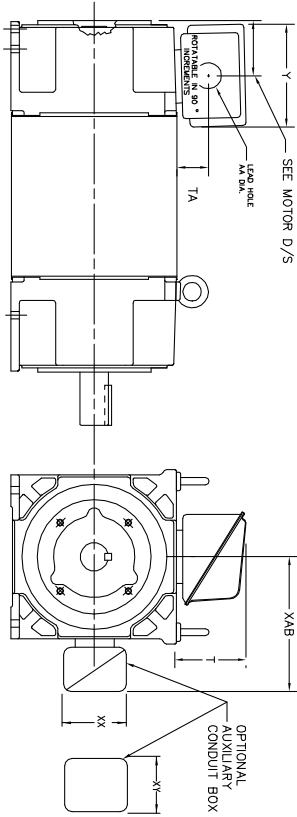
BALDOR • DODGE • RELIANCE

DIM SH 210TC RPMAC TENV FL1852CZ FT MT PROV FOR TACH

SH 1 of 1

617234-013

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	706320004B	5.75	2.38	4.38	1.50/1.50
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	336	706320016A	9.00	4.12	8.42	4.89
FL210 & RL210	CAST IRON	N	110	075460062B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	7063100229A	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	706310058B	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	336	706320016A	9.00	4.12	8.42	4.89
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	7063100229A	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	706310058B	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	706320029A	7.25	3.50	7.06	2.50
FL280 & RL280	STEEL	N	309	706320018	9.00	4.12	8.42	4.89
FL280 & RL280	STEEL	N	500	70256001C	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	706310058B	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/FL180/RL210/RL182	7.38	4.25	4.25	602007-26-A	FL180/FL180/RL210/RL182	10.88	8.00	8.00	706310-3-B
FL250/FL180/RL210/RL182	8.44	4.25	4.25	602007-26-A	FL250/FL180/RL210/RL182	11.88	8.00	8.00	706310-3-B
FL280/FL180/RL210/RL182	9.12	4.25	4.25	602007-26-A	FL280/FL180/RL210/RL182	12.62	8.00	8.00	706310-3-B

(1) 7/8" CONDUIT.
(2) 1/2" PIPE TAP.
(3) CUSTOMER TO PROVIDE W/LE TYP CONDUIT.
(4) 2" DIA. SA OR 1" DIA. DN W/2

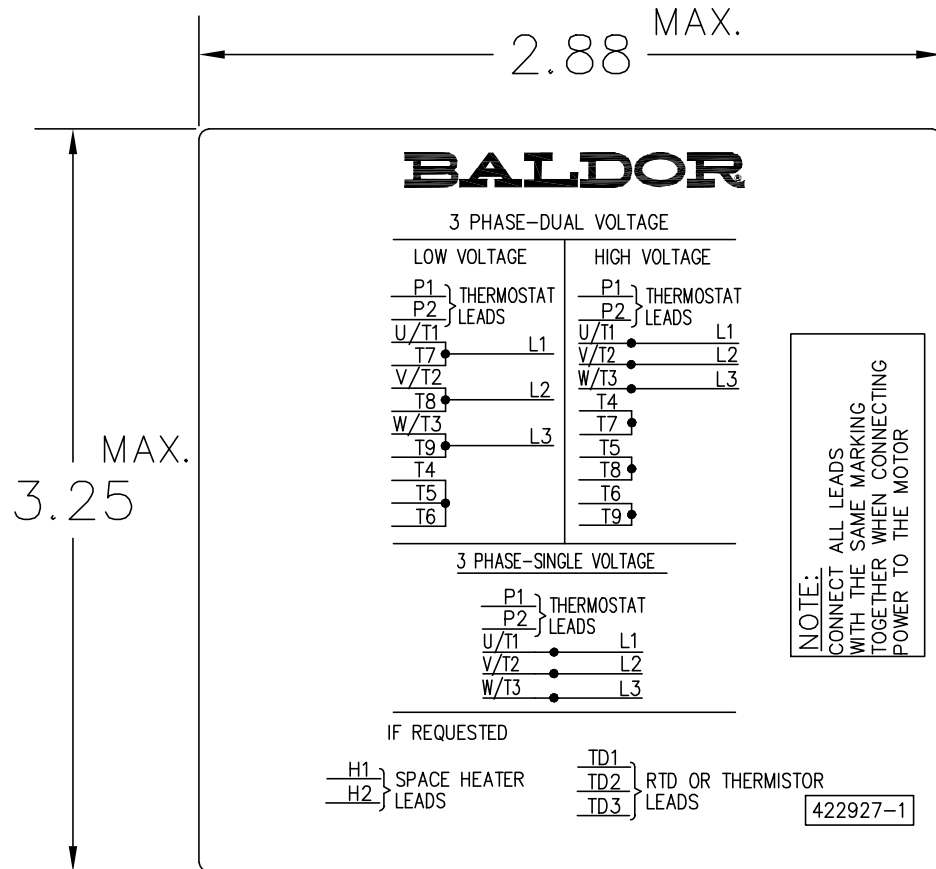
TERMINAL BOX CAN BE ROTATED FOR LEAD INLET AT TOP, SIDES OR BOTTOM.
TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-1, V-4, V-5, V-7.
DR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

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

REV. DESC: ADD 706310-637 & 639 BOX	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.

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

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: 00000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

BALDOR

EXTERNAL CONNECTION LABEL

SH 1 of 1