

ABB BALDOR RELIANCE III

Customer information packet

IDBRPM18204C

20HP, 1755RPM, 3PH, 60HZ, 1852C, TEBC, FT/250

Specifications

Enclosure	TEAO
Frame	FL1852C
Frame Material	Aluminum
Frequency	60.00 Hz
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	27.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	27.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	27.96 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1755 rpm
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L3218A
Layout	617235-023
Eff. date	01-21-2022
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	04-10-2015

Nameplate

000613006MY							
	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	20	1755	27	460		60
	CONT	20	3565	25	460		122
CAT.NO.	IDBRPM18204C			SPEC. NO.	P18T0268		
SER.NO			FR	FL 1852CZ	INSUL	H	
PH.	3	MAX SAFE SPEED		7200	AMB.	40	MIN. AMB. -25
DESIGN NO.	L3218A		TYPE		ENCL.	TEAO-BC	
S.F.	1.0		D.E. BRG.	45BC02JPP30A			
ENCL MOD			O.D.E. BRG.	35BC02JPP30A			

REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	FL1852	AMPS	27	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)			
HP	20	DUTY	CONT	IM (AMPS)	14.6	R1	.258	X1	.906
BASE SPEED	1755	S.F.	1.0	P.F.@NL/FL	.060/.796	R2	.191	X2	1.03
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.8			XM	18.9

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1757	20.0	60	460	60	27.1
MAX SPEED	3564	20.0	29	460	122	24.8
MIN SPEED	0	0	60	20.2	1.44	27.1

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	14.3
1/4	1790	5.01	15	460	60	15.5
1/2	1779	10.0	30	460	60	18.5
3/4	1769	15.0	45	460	60	22.3
FULL LOAD	1757	20.0	60	460	60	27.1
O/L	1701	38.8	120	460	60	50.9

REMARKS: TYPICAL DATA



DR. BY	B. GRANT
CK. BY	B. GRANT
APP. BY	T. CUFR
DATE	5-31-06

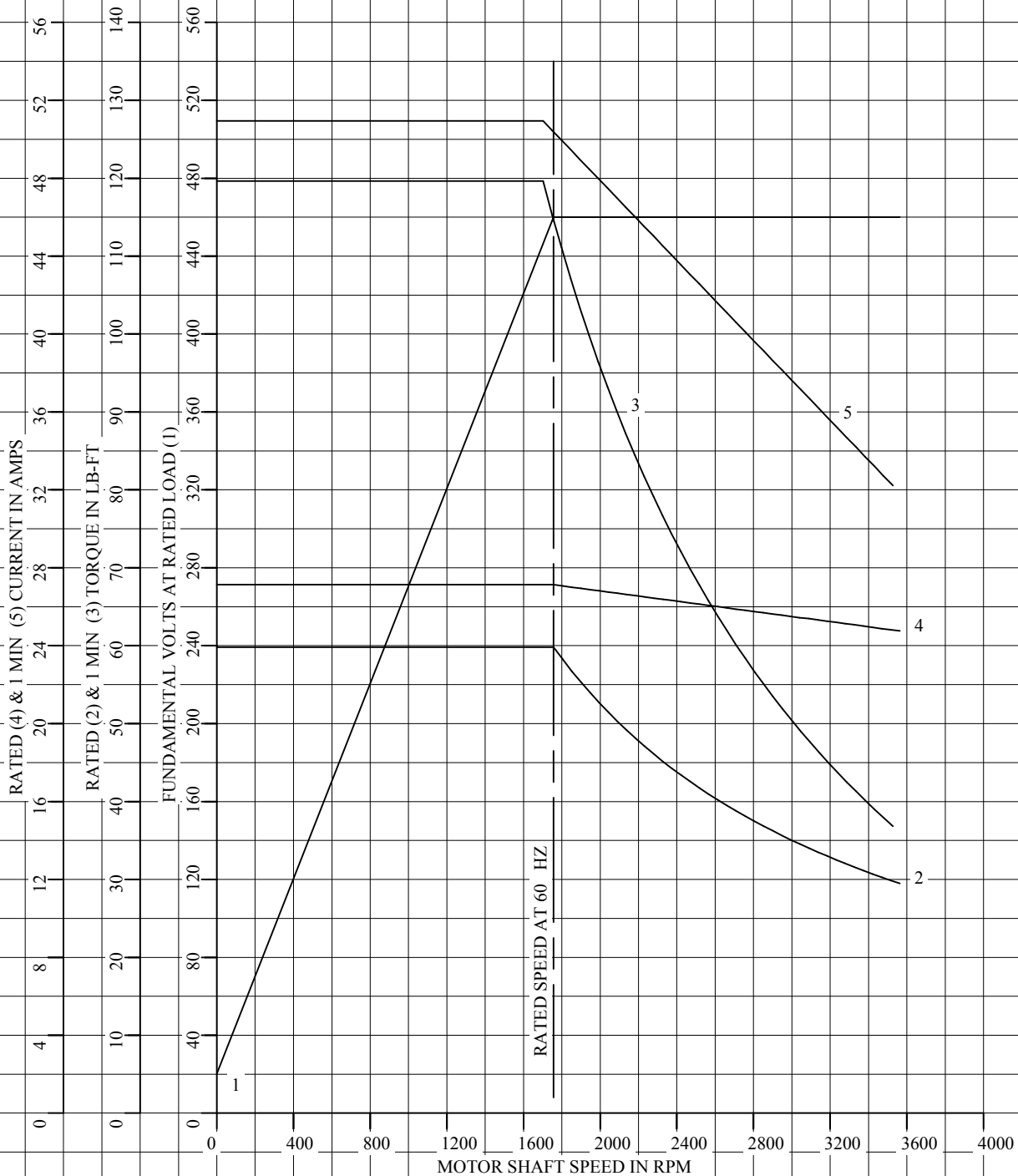
**A-C MOTOR
PERFORMANCE DATA** L3218A

ISSUE DATE 8-2-16

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REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN	EQ	CKT	OHMS	PER PHASE
FRAME	FL1852	AMPS	27	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)				
HP	20	DUTY	CONT	IM (AMPS)	14.6	R1	.258	X1	.906	
BASE SPEED	1755	S.F.	1.0	P.F. @NL/FL	.060/.796	R2	.191	X2	1.03	
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.8			XM	18.9	

VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

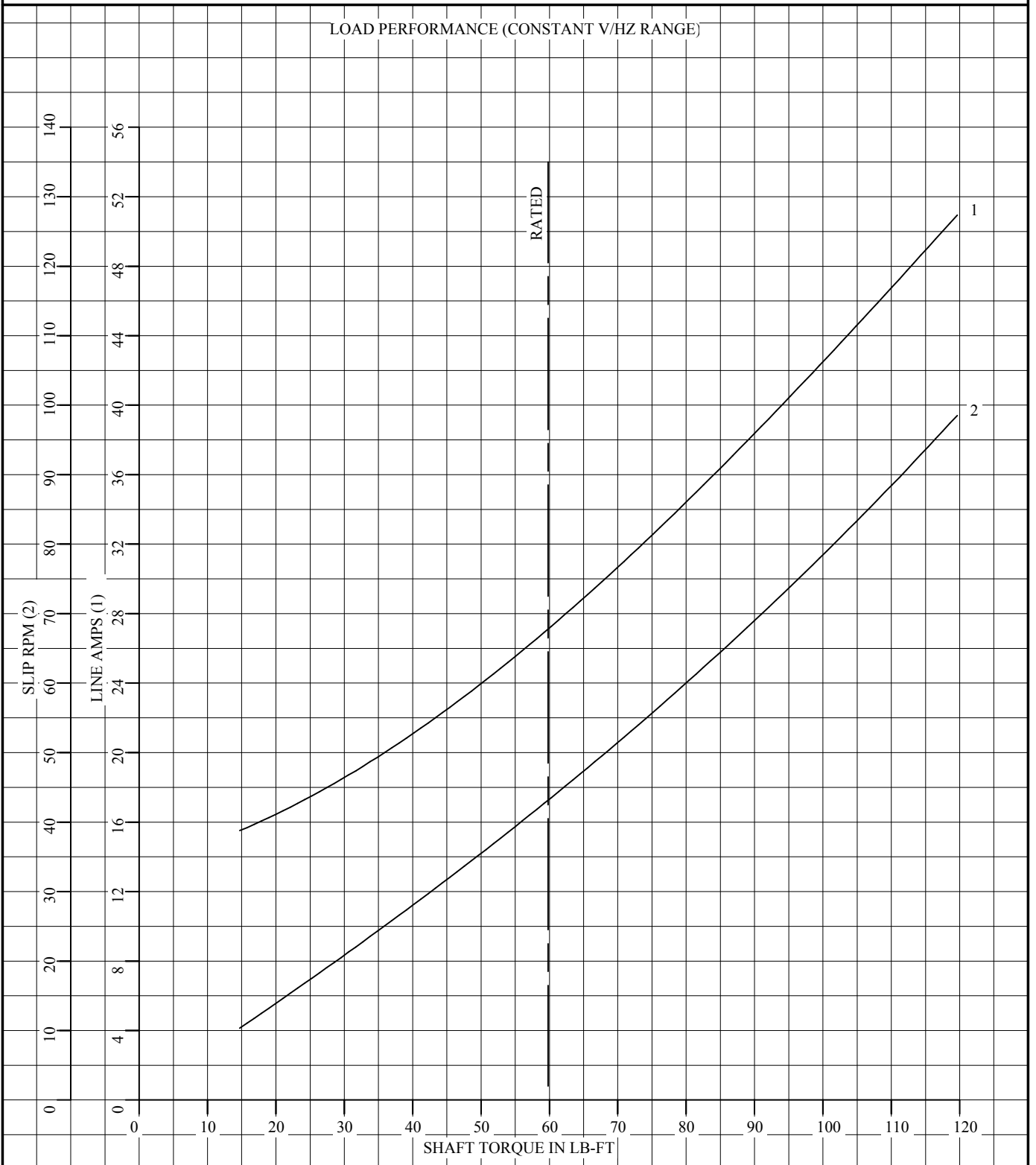


DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 5-31-06

**A-C MOTOR
PERFORMANCE
CURVES**

L3218A
SH 1 OF 2
ISSUE DATE 8-2-16 Page 5 of 9

REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE		
FRAME	FL1852	AMPS	27	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)		
HP	20	DUTY	CONT	IM (AMPS)	14.6	R1 .258	X1 .906	
BASE SPEED	1755	S.F.	1.0	P.F. @NL/FL	.060/.796	R2 .191	X2 1.03	
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.8		XM 18.9	



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 5-31-06

**A-C MOTOR
PERFORMANCE
CURVES**

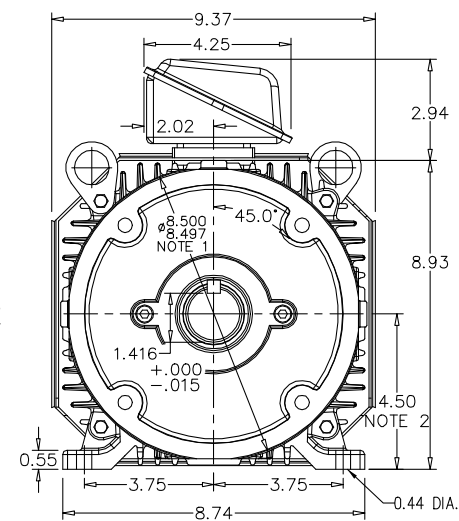
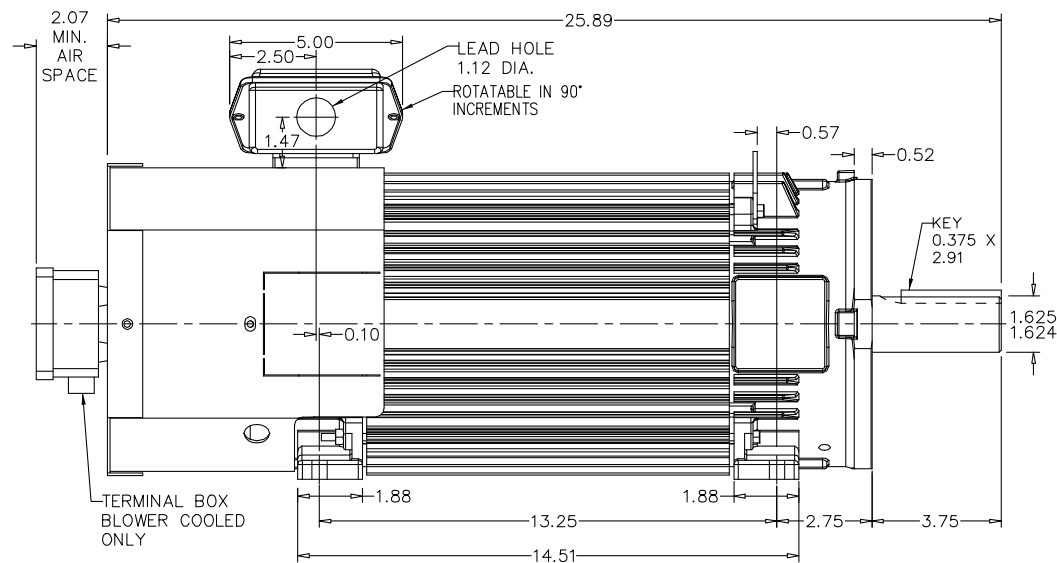
L3218A
SH 2 OF 2
ISSUE DATE 8-2-16 Page 6 of 9

617235-023

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING
CURRENT MOTOR
FL1852CZ

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT / NEMA 250TC C-FACE
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

NOTE 2: FACE RUNOUT AND ECCENTRICITY 0.004 MAX. T.I.R.

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: 209 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.

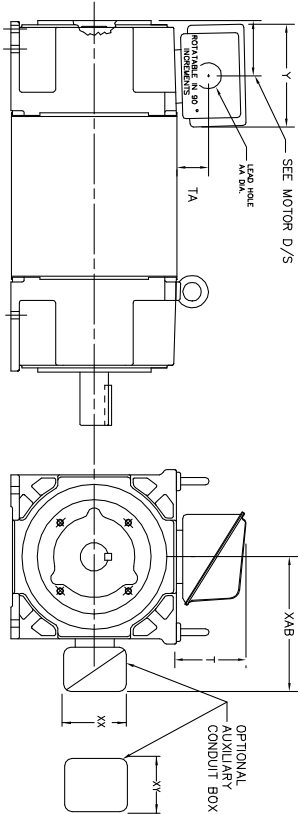
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REV. LTR: B	VERSION: 02	TDR: 00000931418
FILE: \RGG\00003\273	REVISED: 01:34:52 06/23/2015	BY: RGGWT
MTL: -		

BALDOR	
DIM SH 250TC RPMAC TEBC/FC FL1852CZ FT MT PROV FOR TACH	
SH 1 of 1	

617235-023

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	75	706320003A	6.12	2.35	4.38	1.75/2.00
FL180	STEEL	N	208	706320007A	6.62	2.00	7.00	2.50/3.00
FL180	CAST IRON	Y/N	208	706320004C	6.75	2.50	4.38	1.0/1.75
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	075452001A	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	075460052B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310229A	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310056A	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y/N	235	706310056B	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	075452001A	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	075460052B	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	706310229A	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/N	235	706310057A	11.42	4.00	6.72	2.50
FL250 & RL250	MILL	Y	235	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	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/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	YAB	XA	XY	PART NUMBER	FRAME SIZE	YAB	XA	XY	PART NUMBER
FL210/RL210/FL112	7.38	4.25	4.25	602007-26-A	FL210/RL210/FL112	10.88	8.00	8.00	706310-3-B
FL250/RL250/FL160	8.44	4.25	4.25	602007-26-A	FL250/RL250/FL160	11.88	8.00	8.00	706310-3-B
FL280/RL280/FL200/FL180	9.12	4.25	4.25	602007-26-A	FL280/RL280/FL200/FL180	12.62	8.00	8.00	706310-3-B

- (1) 1"AW CONDUIT.
(2) 1"AW PIPE TAP.
(3) CUSTOMER TO PROVIDE HOLE PER CONDUIT.
(4) 2" DIA. SA OR 1" DIA. DIA. W/6

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.
DR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

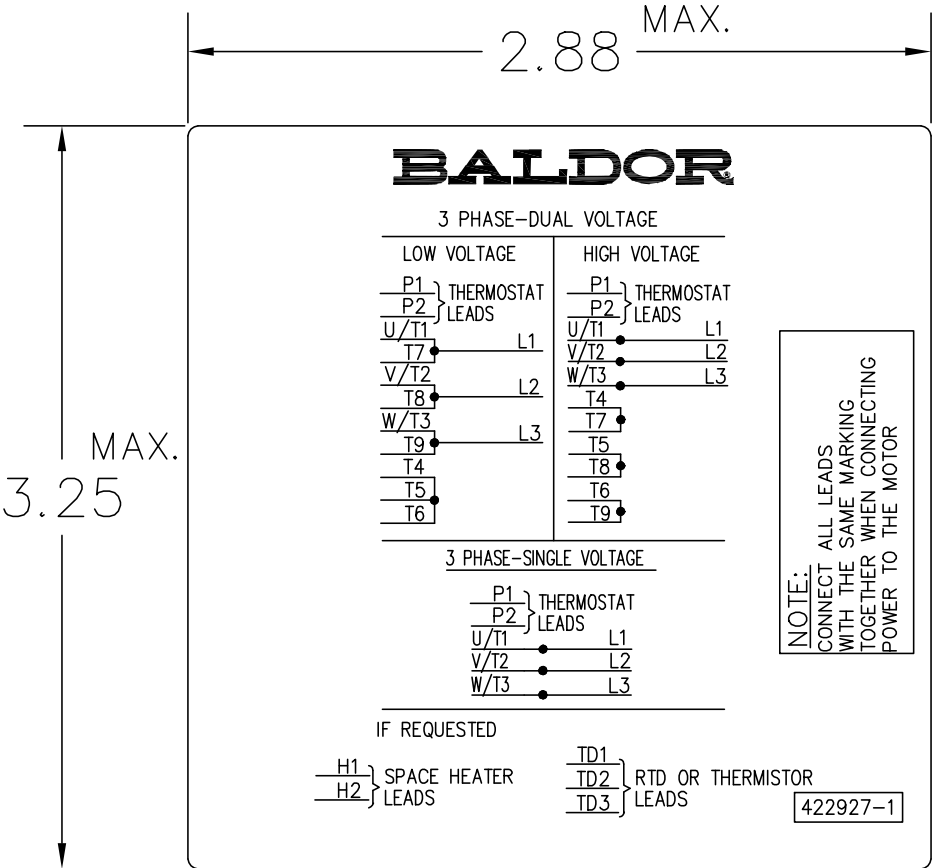
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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

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