

ABB BALDOR RELIANCE III

Customer information packet

IDNRPM18054C

5HP, 1770RPM, 3PH, 60HZ, 1838C, TENV, FT/180T

Specifications

Enclosure	TENV
Frame	FL1838C
Frame Material	Aluminum
Frequency	60.00 Hz
Output @ Frequency	5.000 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	7.200 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	7.2 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	17.87 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 rpm
Thermal Device - Bearing	None

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L3221A
Layout	617228-003
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	5	1770		7.2	460	60		
	CONT	5	3540		6.2	460	120		
	CONT	5	1770		14.4	230	60		
	CONT	5	3540		12.4	230	120		
CAT.NO.	IDNRPM18054C		SPEC. NO.		P18T0348				
SER.NO			FR	FL 1838C	INSUL	H			
PH.	3	MAX SAFE SPEED		7200	AMB.	40	MIN. AMB.	-25	
DESIGN NO.	L3221A		TYPE		ENCL.		TENV		
S.F.	1.0		D.E. BRG.		45BC02JPP30A				
ENCL MOD			O.D.E. BRG.		35BC02JPP30A				

Parts List

Part number	Description	Quantity
WS286786	WS P18T0348	1.000 ea
RA282994	RA P18T0348	1.000 ea
000613006MY	NP-RPMAC INVERTER DUTY	1.000 ea
LB1613	LABEL, QR CODE, ADHESIVE LABEL	1.000 ea
000692000XM	LABEL QR CODE	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
411716004A	219P039 - 219P039 - LA	1.000 ea
422927001	C/D LABEL	1.000 ea
032003144CB	THRU BOLT	4.000 ea
BP5248	BP5248	1.000 ea
033102012AG	HXNUT LEAD CONN 1/4-20 GR5 ZP	4.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
036000016DB	HHCS	2.000 ea
036000050JB	M8-1,25 X 50 MHHCS	2.000 ea
400638001D	WAVEN (Customer number 43699)	1.000 ea
411693051B	LUG, LIFTING	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
807580002BAA	BRKT,DE,FL181 807580-1WCC	1.000 ea
BP5068BJ01	BRUSH, .187 X .187 X 1.00	1.000 ea
807580003AAB	BRKT,ODE180AC 807580-1WCC	1.000 ea
032018004DK	HHCS,DRIP COVER	4.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	2.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	3.000 ea
036000040JB	HHCS,DE BRKT (M8-1.25X40MM PLTD.) AA	4.000 ea
036620009AB	M8 EXTERNAL LK WASHER	1.000 ea
065530000B	GASK	1.000 ea
075451000A	COVER, CONDUIT BOX	1.000 ea
415000103G	TLUG	1.000 ea
417733001A	GSK C/ BOX BASE	2.000 ea
418010006A	CAST,MPLATE,180-280,EX1,7BY	1.000 ea

418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
706305301A	GUARD, SHAFT	1.000 ea
706320003A	CONDUIT BOX	1.000 ea
418057243A	GROOVE PIN	1.000 ea
807504052B	FL180 FRAME	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
004824007CQR	C2 PAINT SYSTEM MEDIUM GRAY CHARCOAL MET	0.100 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
LB1549	LABEL, BLANK 1.375 X 2.250 IMPRINTABLE	1.000 ea
004824007AB	PAINT,XT	0.100 ea

REL S.O.	-	VOLTS	460	ENCLOSURE	TENV	WYE CONN	EQ	CKT	OHMS	PER PHASE
FRAME	FL1838	AMPS	7.2	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)				
HP	5	DUTY	CONT	IM (AMPS)	4.4	R1	.803	X1	2.62	
BASE SPEED	1770	S.F.	1.0	P.F.@NL/FL	.069/.745	R2	.523	X2	3.46	
PHASE/HERTZ	3/60	AMB °C/INSUL	60/H	WK ² (Lb-Ft ²)	.528			XM	59.7	

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1770	5.01	15	460	60	7.44
MAX SPEED	3534	5.00	7	460	120	6.76
MIN SPEED	0	0	15	16.7	.989	7.44

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	4.30
1/4	1792	1.25	4	460	60	4.71
1/2	1785	2.50	7	460	60	5.38
3/4	1778	3.75	11	460	60	6.30
FULL LOAD	1770	5.00	15	460	60	7.44
O/L	1718	12.1	37	460	60	15.8

BLOWER DATA

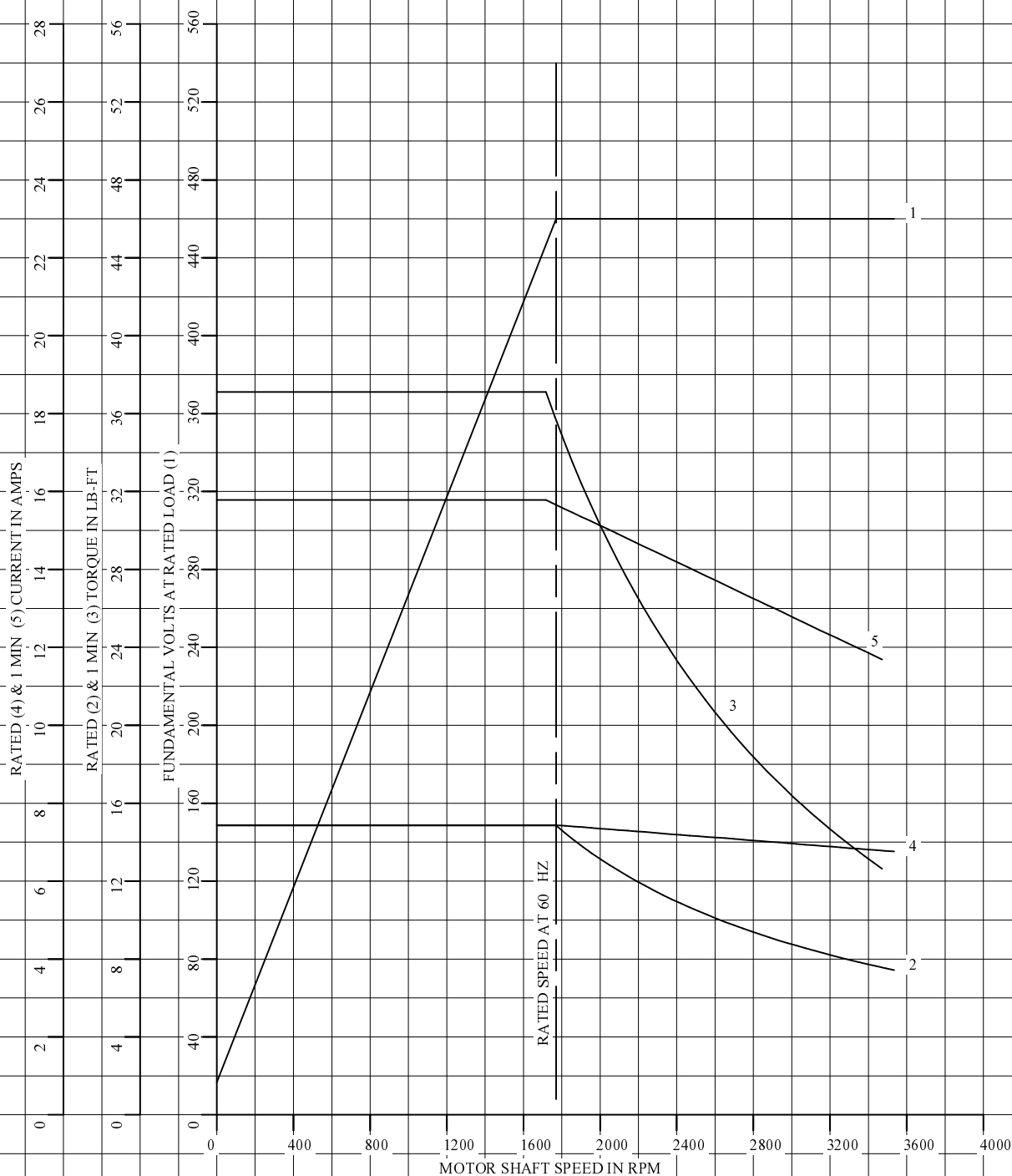
VOLTS	PH/HZ	FL AMPS	LR AMPS	FRAME	CFM

REMARKS: TYPICAL DATA


 DR. BY B. GRANT
 CK. BY B. GRANT
 APP. BY T. CUFR
 DATE 3-7-06
**A-C MOTOR
PERFORMANCE
DATA** **L3221A**
 ISSUE DATE **3-7-06**

REL S.O.	-	VOLTS	460	ENCLOSURE	TENV	WYE CONN	EQ CKT	OHMS PER PHASE
FRAME	FL1838	AMPS	7.2	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)		
HP	5	DUTY	CONT	IM (AMPS)	4.4	R1	.803	X1 2.62
BASE SPEED	1770	S.F.	1.0	P.F.@NL/FL	.069/.745	R2	.523	X2 3.46
PHASE/HERTZ	3/60	AMB °C/INSUL	60/H	WK ² (Lb-Ft ²)	.528	XM 59.7		

VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



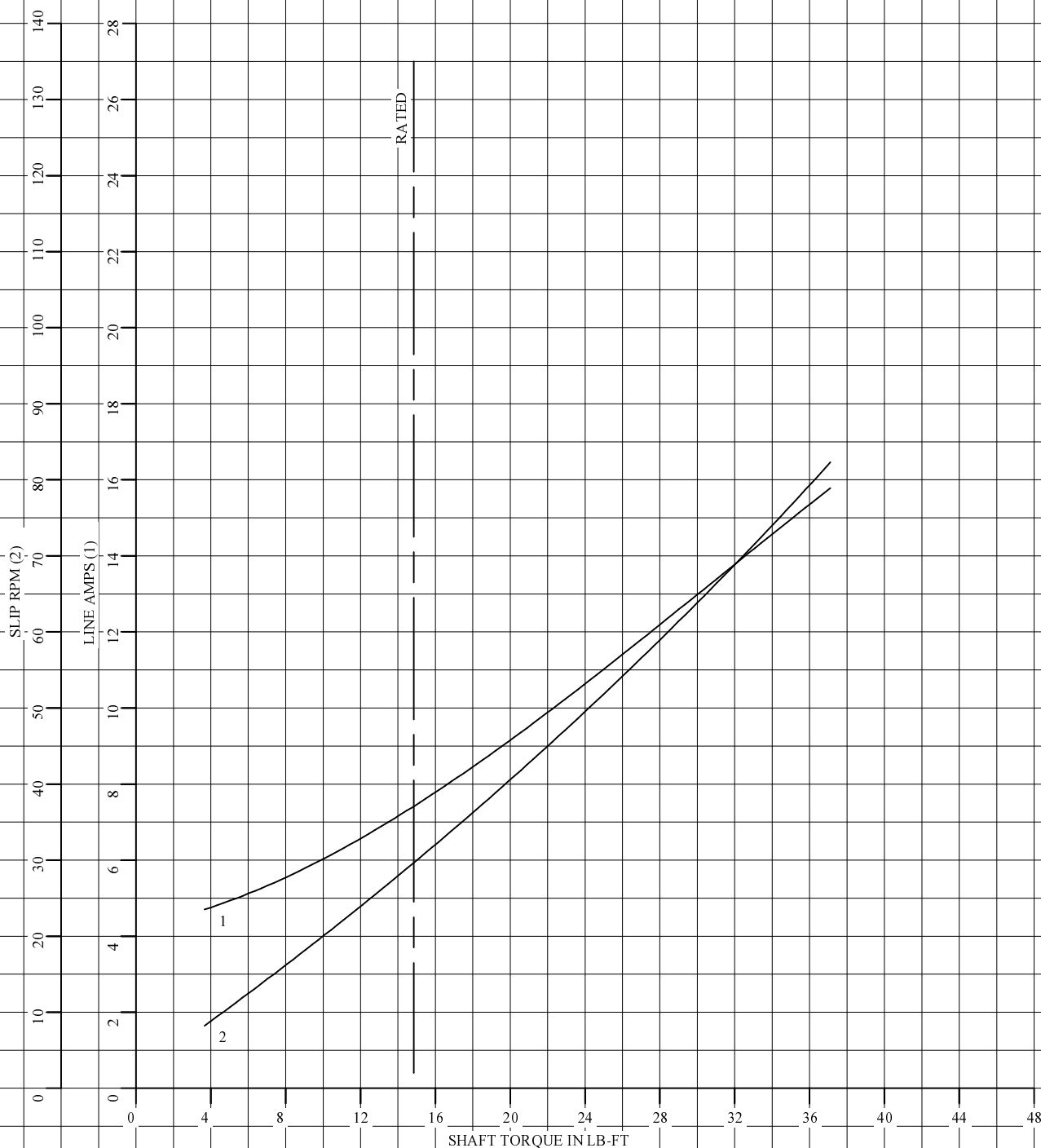
DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 3-7-06

**A-C MOTOR
PERFORMANCE
CURVES**

L3221A
SH 1 OF 2
ISSUE DATE 3-7-06

REL S.O.	-	VOLTS	460	ENCLOSURE	TENV	WYE CONN	EQ CKT	OHMS PER PHASE
FRAME	FL1838	AMPS	7.2	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)		
HP	5	DUTY	CONT	IM (AMPS)	4.4	R1	.803	X1 2.62
BASE SPEED	1770	S.F.	1.0	P.F.@NL/FL	.069/.745	R2	.523	X2 3.46
PHASE/HERTZ	3/60	AMB °C/INSUL	60/H	WK ² (Lb-Ft ²)	.528	XM 59.7		

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



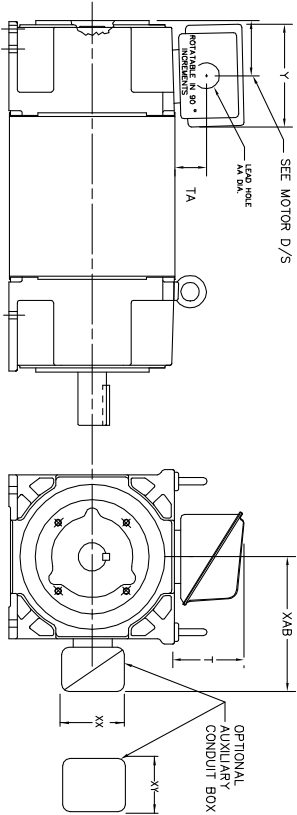
DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 3-7-06

**A-C MOTOR
PERFORMANCE
CURVES**

L3221A
SH 2 OF 2
ISSUE DATE 3-7-06

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	2.36	4.38	1.75/2.00
FL180	STEEL	N	208	706320007A	6.62	2.00	7.00	2.50/2.00
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	306	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	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	306	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	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	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	306	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/FL280/180	9.12	4.25	4.25	602007-26-A	FL280/RL280/FL280/180	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,
OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

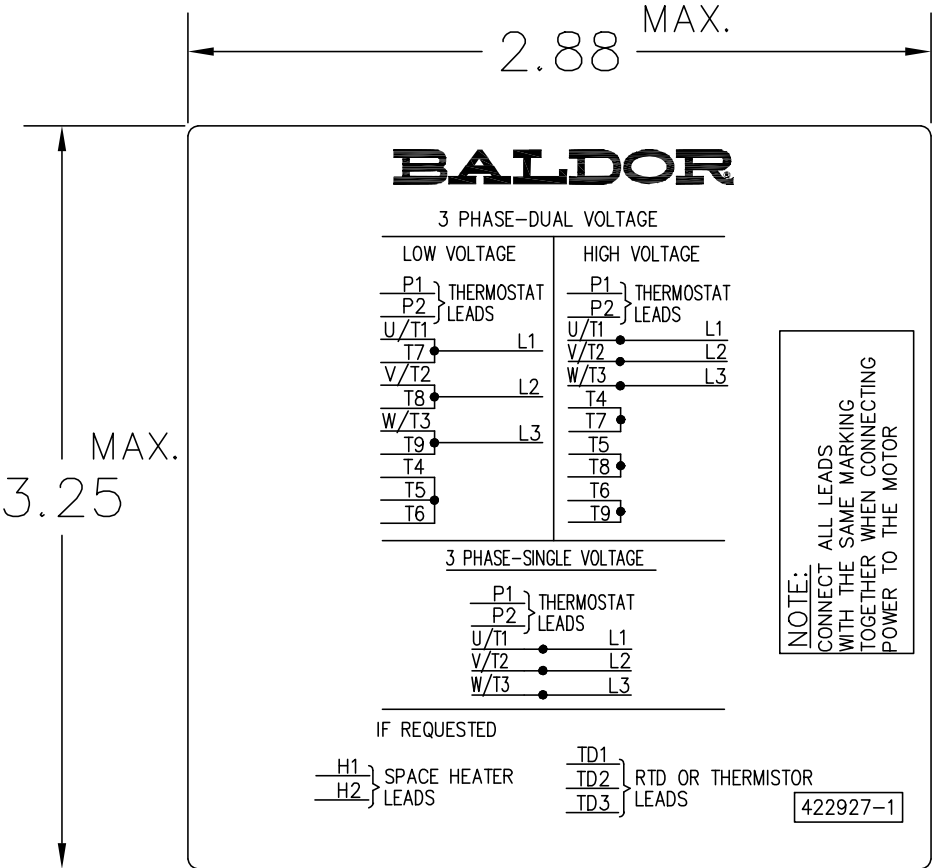
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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