

BALDOR • RELIANCE

Customer information packet

IDDRPM21404

40HP, 1750, 460V, RL2162, DPFV, F1

Specifications

Enclosure	DPFV
Frame	RL2162Z
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	40.000 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	52.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	RL
Heater Indicator	No Heater
High Voltage Full Load Amps	52.0 a
Insulation Class	H
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	23.12 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1750 rpm
Starting Method	Full Voltage

Part detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L0231A
Layout	617202-051
Eff. date	01-08-2026
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	10-21-2021

Thermal Device - Bearing

None

Thermal Device - Winding

Normally Closed Thermostat

Nameplate

000613006MY

	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	40	1750	52	460		60
	CONT	40	2000	52	460		69
CAT.NO.	IDDRPM21404		SPEC. NO.		R21-A000-0368		
SER.NO.		FR	RL2162Z	INSUL	H		
PH.	3	MAX SAFE SPEED		5000	AMB.	40	MIN. AMB. -25
DESIGN NO.	L0231A	TYPE			ENCL.	DPG-FV	
S.F.	1.00		D.E. BRG.		50BC03JPP30A		
ENCL MOD			O.D.E. BRG.		45BC02JPP30A		
	IP23						

S/O	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C)
FRAME	RL2162	AMPS	49.26	MAX SAFE SPEED	5000	
HP	40	DUTY	CONT	IM (AMPS)	15.52	R1 .177 X1 .748
BASE SPEED	1750	S.F.	1.0	P.F. @NL / FL	.089/.872	R2 .113 X2 .717
PHASE/HZ	3/60	AMB: C / INSUL	40/H	WK ² (Lb-Ft ²)	1.99	XM 17.6


RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1747	40.0	120	460	60	49.6
MAX SPEED	2007	40.0	105	460	69	48.9
MIN SPEED	0	0	120	26.7	1.78	49.6

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	15.3
1/4	1788	10.0	29	460	60	19.4
1/2	1776	20.0	59	460	60	27.6
3/4	1762	30.0	89	460	60	37.7
FULL LOAD	1747	40.0	120	460	60	49.6
0/L	1707	58.6	180	460	60	76.8

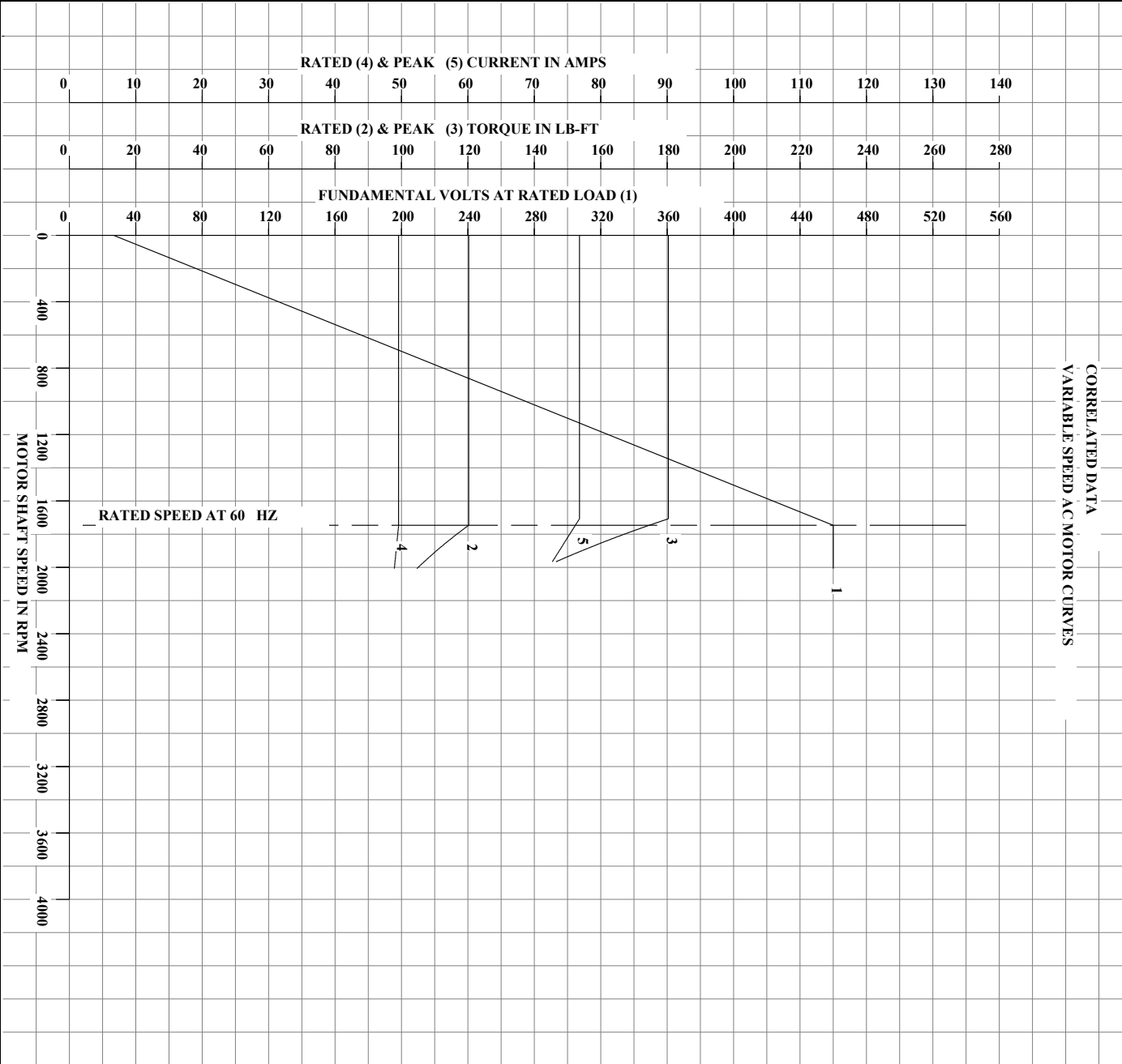
REMARKS:
TYPICAL DATA
CORRELATED DATA

	DRAWN BY: B. GRANT	AC MOTOR PERFORMANCE DATA	L0231A
	CHECKED BY: B. GRANT APPROVED BY: T. EVON DATE: 3-7-05		

USBAGRA

Printed on 03/04/2019 3:36 PM

S/O	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C)
FRAME	RL2162	AMPS	49.26	MAX SAFE SPEED	5000	R1 .177 X1 .748
HP	40	DUTY	CONT	IM (AMPS)	15.52	R2 .113 X2 .717
BASE SPEED	1750	S.F.	1.0	P.F. @ NL / FL	.089/.872	XM 17.6
PHASE/HZ	3/60	AMB. °C / INSUL.	40/H	WK² (Lb.-Ft²)	1.99	



TYPICAL DATA. DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



DRAWN BY: B. GRANT
CHECKED BY: B. GRANT
APPROVED BY: T. EVON
DATE: 3-7-05

**AC MOTOR
PERFORMANCE
DATA**

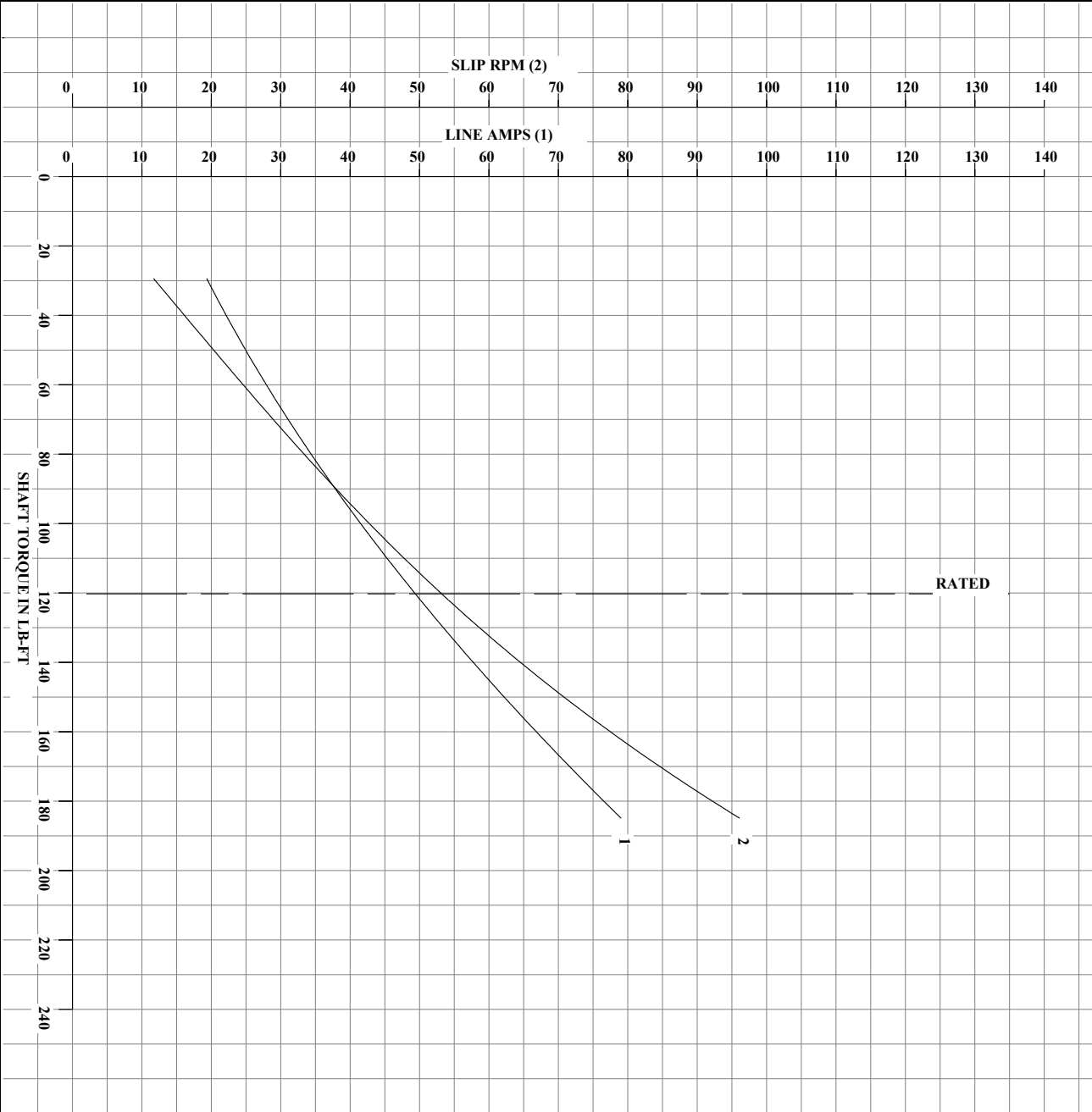
L0231A
ISSUE DATE: 3-7-05

USBAGRA

Printed on 03/04/2019 3:36 PM

S/O	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C)
FRAME	RL2162	AMPS	49.26	MAX SAFE SPEED	5000	R1 .177 X1 .748
HP	40	DUTY	CONT	IM (AMPS)	15.52	R2 .113 X2 .717
BASE SPEED	1750	S.F.	1.0	P.F. @ NL / FL	.089/.872	XM 17.6
PHASE/HZ	3/60	AMB. °C / INSUL.	40/H	WK² (Lb.-Ft²)	1.99	

CORRELATED DATA
LOAD PERFORMANCE (CONSTANT V/Hz RANGE)



TYPICAL DATA. DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

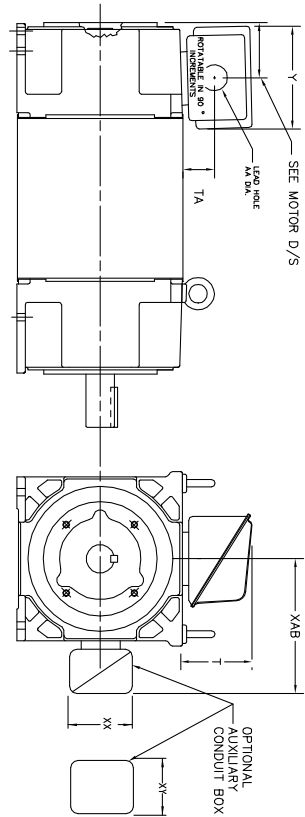
ABB	DRAWN BY: <u>B. GRANT</u> CHECKED BY: <u>B. GRANT</u> APPROVED BY: <u>T. EVON</u> DATE: <u>3-7-05</u>	AC MOTOR PERFORMANCE DATA	ISSUE DATE: <u>3-7-05</u> L0231A
------------	--	---------------------------------	--

USBAGRA

Printed on 03/04/2019 3:36 PM

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	6.92	2.00	7.00	2.50/2.00
FL180	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	PC29/PG16
FL210 & RL210	STEEL	N	61	0754520009	6.34	2.00	4.12	1.75
FL210 & RL210	STEEL	N	121	0754520009	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	305	706320016A	9.00	4.12	8.42	4.89
FL210 & RL210	CAST IRON	N	110	075460052B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310225A	7.75	2.30	4.40	PC29/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	0754520009	7.69	2.38	5.25	1.94
FL250 & RL250	CAST IRON	N	110	075460052B	7.25	2.50	5.25	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320016A	10.50	4.88	9.00	4.0 TAP
FL250 & RL250	MILL	Y	100	706310225A	7.75	2.30	4.40	PC29/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

FRAME	TYPE	TERMINAL STRIP	AMPS	C/BOX	Y	TA	T	AA
FL280 & RL280	STEEL	N	160	706320029A	7.25	3.50	7.06	2.50
FL280 & RL280	STEEL	N	305	706320016A	9.00	4.12	8.42	4.89
FL280 & RL280	STEEL	N	500	702560010C	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	706320015A	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	PC29/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			
FL210/FL180/FL160/FL132	7.38	4.25	4.25	602007-26-A	FL210/FL180/FL160/FL132	10.88	8.00	8.00	706310-3-B
FL250/FL220/FL200/FL180	8.44	4.25	4.25	602007-26-A	FL250/FL220/FL200/FL180	11.88	8.00	8.00	706310-3-B
FL280/FL260/FL240/FL180	9.12	4.25	4.25	602007-26-A	FL280/FL260/FL240/FL180	12.62	8.00	8.00	706310-3-B

(1) 7/8" CONDUIT.
(2) 7/8" PIPE TAP.
(3) CUSTOMER TO PROVIDE WIRE TYPE CONDUIT.
(4) 2" DIA. SA OR 1" DIA. DIA. 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,
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.

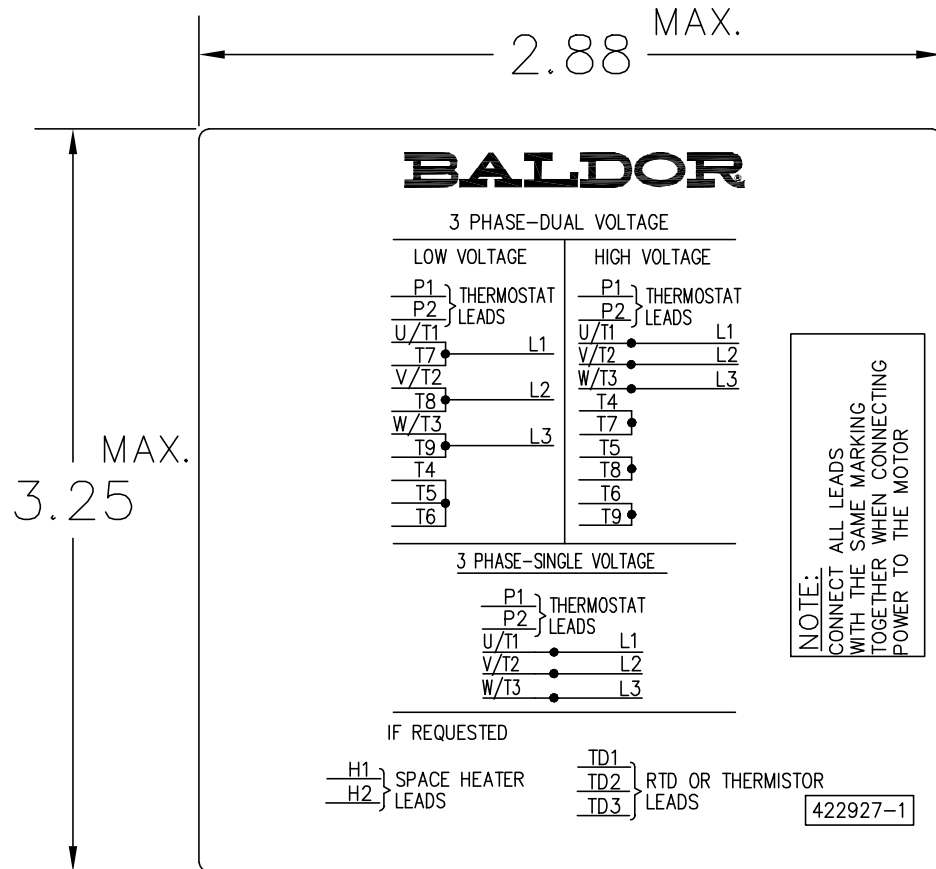
REV. DESC: ADD 706310-637 & 639 BOX	VERSION: 06	TDR: 000001180260
REV. LTR: F	REVISED: 11: 08: 56 10/26/2021	BY: RCGRWM
FILE: \RGG\00003\692		
MTL: -		

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.

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