ABB BALDOR RELIANCE

Customer information packet

ZDPM18030C-BV

30HP, 1800RPM, 3PH, 60HZ, 1852C, TEBC, FOOT,

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/14/2026 3:15:12 PM

Specifications

Enclosure	TEAO
Frame	FL1852C
Frame Material	Aluminum
Frequency	60.00 Hz
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	32.300 A @ 460.0 V
Duty Rating	CONT
Feedback Device	TACHOMETER
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	32.3 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	28.05 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	1800 rpm
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	PM3756A
Layout	617235-315
Eff. date	10-24-2019
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

000613006NS

DUTY	HP	RPM	AMPS	VOLTS	HZ
CONT	30	1800	32.3	460	60
CONT	30	3000	30.6	460	100

CAT.NO.	ZDPM18030C-BV	**SPEC. NO.**	P18M0505				
SER.NO		**FR**	FL 1852C	**INSUL**	H		
PH.	3	**MAX SAFE SPEED**	7200	**AMB.**	40	**MIN. AMB.**	-25
DESIGN NO.	PM3756A	**TYPE**		**ENCL.**	TEAO-BC		
S.F.	1.0	**D.E. BRG.**	45BC02JPP30A				
ENCL MOD		**O.D.E. BRG.**	35BC02JPP30A				

000692000VY

MEAS OPEN CIRCUIT VOLTAGE

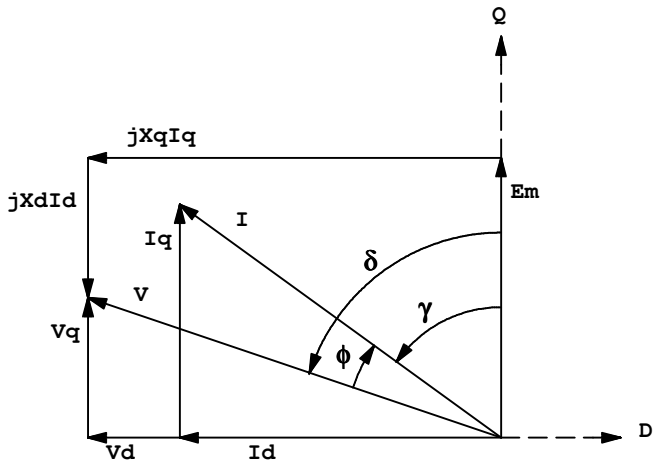
IS **VOLTS AT** **RPM.**

S.O. 0	VOLTS 460	TYPE IPM	STATOR RES.@ 25 °C .3489
FRAME FL1852	AMPS 32	ENCLOSURE TEBC	OHMS (BETWEEN LINES)
HP 30	DUTY CONT	MAX SAFE RPM 7200	
BASE SPEED 1800	S.F. 1.0	WK^2 (Lb-Ft^2) .96	
PHASE/HERTZ 3/60	AMB °C/INSUL 40/H	MAX INSTANTANEOUS OVERLOAD AMPS 96	

VARIABLE SPEED PERFORMANCE

HP	AMPS (rms)	RPM	GAMMA*	POWER FACT.	EFF.	VOLTS (L-L) (rms)	Em (L-N) (rms)	Lq (mH)	Ld (mH)
OpenCkt**	N/A	1800	5.0	N/A	N/A	N/A	185	N/A	N/A
OpenCkt,hot	N/A	1800	5.0	N/A	N/A	N/A	160	N/A	N/A
6.10	8.0	1800	30.7	96.5	93.0	367	160	58.3	8.90
13.8	16.0	1800	39.6	95.3	94.2	413	160	42.6	8.70
21.7	24.0	1800	44.0	94.0	94.7	436	160	34.2	8.50
30.0	32.0	1800	48.5	92.9	94.7	459	160	30.5	8.30

Remarks: TYPICAL DATA
CONSTANT TORQUE 0-1800 RPM, CONSTANT POWER 1800-3000 RPM
200% OVERLOAD BELOW BASE SPEED TAPERED TO 100% AT 3000 RPM



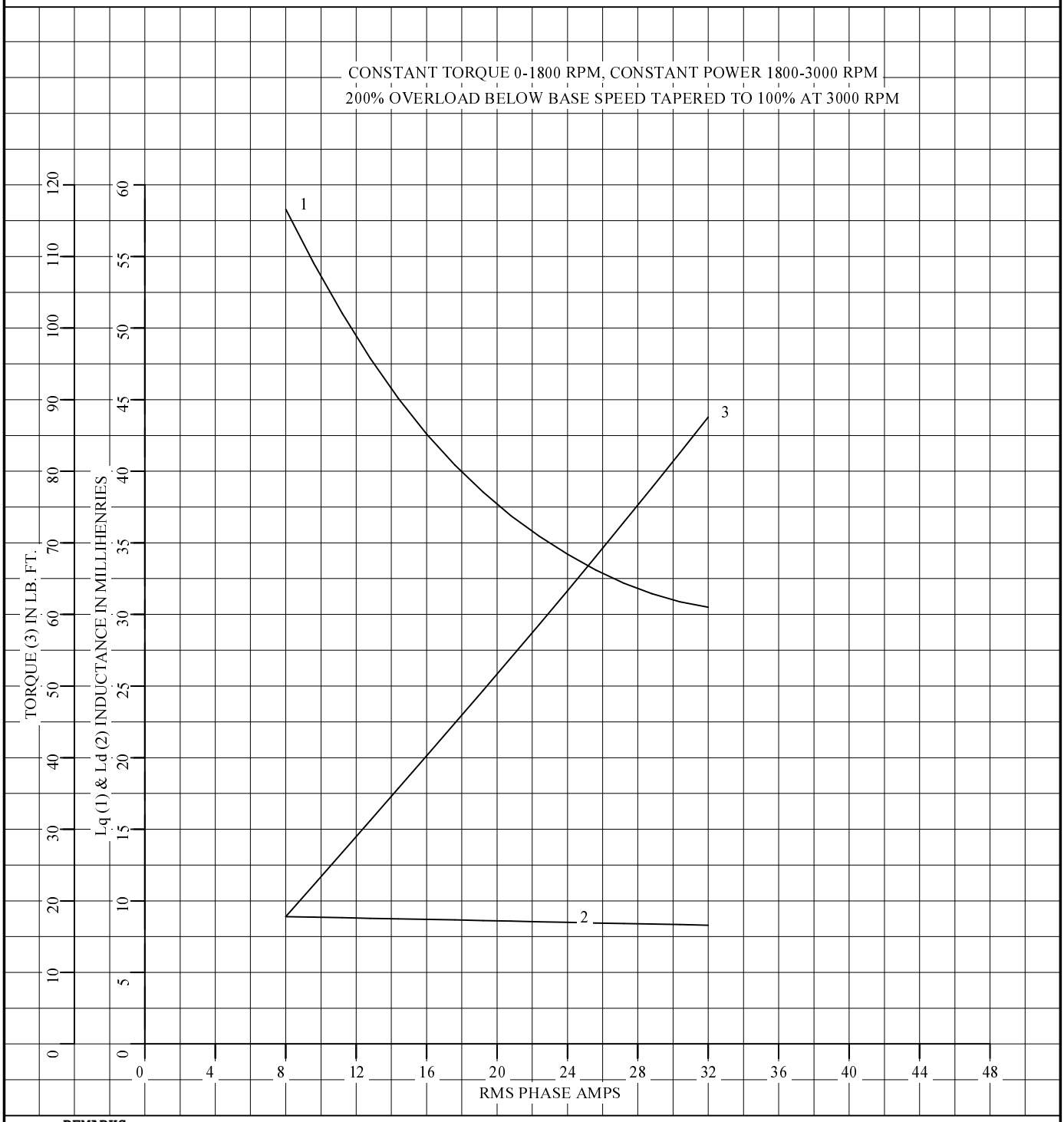
*Gamma is the current angle relative to counter emf, defined to be positive when current leads counter emf.

Equivalently, Gamma is positive when Id is negative.

**Data at 25°C - all other data at rated temperature

S.O. 0	VOLTS 460	TYPE IPM	STATOR RES.@ 25 °C .3489
FRAME FL1852	AMPS 32	ENCLOSURE TEBC	OHMS (BETWEEN LINES)
HP 30	DUTY CONT	MAX SAFE RPM 7200	
BASE SPEED 1800	S.F. 1.0	WK^2 (Lb-Ft^2) .96	
PHASE/HERTZ 3/60	AMB °C/INSUL 40/H	MAX INSTANTANEOUS OVERLOAD AMPS 96	

Lq, Ld, & Torque vs. RMS Phase Amps



REMARKS: TYPICAL DATA

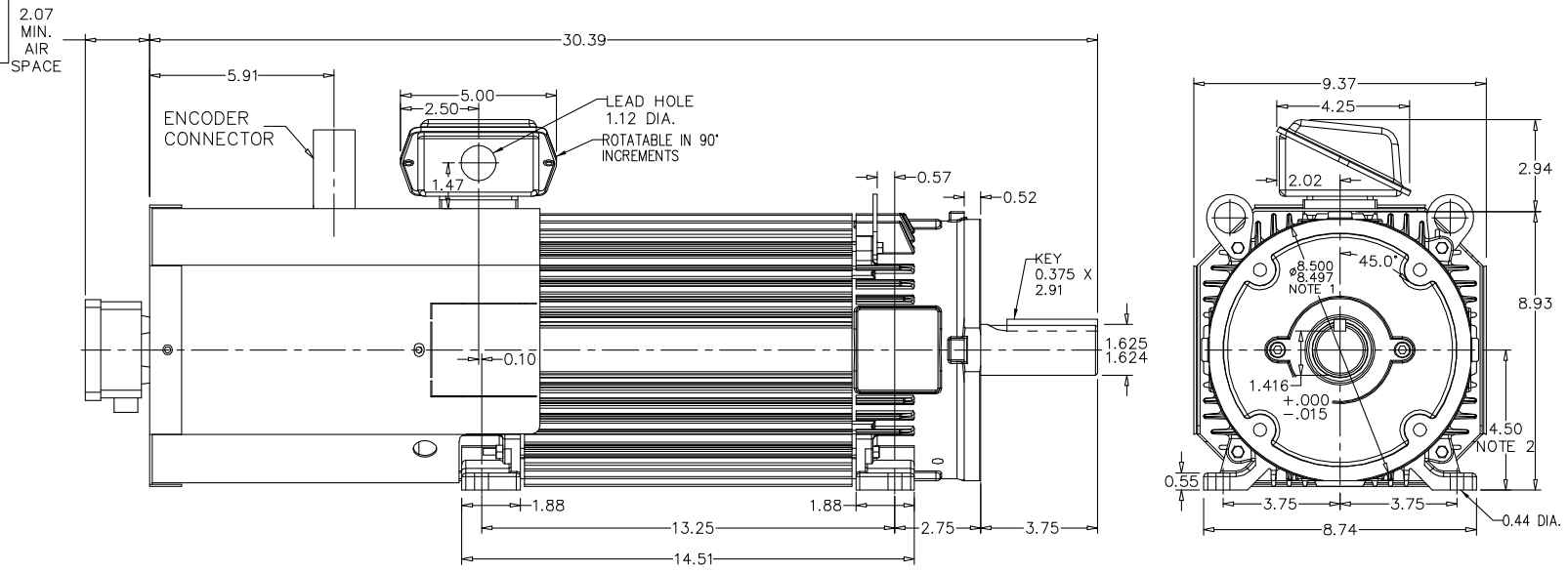
BALDOR	DR. BY CD CK. BY RM APP. BY RM DATE 4/23/10	**IPM MOTOR PERFORMANCE DATA**	**PM3756A** ISSUE DATE 4/23/10

617235-315

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
ACCESSORIES: ENCODER



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

MOTOR WEIGHT: 209 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

617235-315

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THIS PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: CHANGE TO GENERIC CONNECTOR AND ENCODER		
REV. LTR: C	VERSION: 03	TDR: 000000984829
FILE: \RGG\00025\785	REVISED: 09:39:14 06/27/2016	BY: RGGWT
MTL: -		

BALDOR

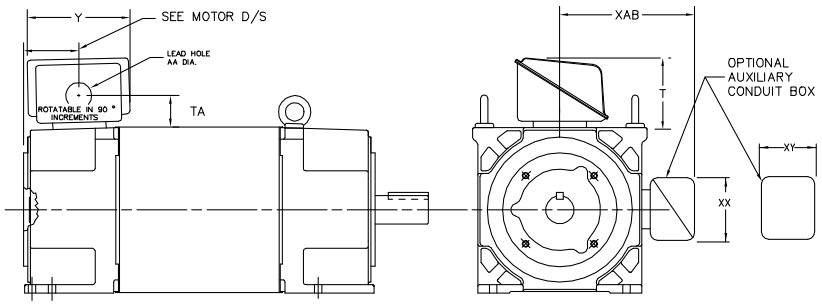
DIM SHT,RPMAC,TEBC,FL1852CZ,250TC,ENCODER
SH 1 of 1

616779-050

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	706320005A	6.12	2.38	4.38	1.75/2.00
FL180	STEEL	N	208	706320007A	7.62	2.00	7.00	2.50/3.00
FL180	CAST IRON	Y/N	60	706320004C	5.75	2.38	4.38	1.0 TAP
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	075454001AJ	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	075460062B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210 FDL13 & RDL13	MILL	Y	100	706310225R 706310056A	7.75	2.30	4.40	PG29/PG16
FL210 & RL210 FDL13 & RDL13	MILL	Y	160	706310226R 706310056B	9.00	3.06	5.40	PG36/PG16
FL210 & RL210 FDL13 & RDL13	MILL	Y/N	235	706310637A	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	075454001AJ	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	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 FDL16 & RDL16	MILL	Y	100	706310225R 706310056A	7.75	2.30	4.40	PG29/PG16
FL250 & RL250 FDL16 & RDL16	MILL	Y	160	706310226R 706310056B	9.00	3.06	5.40	PG36/PG16
FL250 & RL250 FDL16 & RDL16	MILL	Y/N	235	706310637A	11.42	4.00	6.72	2.50
FL250 & RL250 FDL16 & RDL16	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	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 FDL18 & RDL18	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL280 & RL280 FDL18 & RDL18	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL280 & RL280 FDL18 & RDL18	MILL	Y/N	235	706310637A	11.42	4.00	6.72	2.50
FL280 & RL280 FDL18 & RDL18	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)

FRAME SIZE	XAB	XX	XY	PART NUMBER	FRAME SIZE	XAB	XX	XY	PART NUMBER
FL210/FDL132/RL210/RDL132	7.38	4.25	4.25	602007-26-A	FL210/FDL132/RL210/RDL132	10.88	8.00	8.00	706310-3-B
FL250/FDL160/RL250/RDL160	8.44	4.25	4.25	602007-26-A	FL250/FDL160/RL250/RDL160	11.88	8.00	8.00	706310-3-B
FL280/FDL180/RL280/RDL180	9.12	4.25	4.25	602007-26-A	FL280/FDL180/RL280/RDL180	12.62	8.00	8.00	706310-3-B

(1) 'AA' CONDUIT.
(2) 'AA' PIPE TAP.
(3) CUSTOMER TO PROVIDE HOLE FOR CONDUIT.
(4) 2" DN -5A or 1" TAP DN -4C

TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, W-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.

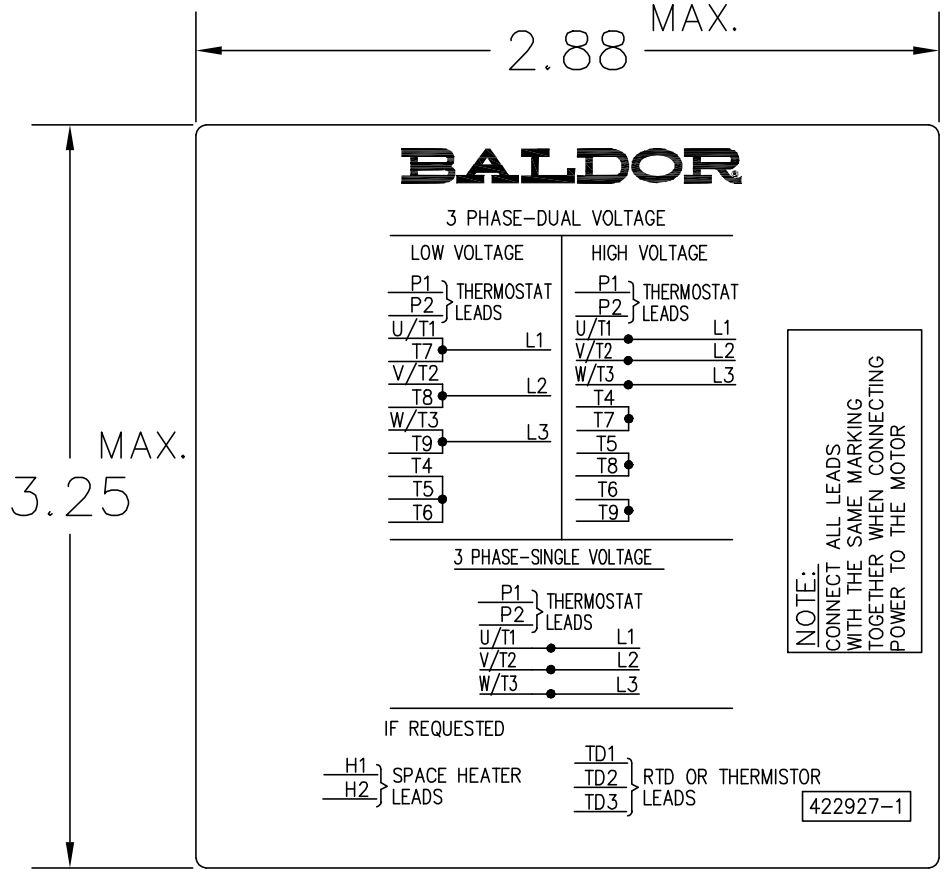
BALDOR - RELIANCE®

REV. DESC: ADD 706310-637 & 639 BOX		TDR: 00000118O260
REV. LTR: F	VERSION: 06	
FILE: \RGG\00003\692	REVISED: 11:08:56 10/26/2021	BY: RGGRWM
MTL: -		

DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180
SH 1 of 1

616779-050

422927–001



NOTE:
DATA TO BE SIZED SO THAT IT FITS INTO MATERIAL DECAL DIMENSIONS. MAKE LETTERS & NUMBERS AS LARGE AS POSIBLE.

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			BALDOR
REV. LTR: B	VERSION: 02	TDR: 000000788708	
FILE: \RGG\00000\203		REVISED: 08:09:29 03/04/2013	EXTERNAL CONNECTION LABEL
MTL: –		BY: RGGWT	SH 1 of 1