

BALDOR® • RELIANCE 

Product Information Packet

ZDPM18030C-BV

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

Part Detail							
Revision:	E	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	PM3756A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617235-315	Poles:	04	Created Date:	04-09-2015
Base:		Eff. Date:	10-24-2019	Leads:			

Specs			
Catalog Number:	ZDPM18030C-BV		
Enclosure:	TEBC		
Frame:	FL1852C		
Frame Material:	Aluminum		
Output @ Frequency:	30.000 HP @ 60 HZ		
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ		
Voltage @ Frequency:	460.0 V @ 60 HZ		
Agency Approvals:	CCSA US		
Auxillary 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		
Insulation Class:	H		
Mounting Arrangement:	F3		

Product Family:	General Industrial		
Pulley End Bearing Type:	Ball		
Pulley Face Code:	C-Face		
Shaft Ground Indicator:	No Shaft Grounding		
Shaft Rotation:	Reversible		
Motor Standards:	NEMA		
Thermal Device - Bearing:	None		
Thermal Device - Winding:	Normally Closed Thermostat		

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						

Nameplate 000692000VY		
IS	<input type="text"/>	MEAS OPEN CIRCUIT VOLTAGE
		VOLTS AT <input type="text"/>
		RPM.
EXCEED	<input type="text"/>	MTR PH CURRENT SHOULD NOT
		AMPS RMS PEAK TO
	AVOID DEMAGNETIZATION	

Parts List		
Part Number	Description	Quantity
WS286790	WS P18M0505	1.000 EA
RA282998	RA P18M0505	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
418057747A	METAL FASTENER	8.000 EA
000613006NS	RPM AC WITH CERTIFIED LOGO	1.000 EA
000692000NH	LABEL DIRECTION AIR FL	1.000 EA
000692000VY	PERMANENT MAGNET MOTOR NAMEPLATE	1.000 EA
411716004A	219P039 - 219P039 - LA	1.000 EA
418056062A	NP AC BLOWER DATA	1.000 EA
422927001	C/D LABEL	1.000 EA
032003200CB	FL1852 THRU BOLT	4.000 EA
033102012AG	HXNUT LEAD CONN	4.000 EA
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 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
807580003AAB	BRKT,ODE180AC 807580-1WCC	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	2.000 EA
036000045JB	M8-1.25 X 45MM HXHCS	4.000 EA
418010006A	CAST,MPLATE,180-280,EX1,7BY	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	3.000 EA

Parts List (continued)		
Part Number	Description	Quantity
036620009AB	M8 EXTERNAL LK WASHER	1.000 EA
036310010FB	RHMS TERM/BLK MTG	2.000 EA
418057461B	PLATE, ENCODER	1.000 EA
418057461B	PLATE, ENCODER	1.000 EA
418057373A	SCREW SHEET METAL	4.000 EA
036320008CB	M2.5 SCREW	4.000 EA
036500006AB	M4-0.7 METRIC HEX NUT	2.000 EA
065530000B	GASK	1.000 EA
075451000A	COVER, CONDUIT BOX	1.000 EA
406673002C	.75 CAP PLUG	2.000 EA
415000103G	TLUG	1.000 EA
422962051BW	STUB SHAFT	1.000 EA
800123015A	RESOLVER DYNAPAR	1.000 EA
417733001A	GSK C/ BOX BASE	2.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 EA
418057445B	SCREW	4.000 EA
418057260A	SCREW PHILLIPS PAN HD	4.000 EA
418057373A	SCREW SHEET METAL	3.000 EA
613450011A	BLMTR SQ AC 210	1.000 EA
706320003A	CONDUIT BOX	1.000 EA
807505050B	SHROUD, FAN/BLOWER	1.000 EA
807505051A	GRILL, FAN COVER	1.000 EA
418057243A	GROOVE PIN	1.000 EA
807504052D	FL180 FRAME	1.000 EA

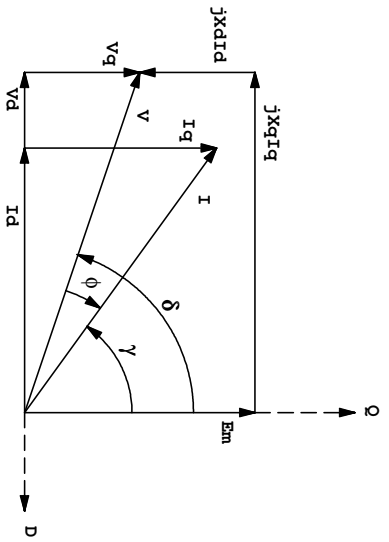
000640000P	TAG WINDING THERMOST	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA
034180022FA	KEY 3/8X3/8X2-3/4 L	1.000 EA

S.O. 0	VOLTS 460	TYPE IPM	STATOR RES. @ 25 °C .3489
FRAME F11852	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

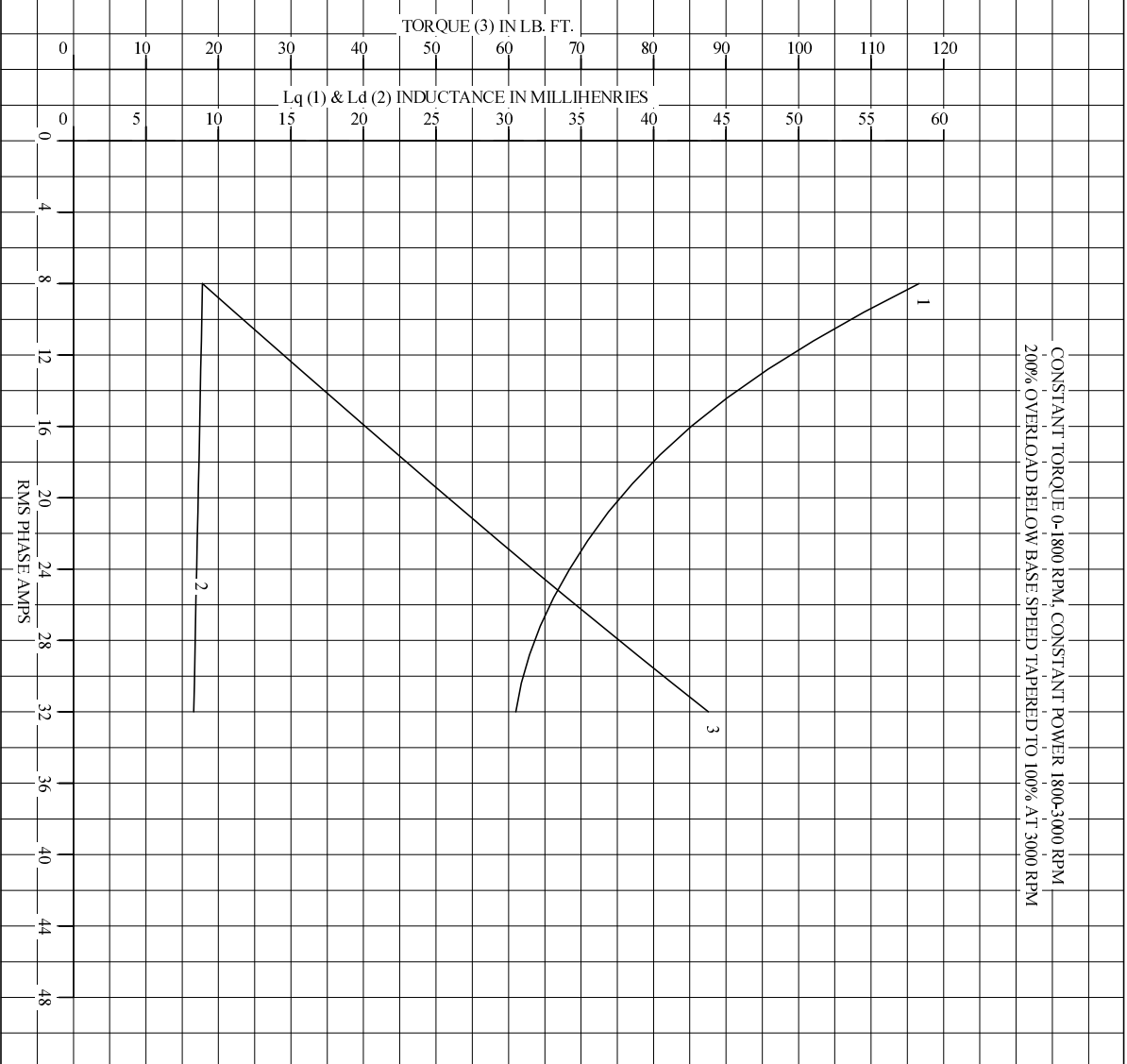


*Gamma is the current angle relative to counter emf, defined to be positive when current leads counter emf.
 Equivalently, Gamma is positive when Id is negative.
 **Data at 25°C - all other data at rated temperature

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

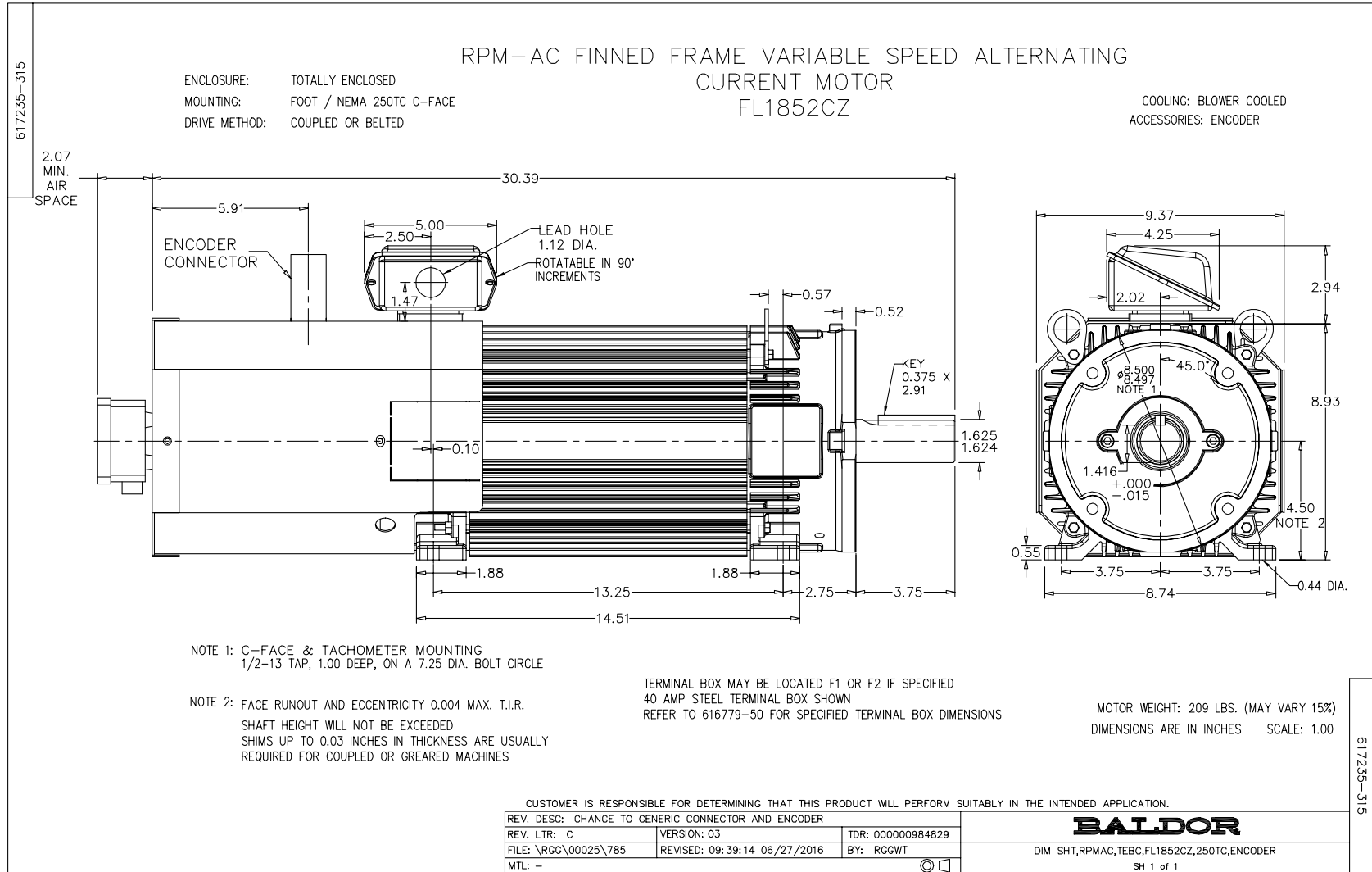
S.O. 0	VOLTS 460	TYPE IPM	STATOR RES. @ 25 °C .3489
FRAME F11852	AMPS 32	ENCLOSURE TEBC	OHMS (BETWEEN LINES)
HP 30	DUTY CONT	MAX SAFE RPM 7200	
BASE SPEED 1800	S.F. 1.0	WK ² (Lb-Ft ²) .96	
PHASE/HERTZ 3/60	AMB °C/INSUL 40/H	MAX INSTANTANEOUS OVERLOAD AMPS 96	

Lq, Ld, & Torque vs. RMS Phase Amps



REMARKS : TYPICAL DATA

BALDOR	DR. BY	CD	IPM MOTOR		
	CK. BY	KM		PERFORMANCE	
	APP. BY	KM			
DATE	4/23/10	DATA	ISSUE DATE		PM3/56A

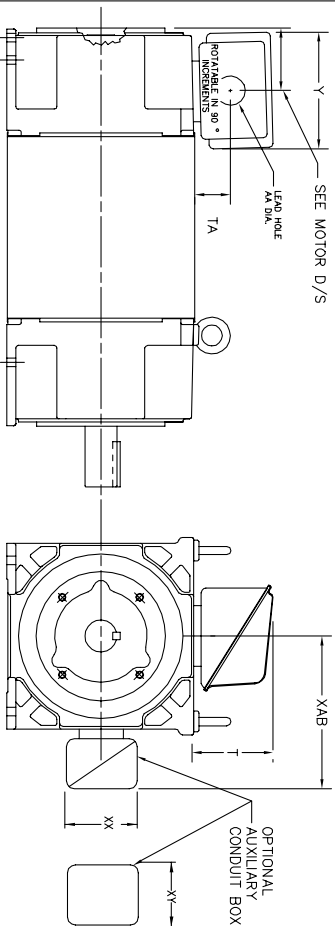


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INDUSTRIAL ALTERNATING CURRENT MOTORS

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	7/5	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	MILL	Y	100	706310225R	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310226R	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FDL13 & RDL13	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

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	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL250 & RL250	MILL	Y	160	706310225R	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	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	8.58	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	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL280 & RL280	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FRAME SIZE	XAB	XX	XY	PART NUMBER	FRAME SIZE	XAB	XX	XY	PART NUMBER
FL180/TL180/RL210/VL132	7.38	4.25	4.25	603C007-26-A	FL210/TL210/RL210/VL132	10.88	8.00	8.00	706310-3-B
FL250/TL180/RL250/VL160	8.44	4.25	4.25	603C007-26-A	FL250/TL180/RL250/VL160	11.88	8.00	8.00	706310-3-B
FL280/TL180/RL280/VL180	9.12	4.25	4.25	603C007-26-A	FL280/TL180/RL280/VL180	12.62	8.00	8.00	706310-3-B

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

TERMINAL BOX CAN BE KEPT FOR LEAD OUTLET AT TOP SIDES OR BOTTOM TERMINAL BOX CAN BE KEPT FOR LEAD OUTLET AT TOP SIDES OR BOTTOM SIDE. LEAD IN AND LEAD OUT DIMENSIONS ARE LOCATED ON TYPICAL SPECIFIED DRAWING WHEN SPECIFIED.

050-667919

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

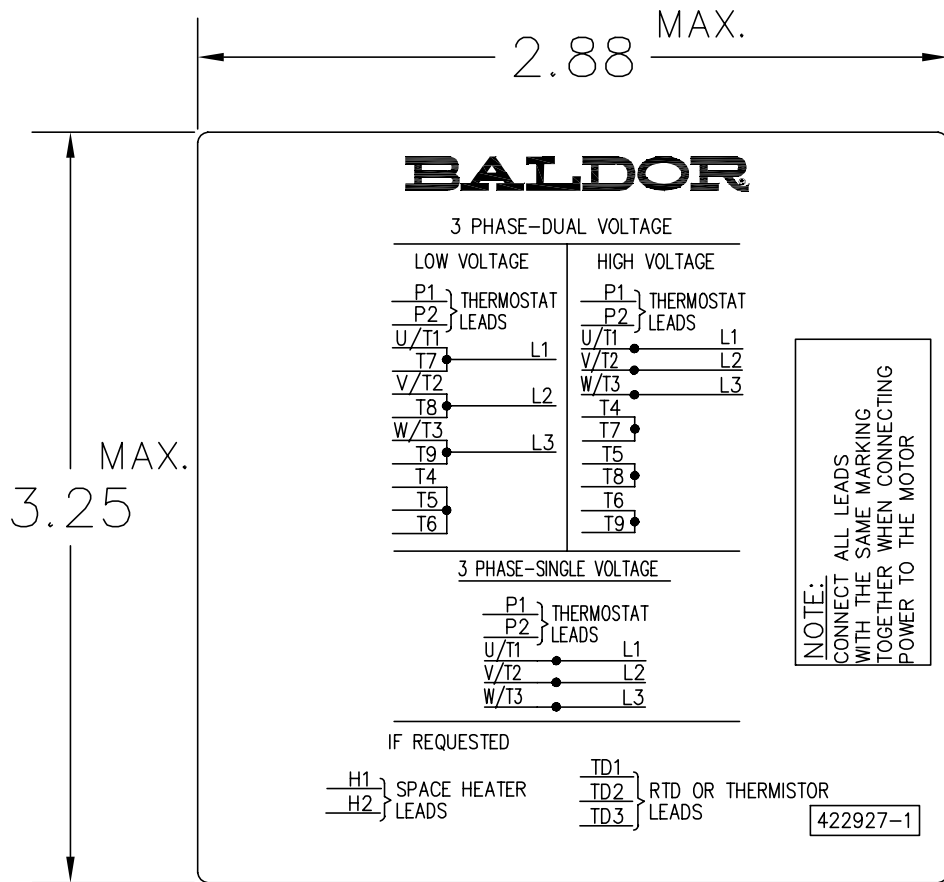
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REV. LTR: E	REVISED: 07: 27: 52 12/18/2018	BY: RGGWT
FILE: \RGG\00003\692		
MTL: -		

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.

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

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

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