

BALDOR® • RELIANCE 

Product Information Packet

IDFRPM21204C

20 HP 1750 TEFC FL2162C (250TC)

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	L3308A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617517-023	Poles:	04	Created Date:	04-10-2015
Base:		Eff. Date:	04-13-2015	Leads:			

Specs			
Catalog Number:	IDFRPM21204C		
Enclosure:	TEFC		
Frame:	FL2162CZ		
Frame Material:	Exposed Laminations		
Output @ Frequency:	20.000 HP @ 60 HZ		
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ		
Voltage @ Frequency:	460.0 V @ 60 HZ		
Agency Approvals:	CCSA US		
	UR		
Auxillary Box:	No Auxillary Box		
Base Indicator:	Rigid		
Bearing Grease Type:	No Grease		
Current @ Voltage:	27.000 A @ 460.0 V		
Duty Rating:	CONT		
Feedback Device:	NO FEEDBACK		
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 (OLD)		
Thermal Device - Winding:	Normally Closed Thermostat		

Nameplate 000613006NN										
	DUTY	HP	RPM	AMPS	VOLTS	HZ				
	CONT	20	1775	27	460	60				
	CONT	20	3545	25	460	120				
CAT.NO.	IDFRPM21204C		SPEC. NO.	P21T0283						
SER.NO.			FR	FL 2162CZ		INSUL	H			
PH.	3		MAX SAFE SPEED	5000		AMB.	40		MIN. AMB.	0
DESIGN NO.	L3308A		TYPE			ENCL.	TEFC			
S.F.	1.0		D.E. BRG.	50BC03JPP30A						
ENCL MOD			O.D.E. BRG.	45BC02JPP30A						

Parts List		
Part Number	Description	Quantity
WS286744	WS P21T0283	1.000 EA
RA282952	RA P21T0283	1.000 EA
000613006NN	RPM AC WITH CERTIFIED LOGOS	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
036170004EA	ROUND HEAD DRIVE SCREW	4.000 EA
411716004A	219P039 - 219P039 - LA	1.000 EA
418018122A	LABEL	2.000 EA
422927001	C/D LABEL	1.000 EA
036100080KA	M10-1.50X 80MM HXSOCHDCS	3.000 EA
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 EA
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 EA
036610010AB	MHSLW M10 PLATED	4.000 EA
400638001AB	WASHER SPRING - 210	1.000 EA
418057491A	LIFTING LUG	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
609830005AN	TBOLT PURGE MTR	4.000 EA
807581003BAA	BRKT,FL210,DE 807581-1WCB	1.000 EA
807581004AAB	BRKT,FL210,DE 807581-2WCB	1.000 EA
032018004AK	HHCS 1/4-20X1/2 PLATED	2.000 EA
034180010DA	KEY 1/4X1/4X1-1/4L	1.000 EA
036000020HB	HHCS M6-1.0X20MM PLATED	4.000 EA
036321020HB	HEXSOCKET FLAT SCREW M	3.000 EA
036620008AB	M6 METRIC EXT LOCKWASHER	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
065564000B	GASK 250-280	1.000 EA
075452000B	C/BOX, PAINTED 210-250	1.000 EA
075453000A	CBOXC, PAINTED 250-280	1.000 EA
078547001P	FAN 210	1.000 EA
406673002AE	2" CAP PLUG	1.000 EA
406673002C	.75 CAP PLUG	1.000 EA
415000103A	T/LUG #14AWG-#4AWG W/HOLE FOR .250 BOLT	1.000 EA
415072001B	CLAMP	1.000 EA
417733004T	GASKET CONDUIT BOX	2.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 EA
418057373A	SCREW SHEET METAL	7.000 EA
708533003A	PLATE, BTM FAN/BLOWER	2.000 EA
708533050A	COVER, FAN	1.000 EA
708533051A	GRILL, FAN COVER	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

REL. S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25 °C)
FRAME	FL2162	AMPS	27	MAX SAFE RPM	5000	
HP	20	DUTY	CONT	IM (AMPS)	15	R1 .179 X1 .845
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.066/.777	R2 .122 X2 1.09
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (LB-FT ²)	1.92	XM 18.1

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1774	20.0	59	460	60	26.9
MAX SPEED	3543	20.0	30	460	120	24.4
MIN SPEED	0	0	59	13.8	.874	26.9


LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	14.4
1/4	1794	5.01	15	460	60	15.7
1/2	1787	10.0	29	460	60	18.6
3/4	1781	15.0	44	460	60	22.4
FULL LOAD	1774	20.0	59	460	60	26.9
O/L	1742	39.3	119	460	60	48.5

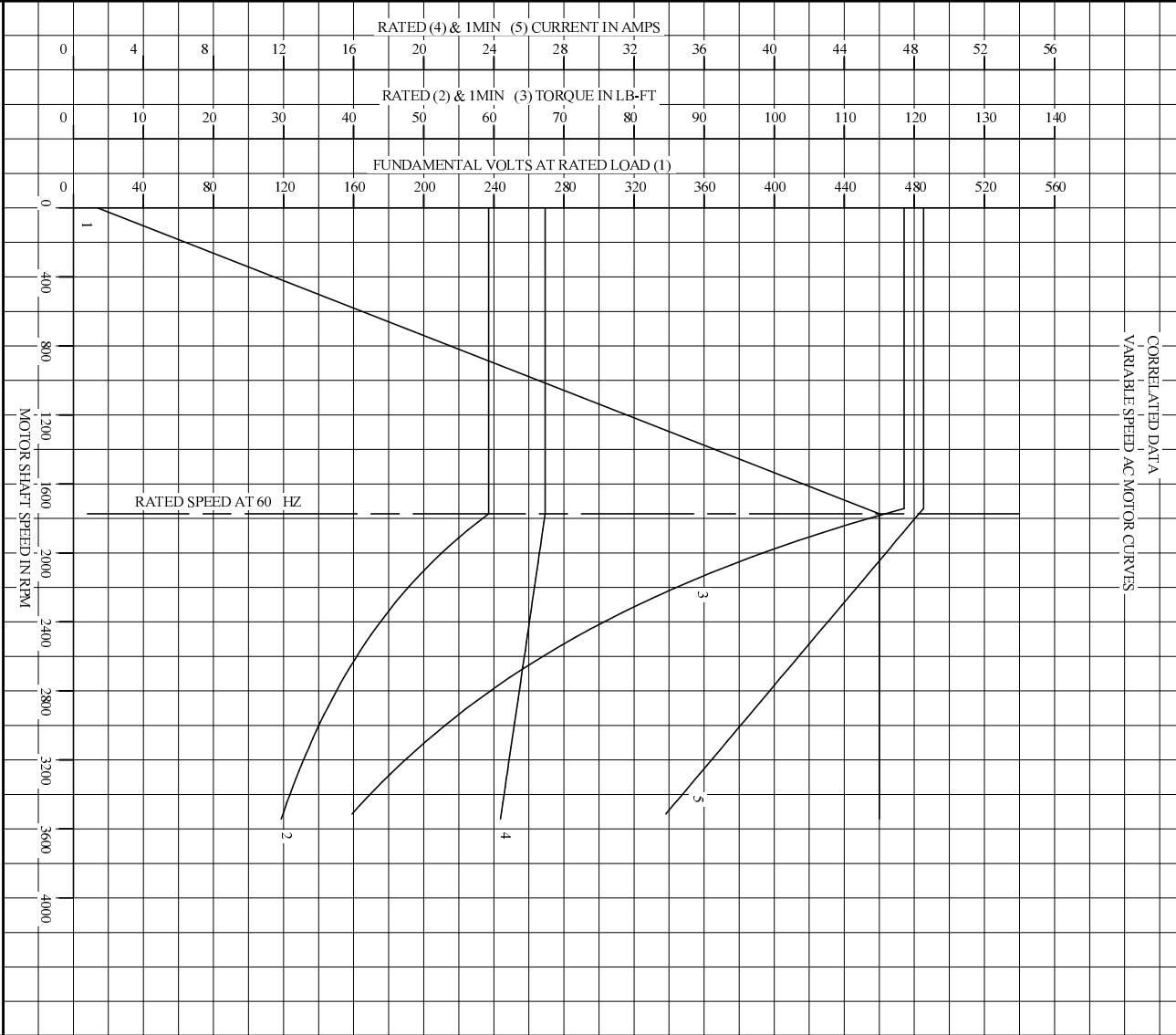
BLOWER DATA

VOLTS	PH/HZ	FL AMPS	LR AMPS	FRAME	CFM

REMARKS: TYPICAL DATA
CORRELATED DATA

	DR. BY	B. GRANT	A-C MOTOR PERFORMANCE DATA L3308A ISSUE DATE 6-6-06
	CK. BY	T. CUER	
APP. BY 6-6-06			

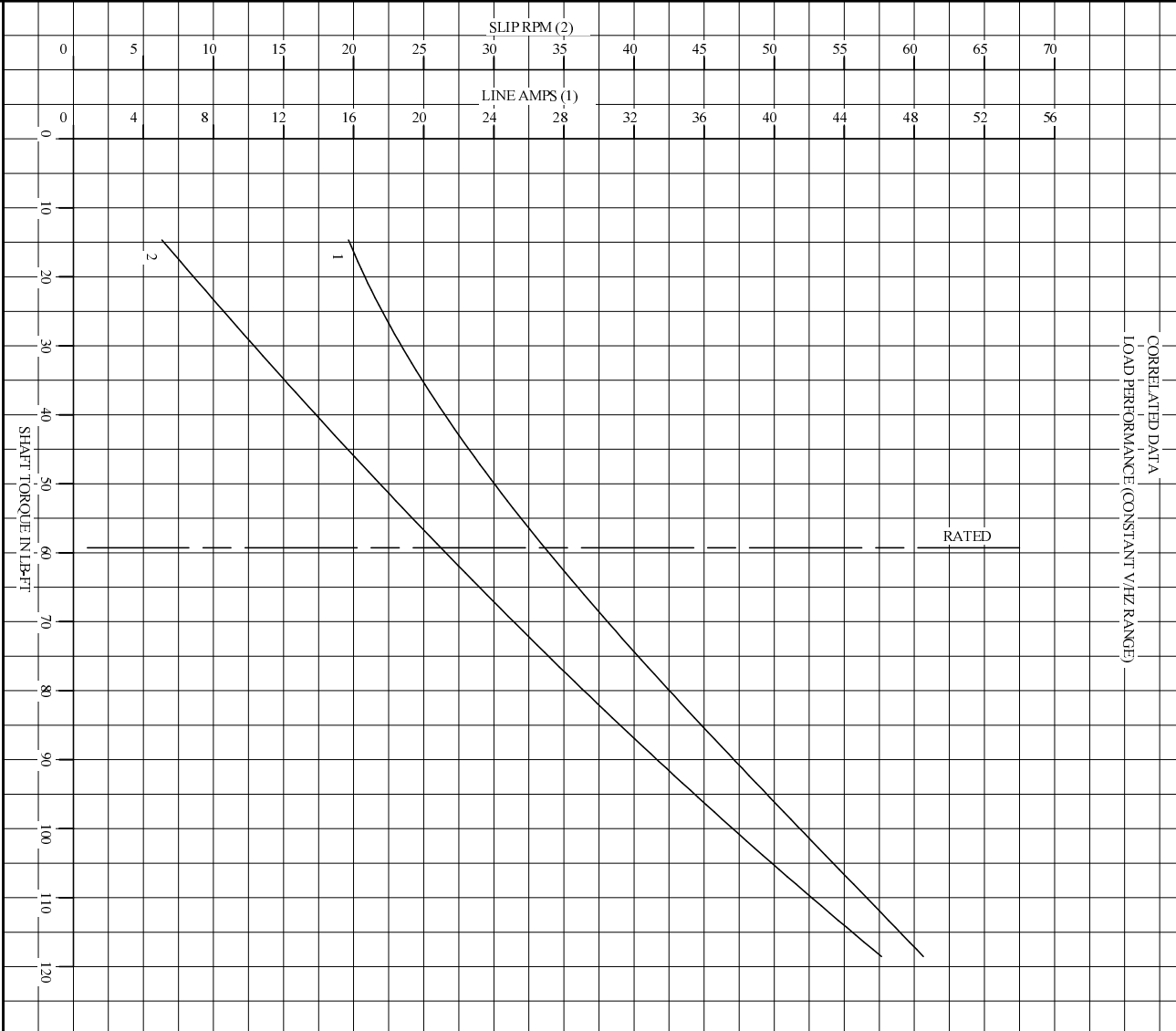
REL. S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE
FRAME	FL2162	AMPS	27	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)
HP	20	DUTY	CONT	IM (AMPS)	15	R1 .179 X1 .845
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.066 / .777	R2 .122 X2 1.09
PHASE/HERTZ	3/60	AMB C/INSUL	40/H	WK ² (LB-FT ²)	1.92	XN 18.1



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

 BALDOR • DOUGLASS • RELIANCE	DR. BY	B. GRANT	A-C MOTOR PERFORMANCE CURVES	L3308A SH1 OF 2 ISSUE DATE 6-6-06
	CK. BY	B. GRANT		
	APP. BY	T. CURR		
	DATE	6-6-06		

REL S.O.	-	VOLTS	460	ENCLOSURE	TEFC	WYE CONN	EQ CKT OHMS PER PHASE
FRAME	FL2162	AMPS	27	MAX SAFE RPM	5000	(AT BASE RATING, 25°C)	
HP	20	DUTY	CONT	IM (AMPS)	15	R1	.179
BASE SPEED	1775	S.F.	1.0	P.F.@NL/FL	.066/.777	R2	.122
PHASE/HERTZ	3/60	AMB C/INSUL	40/H	WK ² (LB-FC ²)	1.92	X2	1.09
						XN	18.1



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

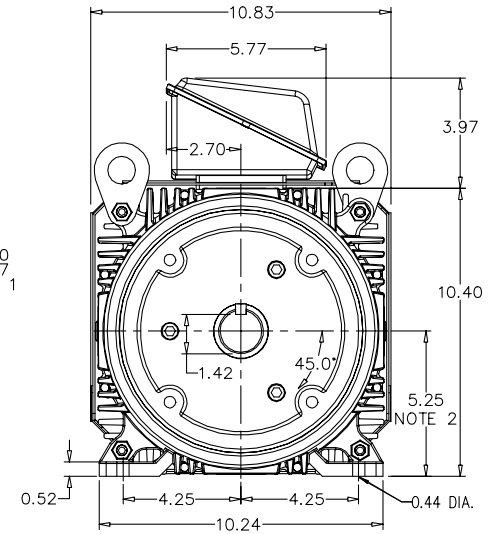
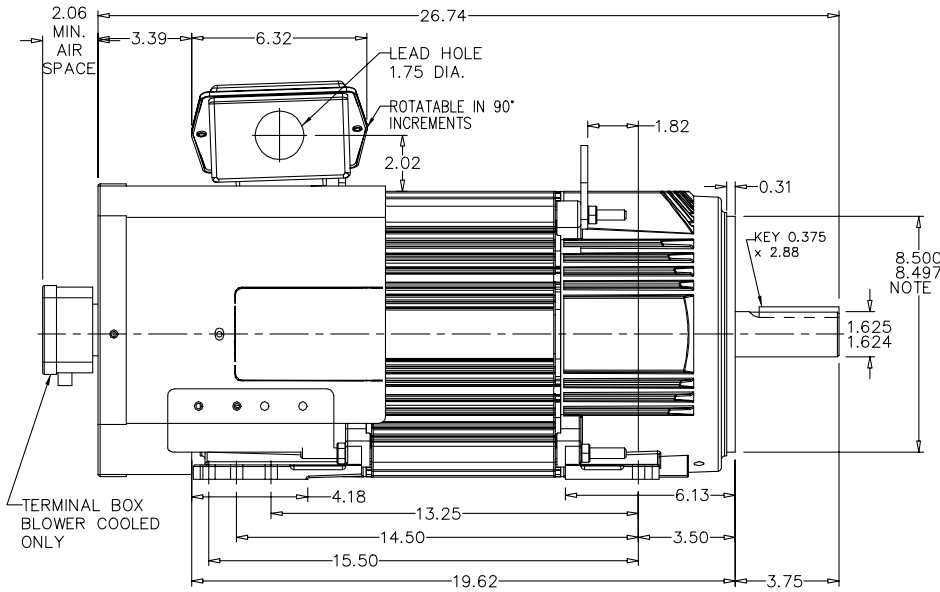
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	CK. BY	T. CURR		
APP. BY	6-6-06	DATE		

617517-023

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING
CURRENT MOTOR
FL2162CZ

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
FACE RUNOUT AND ECCENTRICITY 0.004 MAX. T.I.R.

NOTE 2: 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
61 AMP STEEL TERMINAL BOX SHOWN
REFER TO 616779-50 FOR SPECIFIED TERMINAL BOX DIMENSIONS
REFER TO 616779-55 FOR SPECIFIED TACHOMETER DIMENSIONS

MOTOR WEIGHT: 290 LBS. (MAY VARY 15%)
DIMENSIONS ARE IN INCHES SCALE: 1.00

617517-023

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

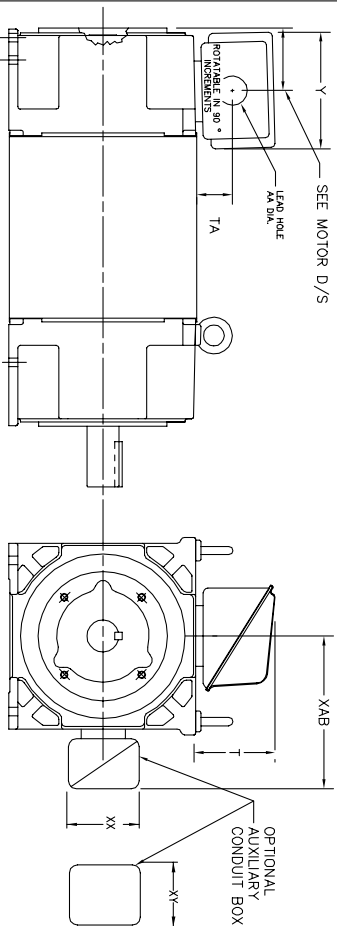
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FILE: \RGG\00003\195		
MTL: -		

BALDOR

DIM SHT RPMAC TEFC/FC FL2162CZ FT MT PROV FOR TACH
SH 1 of 1

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 & FDL11	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	706310056A	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FDL13 & RDL13	MILL	Y	160	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	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	8.56	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	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/RL280/ML180	7.38	4.25	4.25	603C007-26-A	FL210/TL210/RL210/ML210	10.88	8.00	8.00	706310-3-B
FL250/TL250/RL250/ML250	8.44	4.25	4.25	603C007-26-A	FL280/TL280/RL280/ML280	11.88	8.00	8.00	706310-3-B
FL280/TL280/RL280/ML280	9.12	4.25	4.25	603C007-26-A	FL280/TL280/RL280/ML280	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. SIZES OR BOTTOM TERMINAL BOX CAN BE KEPT FOR LEAD OUTLET AT BOTTOM. SIZES OR BOTTOM OF C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

050-667919

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

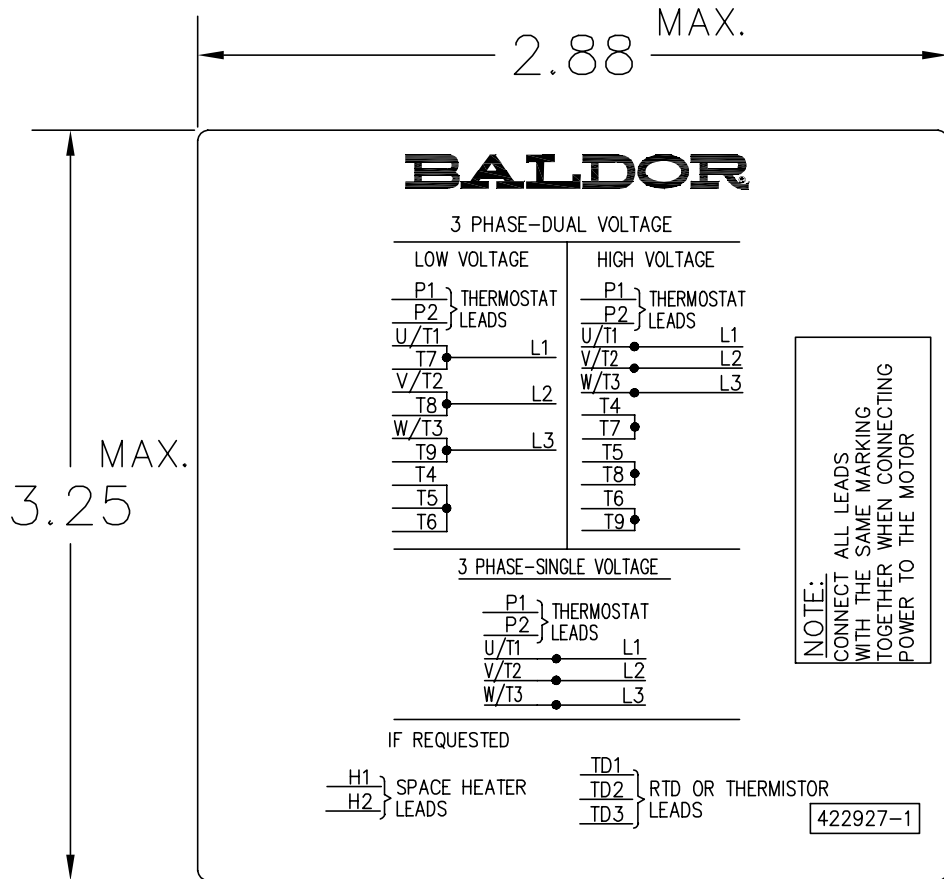
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MTL: 1		

BALDOR

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: 000000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

BALDOR

EXTERNAL CONNECTION LABEL

SH 1 of 1

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