ABB BALDOR RELIANCE

Customer information packet

IDBRPM21304C

30HP, 1750, 460V, FL2162, TEBC, F3

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Specifications

Enclosure	TEBC
Frame	FL2162CZ
Frame Material	Exposed Laminations
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
Agency Approvals	CCSA US
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	40.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	40.0 a
Insulation Class	H
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	28.80 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	Shaft Grounding
Shaft Rotation	Reversible
Speed	1765 rpm
Starting Method	Full Voltage

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L3310A
Layout	617517-063
Eff. date	01-21-2022
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	30	1765	40	460	60
CONT	30	3525	37	460	120

CAT.NO.	IDBRPM21304C		**SPEC. NO.**	F21-A000-0457			
SER.NO		**FR**	FL2162CZ	**INSUL**	H		
PH.	3	**MAX SAFE SPEED**	5000	**AMB.**	40	**MIN. AMB.**	-25
DESIGN NO.	L3310A	**TYPE**		**ENCL.**	TEAO-BC		
S.F.	1.00	**D.E. BRG.**	50BC03JPP30A				
ENCL MOD		**O.D.E. BRG.**	45BC02JPP30A				
	IP44						

Parts List

Part number	Description	Quantity
WS392803	WS F21-A000-0457	1.000 ea
RA389334	RA F21-A000-0457	1.000 ea
411716004A	219P039 - 219P039 - LA	1.000 ea
418018122A	LABEL	2.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
000613006MY	NP-RPMAC INVERTER DUTY	1.000 ea
000692000NH	LABEL DIRECTION AIR FL	1.000 ea
418056062B	NP AC BLOWER DATA	1.000 ea
LB1613	LABEL, QR CODE, ADHESIVE LABEL	1.000 ea
000692000XM	LABEL QR CODE	1.000 ea
422927001	C/D LABEL	1.000 ea
807581004AAB	BRKT,FL210,DE 807581-2WCB	1.000 ea
807581003BAA	BRKT,FL210,DE 807581-1WCB	1.000 ea
BP5068BJ01	BRUSH, .187 X .187 X 1.00	1.000 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
400638001AB	WASHER SPRING - 210	1.000 ea
036610010AB	MHSLW M10 PLATED	4.000 ea
036000016DB	HHCS	2.000 ea
036100080KA	M10-1.50X 80MM HXSOCHDCS	3.000 ea
418057491A	LIFTING LUG	2.000 ea
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 ea
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 ea
609830005AN	TBOLT PURGE MTR	4.000 ea
BP5248	BP5248	1.000 ea
613450002E	BLOWER WITH TERMINAL BOX	1.000 ea
415000103D	T/LUG #4AWG-1/0AWG W/HOLE FOR .250 BOLT	1.000 ea
417733004AC	GASK C/BOX	1.000 ea
706310640B	BACKPLATE GASKET C/BOX 706310-637	1.000 ea
708533051A	GRILL, FAN COVER	1.000 ea
418057260A	SCREW PHILLIPS PAN HD	4.000 ea

708533050A	COVER, FAN	1.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	3.000 ea
418057256F	HHCS M6 12MM ZINCPLAT	1.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	3.000 ea
418057373A	SCREW SHEET METAL	7.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
406673002C	.75 CAP PLUG	1.000 ea
036620009AB	M8 EXTERNAL LK WASHER	1.000 ea
706310638A	BACK PLATE FOR 706310-637 WITH 3.12" BOL	1.000 ea
423709011A	WASHER	8.000 ea
708533003A	PLATE, BTM FAN/BLOWER	2.000 ea
418057056A	ADAPTER ENGLISH CAMER	1.000 ea
706310637A	C/BOX, MILL, RPMAC,9X9X4, 375IN^3	1.000 ea
706310641A	LIPPED CBOX LID FOR 706310-642	1.000 ea
706310640A	LID GASKET C/BOX 706310-637	1.000 ea
036010012HB	HHCS T/BOX BRACE	16.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	4.000 ea
706305301A	GUARD, SHAFT	1.000 ea
034180022FA	KEY 3/8X3/8X2-3/4 L	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
004824007CQR	C2 PAINT SYSTEM MEDIUM GRAY CHARCOAL MET	0.100 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	TEBC	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	FL2162	AMPS	40	MAX SAFE RPM	5000	(AT BASE RATING, 25 ℃)			
HP	30	DUTY	CONT	IM (AMPS)	20	R1	.157	X1	.701
BASE SPEED	1765	S.F.	1.0	P.F.@NL/FL	.064/.797	R2	.102	X2	.791
PHASE/HERTZ	3/60	AMB ℃/INSUL	40/H	WK^2 ($Lb\text{-}Ft^2$)	1.92			XM	13.4

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1766	30.0	89	460	60	39.6
MAX SPEED	3523	30.0	45	460	120	37.1
MIN SPEED	0	0	89	18.1	1.14	39.6

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	19.8
1/4	1792	7.52	22	460	60	22.1
1/2	1784	15.0	44	460	60	26.3
3/4	1775	22.5	67	460	60	32.3
FULL LOAD	1766	30.0	89	460	60	39.6
O/L	1721	58.5	178	460	60	75.0

BLOWER DATA	VOLTS	PH/HZ	FL AMPS	LR AMPS	FRAME	CFM

REMARKS: TYPICAL DATA
CORRELATED DATA

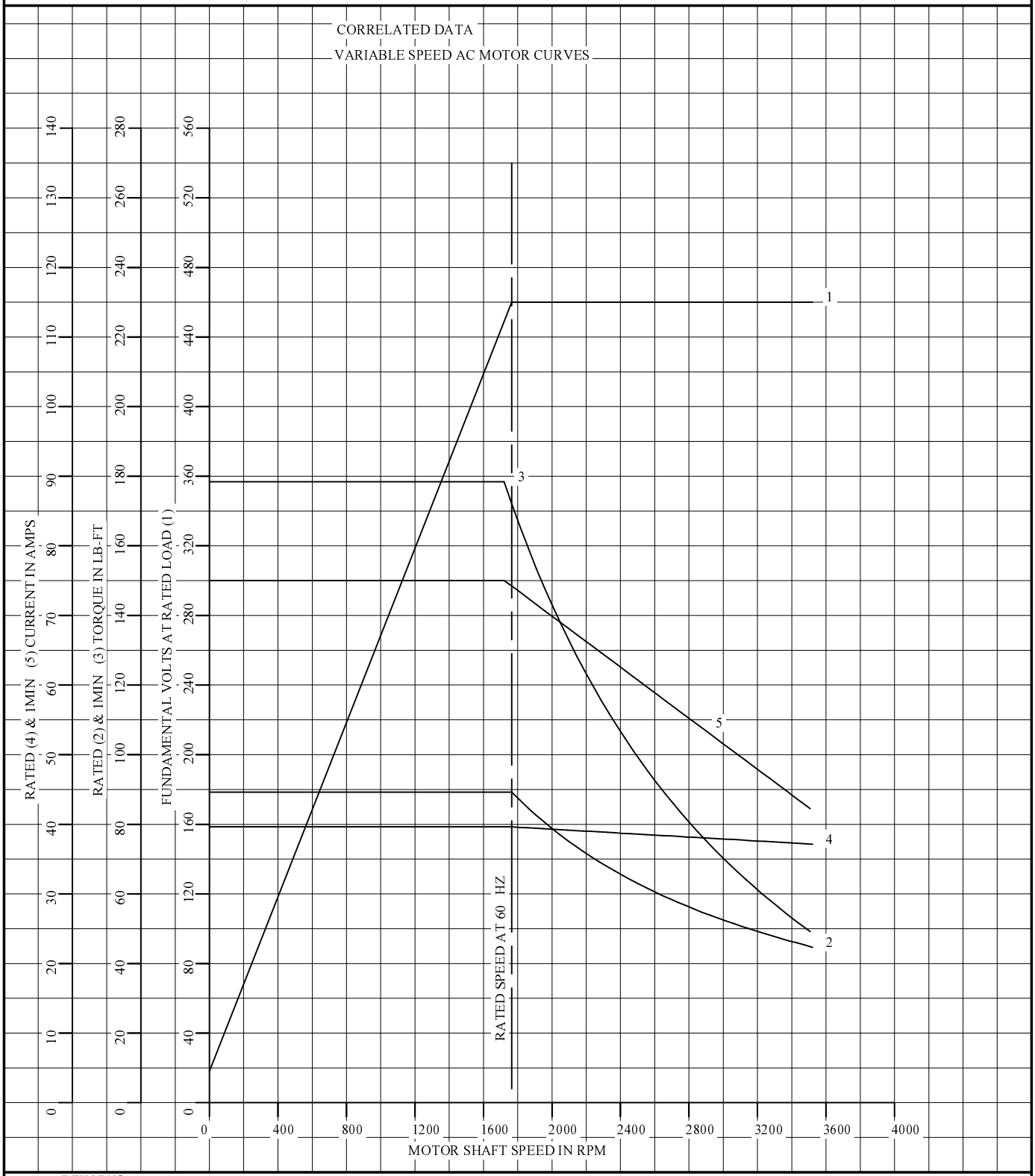
BALDOR · DODGE · RELIANCE

DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 6-5-06

A-C MOTOR PERFORMANCE DATA L3310A
ISSUE DATE 6-5-06

Printed on 12/12/07 13:23 @ usmghengdev

REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25 ℃)	
FRAME	FL2162	AMPS	40	MAX SAFE RPM	5000		
HP	30	DUTY	CONT	IM (AMPS)	20	R1 .157	X1 .701
BASE SPEED	1765	S.F.	1.0	P.F.@NL/FL	.064/.797	R2 .102	X2 .791
PHASE/HERTZ	3/60	AMB ℃/INSUL	40/H	WK^2 (Lb-Ft^2)	1.92		XM 13.4



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

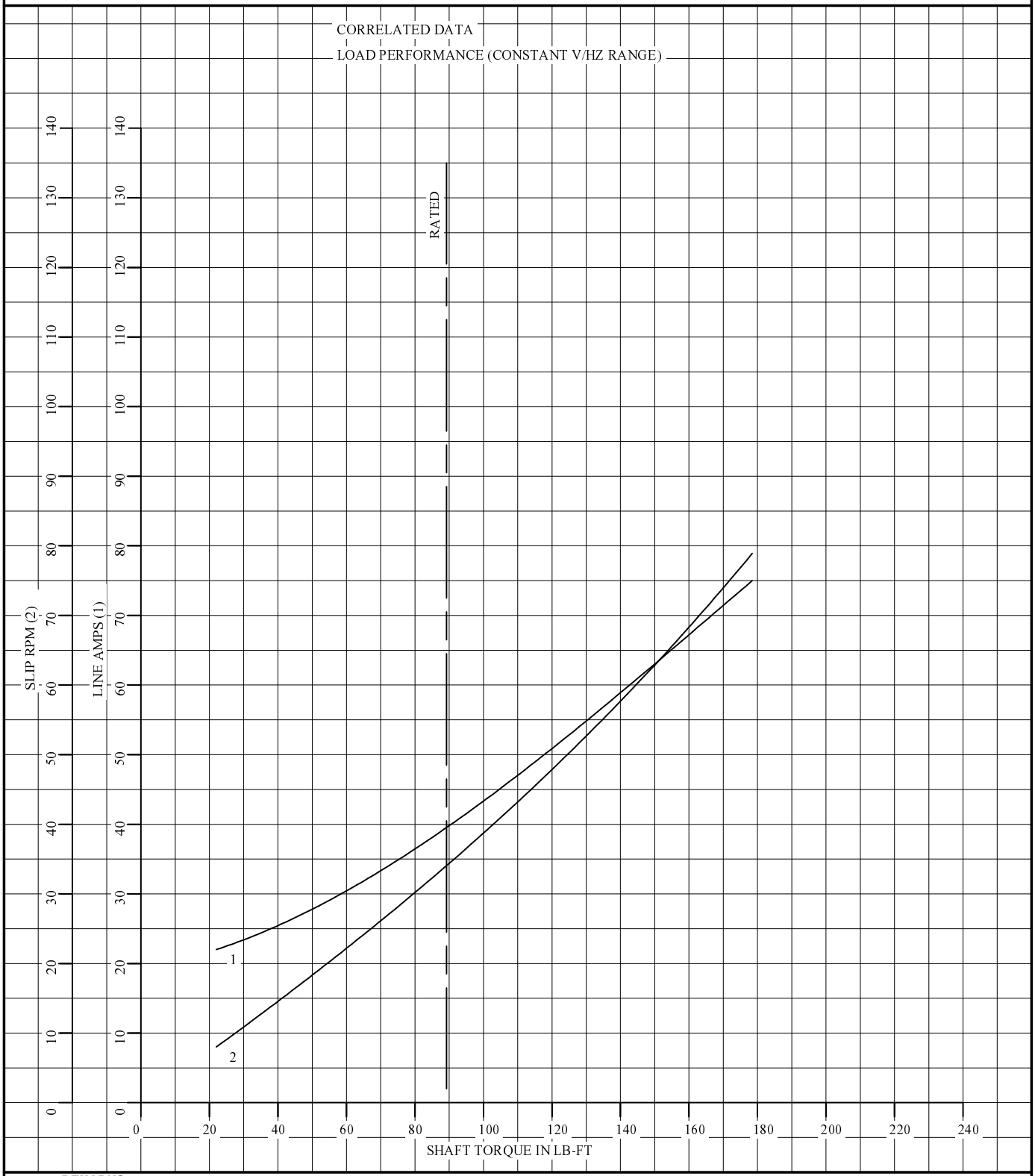
BALDOR · DODGE · RELIANCE

DR. BY	B. GRANT
CK. BY	B. GRANT
APP. BY	T. CUFR
DATE	6-5-06

A-C MOTOR PERFORMANCE CURVES

L3310A
SH 1 OF 2
ISSUE DATE 6-5-06

REL S.O.	-	VOLTS	460	ENCLOSURE	TEBC	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25 ℃)	
FRAME	FL2162	AMPS	40	MAX SAFE RPM	5000		
HP	30	DUTY	CONT	IM (AMPS)	20	R1 .157	X1 .701
BASE SPEED	1765	S.F.	1.0	P.F.@NL/FL	.064/.797	R2 .102	X2 .791
PHASE/HERTZ	3/60	AMB ℃/INSUL	40/H	WK^2 (Lb-Ft^2)	1.92		XM 13.4



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

BALDOR · DODGE · RELIANCE

DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 6-5-06

A-C MOTOR PERFORMANCE CURVES

L3310A
SH 2 OF 2
ISSUE DATE 6-5-06

617517-063

ENCLOSURE: TOTALLY ENCLOSED

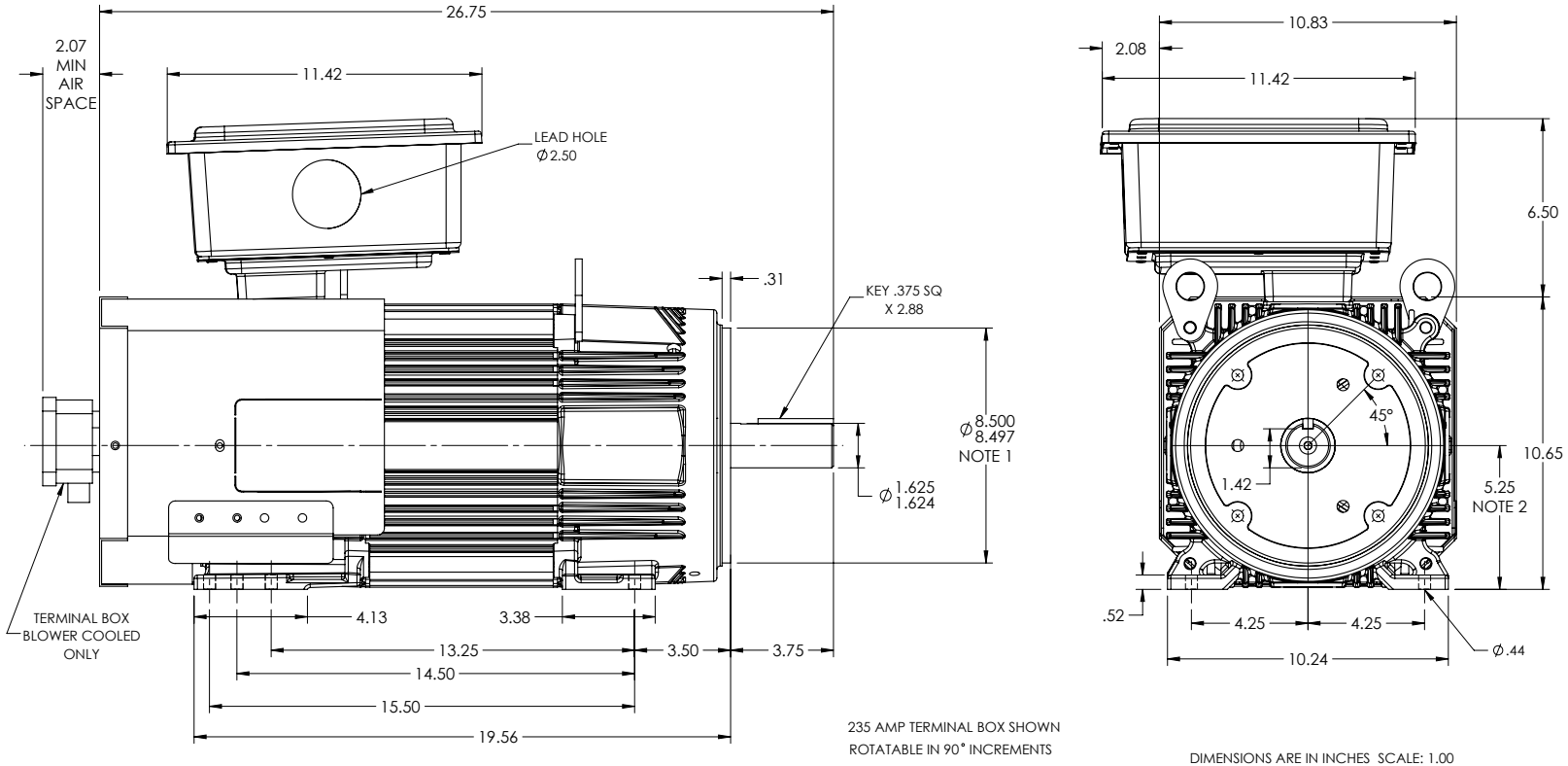
MOUNTING: FOOT / NEMA 250TC C-FACE

DRIVE METHOD: COUPLED OR BELTED

RPM–AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR FL2162CZ

COOLING: BLOWER COOLED

ACCESSORIES: PROVISIONS FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED



235 AMP TERMINAL BOX SHOWN
ROTATABLE IN 90° INCREMENTS

DIMENSIONS ARE IN INCHES SCALE: 1.00

MOTOR WEIGHT: 290 LBS. (MAY VARY 15%)

NOTE 1 O.D.E. C-FACE & TACHOMETER MOUNTING
1/2-13 TAP, .88 IN. DEEP, ON A Ø7.25 IN. BOLT CIRCLE
FACE RUNOUT AND ECCENTRICITY .004 MAX T.I.R.

NOTE 2 SHAFT HEIGHT WILL NOT BE EXCEEDED.
SHIMS UP TO .05mm IN THICKNESS ARE USUALLY
REQUIRED FOR COUPLED OR GEARED MACHINES.

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

REV. DESC: MODEL AND REDRAW IN SOLIDWORKS			
REV: A	VERSION: 01	REVISED: 01:35:05 01/26/2023	TDR: 000001202962
MODEL NO. 617517-063			REF: -
BY: USWATUR			B

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DIM SHT,TEBC,FL2162CZ,FT MT,PROV FOR TACH,F3 MILL C/B

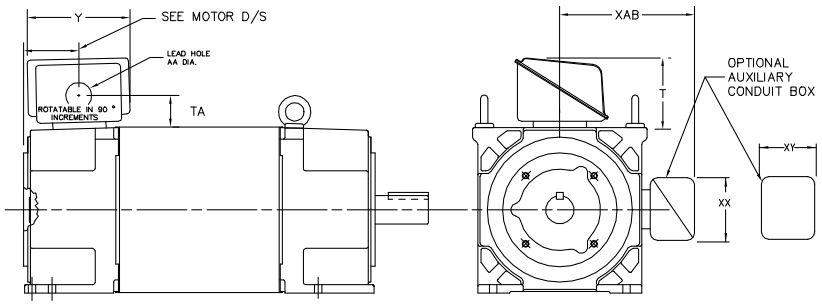
617517-063

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.

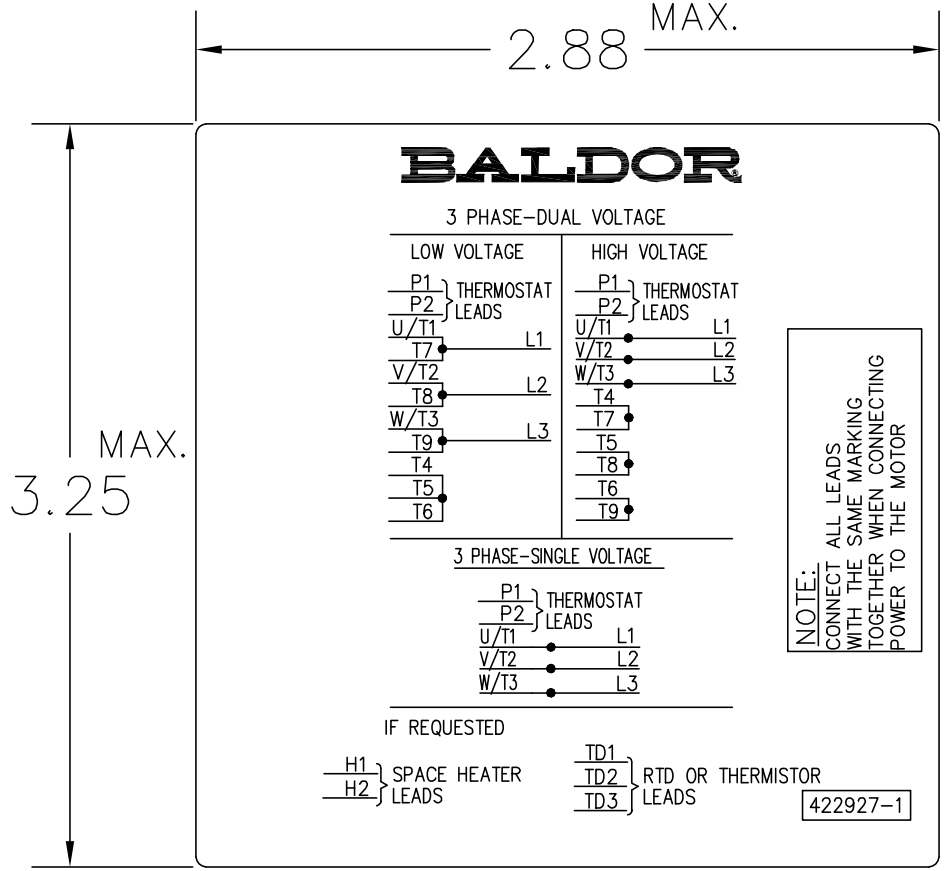
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REV. DESC: ADD 706310-637 & 639 BOX		TDR: 00000118O260
REV. LTR: F	VERSION: 06	
FILE: \RGV\00003\692	REVISED: 11:08:56 10/26/2021	BY: RGGRWM
MTL: -		

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