

ABB BALDOR RELIANCE III

Customer information packet

ZDBRPM21304C

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

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	41.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	ENCODER
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	41.0 a
Insulation Class	H
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	33.30 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	1770 rpm
Starting Method	Full Voltage

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L6754A
Layout	617517-476
Eff. date	01-19-2022
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	11-11-2021

Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613006MY									
	DUTY	HP	RPM	AMPS	VOLTS	HZ			
	CONT	30	1770	41	460	60			
	CONT	30	3540	37	460	120.4			
CAT.NO.	ZDBRPM21304C		SPEC. NO.		F21-A000-0470				
SER.NO			FR	FL2162CZ	INSUL	H			
PH.	3	MAX SAFE SPEED		5000	AMB.	40	MIN. AMB.	-25	
DESIGN NO.	L6754A		TYPE		ENCL.	TEAO-BC			
S.F.	1.00		D.E. BRG.		50BC03JPP30A				
ENCL MOD			O.D.E. BRG.		45BC02JPP30A				
	IP44								

FRAME	FL2162	AMPS	41	MAX SAFE SPEED	5000				
HP	30	DUTY	CONT	IM (AMPS)	19	R1	.146	X1	.666
BASE SPEED	1770	S.F.	1.0	P.F. @NL / FL	.058/.777	R2	.0977	X2	.761
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	1.92			XM	12.2

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1768	30.0	89	460	60	40.5
MAX SPEED	3528	30.0	45	460	120	36.6
MIN SPEED	0	0	89	17.0	1.07	40.5

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	21.7
1/4	1792	7.52	22	460	60	23.9
1/2	1785	15.0	44	460	60	27.7
3/4	1777	22.5	67	460	60	33.5
FULL LOAD	1768	30.0	89	460	60	40.5
0/L	1726	58.6	178	460	60	74.6

REMARKS:
TYPICAL DATA
CORRELATED DATA



DRAWN BY: R. ROBERTS
 CHECKED BY: B. GRANT
 APPROVED BY: J. MARTIN
 DATE: 10-13-15

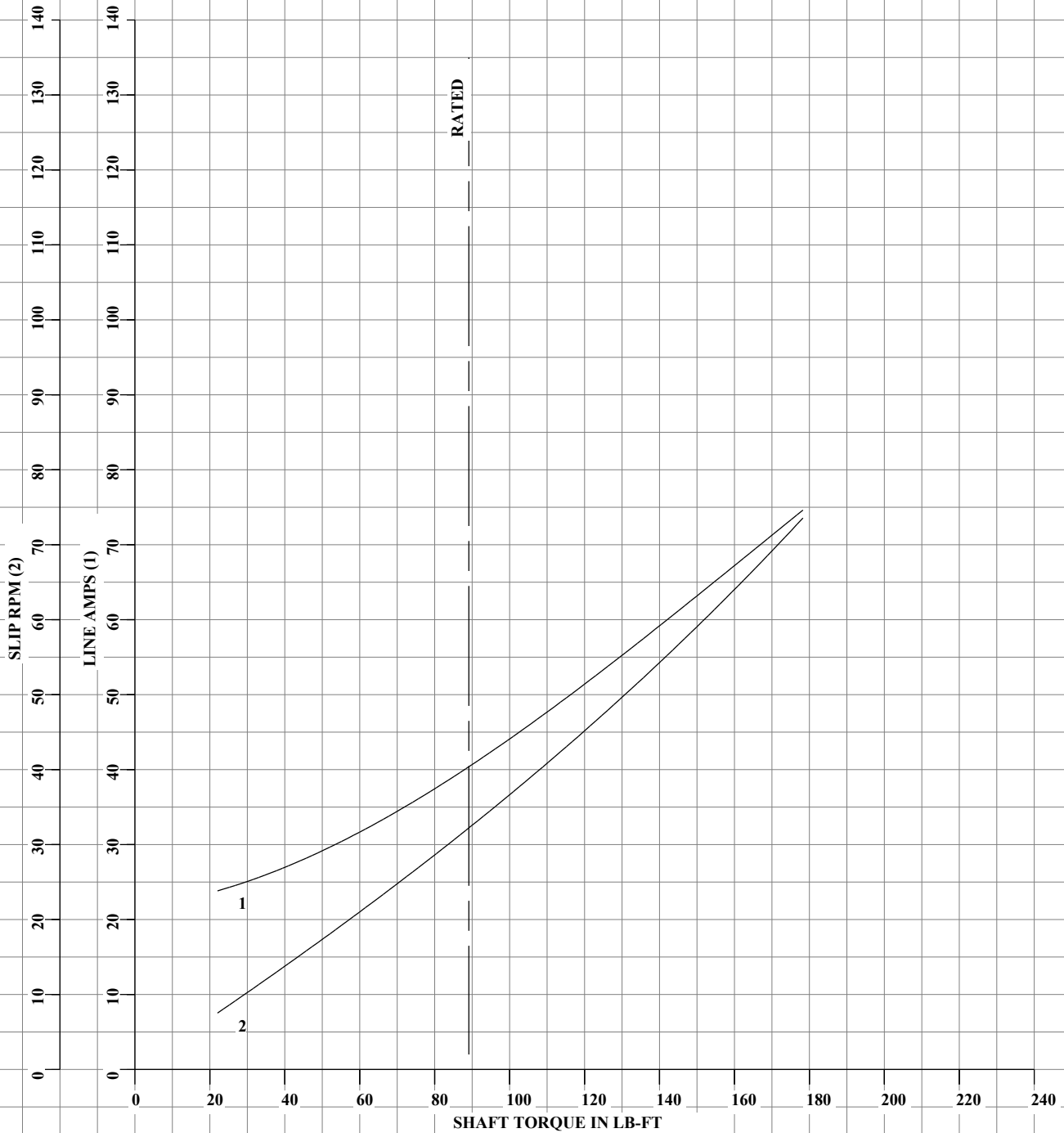
AC MOTOR
PERFORMANCE
DATA

L6754A

ISSUE DATE 2-13-20

		VOLTS		ENCLOSURE		WYE CONNEQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)		
FRAME	FL2162	AMPS	41	MAX SAFE SPEED	5000			
HP	30	DUTY	CONT	IM (AMPS)	19	R1	.146	X1 .666
BASE SPEED	1770	S.F.	1.0	P.F. @NL / FL	.058/.777	R2	.0977	X2 .761
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	1.92			XM 12.2

**CORRELATED DATA
LOAD PERFORMANCE (CONSTANT V/HZ RANGE)**



TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



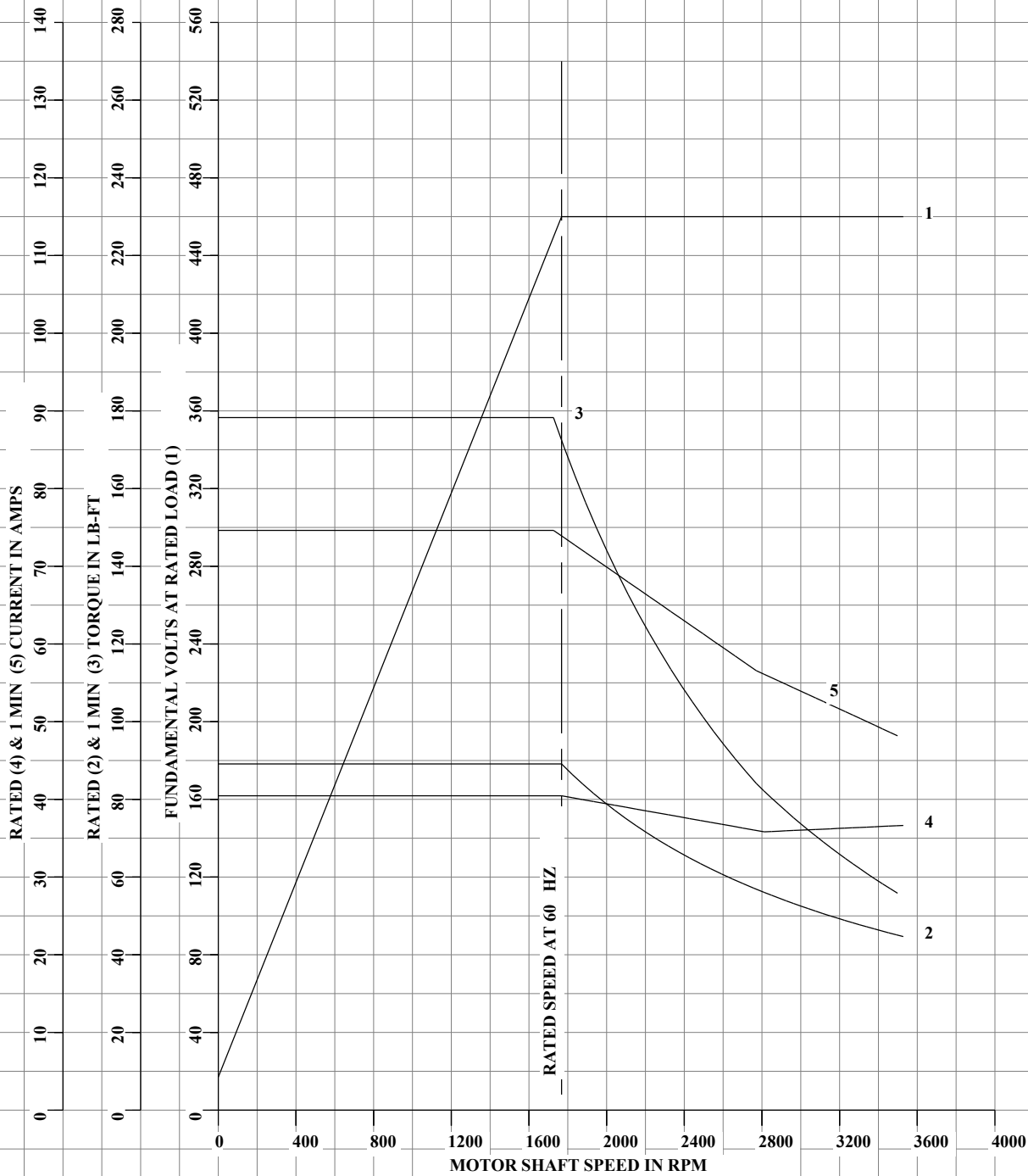
DRAWN BY: R. ROBERTS
 CHECKED BY: B. GRANT
 APPROVED BY: J. MARTIN
 DATE: 10-13-15

**AC MOTOR
PERFORMANCE
DATA**

L6754A
 ISSUE DATE: 2-13-20

FRAME	FL2162	VOLTS	460	ENCLOSURE	TEBC	WYE CONNEQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)		
HP	30	AMPS	41	MAX SAFE SPEED	5000	R1	.146	X1 .666
BASE SPEED	1770	DUTY	CONT	IM (AMPS)	19	R2	.0977	X2 .761
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.058/.777			XM 12.2
		AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	1.92			

**CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES**



TYPICAL DATA, DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

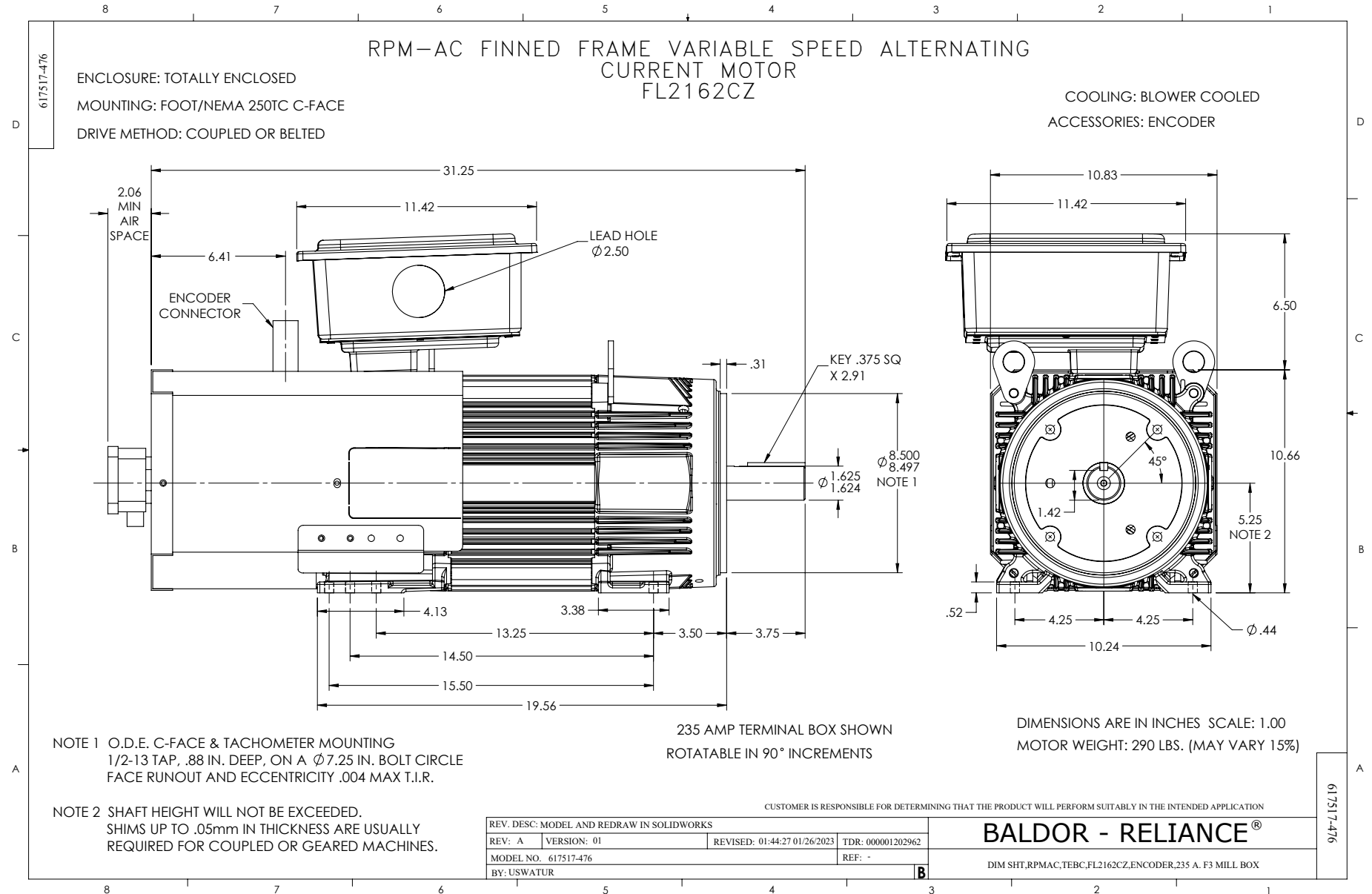


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 DATE: 10-13-15

**AC MOTOR
PERFORMANCE
DATA**

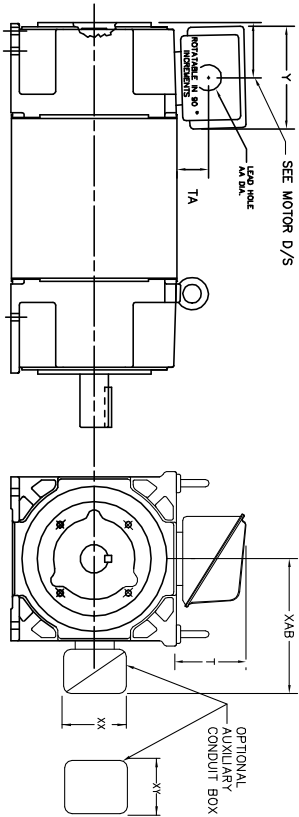
L6754A

ISSUE DATE: 2-13-20



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	706320003A	6.12	2.36	4.38	1.75/2.00
FL180	STEEL	N	208	706320007A	6.62	2.00	7.00	2.50/2.00
FL180	CAST IRON	Y/N	100	706320004C	6.75	2.50	4.38	1.0/1.75
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	075452001A	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	306	706320016A	9.00	4.12	8.44	4.89
FL210 & RL210	CAST IRON	N	110	075460062B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310229A	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310056A	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	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	075452001A	7.69	2.38	5.25	1.94
FL250 & RL250	STEEL	N	306	706320016A	9.00	4.12	8.44	4.89
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	706310229A	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/N	235	706310637A	11.42	4.00	6.72	2.50
FL250 & RL280	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	306	706320016B	9.00	4.12	8.44	4.89
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/N	235	706310637A	11.42	4.00	6.72	2.50
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
FL210/FL180/RL210/RL182	7.38	4.25	4.25	602007-26-A	FL210/FL180/RL210/RL132	10.88	8.00	8.00	706310-3-B
FL250/FL160/RL250/RL160	8.44	4.25	4.25	602007-26-A	FL250/FL160/RL250/RL160	11.88	8.00	8.00	706310-3-B
FL280/FL180/RL280/RL180	9.12	4.25	4.25	602007-26-A	FL280/FL180/RL280/RL180	12.62	8.00	8.00	706310-3-B

(1) 1" AW CONDUIT.
(2) 1" AW PIPE TAP.
(3) CUSTOMER TO PROVIDE W/LE TYP CONDUIT.
(4) 2" DN-3A OR 1" TYP DN-4C

TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET 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.

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
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MTL: -		

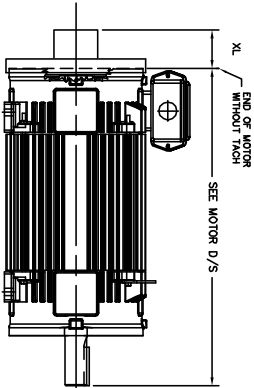
BALDOR - RELIANCE®

DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180

RPM AC TACHOMETER DIMENSIONS
NEMA FRAMES FL180 thru FL440 and IEC FRAMES FDL112 thru FDL280

DIMENSIONS ARE IN INCHES(mm)

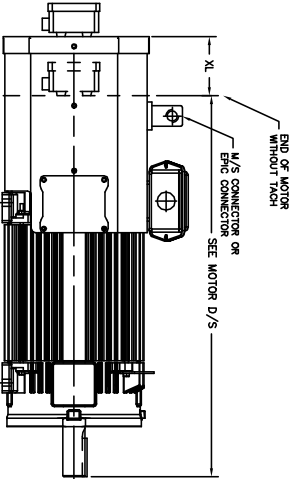
DPV, DPSV, TEPV, TESV, TENV & TEO-B
IC06, IC17, IC37, IC410, & IC416-PB



* THIS DIMENSION INCLUDES COVER FOR X/Y MOTOR.

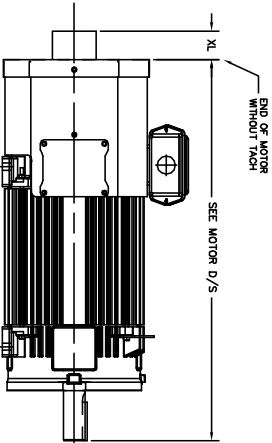
TACH MODEL	XL Inches(mm)	LBS.
BEL DR DYNAPAR HS35	2.88 (74)	5
DYNAPAR H20	7.50 (191) MAX	10
NORTHSTAR HS35M	3.31 (84)	10
NORTHSTAR ST67	2.88 (74)	5
DYNAPAR HS6	10.56 (268)	40
AVTRON M3 DR M4	3.62 (92)	10
TAMAGAMA TS5013(XT)	6.00 (152)	10
NORTHSTAR ST56	2.88 (74)	5
NORTHSTAR ST65	2.00 (51)	5
BEL HS20	10.19 (259)	15
TAMAGAMA TS2151	2.64 (67)	15
BEL T25	7.50 (191)	15
DYNAPAR HS20	2.00 (50.8)	5
DYNAPAR X25	12.88 (327)	10
STEBMANN SRS25	7.25 (184.4)	10
NORTHSTAR HS035	3.00 (76.2)	10
HEIDENHAIN EDW425	2.5 (63.5)	5
AVTRON HS35M	4.19 (106.4)	5
HEIDENHAIN ERN480	5.00 (76.2)	5
DYNAPAR H025	7.00 (177.8)	10
DYNAPAR H02	3.62 (92.1)	5
AVTRON M05	2.54 (64.5)	9
AVTRON AV850	2.54 (64.5)	9
AVTRON AV56	4.50 (115)	15
HS038	3.30 (84)	5
HS025	3.30 (84)	2
NORTHSTAR R18	3.25 (83)	15
DYNAPAR HM625	5.88 (150)	10
AVTRON AV485	9.50 (241)	18
AVTRON AV22	1.93 (49)	7
DYNAPAR RH25	3.80 (97)	1.6
AVTRON AV85	2.40 (61.5)	3

TEAO-BC, IC416-BC
EXCLUDES NEMA FRAMES FL320 THRU FL440
AND
IEC FRAMES FDL200 THRU FDL280



TACH MODEL	XL Inches(mm)	LBS.
BEL DR DYNAPAR HS35	4.50 (115)	10
DYNAPAR H20	4.50 (115)	15
AVTRON M3 DR M4	4.50 (115)	10
NORTHSTAR HS35M	4.50 (115)	15
NORTHSTAR ST56	4.50 (115)	10
NORTHSTAR ST67	4.50 (115)	10
NORTHSTAR S185	4.50 (115)	5
NORTHSTAR TS5008 TS5013	4.50 (115)	10
DYNAPAR HS20	4.50 (115)	15
STEBMANN SRS25	4.50 (115)	10
STEBMANN SRS25/SRS50	4.50 (115)	3
HS20 & HS25	4.50 (115)	15
AVTRON HS35M	4.50 (115)	10
AVTRON AV85	4.50 (115)	10
AVTRON HS6	4.50 (115)	5
AVTRON AV67	4.50 (115)	10
HS038	4.50 (115)	5
TS2014	4.50 (115)	10
AVTRON HS45	4.50 (115)	15
DYNAPAR HS038M	4.50 (115)	15
AVTRON AV22	4.50 (115)	7
AVTRON AV850	4.50 (115)	9

TEFC, IC411



TACH MODEL	XL Inches(mm)	LBS.
BEL HS35	2.88 (74)	7
NORTHSTAR HS35M	3.31 (84)	10
DYNAPAR H20	3.75 (95)	15
DYNAPAR HS35, HS038	2.88 (74)	7
HEX017	9.75 (248)	35
EDW425	7.90 (201)	35
AVTRON HS35M	4.19 (106)	2
STEBMANN SRS50	3.75 (95)	1
DYNAPAR HS20	2.00 (51)	1
NORTHSTAR HS035	2.81 (71)	2
NORTHSTAR HS038	3.30 (84)	5
AVTRON AV22	1.93 (49)	7

550-6677919

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

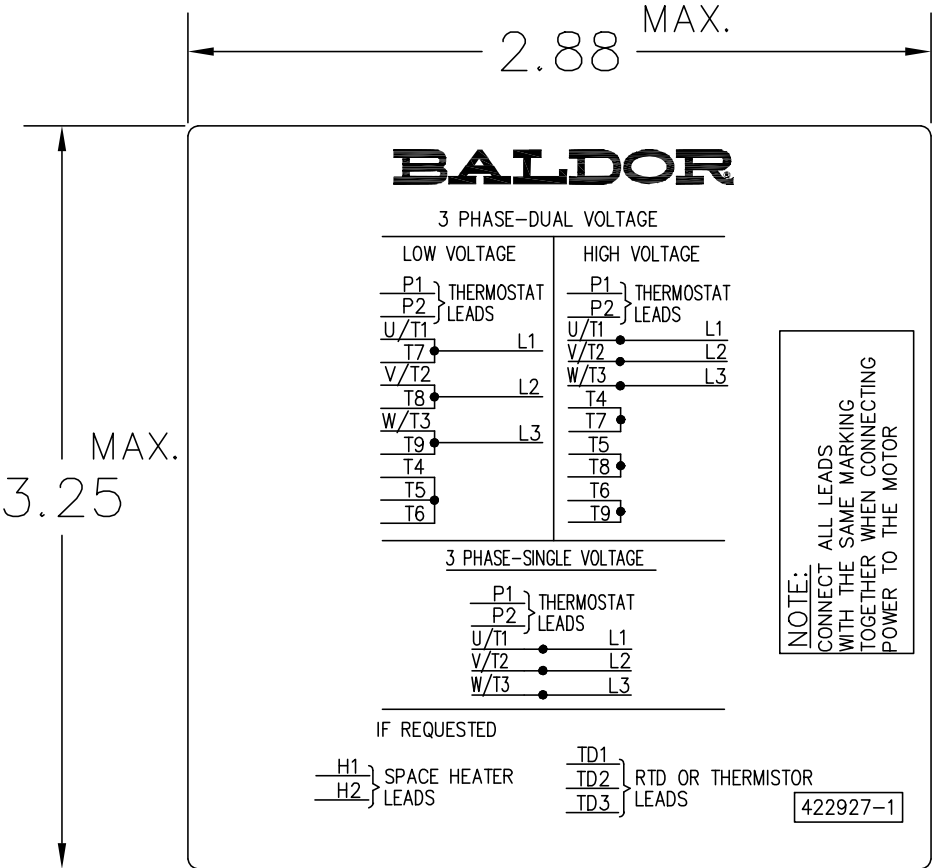
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FILE: \RGG\00003\694		
MTL: -		

BALDOR - RELIANCE®

DIM SHT TACH DIM NEMA FL180 - FL440 IEC FDL112 - FDL280

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