

ABB BALDOR RELIANCE III



Customer information packet

IDNRPM21104C

10HP, 1750, 230_460V, FL2162, TENV, F3

Specifications

Enclosure	TENV
Frame	FL2162C
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	10.000 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	13.600 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	13.6 a
Insulation Class	H
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	23.71 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1780 rpm
Starting Method	Full Voltage

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L3424B
Layout	617516-063
Eff. date	01-21-2022
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	10-20-2021

Thermal Device - Bearing

None

Thermal Device - Winding

Normally Closed Thermostat

Nameplate

000613006MY

	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	10	1780	13.6	460	60	
	CONT	10	3560	12.4	460	120.2	
	CONT	10	1780	27.2	230	60	
	CONT	10	3560	24.8	230	120.2	
CAT.NO.	IDNRPM21104C		SPEC. NO.	F21-A000-0452			
SER.NO		FR	FL2162C	INSUL	H		
PH.	3	MAX SAFE SPEED	5000	AMB.	40	MIN. AMB.	-25
DESIGN NO.	L3424B	TYPE		ENCL.	TENV		
S.F.	1.00		D.E. BRG.	50BC03JPP30A			
ENCL MOD		O.D.E. BRG.	45BC02JPP30A				
	IP44						

REL S.O.	-	VOLTS	230/460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	FL2162	AMPS	13.6	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)			
HP	10	DUTY	CONT	IM (AMPS)	7.5	R1	.305	X1	1.40
BASE SPEED	1780	S.F.	1.0	P.F. @NL/FL	.075/.770	R2	.199	X2	2.17
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	1.92			XM	34.9

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1779	10.0	30	460	60	13.6
MAX SPEED	3560	10.0	15	460	120.2	12.4
MIN SPEED	0	0	30	11.8	.6996	13.6

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	7.34
1/4	1795	2.50	7	460	60	8.09
1/2	1790	5.01	15	460	60	9.45
3/4	1785	7.50	22	460	60	11.3
FULL LOAD	1779	10.0	30	460	60	13.6
O/L	1755	19.7	59	460	60	24.0

REMARKS: TYPICAL DATA
CORRELATED DATA

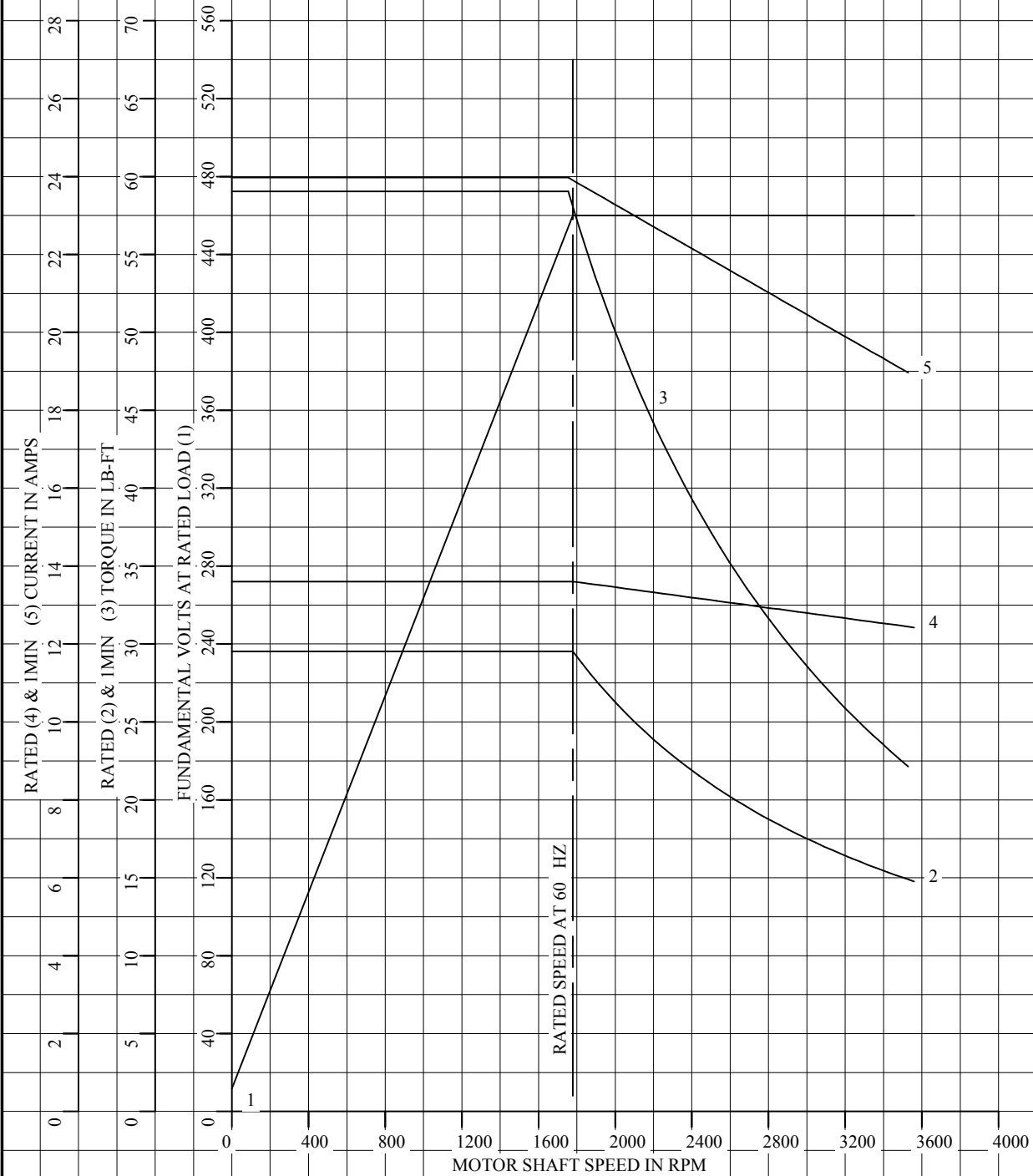


DR. BY B. GRANT
 CK. BY B. GRANT
 APP. BY T. CUFR
 DATE 2-8-07

**A-C MOTOR
PERFORMANCE DATA** L3424B
 ISSUE DATE 9-25-15

REL S.O.	-	VOLTS	230/460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	FL2162	AMPS	13.6	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)	
HP	10	DUTY	CONT	IM (AMPS)	7.5	R1	.305 X1 1.40
BASE SPEED	1780	S.F.	1.0	P.F. @NL/FL	.075/.770	R2	.199 X2 2.17
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	1.92		XM 34.9

CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



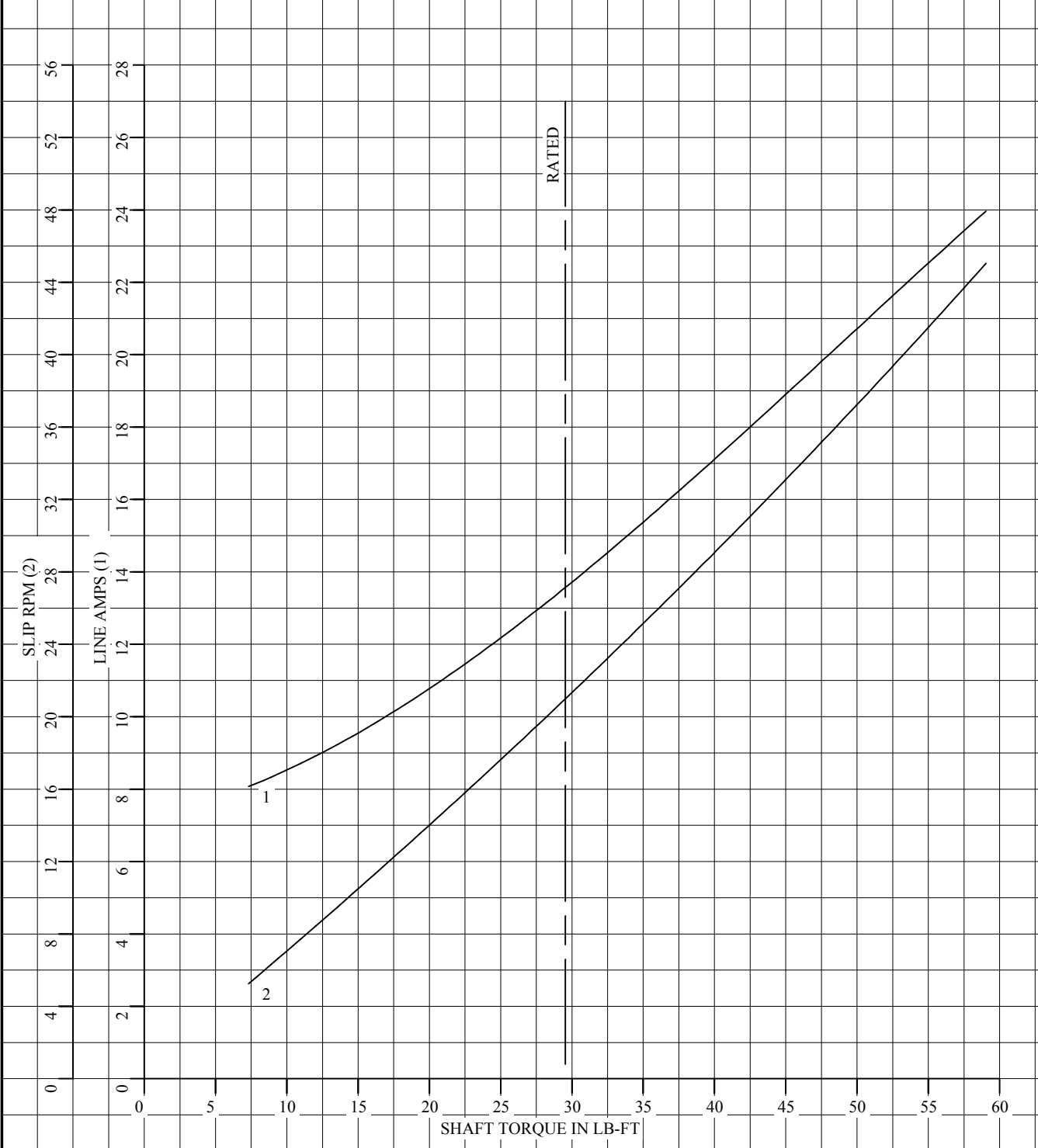
DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. CUFR
DATE 2-8-07

**A-C MOTOR
PERFORMANCE
CURVES**

L3424B
SH 1 OF 2
ISSUE DATE 9-25-15 Page 6 of 10

REL S.O.	-	VOLTS	230/460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	FL2162	AMPS	13.6	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)	
HP	10	DUTY	CONT	IM (AMPS)	7.5	R1	.305 X1 1.40
BASE SPEED	1780	S.F.	1.0	P.F. @NL/FL	.075/.770	R2	.199 X2 2.17
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	1.92		XM 34.9

CORRELATED DATA
LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



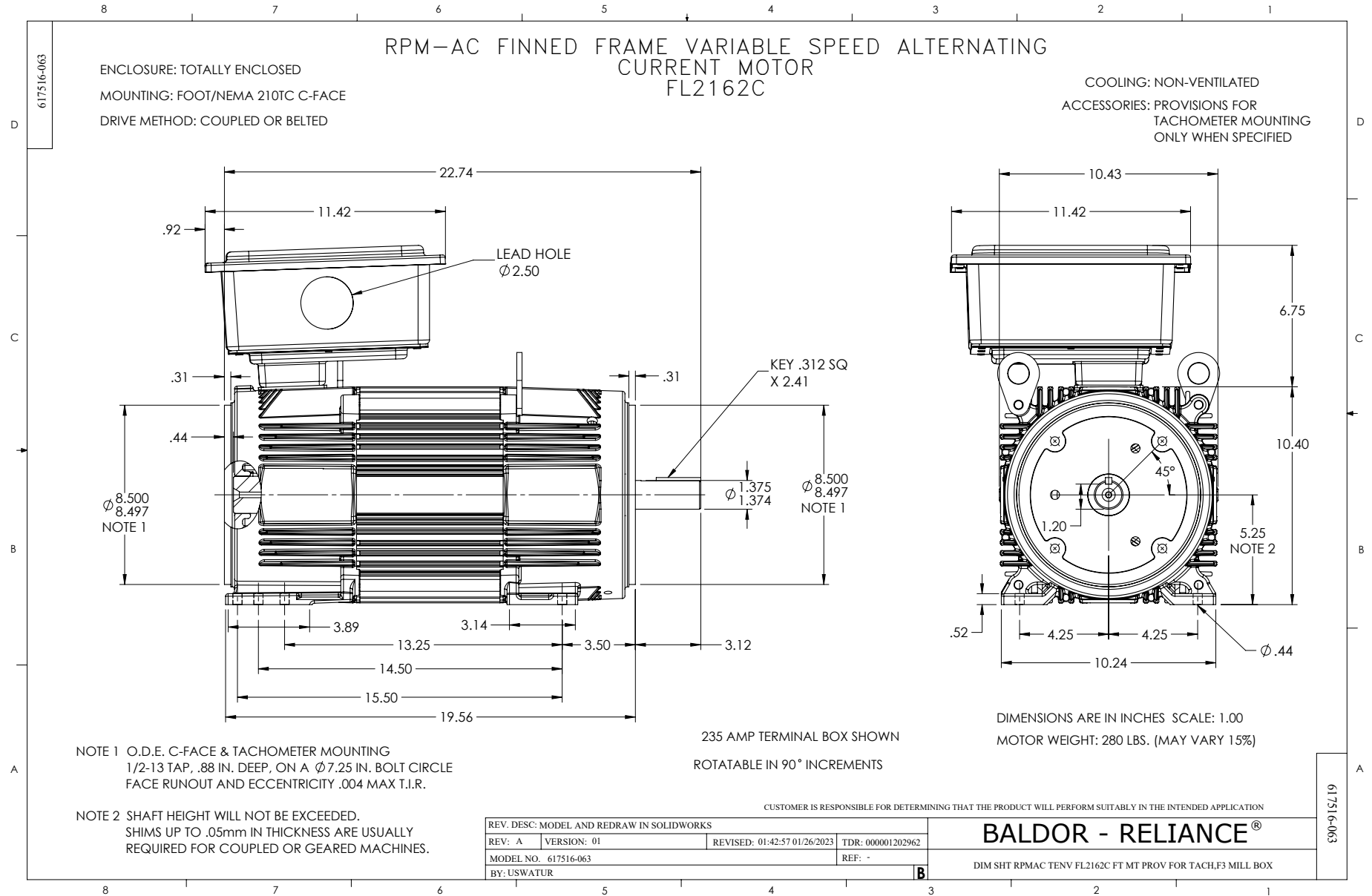
REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



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DATE 2-8-07

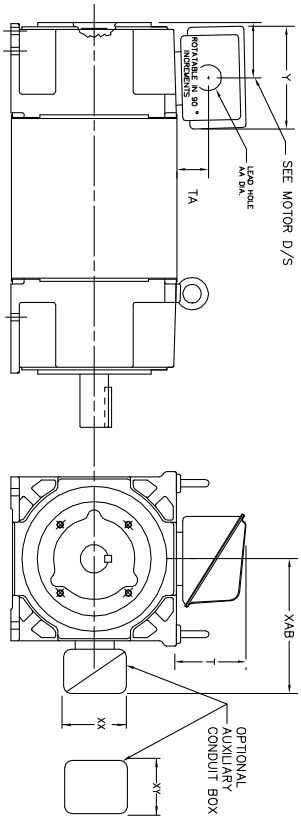
**A-C MOTOR
PERFORMANCE
CURVES**

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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	75	706320003A	6.12	2.38	4.38	1.75/2.00
FL180	CAST IRON	N	208	706320007A	6.82	2.00	7.00	2.50/3.00
FL180	CAST IRON	Y/N	400	706320007A	6.75	2.38	4.38	3.00/3.50
FL180 & FDL11	MILL	Y	100	706310028A	7.75	2.30	4.40	PC29/PG16
FL210 & RL210	STEEL	N	61	0754520009	6.34	2.00	4.12	1.75
FL210 & RL210	STEEL	N	121	0754520009	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	306	706320016A	9.00	4.12	8.42	4.89
FL210 & RL210	CAST IRON	N	110	075460052B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310225A	7.75	2.30	4.40	PC29/PG16
FL210 & RL210	MILL	Y	160	706310056A	9.00	3.06	5.40	PC36/PG16
FL210 & RL210	MILL	Y/N	235	706310056B	11.42	4.00	6.72	2.50
FL250 & RL250	STEEL	N	61	0754520009	6.34	2.00	4.12	1.75
FL250 & RL250	STEEL	N	121	0754520009	7.69	2.38	5.25	1.94
FL250 & RL250	CAST IRON	N	110	075460052B	7.25	2.50	5.25	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320016A	10.50	4.88	9.00	4.0 TAP
FL250 & RL250	MILL	Y	100	706310225A	7.75	2.30	4.40	PC29/PG16
FL250 & RL250	MILL	Y	160	706310056B	9.00	3.06	5.40	PC36/PG16
FL250 & RL250	MILL	Y/N	235	706310056B	11.42	4.00	6.72	2.50
FL250 & RL250	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK
FL280 & RL280	STEEL	N	160	706310056B	9.00	3.06	5.40	PC36/PG16
FL280 & RL280	STEEL	N	306	706320016A	14.62	7.56	12.70	5.00
FL280 & RL280	STEEL	N	500	702565001C	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	706320015A	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	PC29/PG16
FL280 & RL280	MILL	Y	160	706310056B	9.00	3.06	5.40	PC36/PG16
FL280 & RL280	MILL	Y/N	235	706310037A	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
FL107/FL160/FL210/FL182	7.38	4.25	4.25	602007-26-A	FL107/FL160/FL210/FL182	10.88	8.00	8.00	706310-3-B
FL250/FL180/FL280/FL180	8.44	4.25	4.25	602007-26-A	FL250/FL180/FL280/FL180	11.88	8.00	8.00	706310-3-B
FL280/FL180/FL280/FL180	9.12	4.25	4.25	602007-26-A	FL280/FL180/FL280/FL180	12.62	8.00	8.00	706310-3-B

(1) 7/8" PIPE TAP.
(2) CUSTOMER TO PROVIDE WIRE TYPE CONDUIT.
(3) 2" DIA. SA OR 1" DIA. DN -40.

TERMINAL BOX CAN BE ROTATED FOR LEAD INLET 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.

050-677919

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
REV. LTR: F	REVISED: 11: 08: 56 10/26/2021	BY: RCGRWM
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.

422927-001

REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE		
REV. LTR: B	VERSION: 02	TDR: 00000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

BALDOR

EXTERNAL CONNECTION LABEL

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