

ABB BALDOR RELIANCE III

Customer information packet IDDRPM18304C

30HP, 1745RPM, 3PH, 60HZ, 1852C, DPG-FV, FT/2

Specifications

Enclosure	DPFV
Frame	FL1852CZ
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 UR
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	39.000 A @ 460.0 V
Duty Rating	CONT
Enclosure Modification	FORCE VENT
Feedback Device	NO FEEDBACK
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	39.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	23.01 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	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1745 rpm

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L1206A
Layout	617236-023
Eff. date	01-21-2022
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	04-10-2015

Thermal Device - Bearing

None

Thermal Device - Winding

Normally Closed Thermostat

Nameplate

000613006MY

	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	30	1745	39	460	60	
	CONT	30	2300	36.5	460	79.1	
	CONT	30	3475	38	460	120	
CAT.NO.	IDDRPM18304C		SPEC. NO.		P18T0331		
SER.NO		FR	FL 1852CZ	INSUL	H		
PH.	3	MAX SAFE SPEED		7200	AMB.	40	MIN. AMB. -25
DESIGN NO.	L1206A	TYPE			ENCL.	DP	
S.F.	1.0		D.E. BRG.		45BC02JPP30A		
ENCL MOD	FORCE VENT		O.D.E. BRG.		35BC02JPP30A		

000613006MY

	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	30	1745	39	460	60	
	CONT	30	2300	36.5	460	79.1	
	CONT	30	3475	38	460	120	
CAT.NO.	IDDRPM18304C		SPEC. NO.	P18T0331			
SER.NO		FR	FL 1852CZ	INSUL	H		
PH.	3	MAX SAFE SPEED	7200	AMB.	40	MIN. AMB.	-25
DESIGN NO.	L1206A	TYPE		ENCL.	DP		
S.F.	1.0	D.E. BRG.	45BC02JPP30A				
ENCL MOD	FORCE VENT	O.D.E. BRG.	35BC02JPP30A				

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE		
FRAME	FL1852	AMPS	39	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)		
HP	30	DUTY	CONT	IM (AMPS)	17.5	R1	.211	X1 .727
BASE SPEED	1745	S.F.	1.0	P.F. @NL/FL	.080/.838	R2	.155	X2 .742
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.8			XM 12.7

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1745	30.0	90	460	60	41.2
MAX SPEED	3473	30.0	45	460	120	38.7
MIN SPEED	0	0	90	25.5	1.83	41.2

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	21.2
1/4	1787	7.50	22	460	60	23.1
1/2	1774	15.0	44	460	60	27.4
3/4	1760	22.5	67	460	60	33.6
FULL LOAD	1745	30.0	90	460	60	41.2
O/L	1666	57.3	181	460	60	80.9

REMARKS: TYPICAL DATA



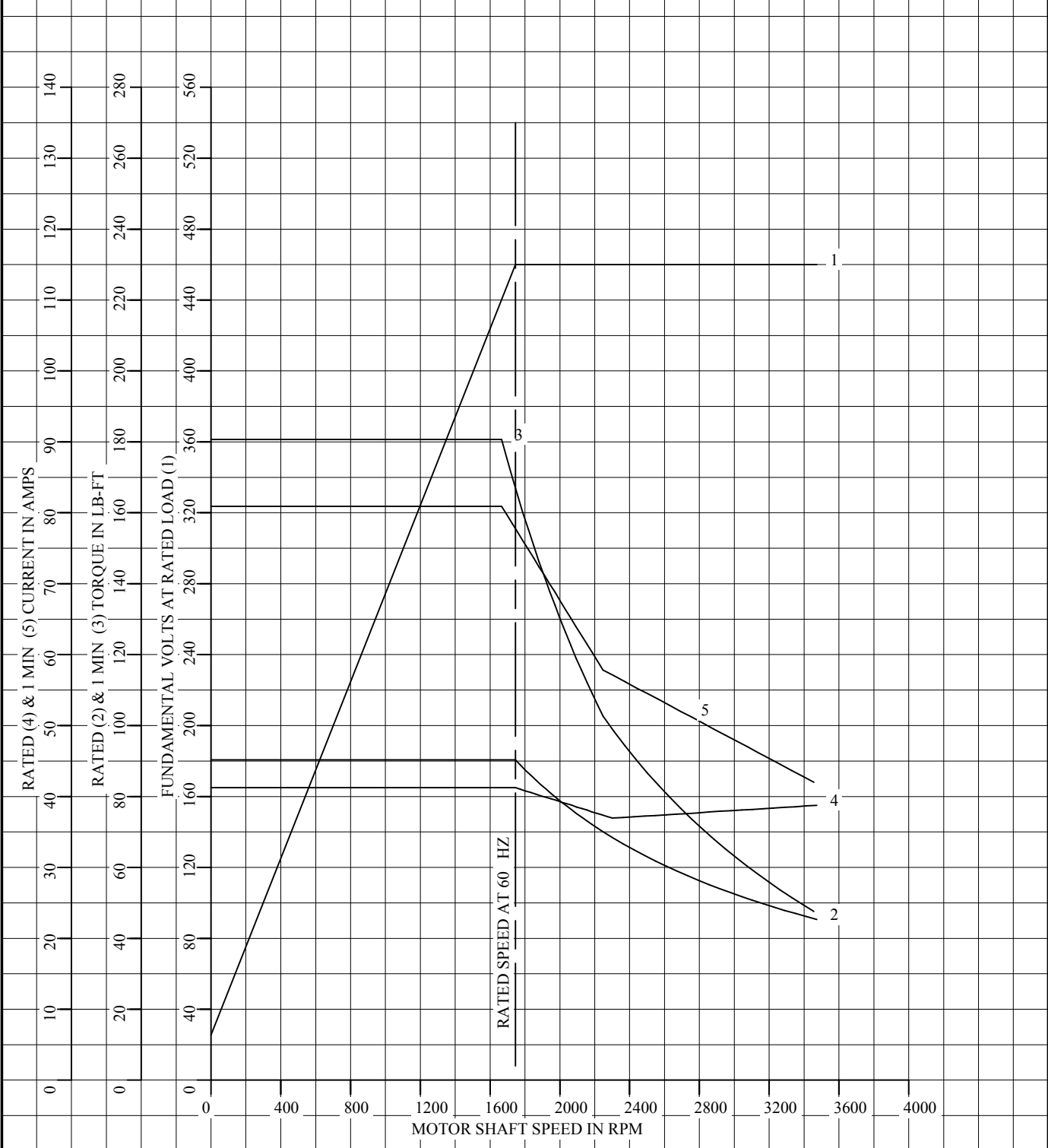
DR. BY B. GRANT
 CK. BY B. GRANT
 APP. BY T. EVON
 DATE 3-31-98

**A-C MOTOR
 PERFORMANCE DATA** L1206A

ISSUE DATE 12-12-13

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	FL1852	AMPS	39	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)	
HP	30	DUTY	CONT	IM (AMPS)	17.5	R1 .211	X1 .727
BASE SPEED	1745	S.F.	1.0	P.F. @NL/FL	.080/.838	R2 .155	X2 .742
PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.8		XM 12.7

VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



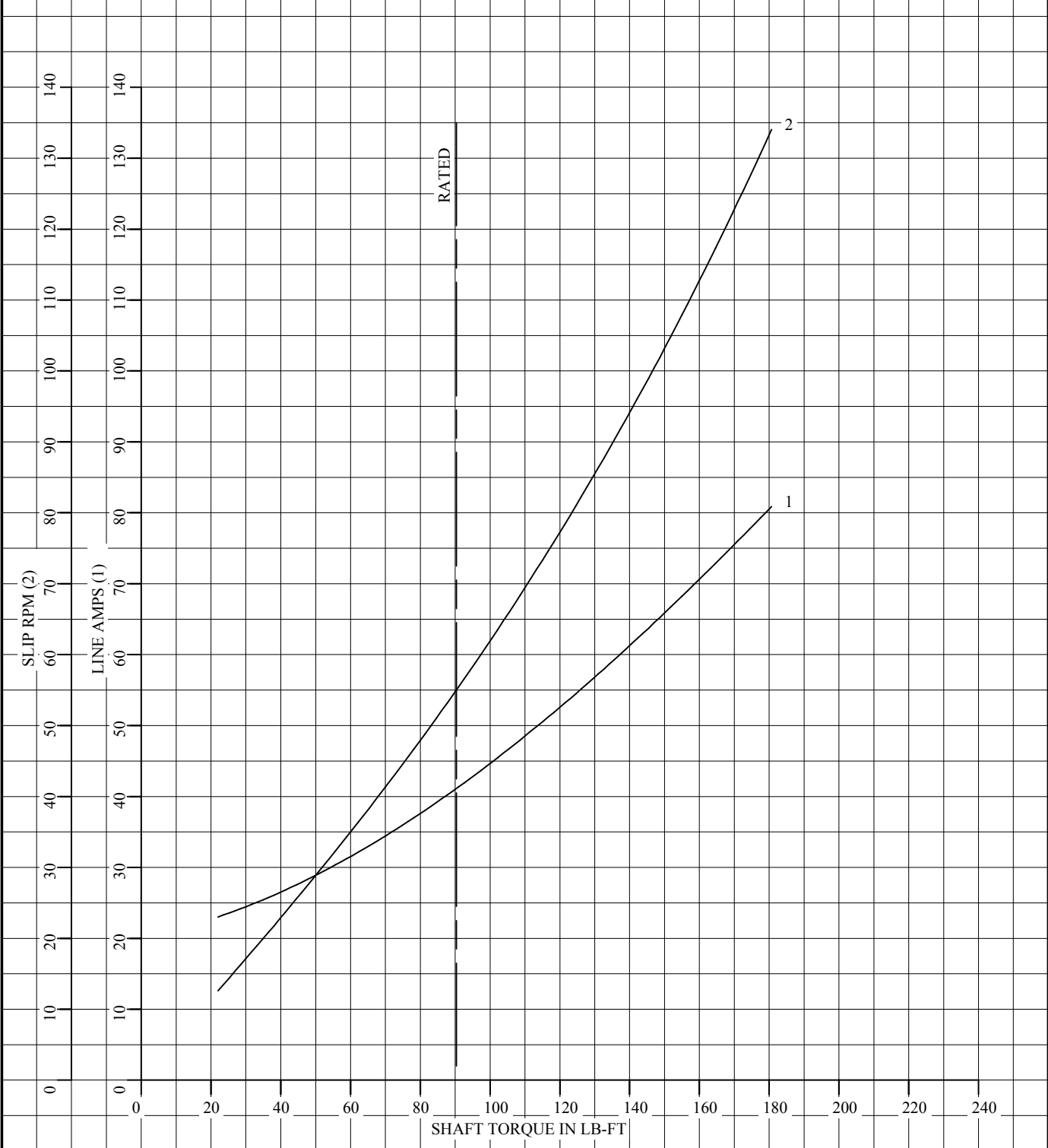
DR. BY B. GRANT
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DATE 3-31-98

**A-C MOTOR
PERFORMANCE
CURVES**

L1206A
SH 1 OF 2
ISSUE DATE 12-12-13 Page 7 of 11

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	FL1852	AMPS	39	MAX SAFE RPM	7200	(AT BASE RATING, 25 °C)	
HP	30	DUTY	CONT	IM (AMPS)	17.5	R1 .211	X1 .727
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PHASE/HERTZ	3/60	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	.8		XM 12.7

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



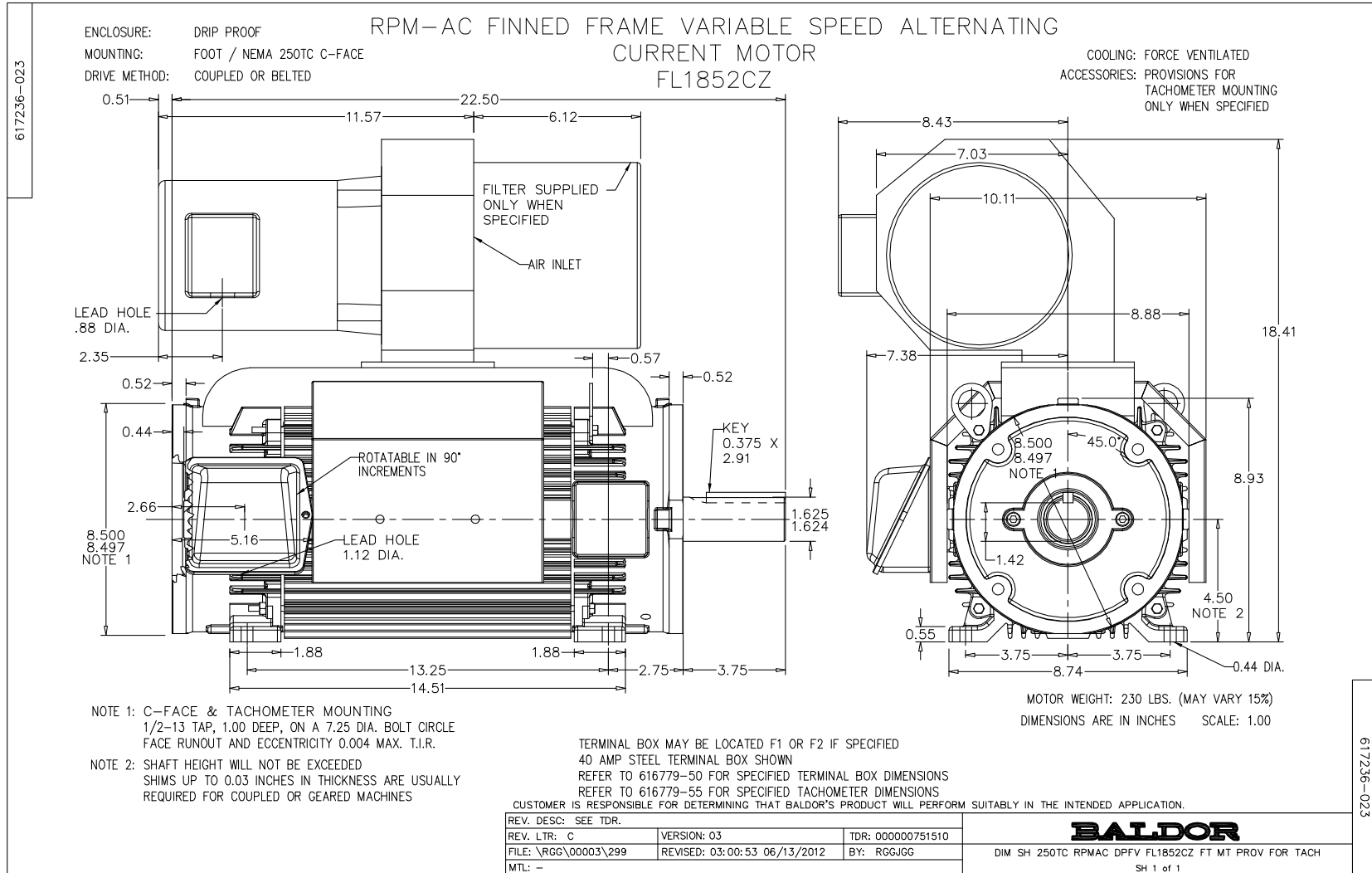
REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



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CK. BY B. GRANT
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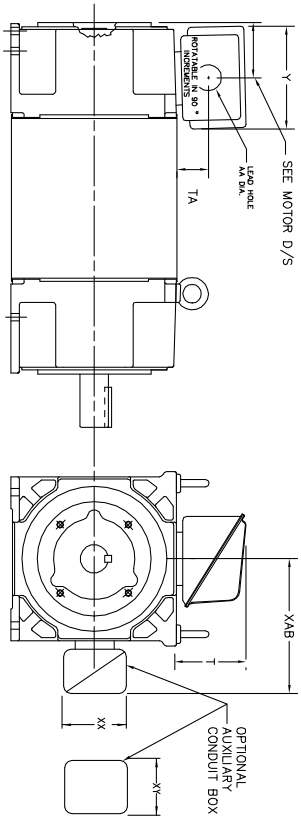
**A-C MOTOR
PERFORMANCE
CURVES**

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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	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	2.50/2.00
FL180 & FDL11	CAST IRON	Y/N	40	706320004B	5.75	2.38	4.38	1.50/1.50
FL180 & FDL11	MILL	Y	100	706310028A	7.75	2.30	4.40	PC39/PG16

FL210 & RL210	STEEL	N	61	0754520009B	6.34	2.00	4.12	1.75
FL210 & RL210	STEEL	N	121	0754520009B	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	336	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	7063100225A	7.75	2.30	4.40	PC39/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	0754520009B	6.34	2.00	4.12	1.75
FL250 & RL250	STEEL	N	121	0754520009A	7.69	2.38	5.25	1.94
FL250 & RL250	STEEL	N	336	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	7063100225A	7.75	2.30	4.40	PC39/PG16
FL250 & RL250	MILL	Y	160	706310056A	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	7063100638B	14.39	7.43	12.15	BLANK

FL280 & RL280	STEEL	N	160	706320029A	7.25	3.50	7.06	2.50
FL280 & RL280	STEEL	N	309	706320018B	9.00	4.12	8.44	4.89
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	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	PC39/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	7063100638B	14.39	7.43	12.15	BLANK

FRAME SIZE	OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)								
	XAB	XX	XY	PART NUMBER	FRAME SIZE	PART NUMBER			
FL180/FL180/RL210/RL182	7.38	4.25	4.25	602007-26-A	FL180/FL180/RL210/RL182	10.88	8.00	8.00	706310-3-B
FL250/FL180/RL210/RL182	8.44	4.25	4.25	602007-26-A	FL250/FL180/RL210/RL182	11.88	8.00	8.00	706310-3-B
FL280/FL180/RL210/RL182	9.12	4.25	4.25	602007-26-A	FL280/FL180/RL210/RL182	12.62	8.00	8.00	706310-3-B

- (1) 1/4" PIPE TAP
- (2) 1/2" PIPE TAP
- (3) CUSTOMER TO PROVIDE WIRE TYPE CONDUIT.
- (4) 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.

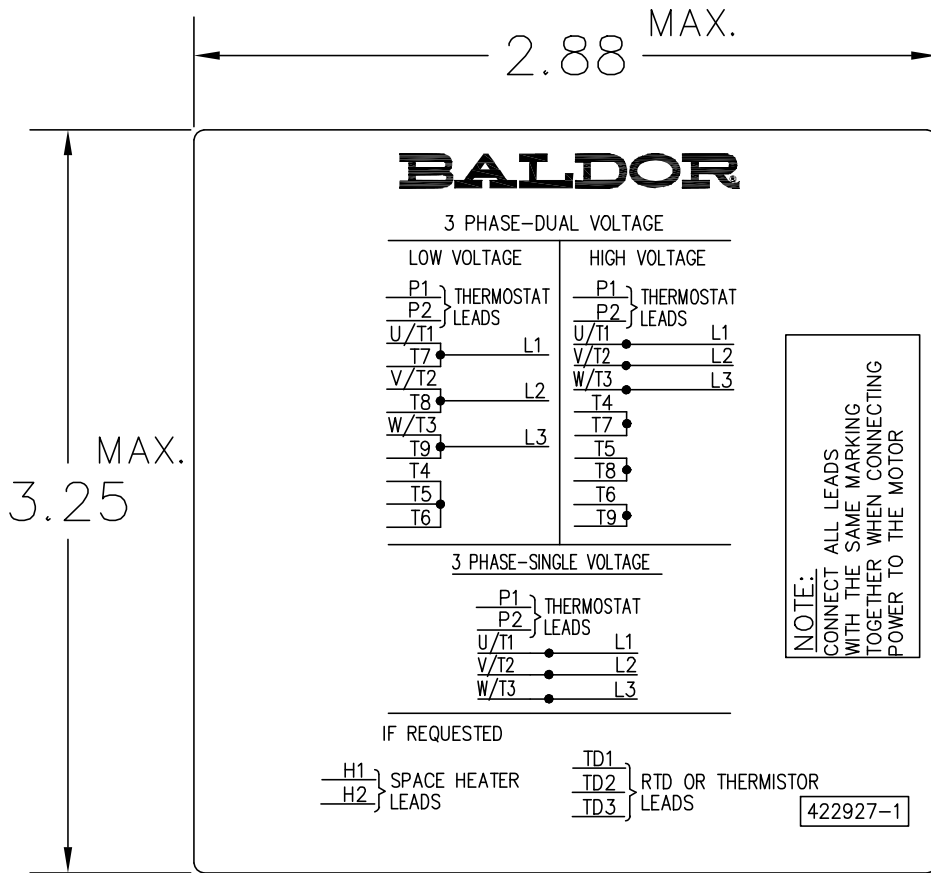
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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

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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