

ABB BALDOR RELIANCE III

Customer information packet

IDDRPM281006

100HP, 1150, 460V, RL2882, DPFV, F1

Specifications

Enclosure	DPFV
Frame	RL2882Z
Frame Material	Exposed Laminations
Frequency	40.00 Hz
Output @ Frequency	100.000 HP @ 40 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 40 HZ
Voltage @ Frequency	460.0 V @ 40 HZ
Agency Approvals	CCSA US
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	124.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	RL
Heater Indicator	No Heater
High Voltage Full Load Amps	124.0 a
Insulation Class	H
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	38.43 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	2.624 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1160 rpm
Starting Method	Full Voltage

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L0337A
Layout	617243-051
Eff. date	03-24-2022
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	10-29-2021

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

Nameplate

000613006MY									
	DUTY	HP	RPM	AMPS	VOLTS	HZ			
	CONT	100	1160		124	460		40	
	CONT	100	1445		123	460		50	
	CONT	40	3450		49	460		116.7	
CAT.NO.	IDDRPM281006		SPEC. NO.		R28-A000-0374				
SER.NO			FR	RL2882Z	INSUL	H			
PH.	3	MAX SAFE SPEED		5000	AMB.	40	MIN. AMB.	-25	
DESIGN NO.	L0337A		TYPE		ENCL.		DPG-FV		
S.F.	1.00		D.E. BRG.		75BC02J30X				
ENCL MOD			O.D.E. BRG.		55BC02J30X				
	IP23								

Parts List

Part number	Description	Quantity
WS393088	WS R28-A000-0374	1.000 ea
RA389619	RA R28-A000-0374	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
000613006MY	NP-RPMAC INVERTER DUTY	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
807529003ACB	BRKT,ODE,RL280 *DO NOT SELL NOT MACHINED	1.000 ea
807529002AAE	BRKT,DE,RL280 807529001WCB	1.000 ea
BP5068BJ01	BRUSH, .187 X .187 X 1.00	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
004824015A	GREASE POLYREX EM	0.300 lb
400638001G	WAVEN (Customer number 43699)	1.000 ea
036000016DB	HHCS	4.000 ea
418150003A	GREASE FITTING CAP	2.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
036100080KA	M10-1.50X 80MM HXSOCHDCS	3.000 ea
036100080JA	HSCHS M8 80MM UNPLATED	3.000 ea
036140001D	EYEBOLT - 360	2.000 ea
034693001AB	PPLG - G508- use 034692001AB	1.000 ea
034693001AB	PPLG - G508- use 034692001AB	1.000 ea
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 ea
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 ea
609830005AAG	TBOLT METRIC	4.000 ea
BP5248	BP5248	2.000 ea
610490001AH	.75HP,3450//2850RPM,3PH,60//50HZ,56C,351	1.000 ea
415000103D	T/LUG #4AWG-1/0AWG W/HOLE FOR .250 BOLT	1.000 ea
036000012JB	M8-1.25 X 12MM HXHDC	3.000 ea
611965001A	WHEEL, BLOWER	1.000 ea

417733004J	GASKT	1.000 ea
706310640B	BACKPLATE GASKET C/BOX 706310-637	1.000 ea
609843001AH	GASKET RL280 (HHCVR)	1.000 ea
036000020JB	HHCS M8-1.25X20L PLTD-250	8.000 ea
032018006CK	HHCS 3/8-16X3/4L PLATED 411409	4.000 ea
000613006NT	NAME PLATE IEC	1.000 ea
418057256F	HHCS M6 12MM ZINCPLAT	1.000 ea
036600009AB	METRIC FLWASH M8 PLATED	3.000 ea
032018004DK	HHCS,DRIP COVER	4.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
034017016AB	LCKW 1/2" PLATED	4.000 ea
708528004J	BLOWER HOUSING	1.000 ea
410978010C	FLANGE, INLET BLOWER HSG.	1.000 ea
410978019A	SCREEN, INLET FLANGE	1.000 ea
036620009AB	M8 EXTERNAL LK WASHER	1.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
036000012JB	M8-1.25 X 12MM HXHDC	4.000 ea
706310642A	BACK PLATE FOR 706310-637 WITH 5.00" BOL	1.000 ea
036600009AB	METRIC FLWASH M8 PLATED	2.000 ea
422919360	HHCVR KIT,RL280, DE, LOUVERED	1.000 ea
422919360	HHCVR KIT,RL280, DE, LOUVERED	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
036000012JB	M8-1.25 X 12MM HXHDC	4.000 ea
706305301A	GUARD, SHAFT	1.000 ea
034180032HA	KEY 5/8X5/8X4	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
004824007CQR	C2 PAINT SYSTEM MEDIUM GRAY CHARCOAL MET	0.100 ea
418018116	WARNING PLATE	1.000 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	DPFV	WYE	CONN	EQ	CKT	OHMS	PER	PHASE
FRAME	RL2882	AMPS	122.91	MAX SAFE RPM	5000						(AT	BASE RATING, 25 °C)
HP	100	DUTY	CONT	IM (AMPS)	36.86	R1	.0684	X1	.323			
BASE SPEED	1160	S.F.	1.0	P.F.@NL/FL	.059/.867	R2	.0486	X2	.298			
PHASE/HERTZ	3/40	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	8.3			XM	7.38			

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1158	99.9	453	460	40	123
MAX SPEED	3452	40.0	61	460	116.7	48.8
MIN SPEED	0	0	453	27.9	1.391	123

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1200	0	0	460	40	36.4
1/4	1191	25.9	114	460	40	47.0
1/2	1181	51.7	230	460	40	68.6
3/4	1169	77.6	349	460	40	95.9
FULL LOAD	1158	99.9	453	460	40	123
O/L	1124	146	679	460	40	196

REMARKS: TYPICAL DATA
CORRELATED DATA

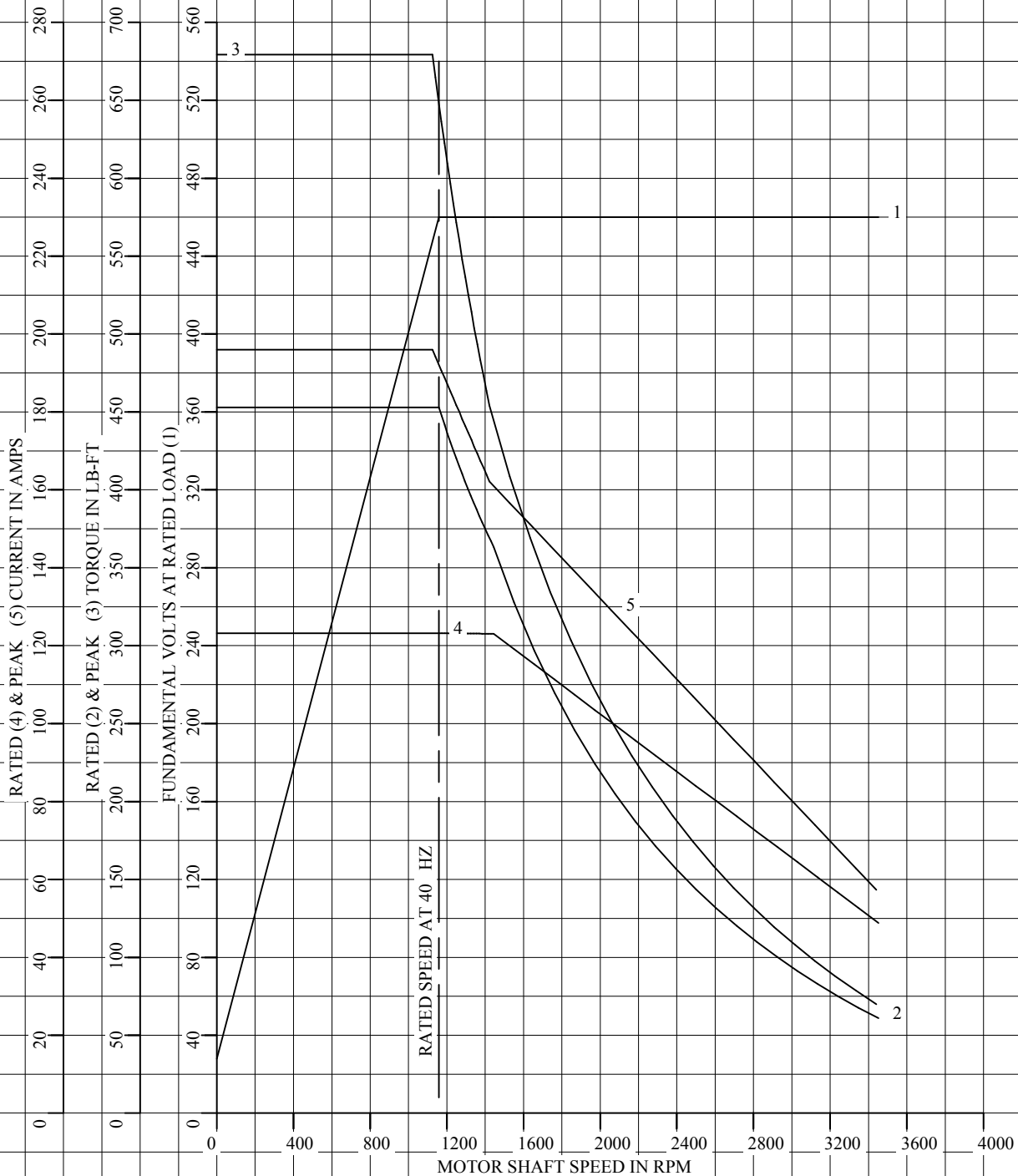


DR. BY J. MARTIN
CK. BY J. MARTIN
APP. BY T. EVON
DATE 1-27-03

**A-C MOTOR
PERFORMANCE DATA** L0337A
ISSUE DATE 11-17-15

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	RL2882	AMPS	122.91	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)	
HP	100	DUTY	CONT	IM (AMPS)	36.86	R1 .0684	X1 .323
BASE SPEED	1160	S.F.	1.0	P.F. @NL/FL	.059/.867	R2 .0486	X2 .298
PHASE/HERTZ	3/40	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	8.3	XM 7.38	

CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



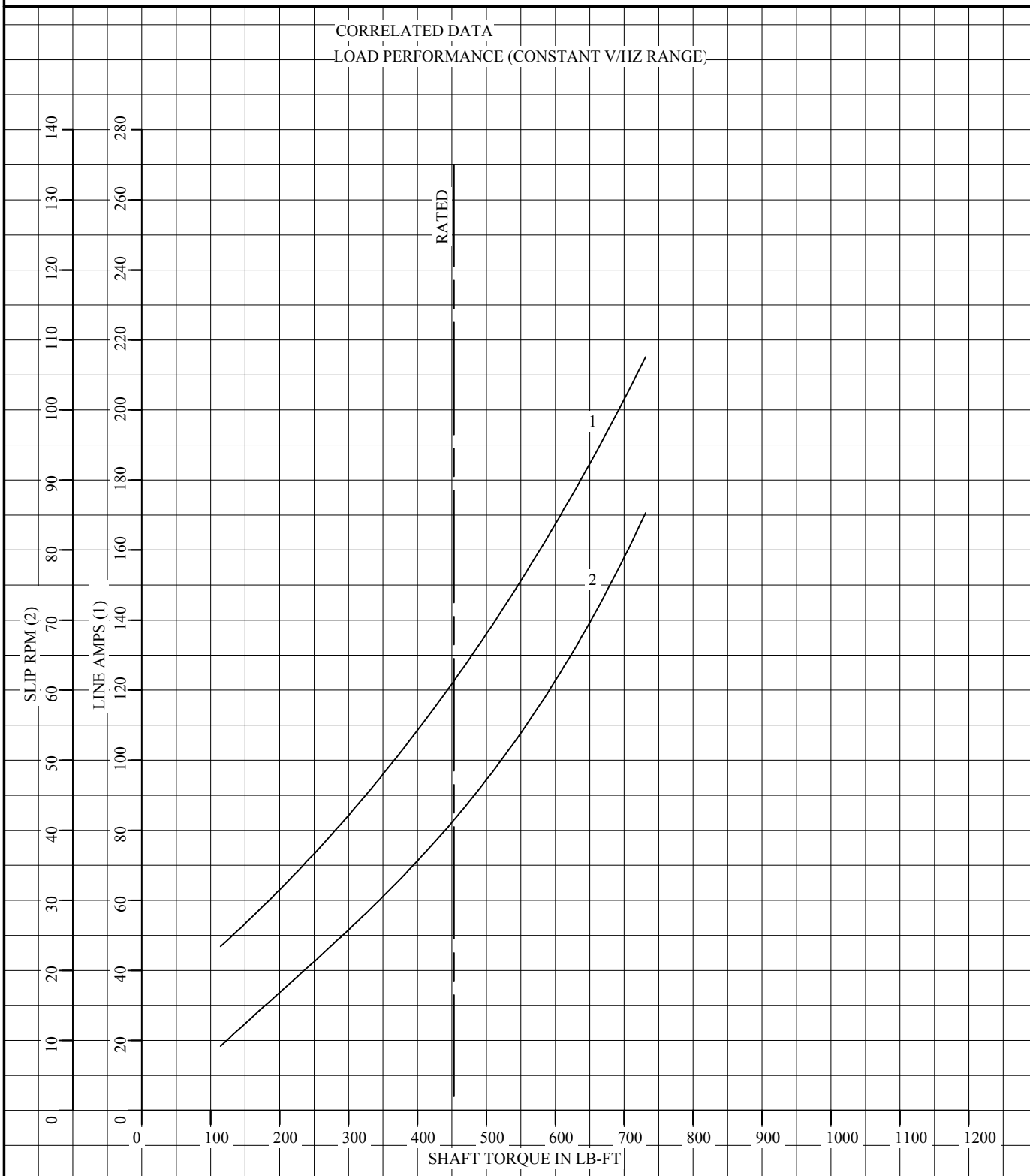
DR. BY J. MARTIN
CK. BY J. MARTIN
APP. BY T. EVON
DATE 1-27-03

**A-C MOTOR
PERFORMANCE
CURVES**

L0337A
SH 1 OF 2
ISSUE DATE 11-17-13 Page 8 of 12

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	RL2882	AMPS	122.91	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)	
HP	100	DUTY	CONT	IM (AMPS)	36.86	R1 .0684	X1 .323
BASE SPEED	1160	S.F.	1.0	P.F. @NL/FL	.059/.867	R2 .0486	X2 .298
PHASE/HERTZ	3/40	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	8.3	XM 7.38	

CORRELATED DATA
LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



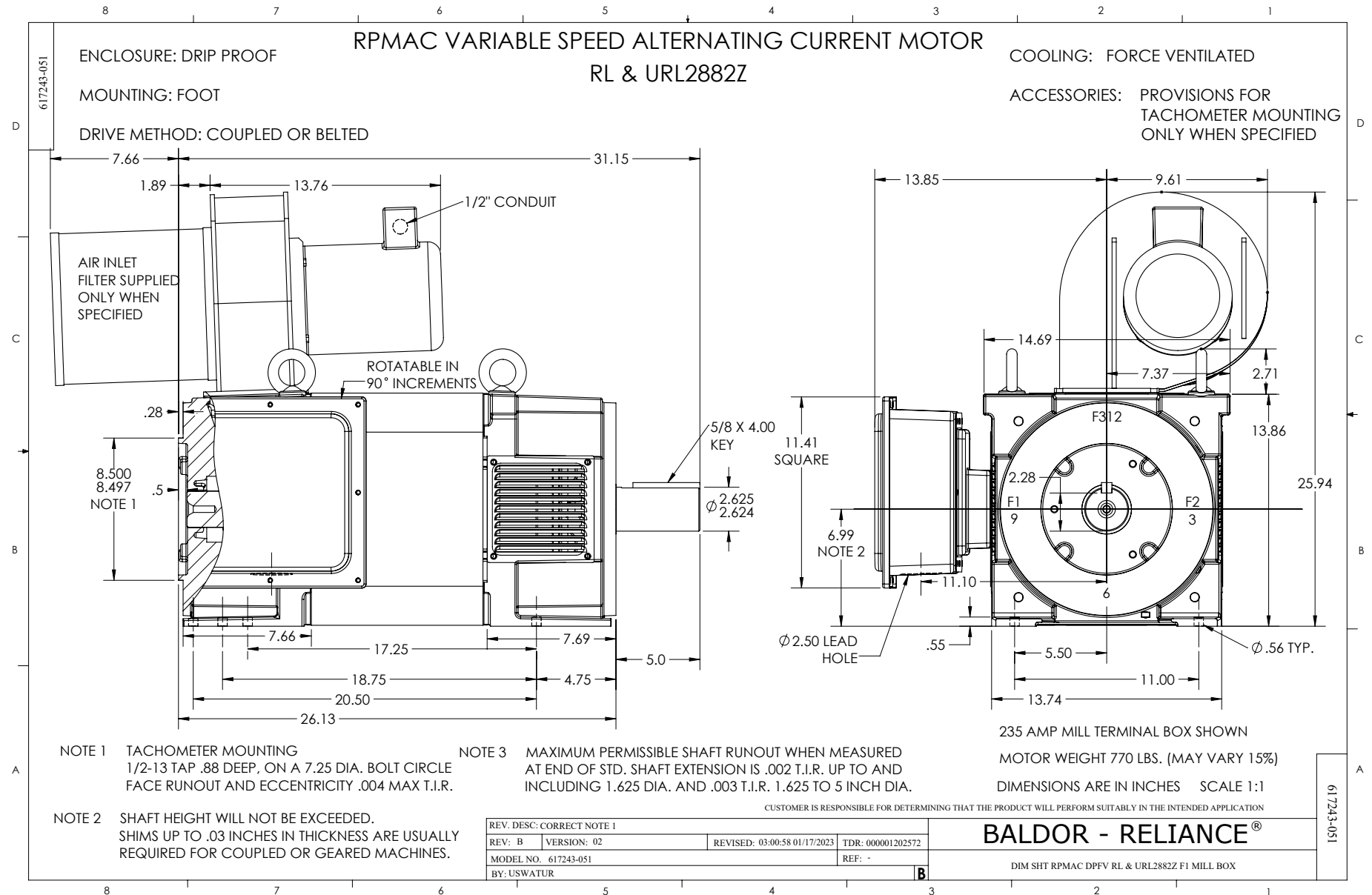
REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



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DATE 1-27-03

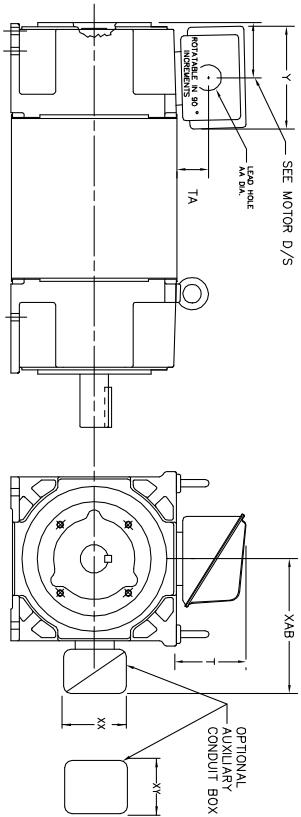
**A-C MOTOR
PERFORMANCE
CURVES**

L0337A
SH 2 OF 2
ISSUE DATE 11-17-13 Page 9 of 12



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	2.35	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	706320004B	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	305	706320016A	9.00	4.12	8.44	4.59
FL210 & RL210	CAST IRON	N	110	075460052B	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	706310056B	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	305	706320016A	9.00	4.12	8.44	4.59
FL250 & RL250	CAST IRON	N	110	075460052B	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	706310057A	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	706320029A	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/N	235	706310057A	11.42	4.00	6.72	2.50
FL280 & RL280	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FRAME SIZE	YAB	XA	XY	PART NUMBER	FRAME SIZE	YAB	XA	XY	PART NUMBER
FL210/RL210/FL112	7.38	4.25	4.25	602007-26-A	FL210/RL210/FL112	10.88	8.00	8.00	706310-3-B
FL250/RL250/FL160	8.44	4.25	4.25	602007-26-A	FL250/RL250/FL160	11.88	8.00	8.00	706310-3-B
FL280/RL280/FL280/180	9.12	4.25	4.25	602007-26-A	FL280/RL280/FL280/180	12.62	8.00	8.00	706310-3-B

(1) 1/4" PIPE CONDUIT.
(2) 1/4" PIPE TAP.
(3) CUSTOMER TO PROVIDE HOLE PER CONDUIT.
(4) 2" DIA. SH. 1" DIA. DIA. 4/8"

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.
DR 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.

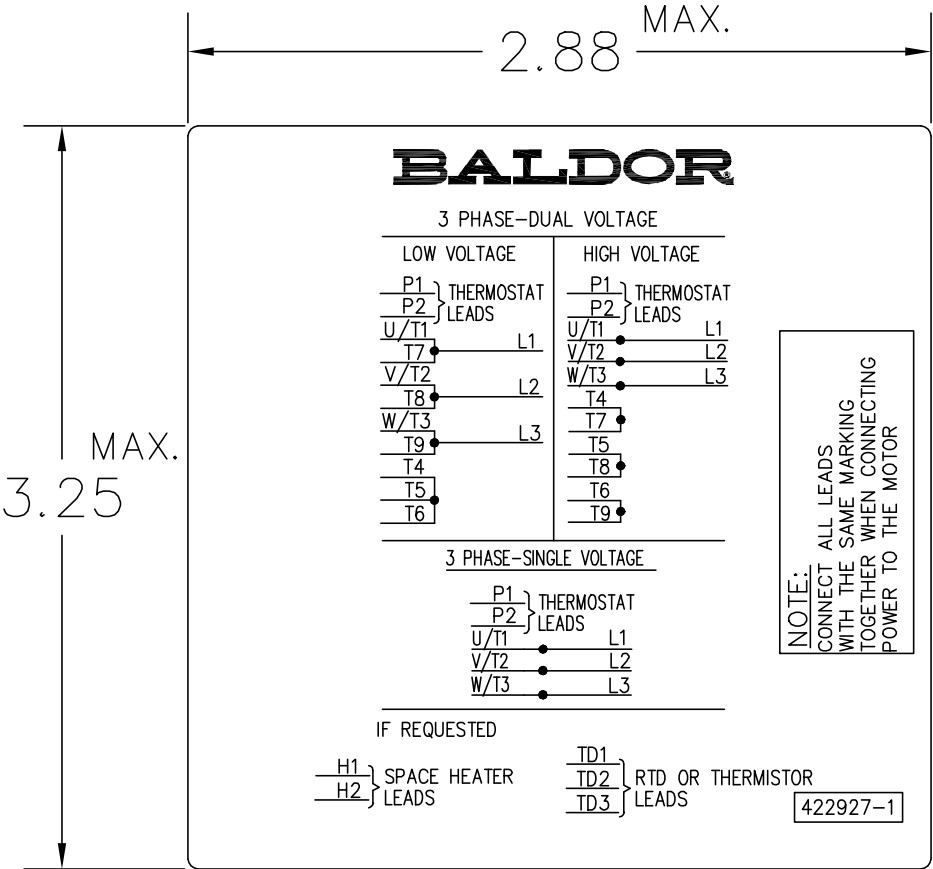
REV. DESC: ADD 706310-637 & 639 BOX	VERSION: 06	TDR: 000001180260
REV. LTR: F	REVISED: 11:08:56 10/26/2021	BY: RCGRWM
FILE: \\RGG\00003\692		
MTL: -		

BALDOR - RELIANCE®

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

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