

ABB BALDOR RELIANCE III

Customer information packet IDDRPM25506

50HP, 1150, 460V, RL2570, DPFV, F1

Specifications

Enclosure	DPFV
Frame	RL2570Z
Frame Material	Exposed Laminations
Frequency	40.00 Hz
Output @ Frequency	50.000 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	64.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	RL
Heater Indicator	No Heater
High Voltage Full Load Amps	64.0 a
Insulation Class	H
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	25.64 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	2.124 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1140 rpm
Starting Method	Full Voltage

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L0191A
Layout	617214-051
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	50	1140	64	460	40	
	CONT	50	1300	64	460	45.6	
CAT.NO.	IDDRPM25506		SPEC. NO.	R25-A000-0361			
SER.NO		FR	RL2570Z	INSUL	H		
PH.	3	MAX SAFE SPEED	5000	AMB.	40	MIN. AMB.	-25
DESIGN NO.	L0191A	TYPE		ENCL.	DPG-FV		
S.F.	1.00	D.E. BRG.	65BC03JPP30A				
ENCL MOD		O.D.E. BRG.	50BC03JPP30A				
	IP23						

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	RL2570	AMPS	63.34	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)			
HP	50	DUTY	CONT	IM (AMPS)	19.4	R1	.172	X1	.628
BASE SPEED	1140	S.F.	1.0	P.F. @NL/FL	.070/.871	R2	.130	X2	.569
PHASE/HERTZ	3/40	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	3.84			XM	14.1

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1147	50.0	229	460	40	63.2
MAX SPEED	1306	50.0	201	460	45.6	62.6
MIN SPEED	0	0	229	33.8	1.78	63.2

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1200	0	0	460	40	19.2
1/4	1189	12.5	55	460	40	24.1
1/2	1177	25.0	112	460	40	34.3
3/4	1163	37.5	169	460	40	47.5
FULL LOAD	1147	50.0	229	460	40	63.2
O/L	1102	72.1	343	460	40	101

REMARKS: TYPICAL DATA
CORRELATED DATA

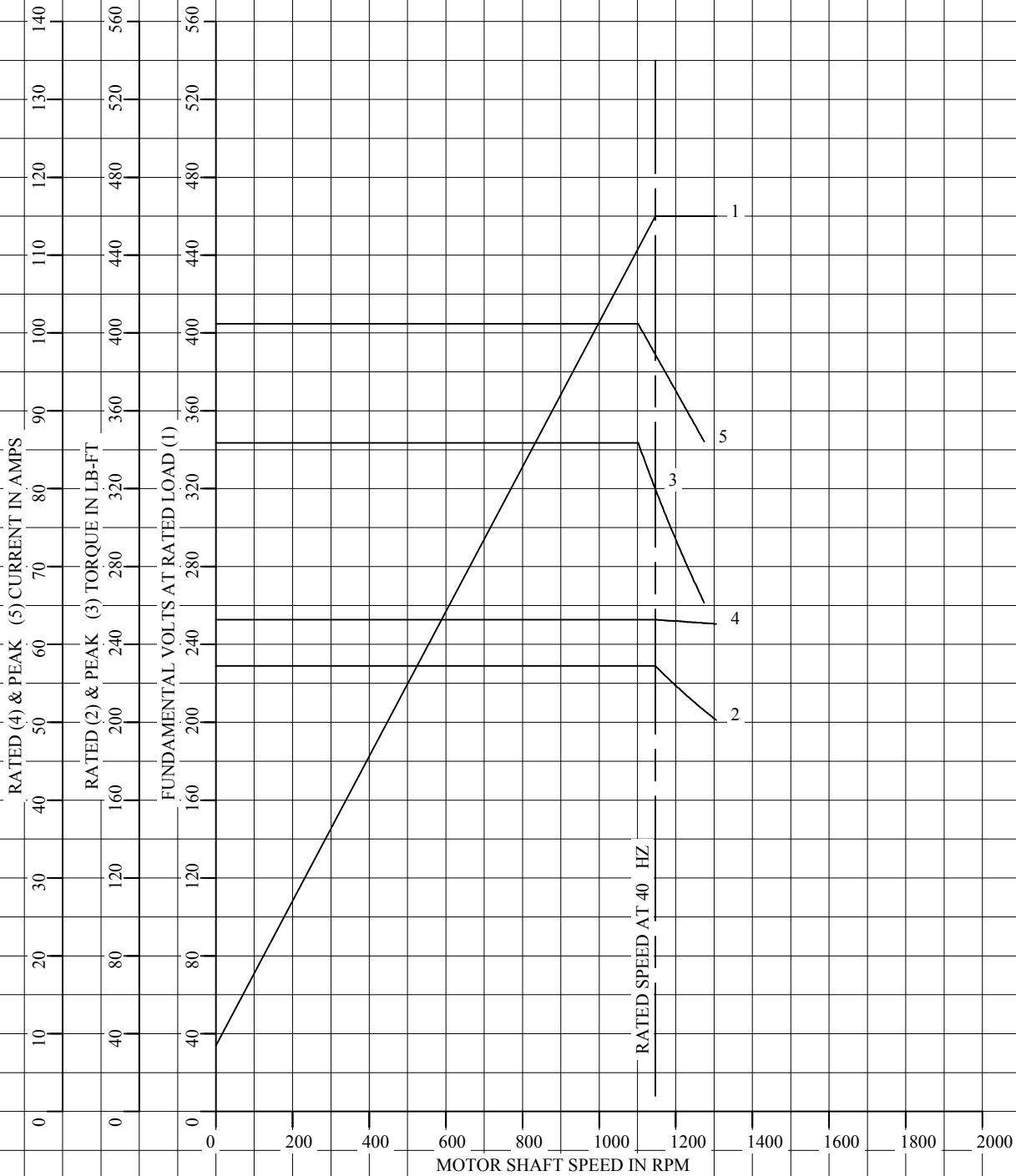


DR. BY B. GRANT
 CK. BY B. GRANT
 APP. BY T. EVON
 DATE 3-7-05

**A-C MOTOR
PERFORMANCE DATA** L0191A
 ISSUE DATE 3-7-05

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	RL2570	AMPS	63.34	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)	
HP	50	DUTY	CONT	IM (AMPS)	19.4	R1	.172 X1 .628
BASE SPEED	1140	S.F.	1.0	P.F. @NL/FL	.070/.871	R2	.130 X2 .569
PHASE/HERTZ	3/40	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	3.84		XM 14.1

CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



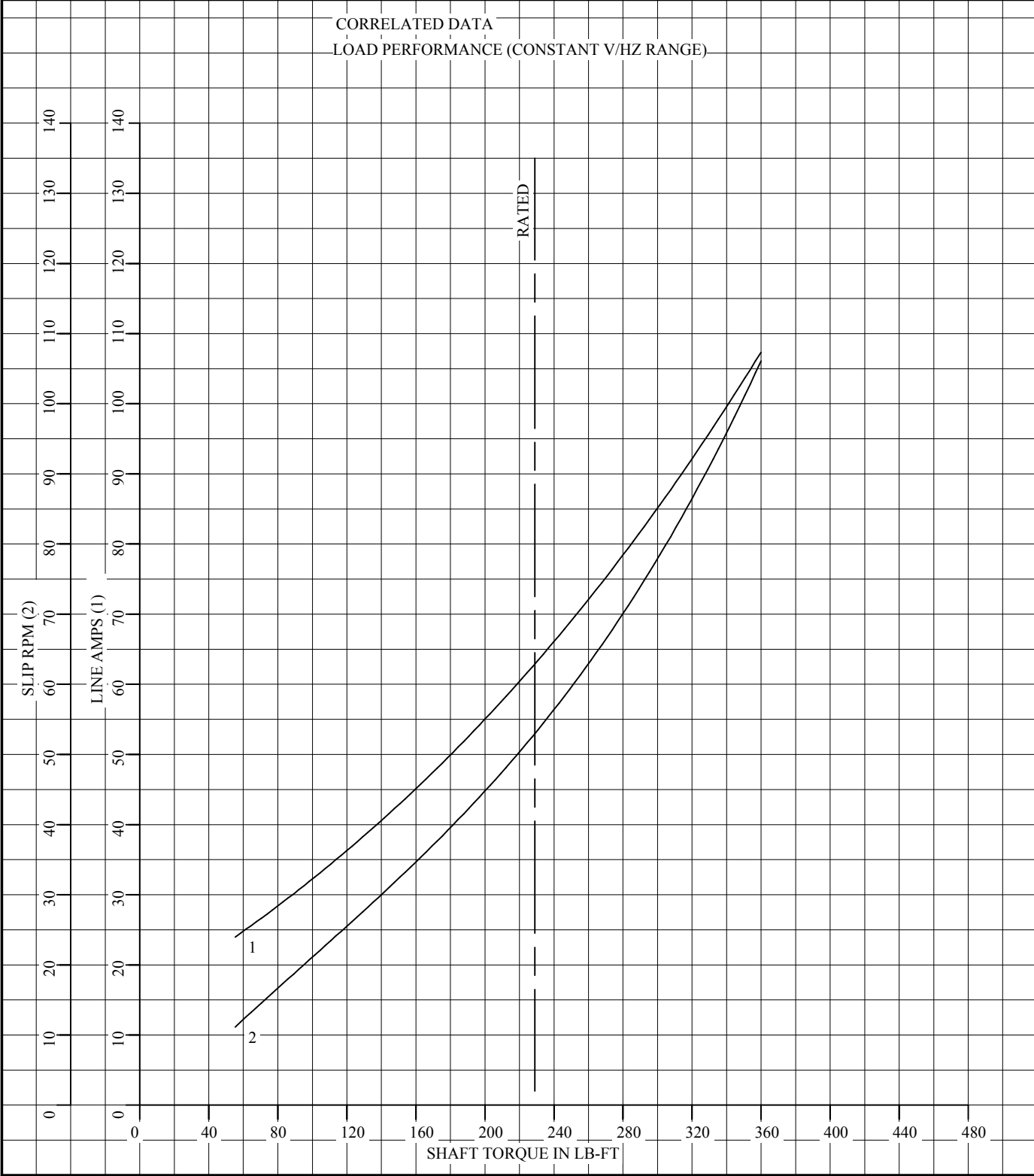
DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. EVON
DATE 3-7-05

**A-C MOTOR
PERFORMANCE
CURVES**

L0191A
SH 1 OF 2
ISSUE DATE 3-7-05

REL S.O.	-	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE	
FRAME	RL2570	AMPS	63.34	MAX SAFE RPM	5000	(AT BASE RATING, 25 °C)	
HP	50	DUTY	CONT	IM (AMPS)	19.4	R1	.172 X1 .628
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PHASE/HERTZ	3/40	AMB °C/INSUL	40/H	WK ² (Lb-Ft ²)	3.84		XM 14.1

CORRELATED DATA
LOAD PERFORMANCE (CONSTANT V/Hz RANGE)



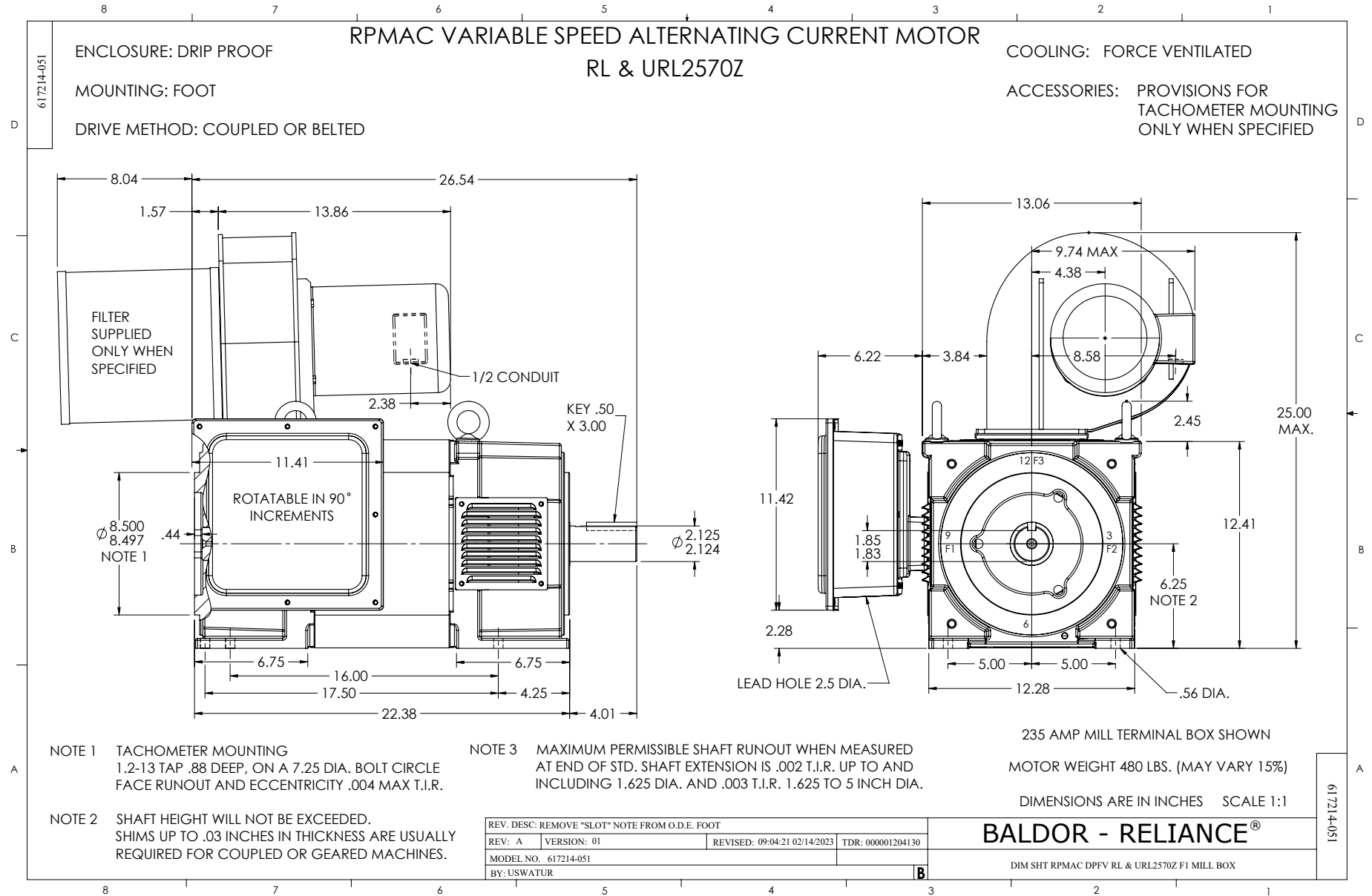
REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



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DATE 3-7-05

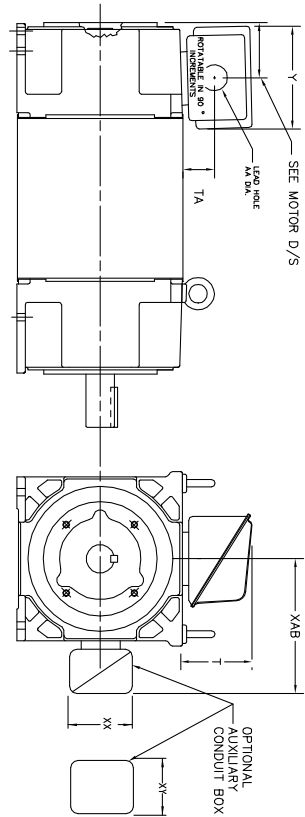
**A-C MOTOR
PERFORMANCE
CURVES**

L0191A
SH 2 OF 2
ISSUE DATE 3-7-05



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	STEEL	N	208	706320007A	6.82	2.00	7.00	2.50/3.00
FL180	CAST IRON	Y/N	40	706320004A	5.75	2.38	4.38	1.50/1.75
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	0754520010	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	336	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	7063100229A	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	706310058B	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	0754520010	7.69	2.38	5.25	1.94
FL250 & RL250	STEEL	N	336	706320016A	9.00	4.12	8.42	4.89
FL250 & RL250	CAST IRON	N	110	075460052B	7.25	2.50	5.25	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320017A	10.50	4.88	9.00	4.0 TAP
FL250 & RL250	MILL	Y	100	7063100229A	7.75	2.30	4.40	PC29/PG16
FL250 & RL250	MILL	Y	160	706310056A	9.00	3.06	5.40	PC36/PG16
FL250 & RL250	MILL	Y/N	235	706310058B	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	336	706320016A	9.00	4.12	8.42	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	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	706310058B	9.00	3.06	5.40	PC36/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	XAB	XX	XY	PART NUMBER	FRAME SIZE	XAB	XX	XY	PART NUMBER
FL107/FL160/RL210/FL182	7.38	4.25	4.25	602007-26-A	FL107/FL160/RL210/FL182	10.88	8.00	8.00	706310-3-B
FL250/FL160/RL250/FL180	8.44	4.25	4.25	602007-26-A	FL250/FL160/RL250/FL180	11.88	8.00	8.00	706310-3-B
FL280/FL180/RL280/FL180	9.12	4.25	4.25	602007-26-A	FL280/FL180/RL280/FL180	12.62	8.00	8.00	706310-3-B

(1) 7/8" CONDUIT.
(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.

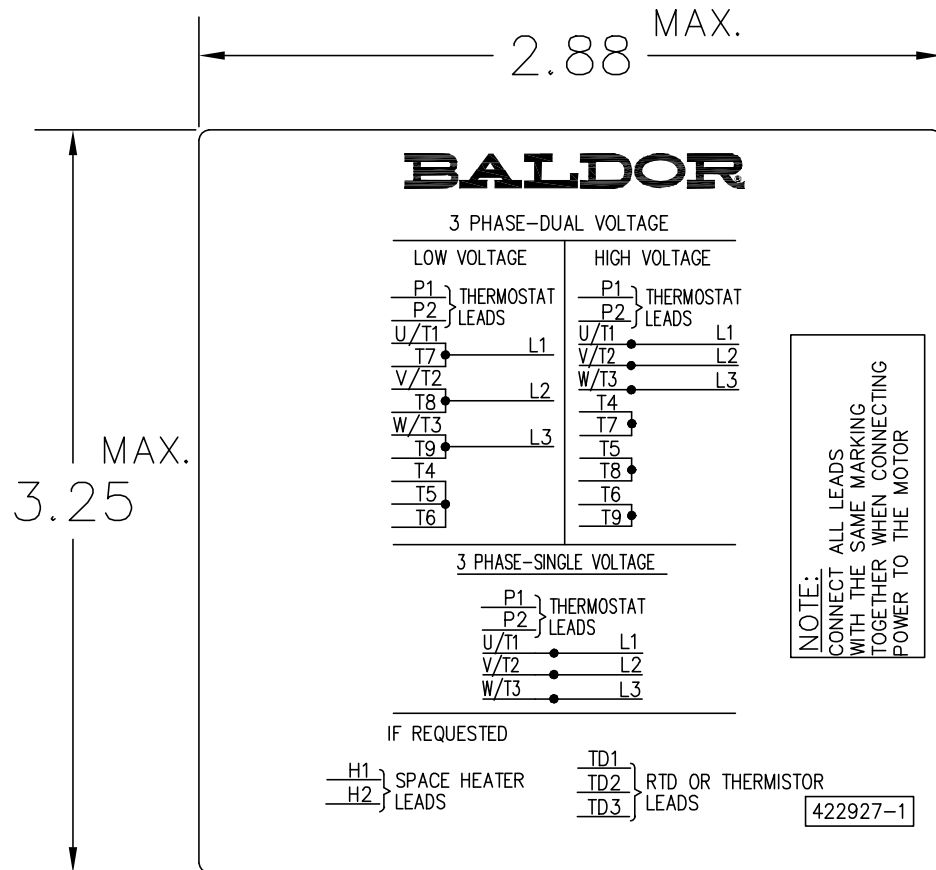
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CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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.

NOTE:
CONNECT ALL LEADS
WITH THE SAME MARKING
TOGETHER WHEN CONNECTING
POWER TO THE MOTOR

422927-1

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

SH 1 of 1