

# ABB BALDOR RELIANCE III



## Customer information packet

### IDDRPM251254

125HP, 1750, 460V, RL2586, DPFV, F1

**Specifications**

<b>Enclosure</b>	DPFV
<b>Frame</b>	RL2586Z
<b>Frame Material</b>	Exposed Laminations
<b>Frequency</b>	60.00 Hz
<b>Output @ Frequency</b>	125.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1800 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	460.0 V @ 60 HZ
<b>Agency Approvals</b>	CCSA US
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Current @ Voltage</b>	148.000 A @ 460.0 V
<b>Duty Rating</b>	CONT
<b>Feedback Device</b>	NO FEEDBACK
<b>Frame Prefix</b>	RL
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	148.0 a
<b>Insulation Class</b>	H
<b>IP Rating</b>	NONE
<b>Motor Standards</b>	NEMA
<b>Mounting Arrangement</b>	F1
<b>Overall Length</b>	30.38 IN
<b>Product Family</b>	General Industrial
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	2.124 IN
<b>Shaft Ground Indicator</b>	Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	1750 rpm
<b>Starting Method</b>	Full Voltage

**Part Detail**

<b>Revision</b>	A
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	L1824A
<b>Layout</b>	617222-051
<b>Eff. date</b>	01-21-2022
<b>CD Diagram</b>	422927-001
<b>Poles</b>	04
<b>Leads</b>	
<b>Proprietary</b>	False
<b>Created date</b>	10-28-2021

**Thermal Device - Bearing**

**None**

**Thermal Device - Winding**

**Normally Closed Thermostat**

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**Nameplate**

**000613006MY**

	<b>DUTY</b>	<b>HP</b>	<b>RPM</b>	<b>AMPS</b>	<b>VOLTS</b>	<b>HZ</b>	
	CONT	125	1750	148	460		60
	CONT	125	1900	146	460		65.1
	CONT	125	2330	147	460		80
<b>CAT.NO.</b>	IDDRPM251254		<b>SPEC. NO.</b>	R25-A000-0362			
<b>SER.NO</b>		<b>FR</b>	RL2586Z	<b>INSUL</b>	H		
<b>PH.</b>	3	<b>MAX SAFE SPEED</b>	5000	<b>AMB.</b>	40	<b>MIN. AMB.</b>	-25
<b>DESIGN NO.</b>	L1824A	<b>TYPE</b>		<b>ENCL.</b>	DPG-FV		
<b>S.F.</b>	1.00	<b>D.E. BRG.</b>	65BC03JPP30A				
<b>ENCL MOD</b>		<b>O.D.E. BRG.</b>	50BC03JPP30A				
	IP23						

FRAME	RL2586	AMPS	148	MAX SAFE SPEED	5000		
HP	125	DUTY	CONT	IM (AMPS)	40	R1 .0450	X1 .231
BASE SPEED	1750	S.F.	1.0	P.F. @NL / FL	.058/.883	R2 .0360	X2 .228
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	4.9	XM 6.60	

**RATED FULL LOAD DATA**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1750	125	375	460	60	147
MAX SPEED	2329	125	282	460	80	147
MIN SPEED	0	0	375	20.2	1.68	147

**LOAD PERFORMANCE AT BASE SPEED**

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	40.5
1/4	1789	31.3	92	460	60	54.2
1/2	1777	62.6	185	460	60	80.1
3/4	1764	93.7	279	460	60	112
FULL LOAD	1750	125	375	460	60	147
0/L	1698	206	638	460	60	264

REMARKS:  
TYPICAL DATA  
CORRELATED DATA



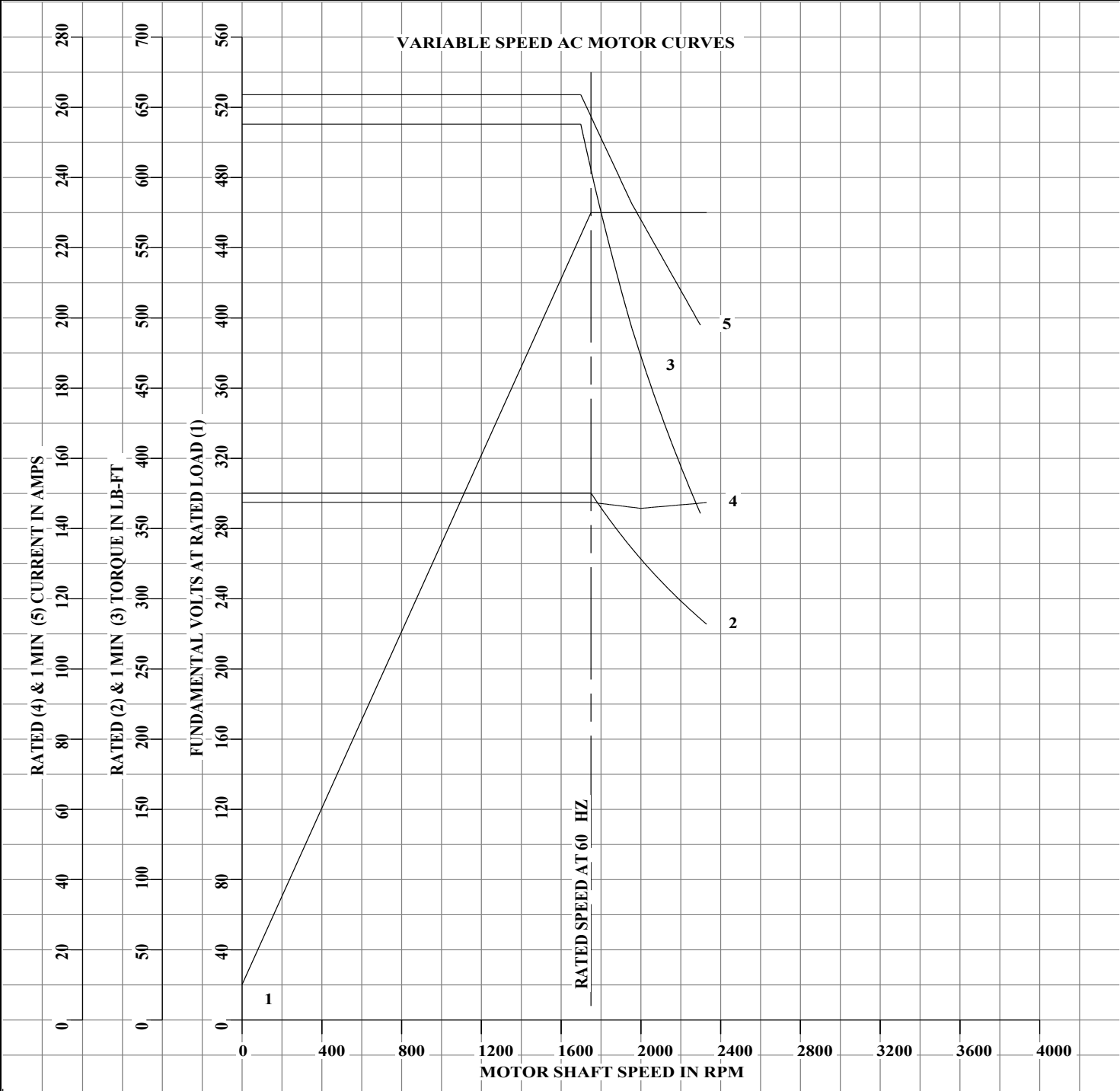
DRAWN BY: M. ORDERS  
CHECKED BY: B. GRANT  
APPROVED BY: T. EVON  
DATE: 2-10-04

AC MOTOR  
PERFORMANCE  
DATA

**L1824A**

ISSUE DATE 7/28/17

FRAME	RL2586	VOLTS	460	ENCLOSURE	DPTV	WYE CONN EQ CKT PER PHASE (AT BASE RATING, 25°C)	
HP	125	AMPS	148	MAX SAFE SPEED	5000	R1	.0450 X1 .231
BASE SPEED	1750	DUTY	CONT	IM (AMPS)	40	R2	.0360 X2 .228
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.058/.883		XM 6.60
		AMB.°C / INSUL	40/H	WK <sup>2</sup> (Lb-Ft <sup>2</sup> )	4.9		



TYPICAL DATA  
CORRELATED DATA DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

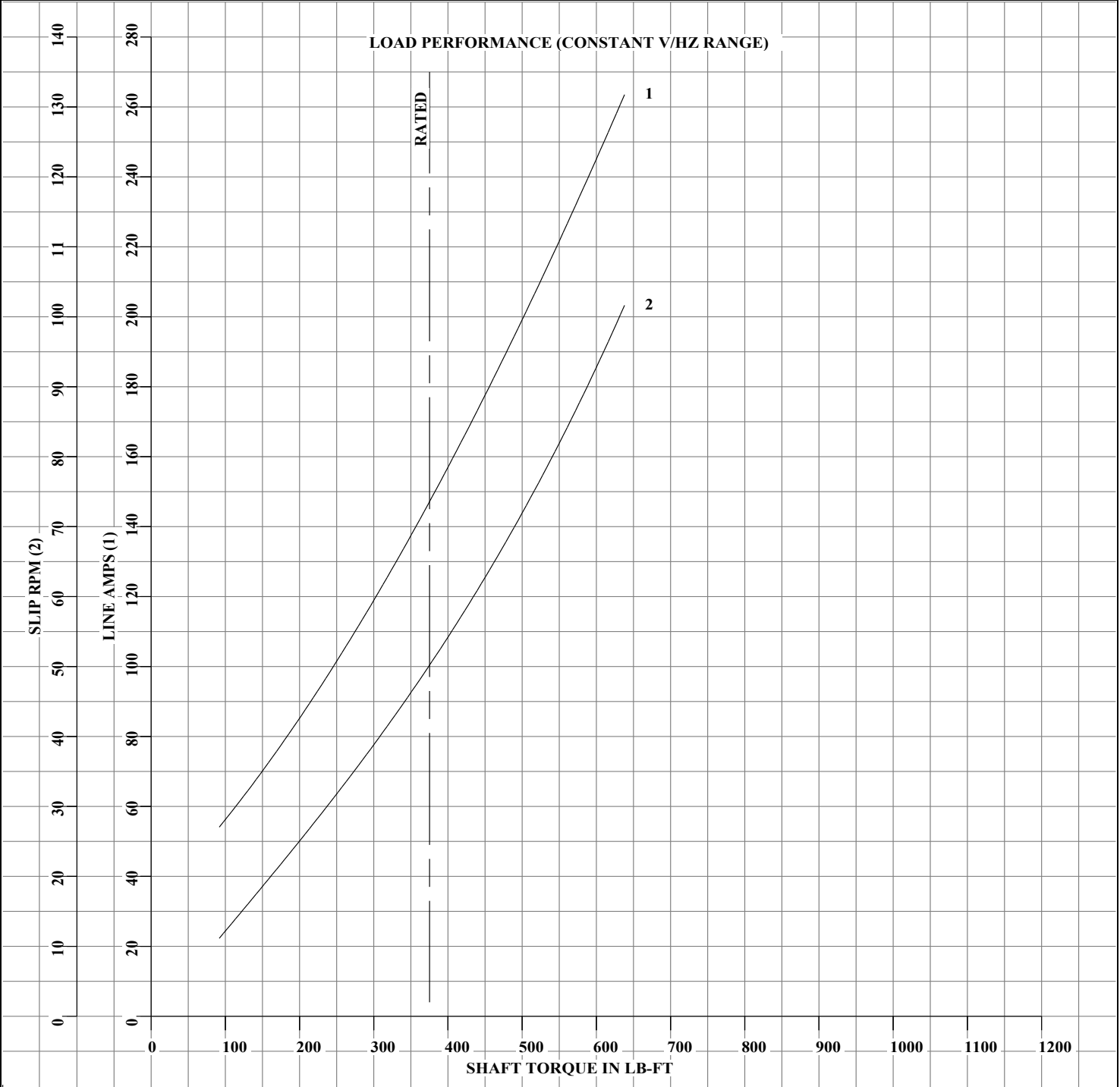


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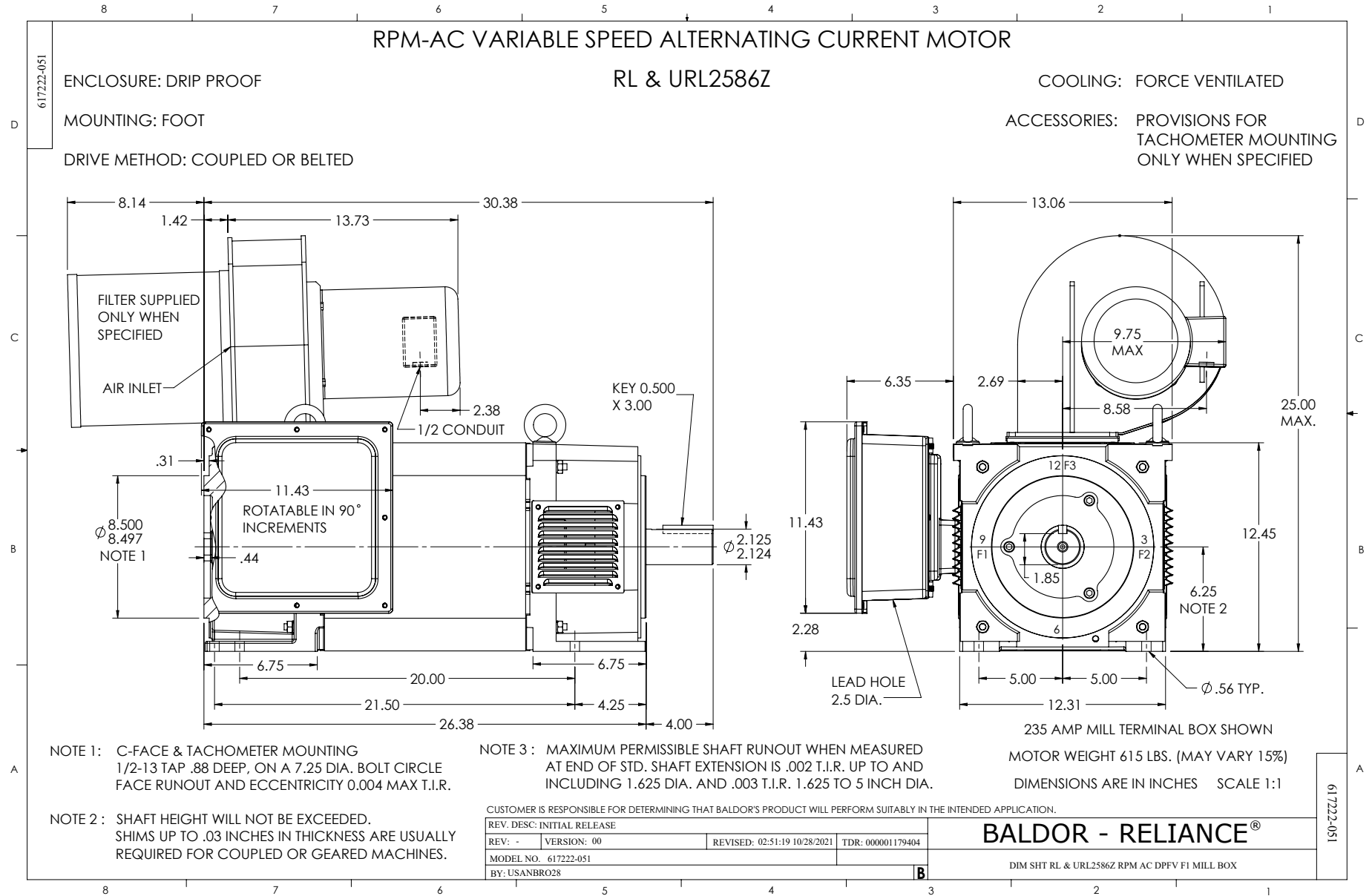
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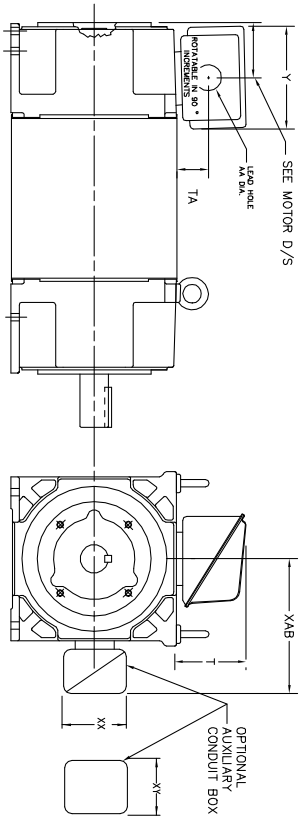
AC MOTOR  
 PERFORMANCE  
 DATA

**L1824A**  
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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	1.50/1.75
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	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	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	706320013A	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	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	306	706320018	9.00	4.12	8.42	4.89
FL280 & RL280	STEEL	N	500	70256001C	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	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	OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)					
	XAB	XX	XY	PART NUMBER	FRAME SIZE	PART NUMBER
FL180/FL180M/FL180L/FL180	7.38	4.25	4.25	602007-26-A	FL180/FL180M/FL180L/FL180	706310-3-B
FL210/FL210M/FL210L/FL210	8.44	4.25	4.25	602007-26-A	FL210/FL210M/FL210L/FL210	706310-3-B
FL250/FL250M/FL250L/FL250	9.12	4.25	4.25	602007-26-A	FL250/FL250M/FL250L/FL250	706310-3-B
FL280/FL280M/FL280L/FL280	9.12	4.25	4.25	602007-26-A	FL280/FL280M/FL280L/FL280	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 W/2"

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: -		

<b>BALDOR - RELIANCE®</b>	
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

SH 1 of 1