ABB BALDOR RELIANCE

Customer information packet

IDDRPM251004ED

100HP, 1750, 460V, RL2586, DPFV, F1

8/22/2026 7:24:18 PM

Specifications

Enclosure	DPFV
Frame	RL2586Z
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	100.000 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	119.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	RL
Heater Indicator	No Heater
High Voltage Full Load Amps	119.0 a
Insulation Class	H
IP Rating	NONE
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	38.69 IN
Product Family	Extruder
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	1760 rpm
Starting Method	Full Voltage

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L9489A
Layout	617222-051
Eff. date	03-23-2023
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	03-02-2023

Thermal Device - Bearing	None
Thermal Device - Winding	Thermostat And RTD

Nameplate

000613006ABS

DUTY	HP	RPM	AMPS	VOLTS	HZ
CONT	100	1760	119	460	60
CONT	100	2300	116	460	78.4

CAT.NO.	IDDRPM251004ED		**SPEC. NO.**	R25-A000-0412			
SER.NO		**FR**	RL2586Z	**INSUL**	H		
PH.	3	**MAX SAFE SPEED**	5000	**AMB.**	40	**MIN. AMB.**	-25
DESIGN NO.	L9489A	**TYPE**		**ENCL.**	DPG-FV		
S.F.	1.00	**D.E. BRG.**	65BC03J30X				
ENCL MOD		**O.D.E. BRG.**	416821-100FL				
	IP23						

SERIAL		VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)			
FRAME	RL2586	AMPS	119	MAX SAFE SPEED	5000				
HP	100	DUTY	CONT	IM (AMPS)	41.3	R1	.0597	X1	.231
BASE SPEED	1760	S.F.	1.0	P.F. @NL / FL	.057/.875	R2	.0360	X2	.250
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK² (Lb-Ft²)	4.2			XM	6.59

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1758	100	299	460	60	119
MAX SPEED	2296	100	229	460	78.4	116
MIN SPEED	0	0	299	21.3	1.38	119

LOAD PERFORMANCE AT BASE SPEED

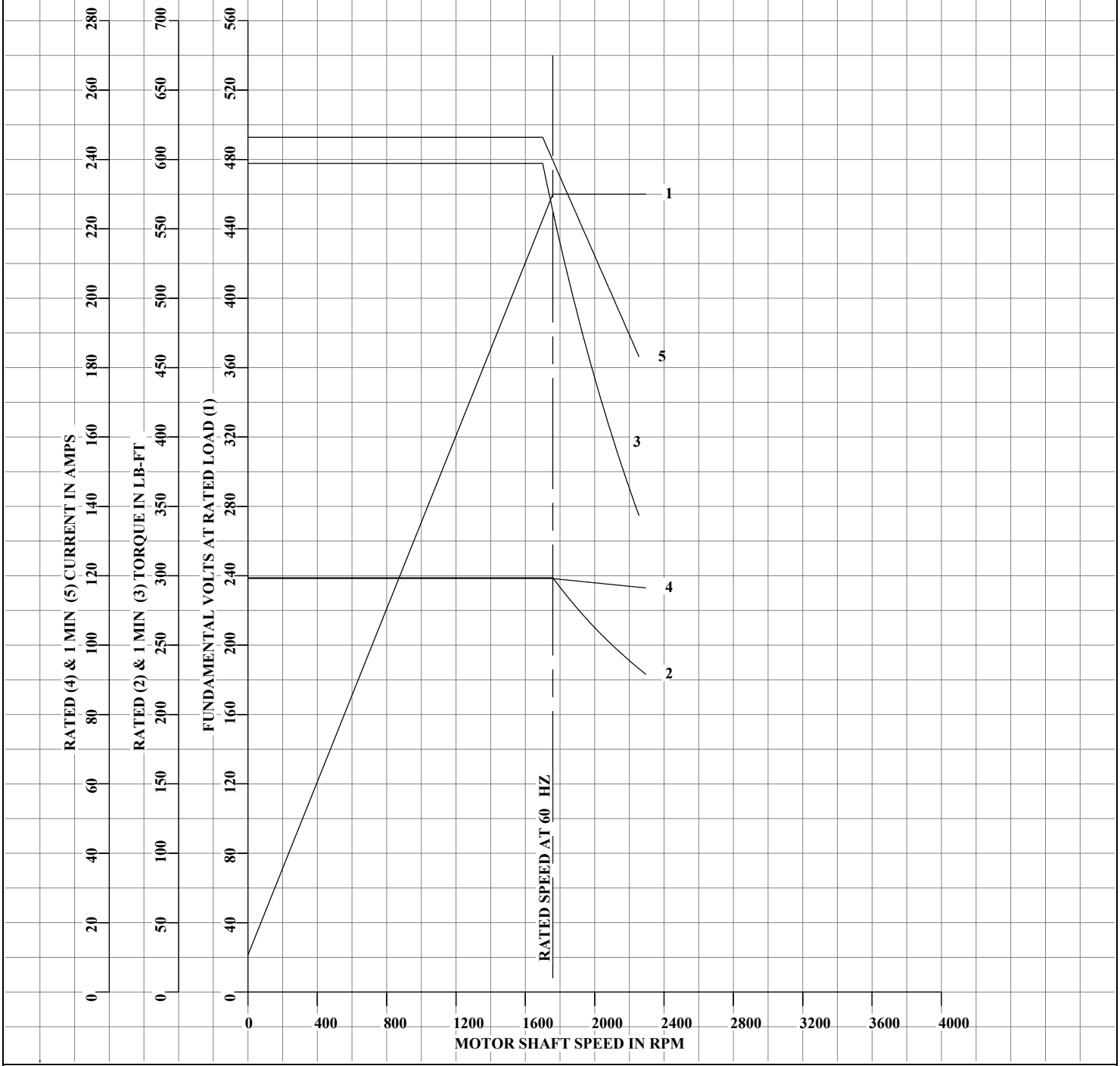
	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	40.5
1/4	1791	25.0	73	460	60	49.9
1/2	1781	50.1	148	460	60	68.6
3/4	1770	75.0	223	460	60	92.3
FULL LOAD	1758	100	299	460	60	119
0/L	1700	193	597	460	60	246

REMARKS:

ABB	DRAWN BY: A. BROOKINS CHECKED BY: B. GRANT APPROVED BY: J. MARTIN DATE: 3-1-23	AC MOTOR PERFORMANCE DATA	L9489A ISSUE DATE 3-10-23

FRAME	RL2586	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)			
HP	100	AMPS	119	MAX SAFE SPEED	5000				
BASE SPEED	1760	DUTY	CONT	IM (AMPS)	41.3	R1	.0597	X1	.231
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.057/.875	R2	.0360	X2	.250
		AMB.°C / INSUL	40/H	WK² (Lb-Ft²)	4.2			XM	6.59

VARIABLE SPEED AC MOTOR CURVES

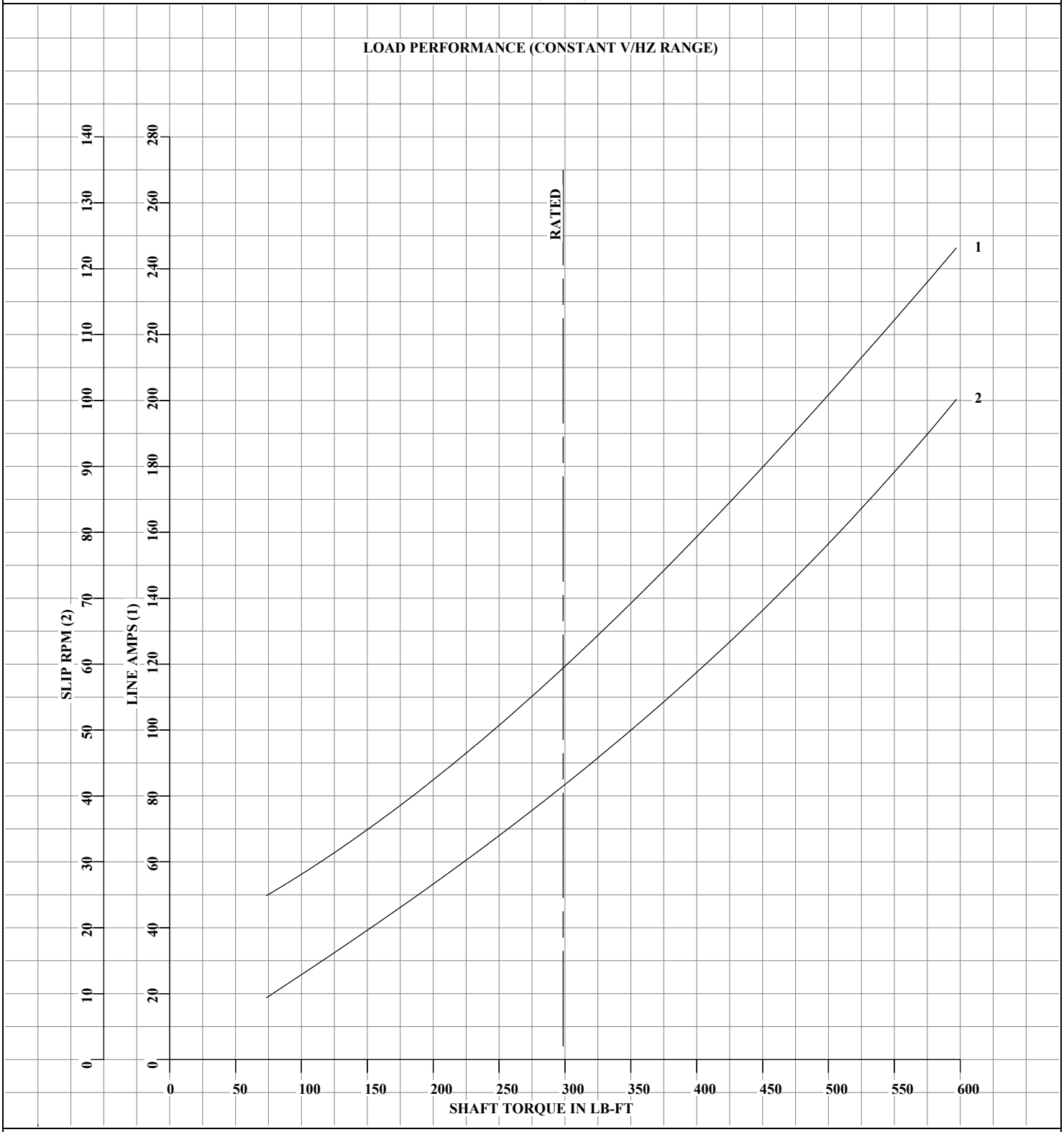


DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

ABB	DRAWN BY: A. BROOKINS CHECKED BY: B. GRANT APPROVED BY: J. MARTIN DATE: 3-1-23	AC MOTOR PERFORMANCE DATA	L9489A ISSUE DATE: 3-10-23

FRAME	RL2586	VOLTS	460	ENCLOSURE	DPFV	WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25°C)			
HP	100	AMPS	119	MAX SAFE SPEED	5000				
BASE SPEED	1760	DUTY	CONT	IM (AMPS)	41.3	R1	.0597	X1	.231
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.057/.875	R2	.0360	X2	.250
		AMB.°C / INSUL	40/H	WK² (Lb-Ft²)	4.2			XM	6.59

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

ABB	DRAWN BY: A. BROOKINS CHECKED BY: B. GRANT APPROVED BY: J. MARTIN DATE: 3-1-23	AC MOTOR PERFORMANCE DATA	L9489A ISSUE DATE: 3-10-23

RPM-AC VARIABLE SPEED ALTERNATING CURRENT MOTOR

RL & URL2586Z

617222-051

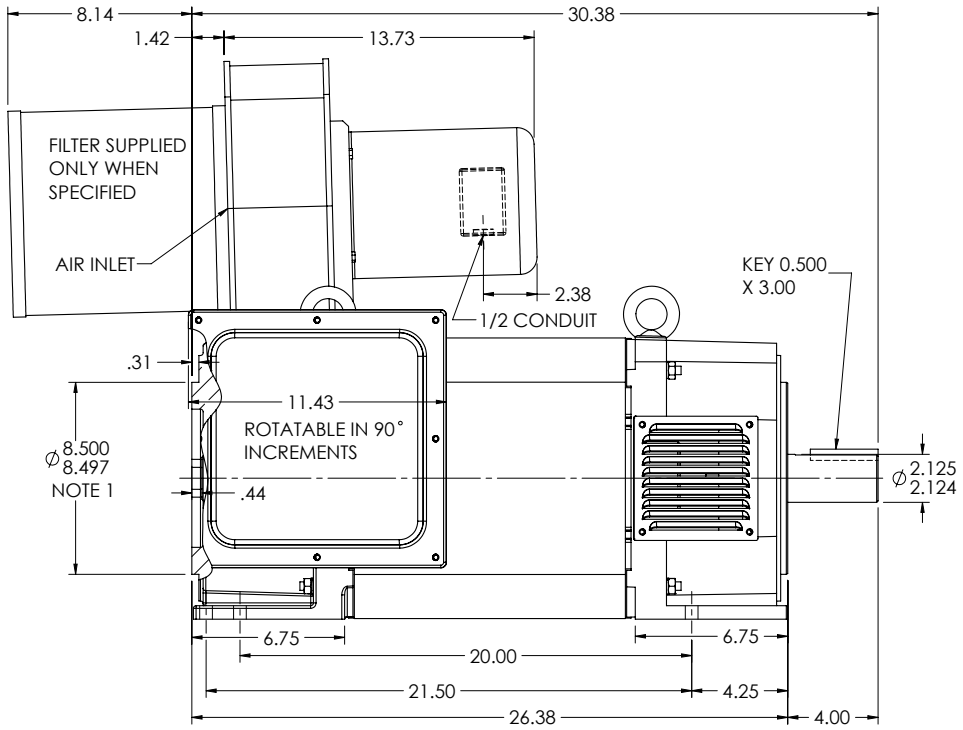
ENCLOSURE: DRIP PROOF

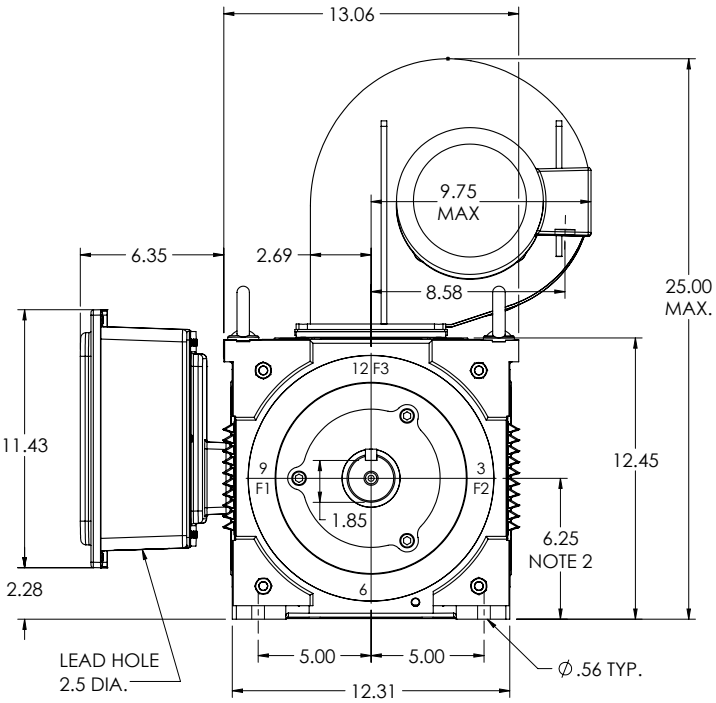
MOUNTING: FOOT

DRIVE METHOD: COUPLED OR BELTED

COOLING: FORCE VENTILATED

ACCESSORIES: PROVISIONS FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED





235 AMP MILL TERMINAL BOX SHOWN

MOTOR WEIGHT 615 LBS. (MAY VARY 15%)

DIMENSIONS ARE IN INCHES SCALE 1:1

NOTE 1: C-FACE & TACHOMETER MOUNTING 1/2-13 TAP .88 DEEP, ON A 7.25 DIA. BOLT CIRCLE FACE RUNOUT AND ECCENTRICITY 0.004 MAX T.I.R.

NOTE 2 : SHAFT HEIGHT WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.

NOTE 3 : MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STD. SHAFT EXTENSION IS .002 T.I.R. UP TO AND INCLUDING 1.625 DIA. AND .003 T.I.R. 1.625 TO 5 INCH DIA.

REV. DESC: INITIAL RELEASE			
REV: -	VERSION: 00	REVISED: 02:51:19 10/28/2021	TDR: 000001179404
MODEL NO. 617222-051			
BY: USANBRO28			B

BALDOR - RELIANCE®

DIM SHT RL & URL2586Z RPM AC DPFV F1 MILL BOX

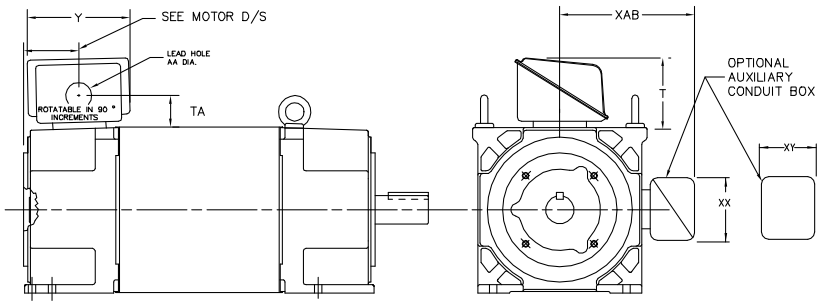
617222-051

616779-050

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	706320005A	6.12	2.38	4.38	1.75/2.00
FL180	STEEL	N	208	706320007A	7.62	2.00	7.00	2.50/3.00
FL180	CAST IRON	Y/N	60	706320004C	5.75	2.38	4.38	1.0 TAP
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	075454001AJ	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	075460062B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210 FDL13 & RDL13	MILL	Y	100	706310225R 706310056A	7.75	2.30	4.40	PG29/PG16
FL210 & RL210 FDL13 & RDL13	MILL	Y	160	706310226R 706310056B	9.00	3.06	5.40	PG36/PG16
FL210 & RL210 FDL13 & RDL13	MILL	Y/N	235	706310637A	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	075454001AJ	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	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 FDL16 & RDL16	MILL	Y	100	706310225R 706310056A	7.75	2.30	4.40	PG29/PG16
FL250 & RL250 FDL16 & RDL16	MILL	Y	160	706310226R 706310056B	9.00	3.06	5.40	PG36/PG16
FL250 & RL250 FDL16 & RDL16	MILL	Y/N	235	706310637A	11.42	4.00	6.72	2.50
FL250 & RL250 FDL16 & RDL16	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK
FL280 & RL280	STEEL	N	160	706320009A	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 FDL18 & RDL18	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL280 & RL280 FDL18 & RDL18	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL280 & RL280 FDL18 & RDL18	MILL	Y/N	235	706310637A	11.42	4.00	6.72	2.50
FL280 & RL280 FDL18 & RDL18	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)

FRAME SIZE	XAB	XX	XY	PART NUMBER	FRAME SIZE	XAB	XX	XY	PART NUMBER
FL210/FDL132/RL210/RDL132	7.38	4.25	4.25	602007-26-A	FL210/FDL132/RL210/RDL132	10.88	8.00	8.00	706310-3-B
FL250/FDL160/RL250/RDL160	8.44	4.25	4.25	602007-26-A	FL250/FDL160/RL250/RDL160	11.88	8.00	8.00	706310-3-B
FL280/FDL180/RL280/RDL180	9.12	4.25	4.25	602007-26-A	FL280/FDL180/RL280/RDL180	12.62	8.00	8.00	706310-3-B

(1) 'AA' CONDUIT.
(2) 'AA' PIPE TAP.
(3) CUSTOMER TO PROVIDE HOLE FOR CONDUIT.
(4) 2' DN -5A or 1' TAP DN -4C

TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, W-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.

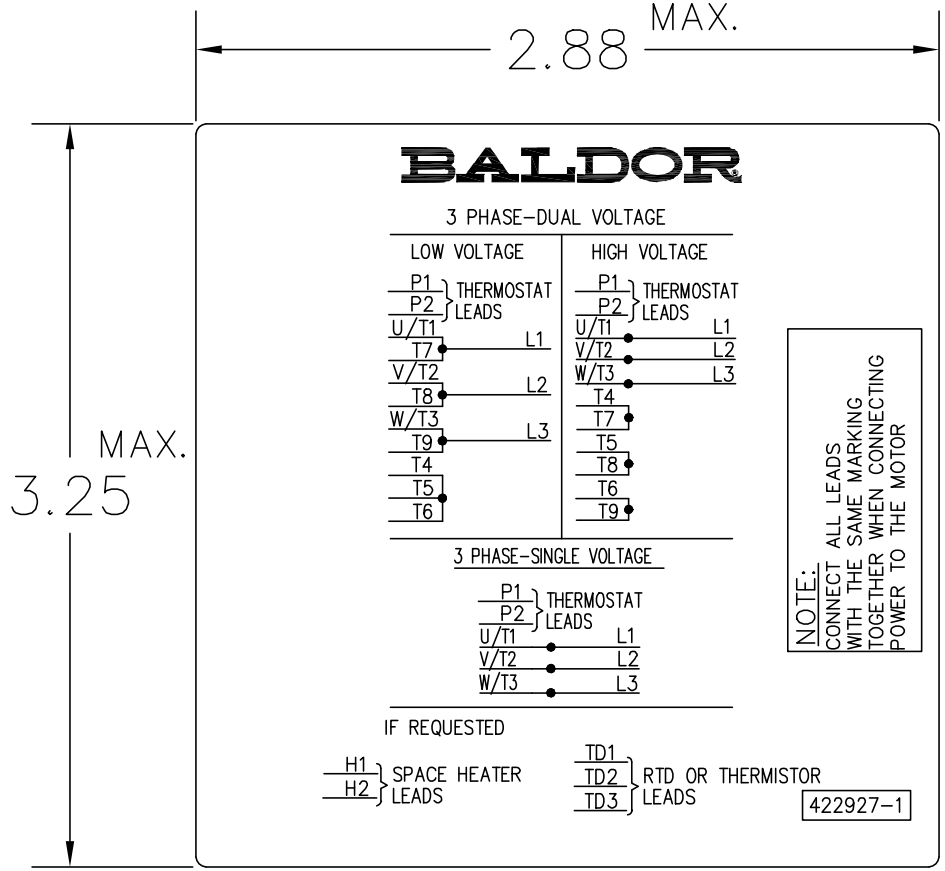
BALDOR - RELIANCE®

REV. DESC: ADD 706310-637 & 639 BOX		TDR: 00000118O260
REV. LTR: F	VERSION: 06	
FILE: \RGV\00003\692	REVISED: 11:08:56 10/26/2021	BY: RGGRWM
MTL: -		

DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180
SH 1 of 1

616779-050

422927–001



NOTE:
DATA TO BE SIZED SO THAT IT FITS INTO MATERIAL DECAL DIMENSIONS. MAKE LETTERS & NUMBERS AS LARGE AS POSIBLE.

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			BALDOR
REV. LTR: B	VERSION: 02	TDR: 000000788708	
FILE: \RGG\00000\203		REVISED: 08:09:29 03/04/2013	EXTERNAL CONNECTION LABEL
MTL: –		BY: RGGWT	SH 1 of 1