

ABB BALDOR RELIANCE III

Customer information packet

IDDRPM445006R1

500HP, 1190/2400RPM, 460V, 3PH, DPGFV, RL4461

Specifications

Enclosure	DPFV
Frame	RL4461
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	500.000 @ 60 HZ 500.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 460 V @ 60 HZ
Agency Approvals	CCSA US
Ambient Temperature	50 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	669.000 A @ 460.0 V
Duty Rating	CONT
Enclosure Modification	FORCE VENT
Feedback Device	NO FEEDBACK
Frame Prefix	RL
Heater Indicator	No Heater
High Voltage Full Load Amps	669.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	63.61 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	4.250 IN
Shaft Ground Indicator	Shaft Grounding

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L2046A
Layout	617602-001
Eff. date	05-03-2022
CD Diagram	422927-001
Poles	06
Leads	
Proprietary	False
Created date	04-09-2015

Shaft Rotation	Reversible
Speed	1190 rpm
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613006MY							
	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	500	1190		669	460	60
	CONT	500	2400		604	460	121.1
CAT.NO.	IDDRPM445006R1		SPEC. NO.		P44R1368		
SER.NO			FR	RL 4461	INSUL	H	
PH.	3	MAX SAFE SPEED		2700	AMB.	50	MIN. AMB. -25
DESIGN NO.	L2046A		TYPE		ENCL.	DP	
S.F.	1.00		D.E. BRG.		110BC02J30X		
ENCL MOD	FORCE VENT		O.D.E. BRG.		6222MCVL0241		

Parts List

Part number	Description	Quantity
WS286567	WS P44R1368	1.000 ea
RA282814	RA P44R1368	1.000 ea
418057249A	LABEL (WARNING)	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
004824007AB	PAINT,XT	0.100 ea
004824015A	GREASE POLYREX EM	1.100 lb
034693003AB	PPLG 3/8" SLOT PIPE PLUG	1.000 ea
034693003AB	PPLG 3/8" SLOT PIPE PLUG	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001BB	GREASE FTG,GRS.IN	1.000 ea
036000012JB	M8-1.25 X 12MM HXHDC	12.000 ea
036000016DB	HHCS	4.000 ea
036000070PB	HHCS M20-2.5X70MM PLTD.	4.000 ea
036000070PB	HHCS M20-2.5X70MM PLTD.	4.000 ea
036000080KB	HHCSM10-1.5X80MMPLTD-360	4.000 ea
036000090KB	HHCS,DE CAP - 400	4.000 ea
036140001F	M30-3.5 X 45MM EYEBOLT	2.000 ea
412118001B	3/8-16 X 3/4 DRAIN SSTL.	1.000 ea
412118001B	3/8-16 X 3/4 DRAIN SSTL.	1.000 ea
418150003A	GREASE FITTING CAP	2.000 ea
424433001A	WAVY SPRING WSHER	1.000 ea
611917002Y	GASKET, NEOPRENE	1.000 ea
708518003A	COVER, HANDHOLE-SOLID	1.000 ea
611917002Y	GASKET, NEOPRENE	1.000 ea
BP5248	BP5248	2.000 ea
611917002Y	GASKET, NEOPRENE	1.000 ea
708518003A	COVER, HANDHOLE-SOLID	1.000 ea

708532007A	L440 AIR BAFFLE	1.000 ea
804831001B	BRKT,DE,L440	1.000 ea
BP5068BJ01	BRUSH, .187 X .187 X 1.00	2.000 ea
808011002AA	RL440, BRACKET	1.000 ea
000613006NT	NAME PLATE IEC	1.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
036000012KB	M10 1.50 X 12MM HXHDCS	4.000 ea
036000020HD	HHCS M6X20MM LONG 304S.S	8.000 ea
036000016KB	HHCSM10-1.5X16MM PLTD-280	2.000 ea
036000020JB	HHCS M8-1.25X20L PLTD-250	8.000 ea
036000020JD	HHCS M8X20MM LONG 304S.S	5.000 ea
036000025JB	HHCS M8X25MM LONG PLATED	8.000 ea
036000070LB	MHHCS M12-1.75X70M -360	4.000 ea
036100020JA	M8-1.25 X 20MM HXSOCHDCS	6.000 ea
036600008AD	FLTWSHR,T BLK SPT	8.000 ea
036620010AB	M10 EXT. TOOTH LK WASHER	1.000 ea
036620010AB	M10 EXT. TOOTH LK WASHER	2.000 ea
417733036B	GASKT,C/BOX BACKPLATE,REF 706310063E	1.000 ea
410978021A	FLANGE, INLET BLOWER HSG	1.000 ea
415000103F	TLUG	2.000 ea
417733004M	GASKT	2.000 ea
417733013E	GASKT L440	1.000 ea
417733014F	GASKT L440	1.000 ea
418010012F	CONDUIT BOX SPACER	1.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	4.000 ea
418019012A	SETSCREW METRIC	2.000 ea
418057256C	HHCS M10 25MM 440 IEC	1.000 ea
422919315	HHCVR KIT,L440,DE/ODE,C/BOX MTG	1.000 ea
422919316	HHCVR KIT,L440,DE/ODE, LOUVERED	1.000 ea
422919316	HHCVR KIT,L440,DE/ODE, LOUVERED	1.000 ea
422919317	HHCVR KIT,L440,DE/ODE, SOLID	1.000 ea
422919317	HHCVR KIT,L440,DE/ODE, SOLID	1.000 ea
610409082A	ADAPTER	1.000 ea

610490003G	5HP,3490RPM,3PH,60HZ,184TC,0632M,TEFC,F1	1.000 ea
611917002Z	GASKT	1.000 ea
706305301A	GUARD, SHAFT	1.000 ea
706310058E	KOBX CVR - 18.90 [480] X 19.49 [495]	1.000 ea
706310389A	706310389AA ENTRY PLATE	1.000 ea
706310063E	CBOX L440 1260A MAX	1.000 ea
706310082A	ADAPT (CBOX) L440	1.000 ea
708520001C	BLOWER WHEEL	1.000 ea
708528008A	SCROLL WELDMENT	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
034180056LA	KEY 1X1X7 L	1.000 ea
036000025NF	SCREW, HEX M16 BRASS	2.000 ea
004824007CQR	C2 PAINT SYSTEM MEDIUM GRAY CHARCOAL MET	0.300 ea
417744143M	PACKAGING (PHANTOM)	1.000 ea
418018071	LABEL LABE	1.000 ea
LB1549	LABEL, BLANK 1.375 X 2.250 IMPRINTABLE	1.000 ea

FRAME	RL4461	AMPS	669	MAX SAFE SPEED	2700				
HP	500	DUTY	CONT	IM (AMPS)	368	R1	.00334	X1	.0341
BASE SPEED	1190	S.F.	1.0	P.F. @NL / FL	.029/.746	R2	.00259	X2	.0581
PHASE/HZ	3/60	AMB.°C / INSUL	50/H	WK ² (Lb-Ft ²)	207			XM	.717

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1191	500	2206	460	60	669
MAX SPEED	2401	500	1094	460	121.1	604
MIN SPEED	0	0	2206	6.33	.4739	669

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1200	0	0	460	60	360
1/4	1198	125	548	460	60	395
1/2	1195	250	1100	460	60	462
3/4	1193	375	1651	460	60	559
FULL LOAD	1191	500	2206	460	60	669
0/L	1185	747	3309	460	60	920

REMARKS:

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DRAWN BY: B. GRANT
CHECKED BY: B. GRANT
APPROVED BY: T. EVON
DATE: 2-23-01

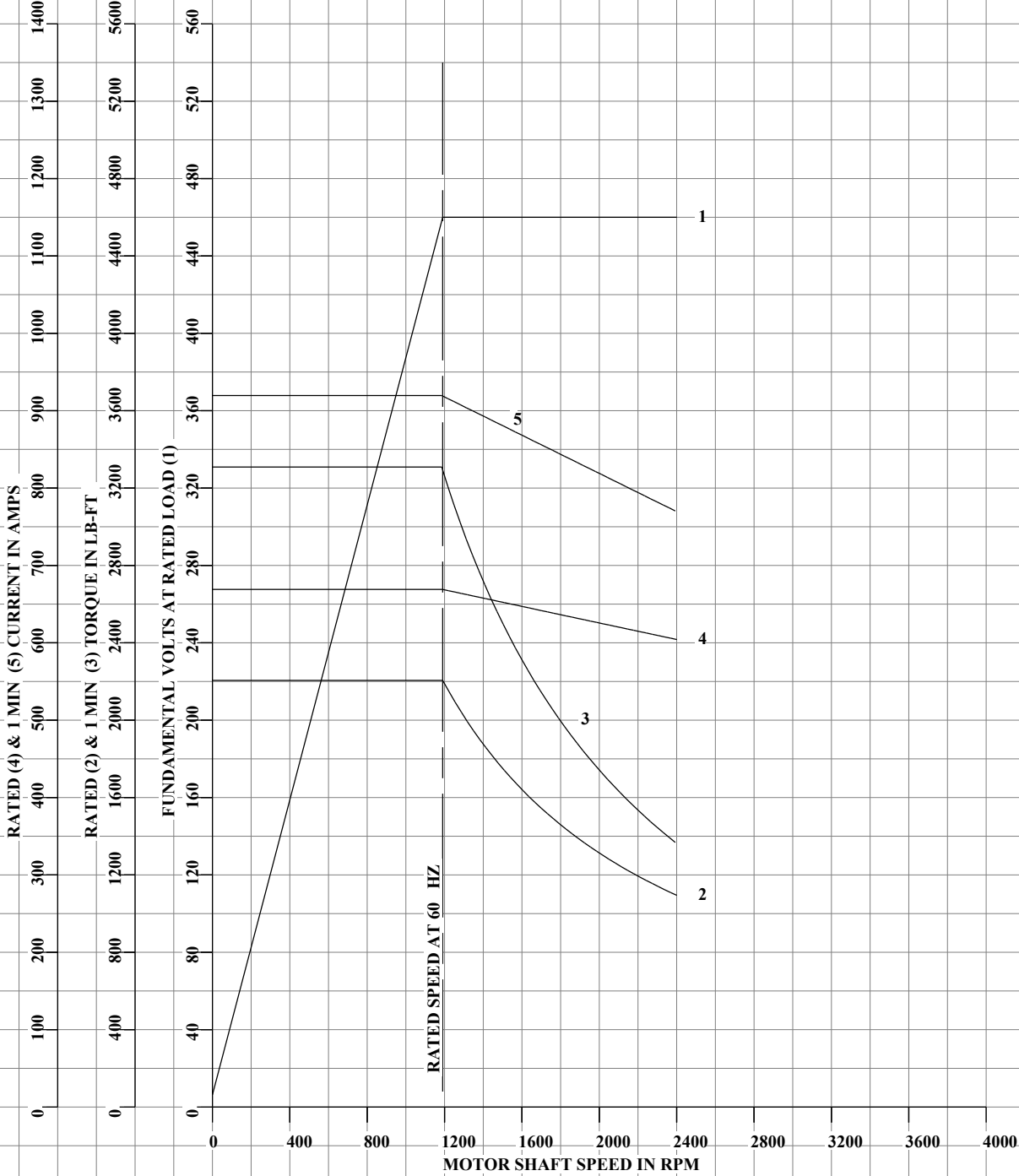
**AC MOTOR
PERFORMANCE
DATA**

L2046A

ISSUE DATE 8-27-18

FRAME	RL4461	VOLTS	460	ENCLOSURE	DPFV	WYE CONNECTION OHMS PER PHASE (AT BASE RATING, 25°C)		
HP	500	AMPS	669	MAX SAFE SPEED	2700	R1	.00334	X1 .0341
BASE SPEED	1190	DUTY	CONT	IM (AMPS)	368	R2	.00259	X2 .0581
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.029/.746			XM .717
		AMB.°C / INSUL	50/H	WK ² (Lb-Ft ²)	207			

VARIABLE SPEED AC MOTOR CURVES



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



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 APPROVED BY: T. EVON
 DATE: 2-23-01

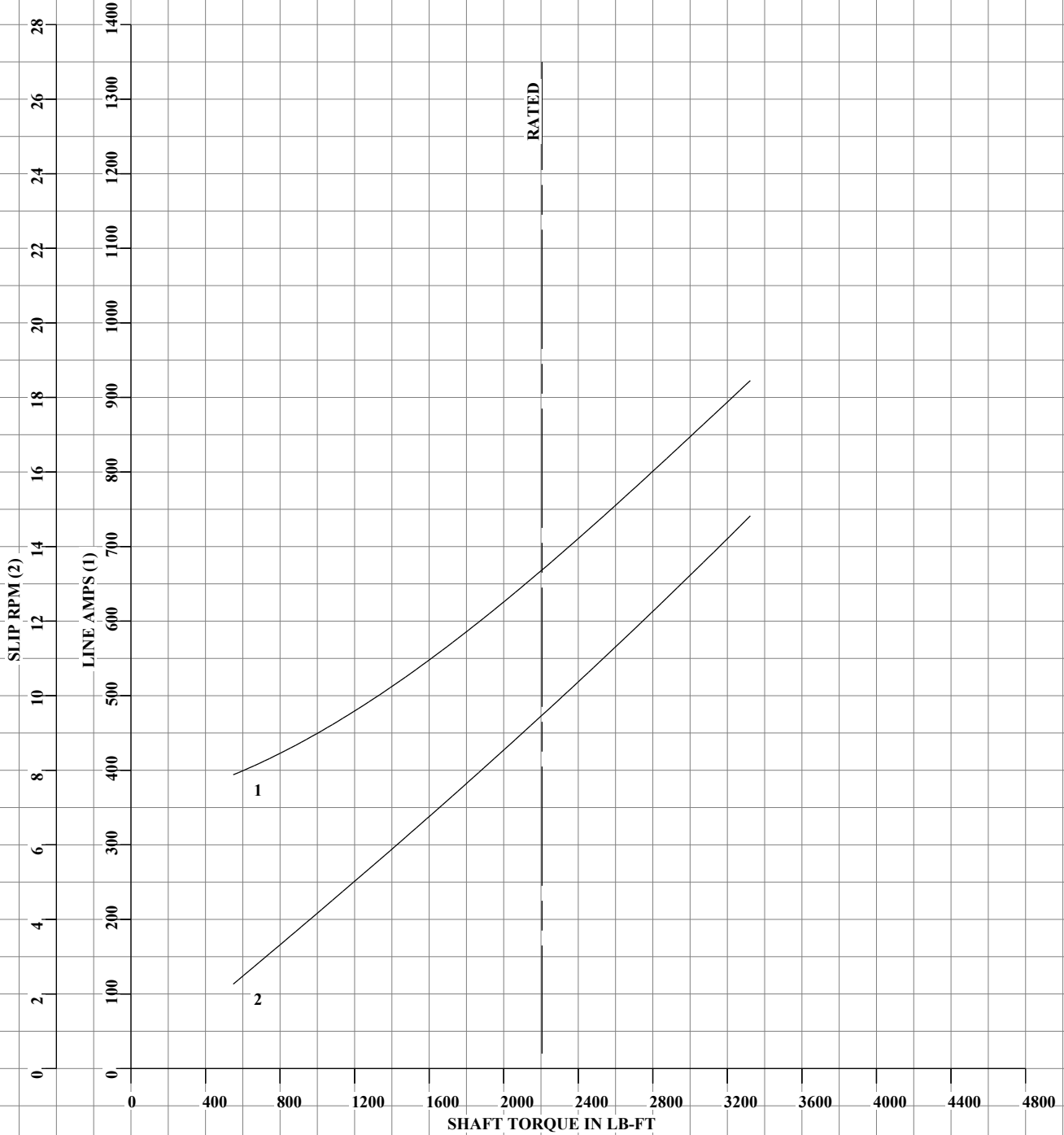
**AC MOTOR
PERFORMANCE
DATA**

L2046A

ISSUE DATE: 8-27-18

FRAME		VOLTS		ENCLOSURE		WYE CONN EQ CRT OHMS PER PHASE (AT BASE RATING, 25°C)		
RL4461		AMPS	669	MAX SAFE SPEED	2700			
HP	500	DUTY	CONT	IM (AMPS)	368	R1	.00334	X1 .0341
BASE SPEED	1190	S.F.	1.0	P.F. @NL / FL	.029/.746	R2	.00259	X2 .0581
PHASE/HZ	3/60	AMB.°C / INSUL	50/H	WK ² (Lb-Ft ²)	207			XM .717

LOAD PERFORMANCE (CONSTANT V/HZ RANGE)



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY

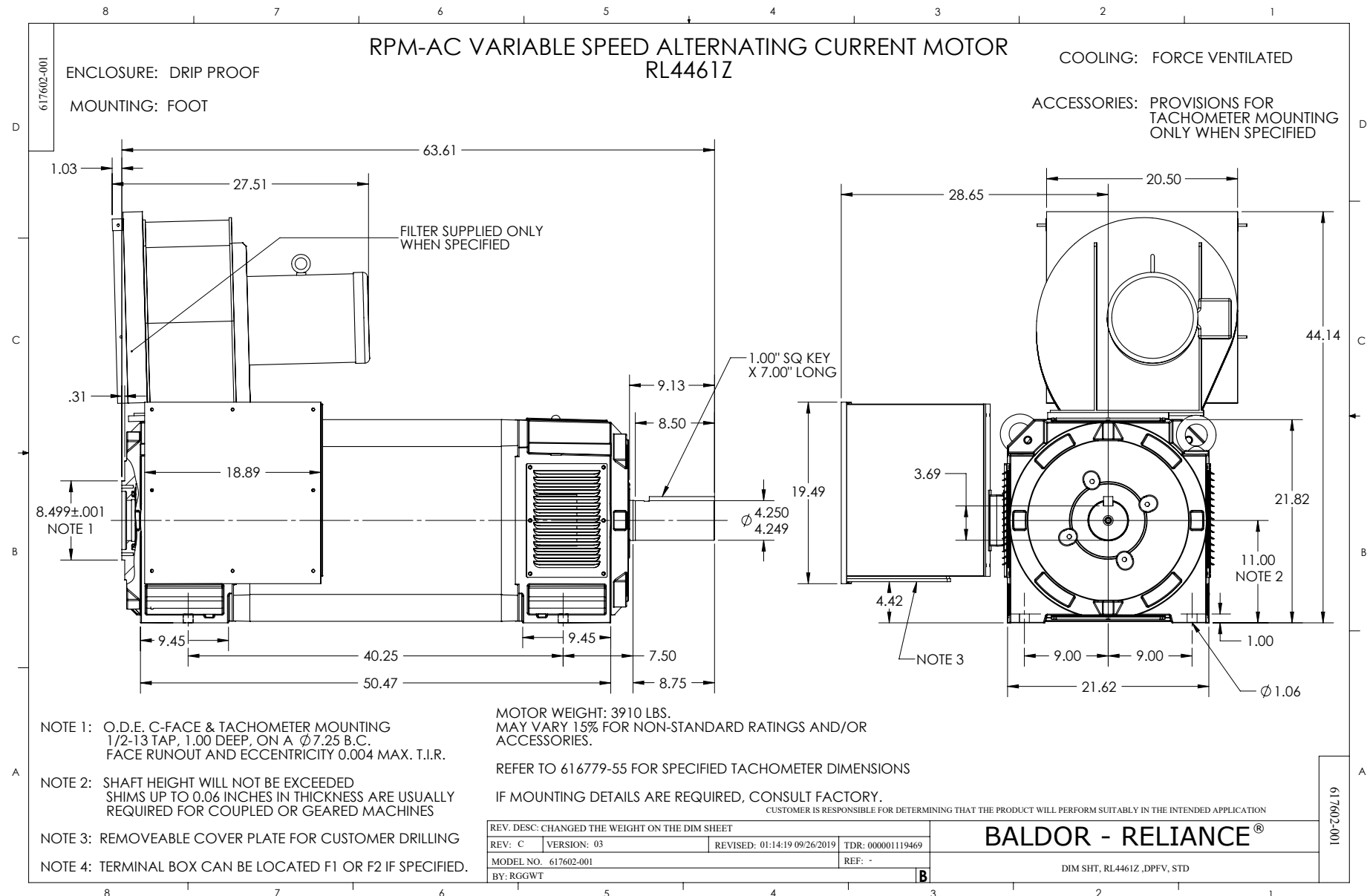


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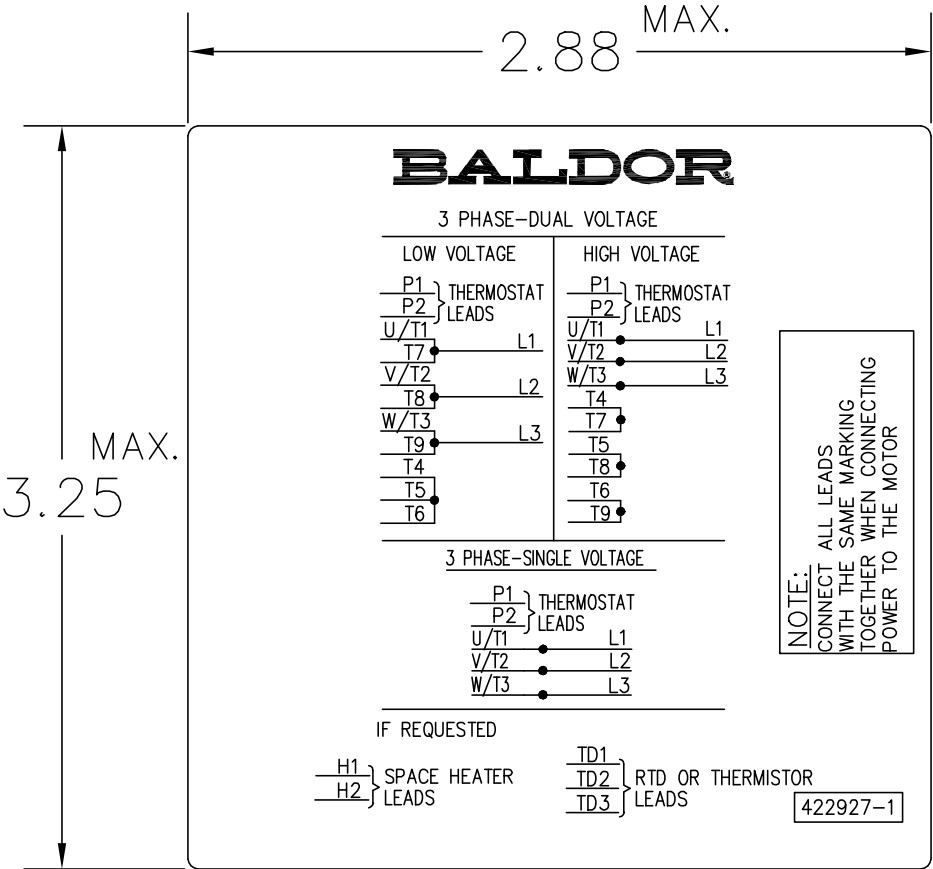
**AC MOTOR
PERFORMANCE
DATA**

L2046A

ISSUE DATE: 8-27-18



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