

ABB BALDOR RELIANCE III

Customer information packet

IDDRPM406004R1

600HP, 1780/2665, 460V, RL4046, DPFV, F1

Specifications

Enclosure	DPFV
Frame	RL4046
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	600.000 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	673.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	RL
Heater Indicator	No Heater
High Voltage Full Load Amps	673.0 a
Insulation Class	H
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	48.62 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	3.624 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1780 rpm
Starting Method	Full Voltage
Thermal Device - Bearing	None

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	L9461A
Layout	619657-001
Eff. date	12-16-2025
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	02-03-2023

Thermal Device - Winding

Normally Closed Thermostat

Nameplate

000613006MY							
	DUTY	HP	RPM	AMPS	VOLTS	HZ	
	CONT	600	1780		674	460	60
	CONT	600	2670		661	460	90
CAT.NO.	IDDRPM406004R1		SPEC. NO.		R40-A000-0300		
SER.NO			FR	RL 4046	INSUL	H	
PH.	3	MAX SAFE SPEED		3750	AMB.	40	MIN. AMB. -25
DESIGN NO.	L9461A		TYPE		ENCL.	DP	
S.F.	1.00		D.E. BRG.		95BC02J30X		
ENCL MOD	FORCE VENT		O.D.E. BRG.		6316/C3VL0241		

Parts List

Part number	Description	Quantity
WS406165	WS R40-A000-0300	1.000 ea
RA402675	RA R40-A000-0300	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
807532033AA	BRKT,RL400 GROUND WIRE	1.000 ea
807532003AA	BRKT,RL400	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
004824015A	GREASE POLYREX EM	1.630 lb
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
419912001B	W WASHER	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
036100090KA	HSHCS BRACKET LE	4.000 ea
036100100KA	HSHCS BRACKET LE	4.000 ea
036140001F	M30-3.5 X 45MM EYEBOLT	2.000 ea
034690002AL	1/4 SQ.HD.PIPE PLUG	1.000 ea
034690002AL	1/4 SQ.HD.PIPE PLUG	1.000 ea
036500013AB	M16 X 2.0 HX NUT,ODE BRKT 304589	4.000 ea
036500013AB	M16 X 2.0 HX NUT,ODE BRKT 304589	4.000 ea
BP5248	BP5248	2.000 ea
708532016A	AIR BAFFLE	1.000 ea
609830005ACY	STUD,FRAME,FL4046	2.000 ea
609830005ABA	TBOLT METRIC	2.000 ea
610490001BW	32M 2P TEFC VER 145TCZ S/P32-6 SUPER E	1.000 ea

415000003E	T/LUG #4AWG-1/0AWG W/HOLE FOR .375 BOLT	1.000 ea
036000012JB	M8-1.25 X 12MM HXHDC	3.000 ea
418057256D	GROUND SCREW	1.000 ea
611965001E	BLOWER WHEEL	1.000 ea
417733004G	GASKT	2.000 ea
611917002P	GASKT C400	1.000 ea
036000020JB	HHCS M8-1.25X20L PLTD-250	6.000 ea
032018006CK	HHCS 3/8-16X3/4L PLATED 411409	4.000 ea
000613006NT	NAME PLATE IEC	1.000 ea
417733036C	GASKT,C/BOX BACKPLATE,REF 706310063B	1.000 ea
418057256C	HHCS M10 25MM 440 IEC	1.000 ea
032018004DK	HHCS,DRIP COVER	4.000 ea
706310389B	ENTRY PLATE 706310389AB	1.000 ea
417733014C	GASKT (REK P/N 187215)	1.000 ea
036000020JD	HHCS M8X20MM LONG 304S.S	5.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
706313062B	BLHSG FE MTG C400	1.000 ea
410978010F	FLANGE, INLET BLOWER HSG	1.000 ea
410978015A	GRILL, INLET FLANGE	1.000 ea
036000055KB	M10-1.5 X 55MM HHCS	4.000 ea
036620010AB	M10 EXT. TOOTH LK WASHER	1.000 ea
036620009AB	M8 EXTERNAL LK WASHER	1.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
418014014T	ADAPT,C/BOX 418014014XT	1.000 ea
613439048A	C/BOX,ADAPT,BACKPLATE	1.000 ea
422919137	HHCVR KIT,C400,DE,SOLID,X/T	1.000 ea
422919133	HHCVR KIT,C400,DE,LOUVERED	1.000 ea
422919133	HHCVR KIT,C400,DE,LOUVERED	1.000 ea
422919418	HHCVR KIT,RL400,ODE/DE,C/BOX MTG	1.000 ea
422919137	HHCVR KIT,C400,DE,SOLID,X/T	1.000 ea
036600008AD	FLTWSHR,T BLK SPT	8.000 ea
706310063B	CBOX (REK)	1.000 ea
706310058B	CBCVR(REK P/N 187296)	1.000 ea
417733013B	GASKT (REK P/N 189486)	1.000 ea

036000020HD	HHCS M6X20MM LONG 304S.S	8.000 ea
036000025JB	HHCS M8X25MM LONG PLATED	4.000 ea
417744401H	GROUND WIRE	1.000 ea
706305301A	GUARD, SHAFT	1.000 ea
034180046KA	KEY 7/8X7/8X5-3/4L	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
004824007CQR	C2 PAINT SYSTEM MEDIUM GRAY CHARCOAL MET	0.300 ea
418018116	WARNING PLATE	1.000 ea
LB1549	LABEL, BLANK 1.375 X 2.250 IMPRINTABLE	1.000 ea

FRAME	RL4046	AMPS	674	MAX SAFE SPEED	3750				
HP	600	DUTY	CONT	IM (AMPS)	203	R1	.00515	X1	.0394
BASE SPEED	1780	S.F.	1.0	P.F. @NL / FL	.037/.891	R2	.00301	X2	.0430
PHASE/HZ	3/60	AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	85			XM	1.34

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1780	600	1770	460	60	674
MAX SPEED	2669	600	1181	460	90	661
MIN SPEED	0	0	1770	10.3	.653	674

LOAD PERFORMANCE AT BASE SPEED

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	199
1/4	1795	150	440	460	60	260
1/2	1791	300	881	460	60	378
3/4	1786	450	1323	460	60	519
FULL LOAD	1780	600	1770	460	60	674
0/L	1746	1354	4071	460	60	1655

REMARKS:
CORRELATED DATA



DRAWN BY: A. BROOKINS
CHECKED BY: R. GARCIA
APPROVED BY: J. MARTIN
DATE: 3-15-23

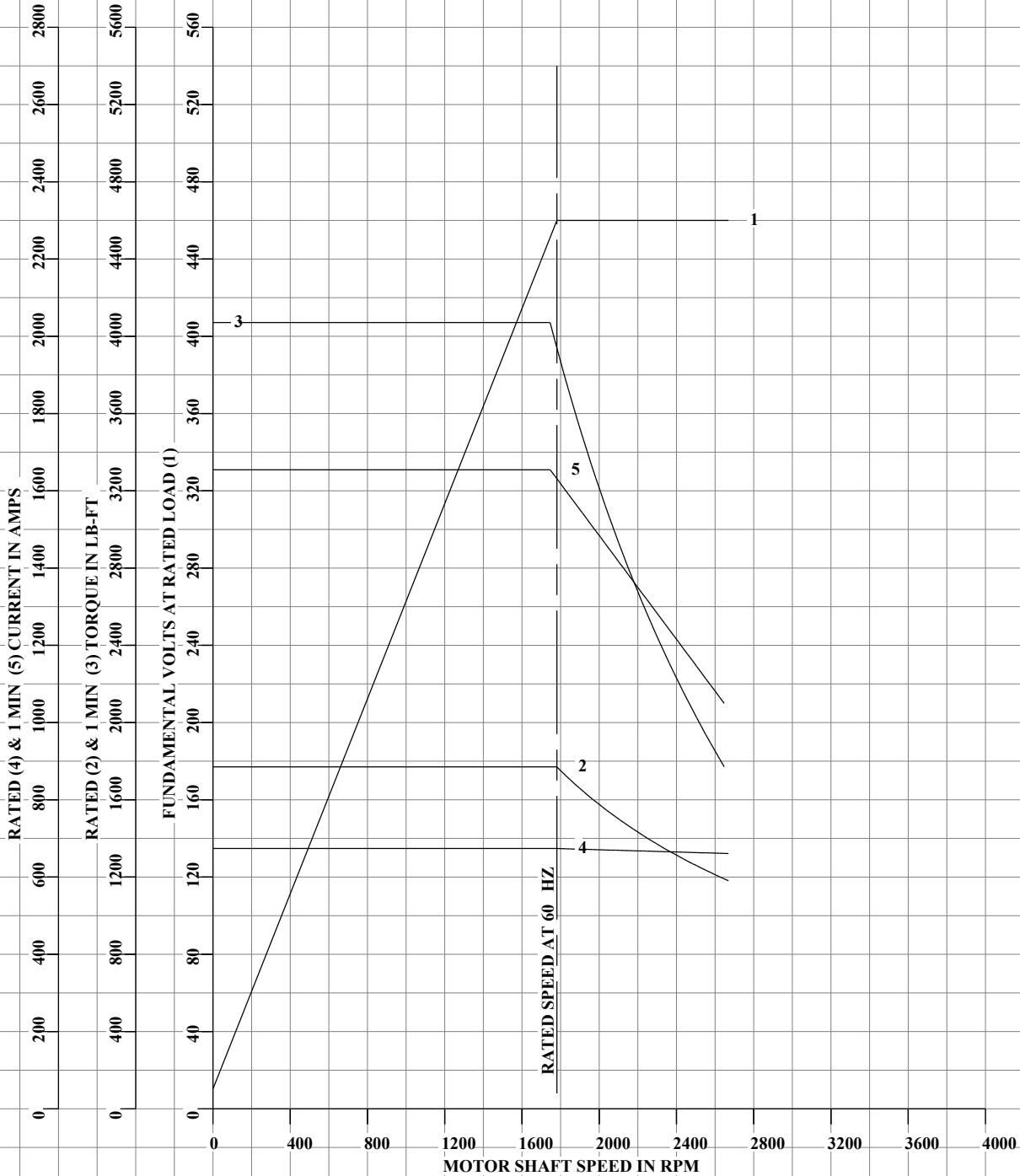
**AC MOTOR
PERFORMANCE
DATA**

L9461A

ISSUE DATE 3-15-23

FRAME	RL4046	VOLTS	460	ENCLOSURE	DPFV	WYE CONNEQ CRT OHMS PER PHASE (AT BASE RATING, 25°C)		
HP	600	AMPS	674	MAX SAFE SPEED	3750	R1	.00515	X1 .0394
BASE SPEED	1780	DUTY	CONT	IM (AMPS)	203	R2	.00301	X2 .0430
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.037/.891			XM 1.34
		AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	85			

**CORRELATED DATA
VARIABLE SPEED AC MOTOR CURVES**



DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



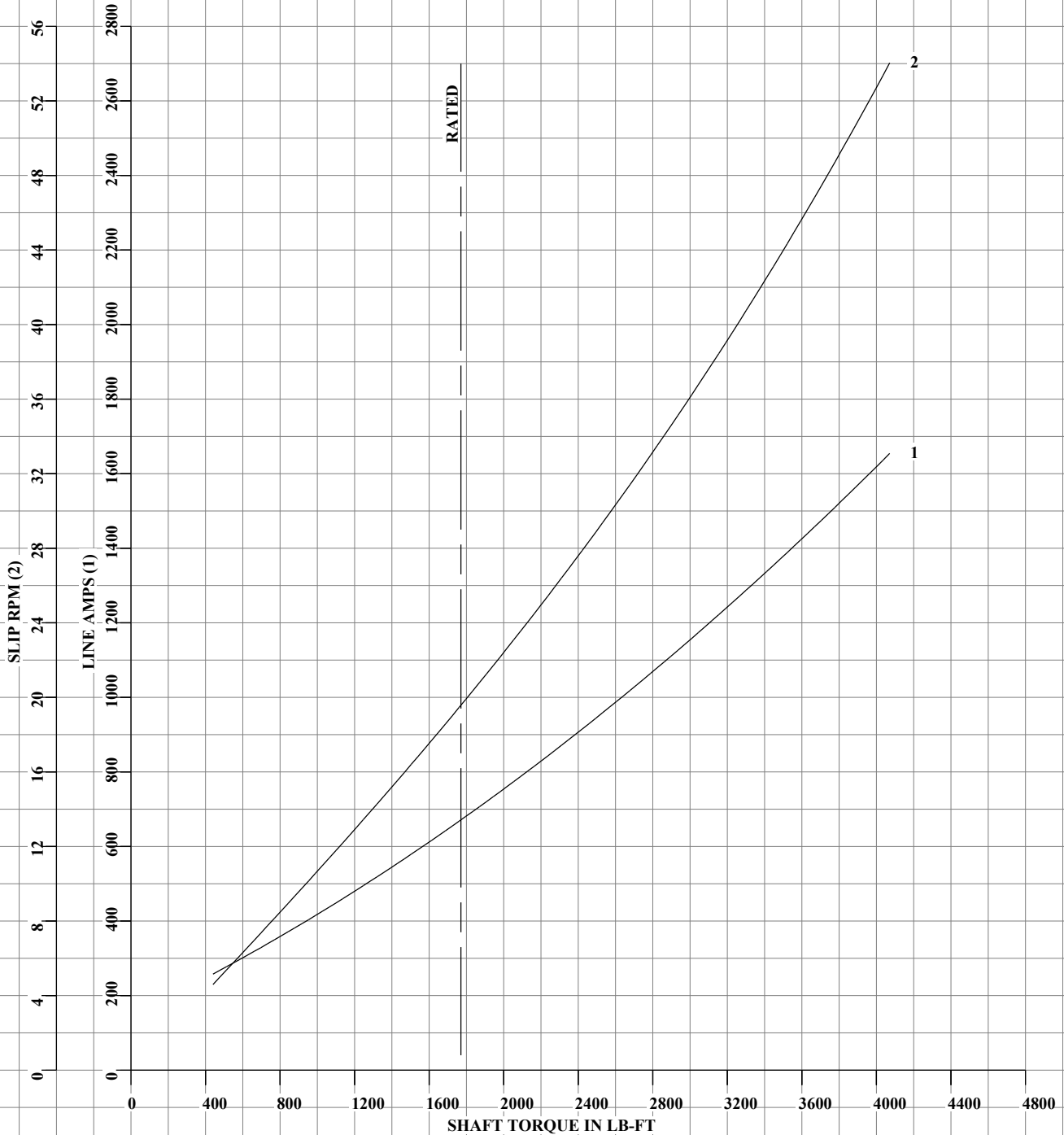
DRAWN BY: A. BROOKINS
 CHECKED BY: R. GARCIA
 APPROVED BY: J. MARTIN
 DATE: 3-15-23

**AC MOTOR
PERFORMANCE
DATA**

L9461A
 ISSUE DATE: 3-15-23

FRAME	RL4046	VOLTS	460	ENCLOSURE	DPFV	WYE CONNEQ CRT OHMS PER PHASE (AT BASE RATING, 25°C)		
HP	600	AMPS	674	MAX SAFE SPEED	3750	R1	.00515	X1 .0394
BASE SPEED	1780	DUTY	CONT	IM (AMPS)	203	R2	.00301	X2 .0430
PHASE/HZ	3/60	S.F.	1.0	P.F. @NL / FL	.037/.891			XM 1.34
		AMB.°C / INSUL	40/H	WK ² (Lb-Ft ²)	85			

**CORRELATED DATA
LOAD PERFORMANCE (CONSTANT V/HZ RANGE)**



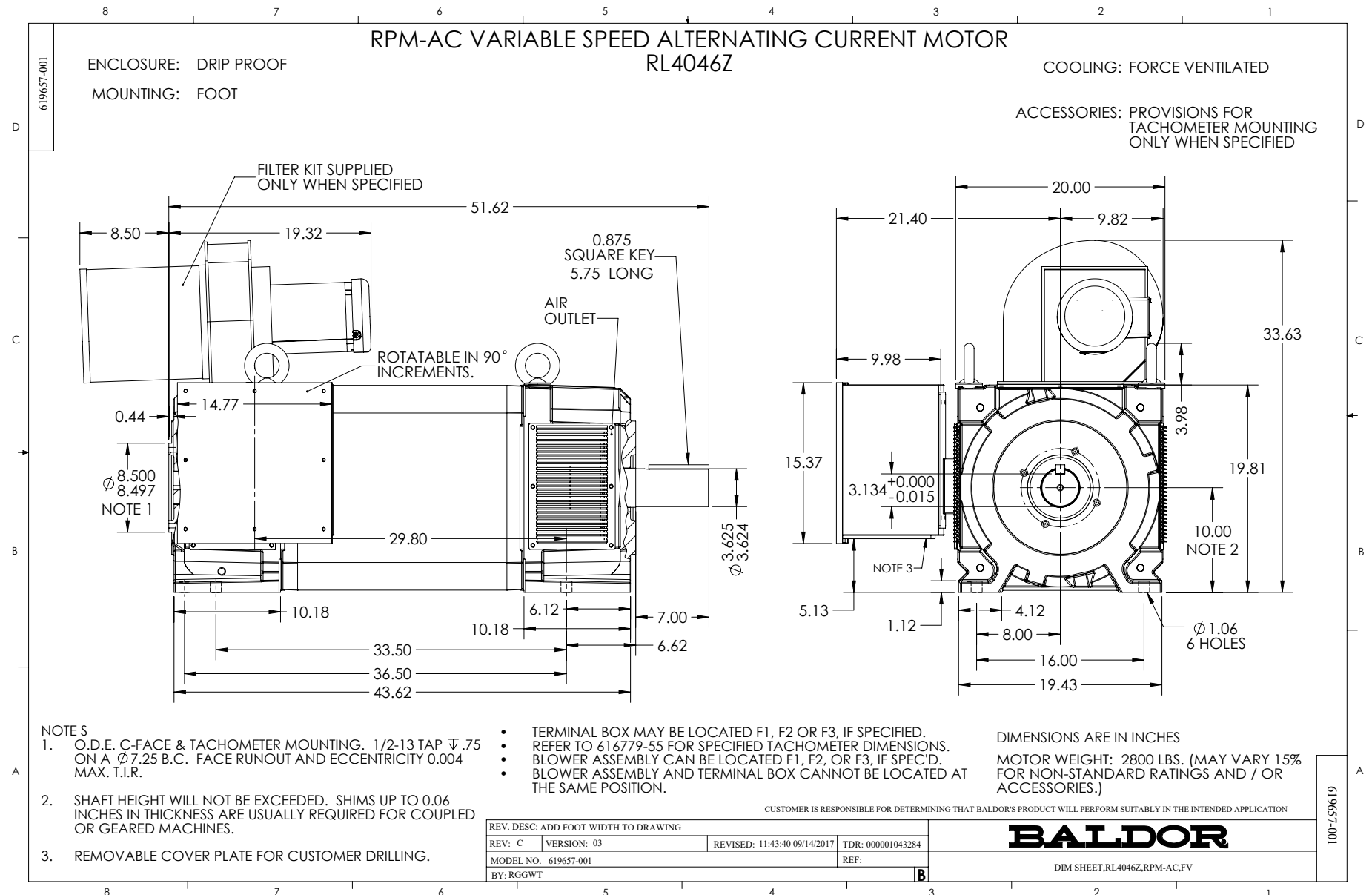
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



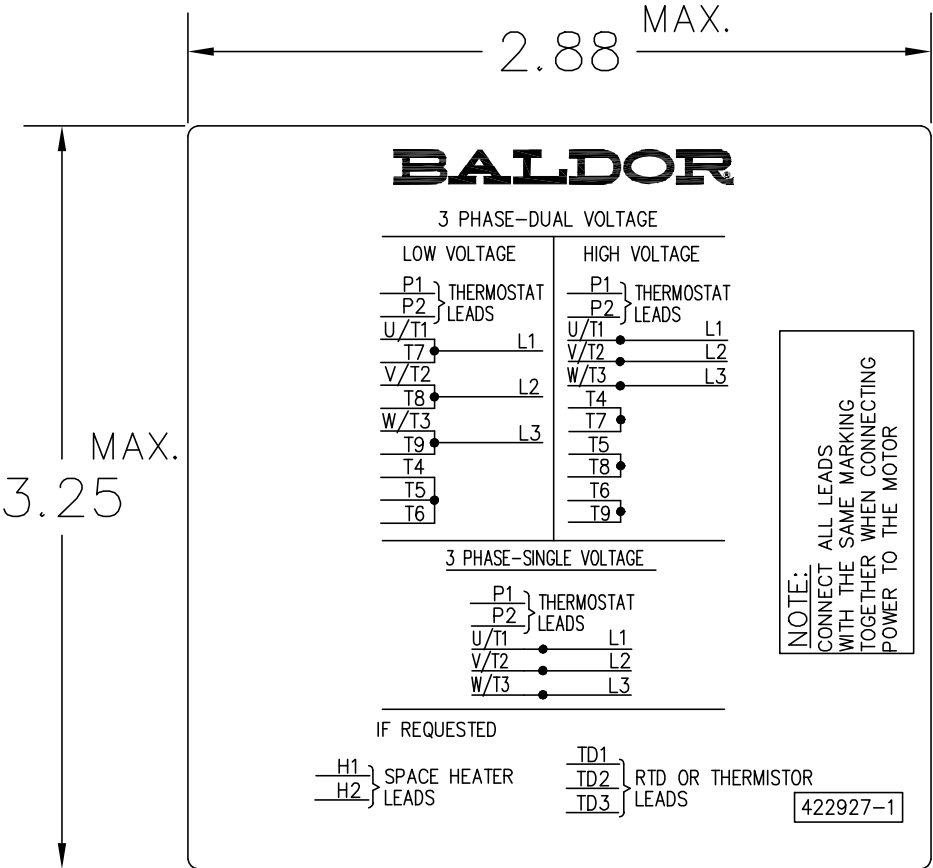
DRAWN BY: A. BROOKINS
 CHECKED BY: R. GARCIA
 APPROVED BY: J. MARTIN
 DATE: 3-15-23

**AC MOTOR
PERFORMANCE
DATA**

L9461A
 ISSUE DATE: 3-15-23



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