

ABB BALDOR RELIANCE III

Customer information packet

IDCRPM281254

125HP, 1800, 460V, FL2898, TEFC, F3

Specifications

Enclosure	TEFC
Frame	FL2898Z
Frame Material	Exposed Laminations
Frequency	60.00 Hz
Output @ Frequency	125.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US NEMA PREMIUM
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	15-60
Current @ Voltage	124.000 A @ 460.0 V
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Frame Prefix	FL
Heater Indicator	No Heater
High Voltage Full Load Amps	124.0 a
Insulation Class	H
KVA Code	G
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	38.59 IN
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.624 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	LS6593A
Layout	617248-073
Eff. date	03-24-2022
CD Diagram	422927-001
Poles	04
Leads	
Proprietary	False
Created date	10-29-2021

Speed	1800 rpm
Starting Method	Full Voltage
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate
000613007QF

	DUTY	HP	RPM	AMPS	VOLTS	HZ								
	CONT	125	1800	124	460	60								
CAT.NO.	IDCRPM281254			SPEC. NO.	F28-A000-0368									
SER.NO				FRAME SIZE	FL2898Z		TYPE PSM							
AMB.	40	S.F.	1.15	ENCL.	TEFC		PH	3	DESIGN	B	CODE	G		
NEMA NOM. EFF	97.3		GUARANTEED EFFICIENCY			96.7		POWER FACTOR		98.6		INSUL. CLASS	H	
D.E. BRG.	75BC02J30X			O.D.E. BRG.		55BC02J30X								
VPWM INVERTER DUTY @1.0SF	CHP HZ	60-90		CT HZ	15-60		VT HZ	0-60						
	IP54 XT													

000692000VY		
MEAS OPEN CIRCUIT VOLTAGE		
IS		VOLTS AT
		RPM.

Parts List

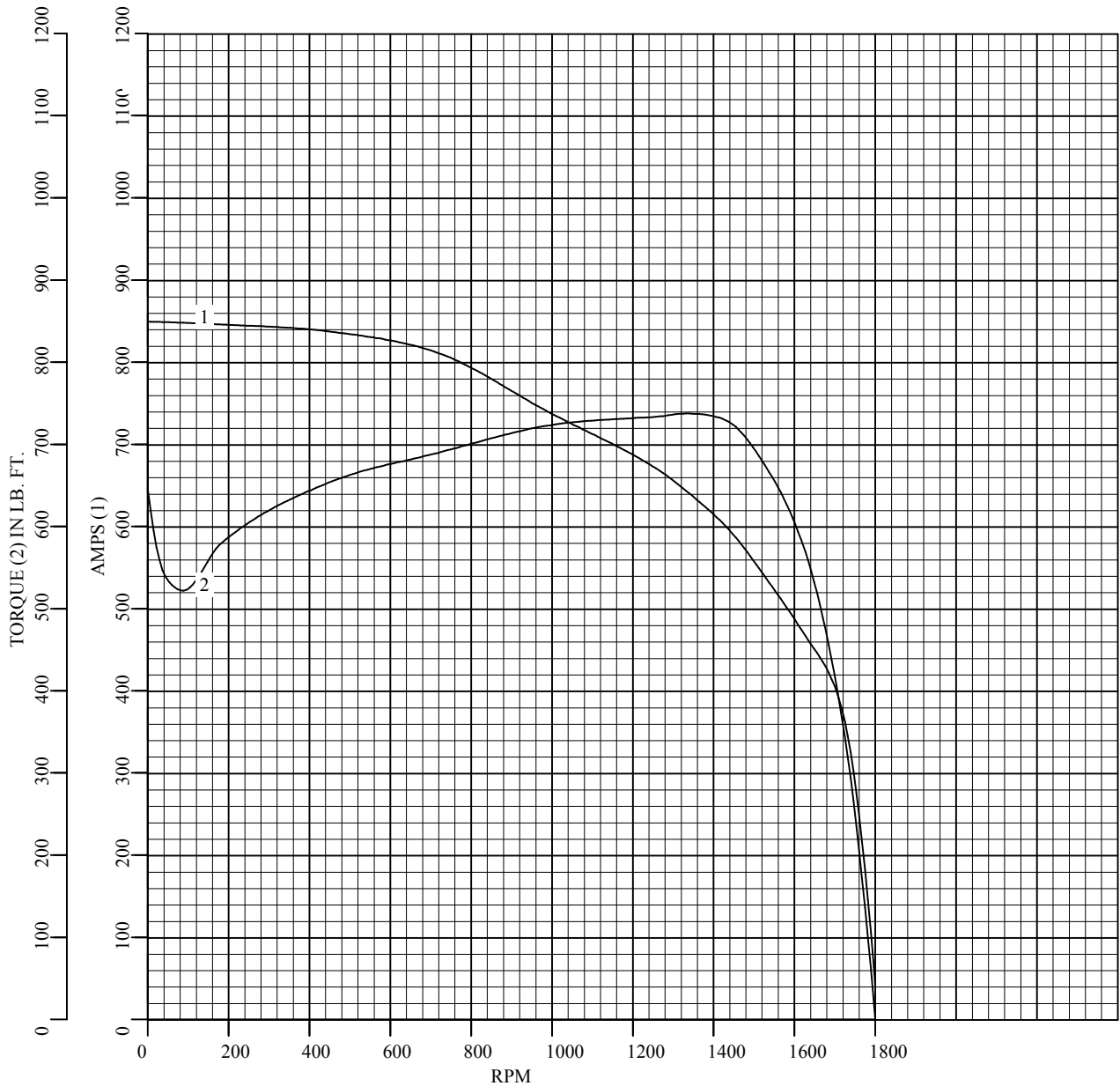
Part number	Description	Quantity
WS393062	WS F28-A000-0368	1.000 ea
RA389593	RA F28-A000-0368	1.000 ea
418018122A	LABEL	2.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
000613007QF	NP,RPM AC - XE WITH CERTIFIED LOGO	1.000 ea
000692000XM	LABEL QR CODE	1.000 ea
LB1613	LABEL, QR CODE, ADHESIVE LABEL	1.000 ea
000692000VY	PERMANENT MAGNET MOTOR NAMEPLATE	1.000 ea
422927001	C/D LABEL	1.000 ea
004824007AB	PAINT,XT	0.100 ea
807583004AAB	BRKT,ODE,FL280	1.000 ea
807583003AAA	BRKT,DE,FL280	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
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
004824015A	GREASE POLYREX EM	0.300 lb
036600014AB	FLTW MOTOR MTG.	2.000 ea
406055001C	GRFTG	1.000 ea
415045002F	SLINGER	1.000 ea
415045002P	SLINGER	1.000 ea
400638001G	WAVEN (Customer number 43699)	1.000 ea
036000016DB	HHCS	4.000 ea
418150003A	GREASE FITTING CAP	2.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001BA	ALFTG 1/8" 1688-B-use 1B (bs)	1.000 ea
036100070KA	METRIC HSHCS	3.000 ea
036100070JA	HSHCS M8 70MM UNPLATED	3.000 ea
036140001D	EYEBOLT - 360	2.000 ea
034693001AB	PPLG - G508- use 034692001AB	1.000 ea
034693001AB	PPLG - G508- use 034692001AB	1.000 ea
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 ea

036500011AB	METRIC NUT M12-1.75 PLT.	4.000 ea
609830005ACE	TBOLT L2898	4.000 ea
BP5248	BP5248	2.000 ea
415000103D	T/LUG #4AWG-1/0AWG W/HOLE FOR .250 BOLT	1.000 ea
415072001B	CLAMP	1.000 ea
706310640B	BACKPLATE GASKET C/BOX 706310-637	1.000 ea
417733004J	GASKT	1.000 ea
034180014GA	KEY 1/2X1/2X1-3/4 L	1.000 ea
078549001SA	(006) FAN	1.000 ea
708535012A	FAN COVER FL280	1.000 ea
708533003A	PLATE, BTM FAN/BLOWER	2.000 ea
708535010A	FAN COVER FL280	1.000 ea
036000016KB	HHCSM10-1.5X16MM PLTD-280	3.000 ea
418057256F	HHCS M6 12MM ZINCPLAT	1.000 ea
418057373A	SCREW SHEET METAL	11.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
406673002AE	2" CAP PLUG	1.000 ea
036620009AB	M8 EXTERNAL LK WASHER	1.000 ea
034630001AJ	1/8" PIPE COUPLING	1.000 ea
706310642A	BACK PLATE FOR 706310-637 WITH 5.00" BOL	1.000 ea
036600009AB	METRIC FLWASH M8 PLATED	2.000 ea
034530016AB	P/NIP 1/8X2 PLATED - 320	1.000 ea
706310637A	C/BOX, MILL, RPMAC,9X9X4, 375IN^3	1.000 ea
706310641A	LIPPED CBOX LID FOR 706310-642	1.000 ea
706310640A	LID GASKET C/BOX 706310-637	1.000 ea
036000012JB	M8-1.25 X 12MM HXHDC	4.000 ea
036010012HB	HHCS T/BOX BRACE	16.000 ea
034180032HA	KEY 5/8X5/8X4	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
004824007CQR	C2 PAINT SYSTEM MEDIUM GRAY CHARCOAL MET	0.100 ea
LB1549	LABEL, BLANK 1.375 X 2.250 IMPRINTABLE	1.000 ea

S.O.	FRAME	HP	TYPE	PHASE	HERTZ	RPM
--	FL2898	125	PSM	3	60	1800
VOLTS	AMPS	DUTY	AMB ⁰ C	INSUL	S.F.	NEMA DESIGN
460	122.1	CONT	40	H	1.15	B
CODE LETTER	ENCL	ROTOR INERTIA (lb-ft ²)	STATOR RES. @ 25 ⁰ C OHMS (BETWEEN LINES)	TYPICAL DATA		
G	TEFC	12.8	.05510			
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	41.2	1800	3.20	N/A	
1/4	31.3	35.8	1800	85.8	95.5	
2/4	62.6	61.4	1800	98.3	96.9	
3/4	93.9	91.1	1800	99.0	97.3	
4/4	125	122	1800	98.6	97.3	
5/4	156	154	1800	97.5	97.1	
SPEED TORQUE						
	RPM	TORQUE (% FULL LOAD)	TORQUE (lb-ft)	AMPERES		
LOCKED ROTOR	0	177	645.6	849.4		
PULL OUT	1800	208	760.5	327.6		
FULL LOAD	1800	100	365.3	122.0		
THIS IS A PERMANENT MAGNET MOTOR GENERATED OPEN CIRCUIT LINE-LINE VOLTAGE at 25 ⁰ C = 21.8 VOLTS PER 100 RPM REMARKS:						
		DR. BY CAD CK. BY RFM APP. BY RFM DATE 05/25/2016		LSPM MOTOR PERFORMANCE DATA LS6593A ISSUE DATE 05/25/2016		

S.O.	--	HERTZ	60	AMB ⁰ C	40	CODE LETTER	G
FRAME	FL2898	RPM	1800	INSUL	H	WK ² (lb-ft ²)	12.8
HP	125	VOLTS	460	S.F.	1.15	NEMA DESIGN	B
TYPE	PSM	AMPS	122.1	ENCL	TEFC	STATOR RES. @ 25 ⁰ C	.05510
PHASE	3	DUTY	CONT			OHMS (BETWEEN LINES)	

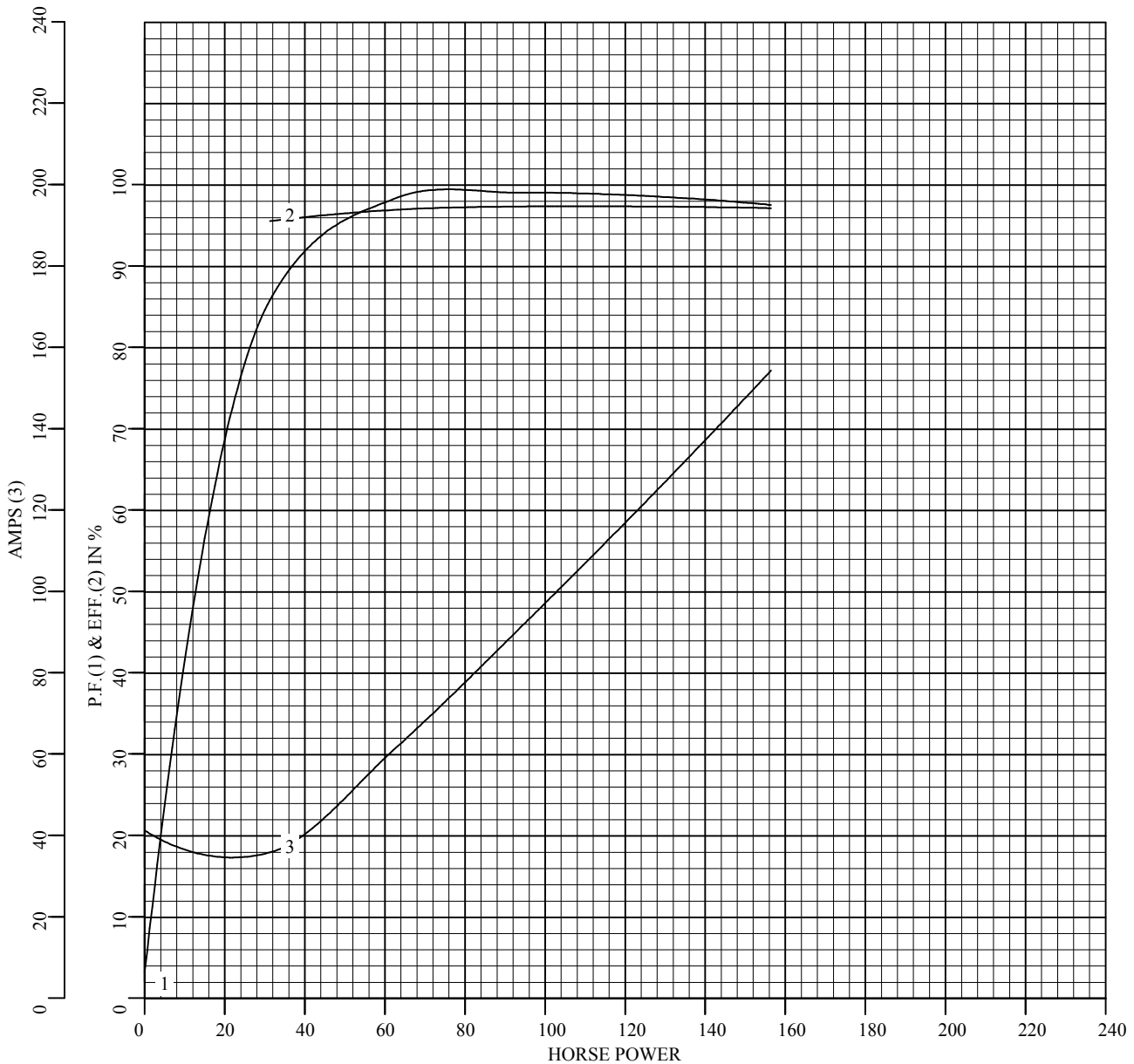
Amps & Torque vs. RPM During Acceleration



TYPICAL DATA

S.O.	--	HERTZ	60	AMB ⁰ C	40	CODE LETTER	G
FRAME	FL2898	RPM	1800	INSUL	H	WK ² (lb-ft ²)	12.8
HP	125	VOLTS	460	S.F.	1.15	NEMA DESIGN	B
TYPE	PSM	AMPS	122.1	ENCL	TEFC	STATOR RES. @ 25 ⁰ C	.05510
PHASE	3	DUTY	CONT			OHMS (BETWEEN LINES)	

Performance Data vs. HP At Synchronous Speed



TYPICAL DATA



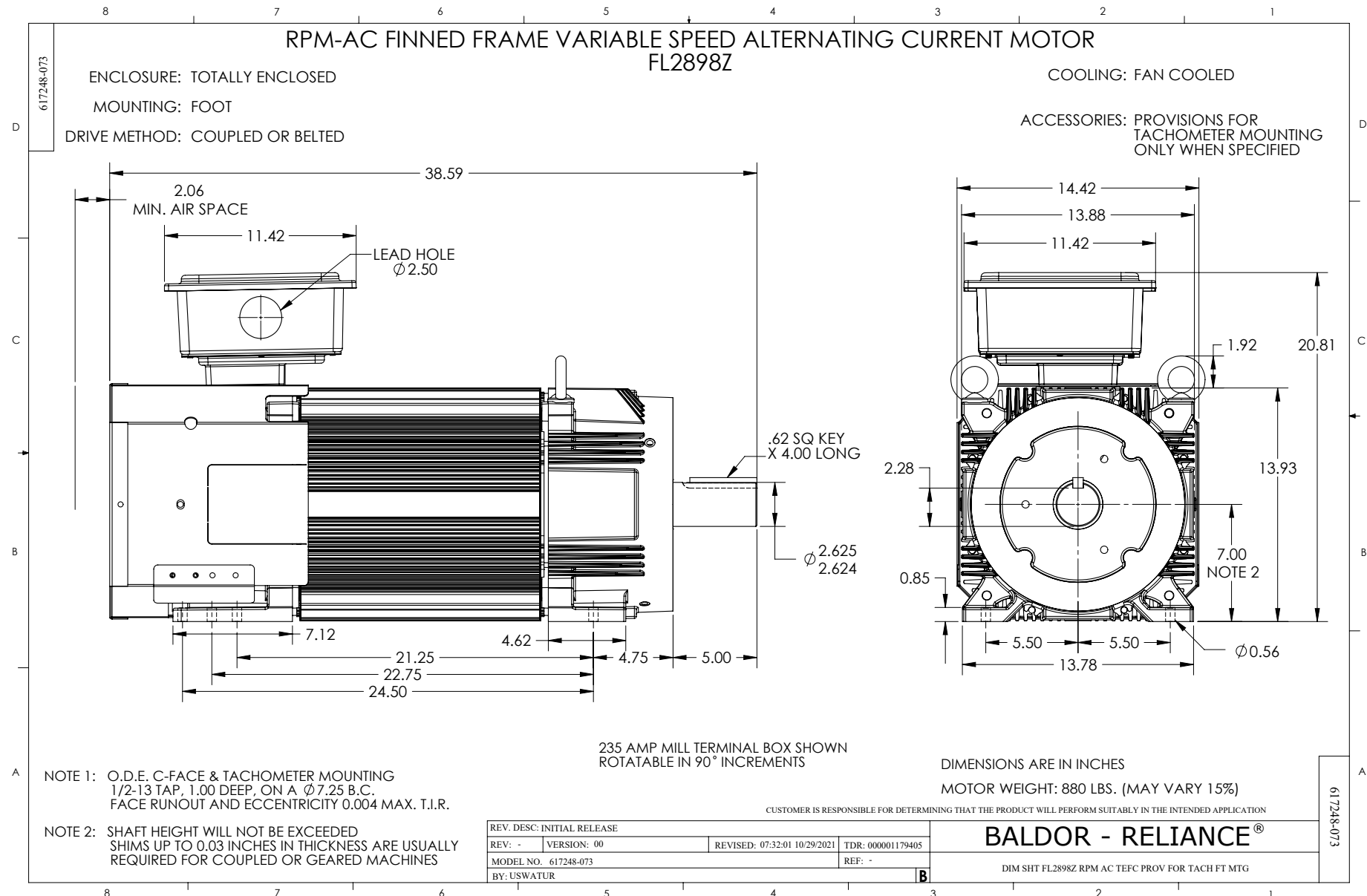
DR. BY CAD
CK. BY RFM
APP. BY RFM
DATE 05/25/2016

LSPM MOTOR PERFORMANCE CURVES

ISSUE DATE

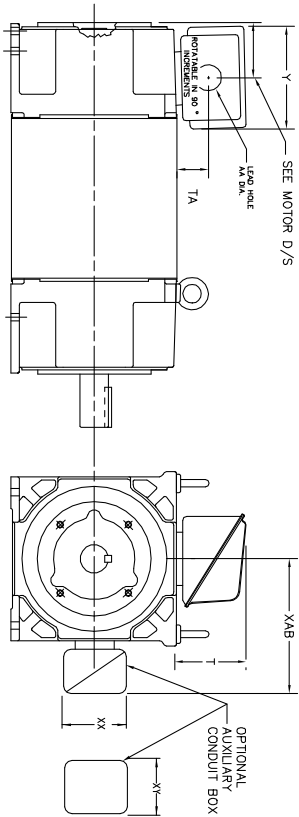
LS6593A

05/25/2016



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	706320003A	6.12	2.36	4.38	1.75/2.00
FL180	STEEL	N	208	706320007A	6.62	2.00	7.00	2.50/3.00
FL180	CAST IRON	Y/N	208	706320004C	6.75	2.50	4.38	1.0/1.75
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	075452001A	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	306	706320016A	9.00	4.12	8.44	4.59
FL210 & RL210	CAST IRON	N	110	075460052B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310229A	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310056A	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y/N	235	706310056B	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	075452001A	7.69	2.38	5.25	1.94
FL250 & RL250	STEEL	N	306	706320016A	9.00	4.12	8.44	4.59
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	706310229A	7.75	2.30	4.40	PG29/PG16
FL250 & RL250	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL250 & RL250	MILL	Y/N	235	706310057A	11.42	4.00	6.72	2.50
FL250 & RL250	MILL	Y	235	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	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	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL280 & RL280	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/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
FL210/RL210/FL112	7.38	4.25	4.25	602007-26-A	FL210/RL210/FL112	10.88	8.00	8.00	706310-3-B
FL250/RL250/FL160	8.44	4.25	4.25	602007-26-A	FL250/RL250/FL160	11.88	8.00	8.00	706310-3-B
FL280/RL280/FL280/180	9.12	4.25	4.25	602007-26-A	FL280/RL280/FL280/180	12.62	8.00	8.00	706310-3-B

(1) 1"AW CONDUIT.
(2) 1"AW PIPE TAP.
(3) CUSTOMER TO PROVIDE HOLE PER CONDUIT.
(4) 2" DIA. SA OR 1" DIA. DIA. W/6

TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET 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.

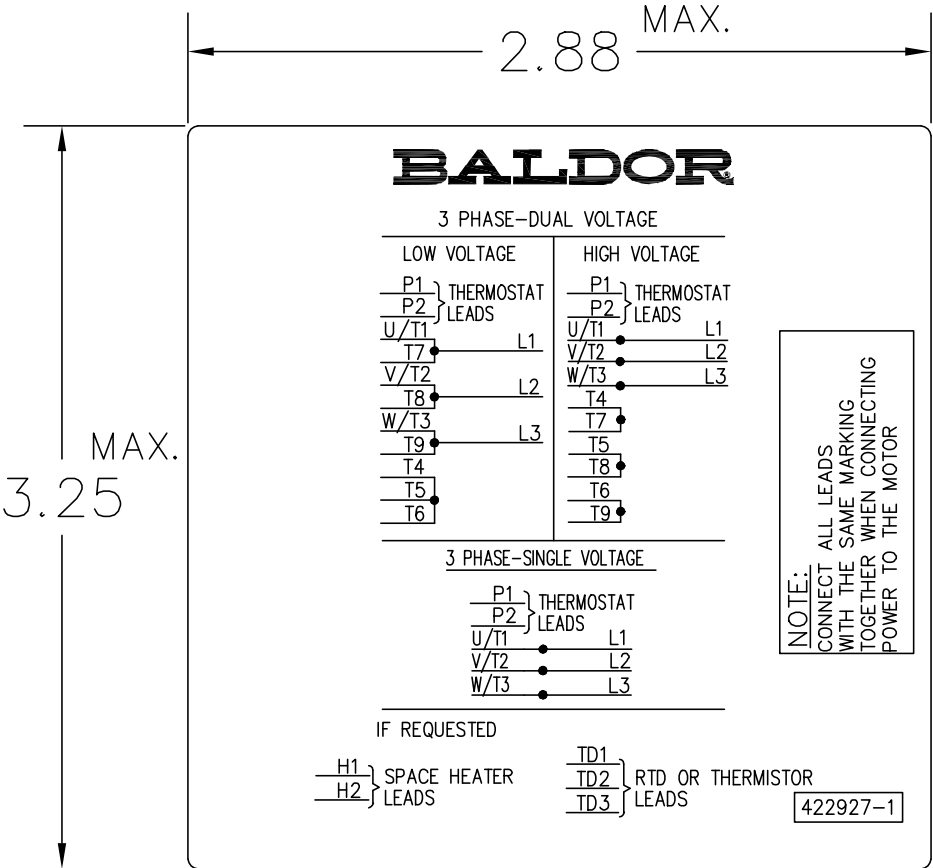
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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: -		

BALDOR - RELIANCE®

DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180

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