ABB BALDOR RELIANCE

Customer information packet

EL3503

.5HP, 3450RPM, 1PH, 60HZ, 56, 3413LC, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Cap Run
Output @ Frequency	.500 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	C UR US
	CURUS
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	4.900 A @ 115.0 V
	2.500 A @ 230.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	68.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	J
Type	AC
Mech. spec.	34L277
Base	
Status	PRD/A
Elec. spec.	34WGS431
Layout	34LYL277
Eff. date	10-29-2024
CD Diagram	CD0055
Poles	02
Leads	6#18
Proprietary	False
Created date	11-10-2008

High Voltage Full Load Amps	2.5 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3413LC
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.97 IN
Power Factor	84
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP2116L											
CAT.NO.	EL3503										
SPEC.	34L277S431G1										
HP	.5										
VOLTS	115/230										
AMP	4.9/2.5										
RPM	3450										
FRAME	56		**HZ**	60		**PH**	1				
SER.F.	1.25	**CODE**	L	**DES**	N	**CL**	B				
NEMA-NOM-EFF	68	**PF**	84								
RATING	40C AMB-CONT										
CC											
DE	6203	**ODE**	6203								
ENCL	TEFC	**SN**									
	SFA 5.8/2.9										

AC Induction Motor Performance Data
Record # 27898
Preliminary Data Sheet

Winding: 34WGS431-R001	**Type:** 3413LC	**Enclosure:** TEFC

Nameplate Data				**115 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	0.748 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			4.9/2.5	**Breakdown Torque**	2.33 LB-FT
R.P.M.			3450	**Pull-up Torque**	1.95 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	2.14 LB-FT
NEMA Design Code	N	**KVA Code**	K	**Starting Current**	39.9 A
Service Factor (S.F.)			1.25	**No-load Current**	2.72 A
NEMA Nom. Eff.	68	**Power Factor**	84	**Line-line Res. @ 25ºC**	1.06 Ω A Ph 4.65 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	46°C
S.F. Amps			5.8/2.9	**Temp. Rise @ S.F. Load**	53°C

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	47	72	83	90	94	92	94
Efficiency	59	66.6	72.5	73.4	72.5	70.8	72.5
Speed	3551	3524	3494	3456	3413	3355	3413
Line amperes	2.97	3.39	4.02	4.85	5.8	7.13	5.8

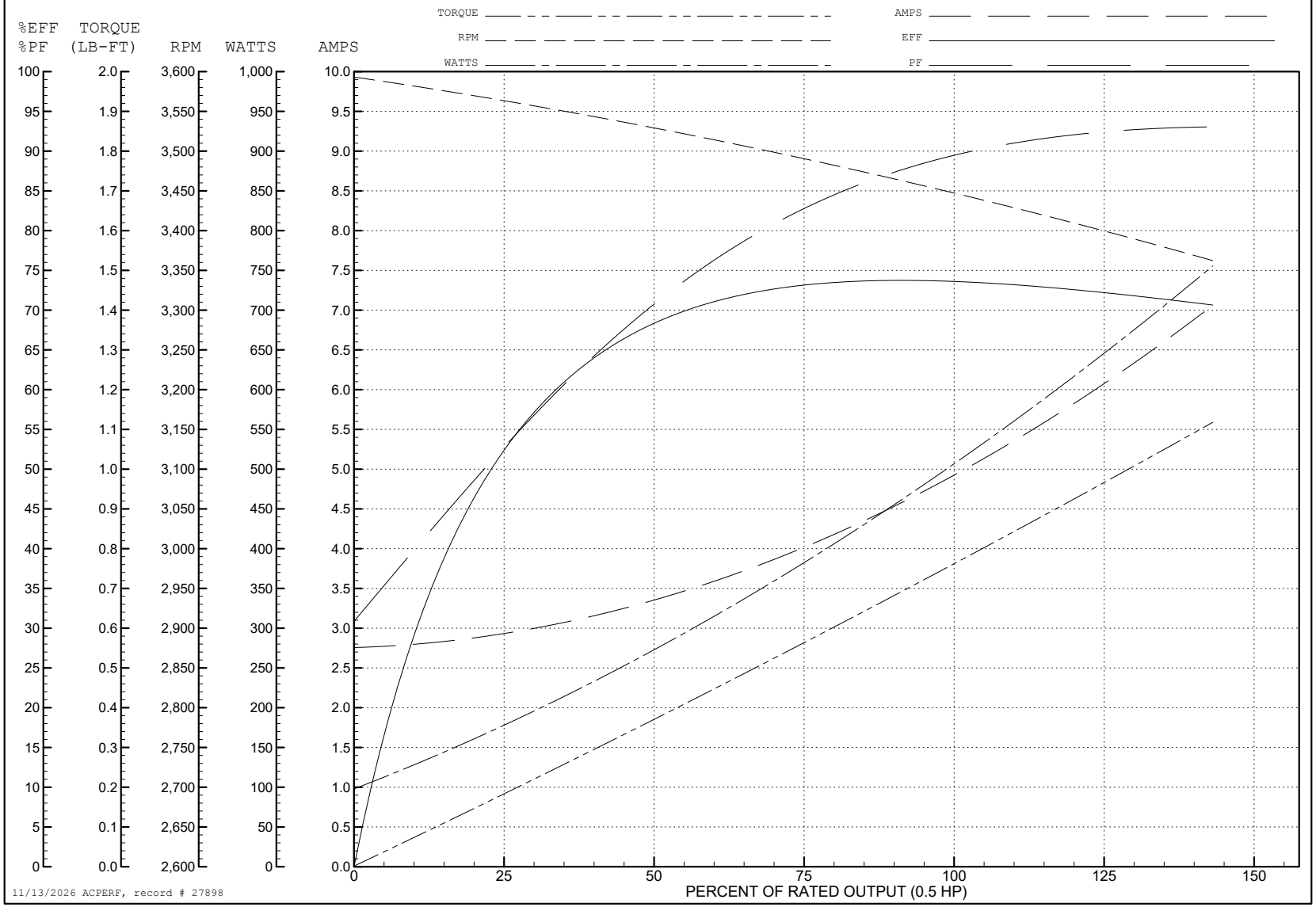
ABB Motors and Mechanical Inc.

WINDING # 34WGS431

0.5 HP 1 PH 60 HZ 3450 RPM 115 V 3413LC

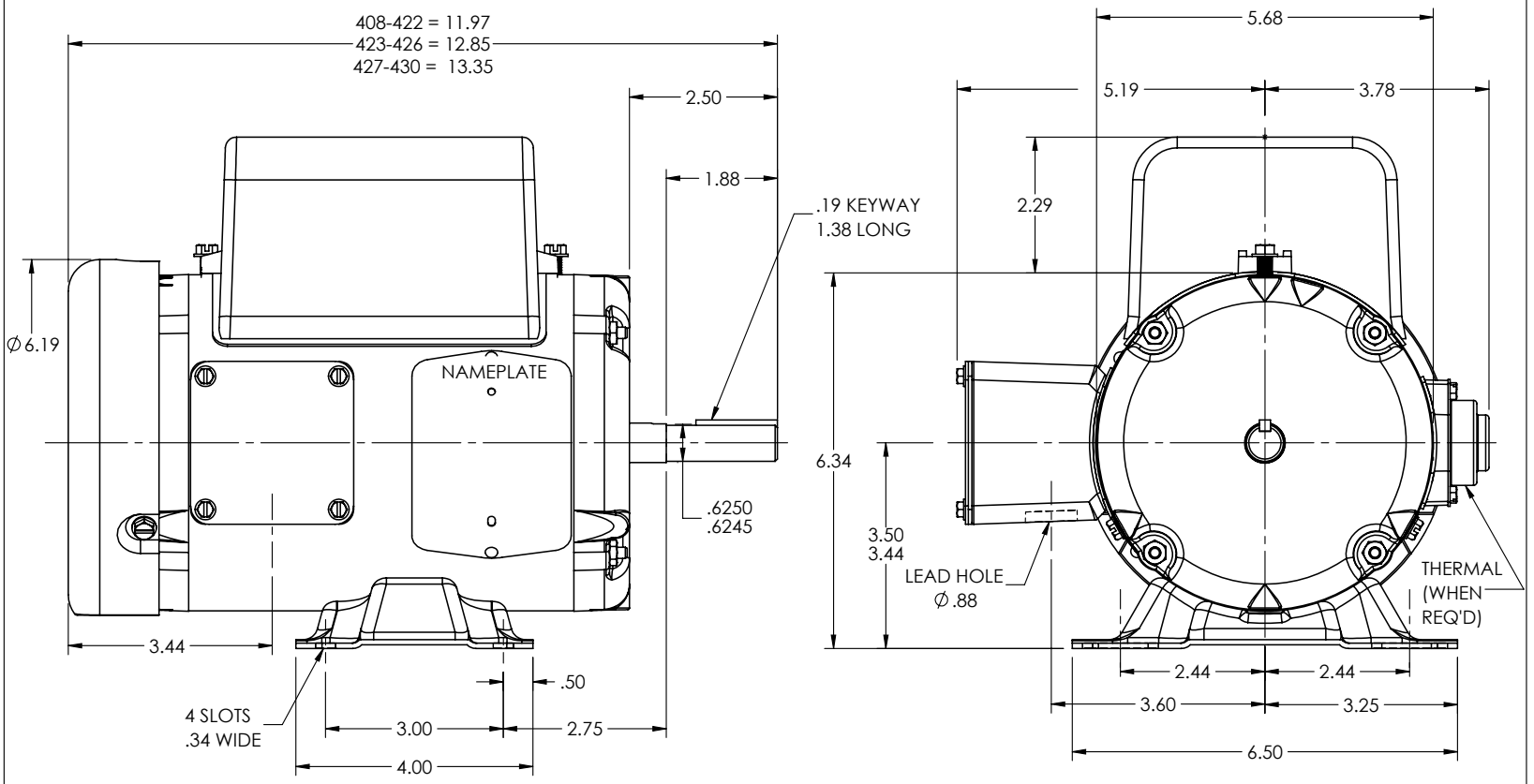
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=2.33 PU=1.95 LR=2.14 LRA=39.9



11/13/2026 ACPERF, record # 27898

34LYL277

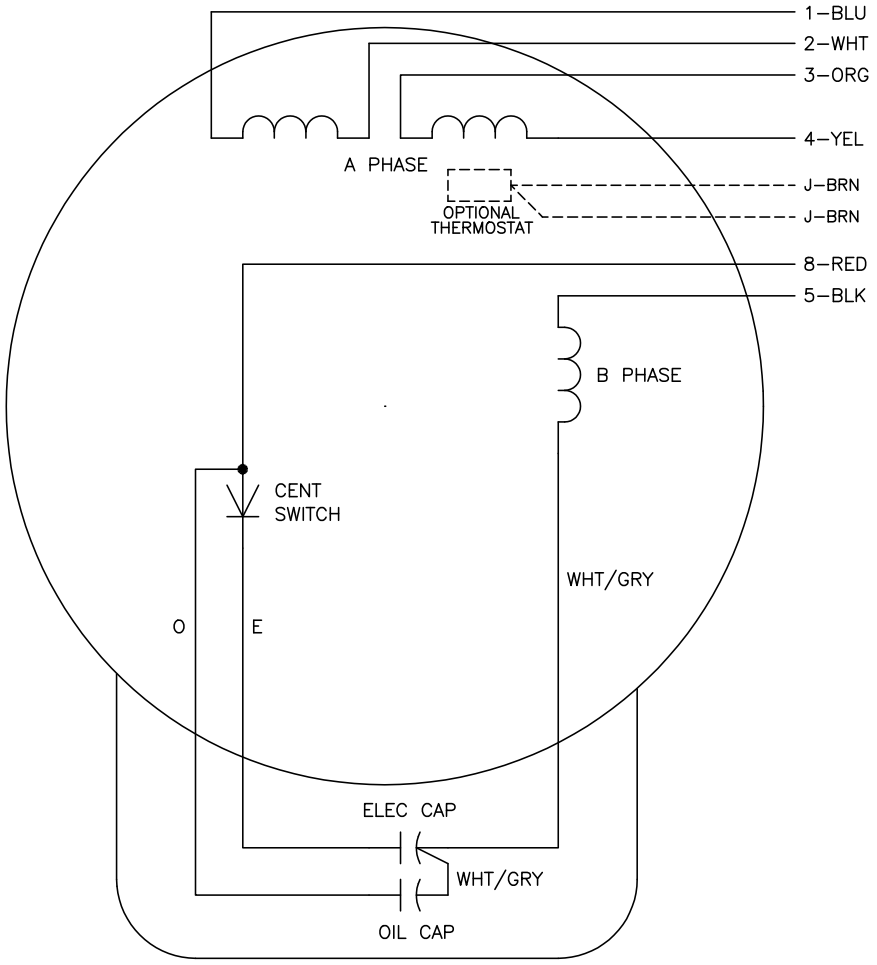


34LYL277

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: LOAD TO SOLIDWORKS			BALDOR - RELIANCE®
REV: B	VERSION: 02	REVISED: 01:40:24 08/18/2022	TDR: 000001194274
34LYL277	MODEL NO. 34LYL277		REF: -
	BY: ENFRAJ0		HOR 34LC NEMA 56 TEFC FOR 3 PH ER

CD0055



	LINE A	LINE B	JOIN
HIGH STD	1	4,5	2,3,8
HIGH OPP	1	4,8	2,3,5
LOW STD	1,3,8	2,4,5	–
LOW OPP	1,3,5	2,4,8	–

NOTES:

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. OPTIONAL THERMOSTAT IS PROVIDED WHEN SPECIFIED.
3. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0055

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: D	BY: JLP	REVISED: 04/08/99 1:17	TDR: 0178636
CD0055		FILE: AAA00007414	MDL: –
		MTL: –	TYPE LC, DV, REV, 6 LEADS