

**BALDOR • RELIANCE**

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# Customer information packet

## EL3503

.5HP, 3450RPM, 1PH, 60HZ, 56, 3413LC, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
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
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	UR CSA CSA EEV
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary 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	G
Type	AC
Mech. spec.	34L277
Base	
Status	PRD/A
Elec. spec.	34WGS431
Layout	34LYL277
Eff. date	04-23-2021
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**

<b>NP2116L</b>									
<b>CAT.NO.</b>	EL3503								
<b>SPEC.</b>	34L277S431G1								
<b>HP</b>	.5								
<b>VOLTS</b>	115/230								
<b>AMP</b>	4.9/2.5								
<b>RPM</b>	3450								
<b>FRAME</b>	56			<b>HZ</b>	60		<b>PH</b>	1	
<b>SER.F.</b>	1.25	<b>CODE</b>	L	<b>DES</b>	N	<b>CL</b>	B		
<b>NEMA-NOM-EFF</b>	68	<b>PF</b>	84						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>				<b>USABLE AT 208V</b>					
<b>DE</b>	6203	<b>ODE</b>	6203						
<b>ENCL</b>	TEFC	<b>SN</b>							
	SFA 5.8/2.9								

## Parts list

Part number	Description	Quantity
SA177298	SA 34L277S431G1	1.000 ea
RA165340	RA 34L277S431G1	1.000 ea
OC3025F11	CYL OIL CAP 25MFD/370V	1.000 ea
EC1400A03	ELEC CAP, 400-480 MFD, 125V, 1.81D X 3.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 ea
34GS1029A01	GASKET, CONDUIT BOX	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	3.000 ea
34EP3102A01SP	FR ENDPLATE, MACH	1.000 ea
34CB3801	CAPACITOR BOX, DIE CAST	1.000 ea
34GS3002	GASKET, CAPACITOR BOX	1.000 ea
51XB1214A08	12-14 X 1/2HX WS SL SR TYBX	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3102A02SP	FR/PU ENDPLATE, MACH	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
34FH4002A01SP	IEC FH NO GREASER PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 ea
34GS1031A01	GASKET, FLAT CONDUIT BOX LID (LEXIDE)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
34GS5003A01	FOAM SLEEVE, ID = 2 1/16" X 4 3/8"	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
SP5051B17	MDL 34 TORQ STAT SW,TYPE LC, STD F1 & F2	1.000 ea
HA3100A44	THRUBOLT 10-32 X 8.000	4.000 ea
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.014 ga
MN416A01	TAG-INSTAL-MAINT no wire (2100bx)4/22	1.000 ea

LC0001A01	CONN LABEL / WARNING LABEL (LC0001 / LB1	1.000 ea
NP2116L	ALUM SUPER-E UL CSA CC	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A06	1.000 ea

**AC Induction Motor Performance Data**

Record # 27898

Preliminary Data Sheet

<b>Winding: 34WGS431-R001</b>		<b>Type: 3413LC</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>115 V, 60 Hz: Low Voltage Connection</b>		
<b>Rated Output (HP)</b>			<b>Full Load Torque</b>	0.748 LB-FT	
<b>Volts</b>	115/230		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	4.9/2.5		<b>Breakdown Torque</b>	2.33 LB-FT	
<b>R.P.M.</b>	3450		<b>Pull-up Torque</b>	1.95 LB-FT	
<b>Hz</b>	<b>60 Phase</b>	<b>1</b>	<b>Locked-rotor Torque</b>	2.14 LB-FT	
<b>NEMA Design Code</b>	<b>N</b>	<b>KVA Code</b>	<b>K</b>	<b>Starting Current</b>	39.9 A
<b>Service Factor (S.F.)</b>			<b>1.25</b>	<b>No-load Current</b>	2.72 A
<b>NEMA Nom. Eff.</b>	<b>68</b>	<b>Power Factor</b>	<b>84</b>	<b>Line-line Res. @ 25°C</b>	1.06 Ω A Ph 4.65 Ω B Ph
<b>Rating - Duty</b>			<b>40C AMB-CONT</b>	<b>Temp. Rise @ Rated Load</b>	46°C
<b>S.F. Amps</b>			<b>5.8/2.9</b>	<b>Temp. Rise @ S.F. Load</b>	53°C

**Load Characteristics 115 V, 60 Hz, 0.5 HP**

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

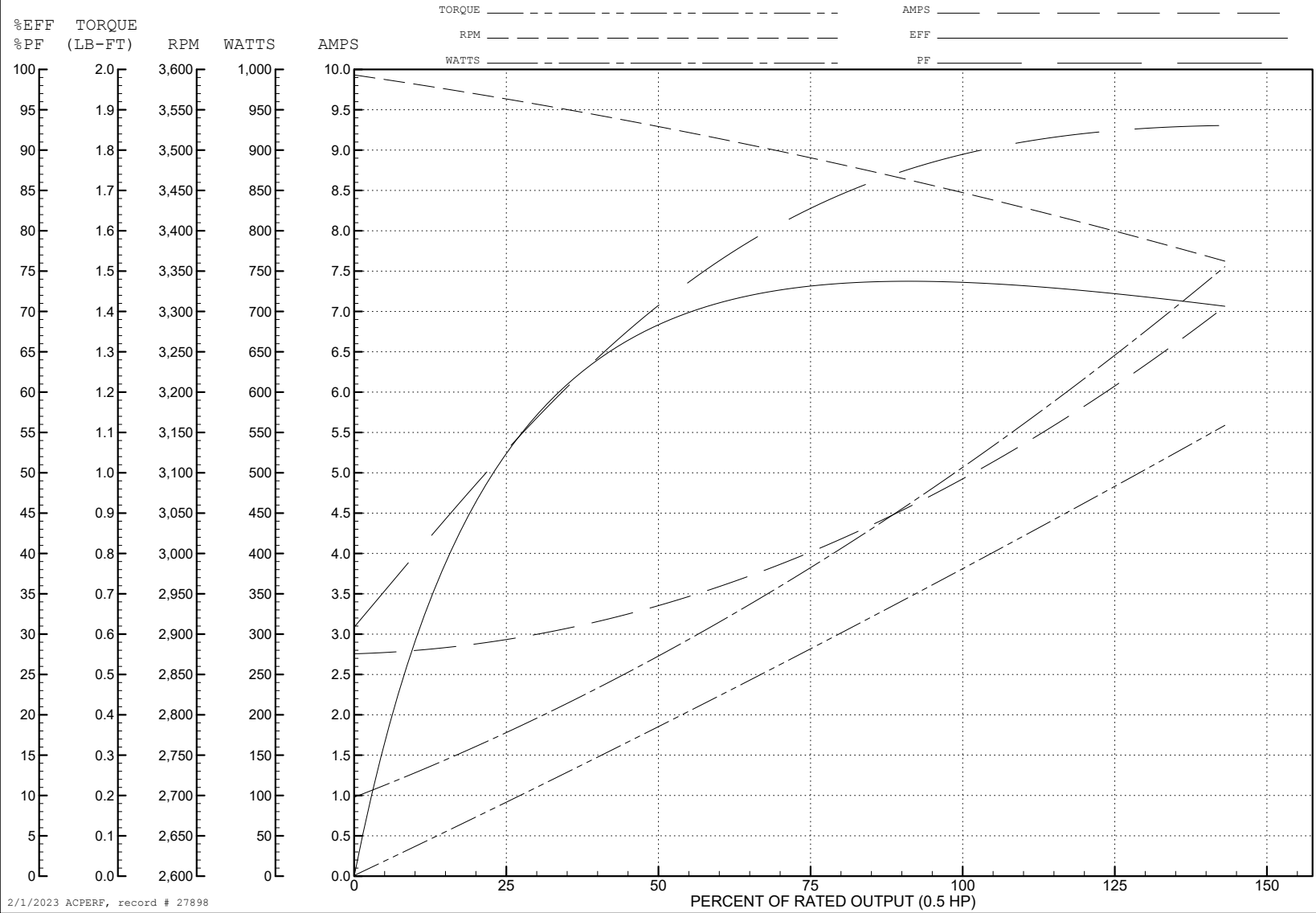
ABB Motors and Mechanical Inc.

WINDING # 34WGS431

Typical performance - not guaranteed values.

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

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

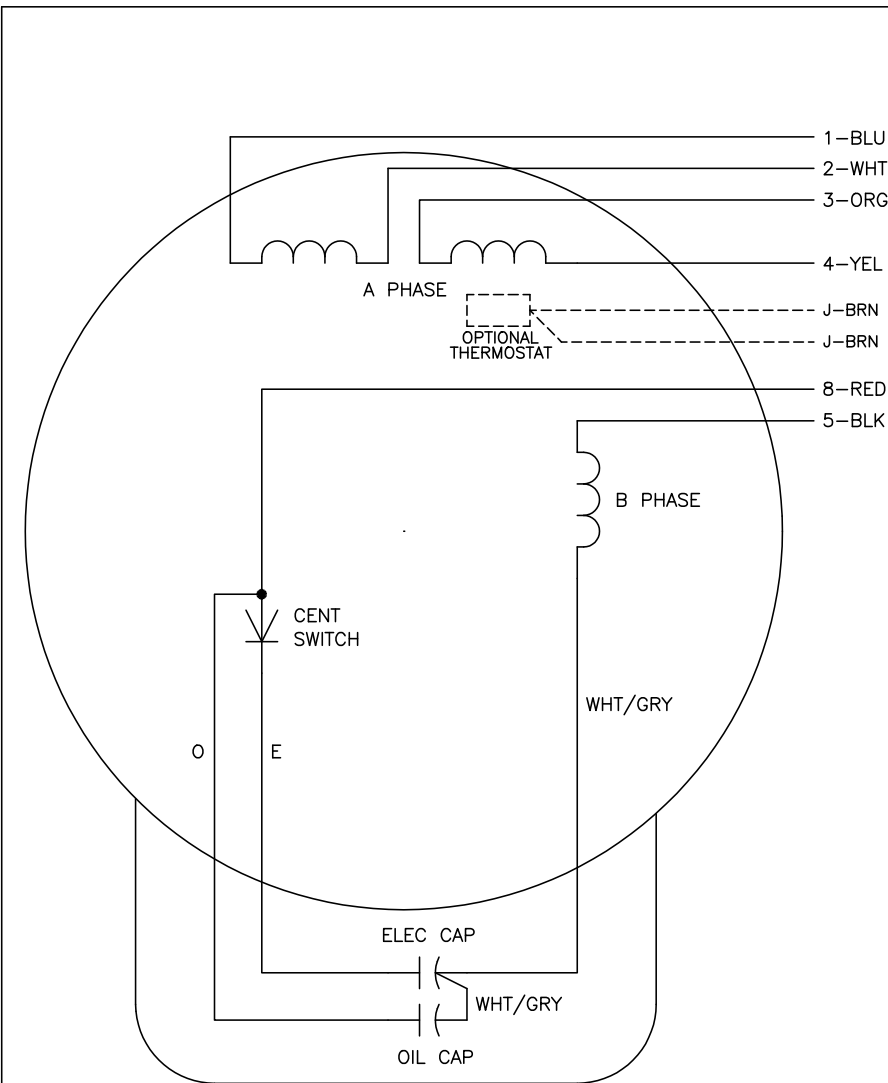


2/1/2023 ACPERF, record # 27898





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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 04/08/99 1:17	TDR: 0178636
C00000		FILE: AAA00007414	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

TYPE LC, DV, REV, 6 LEADS

CD0055