ABB BALDOR RELIANCE

Customer information packet

EL11303

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

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Specifications

Enclosure	ODP
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
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	2.500 A @ 230.0 V
	4.900 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	72.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a
Insulation Class	F

Part Detail

Revision	J
Type	AC
Mech. spec.	34F353
Base	
Status	PRD/A
Elec. spec.	34WGR142
Layout	34LYF353
Eff. date	12-31-2024
CD Diagram	CD0055
Poles	02
Leads	6#18
Proprietary	False
Created date	03-04-2014

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	10.13 IN
Power Factor	91
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
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

NP3155L										
CAT.NO.	EL11303									
SPEC.	34F353R142G1									
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**	F			
F.L. AVG. EFF.	72.4	**PF**	91							
RATING	40C AMB-CONT									
CC										
DE	6203	**ODE**	6203							
ENCL	ODP	**SN**								
	SFA 5.8/2.9									

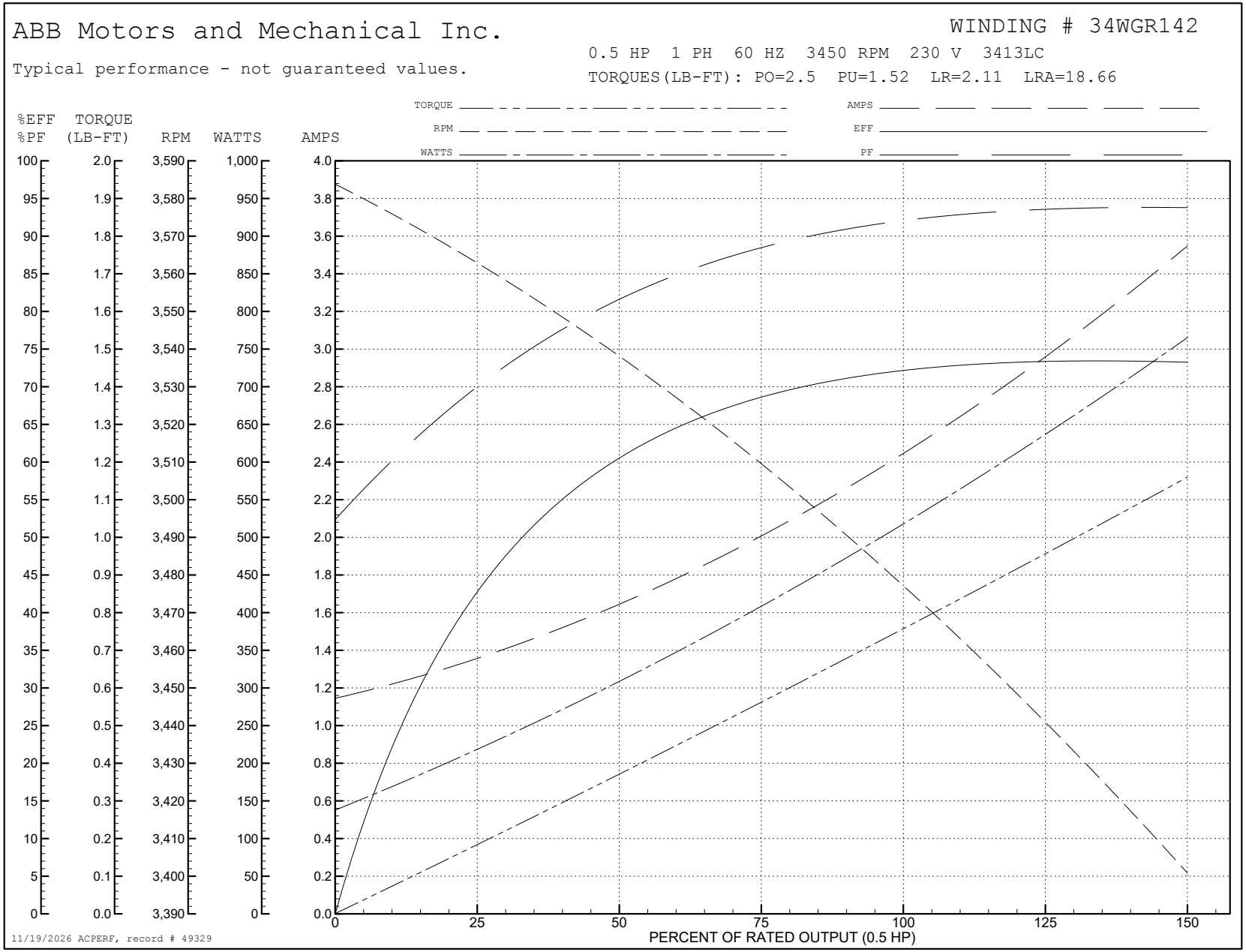
AC Induction Motor Performance Data
Record # 49329
Typical performance - not guaranteed values

Winding: 34WGR142-R001	**Type:** 3413LC	**Enclosure:** OPEN

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	0.755 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			4.9/2.5	**Breakdown Torque**	2.5 LB-FT
R.P.M.			3450	**Pull-up Torque**	1.52 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	2.11 LB-FT
NEMA Design Code	N	**KVA Code**	L	**Starting Current**	18.66 A
Service Factor (S.F.)			1.25	**No-load Current**	1.15 A
NEMA Nom. Eff.	72.4	**Power Factor**	91	**Line-line Res. @ 25ºC**	4.36 Ω A Ph 4.65 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	21°C
S.F. Amps			5.8/2.9	**Temp. Rise @ S.F. Load**	25°C
				Rotor inertia	0.0121 LB-FT2

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	71	83	88	92	93	94	93
Efficiency	42.3	58.9	69.5	73.2	72.8	73.3	72.8
Speed	3562	3535	3512	3481	3436	3402	3436
Line amperes	1.34	1.67	1.99	2.42	3.01	3.53	3.01


ABB Motors and Mechanical Inc.
WINDING # 34WGR142
Typical performance - not guaranteed values.
0.5 HP 1 PH 60 HZ 3450 RPM 230 V 3413LC
TORQUES(LB-FT): PO=2.5 PU=1.52 LR=2.11 LRA=18.66
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0
2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.0
3,590 3,580 3,570 3,560 3,550 3,540 3,530 3,520 3,510 3,500 3,490 3,480 3,470 3,460 3,450 3,440 3,430 3,420 3,410 3,400 3,390
1,000 950 900 850 800 750 700 650 600 550 500 450 400 350 300 250 200 150 100 50 0
4.0 3.8 3.6 3.4 3.2 3.0 2.8 2.6 2.4 2.2 2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0
0 25 50 75 100 125 150
PERCENT OF RATED OUTPUT (0.5 HP)
11/19/2026 ACPERF, record # 49329

AC Induction Motor Performance Data
Record # 49398
Typical performance - not guaranteed values

Winding: 34WGR142-R001 **Type:** 3413LC **Enclosure:** OPEN

Nameplate Data			
Rated Output (HP)			.5
Volts			115/230
Full Load Amps			4.9/2.5
R.P.M.			3450
Hz	60	**Phase**	1
NEMA Design Code	N	**KVA Code**	L
Service Factor (S.F.)			1.25
NEMA Nom. Eff.	72.4	**Power Factor**	91
Rating - Duty			40C AMB-CONT
S.F. Amps			5.8/2.9

115 V, 60 Hz: Low Voltage Connection	
Full Load Torque	0.755 LB-FT
Start Configuration	direct on line
Breakdown Torque	2.5 LB-FT
Pull-up Torque	1.78 LB-FT
Locked-rotor Torque	2.47 LB-FT
Starting Current	38 A
No-load Current	2.28 A
Line-line Res. @ 25ºC	1.1337 Ω A Ph 4.8491 Ω B Ph
Temp. Rise @ Rated Load	21°C
Temp. Rise @ S.F. Load	27°C

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	70	82	88	91	93	94	93
Efficiency	42.8	59.4	69.9	73.5	73	73.2	73
Speed	3561.5	3535	3512.3	3480.9	3435.5	3401.6	3436
Line amperes	2.67	3.33	3.96	4.83	6	7.05	6

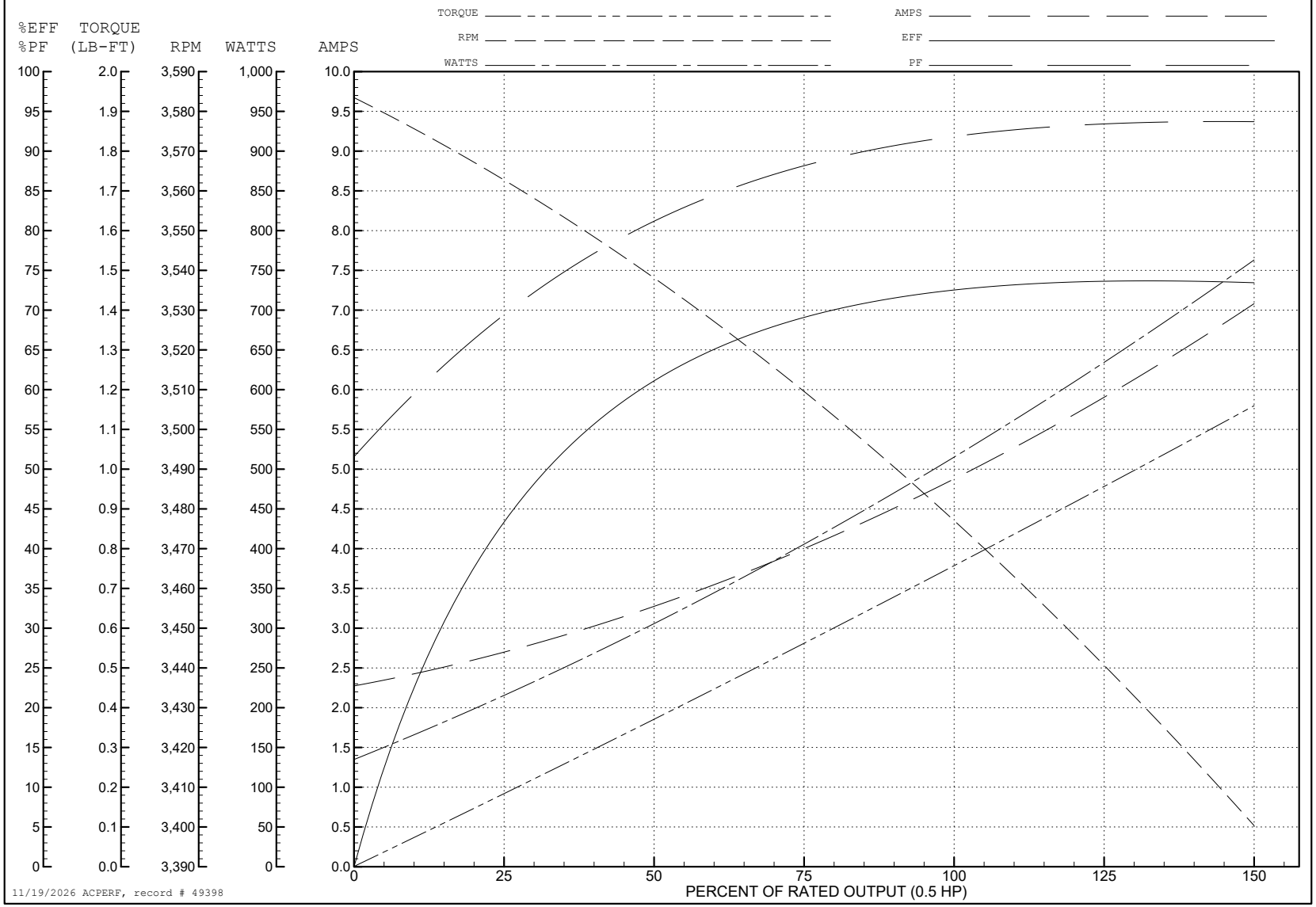
ABB Motors and Mechanical Inc.

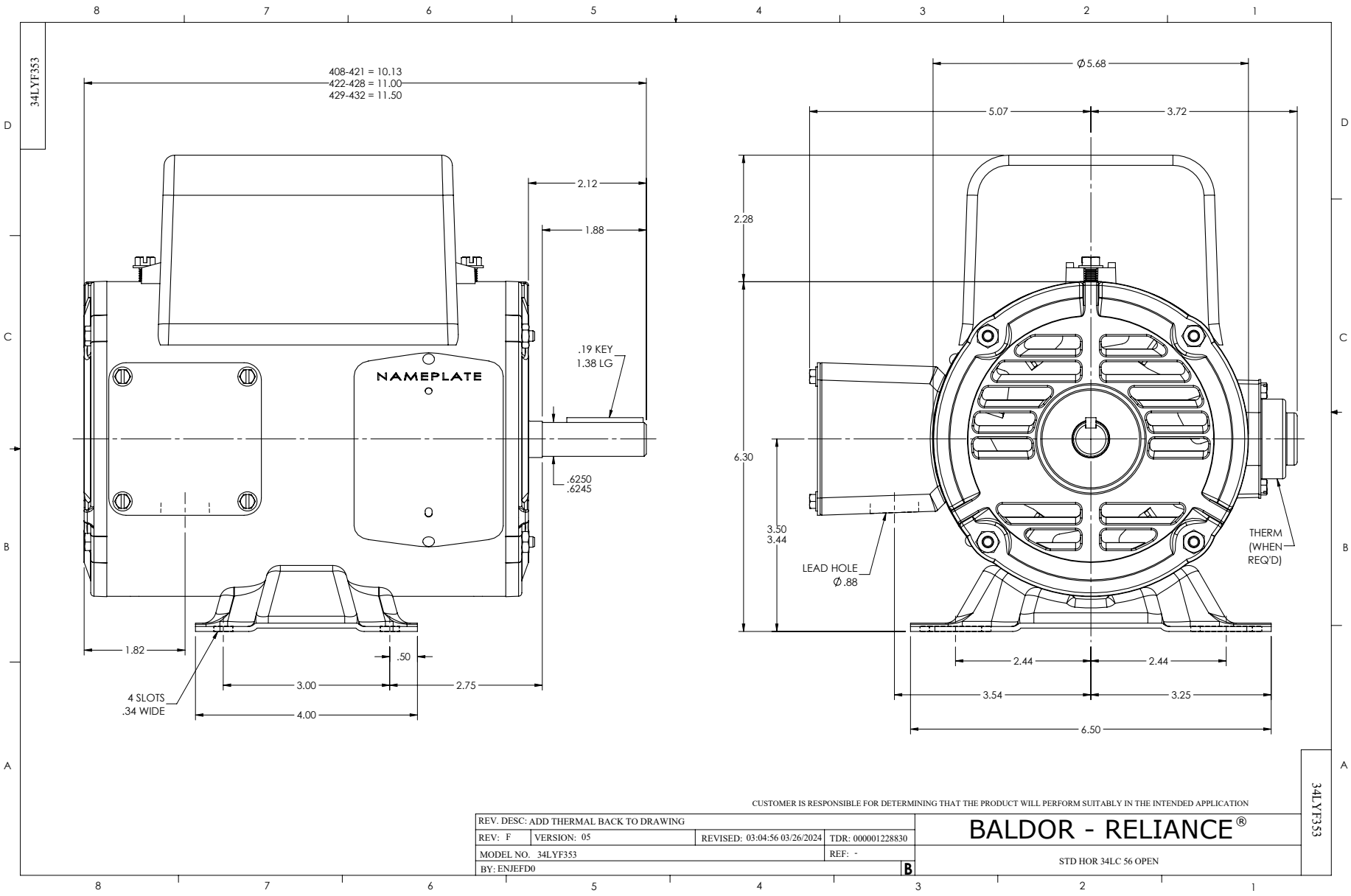
WINDING # 34WGR142

Typical performance - not guaranteed values.

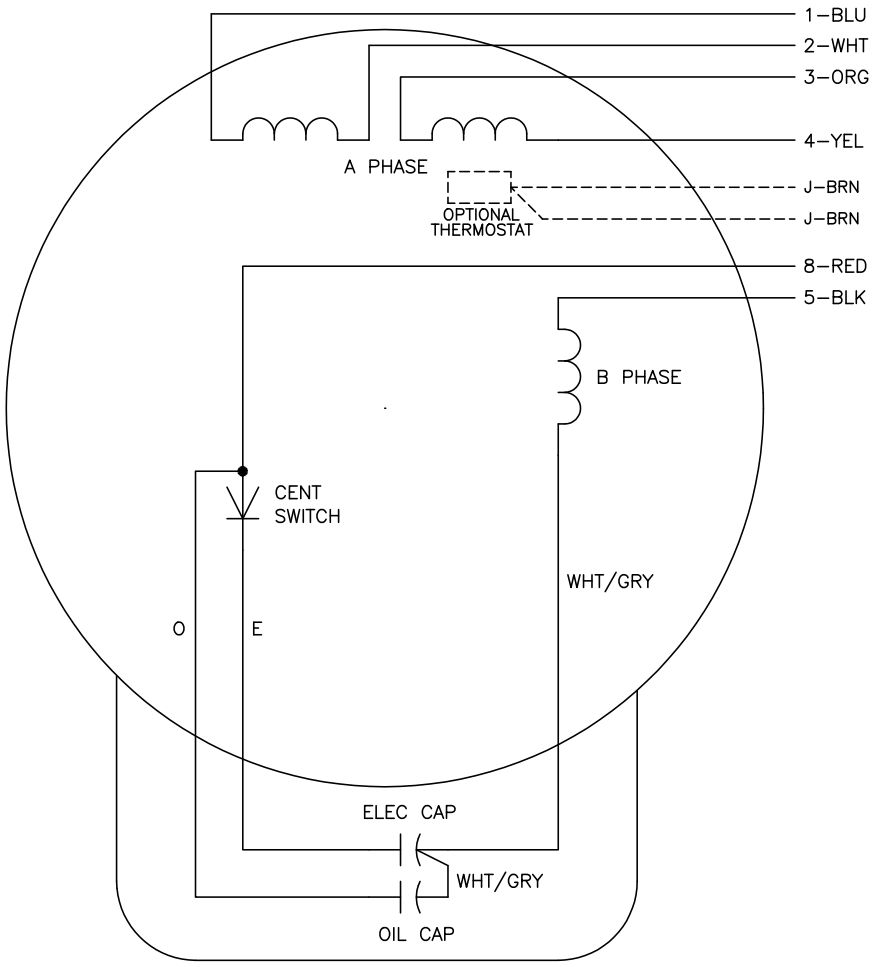
0.5 HP 1 PH 60 HZ 3450 RPM 115 V 3413LC

TORQUES(LB-FT): PO=2.5 PU=1.78 LR=2.47 LRA=38




34LYF353
408-421 = 10.13
422-428 = 11.00
429-432 = 11.50
2.12
1.88
.19 KEY
1.38 LG
NAMEPLATE
.6250
.6245
1.82
.50
3.00
2.75
4.00
4 SLOTS
.34 WIDE
Ø5.68
5.07
3.72
2.28
6.30
3.50
3.44
LEAD HOLE
Ø .88
THERM
(WHEN
REQ'D)
2.44
2.44
3.54
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD THERMAL BACK TO DRAWING
REV: F
VERSION: 05
REVISED: 03:04:56 03/26/2024
TDR: 000001228830
MODEL NO. 34LYF353
REF: -
BY: ENJEFD0
B
BALDOR - RELIANCE®
STD HOR 34LC 56 OPEN
34LYF353

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