ABB BALDOR RELIANCE

Customer information packet

EL3504

.5HP, 1745RPM, 1PH, 60HZ, 56, 3424LC, 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	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	C UR US
	CSA
	CURUS
	CURUSEEV
	NEMA PREMIUM (OLD LOGO)
	UR
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	2.300 A @ 230.0 V
	4.600 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	AL
Type	AC
Mech. spec.	34G375
Base	
Status	PRD/A
Elec. spec.	34WGX029
Layout	34LYG375
Eff. date	10-29-2024
CD Diagram	CD0055
Poles	04
Leads	6#18
Proprietary	False
Created date	01-01-0001

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.3 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K
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	3424LC
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.97 IN
Power Factor	89
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	1745 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

NP2117L											
CAT.NO.	EL3504										
SPEC.	34G375X29G1										
HP	.5										
VOLTS	115/230										
AMP	4.6/2.3										
RPM	1745										
FRAME	56	**HZ**	60		**PH**	1					
SER.F.	1.25	**CODE**	K	**DES**	N	**CL**	F				
NEMA-NOM-EFF	78.5	**PF**	89								
RATING	40C AMB-CONT										
CC											
DE	6203	**ODE**	6203								
ENCL	TEFC	**SN**									
	SFA 5.6/2.8										

Accessories

Part number	Description	Multiplier
34-171	C FACE KIT	A8

AC Induction Motor Performance Data
Record # 20836
Typical performance - not guaranteed values

Winding: 34WGX029-R002	**Type:** 3424LC	**Enclosure:** TEFC

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	1.5 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			4.6/2.3	**Breakdown Torque**	3.6 LB-FT
R.P.M.			1745	**Pull-up Torque**	3.1 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	3.7 LB-FT
NEMA Design Code	N	**KVA Code**	K	**Starting Current**	18.1 A
Service Factor (S.F.)			1.25	**No-load Current**	1 A
NEMA Nom. Eff.	78.5	**Power Factor**	89	**Line-line Res. @ 25ºC**	5.16 Ω A Ph 4.01 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	57°C
S.F. Amps			5.6/2.8	**Temp. Rise @ S.F. Load**	71°C

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	64	79	87	90	92	93	92
Efficiency	56.9	72.4	76.5	78.4	77.8	75.8	77.8
Speed	1786	1773	1758	1742	1722	1699	1722
Line amperes	1	1.4	1.8	2.3	2.8	3.4	2.8

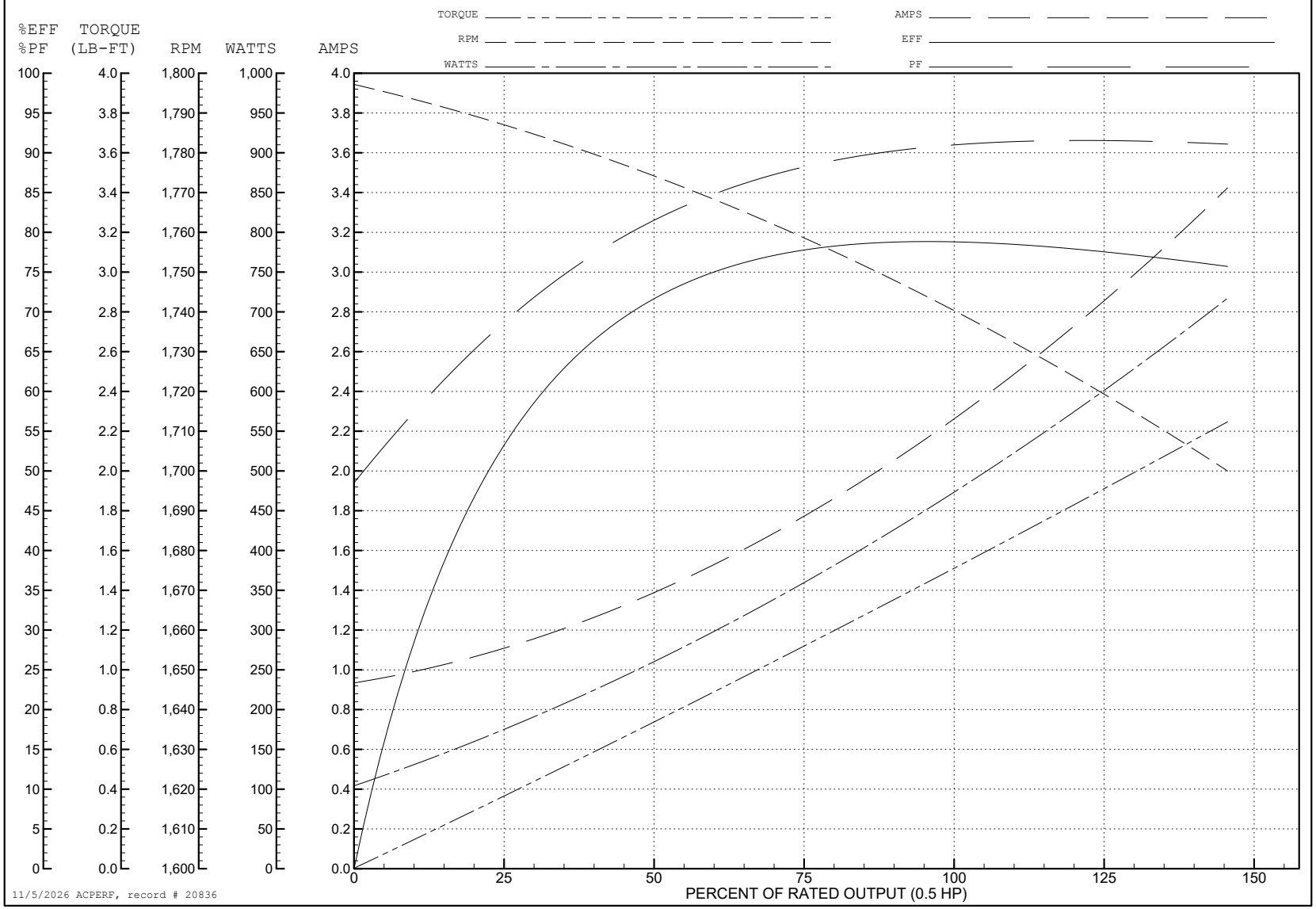
ABB Motors and Mechanical Inc.

WINDING # 34WGX029

0.5 HP 1 PH 60 HZ 1745 RPM 230 V 3424LC

TORQUES(LB-FT): PO=3.6 PU=3.1 LR=3.7 LRA=18.1

Typical performance - not guaranteed values.



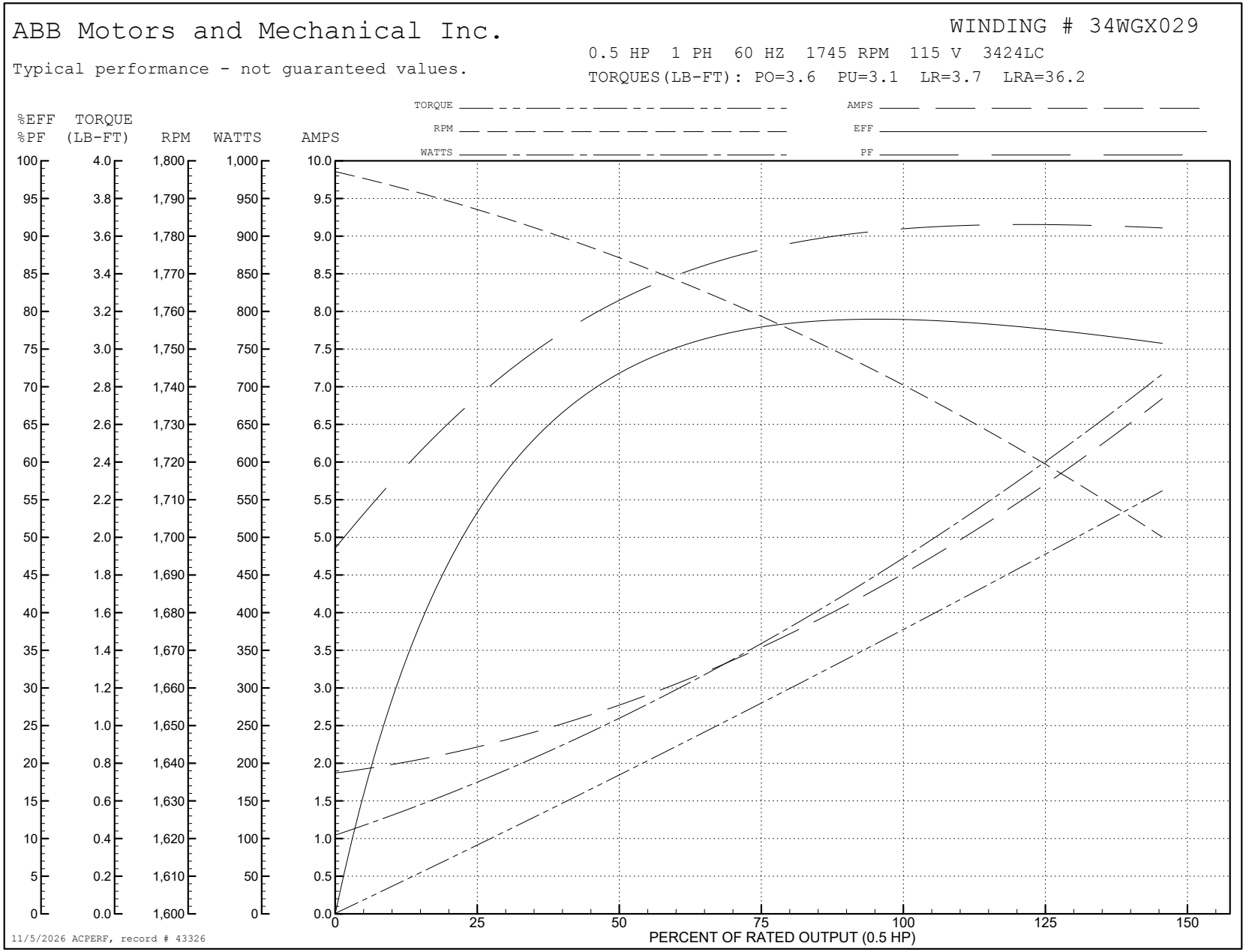
AC Induction Motor Performance Data
Record # 43326
Typical performance - not guaranteed values

Winding: 34WGX029-R002	**Type:** 3424LC	**Enclosure:** TEFC

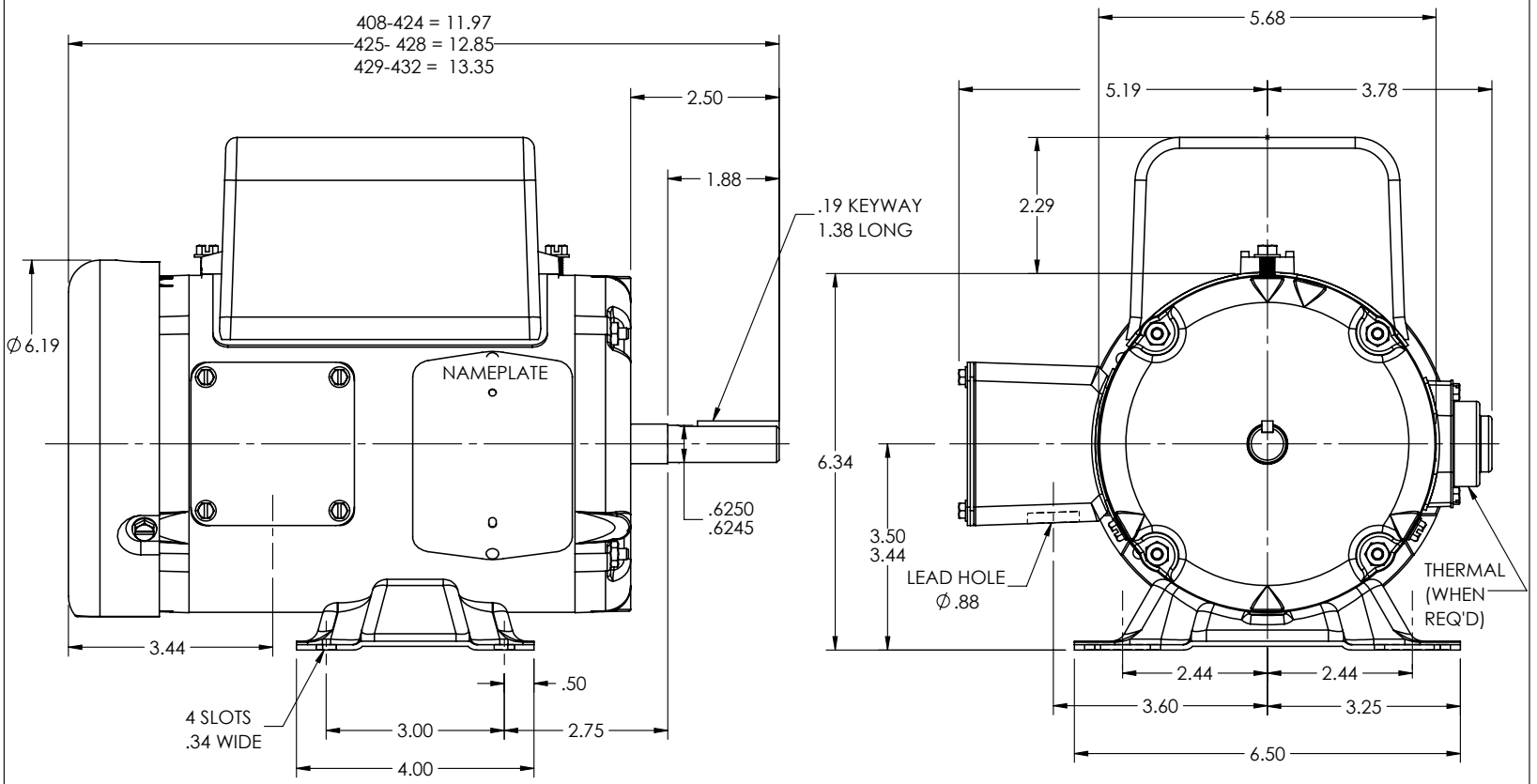
Nameplate Data				**115 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	1.5 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			4.6/2.3	**Breakdown Torque**	3.6 LB-FT
R.P.M.			1745	**Pull-up Torque**	3.1 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	3.7 LB-FT
NEMA Design Code	N	**KVA Code**	K	**Starting Current**	36.2 A
Service Factor (S.F.)			1.25	**No-load Current**	2 A
NEMA Nom. Eff.	78.5	**Power Factor**	89	**Line-line Res. @ 25ºC**	1.18 Ω A Ph 4.17 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	57°C
S.F. Amps			5.6/2.8	**Temp. Rise @ S.F. Load**	71°C

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	73	81	89	89	91	92	91
Efficiency	57	72.4	76.9	78.5	78.1	75.9	78.1
Speed	1786	1773	1758	1742	1722	1699	1722
Line amperes	2	2.8	3.6	4.6	5.6	6.8	5.6


ABB Motors and Mechanical Inc.
WINDING # 34WGX029
Typical performance - not guaranteed values.
0.5 HP 1 PH 60 HZ 1745 RPM 115 V 3424LC
TORQUES(LB-FT): PO=3.6 PU=3.1 LR=3.7 LRA=36.2
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
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
1,800 1,790 1,780 1,770 1,760 1,750 1,740 1,730 1,720 1,710 1,700 1,690 1,680 1,670 1,660 1,650 1,640 1,630 1,620 1,610 1,600
1,000 950 900 850 800 750 700 650 600 550 500 450 400 350 300 250 200 150 100 50 0
10.0 9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
0 25 50 75 100 125 150
PERCENT OF RATED OUTPUT (0.5 HP)
11/5/2026 ACPERF, record # 43326

34LYG375

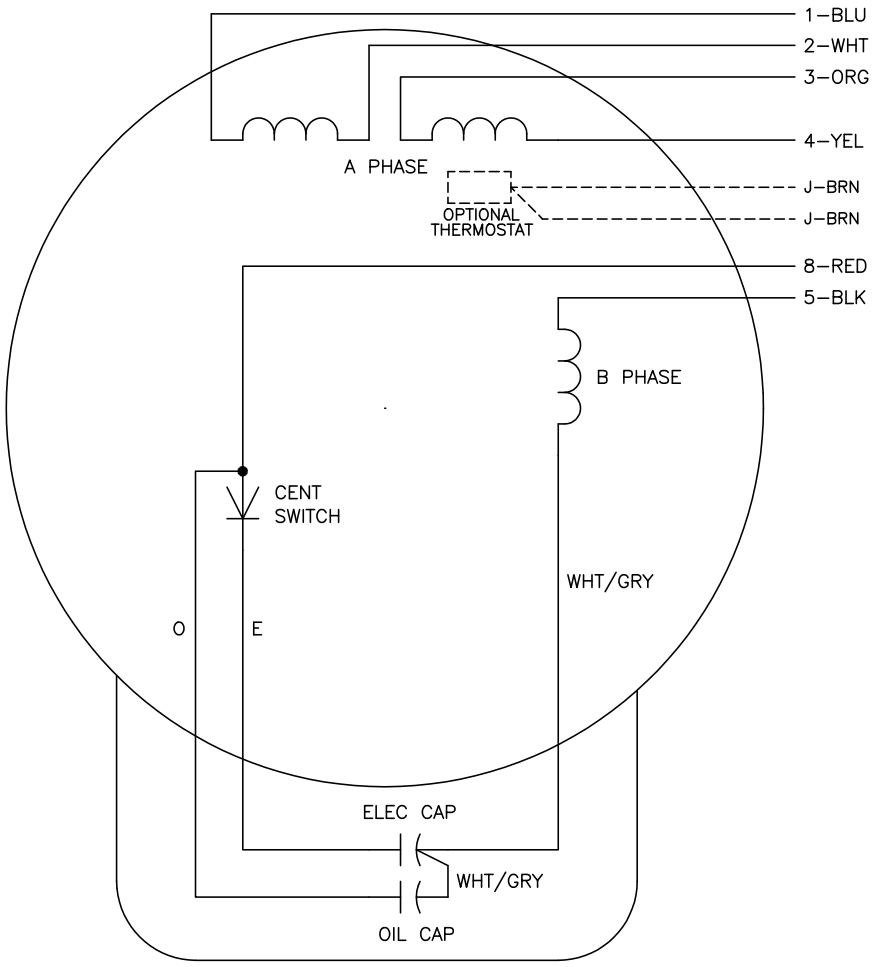


34LYG375

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

REV. DESC: LOAD TO SOLIDWORKS			BALDOR - RELIANCE®
REV: E	VERSION: 04	REVISED: 03:58:39 08/09/2022	TDR: 000001194274
34LYG375	MODEL NO. 34LYG375		REF: -
	BY: ENFRAJ0		HORZ 34LC NEMA 56 TEFC

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