

ABB BALDOR RELIANCE III

Customer information packet

EL3504

.5HP, 1745RPM, 1PH, 60HZ, 56, 3424LC, TEFC, F1

Class - None

Division - Not Applicable

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								

Parts List

Part number	Description	Quantity
SA006945	SA 34G375X29G1	1.000 ea
RA003392	RA 34G375X29G1	1.000 ea
OC3020F12SP	CAPACITORS 20 MFD 370 VAC	1.000 ea
EC1270A02SP	ELEC CAP, 270-324 MFD, 125V, 1.48D 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"	3.000 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
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.014 ga
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

LC0001A01	CONN LABEL / WARNING LABEL (LC0001 / LB1	1.000 ea
NP2117L	SS SUPER-E UL CC	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea

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	
NEMA Design Code		N	KVA Code		K	
Service Factor (S.F.)		1.25	No-load Current		1 A	
NEMA Nom. Eff.		78.5	Power Factor		89	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
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

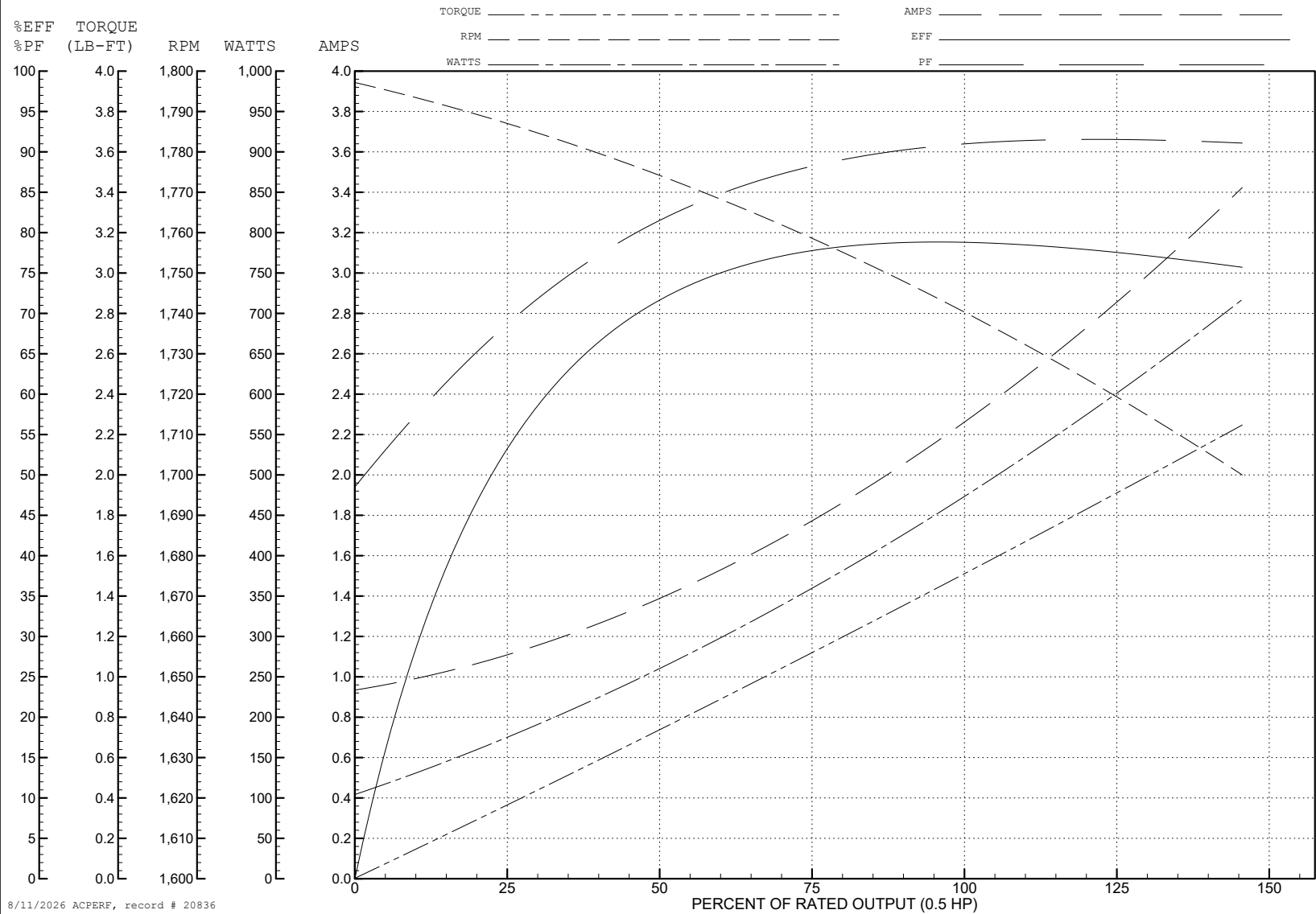
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WINDING # 34WGX029

Typical performance - not guaranteed values.

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



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	
NEMA Design Code		N	KVA Code		K	
Service Factor (S.F.)		1.25	No-load Current		2 A	
NEMA Nom. Eff.		78.5	Power Factor		89	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
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

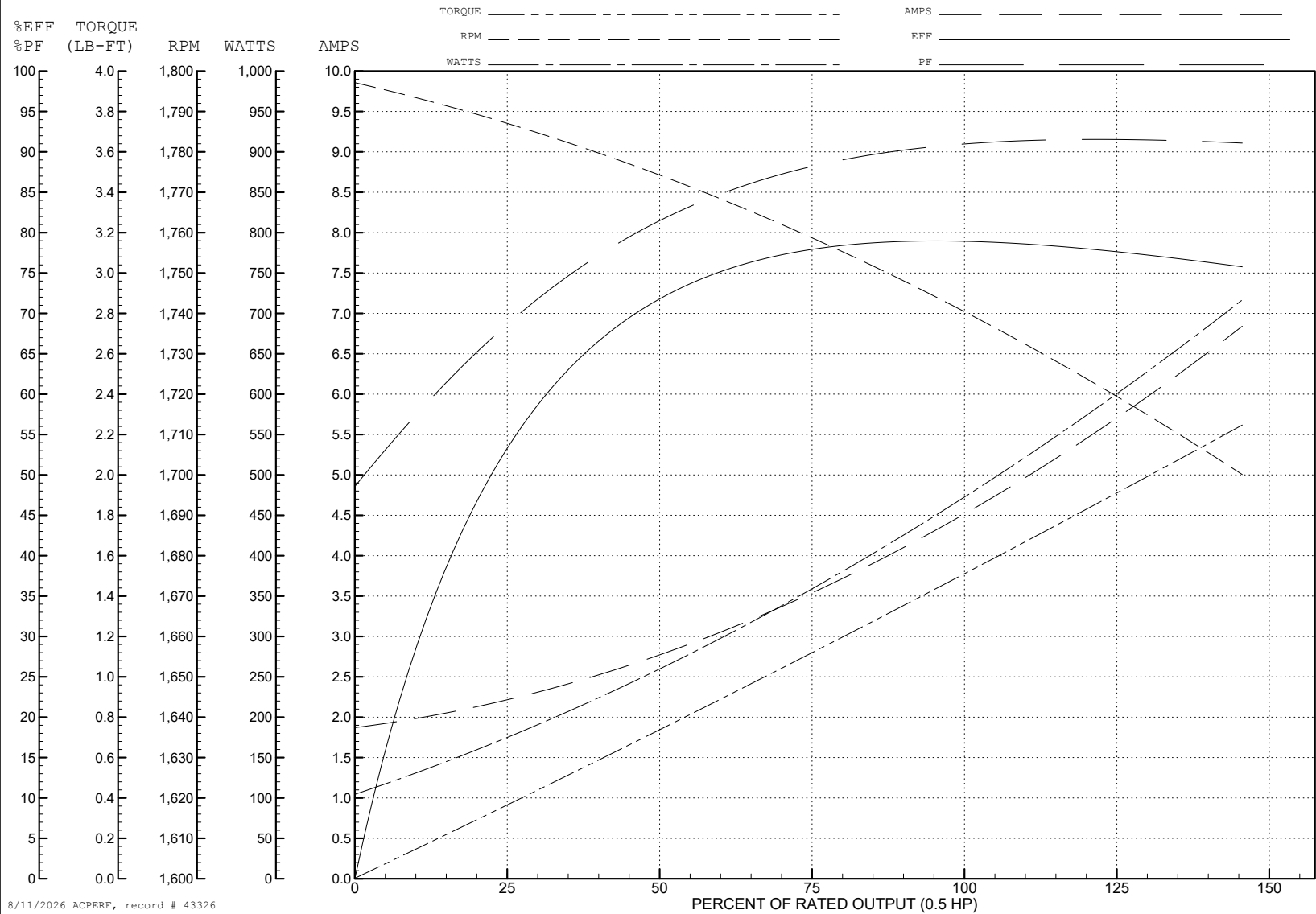
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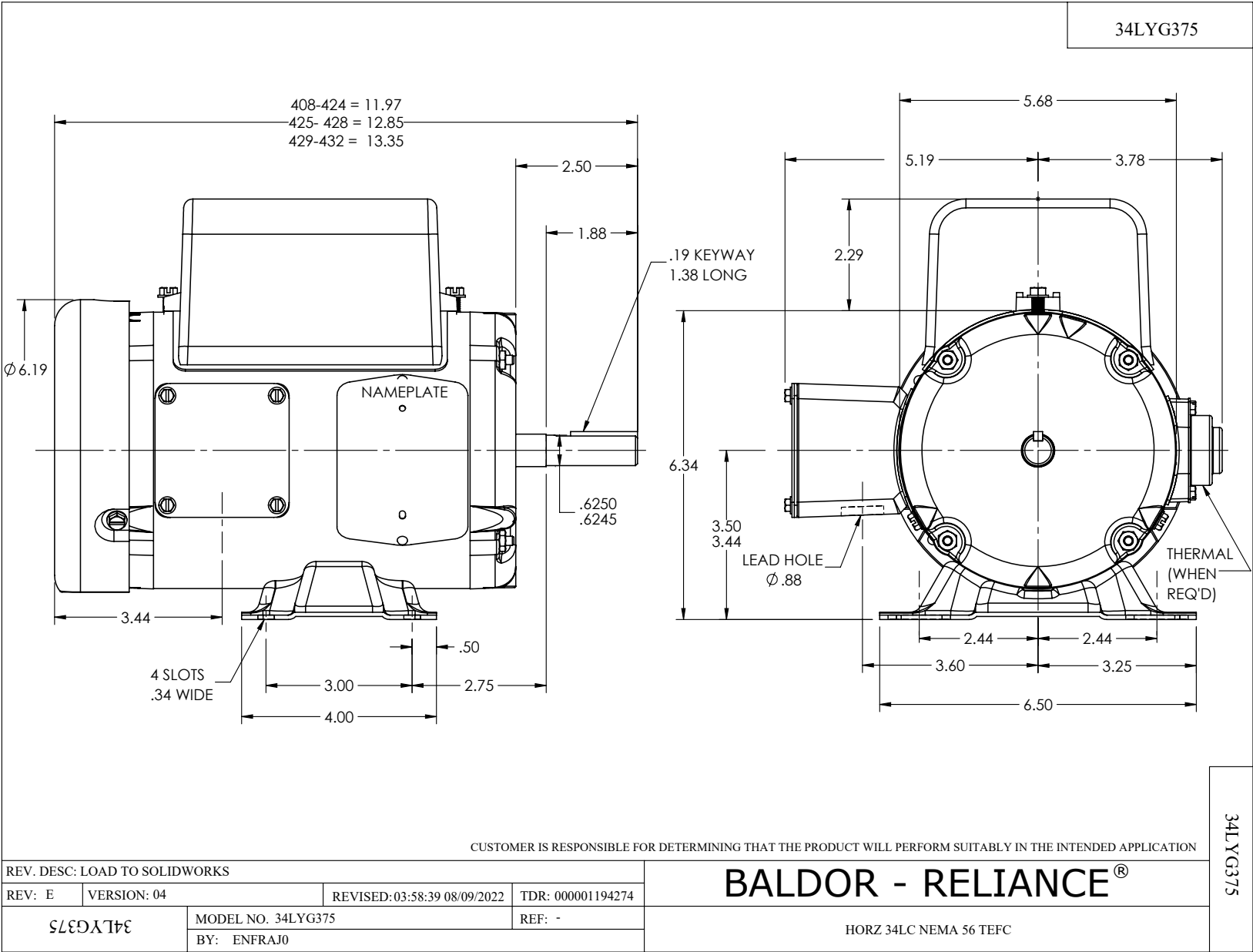
WINDING # 34WGX029

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





CD0055

