

BALDOR • RELIANCE

Customer information packet

BM3538

.5HP, 1725RPM, 3PH, 60HZ, 56, BRAKE, 3420M

Class - None

Division - Not Applicable

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8/11/2024 3:41:11 AM

Specifications

Enclosure	TENV
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	CSA UR
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
Brake Torque	3.0 lb-ft
Current @ Voltage	1.900 A @ 208.0 V 1.800 A @ 230.0 V .900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	75.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting

Part detail

Revision	AE
Type	AC
Mech. spec.	34K044
Base	
Status	PRD/A
Elec. spec.	34WG0097
Layout	34LYK044
Eff. date	02-08-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-01-0001

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	B
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	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3420M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.98 IN
Power Factor	69
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
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	1725 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor

Nameplate

NP1256L									
CAT.NO.	BM3538								
SPEC.	34K44-97-B								
HP	.5								
VOLTS	208-230/460								
AMP	1.9-1.8/.9								
RPM	1725								
FRAME	56		HZ	60		PH	3		
SER.F.	1.00	CODE	K	DES	B	CLASS	B		
NEMA-NOM-EFF	75.5	PF	69						
RATING	40C AMB-CONT								
CC									
DE	6203		ODE	6203					
ENCL	TENV	SN							

AC Induction Motor Performance Data

Record # 6542

Typical performance - not guaranteed values

Winding: 34WG0097-R001		Type: 3420M	Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	.5	Full Load Torque	1.5 LB-FT	
Volts	208-230/460	Start Configuration	direct on line	
Full Load Amps	1.9-1.8/.9	Breakdown Torque	6.8 LB-FT	
R.P.M.	1725	Pull-up Torque	4.6 LB-FT	
Hz	60 Phase	Locked-rotor Torque	5.8 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	7 A	
Service Factor (S.F.)	1	No-load Current	0.54 A	
NEMA Nom. Eff.	75.5 Power Factor	Line-line Res. @ 25°C	27.56 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	57°C	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	38	53	65	71	75	81
Efficiency	55	69	74	78	75.5	74.4
Speed	1787	1774	1760	1749	1728	1717
Line amperes	0.6	0.65	0.74	0.84	1	1.1

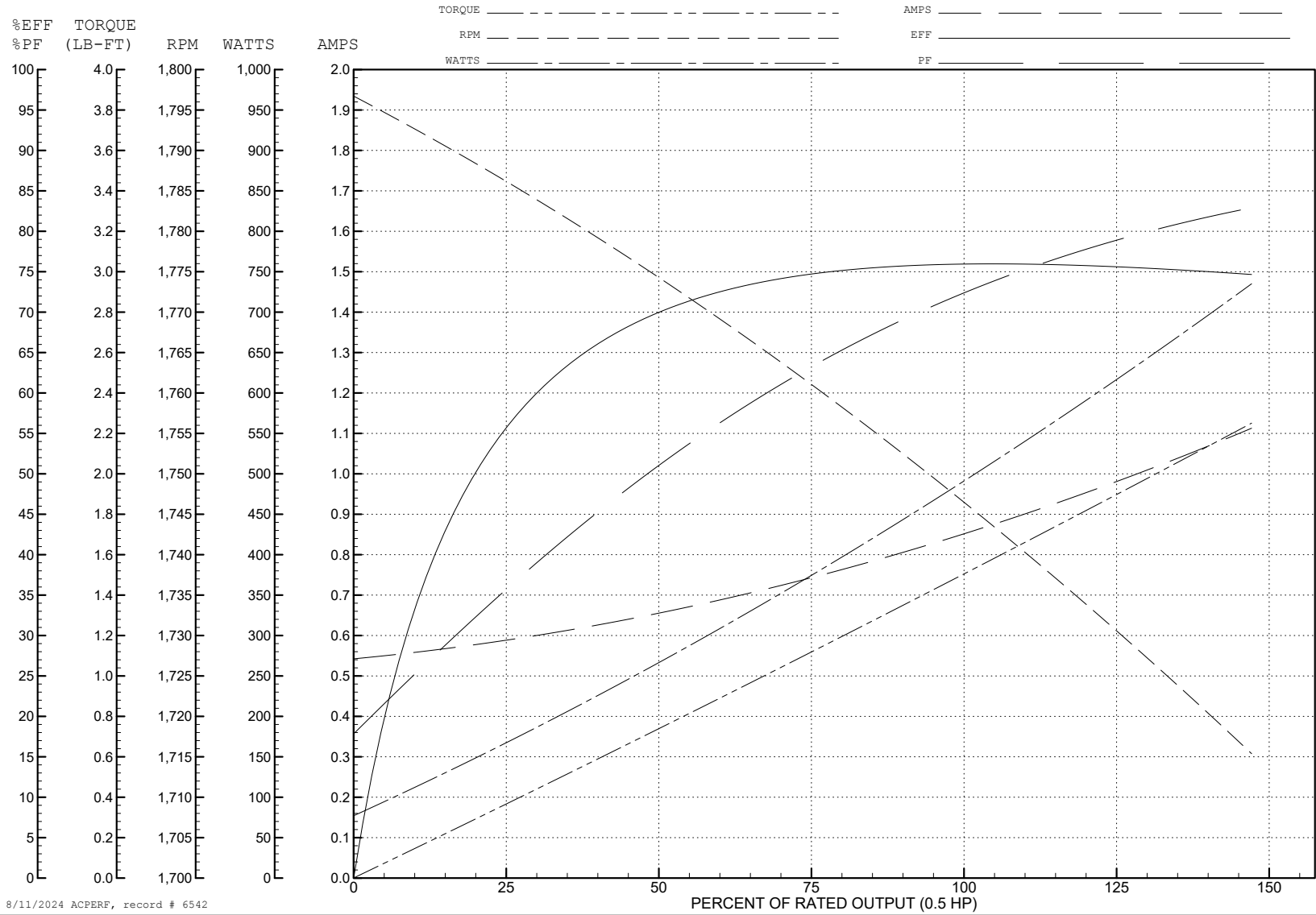
ABB Motors and Mechanical Inc.

WINDING # 34WG0097

0.5 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

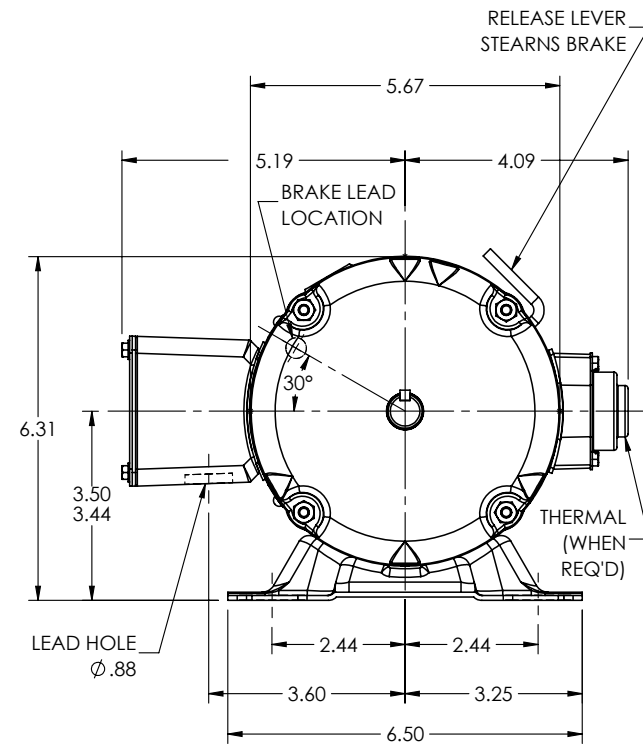
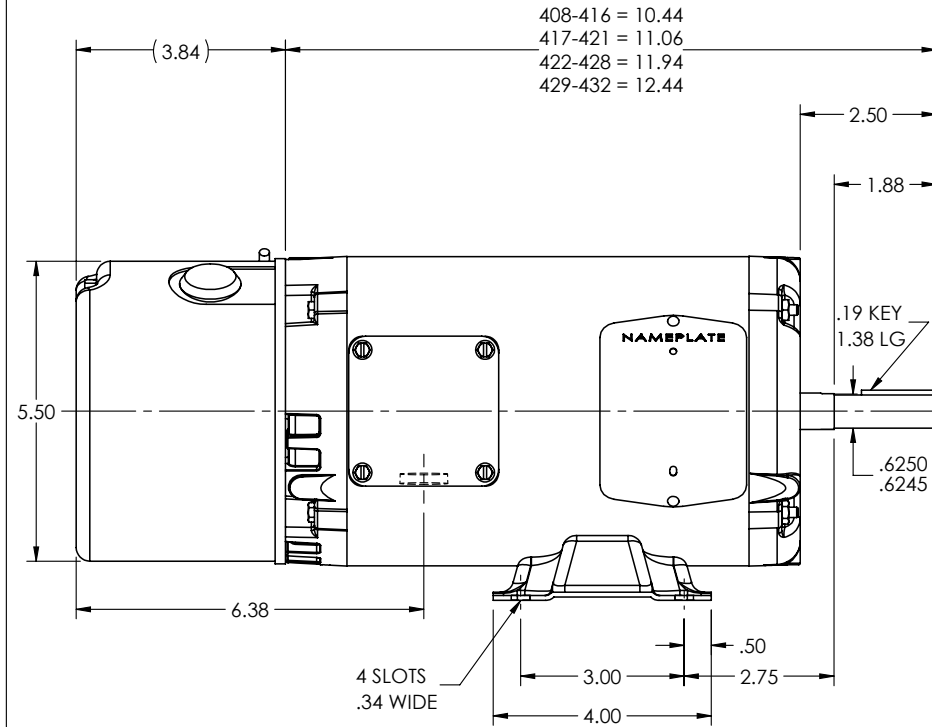
Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=6.8 PU=4.6 LR=5.8 LRA=7



8/11/2024 ACPERF, record # 6542

34LYK044



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

REV. DESC: LOAD TO SOLIDWORKS - REV F

REV: G	VERSION: 04	REVISED: 09:12:25 01/03/2023	TDR: 000001201165
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34LYK044

MODEL NO. 34LYK044
 BY: ENFRAJ0

REF: -

BALDOR - RELIANCE®

STD HORZ MODEL 34M NEMA 56 TENV W/INT CONNECTED BRAKE

34LYK044

CD0005



LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS