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# Customer information packet

## CDM3538

.5HP, 1725RPM, 3PH, 60HZ, 56C, 3420M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	56C
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
Agency Approvals	CCSA US 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
Constant Torque Speed Range	6
Current @ Voltage	1.600 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	Standard
Front Shaft Indicator	None

## Part detail

Revision	L
Type	AC
Mech. spec.	34M811
Base	
Status	PRD/A
Elec. spec.	34WG0097
Layout	34LYM811
Eff. date	10-27-2022
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	04-20-2016

Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
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	11.35 IN
Power Factor	69
Product Family	Dirty Duty Plus
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
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	1725 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

**Nameplate**

<b>NP3659</b>	
<b>CAT.NO.</b>	CDM3538
<b>SPEC.</b>	34M811-0097G1 <b>ENCL</b> TEFC
<b>FRAME</b>	56C <b>H.P.</b> .5
<b>VOLTS</b>	230/460
<b>AMPS</b>	1.8/.9 <b>IP</b> 56
<b>R.P.M.</b>	1725
<b>HZ.</b>	60 <b>PH.</b> 3 <b>CLASS</b> F
<b>SER.F.</b>	1.25 <b>DES.</b> B <b>CC</b>
<b>NEMA NOM. EFF.</b>	75.5
<b>RATING</b>	40C AMB-CONT
<b>DE</b>	6203 <b>ODE</b> 6203
<b>GREASE</b>	POLYREX EM
<b>SN</b>	
	50C AT 1.0 SF
	SFA 2/1

**AC Induction Motor Performance Data**

Record # 55809

Typical performance - not guaranteed values

<b>Winding: 34WG0097-R039</b>		<b>Type: 3420M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	.5	<b>Full Load Torque</b>	1.5 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	1.8/.9	<b>Breakdown Torque</b>	6.8 LB-FT		
<b>R.P.M.</b>	1725	<b>Pull-up Torque</b>	4.6 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	5.8 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	M	<b>Starting Current</b>	7 A	
<b>Service Factor (S.F.)</b>	1.25		<b>No-load Current</b>	0.54 A	
<b>NEMA Nom. Eff.</b>	75.5	<b>Power Factor</b>	69		<b>Line-line Res. @ 25°C</b>
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	45°C	
<b>S.F. Amps</b>	2/1		<b>Temp. Rise @ S.F. Load</b>	54°C	
			<b>Locked-rotor Power Factor</b>	56.3	
			<b>Rotor inertia</b>	0.0476 LB-FT <sup>2</sup>	

**Load Characteristics 460 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>	36	53	64	71	77	84	77
<b>Efficiency</b>	55	69	74.4	78	75.7	74.4	75.7
<b>Speed</b>	1787	1774	1760	1749	1728	1717	1728
<b>Line amperes</b>	0.6	0.65	0.74	0.84	1	1.1	1

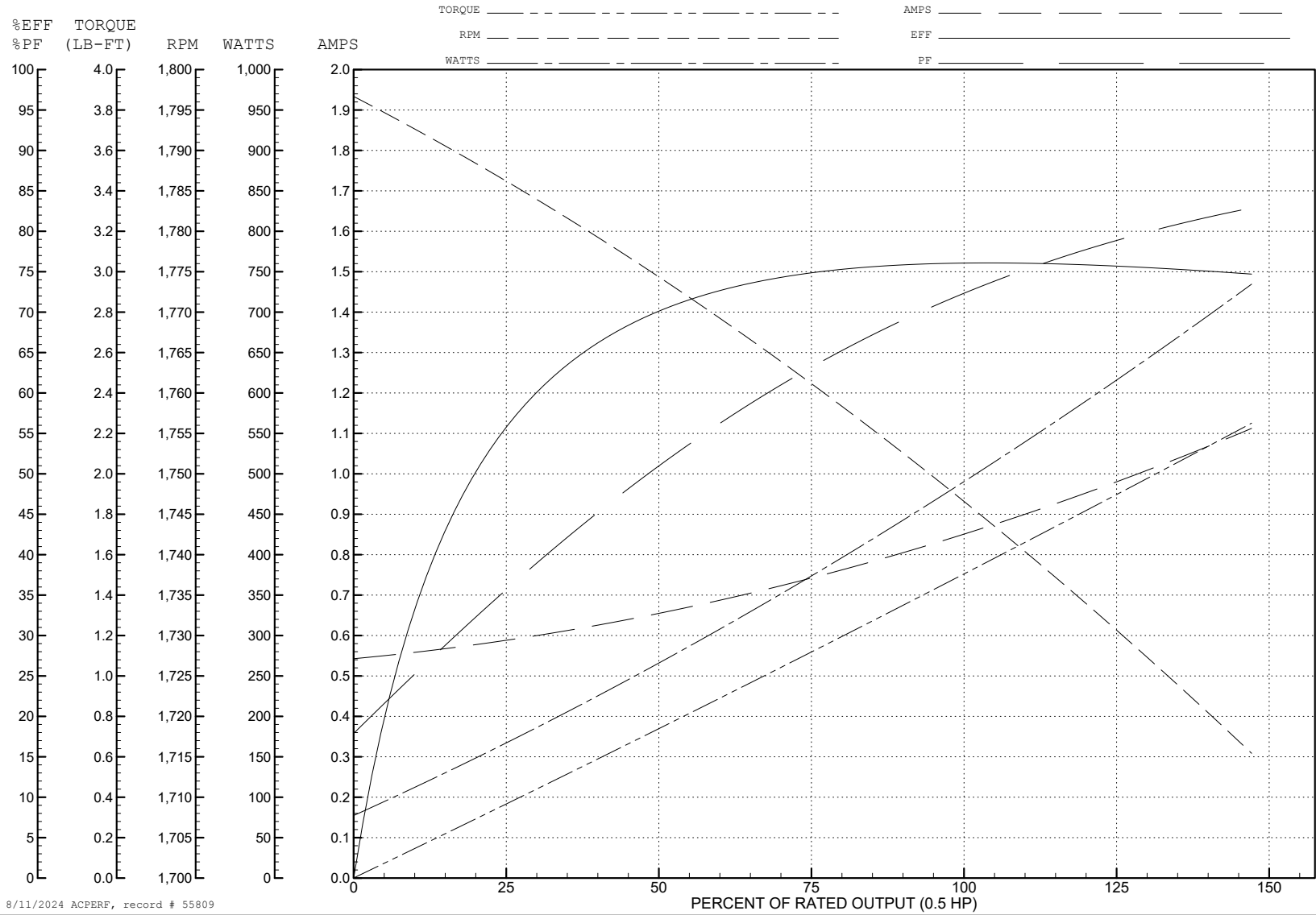
ABB Motors and Mechanical Inc.

WINDING # 34WG0097

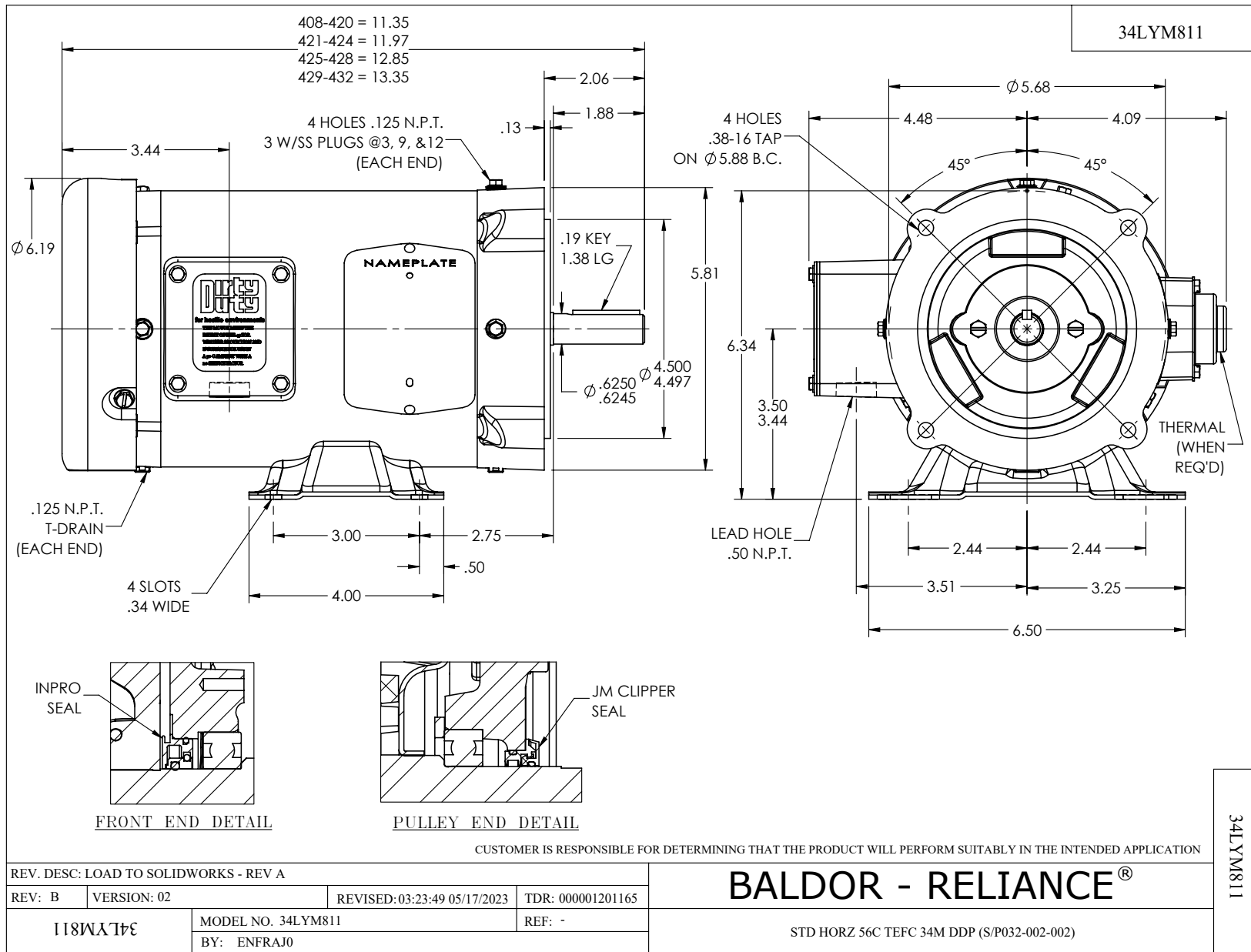
0.5 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

Typical performance - not guaranteed values.

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



8/11/2024 ACPERF, record # 55809





CD0005

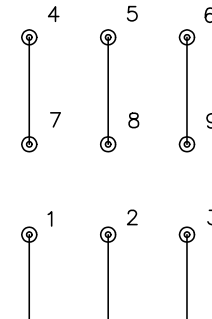


LOW VOLTAGE  
(2Y)



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