ABB BALDOR RELIANCE

Customer information packet

EM3538

.5HP, 1775RPM, 3PH, 60HZ, 56, 3514M, TEFC, F1, N
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	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	C UR US
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	1.010 A @ 460.0 V
	2.020 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	81.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	E
Type	AC
Mech. spec.	35A011
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYA011
Eff. date	01-02-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.22 IN
Power Factor	63
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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

	NP2116L							
CAT.NO.	EM3538							
SPEC.	35A011G069G2							
HP	.5							
VOLTS	230/460							
AMP	2.02/1.01							
RPM	1775							
FRAME	56	**HZ**	60	**PH**	3			
SER.F.	1.15	**CODE**	N	**DES**	B	**CL**	F	
NEMA-NOM-EFF	81.5	**PF**	63					
RATING	40C AMB-CONT							
CC								
DE	6205	**ODE**	6203					
ENCL	TEFC	**SN**						
	SFA 2.2/1.1							

AC Induction Motor Performance Data
Record # 101694
Typical performance - not guaranteed values

Winding: 35WGG069-R086	**Type:** 3514M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	1.48 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			2.02/1.01	**Breakdown Torque**	8 LB-FT
R.P.M.			1775	**Pull-up Torque**	4.4 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	5.1 LB-FT
NEMA Design Code	B	**KVA Code**	N	**Starting Current**	8.4 A
Service Factor (S.F.)			1.15	**No-load Current**	0.85 A
NEMA Nom. Eff.	81.5	**Power Factor**	63	**Line-line Res. @ 25ºC**	30.3 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	23°C
S.F. Amps				**Temp. Rise @ S.F. Load**	25°C
				Locked-rotor Power Factor	66.8
				Rotor inertia	0.101 lb-ft²

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	24	37	48	58	65	71	62
Efficiency	58.9	72.5	78.4	80.5	81.6	81.5	81.2
Speed	1793	1788	1782	1776	1771	1763	1773
Line amperes	0.85	0.89	0.94	1.01	1.11	1.21	1.07

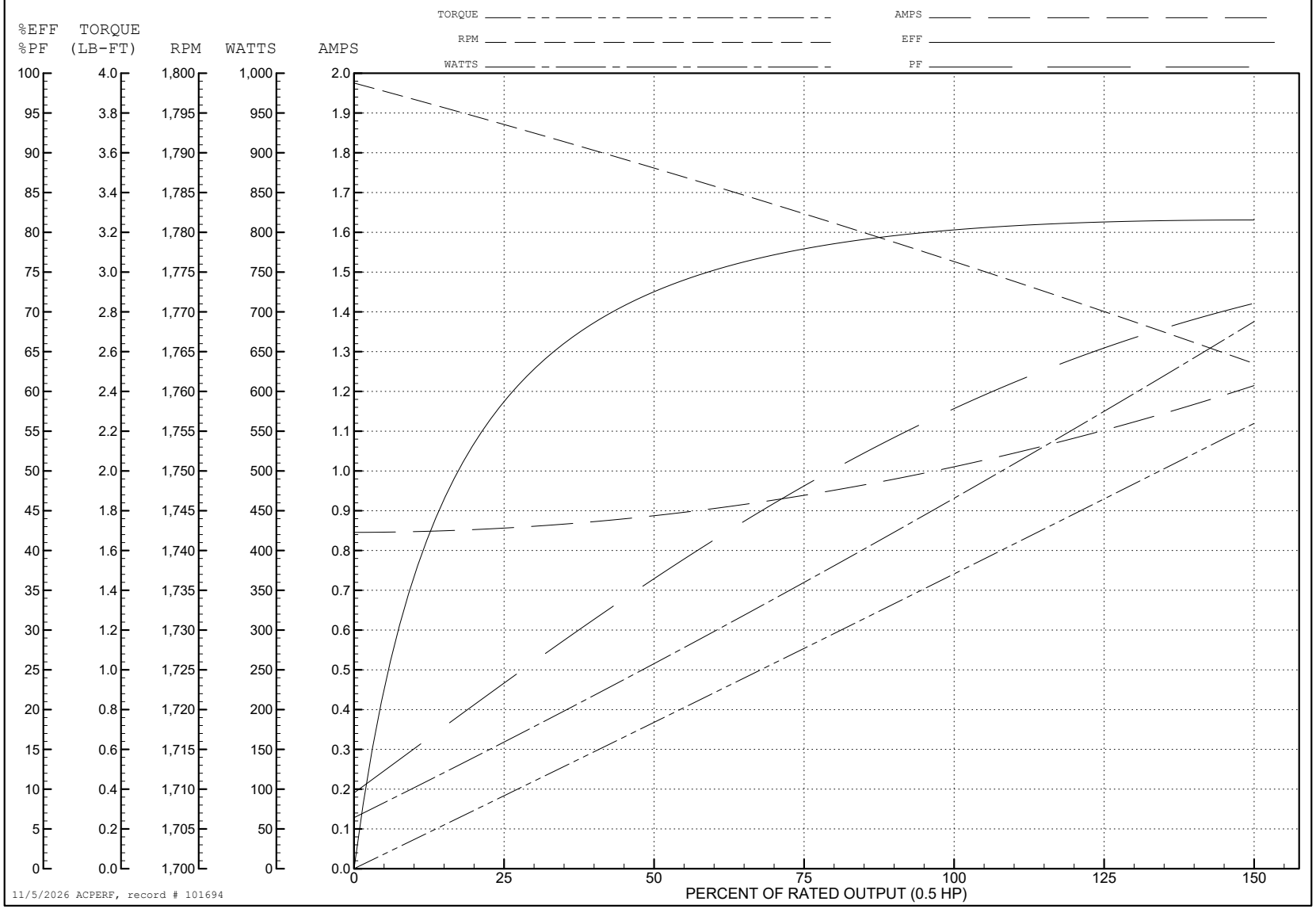
ABB Motors and Mechanical Inc.

WINDING # 35WGG069

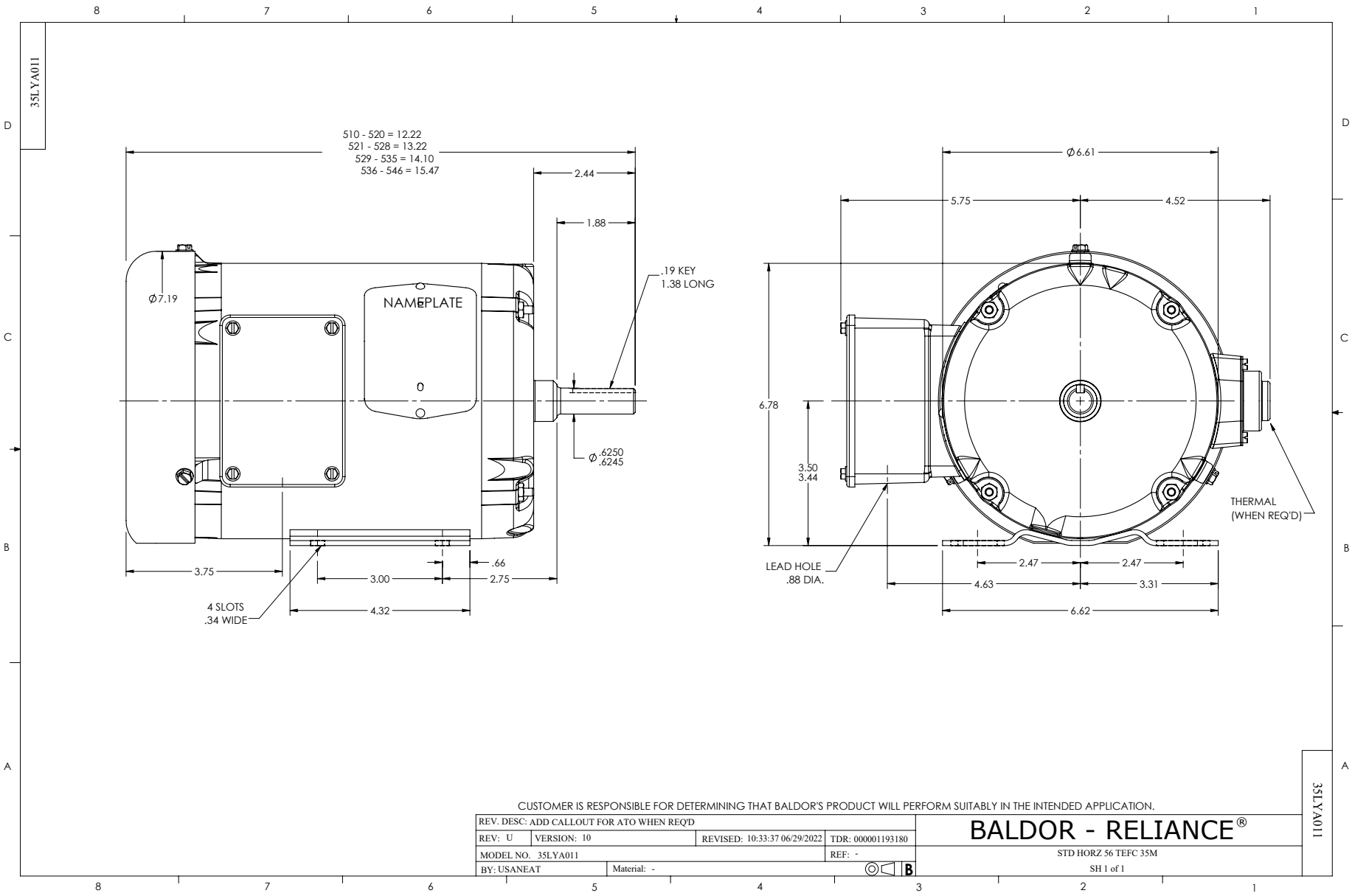
0.5 HP 3 PH 60 HZ 1775 RPM 460 V 3514M

Typical performance - not guaranteed values.

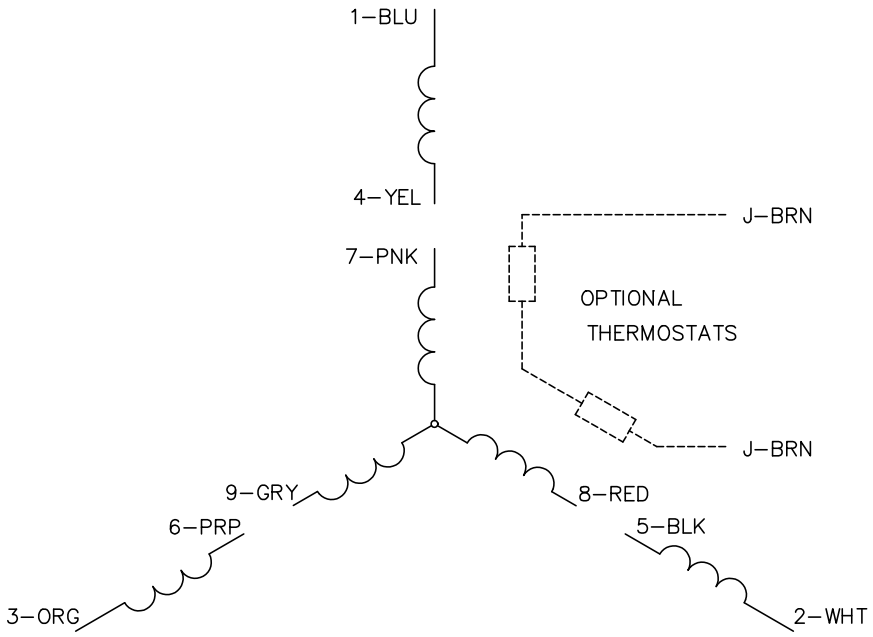
TORQUES(LB-FT): PO=8 PU=4.4 LR=5.1 LRA=8.4

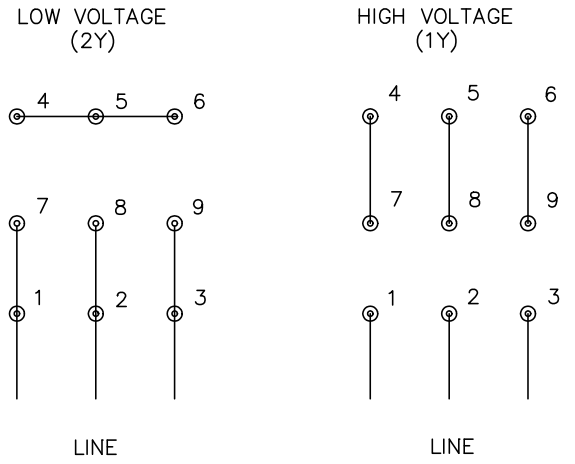


11/5/2026 ACPERF, record # 101694


35LYA011
510 - 520 = 12.22
521 - 528 = 13.22
529 - 535 = 14.10
536 - 546 = 15.47
2.44
1.88
.19 KEY
1.38 LONG
Ø7.19
NAMEPLATE
Ø .6250
.6245
3.75
3.00
2.75
.66
4.32
4 SLOTS
.34 WIDE
Ø6.61
5.75
4.52
6.78
3.50
3.44
THERMAL
(WHEN REQ'D)
LEAD HOLE
.88 DIA.
2.47
2.47
4.63
3.31
6.62
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: ADD CALLOUT FOR ATO WHEN REQ'D
REV: U
VERSION: 10
REVISED: 10:33:37 06/29/2022
TDR: 000001193180
MODEL NO. 35LYA011
REF: -
BY: USANEAT
Material: -
BALDOR - RELIANCE®
STD HORZ 56 TEFC 35M
SH 1 of 1
35LYA011

CD0005





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			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS