ABB BALDOR RELIANCE

Customer information packet

EM31112-5

0.75HP, 1765RPM, 3PH, 60HZ, 56, 3514M, OPEN, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPEN
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	.750 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CURUSEEV
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	.960 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
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	Not Inverter
IP Rating	NONE
KVA Code	K

Part Detail

Revision	F
Type	AC
Mech. spec.	35B011
Base	
Status	PRD/A
Elec. spec.	35WGG123
Layout	35LYB011
Eff. date	07-01-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.07 IN
Power Factor	71
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1765 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

NP3155L									
CAT.NO.	EM31112-5								
SPEC.	35B011G123G1								
HP	0.75								
VOLTS	575								
AMP	0.93								
RPM	1765								
FRAME	56	**HZ**	60				**PH**	3	
SER.F.	1.25	**CODE**	K	**DES**	B	**CL**	F		
F.L. AVG. EFF.	82.5	**PF**	73						
RATING	40C AMB-CONT								
CC									
DE	6205	**ODE**	6203						
ENCL	OPEN	**SN**							
	SFA 1.04								

AC Induction Motor Performance Data
Record # 82202
Typical performance - not guaranteed values

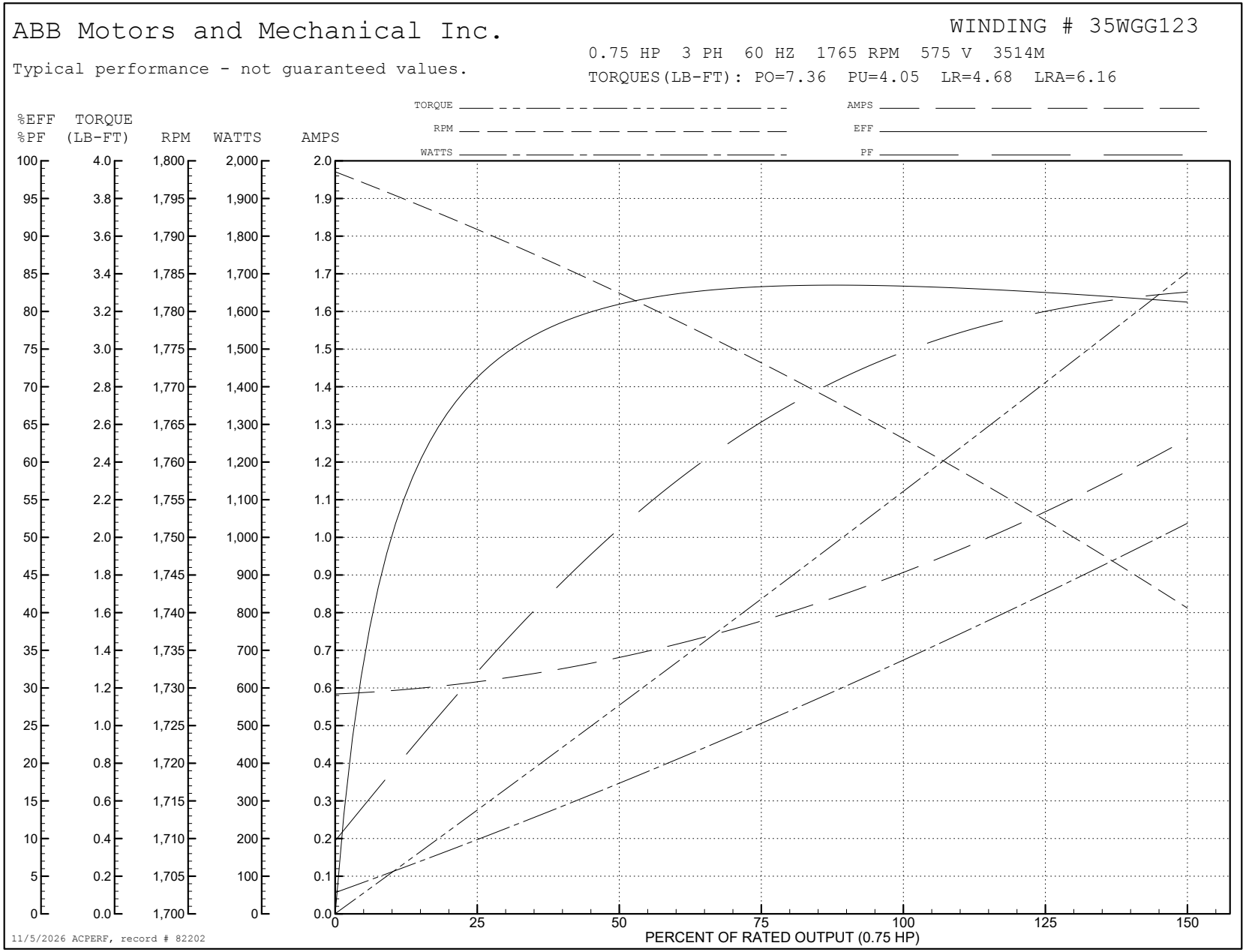
Winding: 35WGG123-R001 **Type:** 3514M **Enclosure:** OPEN

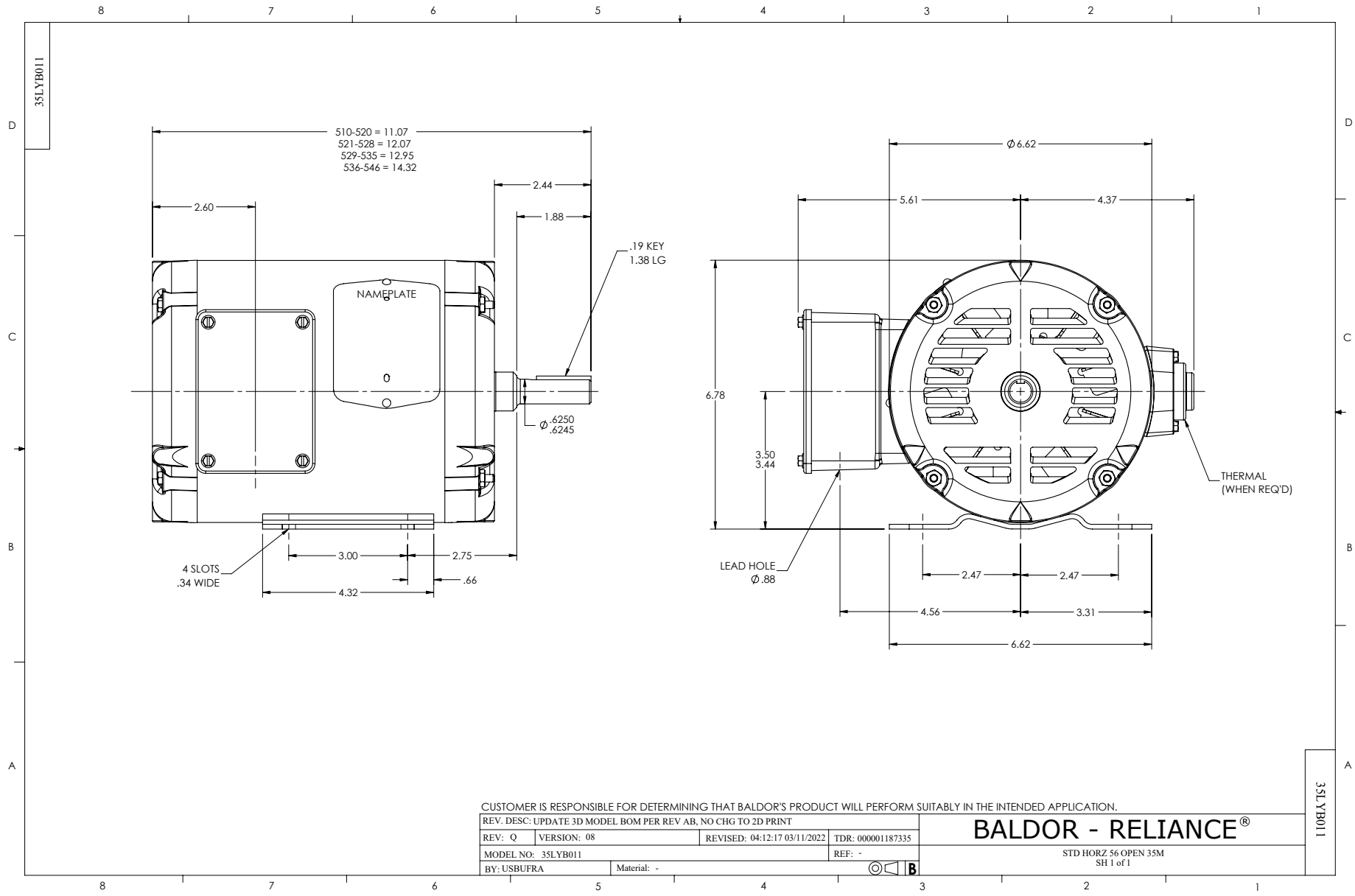
Nameplate Data			
Rated Output (HP)			.75
Volts			575
Full Load Amps			.91
R.P.M.			1765
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	K
Service Factor (S.F.)			1.25
NEMA Nom. Eff.	82.5	**Power Factor**	74
Rating - Duty			40C AMB-CONT
S.F. Amps			1.07

575 V, 60 Hz: Single Voltage Motor	
Full Load Torque	2.25 LB-FT
Start Configuration	direct on line
Breakdown Torque	7.36 LB-FT
Pull-up Torque	4.05 LB-FT
Locked-rotor Torque	4.68 LB-FT
Starting Current	6.16 A
No-load Current	0.589 A
Line-line Res. @ 25ºC	50.2 Ω
Temp. Rise @ Rated Load	24°C
Temp. Rise @ S.F. Load	32°C
Locked-rotor Power Factor	65.3
Rotor inertia	0.101 lb-ft²

Load Characteristics 575 V, 60 Hz, 0.75 HP

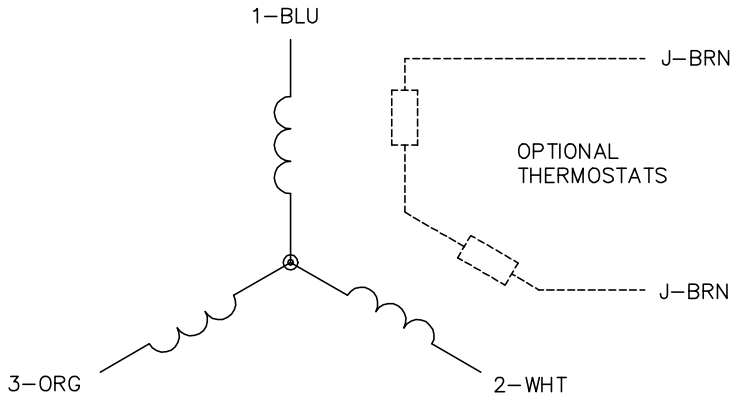
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	52	65	74	80	83	80
Efficiency	71.1	80.8	83.1	83.6	82.8	81	82.8
Speed	1790	1782	1773	1763	1753	1740	1753
Line amperes	0.61	0.682	0.782	0.913	1.07	1.26	1.07

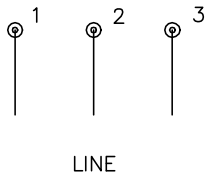

ABB Motors and Mechanical Inc.
WINDING # 35WGG123
Typical performance - not guaranteed values.
0.75 HP 3 PH 60 HZ 1765 RPM 575 V 3514M
TORQUES(LB-FT): PO=7.36 PU=4.05 LR=4.68 LRA=6.16
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 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 1,795 1,790 1,785 1,780 1,775 1,770 1,765 1,760 1,755 1,750 1,745 1,740 1,735 1,730 1,725 1,720 1,715 1,710 1,705 1,700
2,000 1,900 1,800 1,700 1,600 1,500 1,400 1,300 1,200 1,100 1,000 900 800 700 600 500 400 300 200 100 0
2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.0
0 25 50 75 100 125 150
PERCENT OF RATED OUTPUT (0.75 HP)
11/5/2026 ACPERF, record # 82202


35LYB011
510-520 = 11.07
521-528 = 12.07
529-535 = 12.95
536-546 = 14.32
2.44
2.60
1.88
.19 KEY
1.38 LG
NAMEPLATE
Ø .6250
.6245
4 SLOTS
.34 WIDE
3.00
2.75
.66
4.32
Ø 6.62
5.61
4.37
6.78
3.50
3.44
THERMAL
(WHEN REQ'D)
LEAD HOLE
Ø .88
2.47
2.47
4.56
3.31
6.62
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: UPDATE 3D MODEL BOM PER REV AB, NO CHG TO 2D PRINT
REV: Q
VERSION: 08
REVISED: 04:12:17 03/11/2022
TDR: 000001187335
MODEL NO: 35LYB011
REF: -
BY: USBUFRA
Material: -
B
BALDOR - RELIANCE®
STD HORZ 56 OPEN 35M
SH 1 of 1
35LYB011

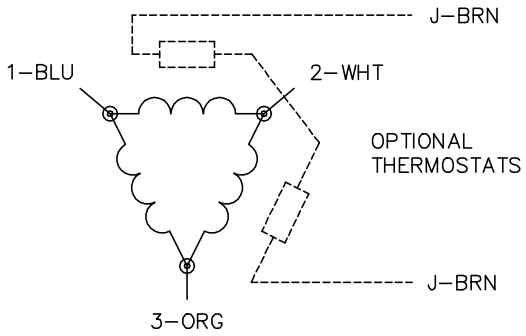
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1