ABB BALDOR RELIANCE

Customer information packet

CEM31155

2HP, 3450RPM, 3PH, 60HZ, 56C, 3524M, OPEN, F1, N
Class - None
Division - Not Applicable

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11/22/2026 10:44:08 AM

Specifications

Enclosure	OPEN
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	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 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	2.600 A @ 460.0 V
	5.200 A @ 230.0 V
	5.600 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.6 a

Part Detail

Revision	L
Type	AC
Mech. spec.	35Z564
Base	
Status	PRD/A
Elec. spec.	35WGS254
Layout	35LYZ564
Eff. date	01-08-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	09-30-2014

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	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	3524M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.07 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
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	3450 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

NP3155LUA											
CAT.NO.	CEM31155										
SPEC.	35Z564S254G1										
HP	2										
VOLTS	230/460										
AMPS	5.2/2.6										
RPM	3450										
FRAME	56C		**HZ**	60			**PH**	3			
SF	1.15	**CODE**	K	**DES**	B	**CLASS**	F				
F.L. AVG. EFF.	85.5	**PF**	85								
RATING	40C AMB-CONT										
CC											
DE	6205		**ODE**	6203							
ENCL	OPEN	**SN**									
USABLE AT	50HZ 2HP 190/380V 6.2/3.1A										SF1.0

AC Induction Motor Performance Data
Record # 57243
Typical performance - not guaranteed values

Winding: 35WGS254-R009	**Type:** 3524M	**Enclosure:** OPEN

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			2	**Full Load Torque**	3 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			5.2/2.6	**Breakdown Torque**	11.6 LB-FT
R.P.M.			3450	**Pull-up Torque**	8.2 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	10.7 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	18.8 A
Service Factor (S.F.)			1.15	**No-load Current**	1 A
NEMA Nom. Eff.	85.5	**Power Factor**	85	**Line-line Res. @ 25ºC**	8.08 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	36°C
S.F. Amps				**Temp. Rise @ S.F. Load**	43°C
				Locked-rotor Power Factor	53.6
				Rotor inertia	0.0657 LB-FT2

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	54	73	82	86	88	88	87
Efficiency	78.2	84.9	86.2	85.8	84.5	82.9	85
Speed	3566	3536	3504	3469	3429	3387	3445
Line amperes	1.2	1.6	2.1	2.6	3.2	3.8	3

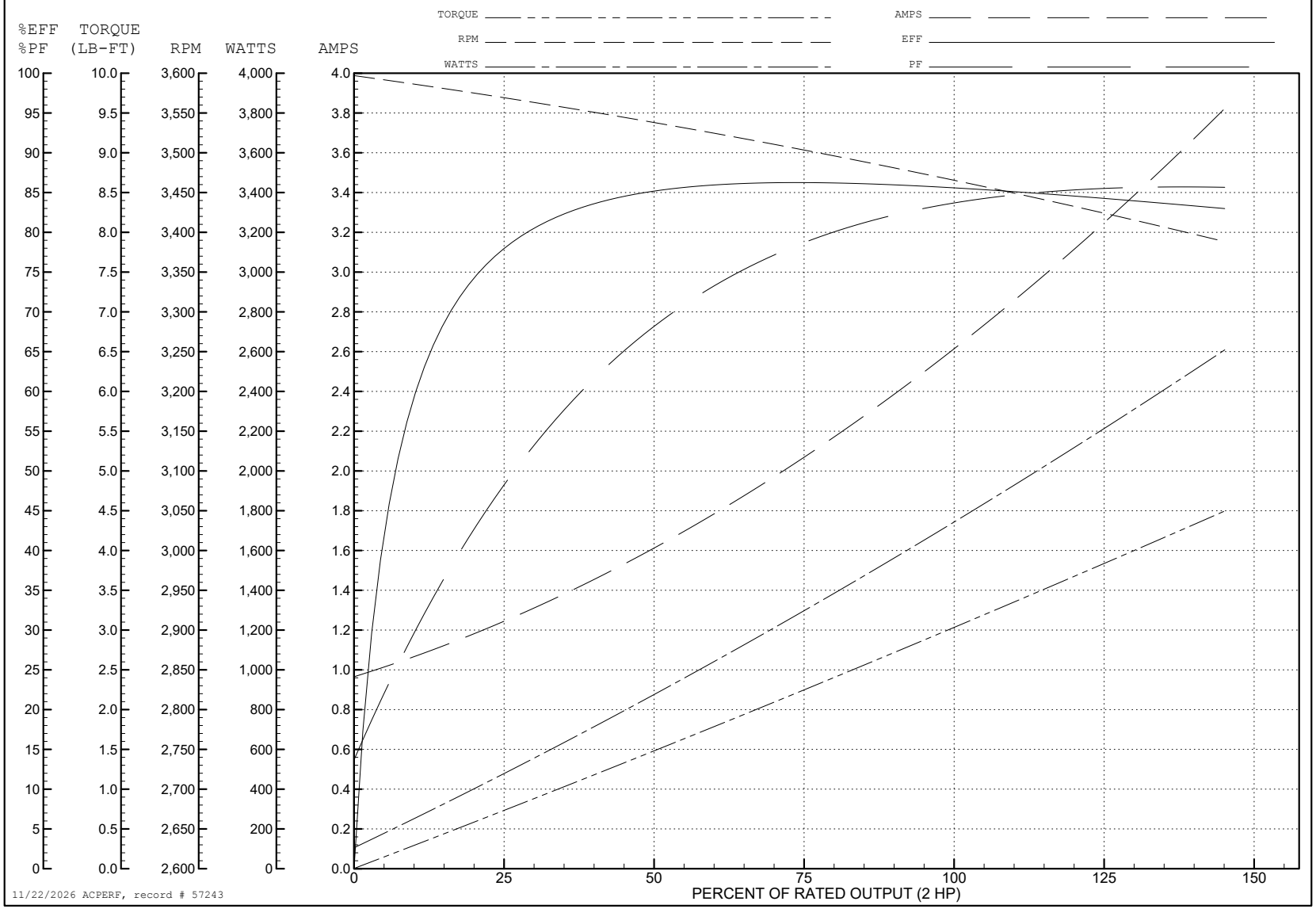
ABB Motors and Mechanical Inc.

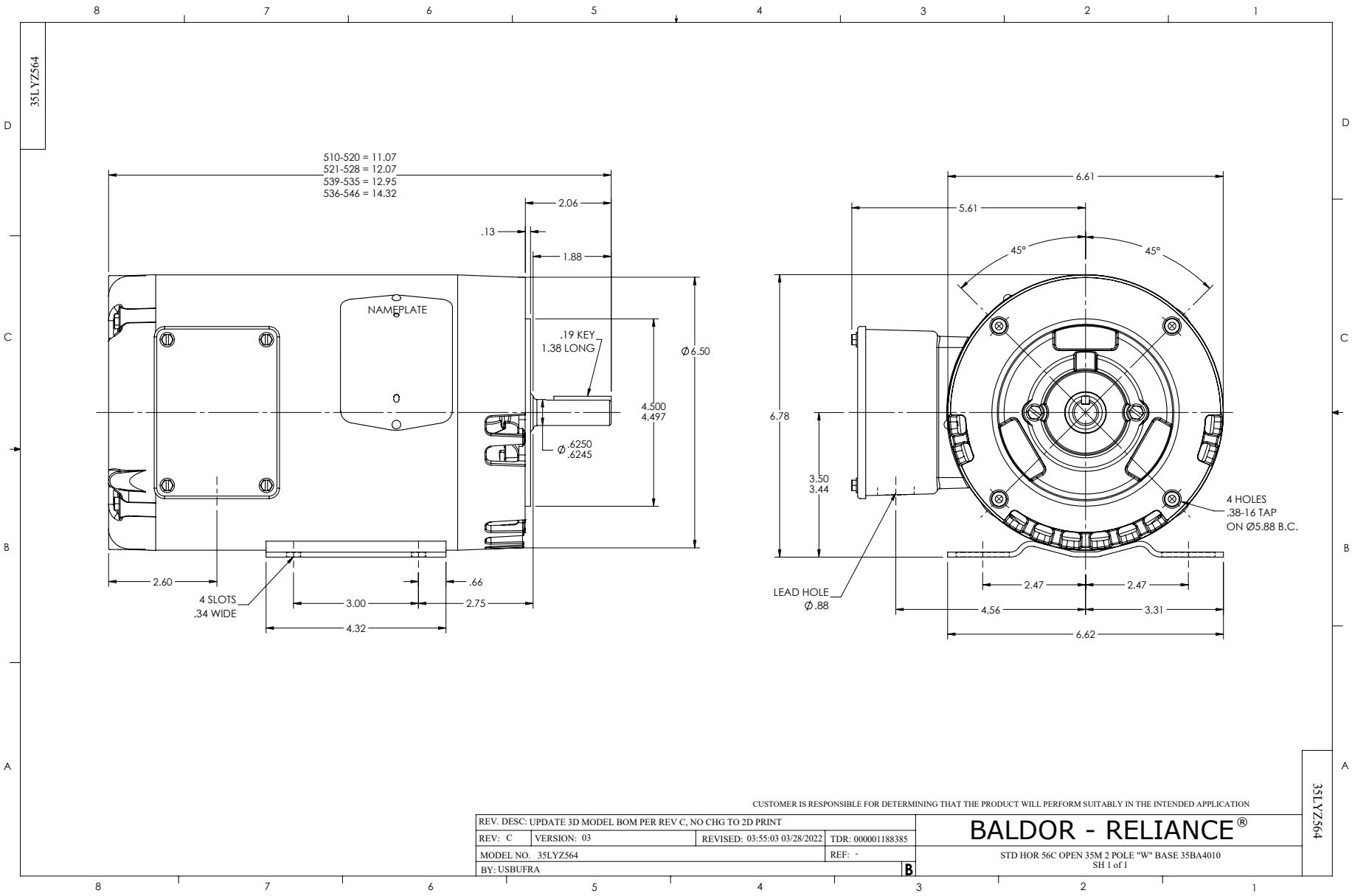
WINDING # 35WGS254

2 HP 3 PH 60 HZ 3450 RPM 460 V 3524M

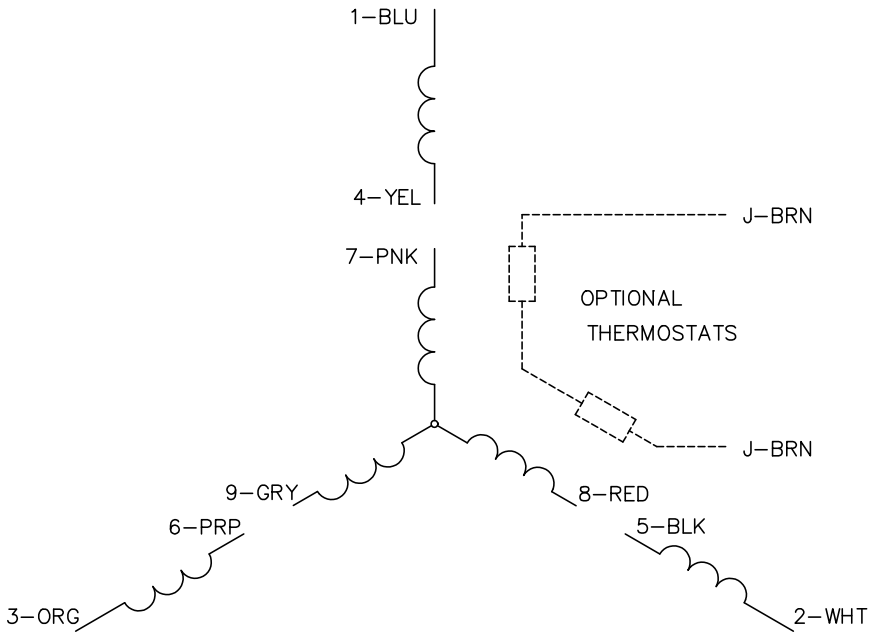
Typical performance - not guaranteed values.

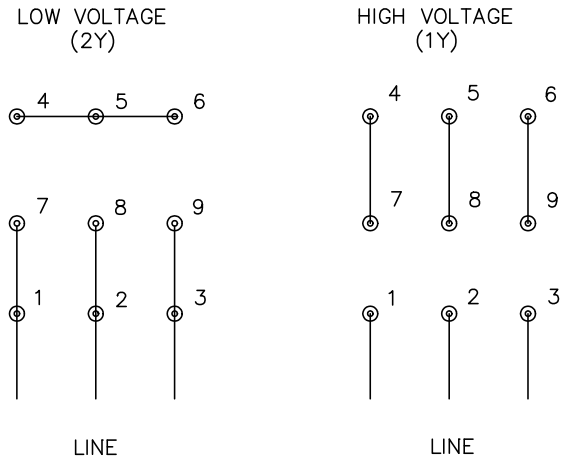
TORQUES(LB-FT): PO=11.6 PU=8.2 LR=10.7 LRA=18.8




35LYZ564
510-520 = 11.07
521-528 = 12.07
539-535 = 12.95
536-546 = 14.32
2.06
.13
1.88
NAMEPLATE
.19 KEY
1.38 LONG
Ø6.50
4.500
4.497
Ø .6250
Ø .6245
2.60
4 SLOTS
.34 WIDE
3.00
2.75
.66
4.32
6.61
5.61
45°
45°
6.78
3.50
3.44
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
LEAD HOLE
Ø .88
2.47
2.47
4.56
3.31
6.62
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV C, NO CHG TO 2D PRINT
REV: C
VERSION: 03
REVISED: 03:55:03 03/28/2022
TDR: 000001188385
MODEL NO. 35LYZ564
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
STD HOR 56C OPEN 35M 2 POLE "W" BASE 35BA4010
SH 1 of 1
35LYZ564

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