ABB BALDOR RELIANCE

Customer information packet

CEM31115-G

1HP, 3500RPM, 3PH, 60HZ, 56C, OPSB, F1
Class - None
Division - Not Applicable

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11/16/2026 6:41:38 AM

Specifications

Enclosure	OPSB
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	1.000 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	CSA
	CSA EEV
	NEMA PREMIUM
	UR
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	2.900 A @ 230.0 V
	1.450 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGP987
Layout	35LYZ614
Eff. date	01-02-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	03-09-2020

Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3512M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.06 IN
Power Factor	80
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	3500 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

NP3553LUA										
CAT.NO.	CEM31115-G									
SPEC.	35-0000-0669									
HP	1									
VOLTS	230/460									
AMPS	2.9/1.45									
RPM	3500									
FRAME	56C	**HZ**	60			**PH**	3			
SF	1.15	**CODE**	K	**DES**	B	**CLASS**	H			
NEMA NOM. EFF	78.5	**PF**	80							
RATING	40C AMB-CONT									
CC	010A									
ENCL	OPSB	**SN**								
DE	6205	**ODE**	6203							
VPWM INVERTER READY										
CT30-60(2:1) VT3-60(20:1)										
USABLE AT	50HZ 1HP 190/380V 3.4/1.9A									SF1.0

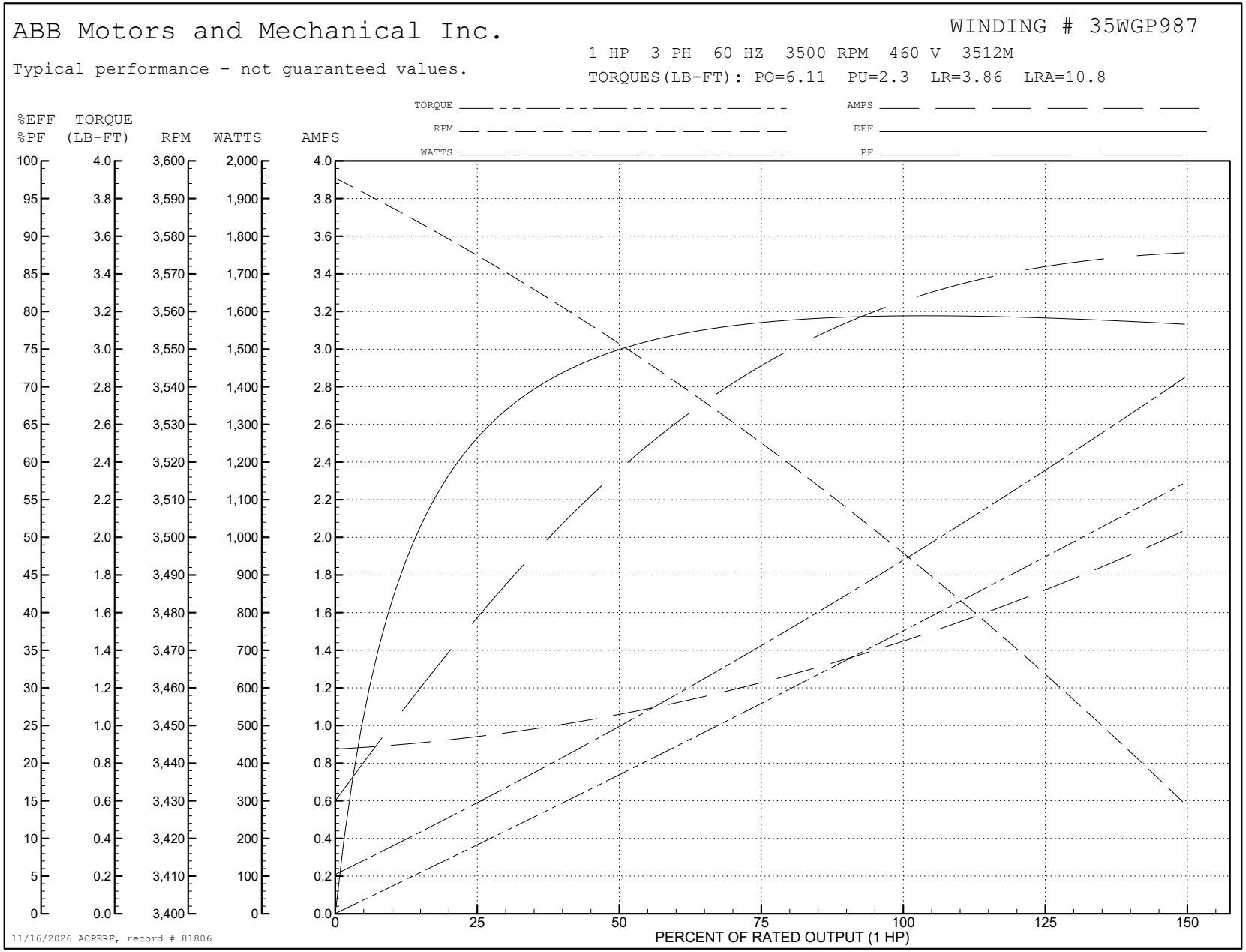
AC Induction Motor Performance Data
Record # 81806
Typical performance - not guaranteed values

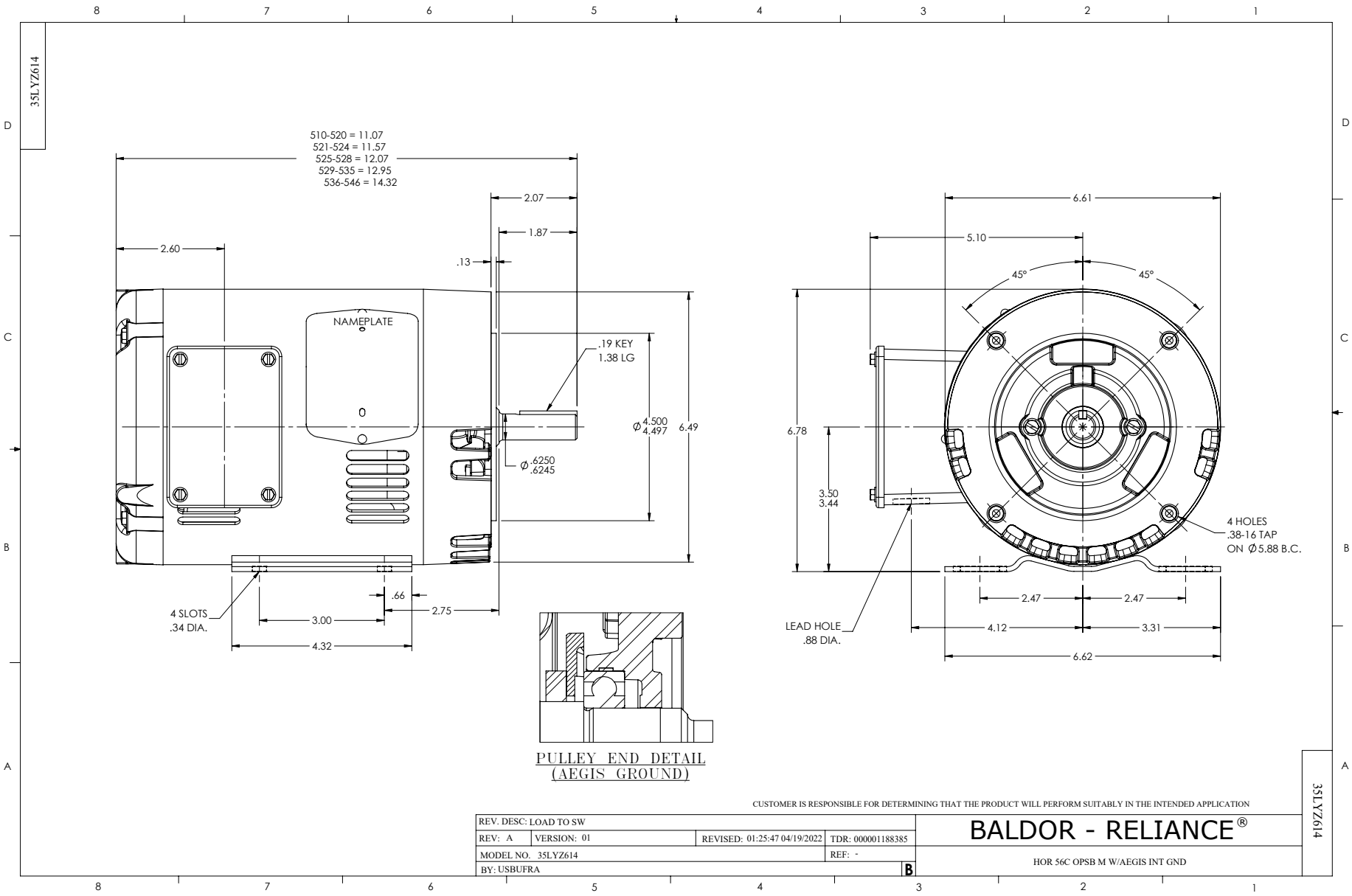
Winding: 35WGP987-R008	**Type:** 3512M	**Enclosure:** OPEN

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	1.47 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			2.9/1.45	**Breakdown Torque**	6.11 LB-FT
R.P.M.			3500	**Pull-up Torque**	2.3 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	3.86 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	10.8 A
Service Factor (S.F.)			1.15	**No-load Current**	0.883 A
NEMA Nom. Eff.	78.5	**Power Factor**	80	**Line-line Res. @ 25ºC**	19.3 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	31°C
S.F. Amps				**Temp. Rise @ S.F. Load**	35°C
				Locked-rotor Power Factor	66
				Rotor inertia	0.0332 LB-FT2

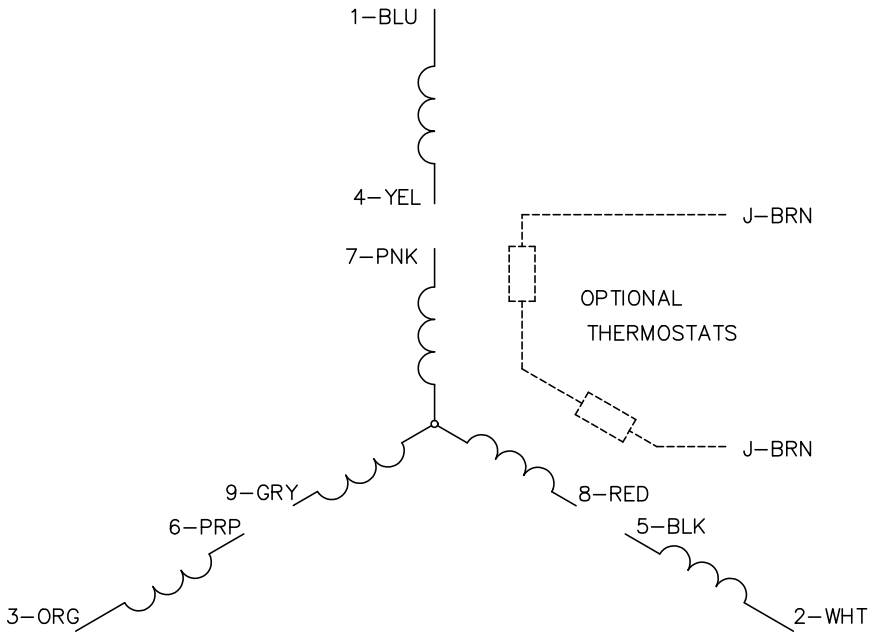
Load Characteristics 460 V, 60 Hz, 1 HP

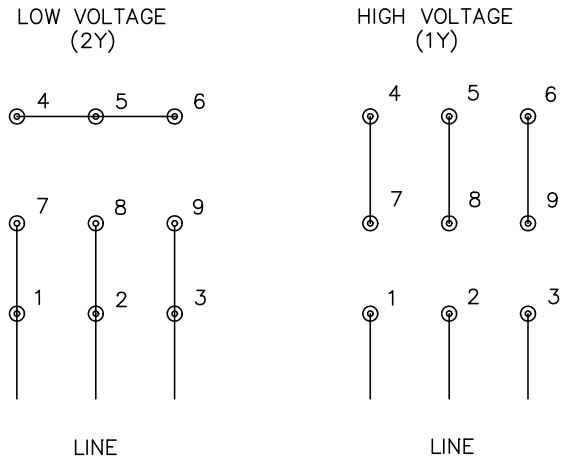
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	39	58	72	80	85	88	83
Efficiency	62.2	74.4	78.5	79.2	79.4	78.1	79.3
Speed	3575	3552	3527	3499	3464	3429	3478
Line amperes	0.931	1.04	1.22	1.44	1.72	2.03	1.61


ABB Motors and Mechanical Inc.
WINDING # 35WGP987
Typical performance - not guaranteed values.
1 HP 3 PH 60 HZ 3500 RPM 460 V 3512M
TORQUES(LB-FT): PO=6.11 PU=2.3 LR=3.86 LRA=10.8
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1 HP)
11/16/2026 ACPERF, record # 81806


35LYZ614
510-520 = 11.07
521-524 = 11.57
525-528 = 12.07
529-535 = 12.95
536-546 = 14.32
2.07
1.87
2.60
.13
NAMEPLATE
.19 KEY
1.38 LG
Ø 4.500
4.497
6.49
Ø .6250
.6245
.66
2.75
4 SLOTS
.34 DIA.
3.00
4.32
6.61
5.10
45°
45°
6.78
3.50
3.44
4 HOLES
.38-16 TAP
ON Ø 5.88 B.C.
2.47
2.47
LEAD HOLE
.88 DIA.
4.12
3.31
6.62
PULLEY END DETAIL
(AEGIS GROUND)
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD TO SW
REV: A
VERSION: 01
REVISED: 01:25:47 04/19/2022
TDR: 000001188385
MODEL NO. 35LYZ614
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HOR 56C OPSB M W/AEGIS INT GND
35LYZ614

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