ABB BALDOR RELIANCE

Customer information packet

VEM3561T

3HP, 1764RPM, 3PH, 60HZ, 145TC, 3630M, TEFC, F1
Class - None
Division - Not Applicable

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11/5/2026 4:37:14 PM

Specifications

Enclosure	TEFC
Frame	145TC
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	3.000 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	CURUSEEV
	NEMA PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	4.160 A @ 460.0 V
	8.320 A @ 230.0 V
	8.800 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	4.2 a

Part Detail

Revision	C
Type	AC
Mech. spec.	36J231
Base	
Status	PRD/A
Elec. spec.	36WGZ650
Layout	36LYJ231
Eff. date	04-16-2026
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	11-05-2025

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3630M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.68 IN
Power Factor	74
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1764 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

NP3441LUA										
CAT.NO.	VEM3561T									
SPEC	36J231Z650									
HP	3									
VOLTS	230/460									
AMPS	8.4/4.2									
RPM	1765									
FRAME	145TC	**HZ**	60	**PH**	3					
SF	1.15	**CODE**	K	**DES**	B	**CLASS**	F			
NEMA NOM. EFF	89.5	**PF**	74							
RATING	40C AMB-CONT									
CC	010A									
ENCL	TEFC	**SER**								
DE	6206	**ODE**	6205							
VPWM INVERTER READY	SFA 9.28/4.64									
CT6-60H(10:1)VT3-60H(20:1										
	50HZ 3HP 190/380V 9.6/4.8A									SF1.0

AC Induction Motor Performance Data
Record # 115759
Typical performance - not guaranteed values

Winding: 36WGZ650-R001	**Type:** 3630M	**Enclosure:** TEFC

Nameplate Data			
Rated Output (HP)			3
Volts			230/460
Full Load Amps			8.4/4.2
R.P.M.			1765
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	K
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	89.5	**Power Factor**	74
Rating - Duty			40C AMB-CONT
S.F. Amps			9.4/4.7

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	8.942 LB-FT
Start Configuration	direct on line
Breakdown Torque	38.2 LB-FT
Pull-up Torque	19.1 LB-FT
Locked-rotor Torque	22.4 LB-FT
Starting Current	32.2 A
No-load Current	2.38 A
Line-line Res. @ 25ºC	3.8717 Ω
Temp. Rise @ Rated Load	46°C
Temp. Rise @ S.F. Load	56°C
Locked-rotor Power Factor	42.6
Rotor inertia	0.279 lb-ft²

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	33	54	67	74	79	81	77
Efficiency	82.2	88.4	89.8	89.8	89	87.9	89.3
Speed	1790.7	1781.4	1771.4	1761.2	1749.9	1738.7	1754
Line amperes	2.54	2.94	3.51	4.2	4.99	5.87	4.67

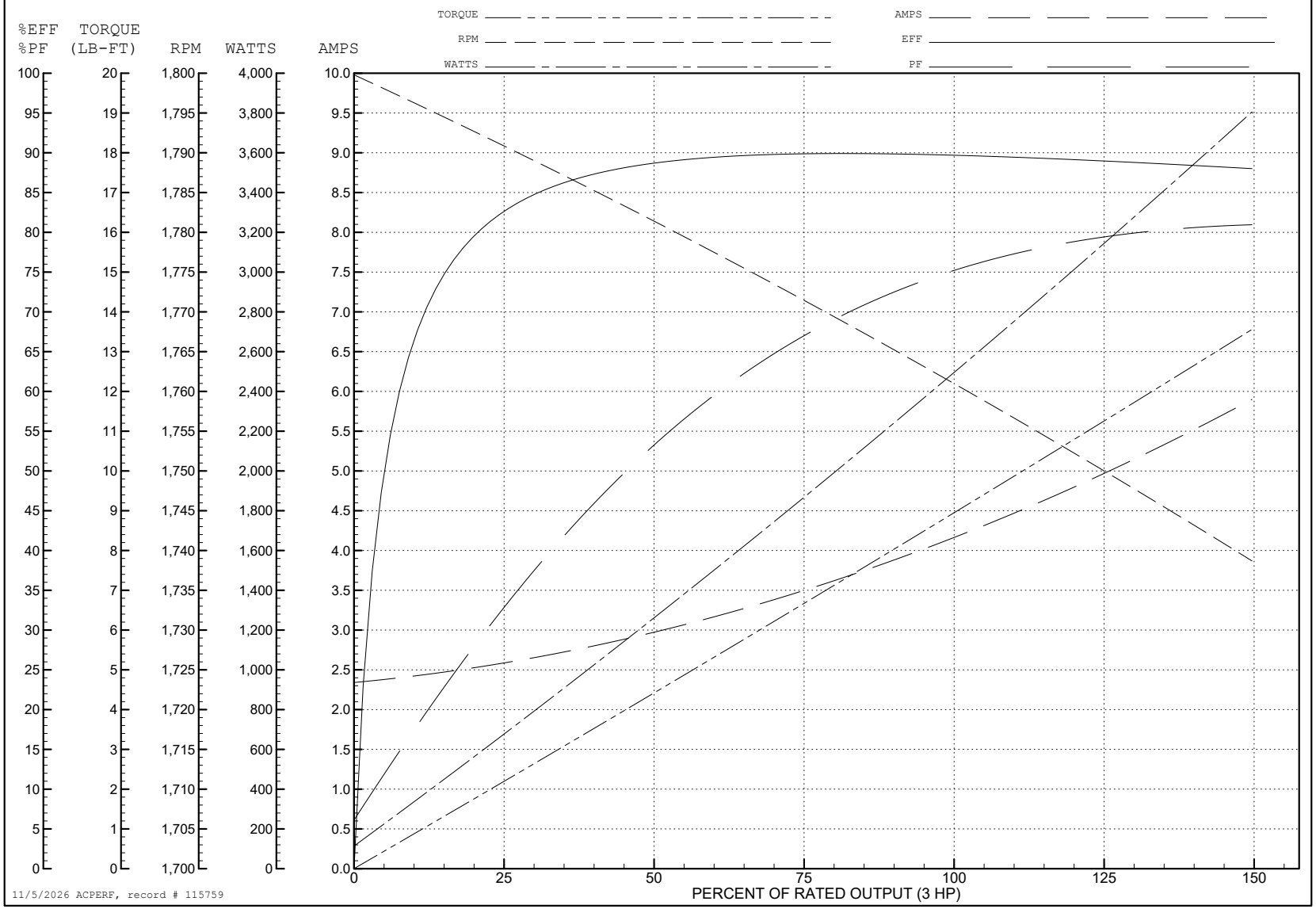
ABB Motors and Mechanical Inc.

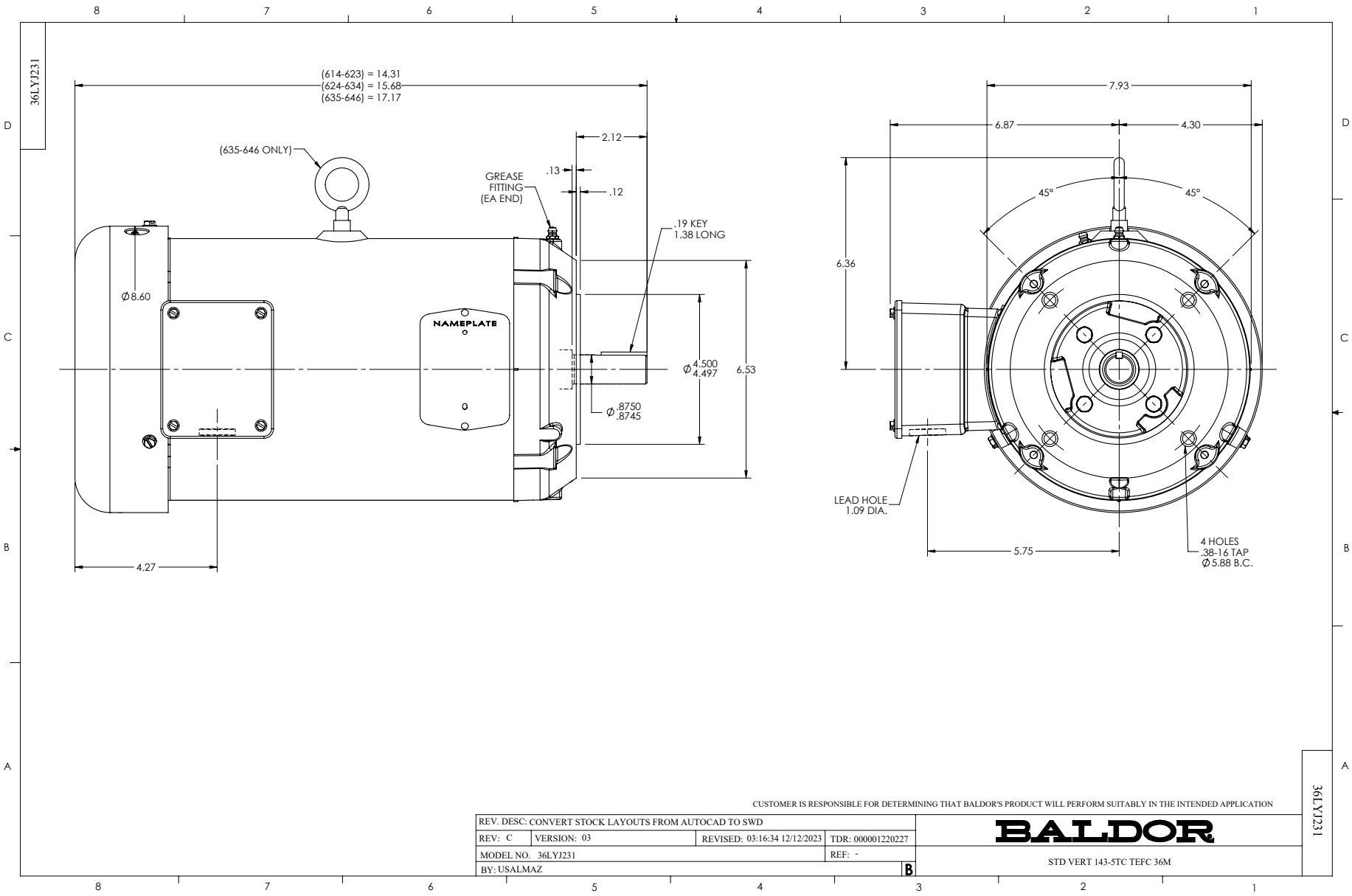
WINDING # 36WGZ650

3 HP 3 PH 60 HZ 1765 RPM 460 V 3630M

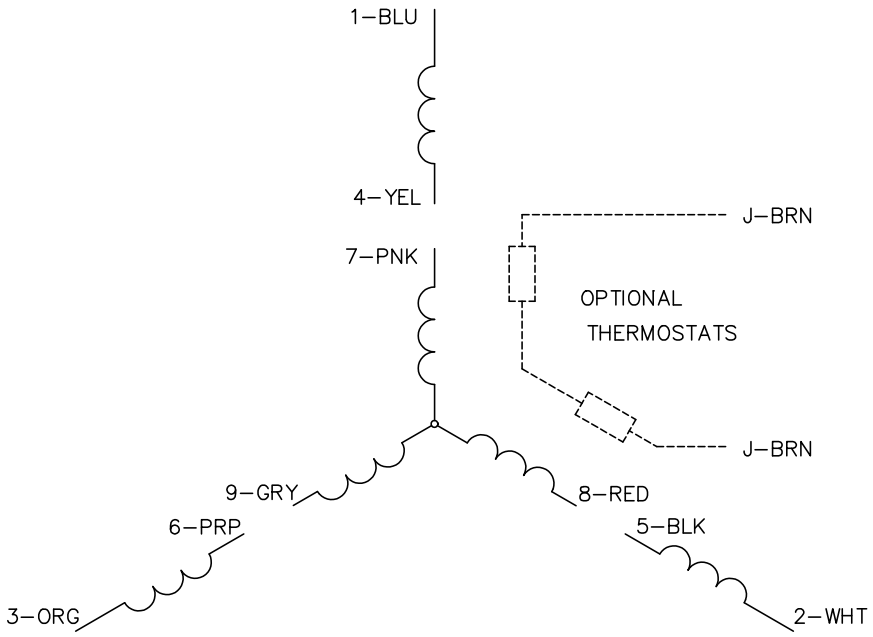
Typical performance - not guaranteed values.

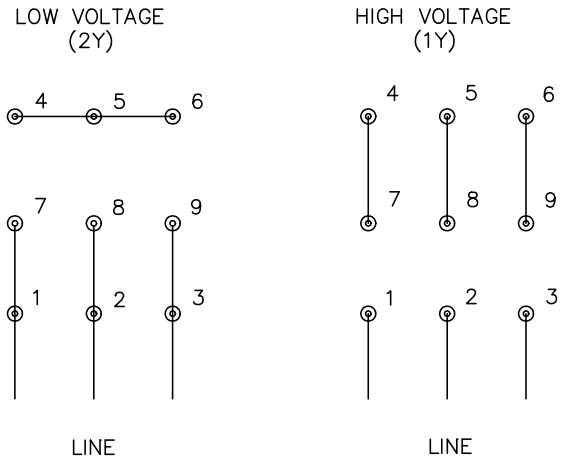
TORQUES(LB-FT): PO=38.2 PU=19.1 LR=22.4 LRA=32.2




36LYJ231
(614-623) = 14.31
(624-634) = 15.68
(635-646) = 17.17
(635-646 ONLY)
GREASE FITTING (EA END)
2.12
.13
.12
.19 KEY
1.38 LONG
Ø8.60
NAMEPLATE
Ø4.500
4.497
6.53
Ø.8750
.8745
4.27
7.93
6.87
4.30
45°
45°
6.36
LEAD HOLE
1.09 DIA.
5.75
4 HOLES
.38-16 TAP
Ø5.88 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT STOCK LAYOUTS FROM AUTOCAD TO SWD
REV: C
VERSION: 03
REVISED: 03:16:34 12/12/2023
TDR: 000001220227
MODEL NO. 36LYJ231
REF: -
BY: USALMAZ
B
BALDOR
STD VERT 143-5TC TEFC 36M
36LYJ231

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