ABB BALDOR RELIANCE

Customer information packet

VEM3542

.75HP, 1765RPM, 3PH, 60HZ, 56C, 3514M, TEFC, F1
Class - None
Division - Not Applicable

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9/7/2026 10:00:19 AM

Specifications

Enclosure	TEFC
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	.750 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
	208.0 V @ 60 HZ
Agency Approvals	C UR US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.420 A @ 230.0 V
	2.420 A @ 208.0 V
	1.210 A @ 460.0 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	1.2 a

Part Detail

Revision	H
Type	AC
Mech. spec.	35J302
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYJ302
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	07-16-2021

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	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	12.23 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
RoHS Status	ROHS COMPLIANT
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

NP2116L											
CAT.NO.	VEM3542										
SPEC.	35J302G069G1										
HP	.75										
VOLTS	208-230/460										
AMP	2.42/1.21										
RPM	1765										
FRAME	56C		**HZ**	60		**PH**	3				
SER.F.	1.25	**CODE**	K	**DES**	B	**CL**	F				
NEMA-NOM-EFF	82.5	**PF**	74								
RATING	40C AMB-CONT										
CC											
DE	6205	**ODE**	6203								
ENCL	TEFC	**SN**									
	SFA 2.86-2.68/1.34										

AC Induction Motor Performance Data
Record # 82185
Typical performance - not guaranteed values

Winding: 35WGG069-R003	**Type:** 3514M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.75	**Full Load Torque**	2.24 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			2.42/1.21	**Breakdown Torque**	8 LB-FT
R.P.M.			1765	**Pull-up Torque**	4.4 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	5.1 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	8.4 A
Service Factor (S.F.)			1.25	**No-load Current**	0.85 A
NEMA Nom. Eff.	82.5	**Power Factor**	74	**Line-line Res. @ 25ºC**	30.3 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	36°C
S.F. Amps			2.9-2.8/1.4	**Temp. Rise @ S.F. Load**	45°C
				Locked-rotor Power Factor	66.8
				Rotor inertia	0.101 lb-ft²

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	30	48	61	70	77	81	80
Efficiency	68.4	79	82.2	82.9	82.4	81.2	82.8
Speed	1791	1783	1775	1766	1757	1746	1752
Line amperes	0.87	0.95	1.06	1.21	1.4	1.61	1.34

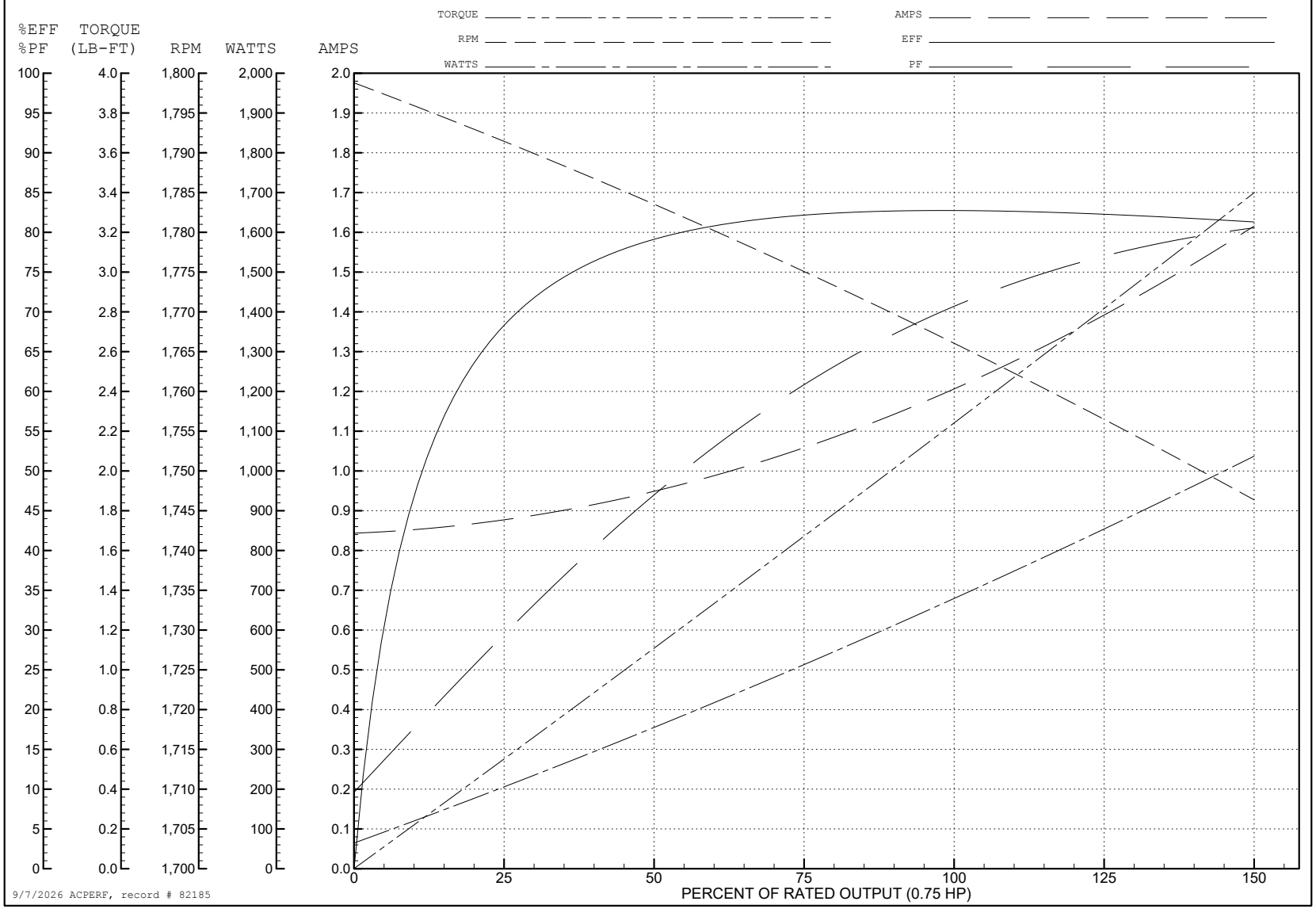
ABB Motors and Mechanical Inc.

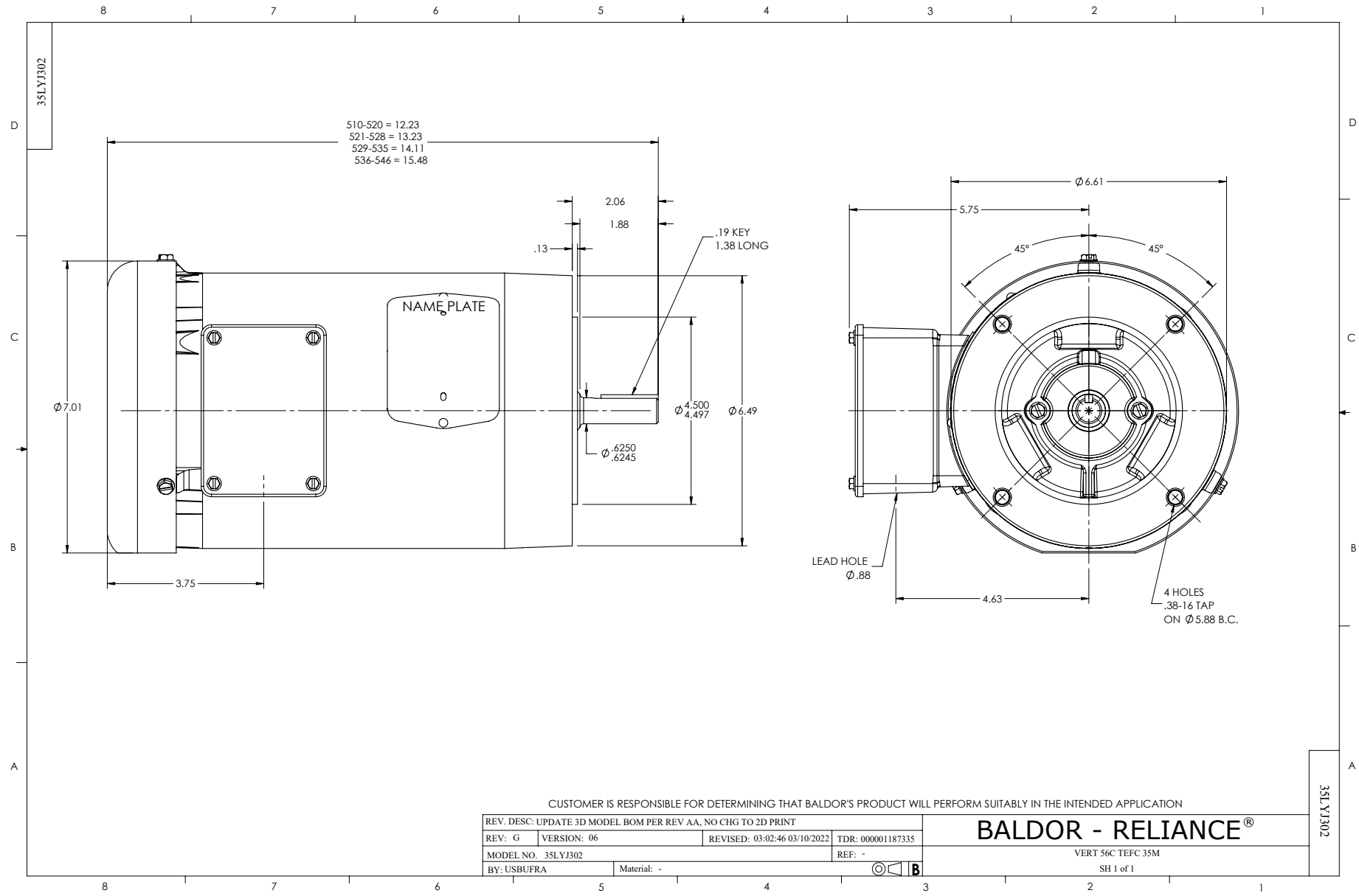
WINDING # 35WGG069

0.75 HP 3 PH 60 HZ 1765 RPM 460 V 3514M

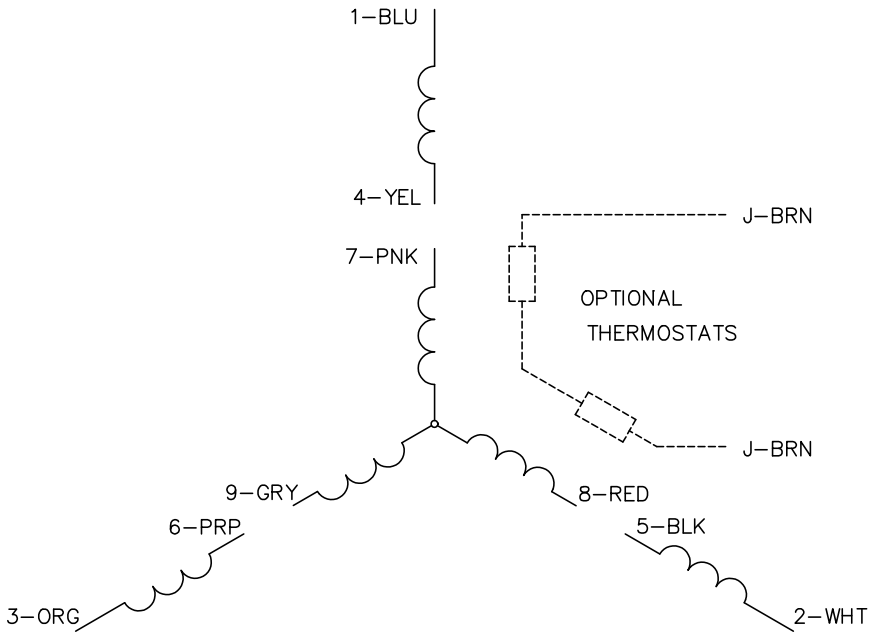
Typical performance - not guaranteed values.

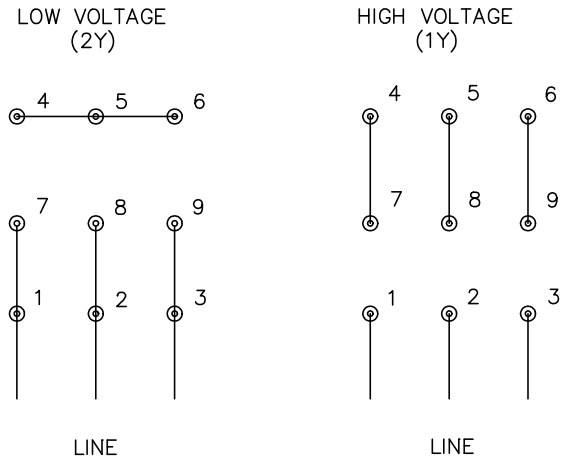
TORQUES(LB-FT): PO=8 PU=4.4 LR=5.1 LRA=8.4




35LYJ302
510-520 = 12.23
521-528 = 13.23
529-535 = 14.11
536-546 = 15.48
2.06
1.88
.13
.19 KEY
1.38 LONG
NAME PLATE
Ø7.01
Ø4.500
4.497
Ø6.49
Ø.6250
.6245
3.75
Ø6.61
5.75
45°
45°
LEAD HOLE
Ø.88
4.63
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV AA, NO CHG TO 2D PRINT
REV: G
VERSION: 06
REVISED: 03:02:46 03/10/2022
TDR: 000001187335
MODEL NO. 35LYJ302
REF: -
BY: USBUFRA
Material: -
B
BALDOR - RELIANCE®
VERT 56C TEFC 35M
SH 1 of 1
35LYJ302

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