BALDOR • RELIANCE

Customer information packet

VEM3542

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

9/12/2024 7:56:23 PM

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	CSA
	UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary 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

Part detail

Revision	G
Type	AC
Mech. spec.	35J302
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYJ302
Eff. date	04-30-2024
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	07-16-2021

High Voltage Full Load Amps	1.2 a
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			
Rated Output (HP)			.75
Volts			208-230/460
Full Load Amps			2.42/1.21
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			2.9-2.8/1.4

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	2.24 LB-FT
Start Configuration	direct on line
Breakdown Torque	8 LB-FT
Pull-up Torque	4.4 LB-FT
Locked-rotor Torque	5.1 LB-FT
Starting Current	8.4 A
No-load Current	0.85 A
Line-line Res. @ 25ºC	30.3 Ω
Temp. Rise @ Rated Load	36°C
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

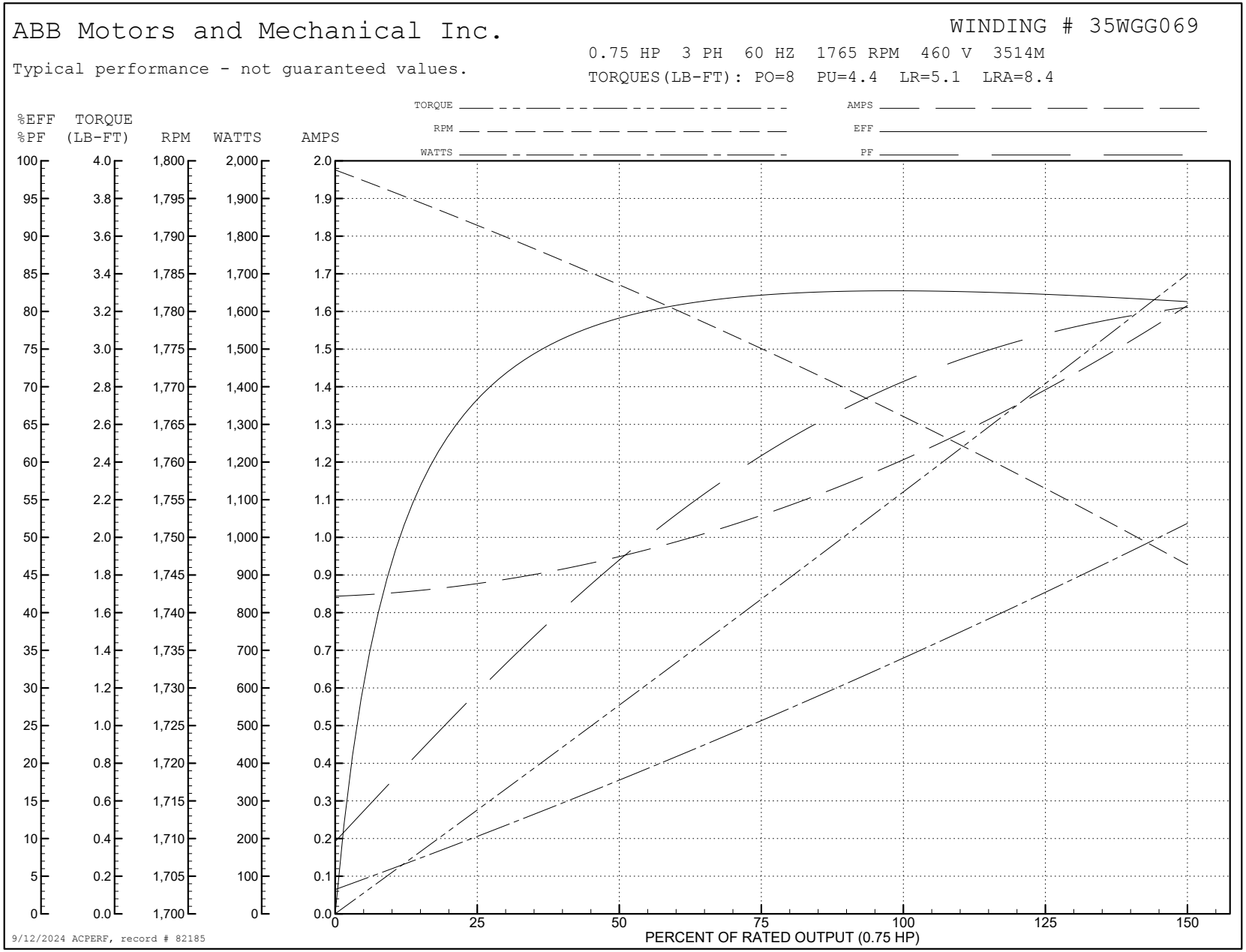
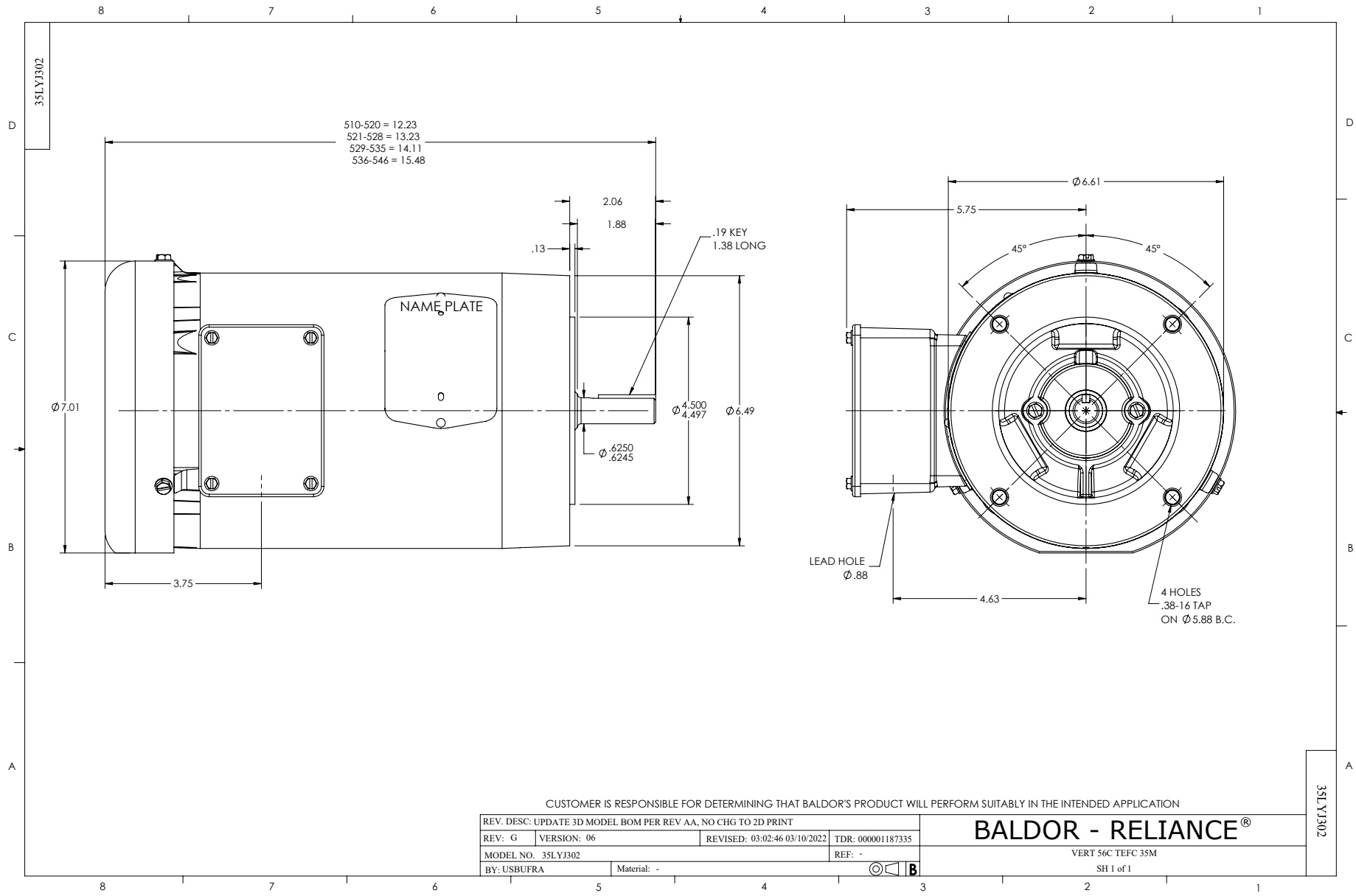
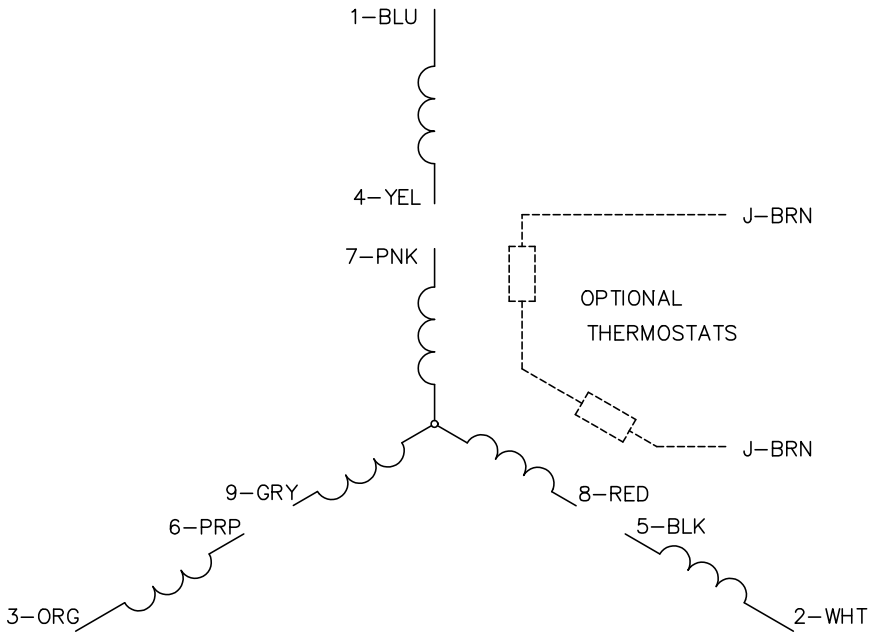
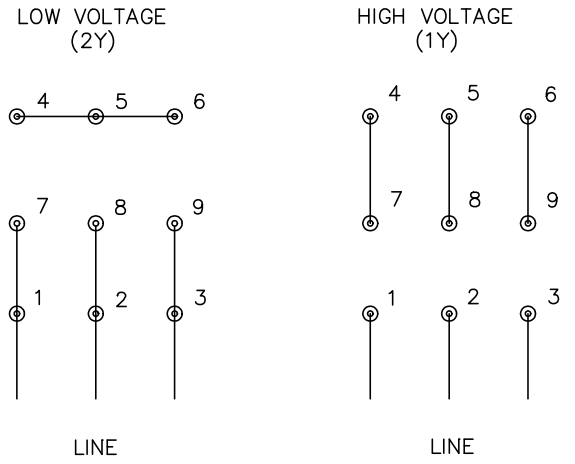


ABB Motors and Mechanical Inc.
WINDING # 35WGG069
Typical performance - not guaranteed values.
0.75 HP 3 PH 60 HZ 1765 RPM 460 V 3514M
TORQUES(LB-FT): PO=8 PU=4.4 LR=5.1 LRA=8.4
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.75 HP)
9/12/2024 ACPERF, record # 82185


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