Customer information packet

VEM3538-5

.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TEFC, N
Class - None
Division - Not Applicable

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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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 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	.770 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs

Part Detail

Revision	B
Type	AC
Mech. spec.	35J302
Base	
Status	PRD/A
Elec. spec.	35WGG200
Layout	35LYJ302
Eff. date	04-30-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	12-20-2023

Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3512M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.23 IN
Power Factor	62
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	1770 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.	VEM3538-5											
SPEC.	35J302G200G1											
HP	.5											
VOLTS	575											
AMP	.77											
RPM	1770											
FRAME	56C			**HZ**	60			**PH**	3			
SER.F.	1.25	**CODE**	M		**DES**	B	**CL**	F				
NEMA-NOM-EFF	80	**PF**	62									
RATING	40C AMB-CONT											
CC												
DE	6205		**ODE**	6203								
ENCL	TEFC	**SN**										
	SFA .87											

AC Induction Motor Performance Data
Record # 87485
Typical performance - not guaranteed values

Winding: 35WGG200-R004	**Type:** 3512M	**Enclosure:** TENV

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			.5	**Full Load Torque**	1.49 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			.77	**Breakdown Torque**	6.26 LB-FT
R.P.M.			1770	**Pull-up Torque**	3.25 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	4.02 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	5.36 A
Service Factor (S.F.)			1.25	**No-load Current**	0.636 A
NEMA Nom. Eff.	80	**Power Factor**	62	**Line-line Res. @ 25ºC**	68 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	29°C
S.F. Amps			.87	**Temp. Rise @ S.F. Load**	34°C
				Locked-rotor Power Factor	71
				Rotor inertia	0.0866 lb-ft²

Load Characteristics 575 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	27	41	52	62	69	75	57
Efficiency	56.2	70.6	76.3	78.9	79.9	79.8	77.6
Speed	1792	1786	1779	1771	1763	1755	1774
Line amperes	0.638	0.664	0.713	0.774	0.85	0.946	0.704

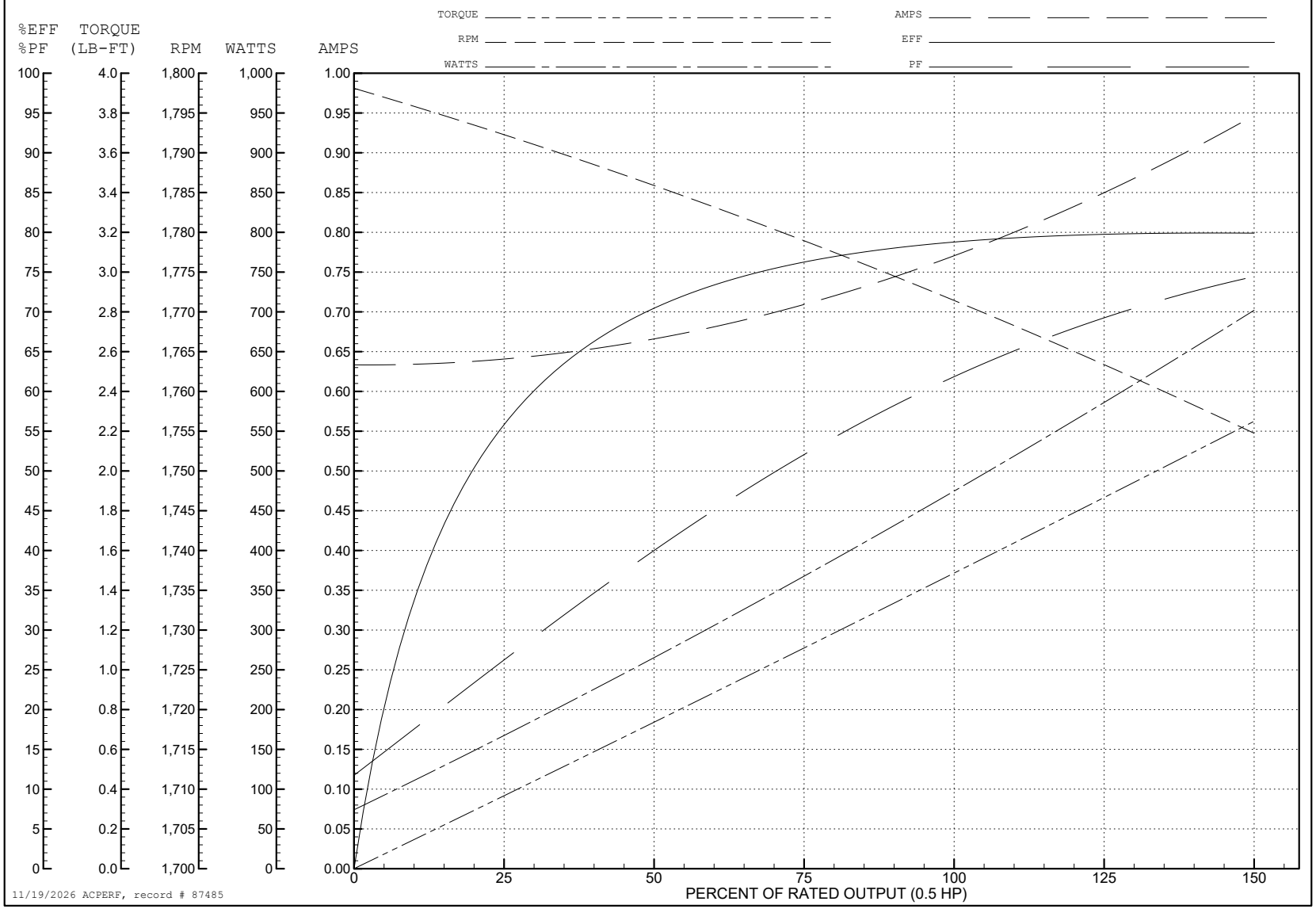
ABB Motors and Mechanical Inc.

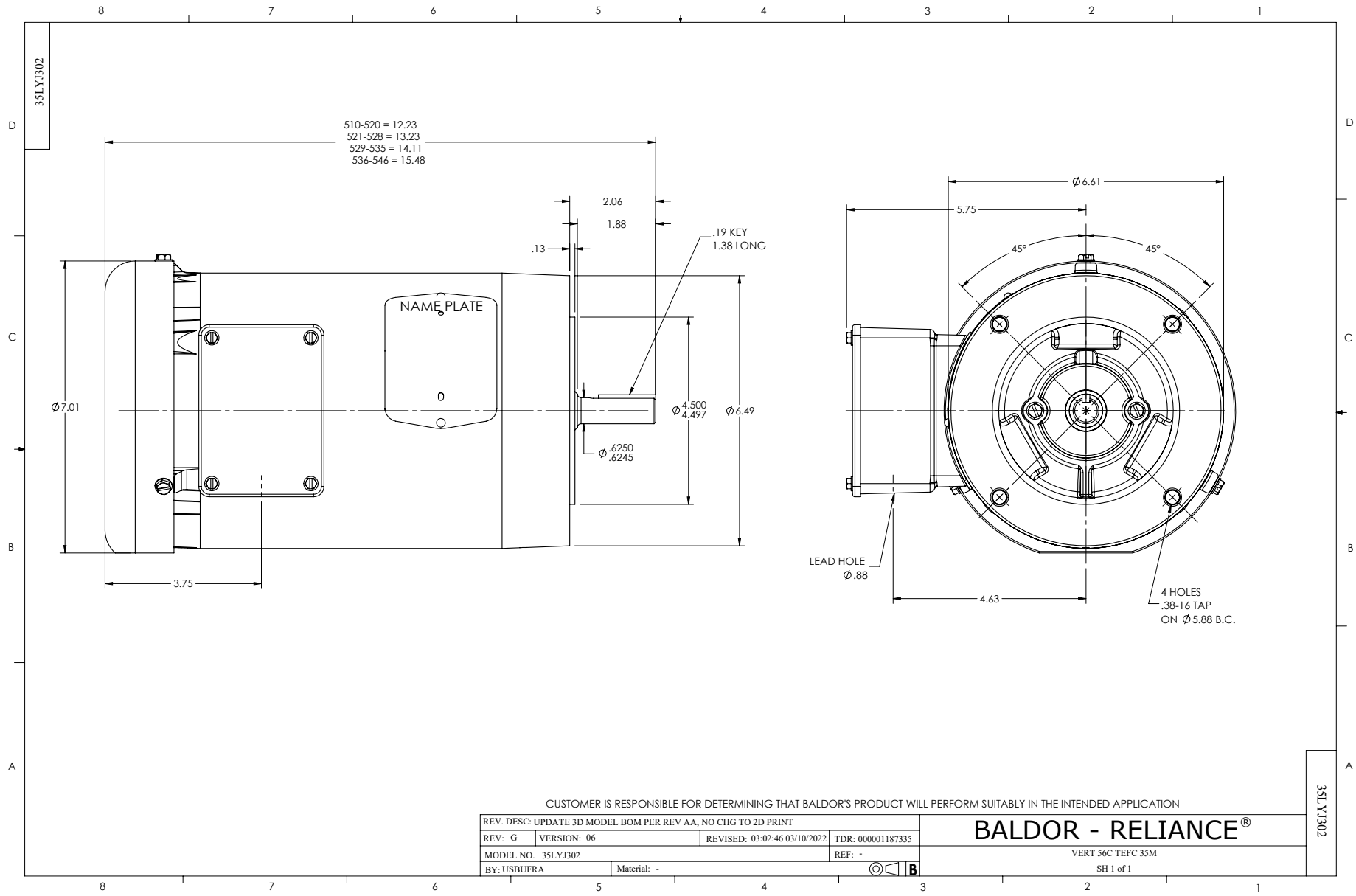
WINDING # 35WGG200

0.5 HP 3 PH 60 HZ 1770 RPM 575 V 3512M

Typical performance - not guaranteed values.

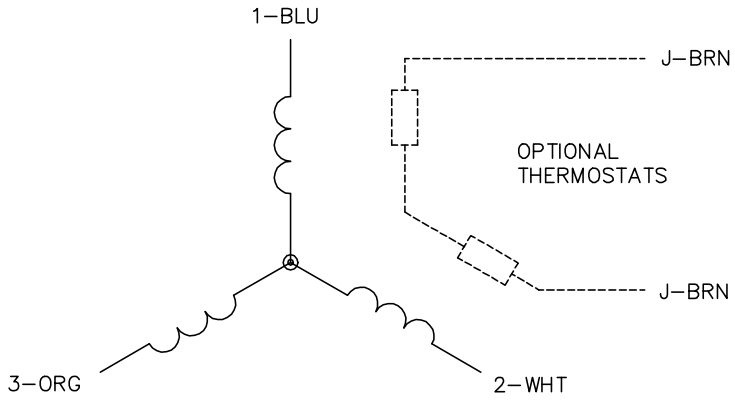
TORQUES(LB-FT): PO=6.26 PU=3.25 LR=4.02 LRA=5.36

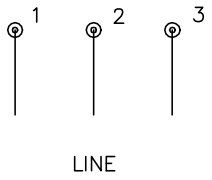



35LYJ302
510-520 = 12.23
521-528 = 13.23
529-535 = 14.11
536-546 = 15.48
2.06
1.88
.13
.19 KEY
1.38 LONG
NAME PLATE
Ø7.01
Ø4.500
4.497
Ø6.49
Ø.6250
.6245
3.75
Ø6.61
5.75
45°
45°
LEAD HOLE
Ø.88
4.63
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM 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

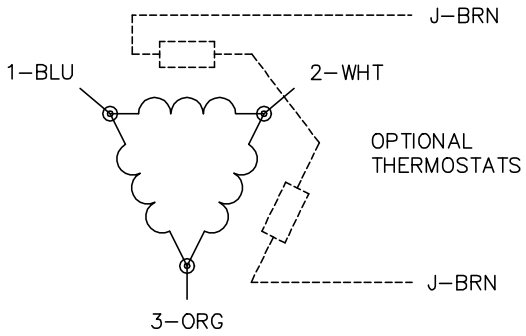
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1