Customer information packet

VEM3550T-5

1.5HP, 3500RPM, 3PH, 60HZ, 143TC, 3520M, TEFC
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	143TC
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
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	1.500 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	T
Type	AC
Mech. spec.	35AA003
Base	
Status	PRD/A
Elec. spec.	35WGM784
Layout	35LYAA003
Eff. date	04-29-2024
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	05-24-2010

KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.29 IN
Power Factor	85
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	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
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

NP3441L										
CAT.NO.	VEM3550T-5									
SPEC.	35AA003M784G1									
HP	1.5									
VOLTS	575									
AMP	1.5									
RPM	3500									
FRAME	143TC	**HZ**	60			**PH**	3			
SER.F.	1.15	**CODE**	L	**DES**	B	**CL**	F			
NEMA-NOM-EFF	84	**PF**	85							
RATING	40C AMB-CONT									
CC	010A									
DE	6205	**ODE**	6203							
ENCL	TEFC	**SN**								
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1										

AC Induction Motor Performance Data
Record # 31306
Typical performance - not guaranteed values

Winding: 35WGM784-R001	**Type:** 3520M	**Enclosure:** TEFC

Nameplate Data			**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)		1.5	**Full Load Torque**	2.22 LB-FT
Volts		575	**Start Configuration**	direct on line
Full Load Amps		1.5	**Breakdown Torque**	9.55 LB-FT
R.P.M.		3500	**Pull-up Torque**	3.64 LB-FT
Hz	60 **Phase**	3	**Locked-rotor Torque**	7.41 LB-FT
NEMA Design Code	B **KVA Code**	L	**Starting Current**	14.5 A
Service Factor (S.F.)		1.15	**No-load Current**	0.763 A
NEMA Nom. Eff.	84 **Power Factor**	85	**Line-line Res. @ 25ºC**	19.2 Ω
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	43°C
S.F. Amps			**Temp. Rise @ S.F. Load**	51°C
			Locked-rotor Power Factor	61
			Rotor inertia	0.0553 LB-FT2

Load Characteristics 575 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	44	66	78	85	89	90	87
Efficiency	72.1	82.1	84.3	84.7	84.3	82.8	84.5
Speed	3575	3552	3527	3499	3468	3434	3480
Line amperes	0.839	1.01	1.25	1.54	1.85	2.24	1.73

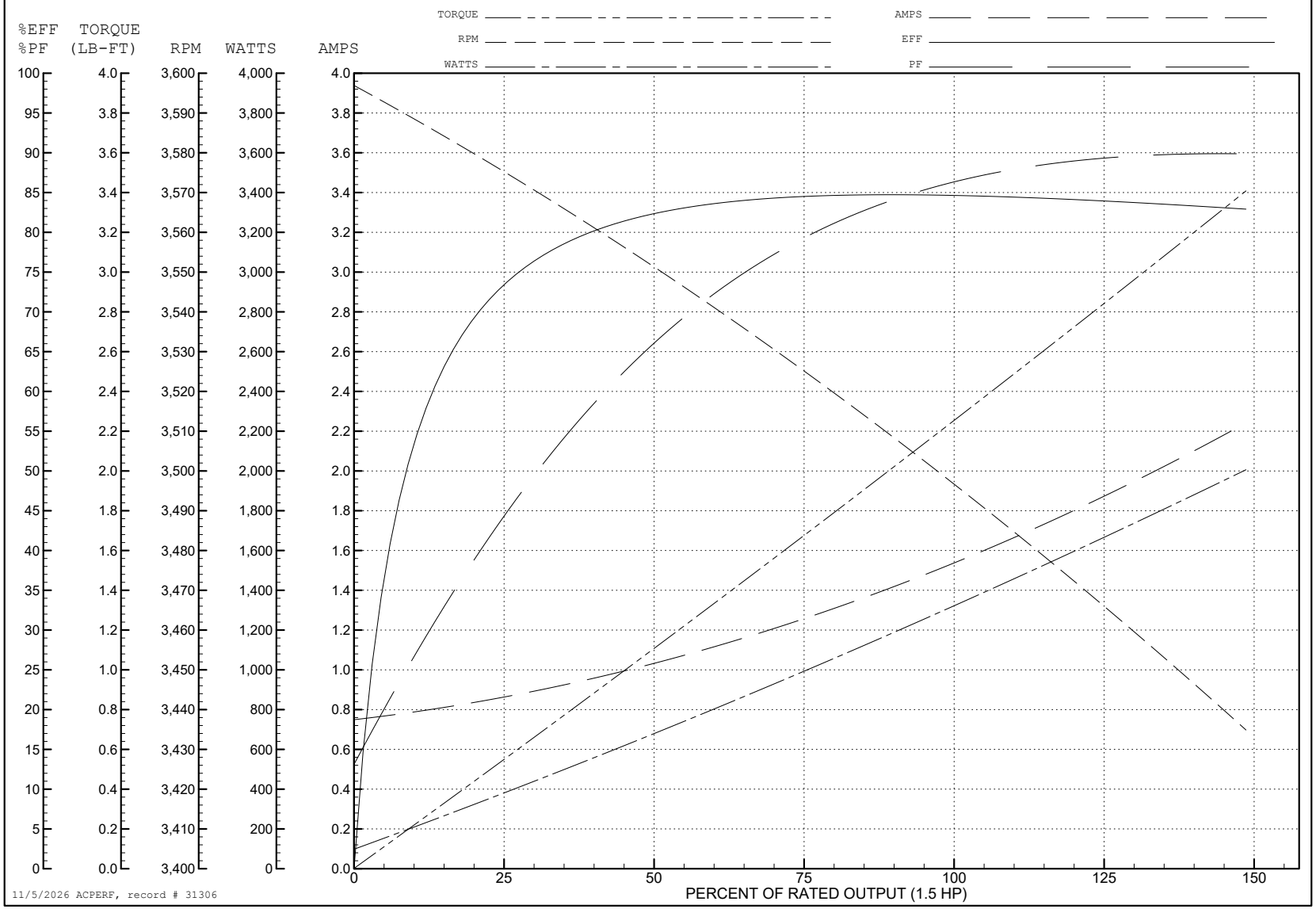
ABB Motors and Mechanical Inc.

WINDING # 35WGM784

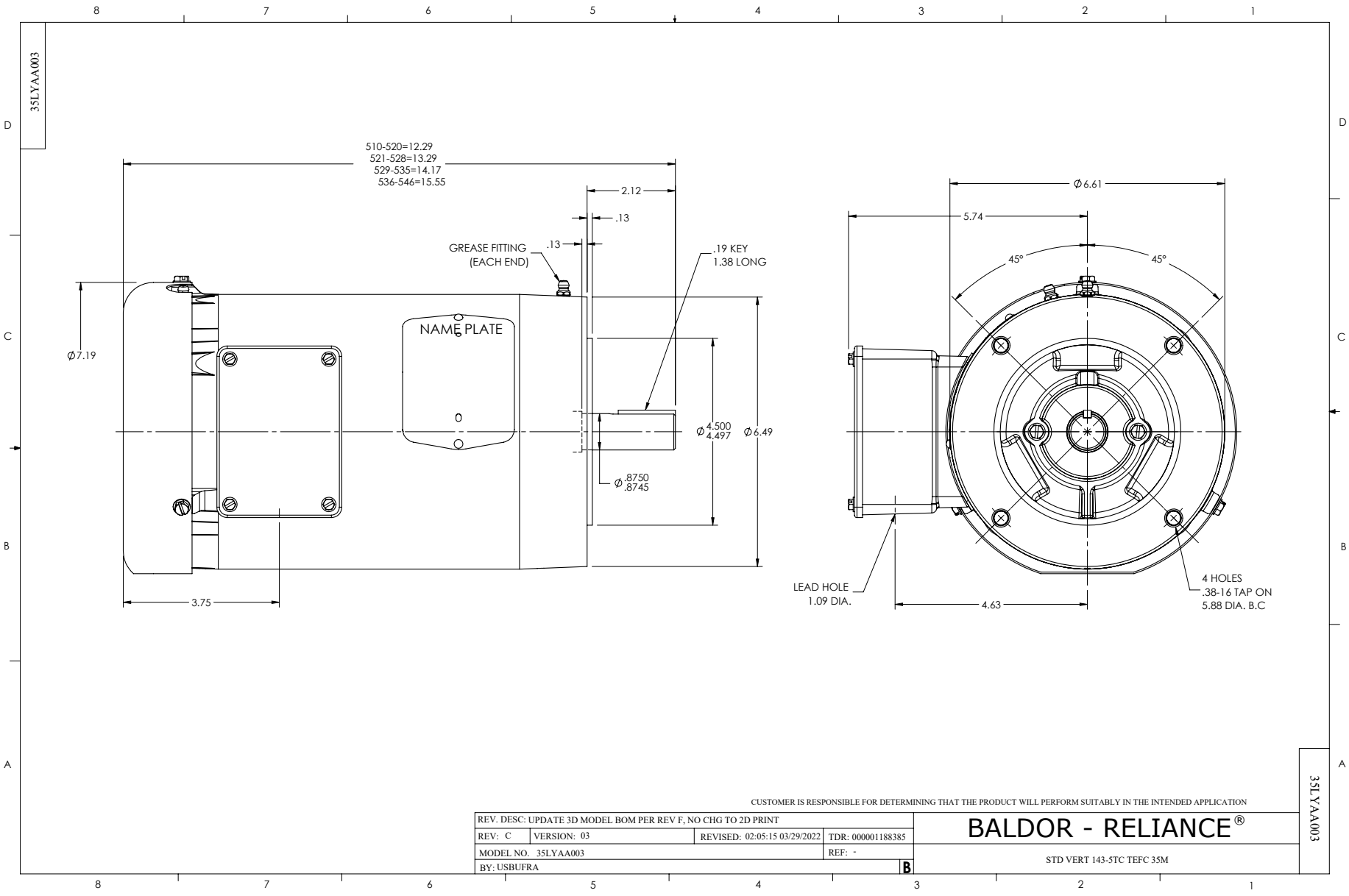
1.5 HP 3 PH 60 HZ 3500 RPM 575 V 3520M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=9.55 PU=3.64 LR=7.41 LRA=14.5

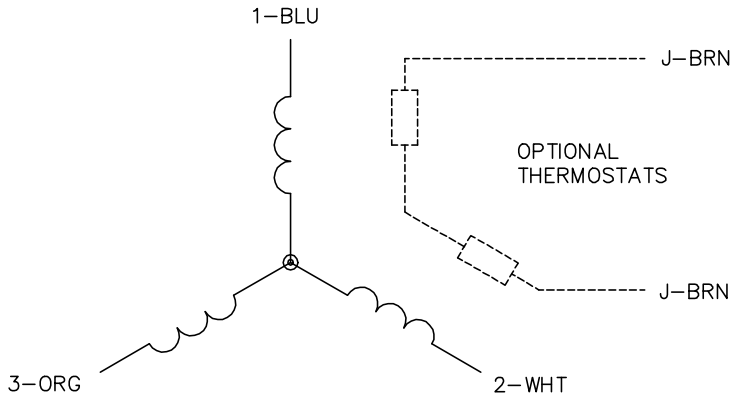


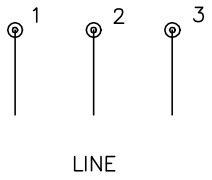
11/5/2026 ACPERF, record # 31306


35LYAA003
510-520=12.29
521-528=13.29
529-535=14.17
536-546=15.55
2.12
.13
.13
GREASE FITTING
(EACH END)
.19 KEY
1.38 LONG
NAME PLATE
Ø7.19
Ø 4.500
4.497
Ø6.49
Ø .8750
.8745
3.75
Ø6.61
5.74
45°
45°
LEAD HOLE
1.09 DIA.
4.63
4 HOLES
.38-16 TAP ON
5.88 DIA. B.C
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV F, NO CHG TO 2D PRINT
REV: C
VERSION: 03
REVISED: 02:05:15 03/29/2022
TDR: 000001188385
MODEL NO. 35LYAA003
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
STD VERT 143-5TC TEFC 35M
35LYAA003

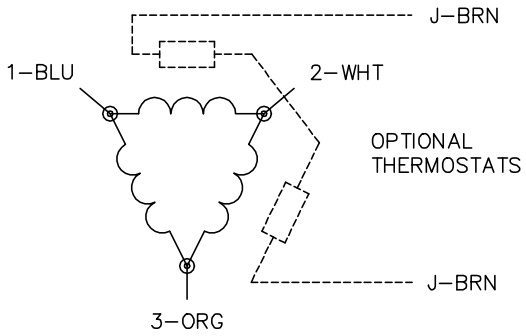
CD0006

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: –		

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

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