ABB BALDOR RELIANCE

Customer information packet

VEM3615T-5

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3642M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	184TC
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	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV NEMA PREMIUM (OLD LOGO)
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	5.300 A @ 575.0 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 Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	5.3 a
Insulation Class	F

Part Detail

Revision	N
Type	AC
Mech. spec.	36A003
Base	
Status	PRD/A
Elec. spec.	36WGS551
Layout	36LYA003
Eff. date	05-21-2025
CD Diagram	CD0006
Poles	04
Leads	3#16
Proprietary	False
Created date	07-30-2010

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.04 IN
Power Factor	78
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	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 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.	VEM3615T-5								
SPEC.	36A003S551G1								
HP	5								
VOLTS	575								
AMP	5.3								
RPM	1750								
FRAME	184TC	**HZ**	60		**PH**	3			
SER.F.	1.15	**CODE**	J	**DES**	B	**CL**	F		
NEMA-NOM-EFF	89.5	**PF**	78						
RATING	40C AMB-CONT								
CC	010A								
DE	6206	**ODE**	6205						
ENCL	TEFC	**SN**							
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	SFA 6								

AC Induction Motor Performance Data
Record # 32022
Typical performance - not guaranteed values

Winding: 36WGS551-R001	**Type:** 3642M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			5	**Full Load Torque**	14.9 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			5.3	**Breakdown Torque**	52.2 LB-FT
R.P.M.			1750	**Pull-up Torque**	31.6 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	35 LB-FT
NEMA Design Code	B	**KVA Code**	J	**Starting Current**	39.3 A
Service Factor (S.F.)			1.15	**No-load Current**	2.6 A
NEMA Nom. Eff.	89.5	**Power Factor**	78	**Line-line Res. @ 25ºC**	3.57 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	77°C
S.F. Amps				**Temp. Rise @ S.F. Load**	94°C
				Locked-rotor Power Factor	40
				Rotor inertia	0.391 LB-FT2

Load Characteristics 575 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	38	60	72	78	83	83	81
Efficiency	84.8	89.6	90.5	89.5	88.5	86.9	88.9
Speed	1789	1776	1762	1750	1733	1714	1740
Line amperes	2.85	3.45	4.35	5.33	6.36	7.72	5.95

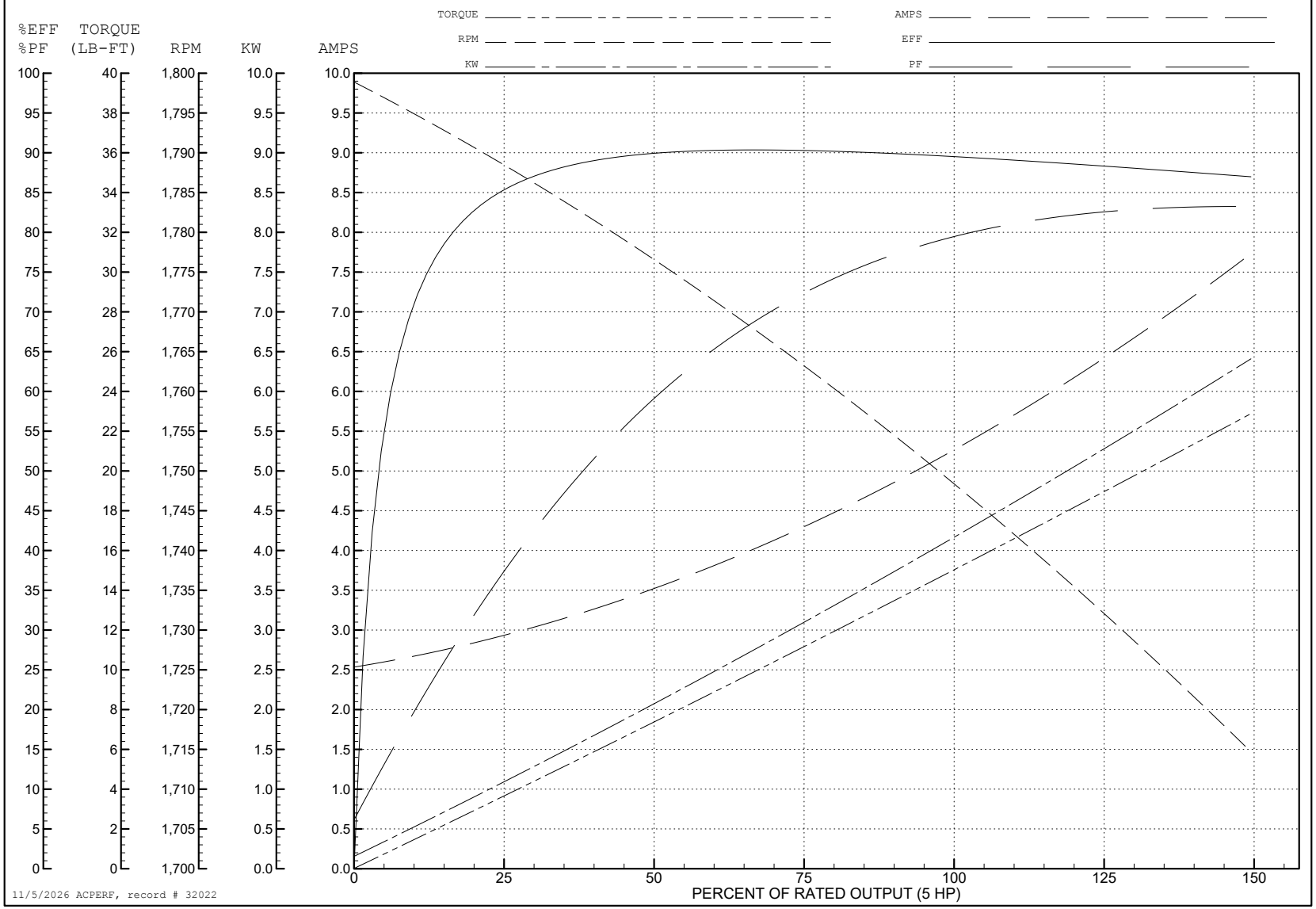
ABB Motors and Mechanical Inc.

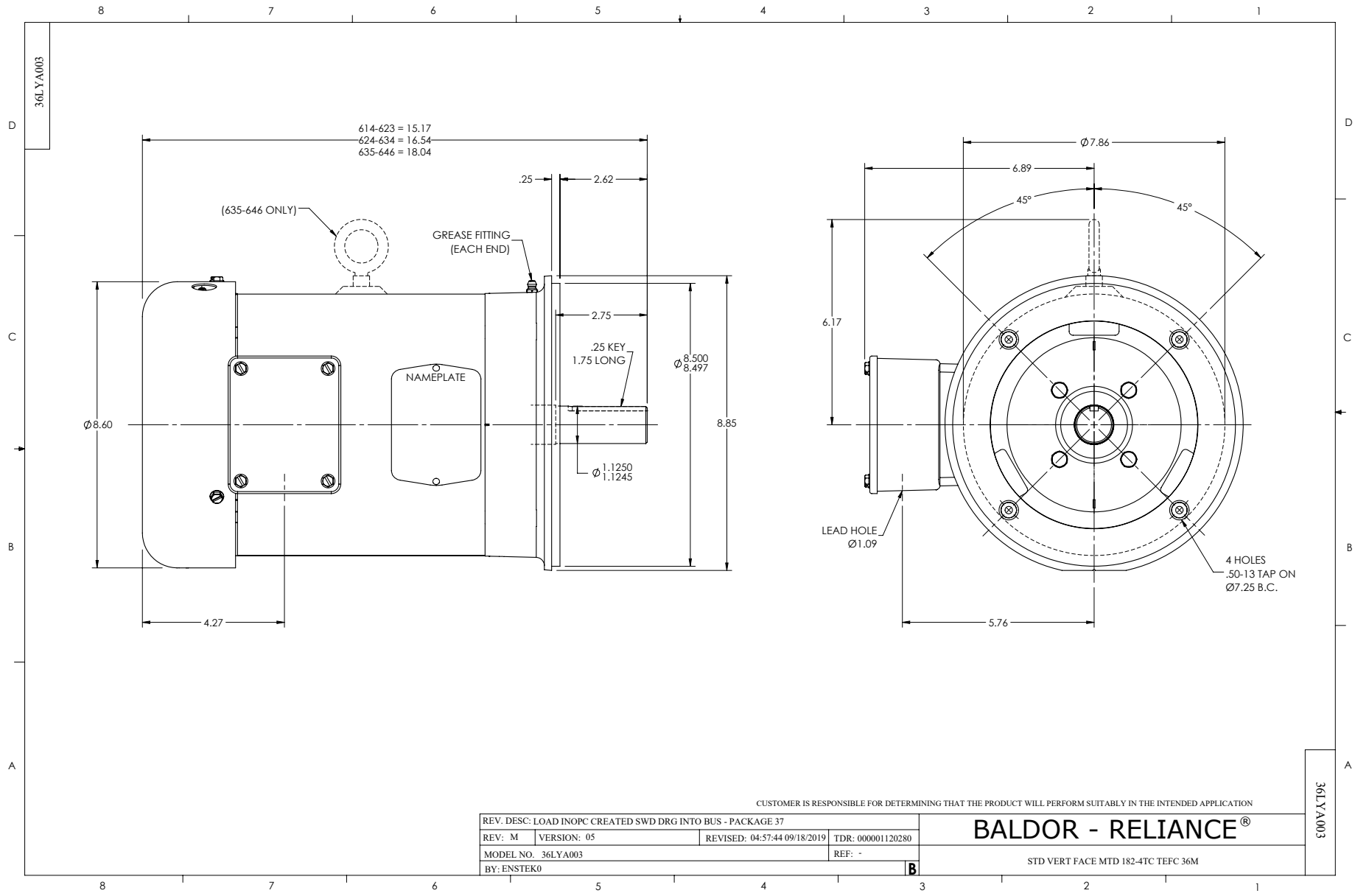
WINDING # 36WGS551

5 HP 3 PH 60 HZ 1750 RPM 575 V 3642M

Typical performance - not guaranteed values.

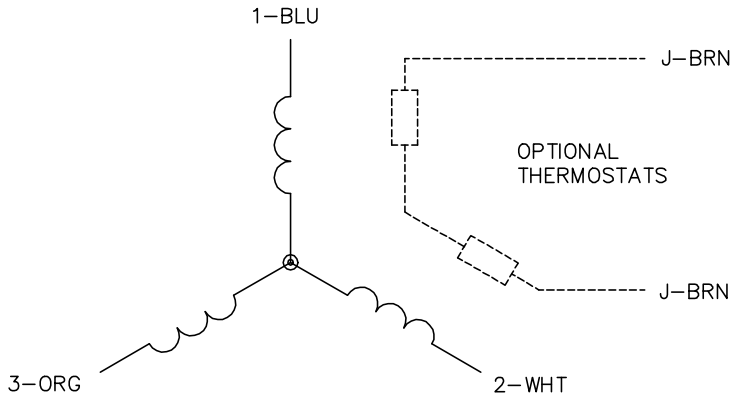
TORQUES(LB-FT): PO=52.2 PU=31.6 LR=35 LRA=39.3

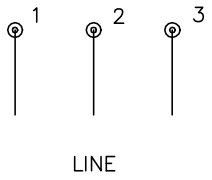



36LYA003
614-623 = 15.17
624-634 = 16.54
635-646 = 18.04
.25
2.62
(635-646 ONLY)
GREASE FITTING
(EACH END)
2.75
.25 KEY
1.75 LONG
Ø8.500
8.497
NAMEPLATE
Ø8.60
8.85
Ø1.1250
1.1245
4.27
Ø7.86
6.89
45°
45°
6.17
LEAD HOLE
Ø1.09
4 HOLES
.50-13 TAP ON
Ø7.25 B.C.
5.76
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD INOPC CREATED SWD DRG INTO BUS - PACKAGE 37
REV: M
VERSION: 05
REVISED: 04:57:44 09/18/2019
TDR: 000001120280
MODEL NO. 36LYA003
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
STD VERT FACE MTD 182-4TC TEFC 36M
36LYA003

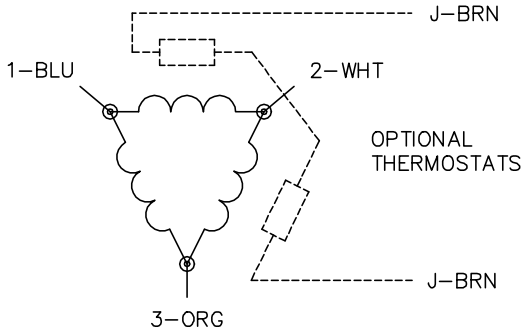
CD0006

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			BALDOR - RELIANCE®
REV. LTR: E	VERSION: 01	TDR: 000001099922	
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0	3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED
MTL: –			SH 1 of 1