

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3615T-4E

5HP, 1750RPM, 3PH, 60HZ, 182TC, 3646M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	182TC
Frame Material	Stainless 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	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM WEEE
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	6.500 A @ 460.0 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 Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.5 a
Insulation Class	H
Inverter Code	Inverter Ready

Part Detail

Revision	A
Type	AC
Mech. spec.	36R533
Base	
Status	PRD/A
Elec. spec.	36WGZ638
Layout	36LYR533
Eff. date	09-13-2024
CD Diagram	CD0006
Poles	04
Leads	3#16
Proprietary	False
Created date	05-22-2024

KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3646M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.89 IN
Power Factor	81
Product Family	WD All SD Non-Encapsulated
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	Y
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft 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

NP4427AAA02												
CAT #	VFSWDM3615T-4E					WGT		LBS				
SPEC	36R533SZ638					ENCL	TEFC					
SER #						CC	010A	IP	69			
HP	5	MAG CUR										
VOLTS	460						NEMA NOM. EFF				89.5	
AMPS	6.5						PF	81				
RATING	40C AMB-CONT											
RPM	1750						MAX RPM	2700				
FRAME	182TC	HZ	60			CODE	J	CLASS	H			
SER.F.	1.15	SF AMP						PH	3	DES	B	
DE	6206	ODE		6206								
LUBRICATION	POLYREX EM											
ID LOGO	INVERTER TYPE			VPWM		CHP	60	TO	90	1.5:1		
ID LOGO	WK2	0.428	CT	15	TO	60	4:1					
ID LOGO	SL HZ	VT		3	TO	60	20:1					

AC Induction Motor Performance Data

Record # 105473

Typical performance - not guaranteed values

Winding: 36WGZ638-R001			Type: 3646M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		5	Full Load Torque			15.03 LB-FT
Volts		460	Start Configuration			direct on line
Full Load Amps		6.5	Breakdown Torque			57.4 LB-FT
R.P.M.		1750	Pull-up Torque			28.9 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		32.3 LB-FT
NEMA Design Code	B	KVA Code	J	Starting Current		47.9 A
Service Factor (S.F.)		1.15	No-load Current			2.91 A
NEMA Nom. Eff.	89.5	Power Factor	81	Line-line Res. @ 25°C		2.34 Ω
Rating - Duty		40C	AMB-CONT	Temp. Rise @ Rated Load		75°C
S.F. Amps				Temp. Rise @ S.F. Load		91°C
				Locked-rotor Power Factor		39
				Rotor inertia		0.428 lb-ft²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	75	90	83	84	86
Efficiency	86.7	90.5	90.8	89.3	88.4	86.6	88.8
Speed	1788	1776	1763	1748	1732	1714	1738
Line amperes	3.27	4.1	5.2	6.53	8.02	9.69	7.42

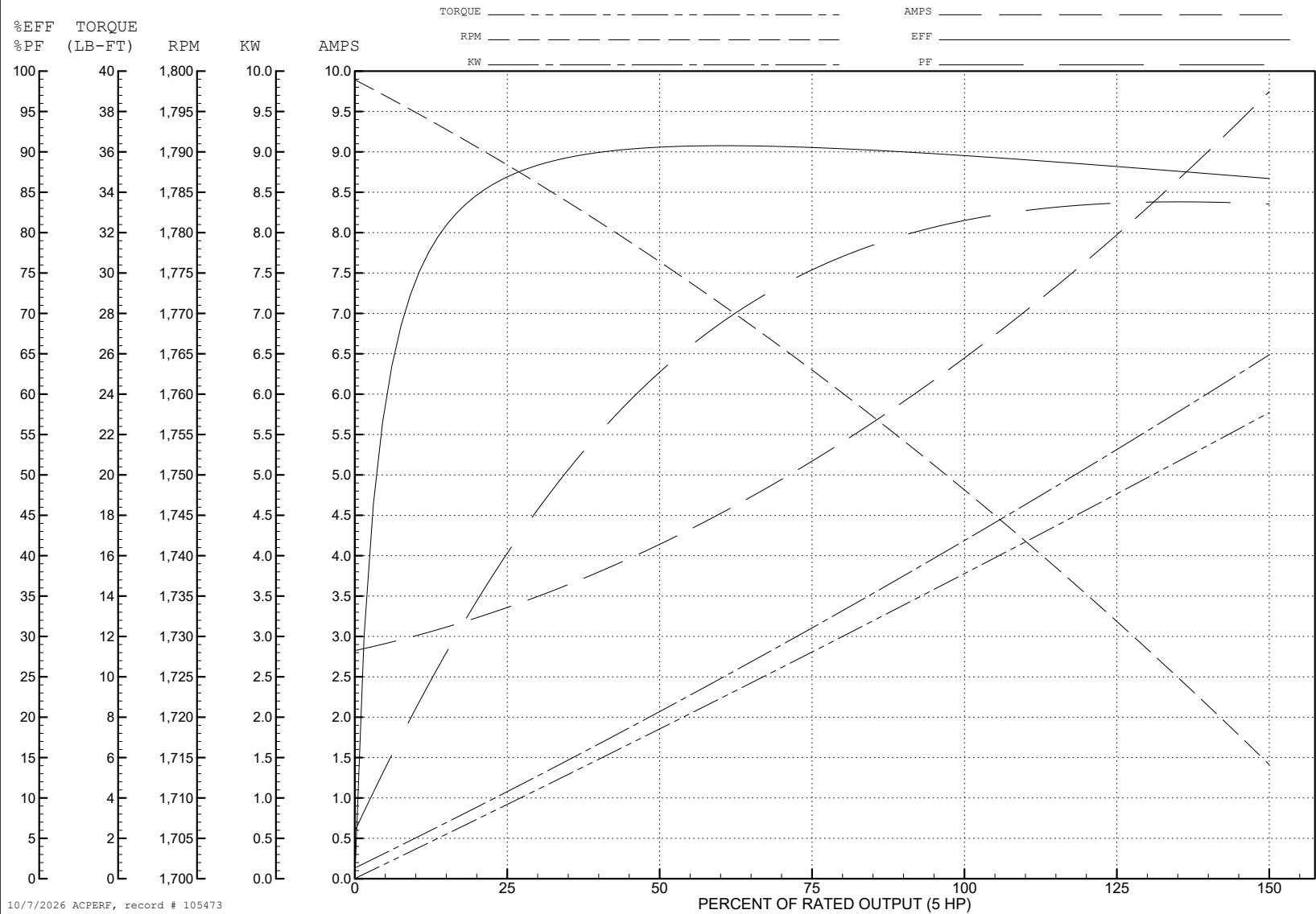
ABB Motors and Mechanical Inc.

WINDING # 36WGZ638

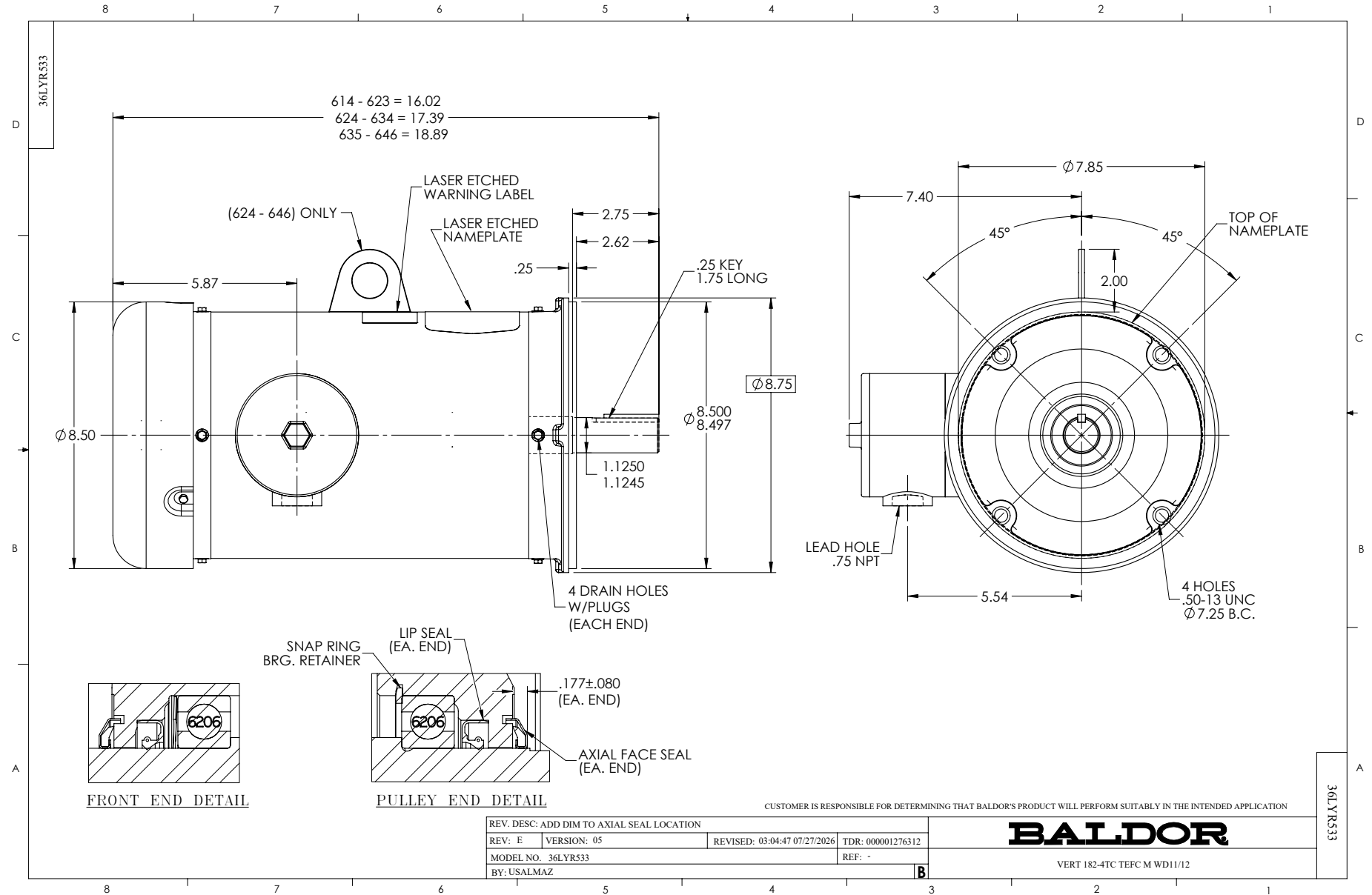
Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 3646M

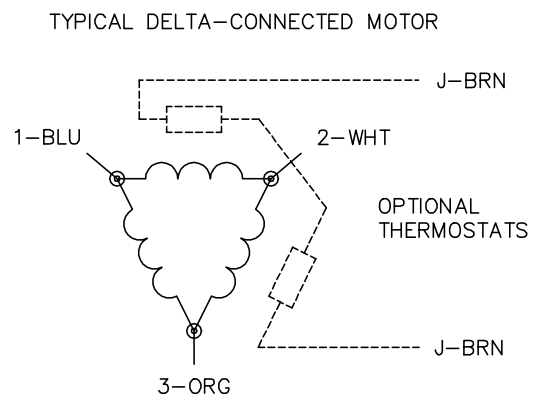
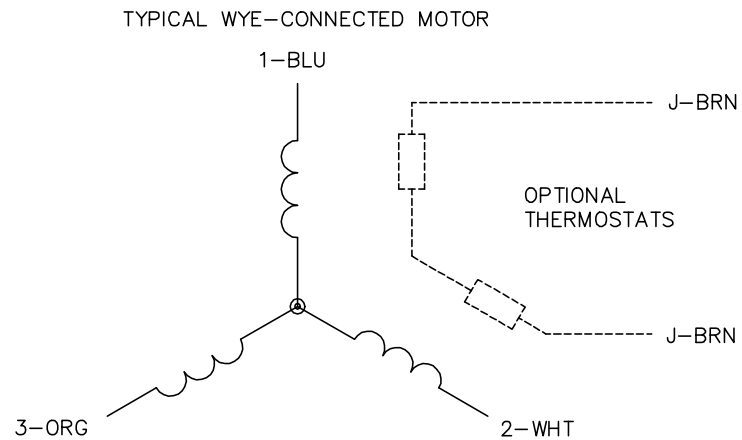
TORQUES (LB-FT) : PO=57.4 PU=28.9 LR=32.3 LRA=47.9



10/7/2026 ACPERF, record # 105473



CD0006


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: ENBRIRO

MTL: -


BALDOR - RELIANCE®

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

SH 1 of 1