

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3546T-5E

1HP, 1770RPM, 3PH, 60HZ, 143TC, 3522M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	143TC
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
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	1.300 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.3 a
Insulation Class	H

Part Detail

Revision	C
Type	AC
Mech. spec.	35E4717
Base	
Status	PRD/A
Elec. spec.	35WGG198
Layout	35LYE4717
Eff. date	08-14-2023
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Finish	UNPAINTED
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.84 IN
Power Factor	67
Product Family	WD All SS Encapsulated
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 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

NP4427AAA02															
CAT #	VFSWDM3546T-5E					LBS									
SPEC	35E4717G198G1					ENCL		TENV							
SER #						CC		010A		IP		69			
HP	1		MAG CUR			.87									
VOLTS	575					NEMA NOM. EFF					85.5				
AMPS	1.3					PF		70							
RATING	40C AMB-CONT														
RPM	1775					MAX RPM			2700						
FRAME	143TC		HZ		60		CODE		M		CLASS		H		
SER.F.	1.15		SF AMP		1.4		PH		3		DES		B		
DE	6205			ODE		6205									
LUBRICATION	POLYREX EM														
ID LOGO	INVERTER TYPE				VPWM		CHP		60		TO		90		1.5:1
ID LOGO	WK2		0.159		CT		15		TO		60		4:1		
ID LOGO	SL HZ		0.9		VT		3		TO		60		20:1		
						QR									
YR															

AC Induction Motor Performance Data

Record # 87480

Typical performance - not guaranteed values

Winding: 35WGG198-R003			Type: 3522M		Enclosure: TEFC	
Nameplate Data				575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)		1		Full Load Torque		2.99 LB-FT
Volts		575		Start Configuration		direct on line
Full Load Amps		1.3		Breakdown Torque		16.37 LB-FT
R.P.M.		1770		Pull-up Torque		7.31 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		10.16 LB-FT
NEMA Design Code		B	KVA Code	Starting Current		12.72 A
Service Factor (S.F.)		1.15		No-load Current		0.972 A
NEMA Nom. Eff.		85.5	Power Factor	Line-line Res. @ 25°C		22.9 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C
S.F. Amps		1.4		Temp. Rise @ S.F. Load		71°C
				Locked-rotor Power Factor		59.6
				Rotor inertia		0.159 lb-ft²

Load Characteristics 575 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	28	44	56	67	73	78	71
Efficiency	71.2	81.2	84.4	86	85.7	85.1	85.8
Speed	1793	1786	1781	1773	1766	1757	1769
Line amperes	0.988	1.06	1.18	1.32	1.49	1.69	1.42

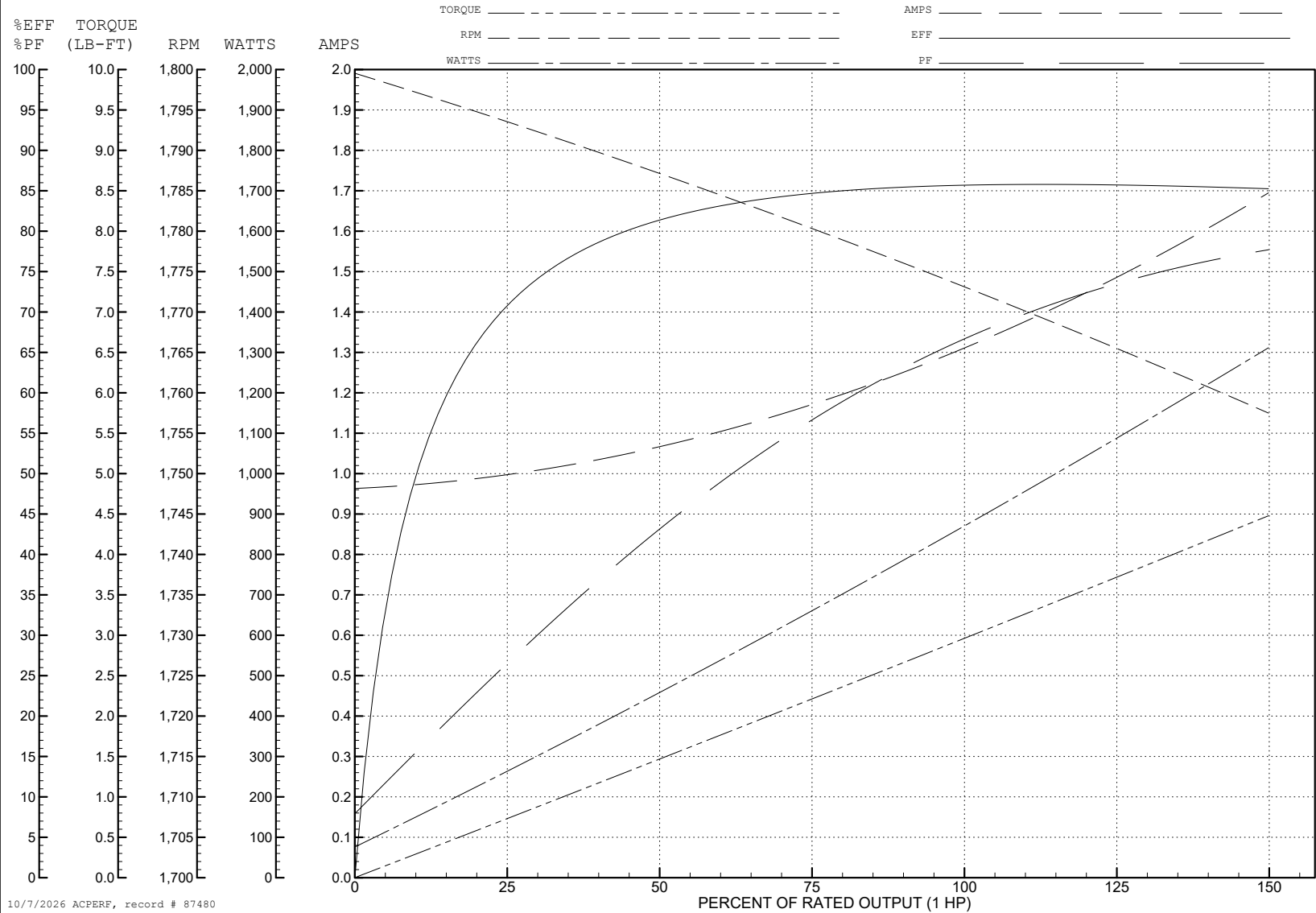
ABB Motors and Mechanical Inc.

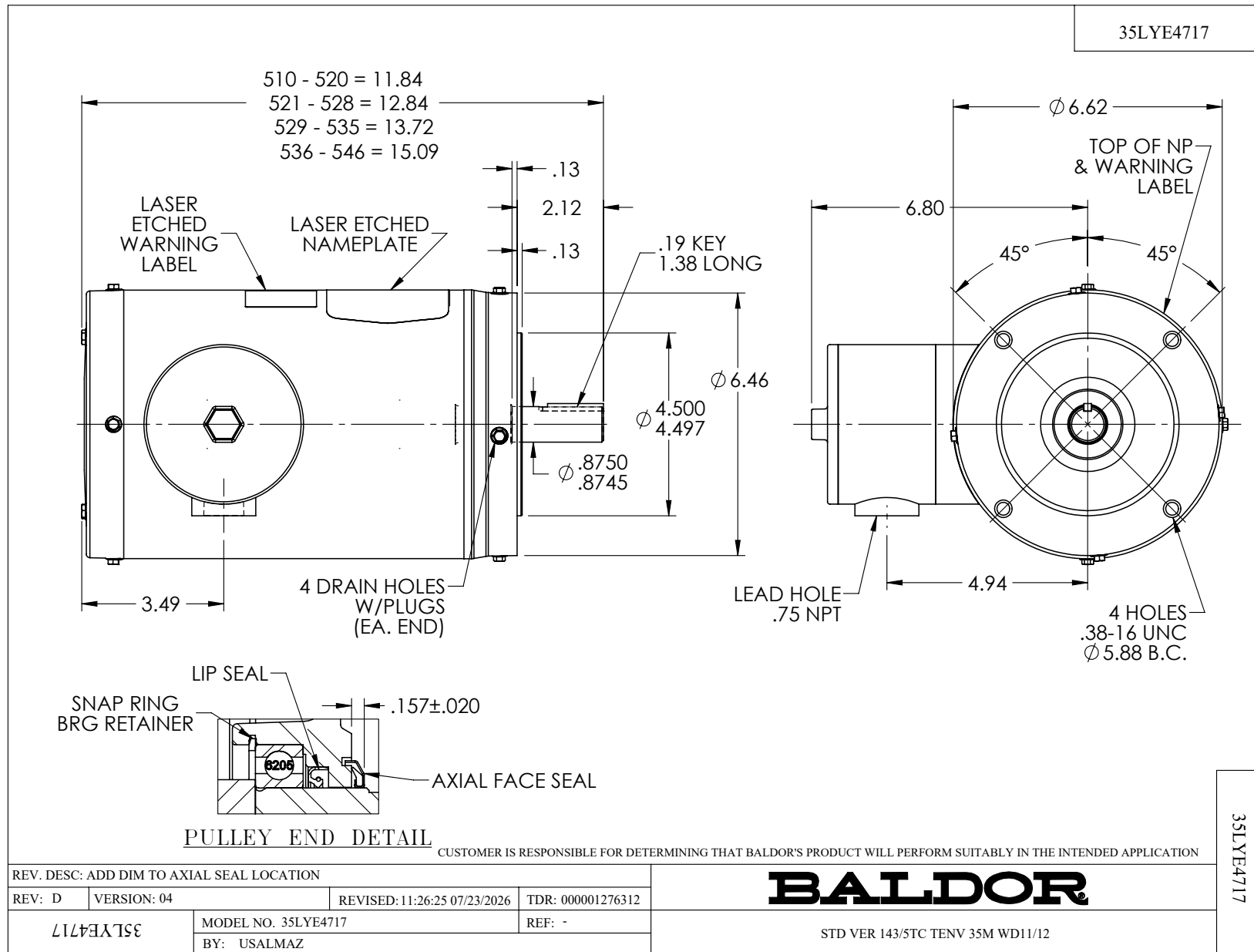
WINDING # 35WGG198

Typical performance - not guaranteed values.

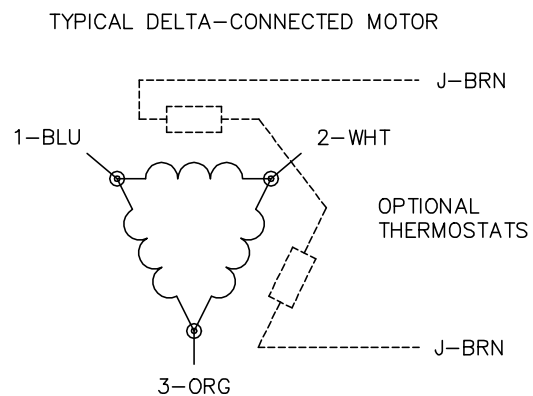
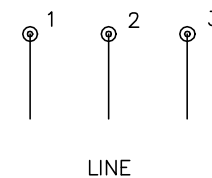
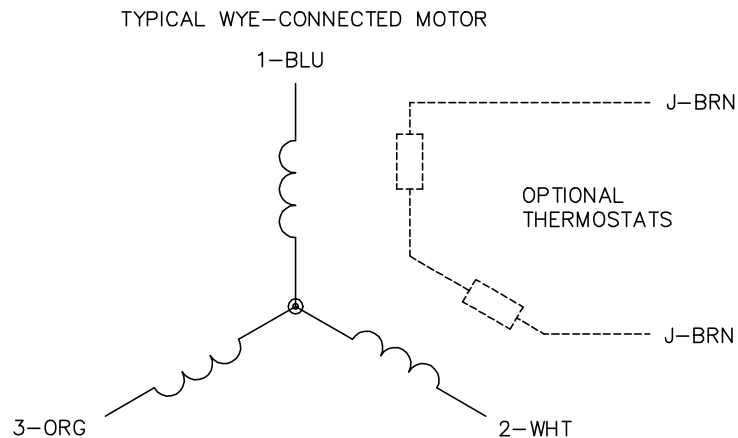
1 HP 3 PH 60 HZ 1770 RPM 575 V 3522M

TORQUES (LB-FT): PO=16.37 PU=7.31 LR=10.16 LRA=12.72





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

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