

ABB BALDOR RELIANCE III

Customer information packet

VFSWDNM3558T-4E

2HP, 1760RPM, 3PH, 60HZ, 143TC, 3546M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	145TC
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	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM 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	2.650 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.7 a
Insulation Class	H

Part Detail

Revision	A
Type	AC
Mech. spec.	35E4717
Base	
Status	PRD/A
Elec. spec.	35WGK983
Layout	35LYE4717
Eff. date	09-13-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	05-22-2024

Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Finish	UNPAINTED
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3546M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.09 IN
Power Factor	80
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	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1760 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 #	VFSWDNM3558T-4E					WGT		LBS						
SPEC	35E4717K983					ENCL	TENV							
SER #						CC	010A	IP	69					
HP	2	MAG CUR				1.35								
VOLTS	460						NEMA NOM. EFF				86.5			
AMPS	2.65						PF	80						
RATING	40C AMB-CONT													
RPM	1760					MAX RPM		2700						
FRAME	143TC	HZ	60			CODE	L	CLASS	H					
SER.F.	1.15	SF AMP	3					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	0.332	CT	15	TO	60	4:1							
ID LOGO	SL HZ	1.33	VT	3	TO	60	20:1							

AC Induction Motor Performance Data

Record # 105470

Preliminary Data Sheet

Winding: 35WGK983-R001			Type: 3546M		Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		2	Full Load Torque			6 LB-FT
Volts		460	Start Configuration			direct on line
Full Load Amps		2.65	Breakdown Torque			27.78 LB-FT
R.P.M.		1760	Pull-up Torque			16.81 LB-FT
Hz	60	Phase	Locked-rotor Torque			21.79 LB-FT
NEMA Design Code	B	KVA Code	Starting Current			25.07 A
Service Factor (S.F.)		1.15	No-load Current			1.36 A
NEMA Nom. Eff.	86.5	Power Factor	Line-line Res. @ 25°C			7.86 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load			100°C
S.F. Amps		3	Temp. Rise @ S.F. Load			122°C
			Locked-rotor Power Factor			51
			Rotor inertia			0.332 lb-ft²

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	73	80	85	87	83
Efficiency	83.3	88.6	89.2	88.7	87.5	86	88
Speed	1790	1781	1771	1760	1748	1735	1753
Line amperes	1.5	1.78	2.17	2.65	3.18	3.77	2.97

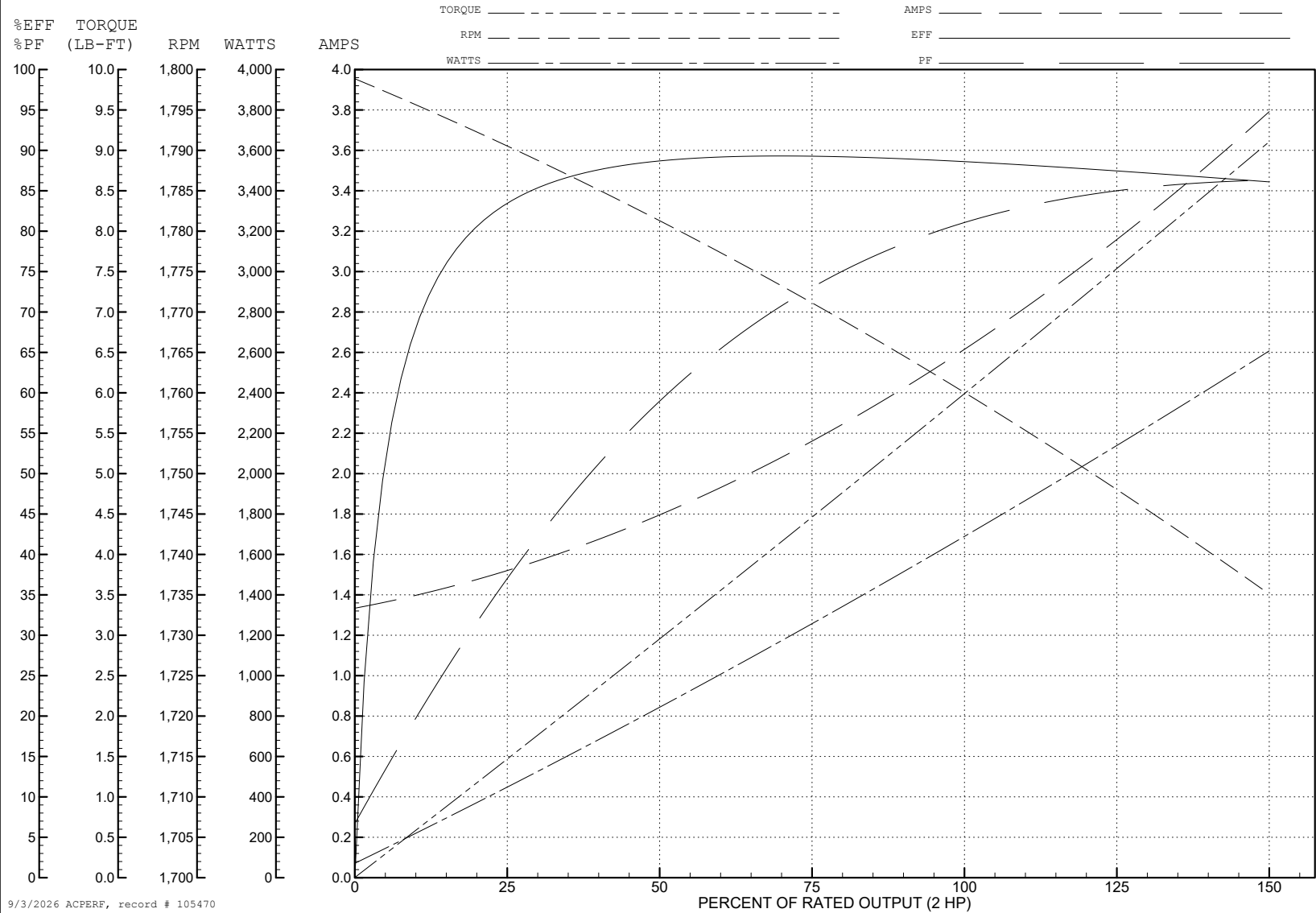
ABB Motors and Mechanical Inc.

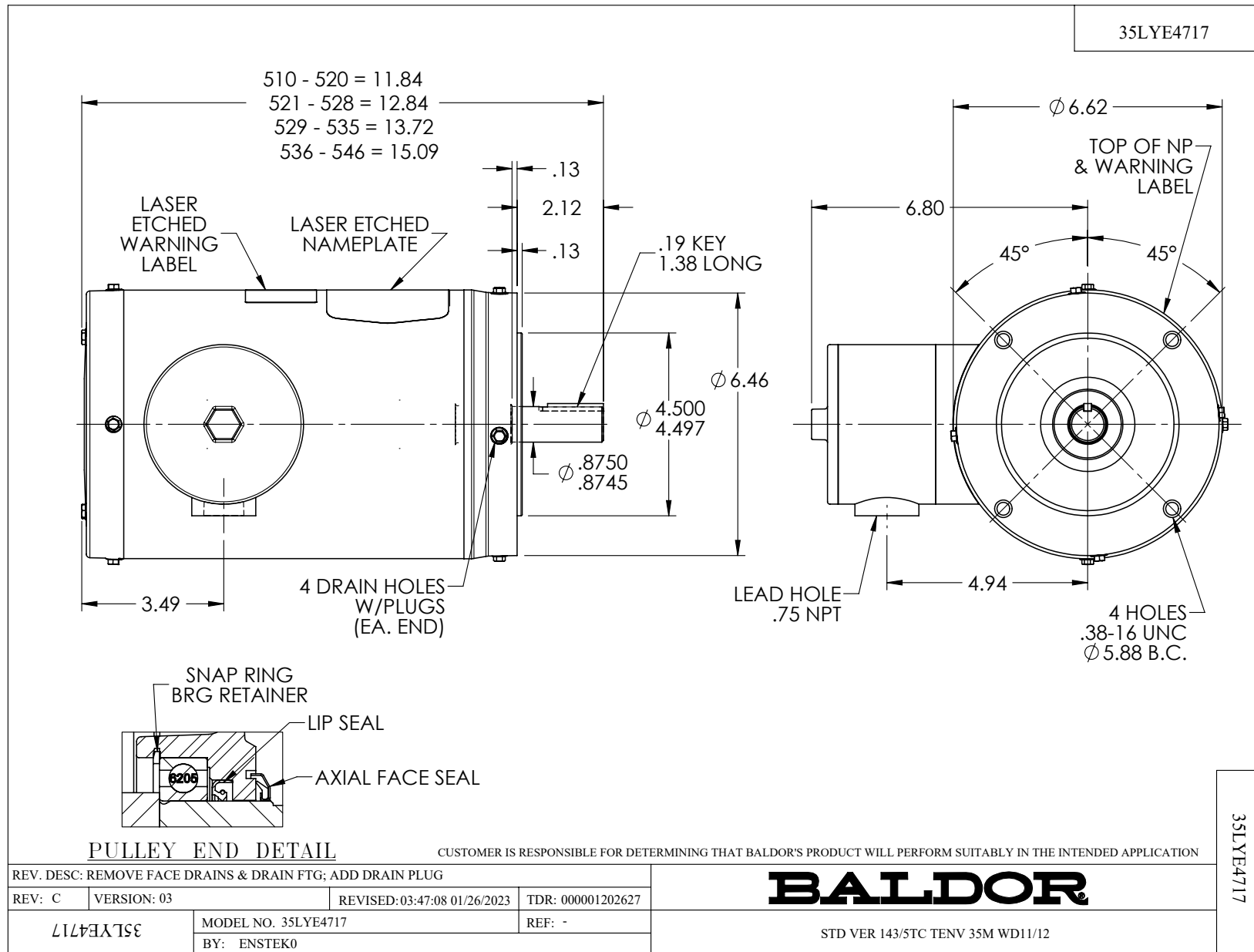
WINDING # 35WGK983

Typical performance - not guaranteed values.

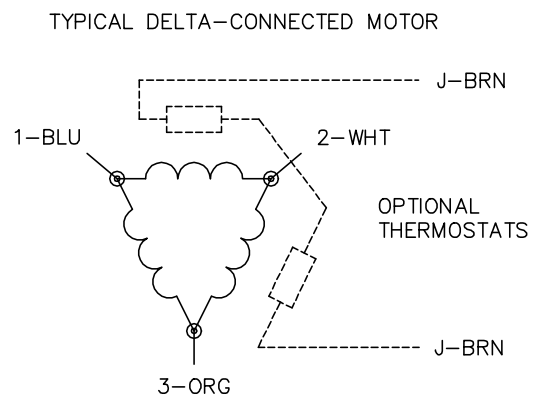
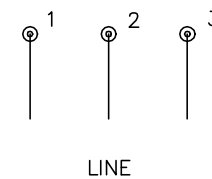
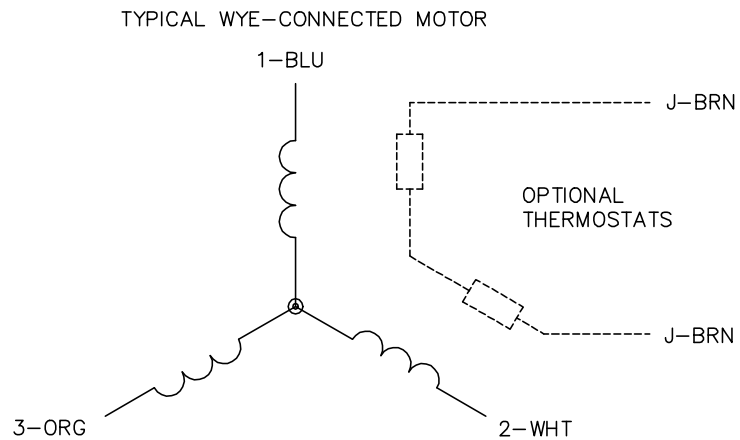
2 HP 3 PH 60 HZ 1760 RPM 460 V 3546M

TORQUES (LB-FT) : PO=27.78 PU=16.81 LR=21.79 LRA=25.07





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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