

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

Parts List

Part number	Description	Quantity
SA409103	SA 35E4717G198G1	1.000 ea
RA400649	RA 35E4717G198G1	1.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
35CB1017A02	5/36 MID SECT - 3 PC. CONDUIT BOX 3/4 N	1.000 ea
HA3424S48	STUD - M6X1.0 THDS X 3.00"	1.000 ea
RM1070A81	O-RING, -043 VITON/FKM .070CS X 3.489ID	1.000 ea
35CB1513A01	35-36-37 MACH. LID - 3 PC. CONDUIT BOX	1.000 ea
11XW1032G08	10-32 X .50, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
35EP1940A03	FRONT TENV 205 BRG (STAINLESS)	1.000 ea
RM1070A25	O-RING, VITON/FKM .070CS X 6.190ID	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
35EP1935A02	PULLEY 56C/143-5TC ENCL 205 BRG	1.000 ea
RM1070A25	O-RING, VITON/FKM .070CS X 6.190ID	1.000 ea
HW4600G01	.984X1.499X.25 VITON SLICK SERIES LIP	1.000 ea
HW4600E99	25 X 42 X 6 AFX SEAL, GRAPHITE INFUSED V	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
RM1070A26	O-RING,4.5MM I.D.X1.5MM C.S. (VITON)	4.000 ea
RM1070A81	O-RING, -043 VITON/FKM .070CS X 3.489ID	1.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.005 qt
MJ5004A93	FOOD GRADE (H1 RATED) ANTISEIZE THRD COM	0.005 ea
HA1025A21	WSHR,FELT .125" THK	1.000 ea
HA5027A09	DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
WD5603A02	KIT, CLOSED-END LEAD SPLICE (18-14GA)	1.000 ea
HA3100FS25	THRUBOLT, 10-32 X 9.500 SS FOOD SAFE	4.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea

MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000010	ZRTG PE ASSEMBLY	1.000 ea
FE-0000007	ZRTG FE ASSEMBLY	1.000 ea

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	N	Starting Current	12.72 A	
Service Factor (S.F.)		1.15	No-load Current		0.972 A	
NEMA Nom. Eff.	85.5	Power Factor	67	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

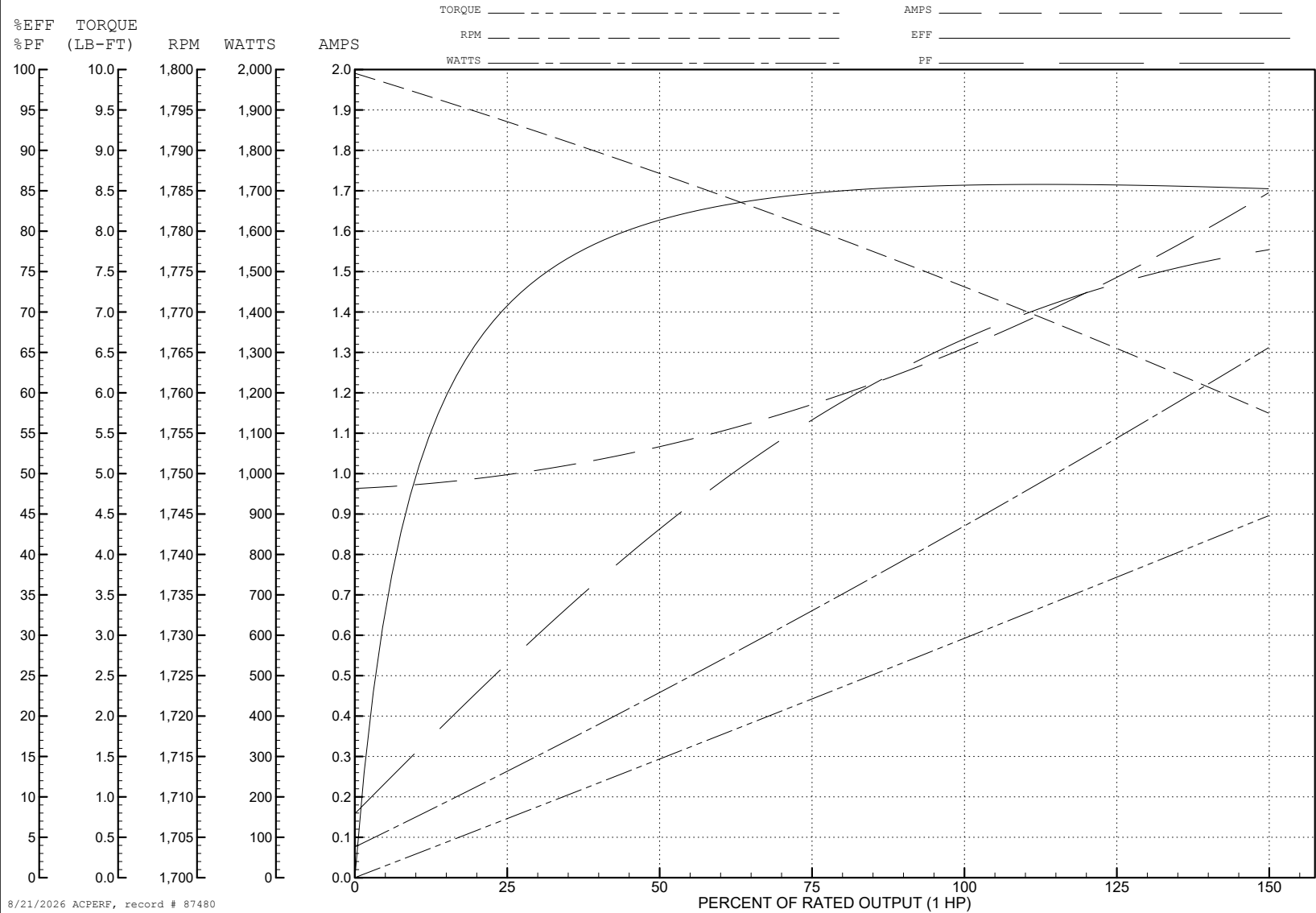
ABB Motors and Mechanical Inc.

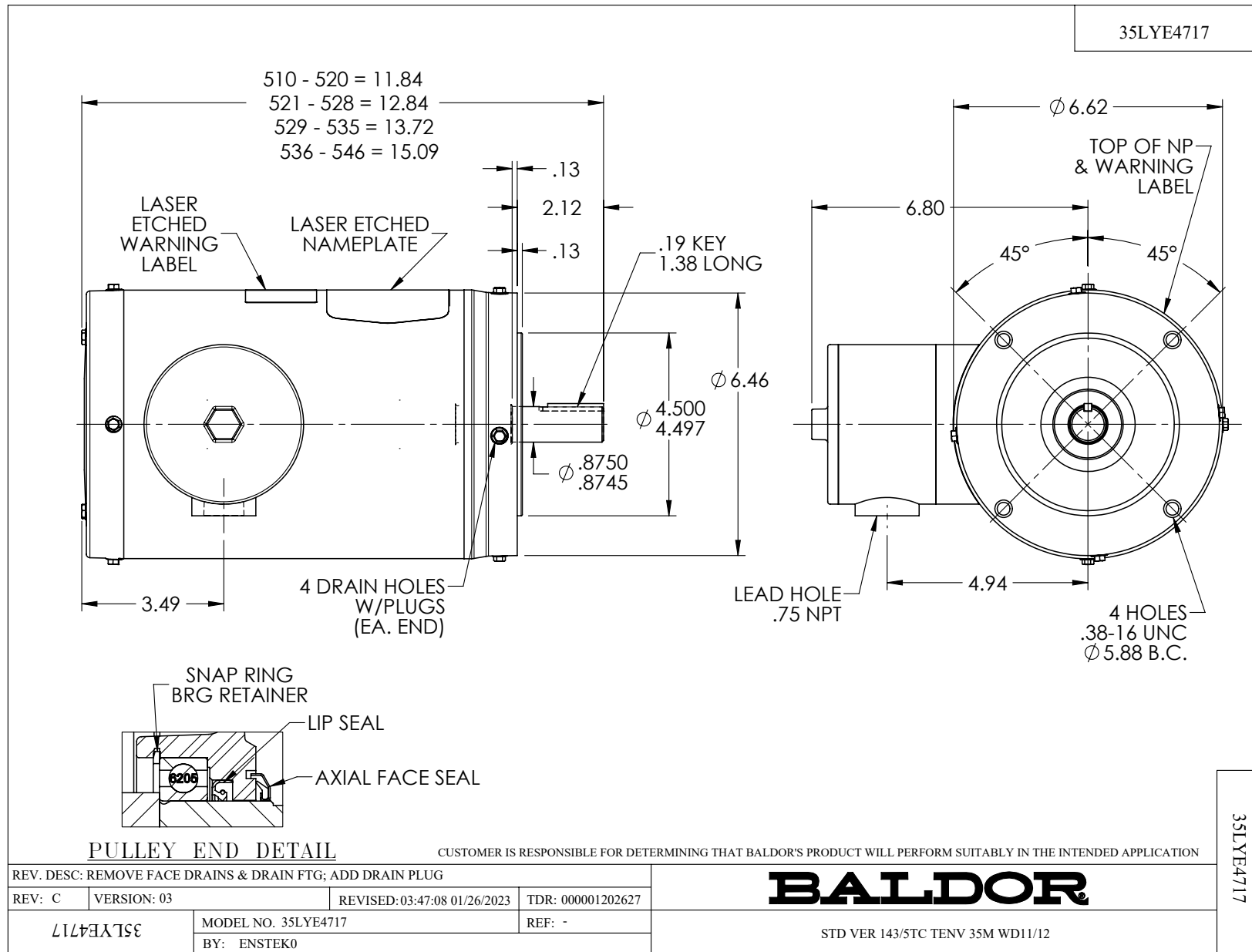
WINDING # 35WGG198

Typical performance - not guaranteed values.

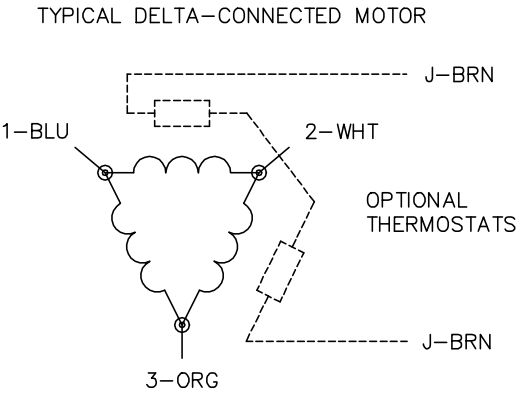
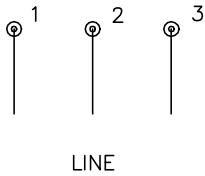
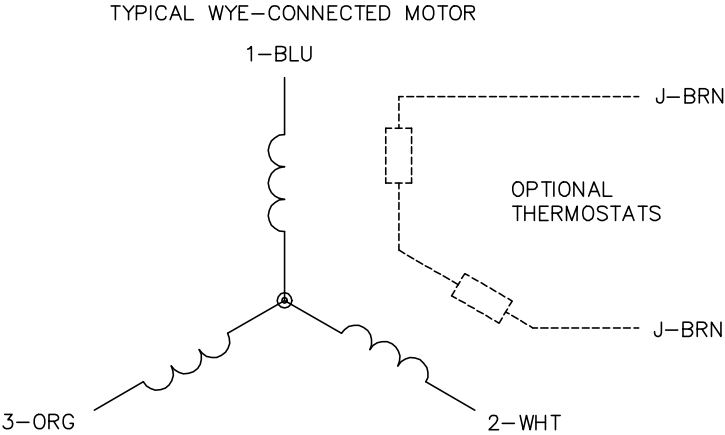
1 HP 3 PH 60 HZ 1770 RPM 575 V 3522M

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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