

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3558T-5E

2HP, 1765RPM, 3PH, 60HZ, 143TC, 3528M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	575.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA_PREMIUM WEEE CSA EEV
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	2.150 A @ 575.0 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	2.2 a

Part Detail

Revision	D
Type	AC
Mech. spec.	35E4709
Base	
Status	PRD/A
Elec. spec.	35WGZ823
Layout	35LYE4709
Eff. date	08-14-2023
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Insulation Class	H
Inverter Code	Not Inverter
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	3528M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.03 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	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	1765 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 #	VFSWDM3558T-5E					LBS						
SPEC	35E4709Z823G1					ENCL	TEFC					
SER #						CC	010A	IP	69			
HP	2					MAG CUR	1.15					
VOLTS	575					NEMA NOM. EFF				86.5		
AMPS	2.15					PF	81					
RATING	40C AMB-CONT											
RPM	1765					MAX RPM	2700					
FRAME	143TC	HZ	60		CODE	L	CLASS	H				
SER.F.	1.15	SF AMP	2.45		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	0.202	CT	15	TO	60	4:1					
ID LOGO	SL HZ	1.17	VT	3	TO	60	20:1					
						QR						
YR												

Parts List

Part number	Description	Quantity
SA405523	SA 35E4709Z823G1	1.000 ea
RA396944	RA 35E4709Z823G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	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, -O43 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
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP1940A05	FRONT TEFC 205 BRG (STAINLESS)	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
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
RM1070A26	O-RING,4.5MM I.D.X1.5MM C.S. (VITON)	4.000 ea
35FH4005A39	IEC FH NO GREASER DEBURR/CLEAN - SS	1.000 ea
10XN1032FS06	HEX HD CAP SCREW 10-32 X 3/8 SS FOOD SAF	3.000 ea
RM1070A81	O-RING, -O43 VITON/FKM .070CS X 3.489ID	1.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	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

11XB1214S16	12-14X1.00 HXWSSLD TYP B STAINLESS	1.000 ea
WD5603A02	KIT, CLOSED-END LEAD SPLICE (18-14GA)	1.000 ea
HA3100FS25	THRUBOLT, 10-32 X 9.500 SS FOOD SAFE	4.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000016	ZTRG FE ASSEMBLY	1.000 ea
PE-0000010	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 88444

Preliminary Data Sheet

Winding: 35WGZ823-R001			Type: 3528M		Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		2	Full Load Torque		5.95 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		2.15	Breakdown Torque		22.1 LB-FT	
R.P.M.		1765	Pull-up Torque		13.1 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	15.85 LB-FT	
NEMA Design Code	B	KVA Code	K	Starting Current	18.31 A	
Service Factor (S.F.)		1.15	No-load Current		1.15 A	
NEMA Nom. Eff.	86.5	Power Factor	81	Line-line Res. @ 25°C	15.5 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		81°C	
S.F. Amps		2.45	Temp. Rise @ S.F. Load		98°C	
			Locked-rotor Power Factor		57	
			Rotor inertia		0.202 lb-ft²	

Load Characteristics 575 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	60	73	80	84	86	82
Efficiency	80.1	86.2	87.3	86.9	85.6	83.9	86.1
Speed	1791	1783	1773	1765	1755	1742	1759
Line amperes	1.23	1.45	1.76	2.15	2.62	3.1	2.43

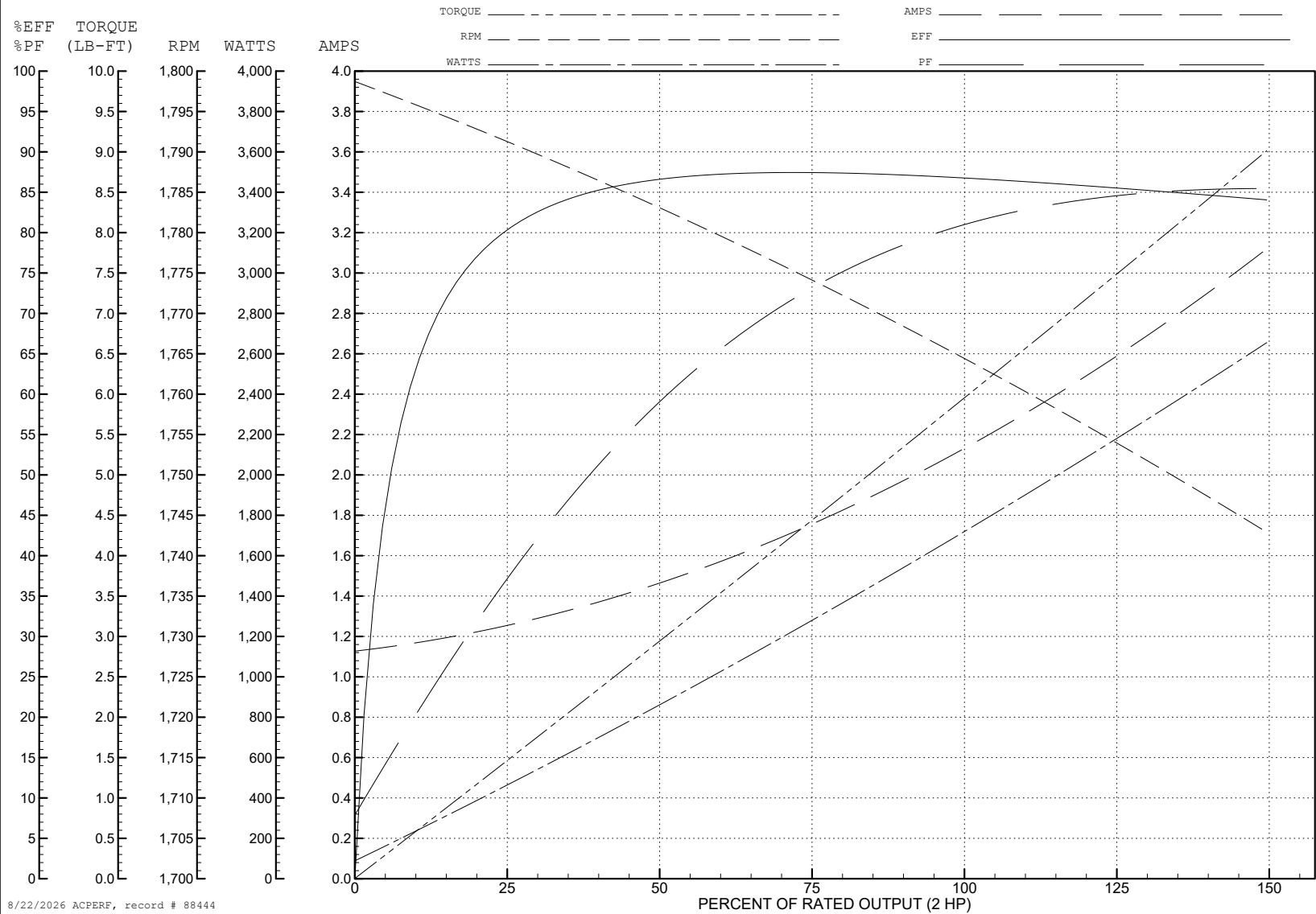
ABB Motors and Mechanical Inc.

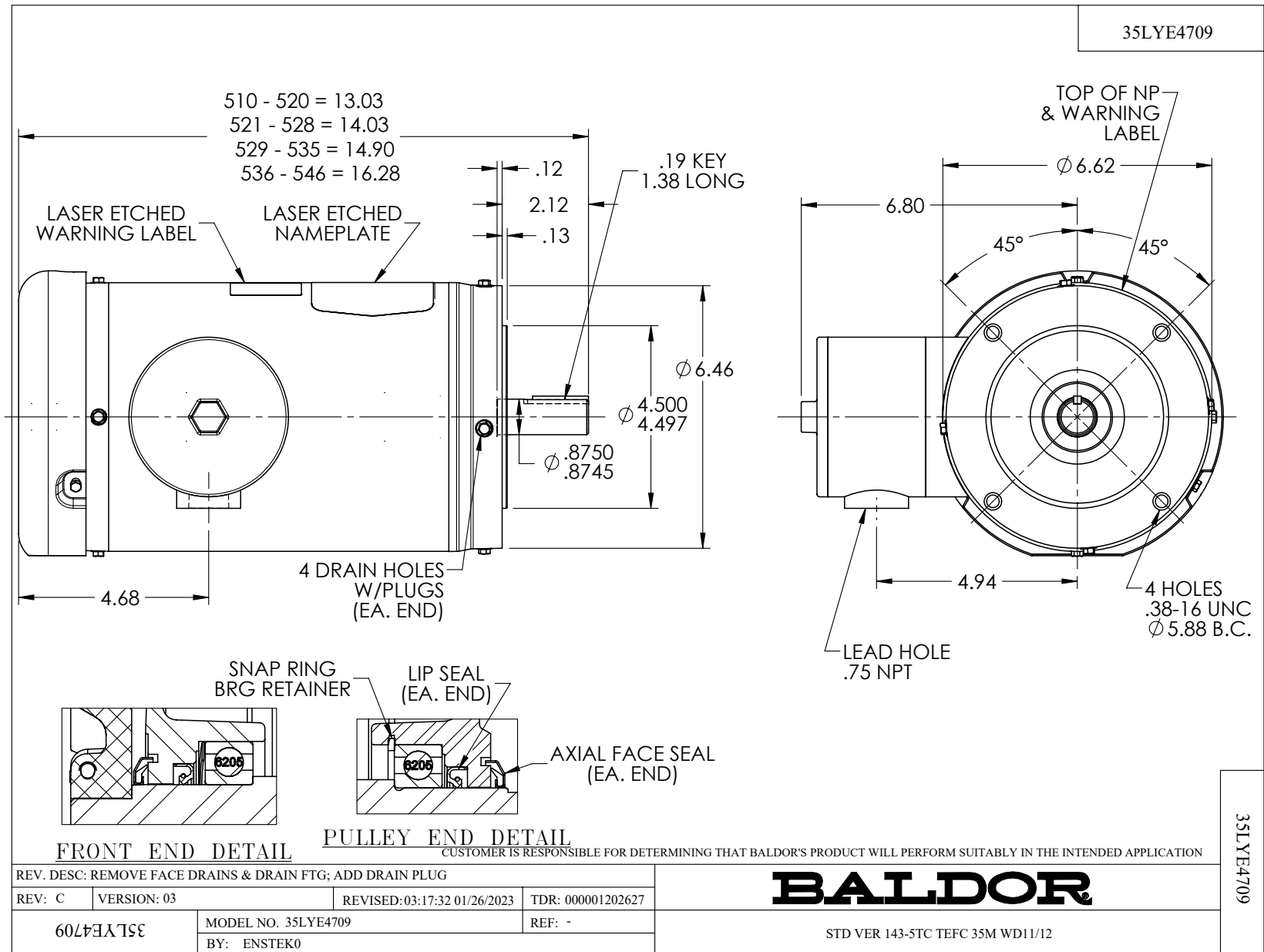
WINDING # 35WGZ823

Typical performance - not guaranteed values.

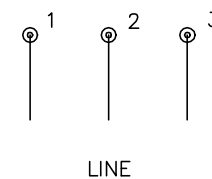
2 HP 3 PH 60 HZ 1765 RPM 575 V 3528M

TORQUES (LB-FT): PO=22.1 PU=13.1 LR=15.85 LRA=18.31





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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