

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3554T-5E

1.5HP, 1770RPM, 3PH, 60HZ, 143TC, 3524M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	1.500 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	1.750 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	1.8 a
Insulation Class	H

Part Detail

Revision	D
Type	AC
Mech. spec.	35E4709
Base	
Status	PRD/A
Elec. spec.	35WGZ955
Layout	35LYE4709
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	L
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	3524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.03 IN
Power Factor	73
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
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 #	VFSWDM3554T-5E					LBS								
SPEC	35E4709Z955G1					ENCL		TEFC						
SER #						CC	010A		IP	69				
HP	1.5		MAG CUR			1.1								
VOLTS	575					NEMA NOM. EFF					86.5			
AMPS	1.75					PF		73						
RATING	40C AMB-CONT													
RPM	1770					MAX RPM			2700					
FRAME	143TC		HZ	60		CODE		L	CLASS		H			
SER.F.	1.15		SF AMP	1.9		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	0.189		CT	15		TO	60		4:1				
ID LOGO	SL HZ	1		VT	3		TO	60		20:1				

Parts List

Part number	Description	Quantity
SA405522	SA 35E4709Z955G1	1.000 ea
RA396943	RA 35E4709Z955G1	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
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, -043 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

19XB0818S12	8-18X3/4 HXWS TYB HIGH-LOW	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
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
FE-0000016	ZTRG FE ASSEMBLY	1.000 ea
PE-0000010	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 91710

Typical performance - not guaranteed values

Winding: 35WGZ955-R001			Type: 3524M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		1.5	Full Load Torque		4.47 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		1.7	Breakdown Torque		18.3 LB-FT		
R.P.M.		1770	Pull-up Torque		9.2 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		12.1 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		15.2 A
Service Factor (S.F.)		1.15	No-load Current		1.11 A		
NEMA Nom. Eff.		86.5	Power Factor	76	Line-line Res. @ 25°C		18.8 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		47°C
S.F. Amps		1.85	Temp. Rise @ S.F. Load		55°C		
			Locked-rotor Power Factor		57.6		
			Rotor inertia		0.188 lb-ft²		

Load Characteristics 575 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	52	65	74	79	83	80
Efficiency	76.4	84.4	86.6	86.8	86.2	84.9	85.5
Speed	1792	1785	1777	1768	1760	1750	1759
Line amperes	1.15	1.29	1.51	1.76	2.06	2.41	1.9

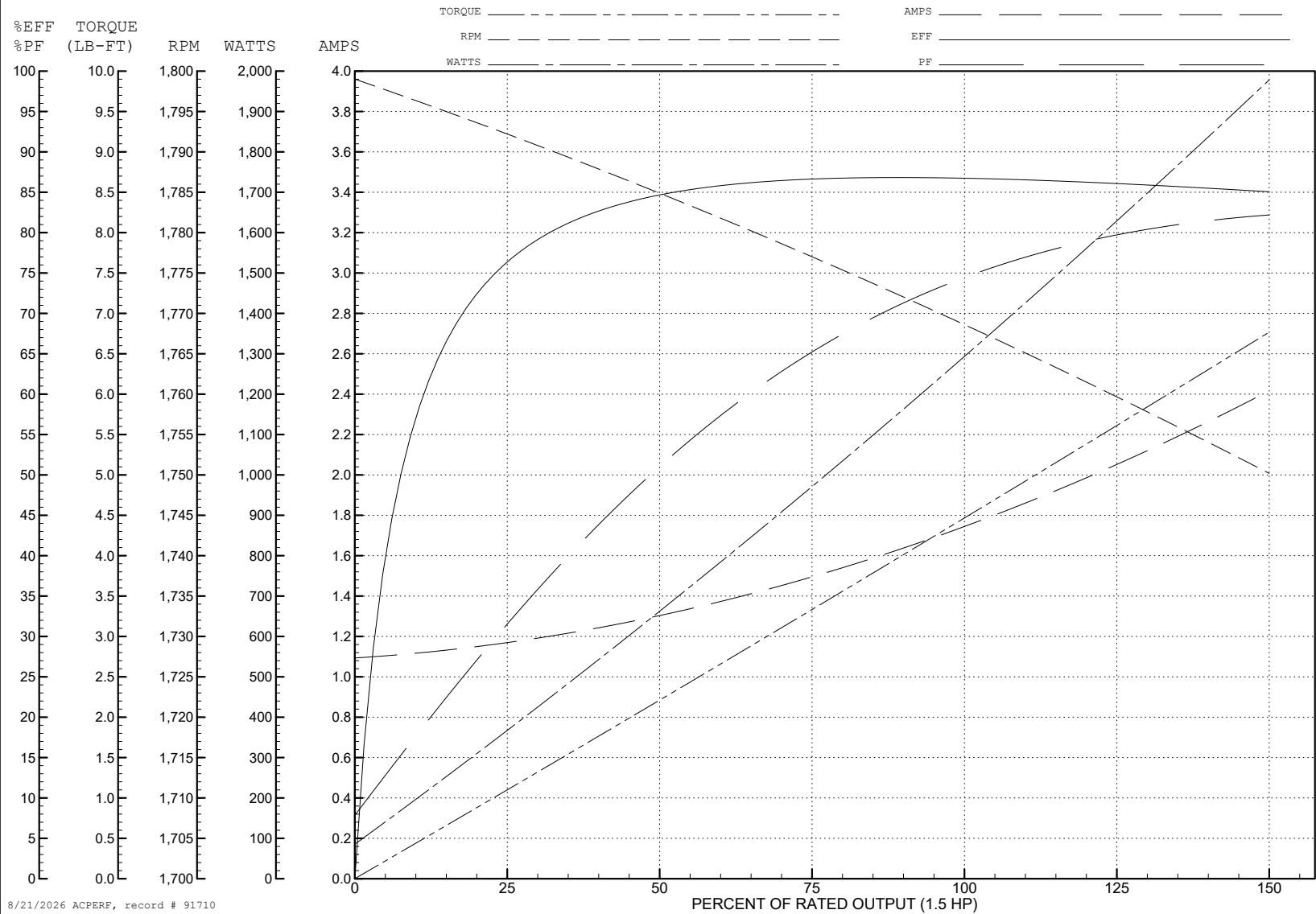
ABB Motors and Mechanical Inc.

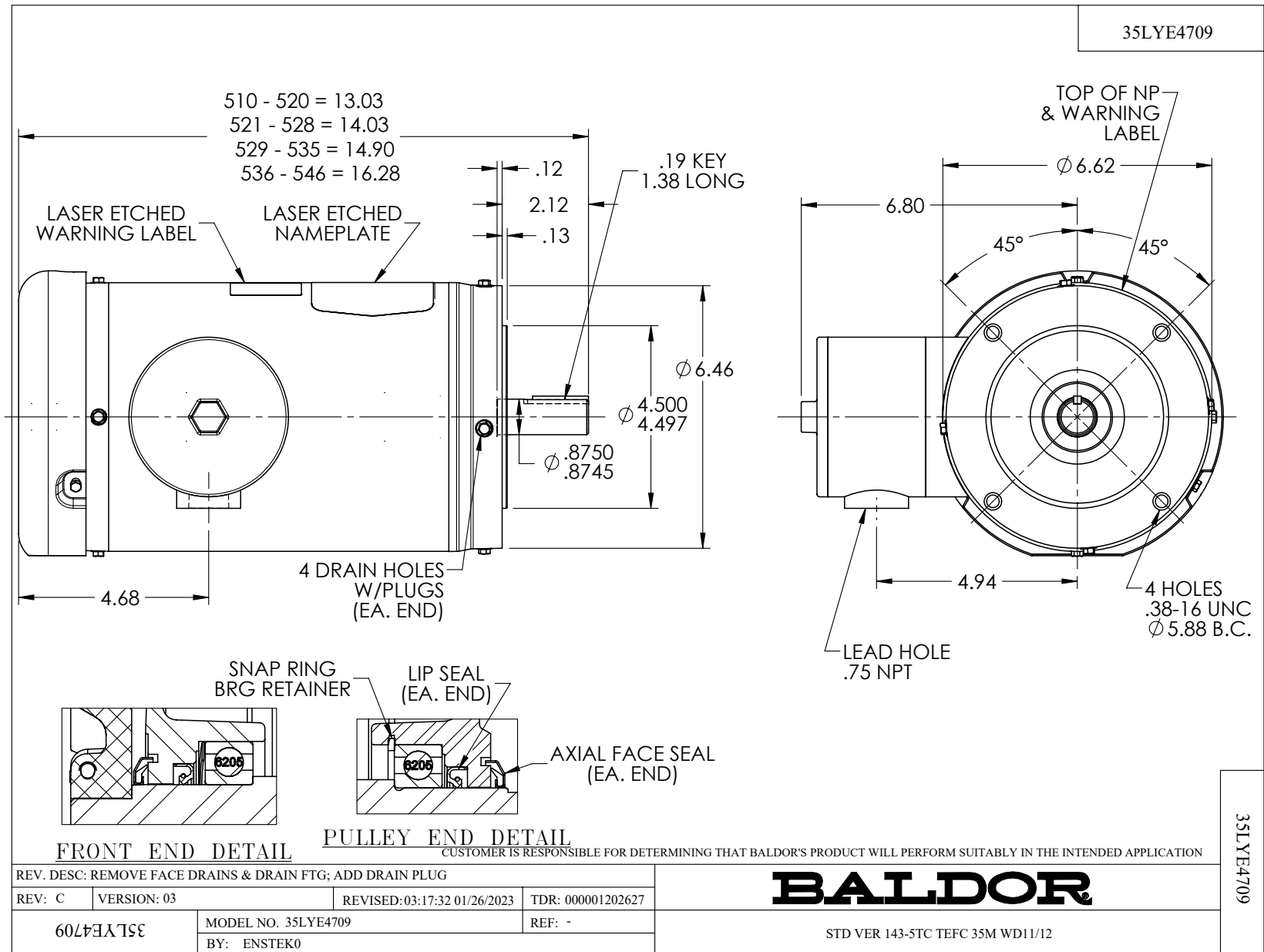
WINDING # 35WGZ955

Typical performance - not guaranteed values.

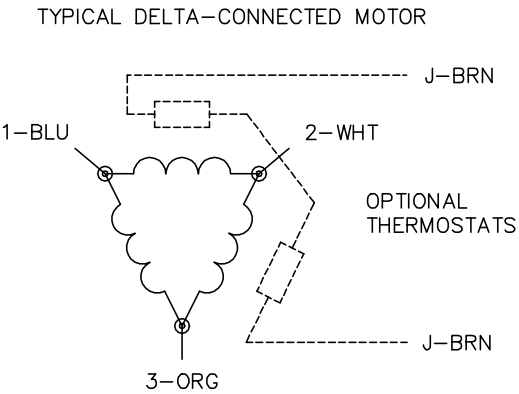
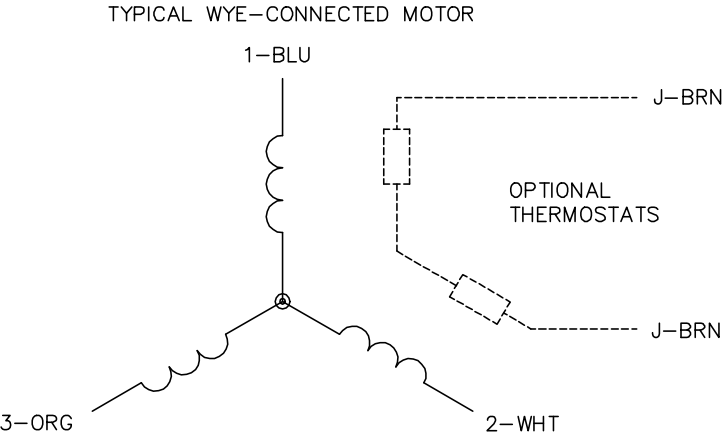
1.5 HP 3 PH 60 HZ 1770 RPM 575 V 3524M

TORQUES (LB-FT): PO=18.3 PU=9.2 LR=12.1 LRA=15.2





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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