

**BALDOR • RELIANCE**

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# Customer information packet

## CFSWDM3538-5E

.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TENV, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TENV
Frame	56C
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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA WEEE NEMA_PREMIUM NEMA PREMIUM CURUSEEV
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	.770 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a

## Part detail

Revision	C
Type	AC
Mech. spec.	35E4735
Base	
Status	PRD/A
Elec. spec.	35WGZ951
Layout	35LYE4735
Eff. date	03-25-2025
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

<b>Insulation Class</b>	H
<b>Inverter Code</b>	Inverter Duty
<b>KVA Code</b>	M
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Max Speed</b>	2700 rpm
<b>Motor Finish</b>	UNPAINTED
<b>Motor Lead Quantity/Wire Size</b>	3 @ 18 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3512M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	11.78 IN
<b>Power Factor</b>	62
<b>Product Family</b>	WD All SD Non-Encapsulated
<b>Pulley End Bearing Type</b>	Sealed Bearing
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	0.625 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1770 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None



## Parts list

Part number	Description	Quantity
SA411399	SA 35E4735Z951G1	1.000 ea
RA403041	RA 35E4735Z951G1	1.000 ea
35CB1017A01	35/36 MID SECT - 3 PC. CONDUIT BOX 1/2 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
HA3100FS11	THRUBOLT, 10-32 X 8.500 SS FOOD SAFE	4.000 ea
36PA1000	PKG GRP, PRINT PK1016A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
FE-0000007	ZRTG FE ASSEMBLY	1.000 ea

PE-0000010

ZRTG PE ASSEMBLY

1.000 ea

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**AC Induction Motor Performance Data**

Record # 91703

Typical performance - not guaranteed values

Winding: 35WGZ951-R001		Type: 3512M	Enclosure: TENV	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>	
Rated Output (HP)	.5	Full Load Torque	1.49 LB-FT	
Volts	575	Start Configuration	direct on line	
Full Load Amps	.77	Breakdown Torque	6.26 LB-FT	
R.P.M.	1770	Pull-up Torque	3.25 LB-FT	
Hz	60	Locked-rotor Torque	4.02 LB-FT	
NEMA Design Code	B	Starting Current	5.36 A	
Service Factor (S.F.)	1.15	No-load Current	0.636 A	
NEMA Nom. Eff.	80	Line-line Res. @ 25°C	68 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	29°C	
S.F. Amps	.83	Temp. Rise @ S.F. Load	33°C	
		Locked-rotor Power Factor	71.0377	
		Rotor inertia	0.0866 lb-ft <sup>2</sup>	

**Load Characteristics 575 V, 60 Hz, 0.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	41	52	62	69	75	66
Efficiency	56.2	70.6	76.3	78.9	79.9	79.8	79.5
Speed	1792	1786	1779	1771	1763	1755	1766
Line amperes	0.638	0.664	0.713	0.774	0.85	0.946	0.82

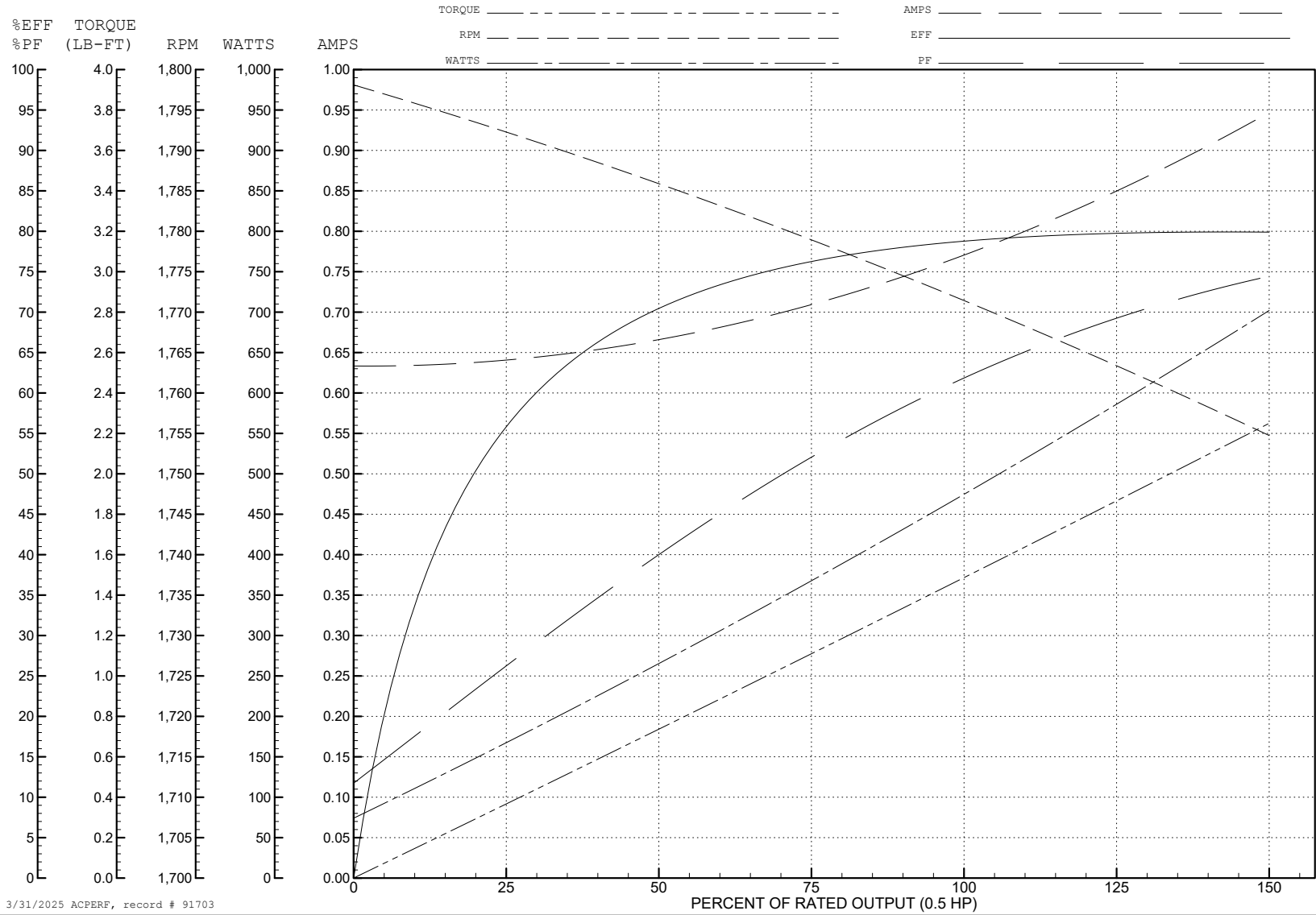
ABB Motors and Mechanical Inc.

WINDING # 35WGZ951

0.5 HP 3 PH 60 HZ 1770 RPM 575 V 3512M

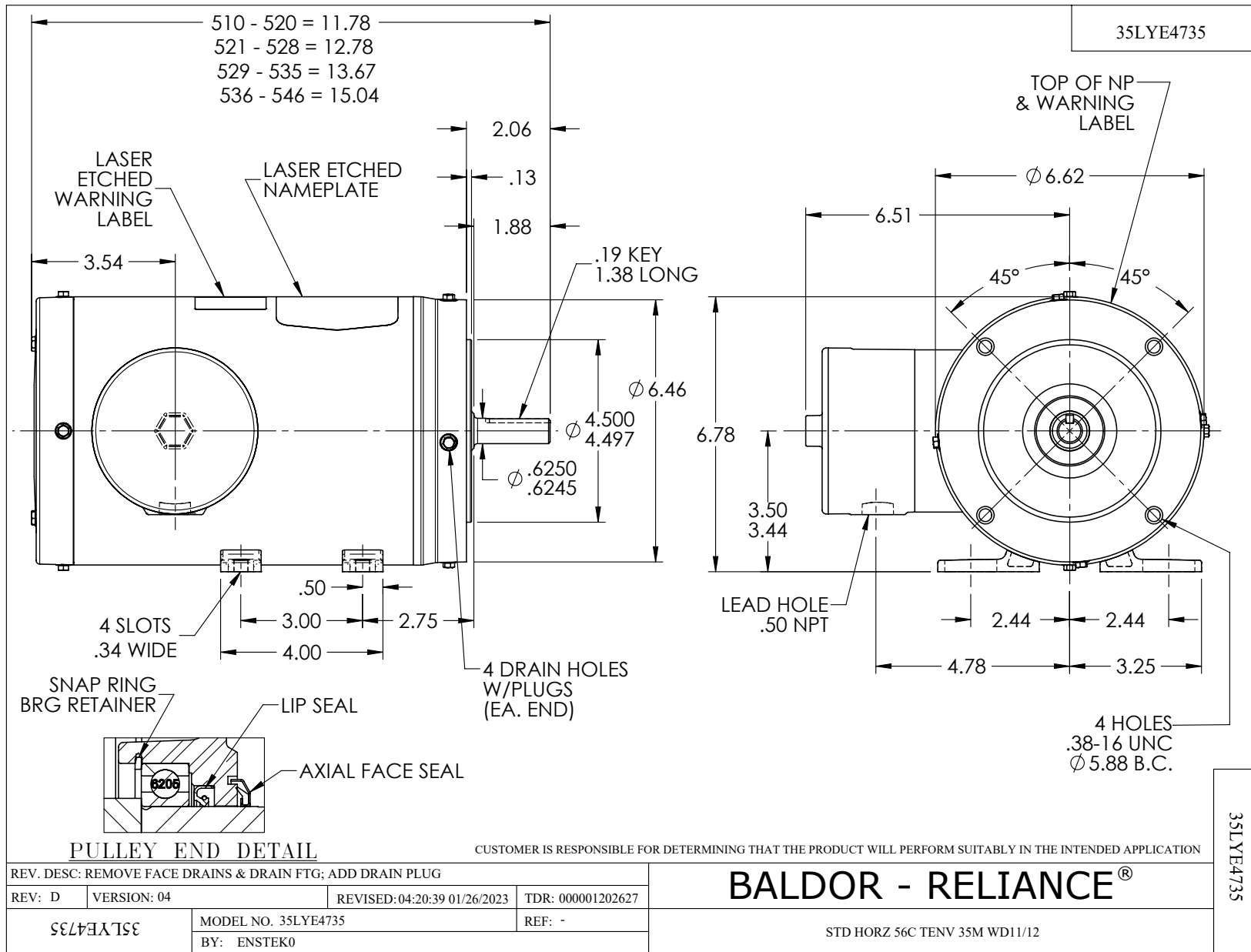
Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=6.26 PU=3.25 LR=4.02 LRA=5.36

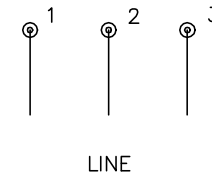
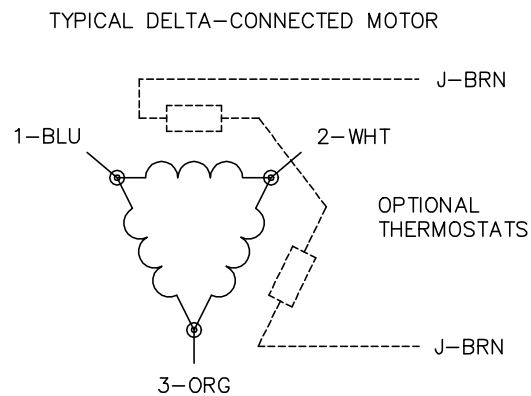


3/31/2025 ACPERF, record # 91703





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

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REV. LTR: E	VERSION: 01	TDR: 000001099922
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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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