

ABB BALDOR RELIANCE III

Customer information packet

CFSWDM3546-4E

1HP, 1770RPM, 3PH, 60HZ, 56C, 3522M, TENV, F1, N

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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	WEEE CURUSEEV NEMA PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.670 A @ 460.0 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	1.7 a
Insulation Class	H
Inverter Code	Inverter Ready

Part Detail

Revision	B
Type	AC
Mech. spec.	35E4735
Base	
Status	PRD/A
Elec. spec.	35WGK984
Layout	35LYE4735
Eff. date	09-13-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	05-22-2024

KVA Code	N
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	3522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.78 IN
Power Factor	66
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	Y
Service Factor	1.15
Shaft Diameter	0.625 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 #	CFSWDM3546-4E					WGT		LBS					
SPEC	35E4735K984					ENCL	TENV						
SER #						CC	010A	IP	69				
HP	1	MAG CUR				1.25							
VOLTS	460					NEMA NOM. EFF				85.5			
AMPS	1.67					PF	66						
RATING	40C AMB-CONT												
RPM	1770					MAX RPM		2700					
FRAME	56C	HZ	60		CODE	N	CLASS	H					
SER.F.	1.15	SF AMP	1.75		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	0.159	CT	15	TO	60	4:1						
ID LOGO	SL HZ	1	VT	3	TO	60	20:1						

AC Induction Motor Performance Data

Record # 105474

Typical performance - not guaranteed values

Winding: 35WKG984-R001			Type: 3522M	Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)		1	Full Load Torque	2.99 LB-FT	
Volts		460	Start Configuration	direct on line	
Full Load Amps		1.67	Breakdown Torque	16.6 LB-FT	
R.P.M.		1770	Pull-up Torque	7.42 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	10.32 LB-FT
NEMA Design Code	B	KVA Code	N	Starting Current	16.1 A
Service Factor (S.F.)		1.15	No-load Current	1.23 A	
NEMA Nom. Eff.	85.5	Power Factor	66	Line-line Res. @ 25°C	14.4 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load	63°C	
S.F. Amps		1.75	Temp. Rise @ S.F. Load	71°C	
			Locked-rotor Power Factor	59.4	
			Rotor inertia	0.159 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	43	56	66	73	78	72
Efficiency	70.8	81.2	84.5	85.9	85.8	85.2	85.5
Speed	1793	1786	1781	1773	1766	1758	1768
Line amperes	1.25	1.34	1.49	1.67	1.87	2.12	1.75

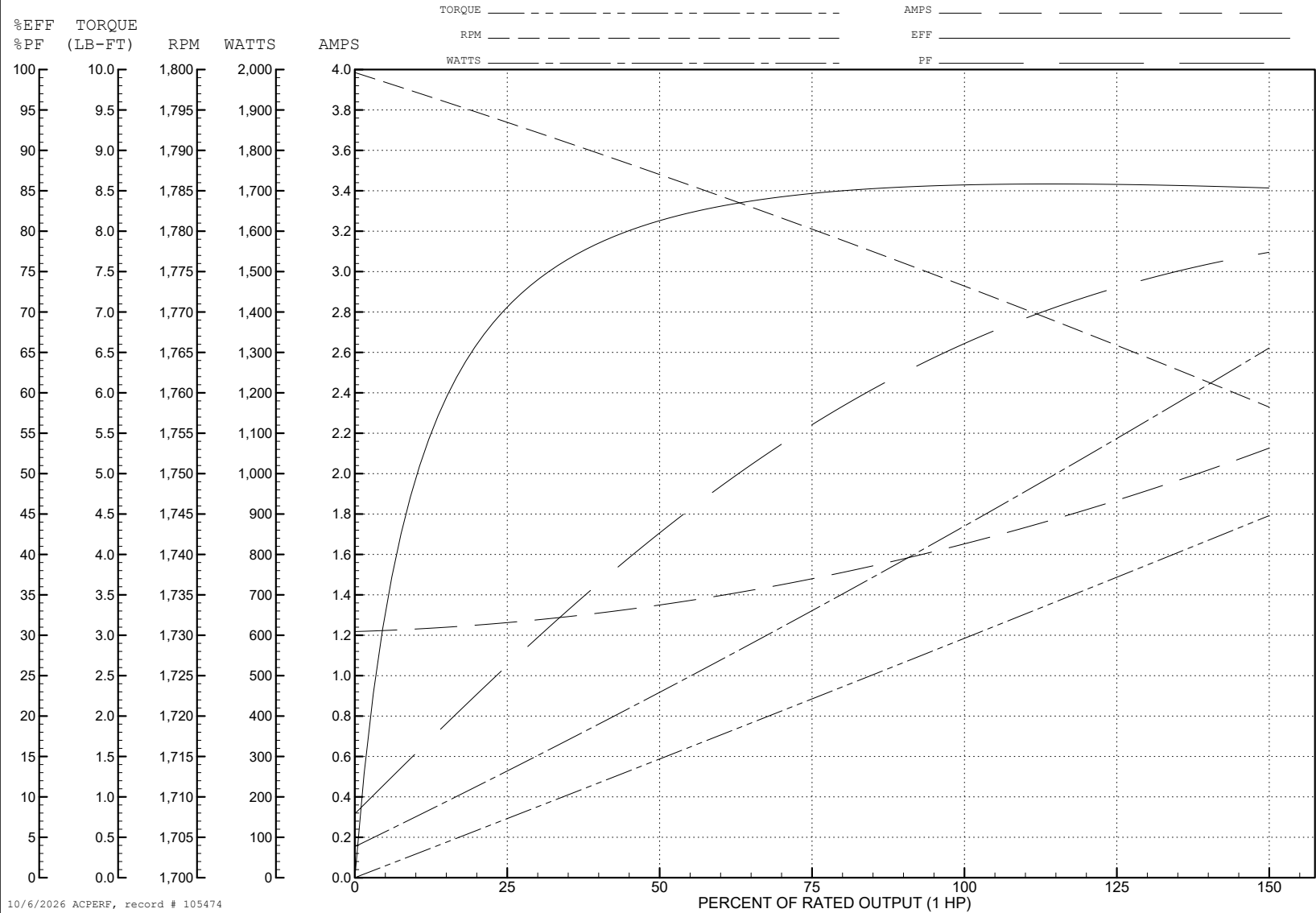
ABB Motors and Mechanical Inc.

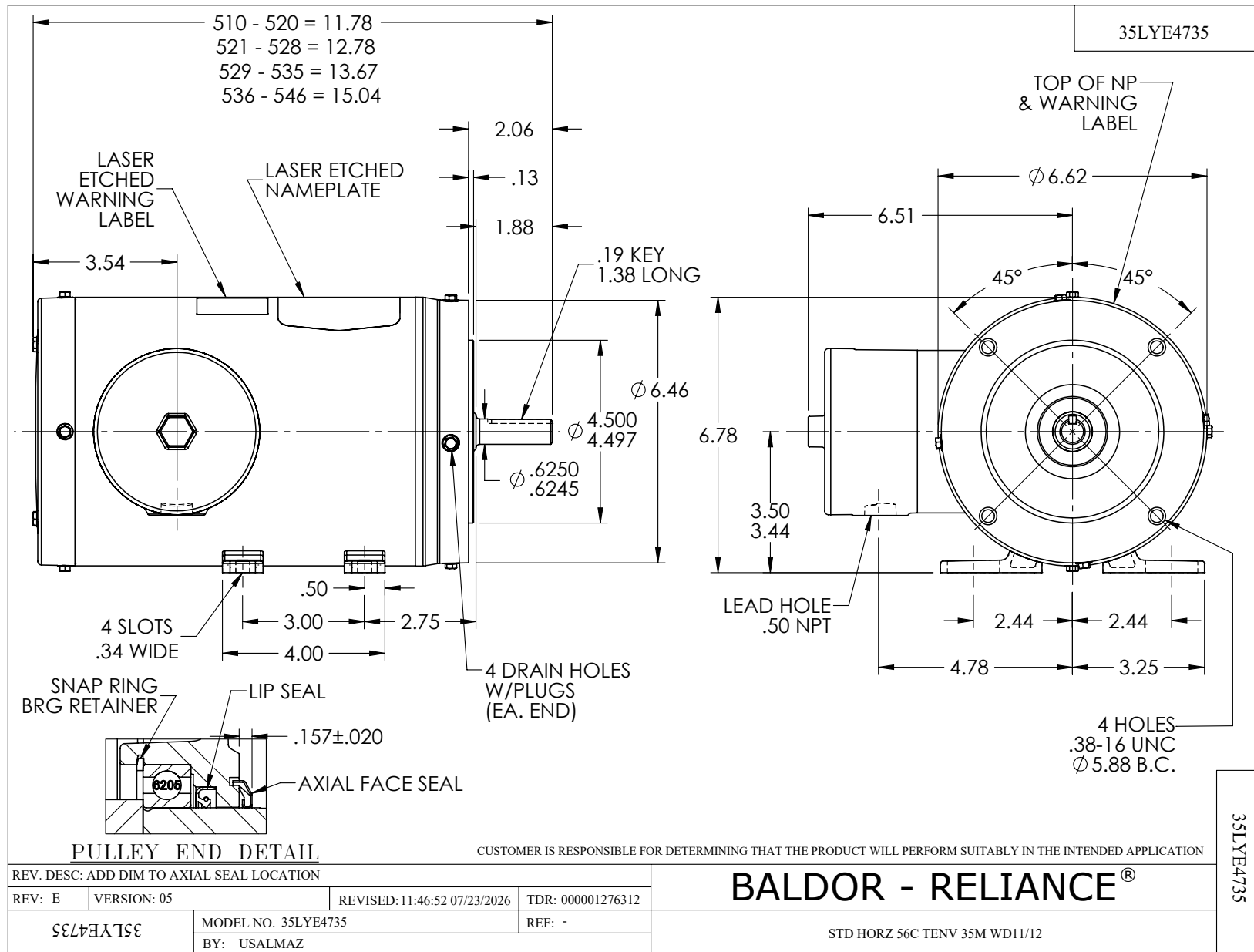
WINDING # 35WGK984

Typical performance - not guaranteed values.

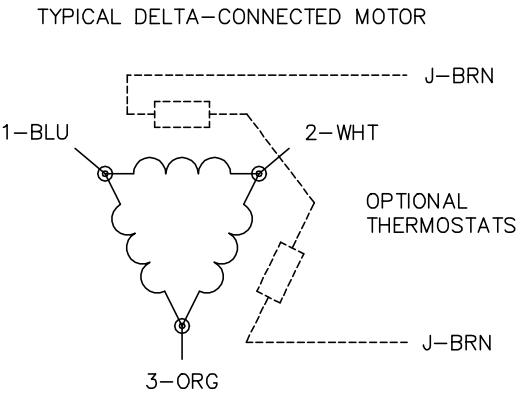
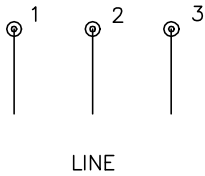
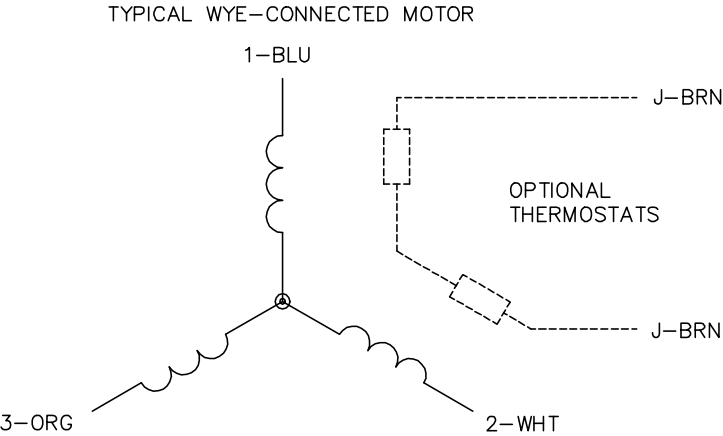
1 HP 3 PH 60 HZ 1770 RPM 460 V 3522M

TORQUES (LB-FT): PO=16.6 PU=7.42 LR=10.32 LRA=16.1





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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