ABB BALDOR RELIANCE

Customer information packet

VFSWDM3546-5E

1HP, 1770RPM, 3PH, 60HZ, 56C, 3522M, TENV, F1, N
Class - None
Division - Not Applicable

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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	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.	35E4656
Base	
Status	PRD/A
Elec. spec.	35WGG198
Layout	35LYE4656
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	12.78 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
RoHS Status	ROHS COMPLIANT
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 #	VFSWDM3546-5E				**LBS**							
SPEC	35E4656G198G1				**ENCL**	TENV						
SER #					**CC**	010A	**IP**	69				
HP	1			**MAG CUR**	.87							
VOLTS	575						**NEMA NOM. EFF**	85.5				
AMPS	1.3					**PF**	70					
RATING	40C AMB-CONT											
RPM	1775				**MAX RPM**	2700						
FRAME	56C	**HZ**	60		**CODE**	M	**CLASS**	H				
SER.F.	1.15	**SF AMP**	1.4			**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**	0.9	**VT**	3	**TO**	60	20:1					
									QR			
YR												

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. @ 25ºC**	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

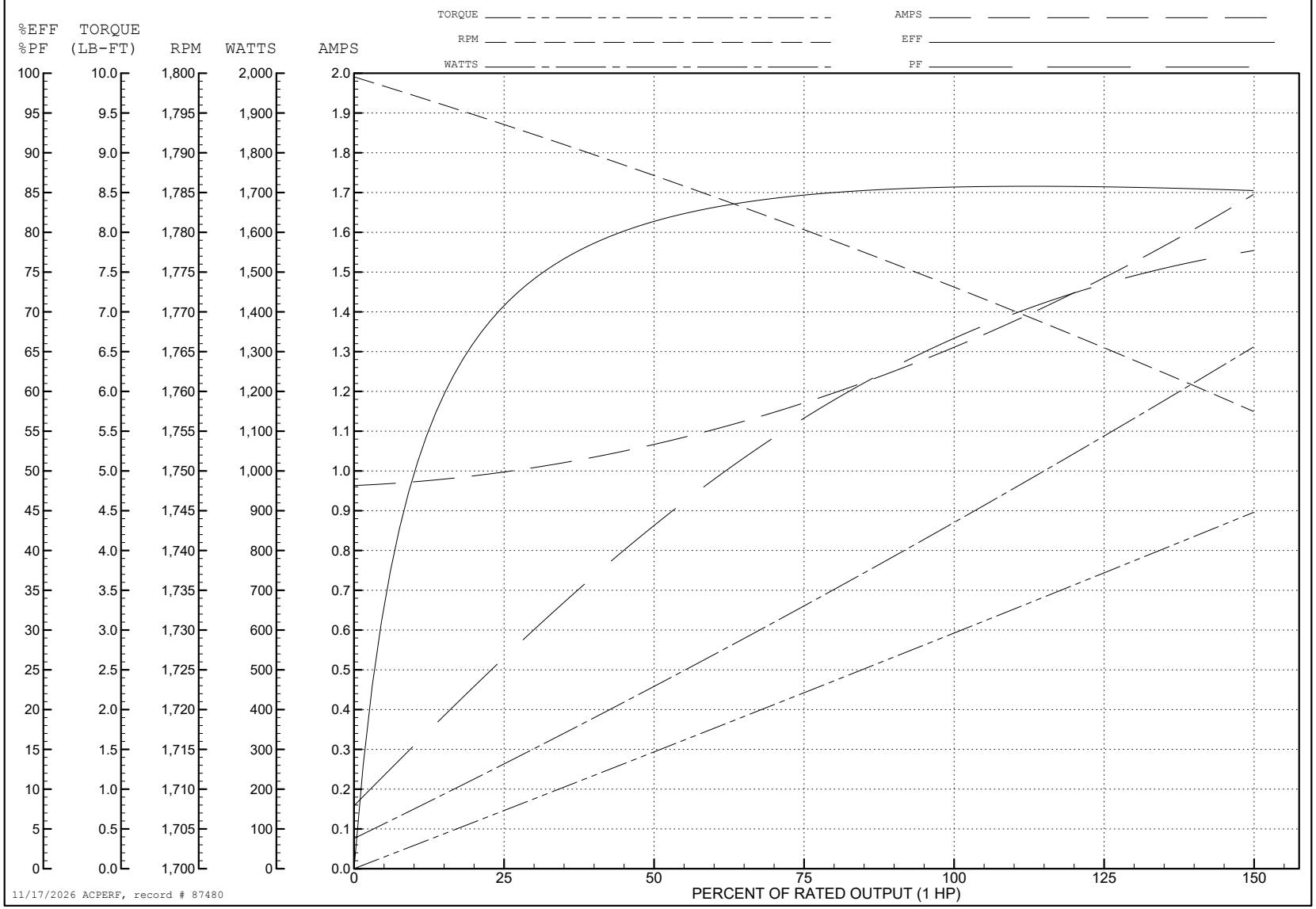
ABB Motors and Mechanical Inc.

WINDING # 35WGG198

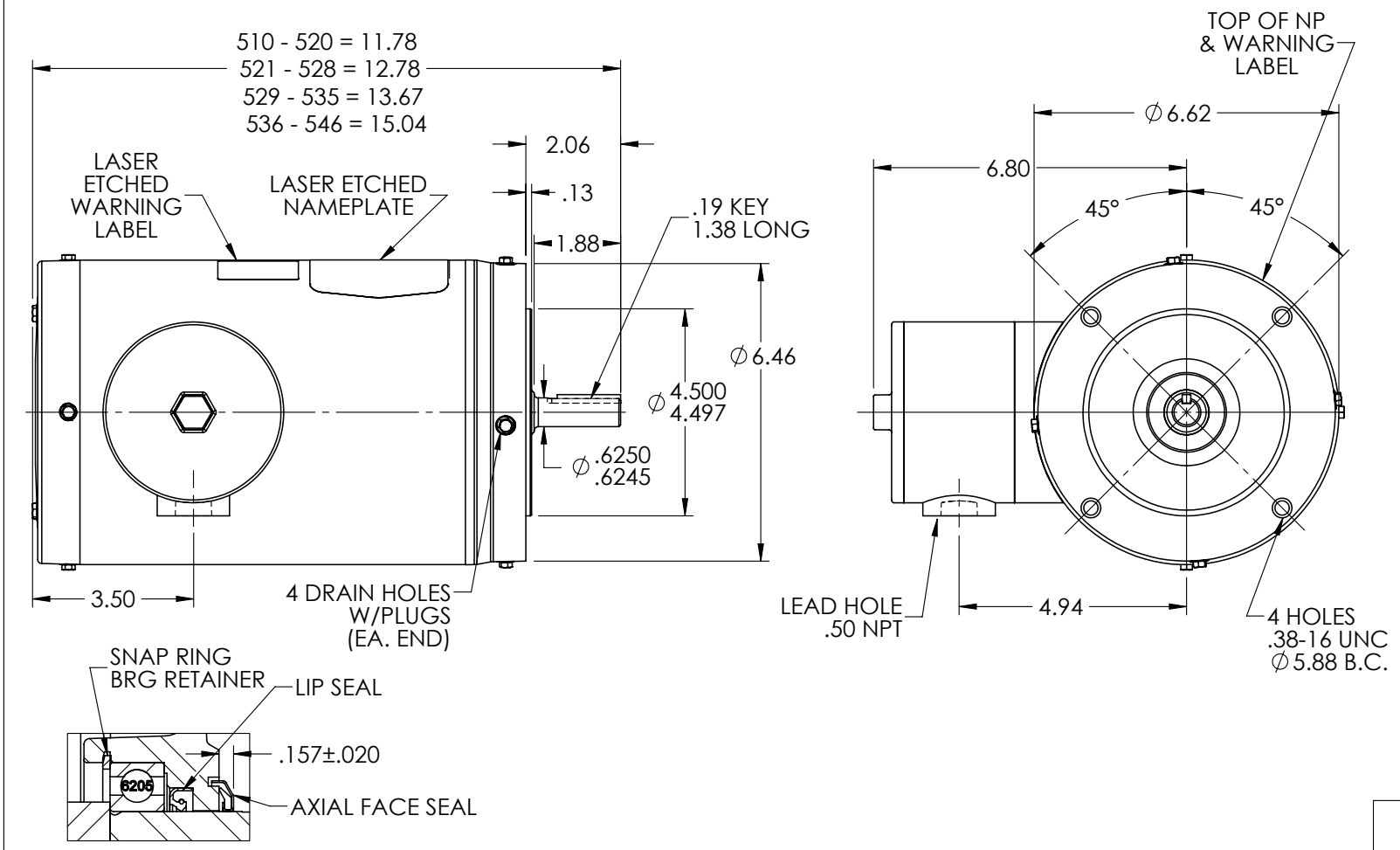
1 HP 3 PH 60 HZ 1770 RPM 575 V 3522M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=16.37 PU=7.31 LR=10.16 LRA=12.72



35LYE4656



PULLEY END DETAIL

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

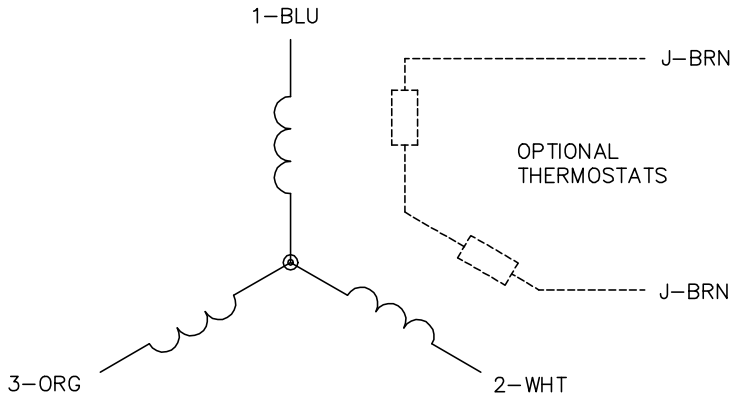
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35LYE4656	MODEL NO. 35LYE4656		REF: -
	BY: USALMAZ		STD VER 56C TENV 35M WD11/12

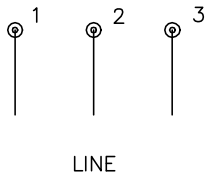
BALDOR

35LYE4656

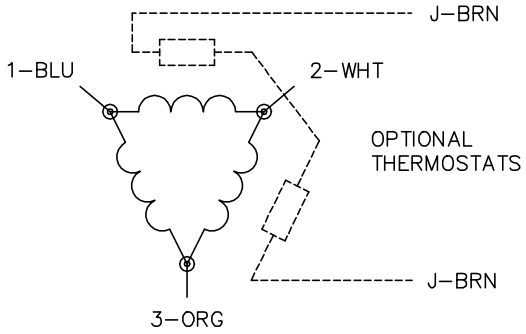
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TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



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
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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