

ABB BALDOR RELIANCE III

Customer information packet

FDEM4115T-5

72M 4P TEFC HOR 326T FARM DUTY SE

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	50.000 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 (OLD LOGO)
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	46.000 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	46.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	G
Type	AC
Mech. spec.	12G994
Base	
Status	PRD/A
Elec. spec.	12WGY539
Layout	12LYG994
Eff. date	11-27-2024
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	06-14-2018

KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 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

NP3126L											
CAT.NO.	FDEM4115T-5										
SPEC.	12G994Y539G1										
HP	50										
VOLTS	575										
AMP	46										
RPM	1775										
FRAME	326T		HZ	60				PH	3		
SER.F.	1.15	CODE	H	DES	A	CL	F				
NEMA-NOM-EFF	94.5	PF	85								
RATING	40C AMB-CONT										
CC	010A										
DE	6312		ODE	6311							
ENCL	TEFC	SN									

AC Induction Motor Performance Data

Record # 36803

Typical performance - not guaranteed values

Winding: 12WGY539-R001			Type: 1272M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		50	Full Load Torque		147.44 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		46	Breakdown Torque		475.4 LB-FT		
R.P.M.		1775	Pull-up Torque		190 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		205.9 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		276.6 A
Service Factor (S.F.)		1.15	No-load Current		18.41 A		
NEMA Nom. Eff.		94.5	Power Factor	85	Line-line Res. @ 25°C		0.159 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps				Temp. Rise @ S.F. Load		76°C	
				Locked-rotor Power Factor		26.4	
				Rotor inertia		9.59 lb-ft²	

Load Characteristics 575 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	72	81	86	88	88	86
Efficiency	88.8	92.8	93.9	94.2	94.1	93.8	94.7
Speed	1796	1791	1787	1775	1774	1773	1774
Line amperes	21.48	28.21	36.86	46.49	56.88	67.83	52.8

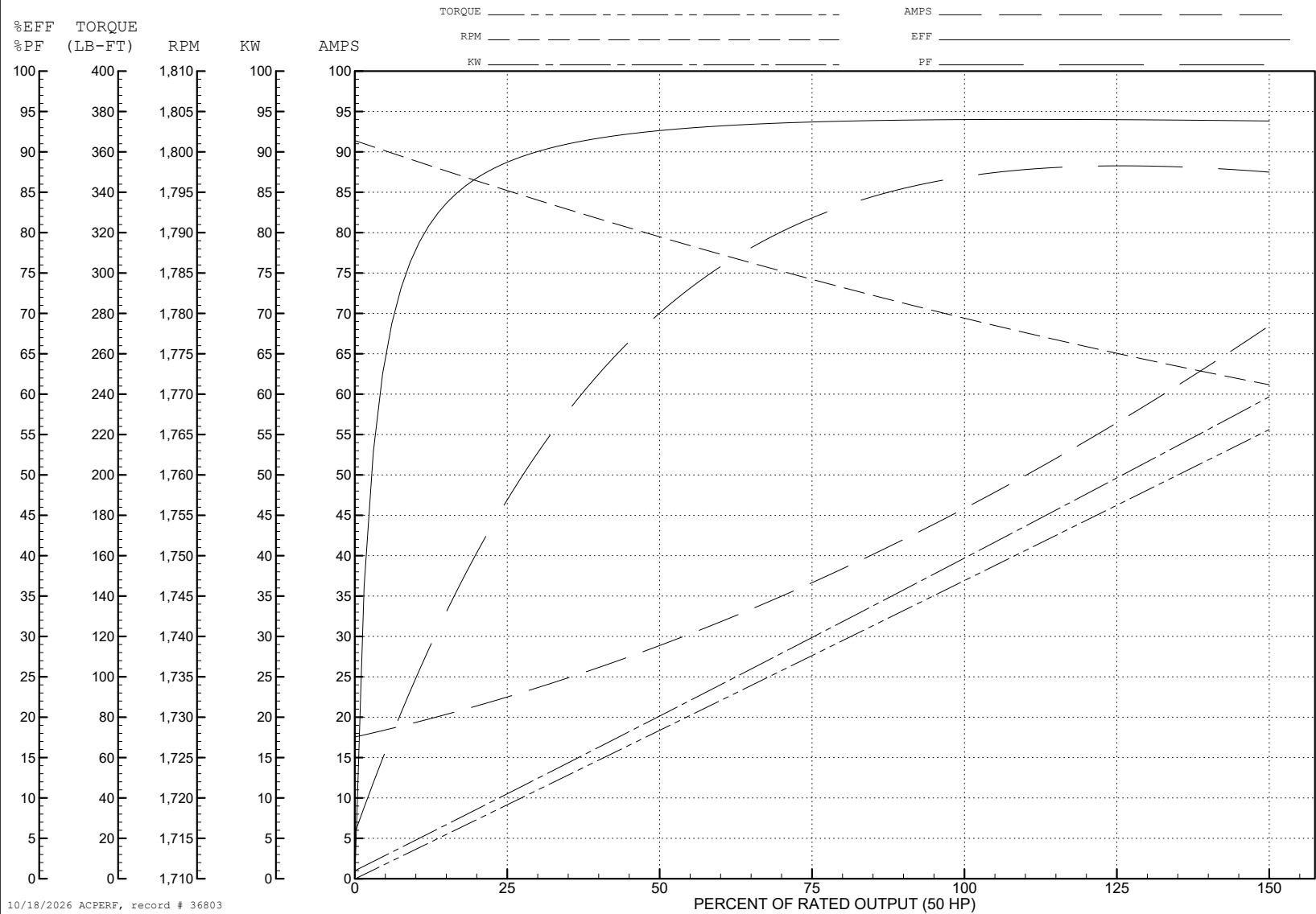
ABB Motors and Mechanical Inc.

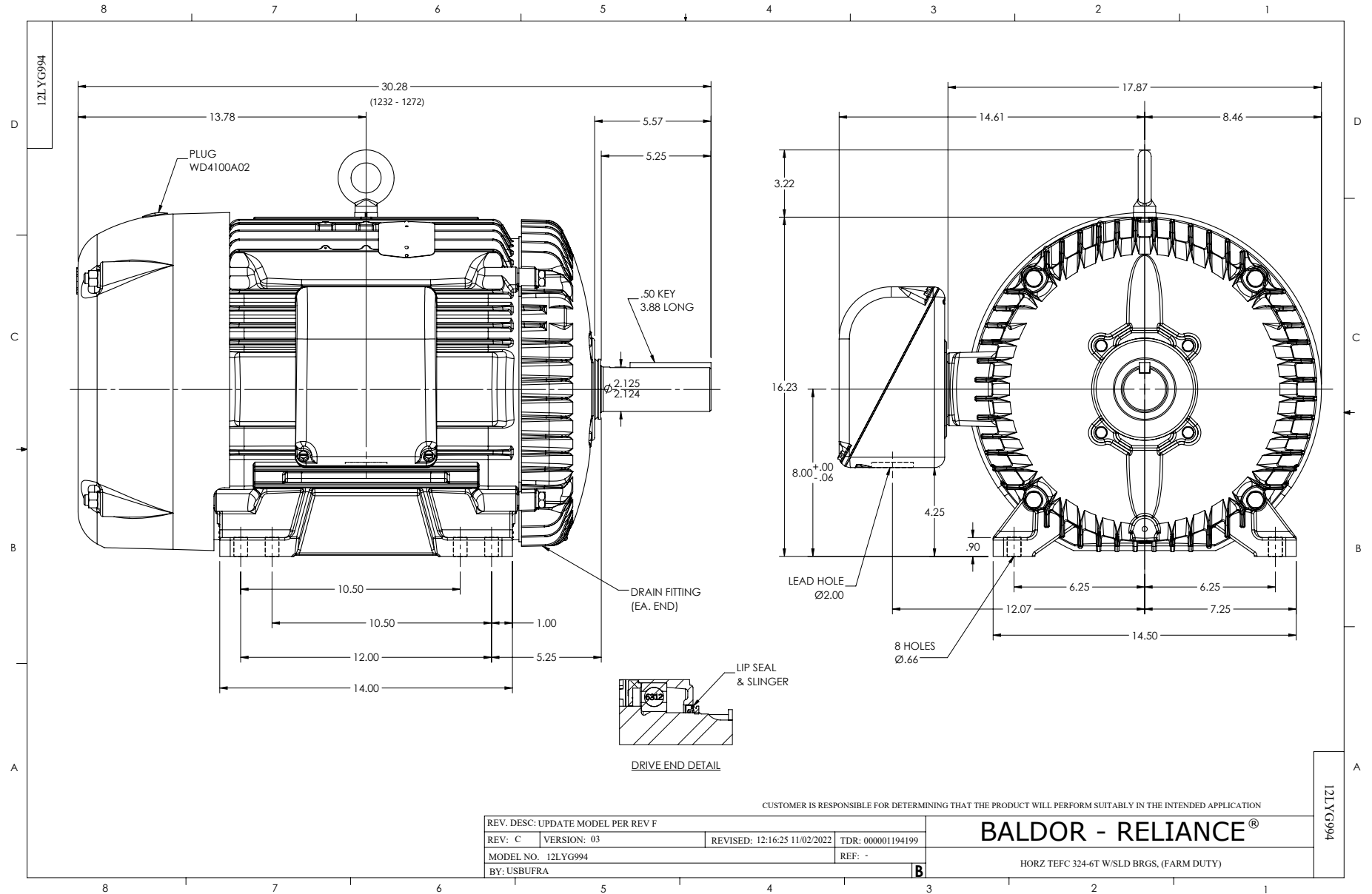
WINDING # 12WGY539

Typical performance - not guaranteed values.

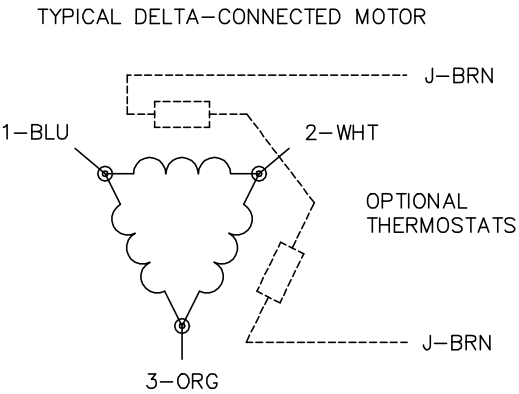
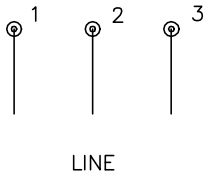
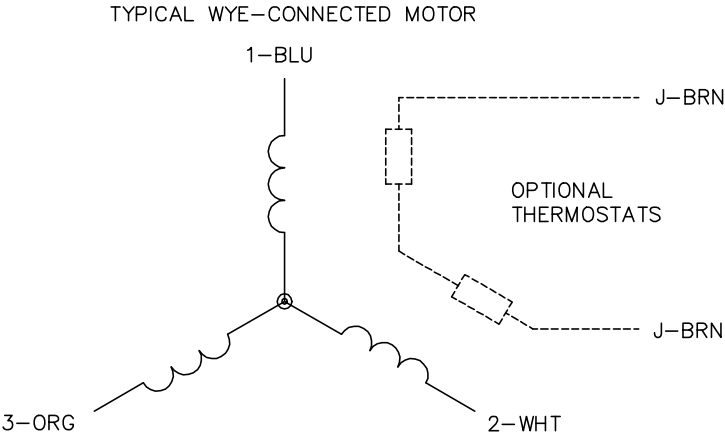
50 HP 3 PH 60 HZ 1775 RPM 575 V 1272M

TORQUES (LB-FT): PO=475.4 PU=190 LR=205.9 LRA=276.6





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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