

ABB BALDOR RELIANCE III

Customer information packet

FDEM4114T-5

52M 2P TEFC HOR 326TS FARM DUTY SE

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326TS
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	3600 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	45.000 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	45.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	G
Type	AC
Mech. spec.	12H685
Base	
Status	PRD/A
Elec. spec.	12WGY889
Layout	12LYH685
Eff. date	11-27-2024
CD Diagram	CD0006
Poles	02
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	1252M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	28.78 IN
Power Factor	90
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	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3540 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.	FDEM4114T-5								
SPEC.	12H685Y889G1								
HP	50								
VOLTS	575								
AMP	45								
RPM	3540								
FRAME	326TS		HZ	60			PH	3	
SER.F.	1.15	CODE	H	DES	A	CL	F		
NEMA-NOM-EFF	93	PF	90						
RATING	40C AMB-CONT								
CC	010A								
DE	6312		ODE	6311					
ENCL	TEFC	SN							

AC Induction Motor Performance Data

Record # 49276

Typical performance - not guaranteed values

Winding: 12WGY889-R001			Type: 1252M		Enclosure: TEFC			
Nameplate Data			575 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		50	Full Load Torque		74.3 LB-FT			
Volts		575	Start Configuration		direct on line			
Full Load Amps		45	Breakdown Torque		311 LB-FT			
R.P.M.		3540	Pull-up Torque		120 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		148 LB-FT		
NEMA Design Code		A	KVA Code	H	Starting Current		347 A	
Service Factor (S.F.)		1.15	No-load Current		13.1 A			
NEMA Nom. Eff.		93	Power Factor		90	Line-line Res. @ 25°C		0.157 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		76°C	
S.F. Amps					Temp. Rise @ S.F. Load		91°C	
					Locked-rotor Power Factor		20.8	
					Rotor inertia		4.07 LB-FT2	

Load Characteristics 575 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	80	87	90	91	90	91
Efficiency	88.4	92.8	93.5	93.3	92.8	91.9	93
Speed	3584	3573	3560	3546	3531	3515	3537
Line amperes	17.2	25.3	34.8	45	55.8	67.7	51.5

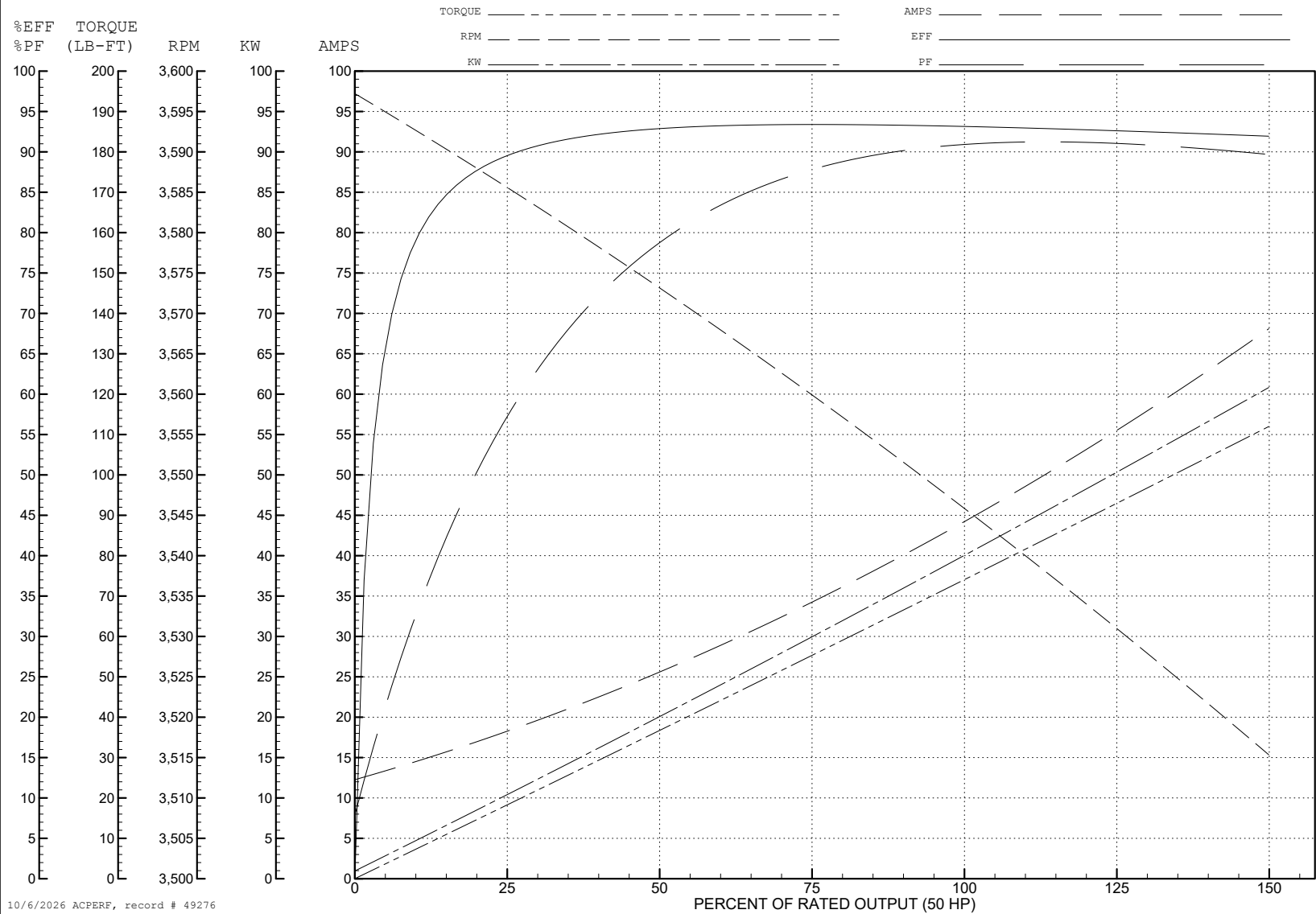
ABB Motors and Mechanical Inc.

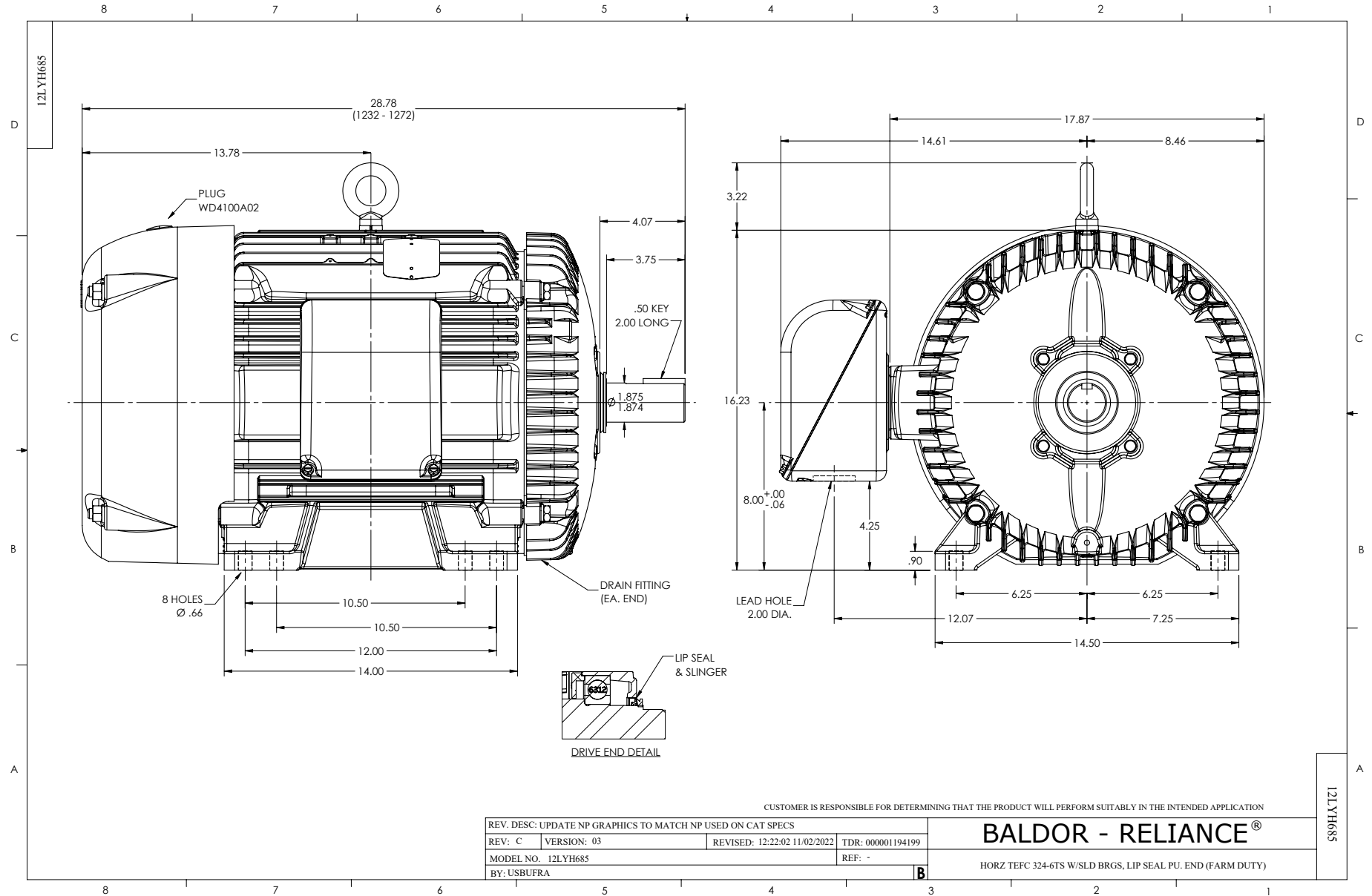
WINDING # 12WGY889

Typical performance - not guaranteed values.

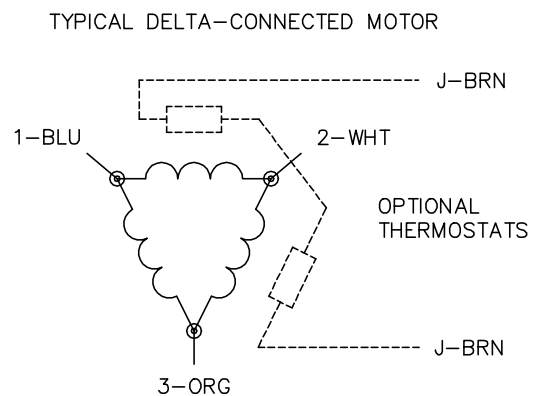
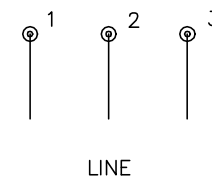
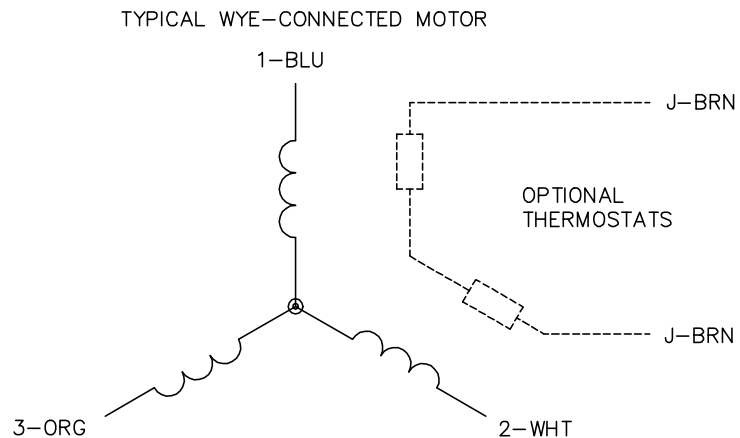
50 HP 3 PH 60 HZ 3540 RPM 575 V 1252M

TORQUES (LB-FT): PO=311 PU=120 LR=148 LRA=347





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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