

ABB BALDOR RELIANCE III

Customer information packet

FDEM4106T-5

36M 2P TEFC HOR 256T FARM DUTY SE

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	256T
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	20.000 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	18.000 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	18.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	N
Type	AC
Mech. spec.	09K989
Base	
Status	PRD/A
Elec. spec.	09WGZ699
Layout	09LYK989
Eff. date	11-27-2024
CD Diagram	CD0006
Poles	02
Leads	3#12
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 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0936M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	23.55 IN
Power Factor	88
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	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3520 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.	FDEM4106T-5										
SPEC.	09K989Z699G1										
HP	20										
VOLTS	575										
AMP	18										
RPM	3520										
FRAME	256T		HZ	60				PH	3		
SER.F.	1.15	CODE	H	DES	A	CL	F				
NEMA-NOM-EFF	91	PF	88								
RATING	40C AMB-CONT										
CC	010A										
DE	6309		ODE	6208							
ENCL	TEFC	SN									

AC Induction Motor Performance Data

Record # 33069

Typical performance - not guaranteed values

Winding: 09WGZ699-R001			Type: 0936M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		20	Full Load Torque		29.7 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		18	Breakdown Torque		110 LB-FT		
R.P.M.		3520	Pull-up Torque		39 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		49.5 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		129 A
Service Factor (S.F.)		1.15	No-load Current		5.75 A		
NEMA Nom. Eff.		91	Power Factor	88	Line-line Res. @ 25°C		0.732 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		78°C	
S.F. Amps				Temp. Rise @ S.F. Load		98°C	
				Locked-rotor Power Factor		29.5	
				Rotor inertia		0.92 lb-ft²	

Load Characteristics 575 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	78	86	88	90	90	89
Efficiency	88.4	91.9	92.2	91.7	90.3	89	90.9
Speed	3580	3562	3541	3519	3495	3468	3505
Line amperes	7.21	10.4	14.2	18.4	22.9	28	21.1

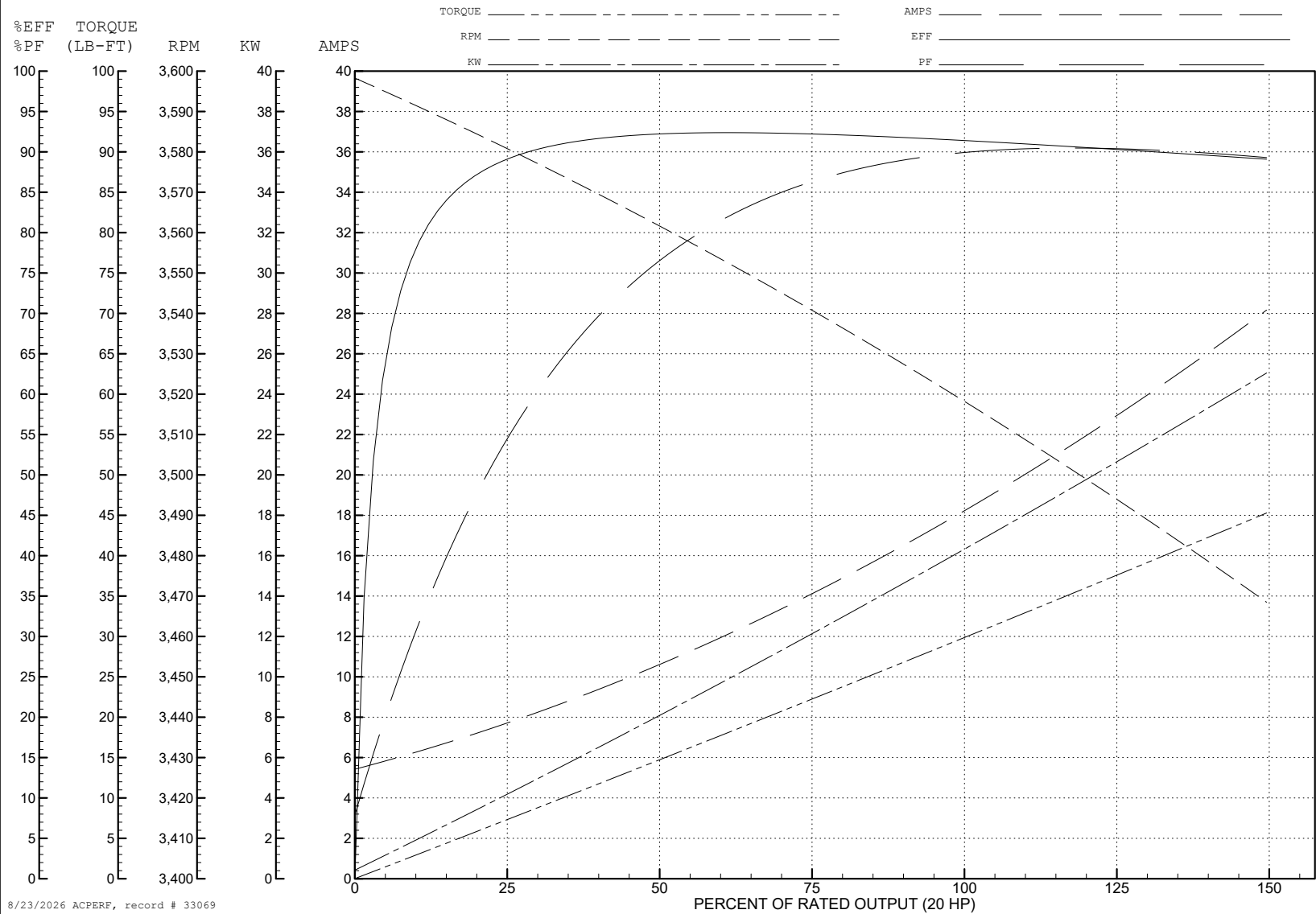
ABB Motors and Mechanical Inc.

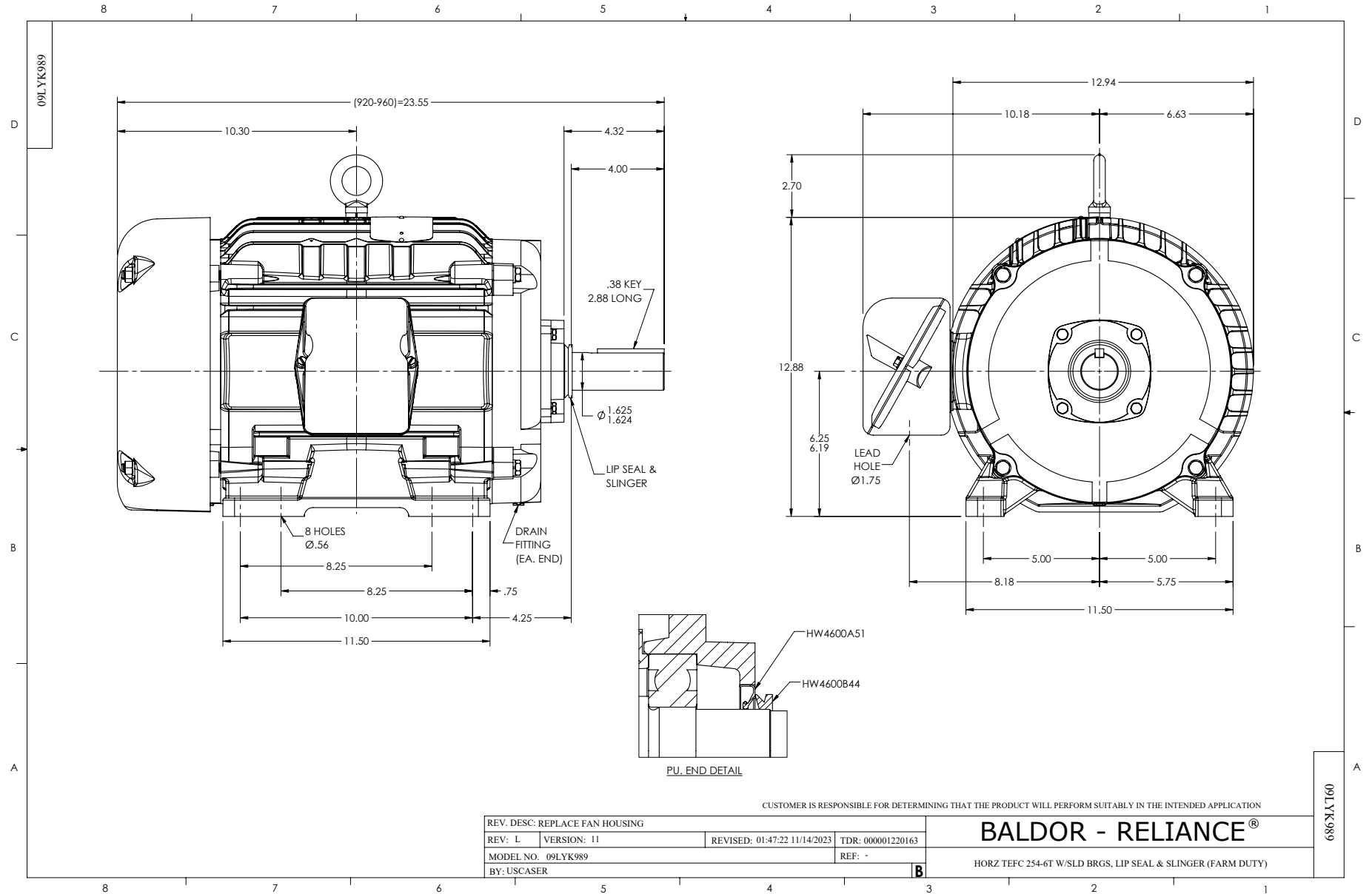
WINDING # 09WGZ699

Typical performance - not guaranteed values.

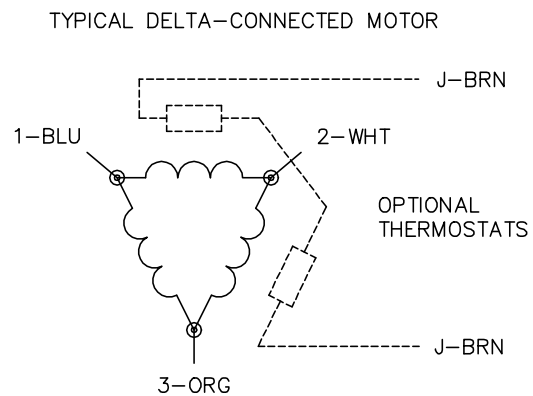
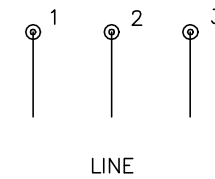
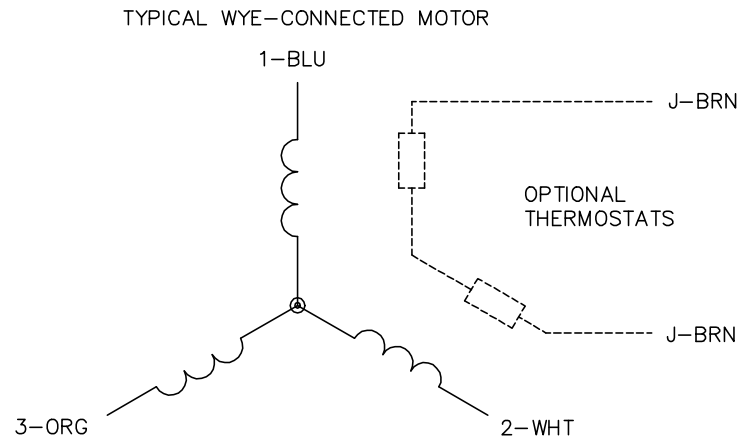
20 HP 3 PH 60 HZ 3520 RPM 575 V 0936M

TORQUES (LB-FT): PO=110 PU=39 LR=49.5 LRA=129





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

SH 1 of 1