

ABB BALDOR RELIANCE III

Customer information packet

FDEM4115T

50HP, 1775RPM, 3PH, 60HZ, 326T, 1272M, TEFC, F1

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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV NEMA PREMIUM UR
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	58.000 A @ 460.0 V 126.000 A @ 208.0 V 116.000 A @ 230.0 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

Part Detail

Revision	E
Type	AC
Mech. spec.	12G994
Base	
Status	PRD/A
Elec. spec.	12WGZ279
Layout	12LYG994
Eff. date	11-27-2024
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	02-03-2021

Heater Indicator	No Heater
High Voltage Full Load Amps	58.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 6 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										
SPEC.	12G994Z279G1										
HP	50										
VOLTS	230/460										
AMP	116/58										
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									
	SFA 132/66										

Parts List

Part number	Description	Quantity
SA390455	SA 12G994Z279G1	1.000 ea
RA380904	RA 12G994Z279G1	1.000 ea
09FN3001C03	XTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
12EP1107A156	FREP W/"O" DRN & NO GRSR,RLF,DRN,RET HLS	1.000 ea
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
12EP1106A85	PUEP, MACH FOR 3.00 LIP SEAL	1.000 ea
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4600B37	SEAL 2.250 X 3.000 X .375 SINGLE LIP	1.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
12FH1002SP	FAN COVER, CAST	1.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
10GS1000	GASKET, CONDUIT BOX LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 ea

HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1025C02	WILKOFASG, 787.105, TAN	0.080 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3126L	ALUM FARM DUTY SUPER-E UL CSA-EEV PREM	1.000 ea
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7026F09	LEAD SET, 8 AWG, 9 LEAD, 26" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 93227

Typical performance - not guaranteed values

Winding: 12WGZ279-R001				Type: 1272M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		50		Full Load Torque		148 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		116/58		Breakdown Torque		437.3 LB-FT		
R.P.M.		1775		Pull-up Torque		223.3 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		255.3 LB-FT		
NEMA Design Code		A	KVA Code	H		Starting Current		407.47 A
Service Factor (S.F.)		1.15		No-load Current		21 A		
NEMA Nom. Eff.		94.5	Power Factor	85		Line-line Res. @ 25°C		0.11287 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		66°C		
S.F. Amps		132/66		Temp. Rise @ S.F. Load		82°C		
				Locked-rotor Power Factor		26.5		

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	51	73	82	85	87	87	86
Efficiency	91.5	94.3	94.7	94.5	93.8	93	94.1
Speed	1791.2	1786.1	1779.1	1773.3	1766.2	1758.5	1769
Line amperes	25.1	34.1	45.4	58.2	72	87	66.5

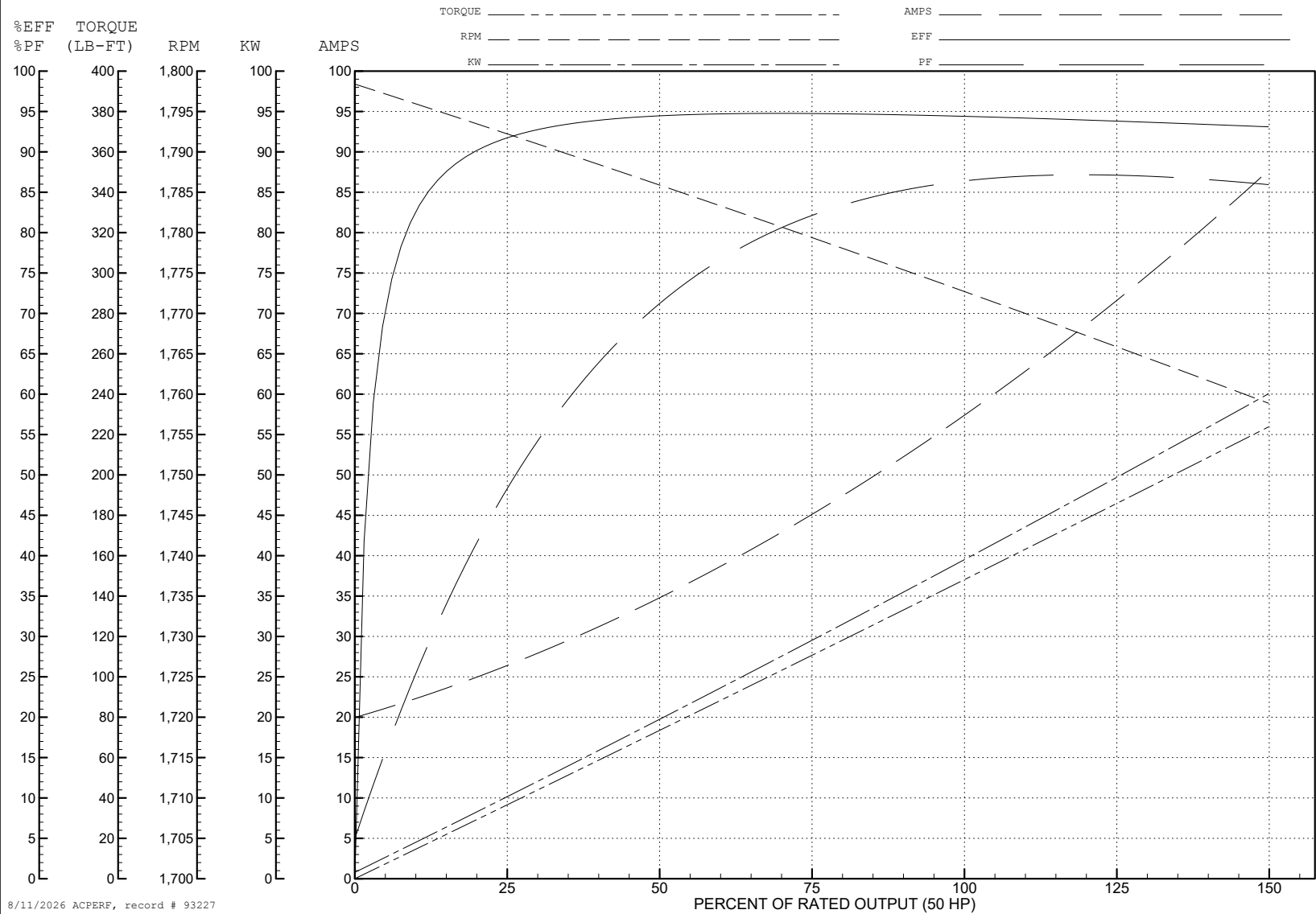
ABB Motors and Mechanical Inc.

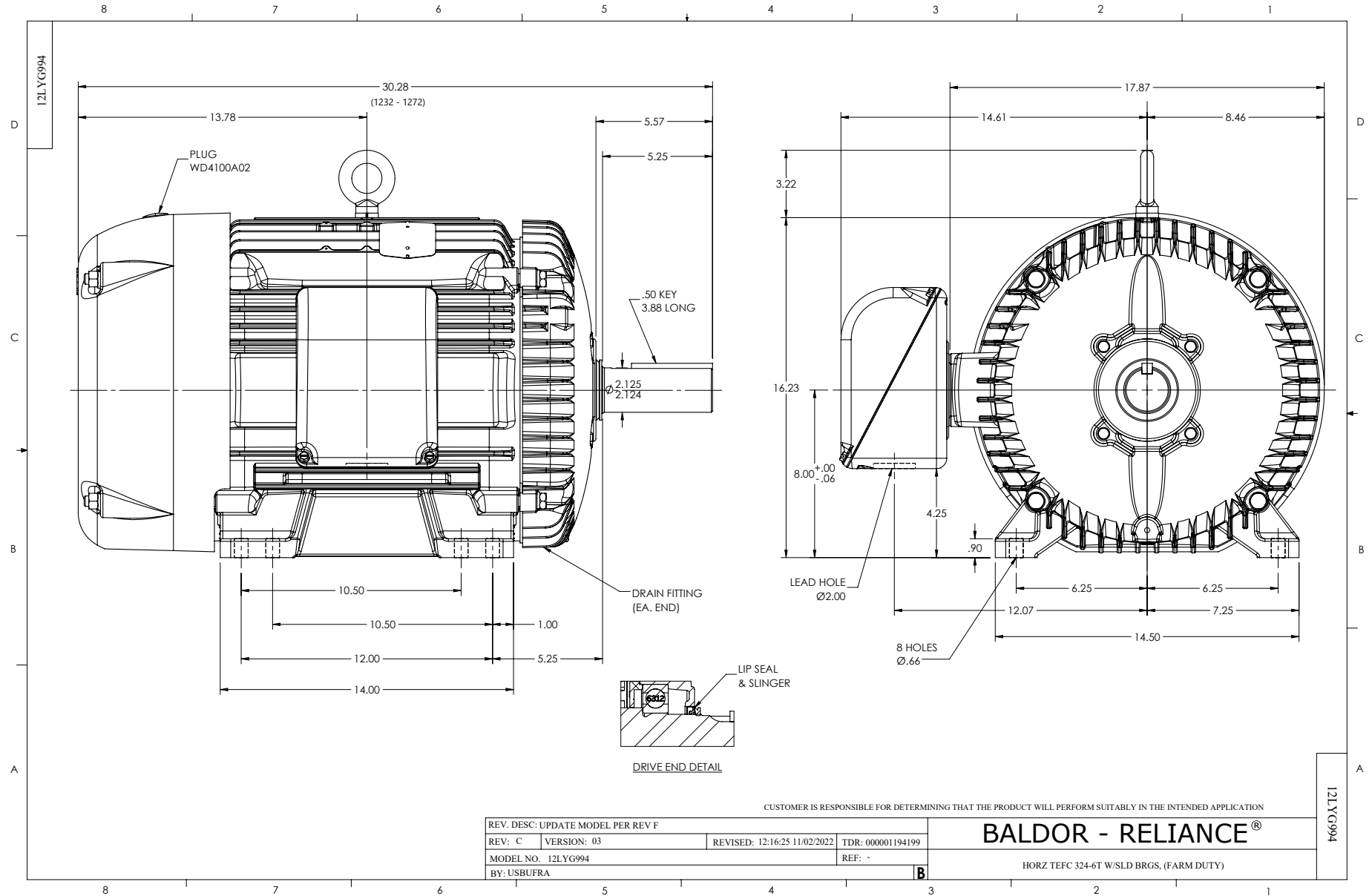
WINDING # 12WGZ279

Typical performance - not guaranteed values.

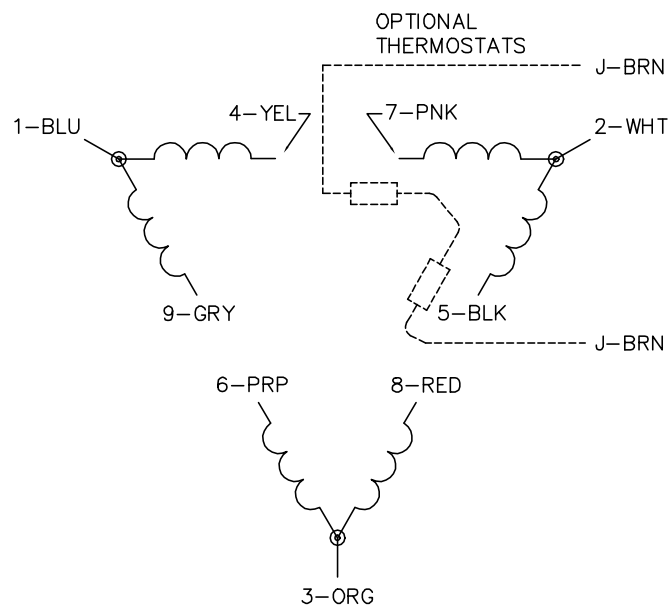
50 HP 3 PH 60 HZ 1775 RPM 460 V 1272M

TORQUES (LB-FT): PO=437.3 PU=223.3 LR=255.3 LRA=407.47

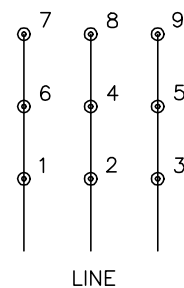




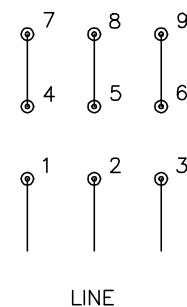
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1