

ABB BALDOR RELIANCE III

Customer information packet

EM4115T-BG

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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	128.000 A @ 208.0 V 58.000 A @ 460.0 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 Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	U
Type	AC
Mech. spec.	12G931
Base	
Status	PRD/A
Elec. spec.	12WGY141
Layout	12LYG931
Eff. date	11-21-2024
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	10-08-2013

Heater Indicator	No Heater
High Voltage Full Load Amps	58.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 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	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	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 (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3443LUA											
CAT.NO.	EM4115T-BG			CUST. P/N				ENCL			TEFC
SPEC.	12G931Y141G1	CC	010A	FRAME	326T	SER.NO.					
HP	50		CLASS	H	HZ	60					
R.P.M.	1775		PH.	3	DES.	A					
VOLTS	230/460		CODE		H	ODE BRG		6311	DE BRG	6312	
AMPS	116/58										
RATING	40C AMB-CONT		NEMA NOM. EFF.			94.5	GREASE		POLYREX EM		
P.F.	85	SER.F.	1.15	CT6-60H(10:1)VT3-60H(20:1							
USABLE AT	50HZ 50HP 190/380V 138/69A			SF1.0							
VOLTS	AMPS	MAX. SPACE HEATER TEMP.									

Parts List

Part number	Description	Quantity
SA270434	SA 12G931Y141G1	1.000 ea
RA257069	RA 12G931Y141G1	1.000 ea
09FN3001C03	XTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
10CB3001	CONDUIT BOX CAST W/2.500 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
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
12EP1107A153	FR ENDPLATE, MACH FOR "O" DRAIN	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
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
12EP1106A77	PU ENDPLATE, MACH FOR "O" DRAIN	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
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
12FH1002SP	FAN COVER, CAST	1.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 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
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
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 ea

HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.080 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3443LUA	SS SUPER-E,CURUS-EEV,NEMA PREM, CC	1.000 ea
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea

AC Induction Motor Performance Data

Record # 35498

Typical performance - not guaranteed values

Winding: 12WGY141-R004				Type: 1272M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		50		Full Load Torque		147 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		116/58		Breakdown Torque		396 LB-FT	
R.P.M.		1775		Pull-up Torque		183 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		254 LB-FT	
NEMA Design Code		A	KVA Code	G	Starting Current		395 A
Service Factor (S.F.)		1.15		No-load Current		19.8 A	
NEMA Nom. Eff.		94.5	Power Factor	85	Line-line Res. @ 25°C		0.10889 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		64°C	
S.F. Amps				Temp. Rise @ S.F. Load		79°C	
				Locked-rotor Power Factor		26	
				Rotor inertia		9.59 lb-ft²	

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	53	74	83	85	87	87	87
Efficiency	91.3	94.3	94.8	94.6	94	93.1	94.2
Speed	1794.5	1789.3	1783.5	1777.5	1770.7	1761.5	1773
Line amperes	24.2	33.5	44.7	57.6	71.5	90	65.9

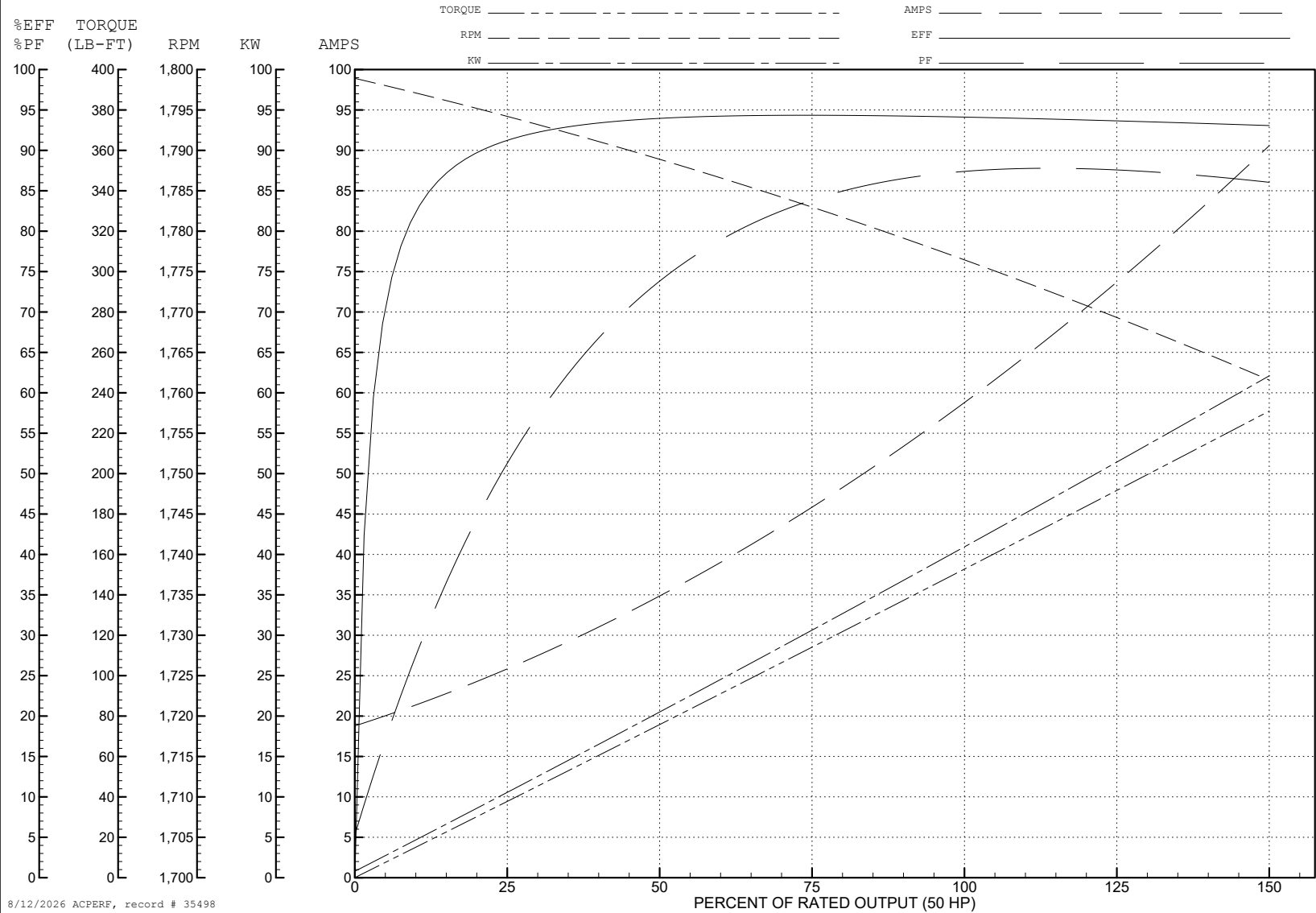
ABB Motors and Mechanical Inc.

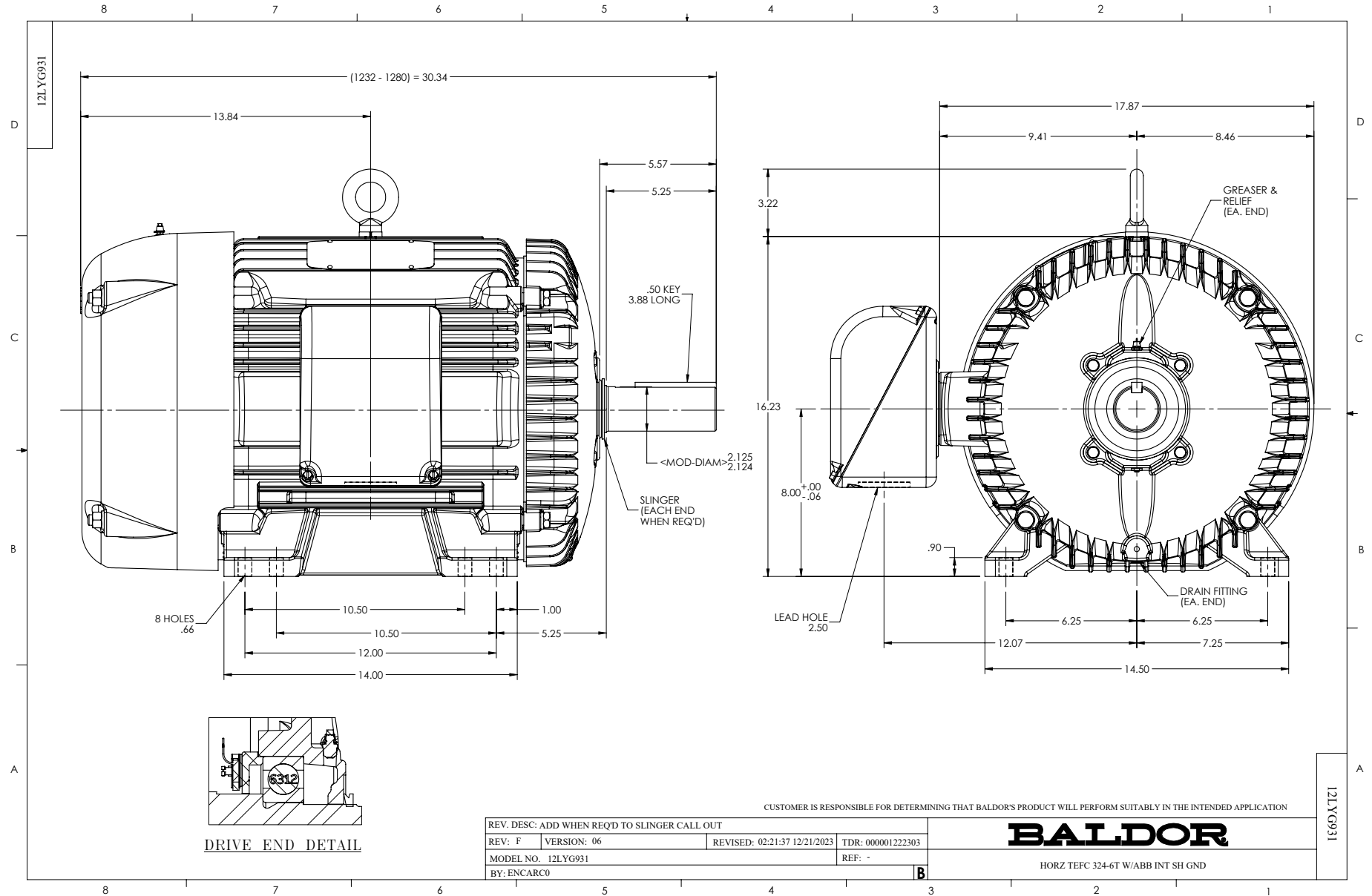
WINDING # 12WGY141

Typical performance - not guaranteed values.

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

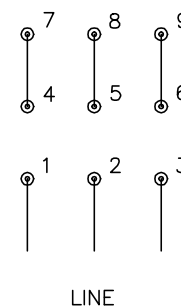
TORQUES (LB-FT): PO=396 PU=183 LR=254 LRA=395





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.

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

CD0180