

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.										

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	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

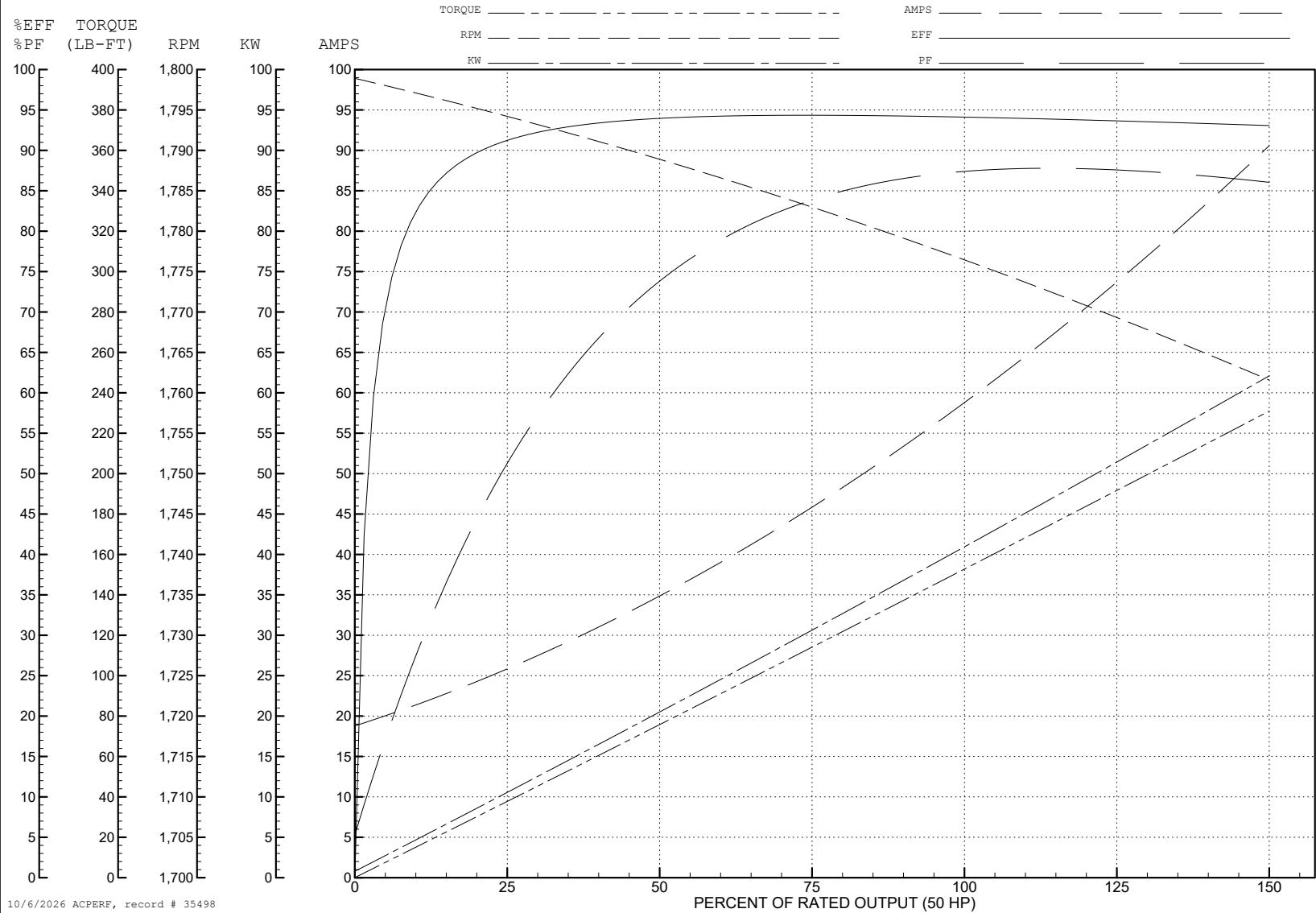
ABB Motors and Mechanical Inc.

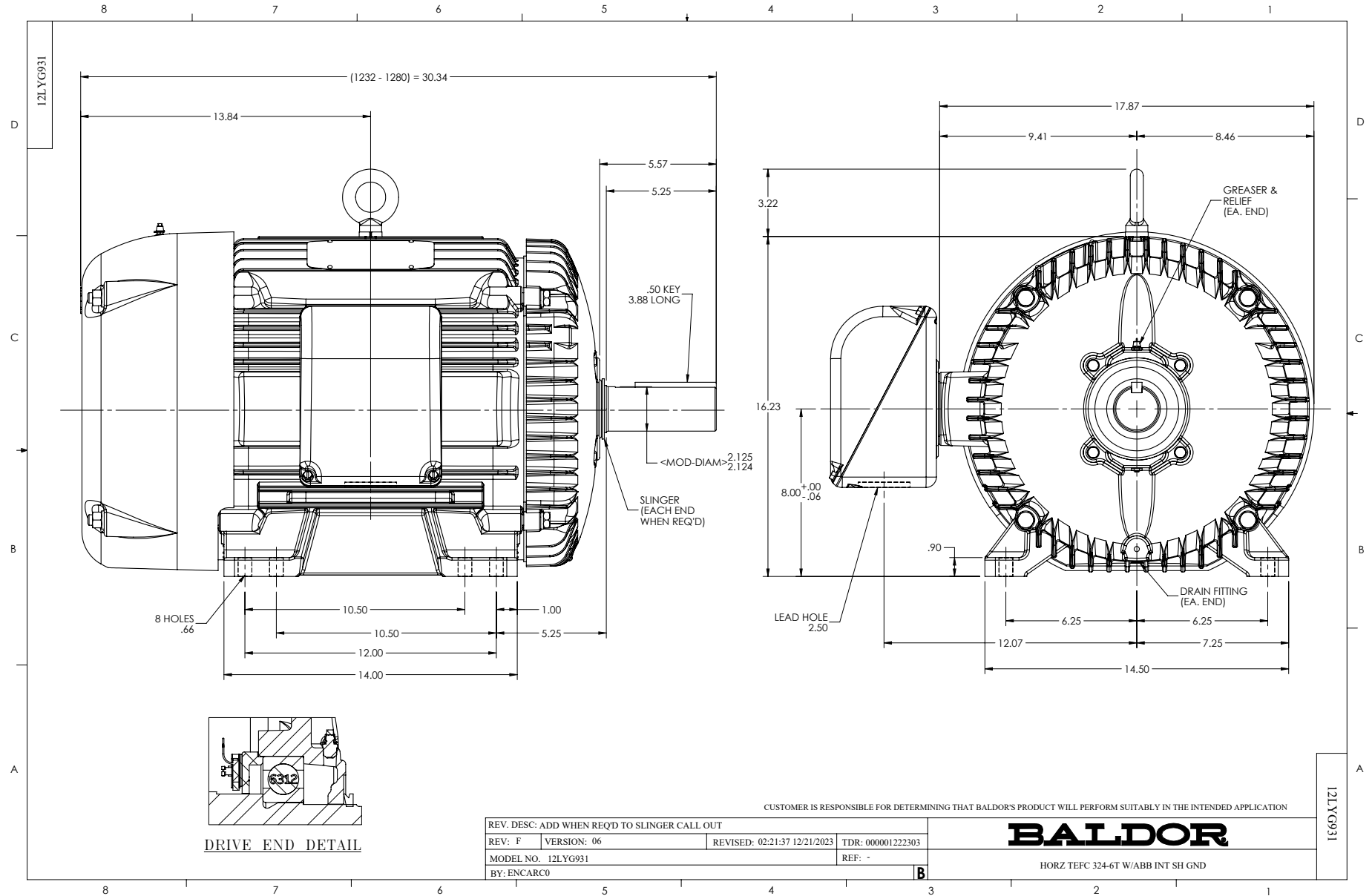
WINDING # 12WGY141

Typical performance - not guaranteed values.

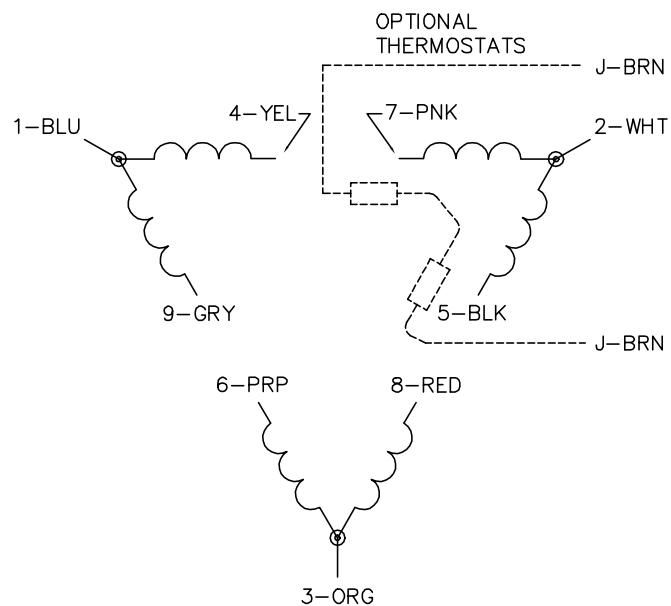
50 HP 3 PH 60 HZ 1775 RPM 460 V 1272M

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

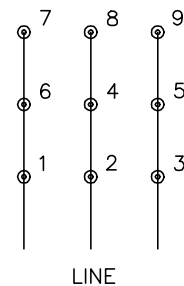




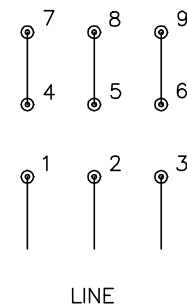
CD0180



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.

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

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