

ABB BALDOR RELIANCE III

Customer information packet

CEM4114T-G

50HP, 3530RPM, 3PH, 60HZ, 326TSC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326TSC
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	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	55.000 A @ 460.0 V 110.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	55.0 a

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY830
Layout	12LY-001-003
Eff. date	03-02-2026
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	12-16-2019

Insulation Class	H
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1266M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	28.78 IN
Power Factor	91
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	3530 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

NP3443LUA												
CAT.NO.	CEM4114T-G			CUST. P/N				ENCL				TEFC
SPEC.	12-0000-1382	CC	010A	FRAME	326TSC	SER.NO.						
HP	50		CLASS	H	HZ	60						
R.P.M.	3530		PH.	3	DES.	B						
VOLTS	230/460		CODE		F	ODE BRG		6311	DE BRG	6312		
AMPS	110/55											
RATING	40C AMB-CONT		NEMA NOM. EFF.			93	GREASE		POLYREX EM			
P.F.	91	SER.F.	1.15	CT6-60H(10:1)VT3-60H(20:1								
USABLE AT	50HZ 50HP 190/380V 134/67A			SF1.0								
VOLTS	AMPS	MAX. SPACE HEATER TEMP.										

AC Induction Motor Performance Data

Record # 74207

Typical performance - not guaranteed values

Winding: 12WGY830-R005			Type: 1266M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		50	Full Load Torque		74.5 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		110/55	Breakdown Torque		223 LB-FT		
R.P.M.		3530	Pull-up Torque		79.4 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		99 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		350 A
Service Factor (S.F.)		1.15	No-load Current		11 A		
NEMA Nom. Eff.		93	Power Factor	91	Line-line Res. @ 25°C		0.113 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		20.1
					Rotor inertia		5.16 LB-FT2

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	75	87	91	91	92	90	92
Efficiency	90.9	93.3	93.6	92.9	92	90.6	92.4
Speed	3583	3566	3549	3531	3510	3486	3518
Line amperes	17.7	28.8	41.5	55.2	69.5	85.6	63.8

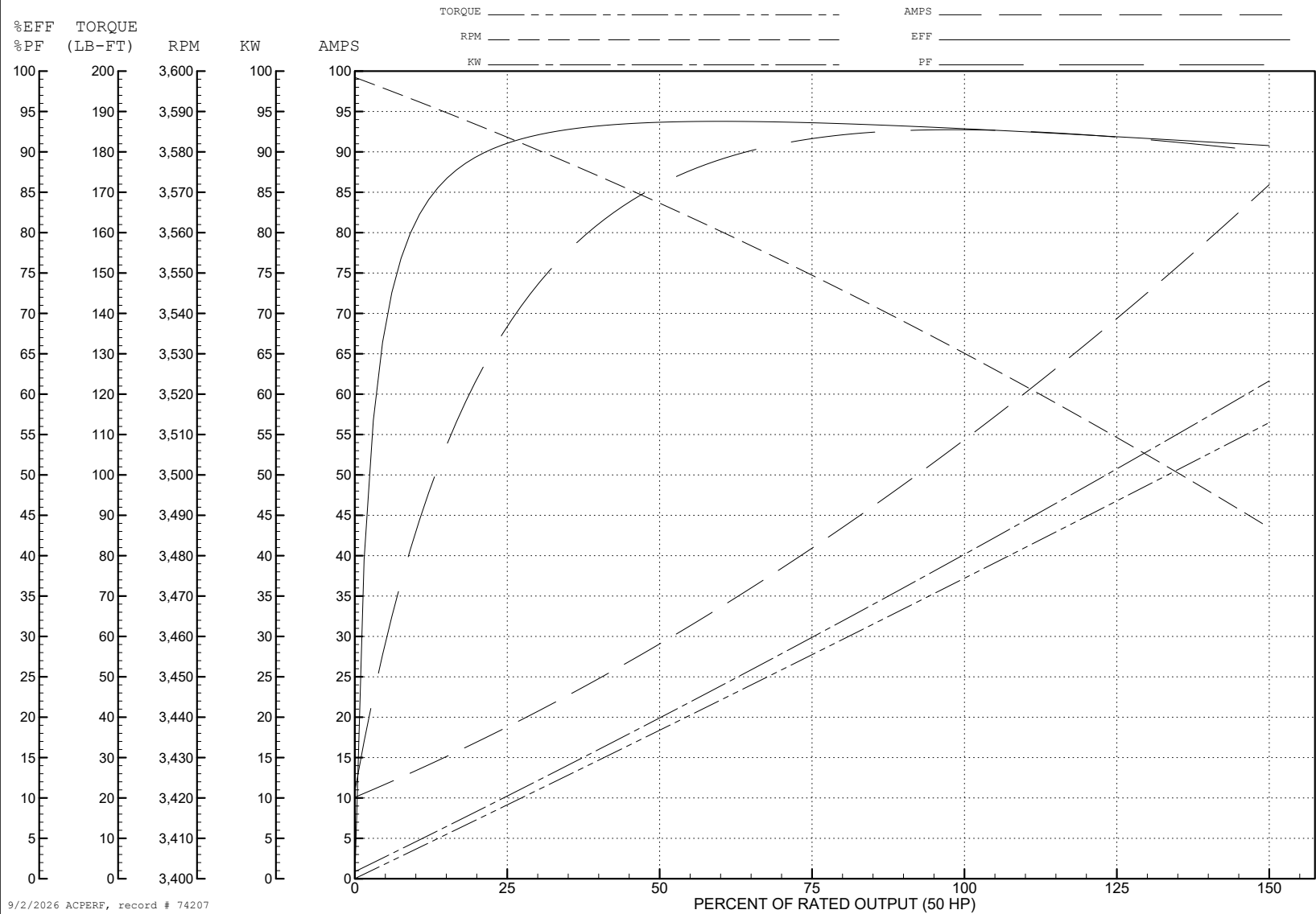
ABB Motors and Mechanical Inc.

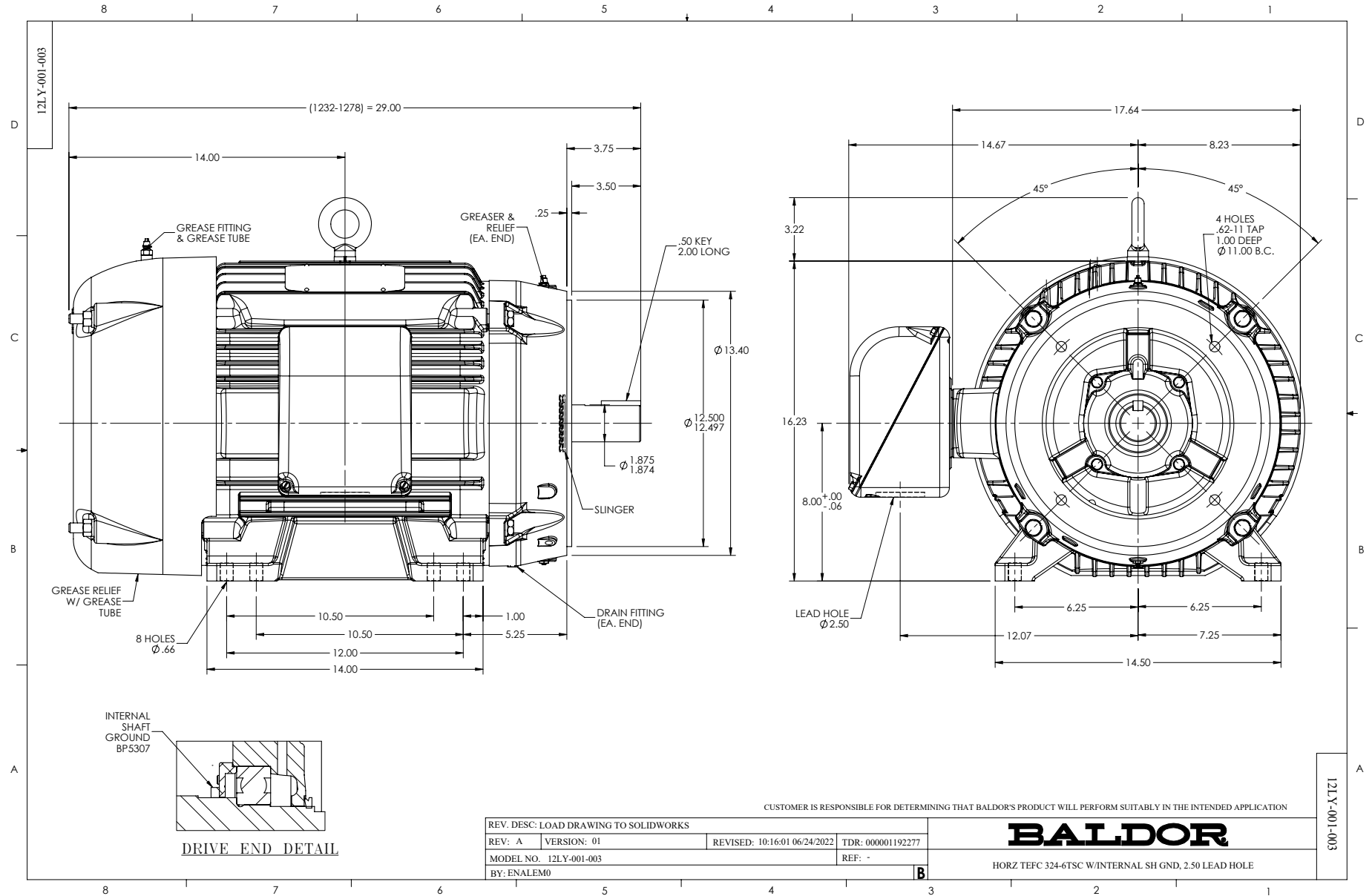
WINDING # 12WGY830

Typical performance - not guaranteed values.

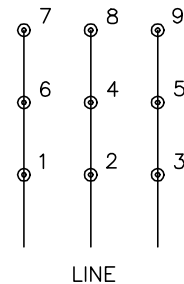
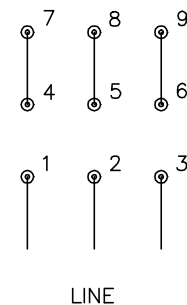
50 HP 3 PH 60 HZ 3530 RPM 460 V 1266M

TORQUES (LB-FT): PO=223 PU=79.4 LR=99 LRA=350





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