

ABB BALDOR RELIANCE III

Customer information packet

ECP84115T-4

50HP, 1770RPM, 3PH, 60HZ, 326T, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	326T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
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
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM 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
Constant Torque Speed Range	1
Current @ Voltage	57.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3

Part Detail

Revision	P
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGX731
Layout	12LYG135
Eff. date	09-04-2026
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	12-12-2018

Heater Indicator	No Heater
High Voltage Full Load Amps	57.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP56
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.74 IN
Power Factor	87
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 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
NP4332

CAT.NO.	ECP84115T-4			P/N		ENCLOSURE			TEFC			
SPEC.	12-0000-0367			CC	010A	FRAME	326T	S/N				
HP	50			CLASS	F	HZ	60	ODE BRG	6312	DE BRG	6312	
RPM	1770	RPM MAX	2700	PH	3	DES	B	D.E. BRG.	60BC03X30X			
VOLT	460			KVA-CODE	G		O.D.E. BRG.	60BC03X30X				
AMP	57			MOTOR WEIGHT			679	GREASE	POLYREX EM			
RATING	40C AMB-CONT			MAX. KVAR			9.4	BLANK				
NEMA-NOM-EFF	94.5	# OF ROTOR BARS			40	SER.F.	1.15	IP	56			
G.MIN.EFF	93.6	# OF STATOR SLOTS			48	PF	87	INV.TYPE	PWM			
TEMP CODE	T3	INVERTER-TEMP-CODE			200							
TEMP =	200	C HP FR	60	C HP TO	90							
CT HZ FROM	1	CT HZ TO	60									
HTR-VOLTS		HTR-AMPS		HTR-WATTS				MAX. SPACE HEATER TEMP.				
									VT HZ FROM	0-	VT HZ TO	60

AC Induction Motor Performance Data

Record # 93262

Typical performance - not guaranteed values

Winding: 12WGX731-R055			Type: 1272M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		50	Full Load Torque		148 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		57	Breakdown Torque		446 LB-FT		
R.P.M.		1770	Pull-up Torque		183 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		254 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		362.5 A
Service Factor (S.F.)		1.15	No-load Current		18.3 A		
NEMA Nom. Eff.		94.5	Power Factor	87	Line-line Res. @ 25°C		0.118 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		61°C
S.F. Amps					Temp. Rise @ S.F. Load		75°C
					Locked-rotor Power Factor		24.4
					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	58	78	85	87	87	87	88
Efficiency	92.1	94.7	94.9	94.5	93.9	92.9	94.1
Speed	1791	1785	1779	1772	1765	1756	1768
Line amperes	22.3	31.9	43.5	56.9	71.3	87.1	65.5

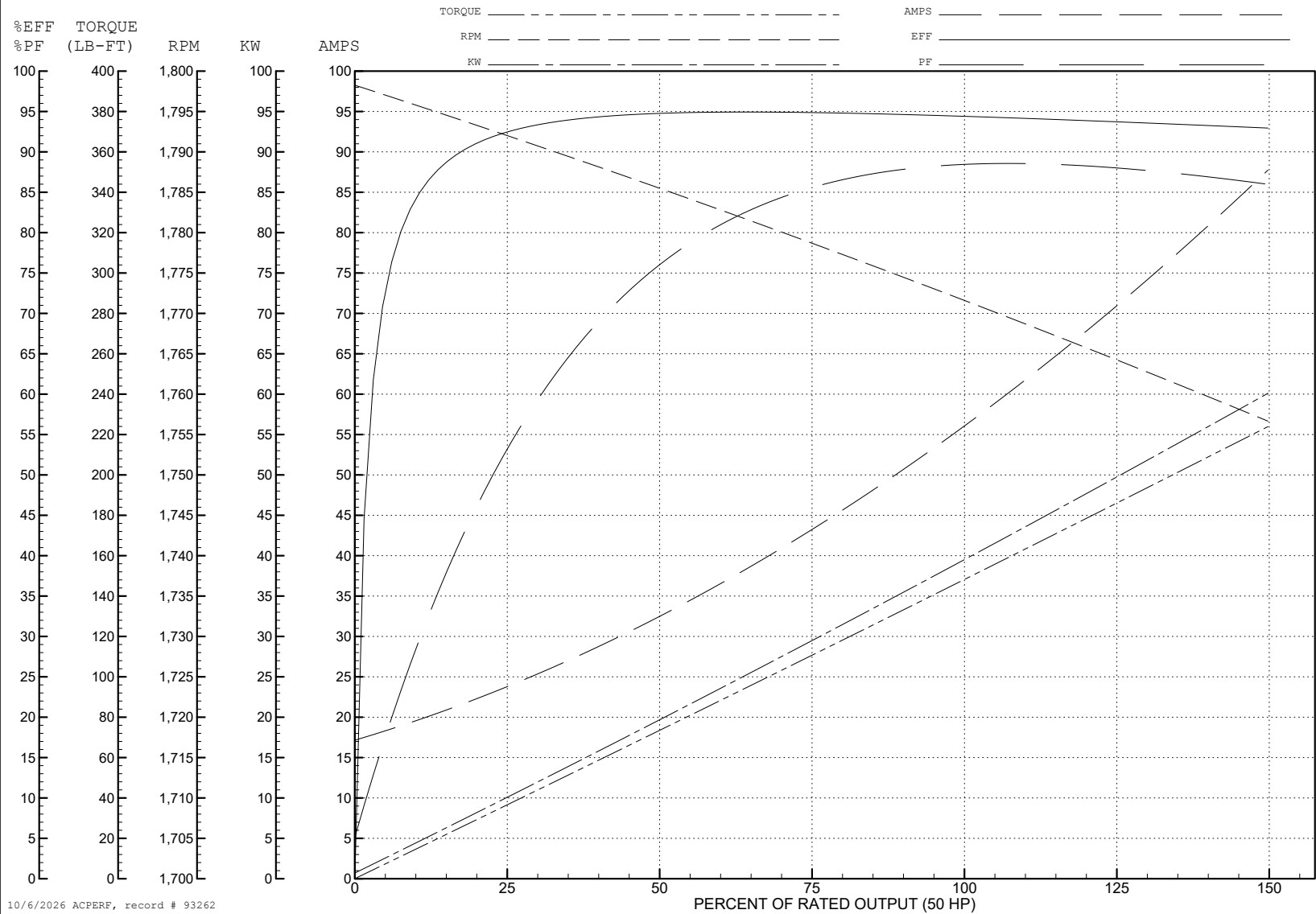
ABB Motors and Mechanical Inc.

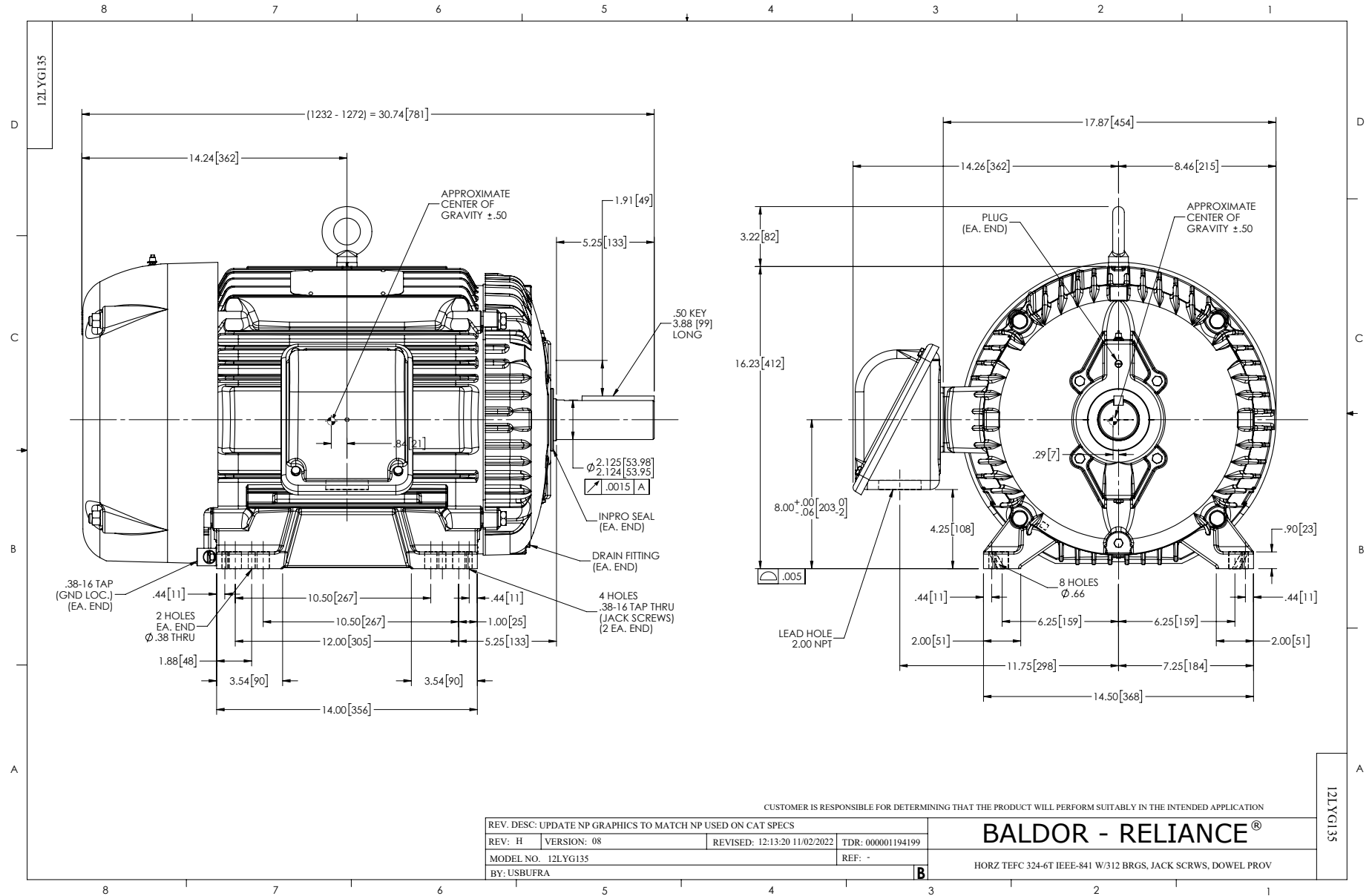
WINDING # 12WGX731

Typical performance - not guaranteed values.

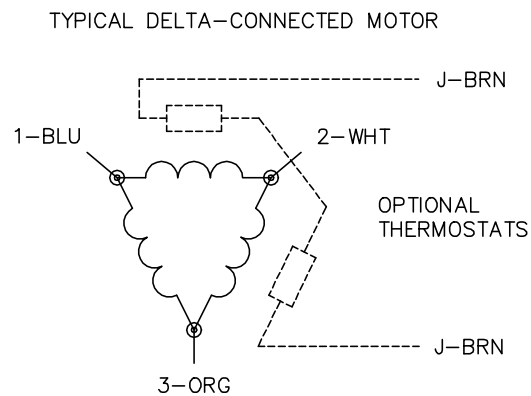
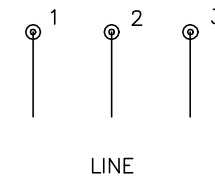
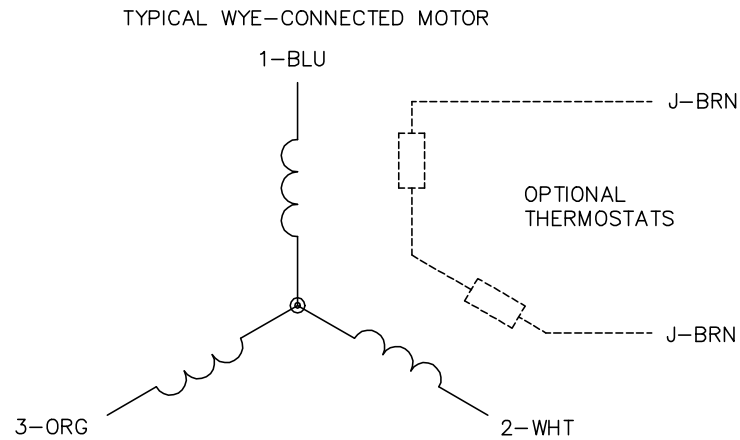
50 HP 3 PH 60 HZ 1770 RPM 460 V 1272M

TORQUES (LB-FT): PO=446 PU=183 LR=254 LRA=362.5





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