

ABB BALDOR RELIANCE III

Customer information packet

ECP4115T-5

50HP, 1770RPM, 3PH, 60HZ, 326T, 1272M, 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	575.0 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	1.0
Current @ Voltage	45.000 A @ 575.0 V
Design Code	B
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	AD
Type	AC
Mech. spec.	12F904
Base	
Status	PRD/A
Elec. spec.	12WGY613
Layout	12LYF904
Eff. date	10-16-2025
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	10-31-2013

Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	45.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 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	87
Product Family	Super-E Chemical Processing
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	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
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

NP3241																			
CAT.NO.	ECP4115T-5				P/N				ENCLOSURE				TEFC						
SPEC.	12F904Y613			CC	010A	FRAME		326T		S/N									
HP	50				CLASS		F	HZ		60	DES	B							
RPM	1770				RPM MAX		2700		PH		3	KVA-CODE		F					
VOLT	575				MOTOR WEIGHT				652										
AMP	45				SER.F.		1.15		PF		87	ODE BRG		6312	DE BRG 6312				
RATING	40C AMB-CONT				NEMA-NOM-EFF				94.5		GREASE		POLYREX EM						
									INV.TYPE		PWM								
TEMP CODE	T3	INVERTER-TEMP-CODE				200													
TEMP =	200	C HP FR	60		C HP TO		90												
CT HZ FROM	1.0		CT HZ TO		60														
HTR-VOLTS			HTR-AMPS				HTR-WATTS				MAX. SPACE HEATER TEMP.					VT HZ FROM	O	VT HZ TO	60

AC Induction Motor Performance Data

Record # 93263

Typical performance - not guaranteed values

Winding: 12WGY613-R006			Type: 1272M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		50	Full Load Torque		148 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		45	Breakdown Torque		435 LB-FT		
R.P.M.		1770	Pull-up Torque		178 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		248 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		290 A
Service Factor (S.F.)		1.15	No-load Current		14.2 A		
NEMA Nom. Eff.		94.5	Power Factor	87	Line-line Res. @ 25°C		0.186 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		24.3	
				Rotor inertia		9.59 lb-ft²	

Load Characteristics 575 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	59	79	85	87	88	87	88
Efficiency	92.3	94.8	95	94.5	93.8	92.7	94
Speed	1791	1785	1779	1771	1764	1755	1767
Line amperes	17.4	25.3	34.6	45.4	57	69.8	52.4

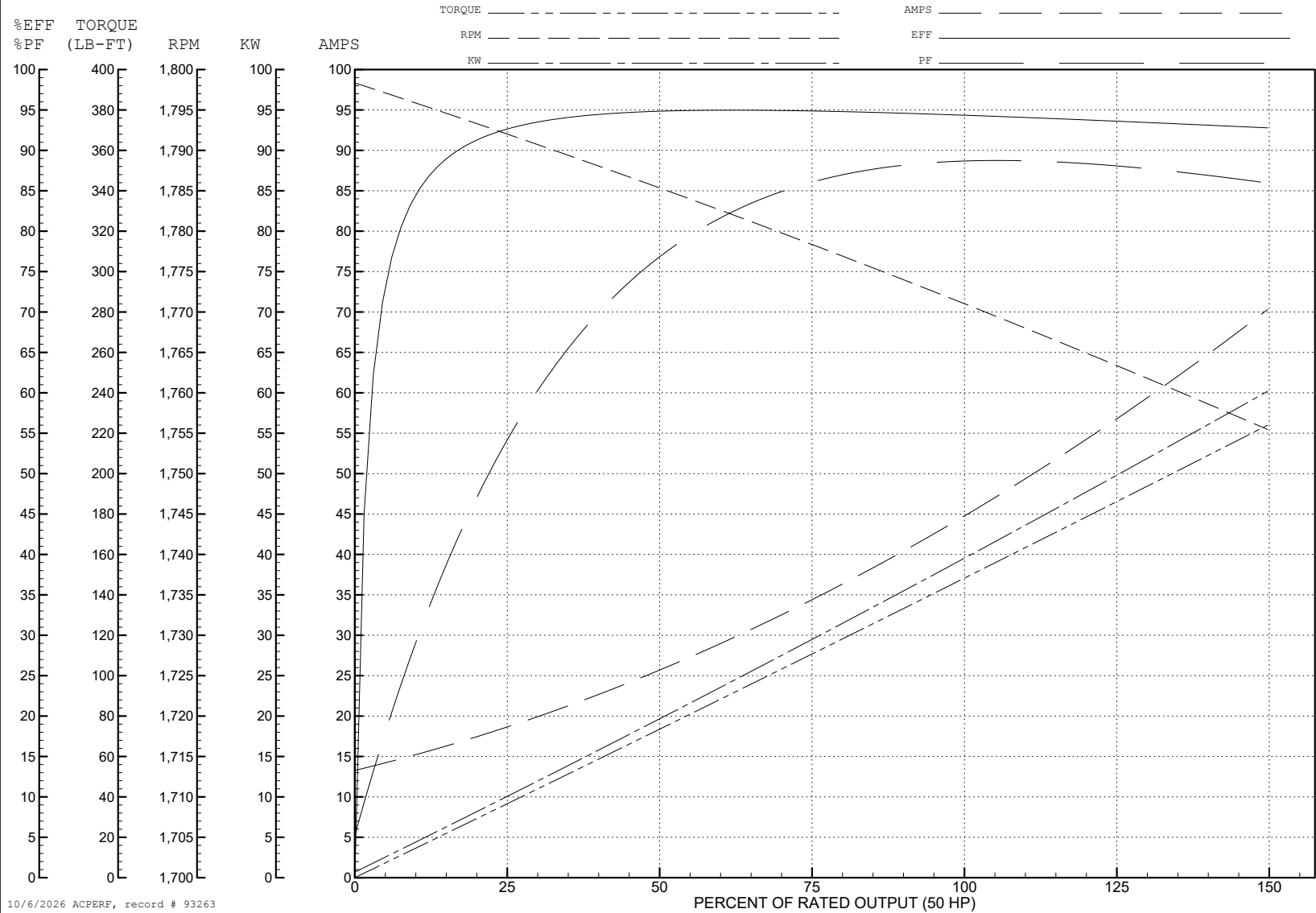
ABB Motors and Mechanical Inc.

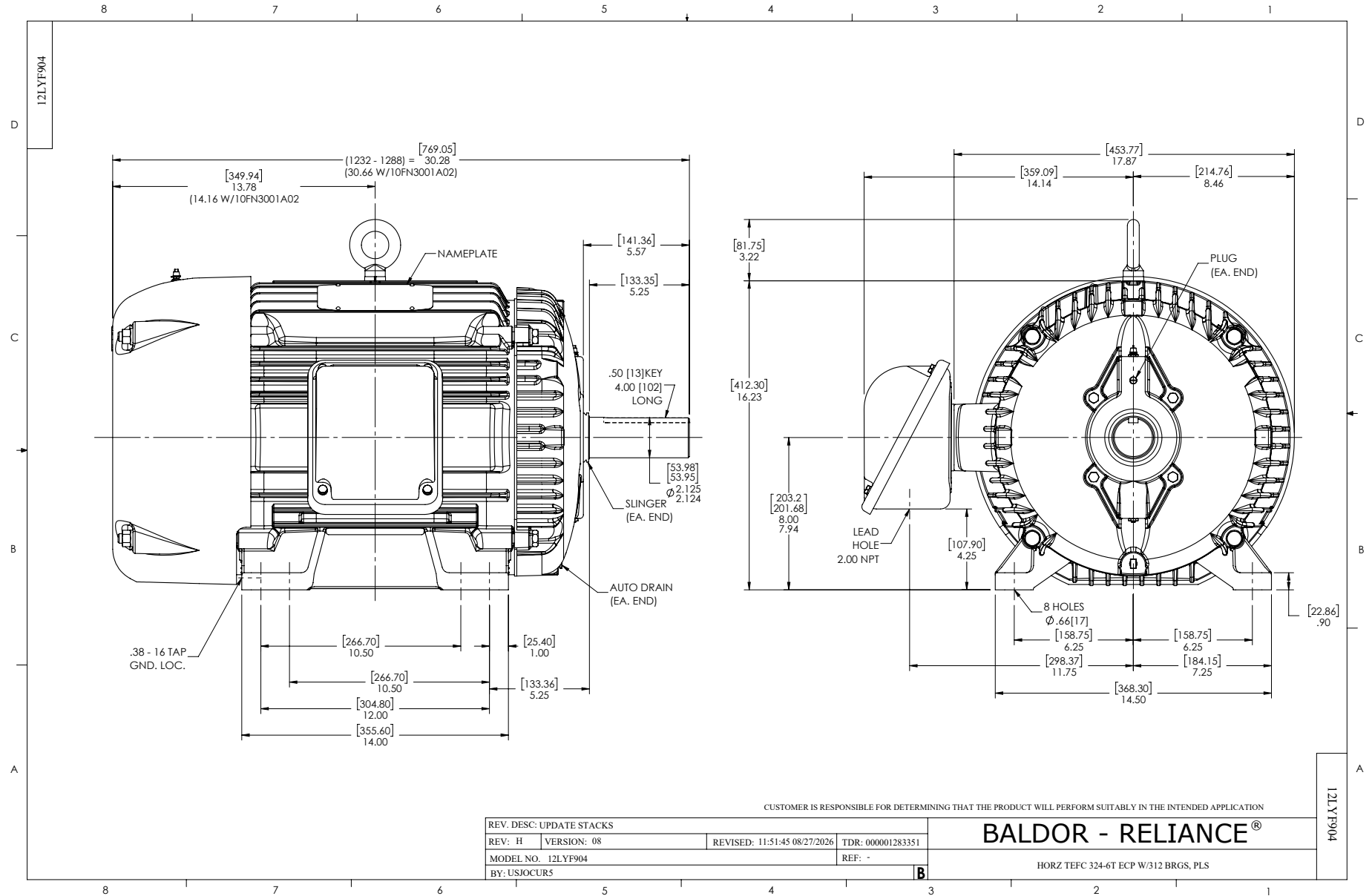
WINDING # 12WGY613

Typical performance - not guaranteed values.

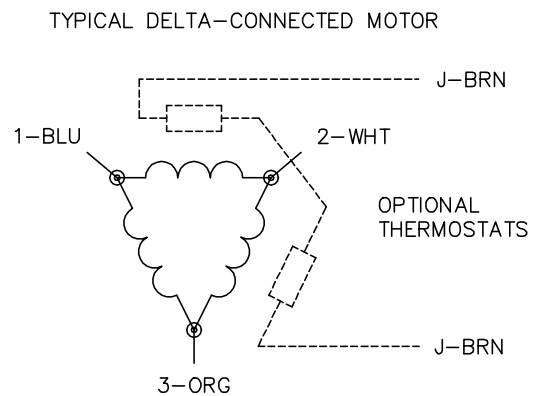
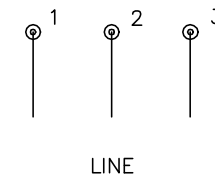
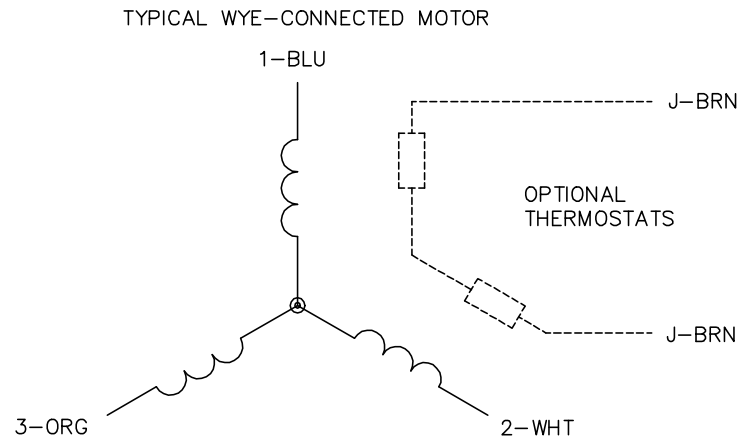
50 HP 3 PH 60 HZ 1770 RPM 575 V 1272M

TORQUES (LB-FT): PO=435 PU=178 LR=248 LRA=290





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

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