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# Customer information packet

## ECP4115T-4

50HP, 1775RPM, 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	460.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	0.8
Current @ Voltage	58.000 A @ 460.0 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	AC
Type	AC
Mech. spec.	12F904
Base	
Status	PRD/A
Elec. spec.	12WGY586
Layout	12LYF904
Eff. date	12-27-2024
CD Diagram	CD0006
Poles	04
Leads	3#6
Proprietary	False
Created date	06-29-2012

Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	58.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
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 @ 6 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	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	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

**Nameplate**

**NP3241**

<b>CAT.NO.</b>	ECP4115T-4	<b>P/N</b>		<b>ENCLOSURE</b>	TEFC
<b>SPEC.</b>	12F904Y586	<b>CC</b>	010A	<b>FRAME</b>	326T
<b>HP</b>	50	<b>CLASS</b>	F	<b>HZ</b>	60
<b>RPM</b>	1775	<b>RPM MAX</b>	2700	<b>PH</b>	3
<b>VOLT</b>	460	<b>MOTOR WEIGHT</b>	668	<b>DES</b>	A
<b>AMP</b>	58	<b>SER.F.</b>	1.15	<b>PF</b>	85
<b>RATING</b>	40C AMB-CONT	<b>NEMA-NOM-EFF</b>	94.5	<b>ODE BRG</b>	6312
				<b>DE BRG</b>	6312
				<b>GREASE</b>	POLYREX EM
				<b>INV.TYPE</b>	PWM
<b>TEMP CODE</b>	T3	<b>INVERTER-TEMP-CODE</b>	200		
<b>TEMP =</b>	200	<b>C HP FR</b>	60	<b>C HP TO</b>	90
<b>CT HZ FROM</b>	0.8	<b>CT HZ TO</b>	60		
<b>HTR-VOLTS</b>		<b>HTR-AMPS</b>		<b>HTR-WATTS</b>	
				<b>MAX. SPACE HEATER TEMP.</b>	
				<b>VT HZ FROM</b>	0
				<b>VT HZ TO</b>	60

**Accessories**

<b>Part number</b>	<b>Description</b>	<b>Multiplier</b>
12-1105	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 47187

Typical performance - not guaranteed values

<b>Winding: 12WGY586-R016</b>		<b>Type: 1272M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	50	<b>Full Load Torque</b>	147 LB-FT		
<b>Volts</b>	460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	58	<b>Breakdown Torque</b>	396 LB-FT		
<b>R.P.M.</b>	1775	<b>Pull-up Torque</b>	183 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	254 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	H	<b>Starting Current</b>	397 A	
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>	19.8 A	
<b>NEMA Nom. Eff.</b>	94.5 <b>Power Factor</b>	85	<b>Line-line Res. @ 25°C</b>	0.10889 Ω	
<b>Rating - Duty</b>		40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	64°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	79°C	
			<b>Rotor inertia</b>	9.59 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 50 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	53	74	83	86	87	87	87
<b>Efficiency</b>	91.3	94.3	94.8	94.6	94	93.1	94.2
<b>Speed</b>	1794.5	1789.3	1783.5	1777.5	1770.7	1761.5	1773
<b>Line amperes</b>	24.2	33.5	44.7	57.6	71.5	90	65.9

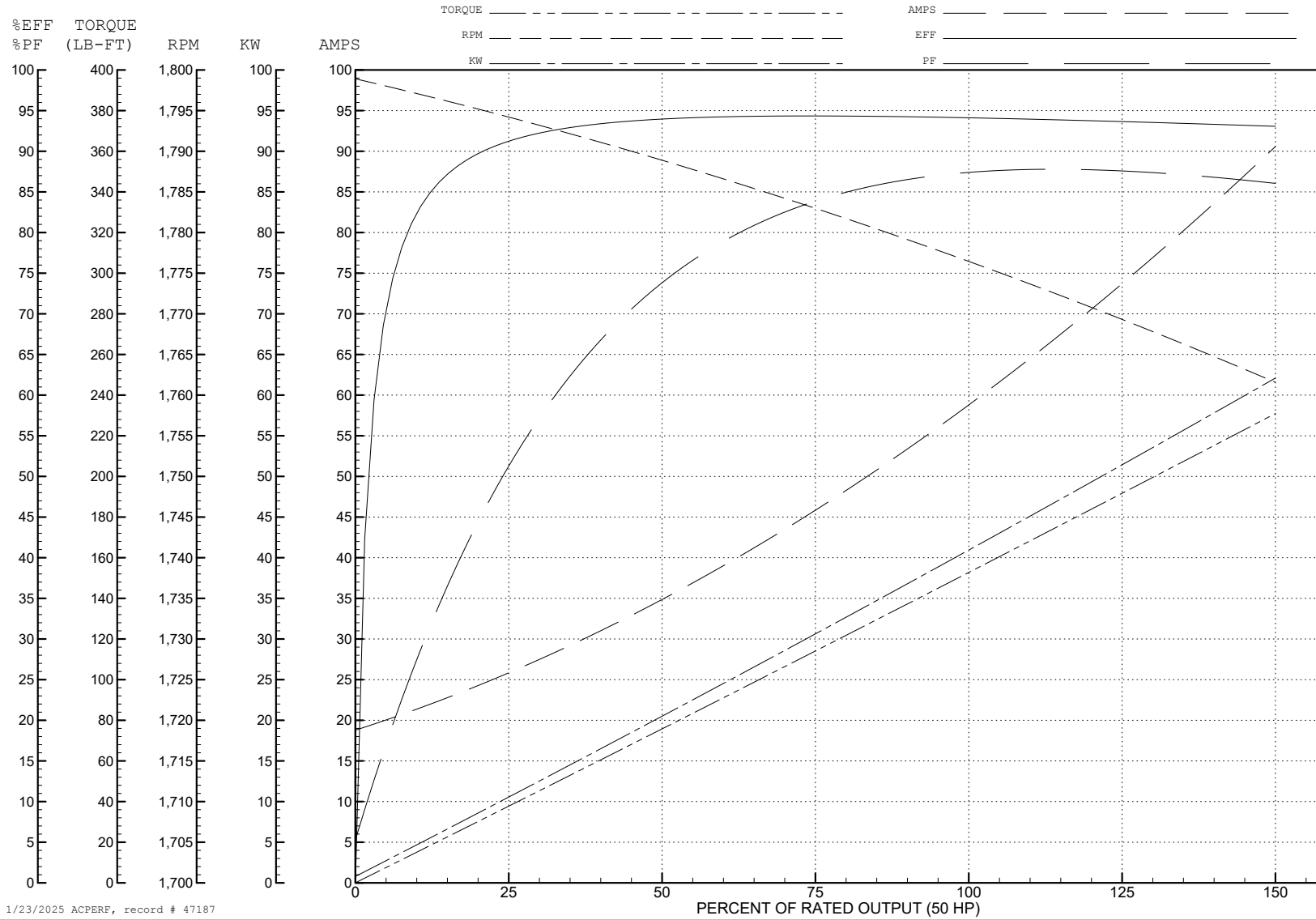
ABB Motors and Mechanical Inc.

WINDING # 12WGY586

Typical performance - not guaranteed values.

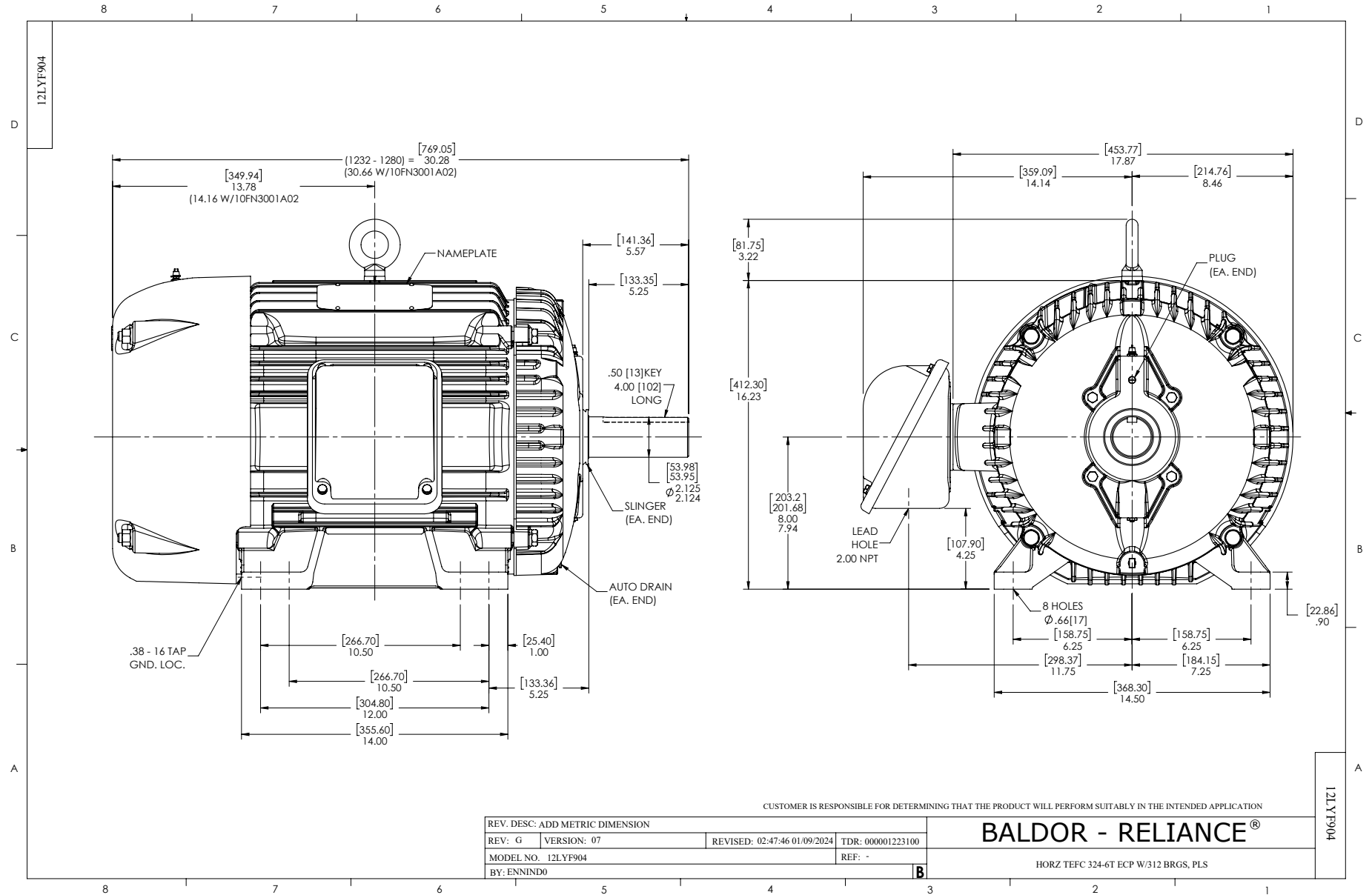
50 HP 3 PH 60 HZ 1775 RPM 460 V 1272M

TORQUES (LB-FT): PO=396 PU=183 LR=254 LRA=397



1/23/2025 ACPERF, record # 47187





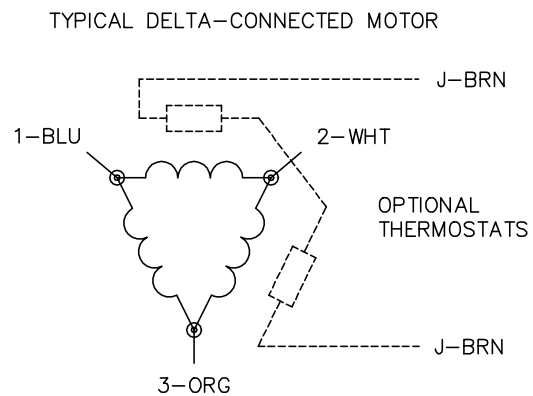
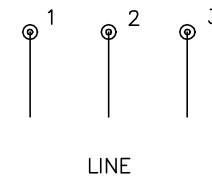
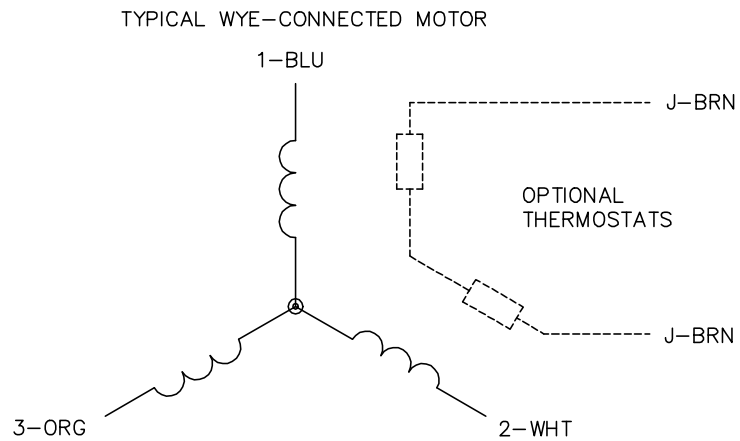
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: ADD METRIC DIMENSION		REVISED: 02:47:46 01/09/2024		TDR: 000001223100
REV: G	VERSION: 07			REF: -
MODEL NO. 12LYF904				
BY: ENNIND0				

**BALDOR - RELIANCE**®

HORZ TEFC 324-6T ECP W/312 BRGS, PLS

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