

ABB BALDOR RELIANCE III

Customer information packet

ECP4110T-4

40HP, 1775RPM, 3PH, 60HZ, 324T, 1254M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	324T
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	40.000 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	0.8
Current @ Voltage	48.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3

Part Detail

Revision	J
Type	AC
Mech. spec.	12F904
Base	
Status	PRD/A
Elec. spec.	12WGY399
Layout	12LYF904
Eff. date	10-16-2025
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	05-29-2018

Heater Indicator	No Heater
High Voltage Full Load Amps	48.0 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 Quantity/Wire Size	3 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	82
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 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
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate
NP3241

CAT.NO.	ECP4110T-4		P/N		ENCLOSURE				TEFC			
SPEC.	12F904Y399G6	CC	010A	FRAME	324T	S/N						
HP	40		CLASS	F	HZ	60	DES	A				
RPM	1775		RPM MAX	2700		PH	3	KVA-CODE	H			
VOLT	460		MOTOR WEIGHT		595							
AMP	48		SER.F.	1.15	PF	82	ODE BRG	6312	DE BRG	6312		
RATING	40C AMB-CONT		NEMA-NOM-EFF		94.1		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	0.8	CT HZ TO		60								
HTR-VOLTS		HTR-AMPS		HTR-WATTS		MAX. SPACE HEATER TEMP.			VT HZ FROM	O	VT HZ TO	60

Accessories

Part number	Description	Multiplier
12-1105ECP	C FACE KIT (C-FACE SWAP FOR ECP MOTOR)	A8

AC Induction Motor Performance Data

Record # 70998

Typical performance - not guaranteed values

Winding: 12WGY399-R046				Type: 1254M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		40		Full Load Torque		118 LB-FT		
Volts		460		Start Configuration		direct on line		
Full Load Amps		48		Breakdown Torque		386 LB-FT		
R.P.M.		1775		Pull-up Torque		193 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		216 LB-FT		
NEMA Design Code		A	KVA Code	H		Starting Current		338 A
Service Factor (S.F.)		1.15		No-load Current		19.9 A		
NEMA Nom. Eff.		94.1	Power Factor	82		Line-line Res. @ 25°C		0.14898 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		54°C		
S.F. Amps				Temp. Rise @ S.F. Load		64°C		
				Locked-rotor Power Factor		27.3		
				Rotor inertia		7.19 lb-ft²		

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	69	78	83	85	85	84
Efficiency	90.1	93.5	94.2	94.2	93.8	93.1	94
Speed	1793.5	1788	1782.5	1776.6	1770.7	1764.1	1773
Line amperes	22.9	29.5	38.4	48.1	59.2	70.8	54.8

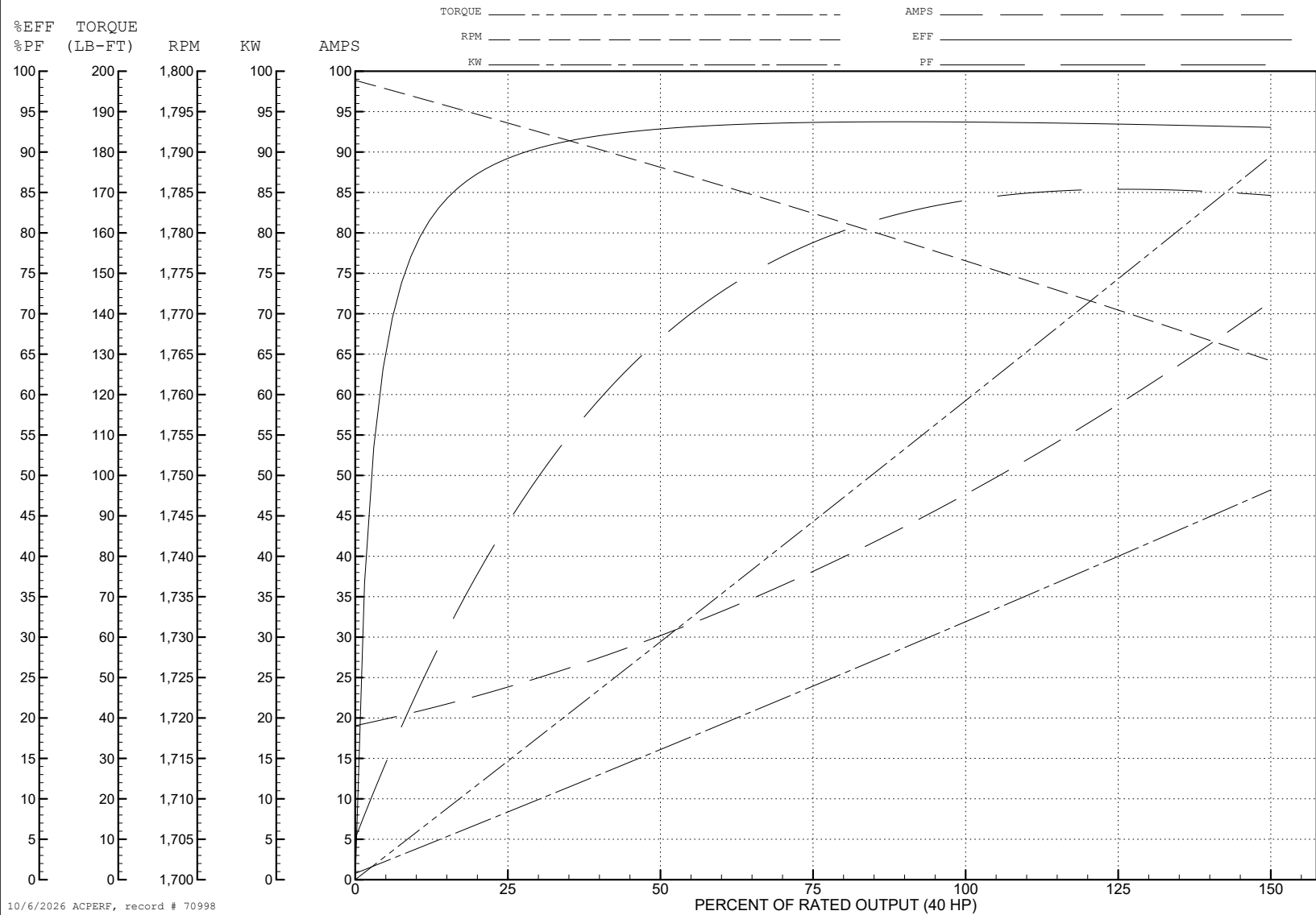
ABB Motors and Mechanical Inc.

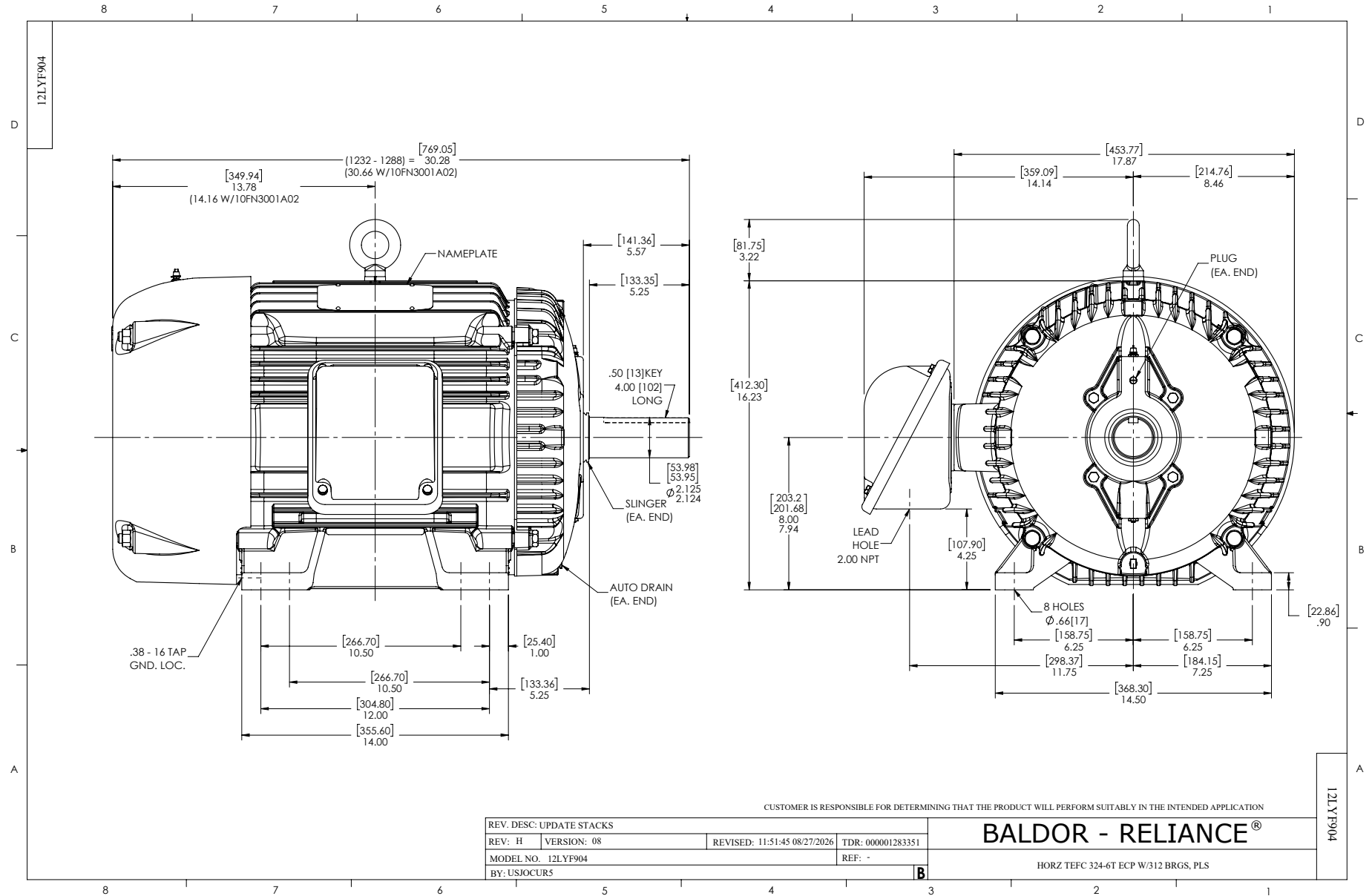
WINDING # 12WGY399

Typical performance - not guaranteed values.

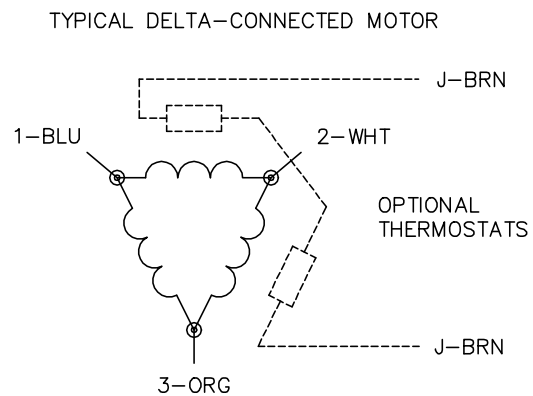
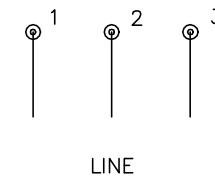
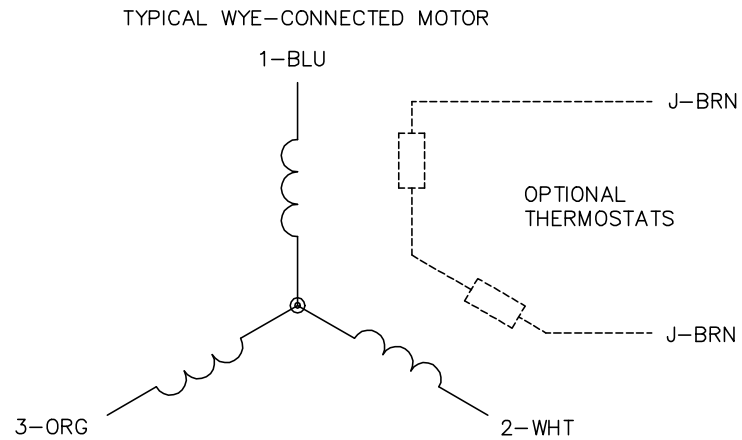
40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

TORQUES (LB-FT): PO=386 PU=193 LR=216 LRA=338





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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