

ABB BALDOR RELIANCE III

Customer information packet

ECP4108T

30HP, 3525RPM, 3PH, 60HZ, 286TS, 1048M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	286TS
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	30.000 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 EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
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	6
Current @ Voltage	68.000 A @ 230.0 V 34.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features

Part Detail

Revision	M
Type	AC
Mech. spec.	10H423
Base	
Status	PRD/A
Elec. spec.	10WGZ501
Layout	10LYH423
Eff. date	09-29-2025
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	01-07-2016

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	34.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1048M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	26.63 IN
Power Factor	90
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3525 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.	ECP4108T			P/N					ENCLOSURE	TEFC		
SPEC.	10H423Z501G1	CC	010A	FRAME	286TS		S/N					
HP	30			CLASS	F	HZ	60	DES	B			
RPM	3525			RPM MAX	5400		PH	3	KVA-CODE	G		
VOLT	230/460			MOTOR WEIGHT		396						
AMP	68/34			SER.F.	1.15	PF	90	ODE BRG	6311	DE BRG	6311	
RATING	40C AMB-CONT			NEMA-NOM-EFF		91.7		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	6	CT HZ TO		60								
HTR-VOLTS	HTR-AMPS				HTR-WATTS				MAX. SPACE HEATER TEMP.			
								VT HZ FROM		3	VT HZ TO	60

AC Induction Motor Performance Data

Record # 55452

Typical performance - not guaranteed values

Winding: 10WGZ501-R001			Type: 1048M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		30	Full Load Torque		44.8 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		68/34	Breakdown Torque		135 LB-FT	
R.P.M.		3520	Pull-up Torque		47 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		65.2 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		212 A	
Service Factor (S.F.)		1.15	No-load Current		8.74 A	
NEMA Nom. Eff.		91.7 Power Factor	Line-line Res. @ 25°C		0.24052 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		69°C	
S.F. Amps			Temp. Rise @ S.F. Load		85°C	
			Locked-rotor Power Factor		23.2	

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	67	83	88	90	90	90	90
Efficiency	87	91.3	92	91.7	90.9	89.7	91.2
Speed	3583	3565.7	3547.3	3526.7	3504.4	3479.1	3513
Line amperes	12.4	18.7	26.1	34.1	43.1	52.5	39.5

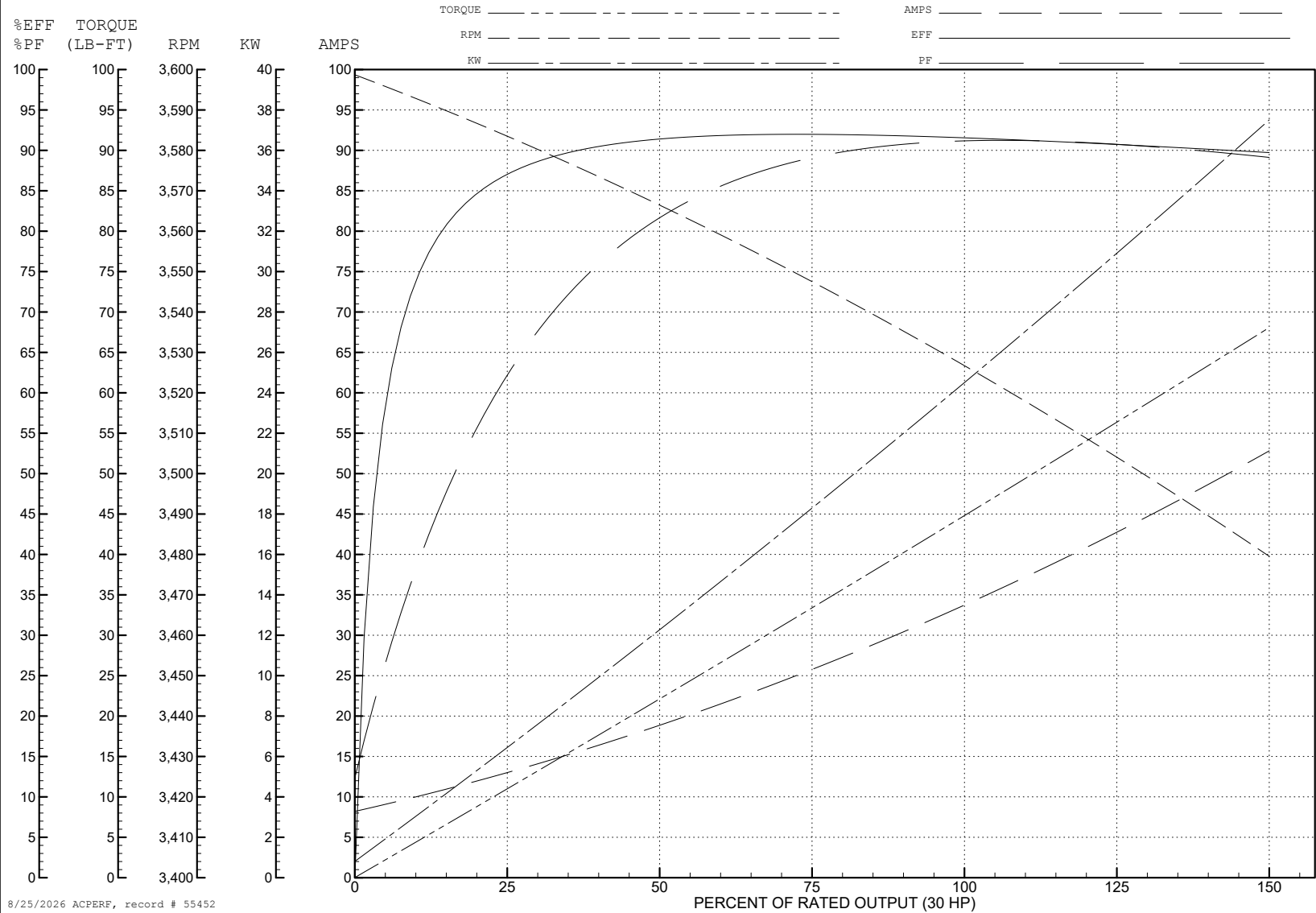
ABB Motors and Mechanical Inc.

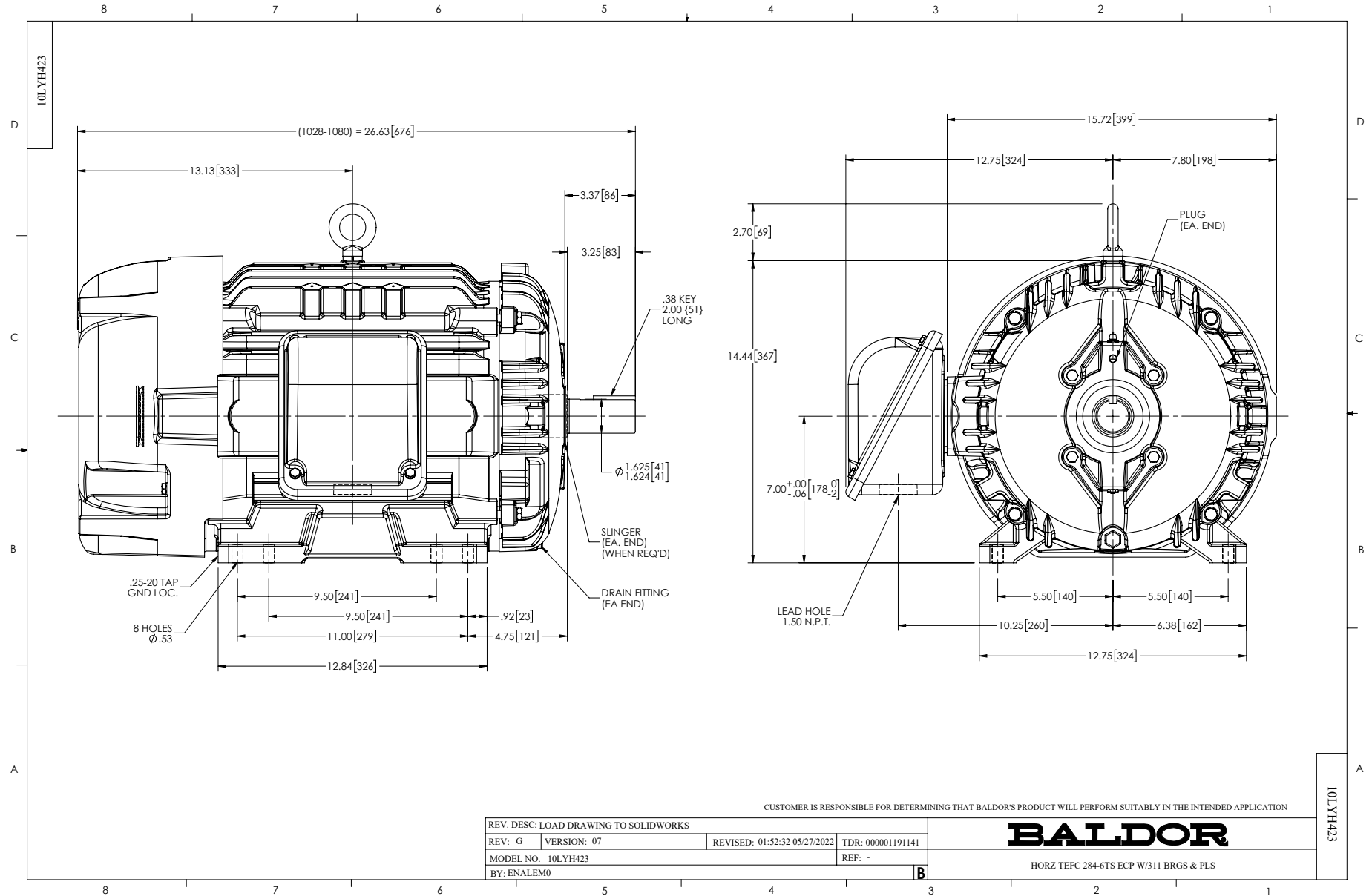
WINDING # 10WGZ501

Typical performance - not guaranteed values.

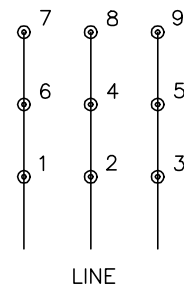
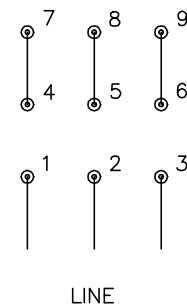
30 HP 3 PH 60 HZ 3520 RPM 460 V 1048M

TORQUES (LB-FT): PO=135 PU=47 LR=65.2 LRA=212





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.

CD0180

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

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