ABB BALDOR RELIANCE

Customer information packet

ECP4108T

30HP, 3525RPM, 3PH, 60HZ, 286TS, 1048M, TEFC, F
Class - CLI GP A,B,C,D
Division - Division II

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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**	G	**Starting Current**	212 A
Service Factor (S.F.)			1.15	**No-load Current**	8.74 A
NEMA Nom. Eff.	91.7	**Power Factor**	90	**Line-line Res. @ 25ºC**	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

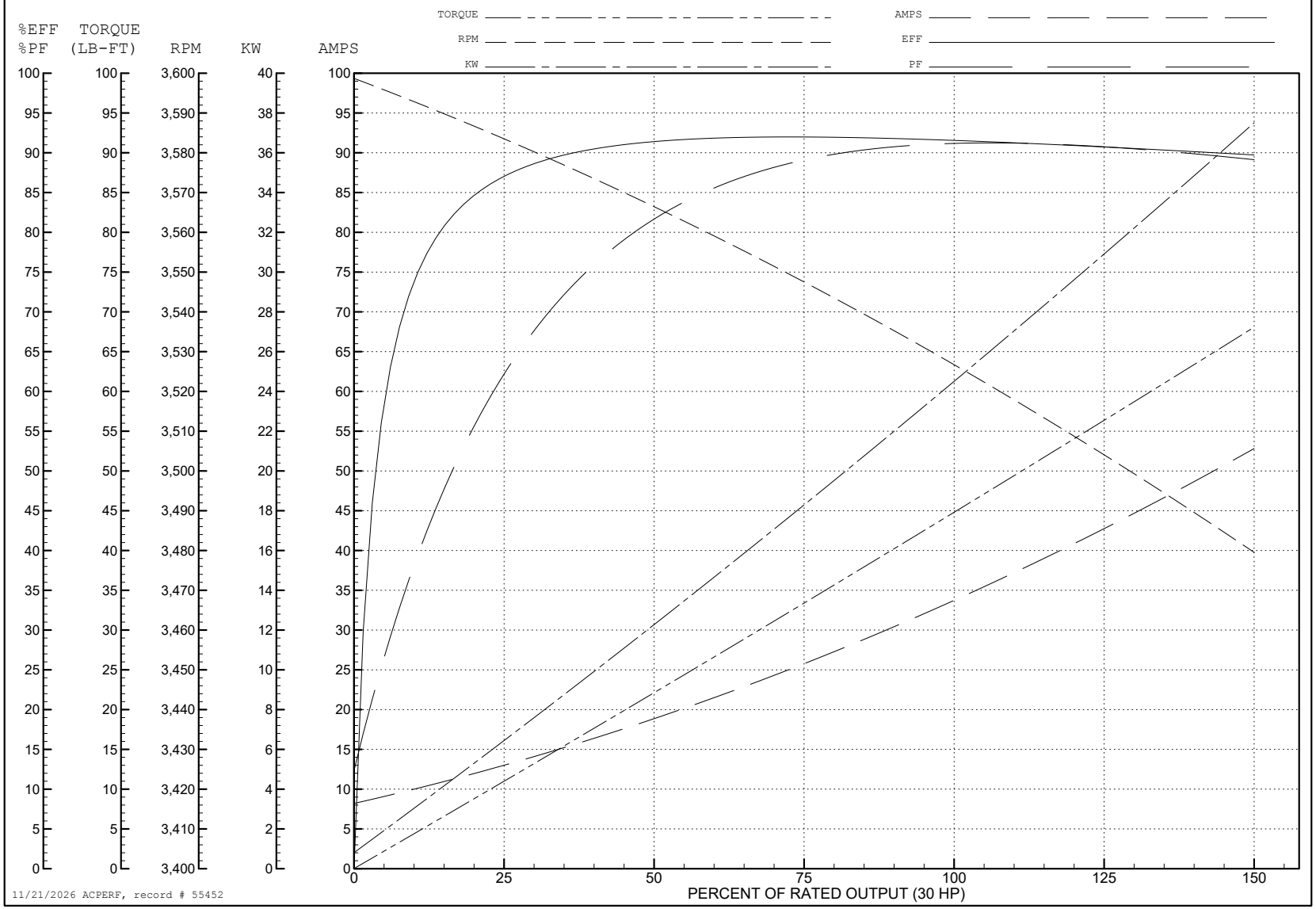
ABB Motors and Mechanical Inc.

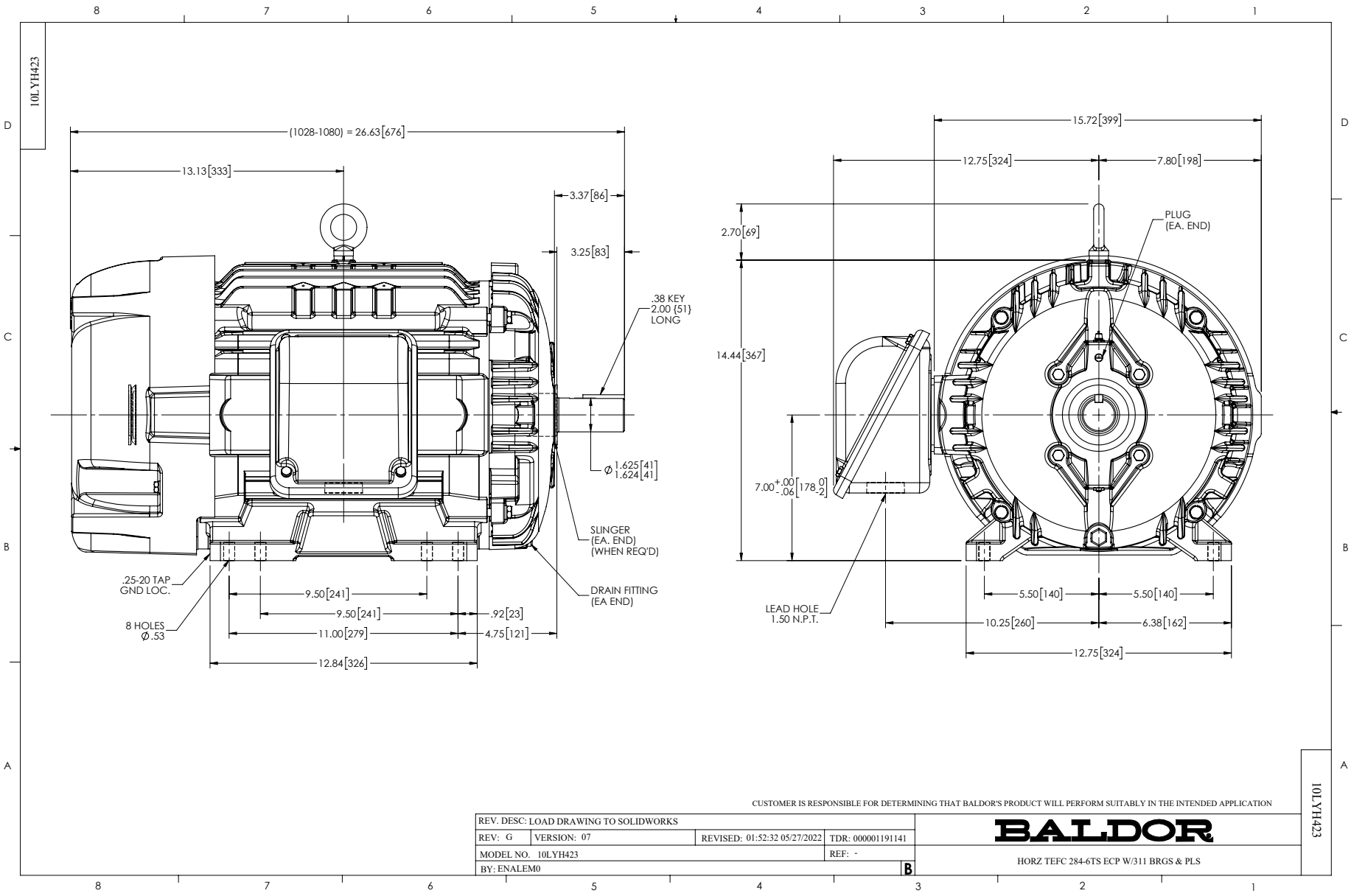
WINDING # 10WGZ501

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

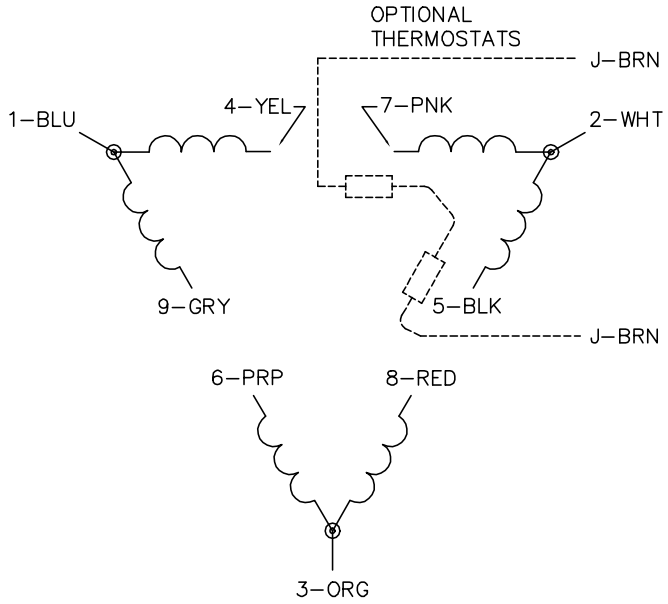
Typical performance - not guaranteed values.

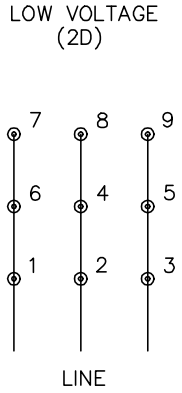
TORQUES(LB-FT): PO=135 PU=47 LR=65.2 LRA=212

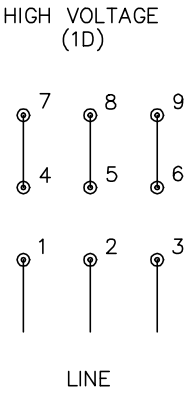



10LYH423
(1028-1080) = 26.63[676]
13.13[333]
3.37[86]
3.25[83]
.38 KEY
2.00 {51}
LONG
Ø 1.625[41]
1.624[41]
SLINGER
(EA. END)
(WHEN REQ'D)
DRAIN FITTING
(EA END)
.25-20 TAP
GND LOC.
8 HOLES
Ø .53
9.50[241]
9.50[241]
.92[23]
11.00[279]
4.75[121]
12.84[326]
15.72[399]
12.75[324]
7.80[198]
PLUG
(EA. END)
2.70[69]
14.44[367]
7.00 +.00 -.06 [178 0 -2]
LEAD HOLE
1.50 N.P.T.
5.50[140]
5.50[140]
10.25[260]
6.38[162]
12.75[324]
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: G
VERSION: 07
REVISED: 01:52:32 05/27/2022
TDR: 000001191141
MODEL NO. 10LYH423
REF: -
BY: ENALEM0
B
BALDOR
HORZ TEFC 284-6TS ECP W/311 BRGS & PLS
10LYH423

CD0180







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: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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