

ABB BALDOR RELIANCE III

Customer information packet

ECP4102T-5

20HP, 1180RPM, 3PH, 60HZ, 286T, 1062M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	286T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CL I GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	575.0 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	1.0
Current @ Voltage	20.600 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AH
Type	AC
Mech. spec.	10H292
Base	
Status	PRD/A
Elec. spec.	10WGY161
Layout	10LYH292
Eff. date	09-29-2025
CD Diagram	CD0006
Poles	06
Leads	3#10
Proprietary	False
Created date	01-09-2013

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	20.6 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1062M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	28.00 IN
Power Factor	78
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1180 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.	ECP4102T-5			P/N						ENCLOSURE		TEFC						
SPEC.	10H292Y161G1		CC	010A	FRAME	286T		S/N										
HP	20			CLASS	F	HZ	60	DES	A									
RPM	1180			RPM MAX		1800		PH	3	KVA-CODE		H						
VOLT	575			MOTOR WEIGHT			478											
AMP	20.6			SER.F.	1.15	PF	78	ODE BRG		6311	DE BRG		6311					
RATING	40C AMB-CONT			NEMA-NOM-EFF			93		GREASE		POLYREX EM							
									INV.TYPE		PWM							
TEMP CODE	T3C	INVERTER-TEMP-CODE			180													
TEMP =	160	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 # 47253

Typical performance - not guaranteed values

Winding: 10WGY161-R004			Type: 1062M		Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		20	Full Load Torque		89 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		20.6	Breakdown Torque		281 LB-FT	
R.P.M.		1180	Pull-up Torque		110 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		156 LB-FT
NEMA Design Code		A	KVA Code		H	
Service Factor (S.F.)		1.15	Starting Current		135 A	
NEMA Nom. Eff.		93	Power Factor		78	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		48°C
S.F. Amps				Temp. Rise @ S.F. Load		58°C
				Rotor inertia		7.59 LB-FT2

Load Characteristics 575 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	40	62	73	78	80	81	79
Efficiency	87.4	92.1	93.2	93.2	92.4	92	92.7
Speed	1195	1191	1187	1183	1178	1173	1180
Line amperes	10.7	13.4	16.7	20.6	25.1	30.2	23.3

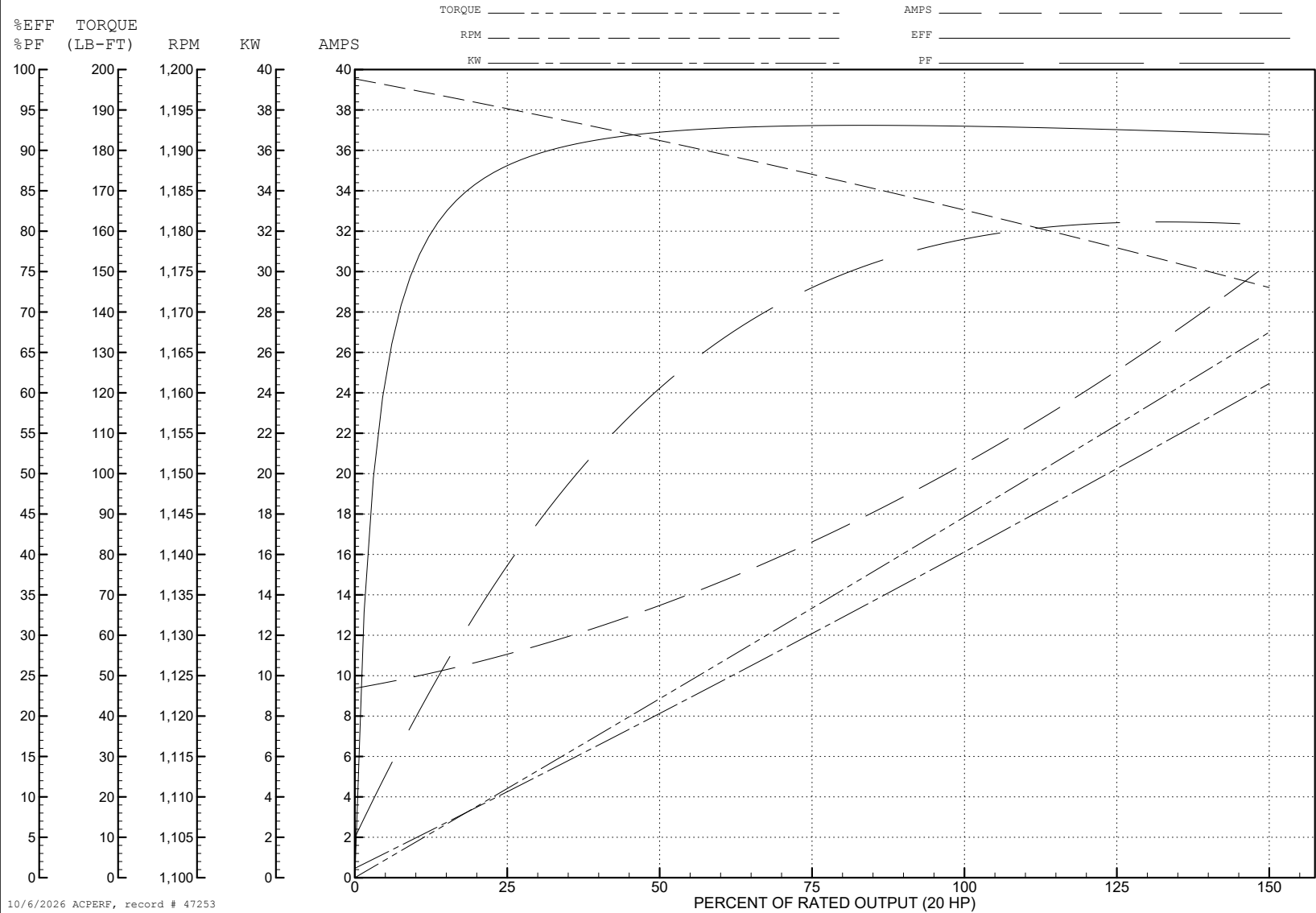
ABB Motors and Mechanical Inc.

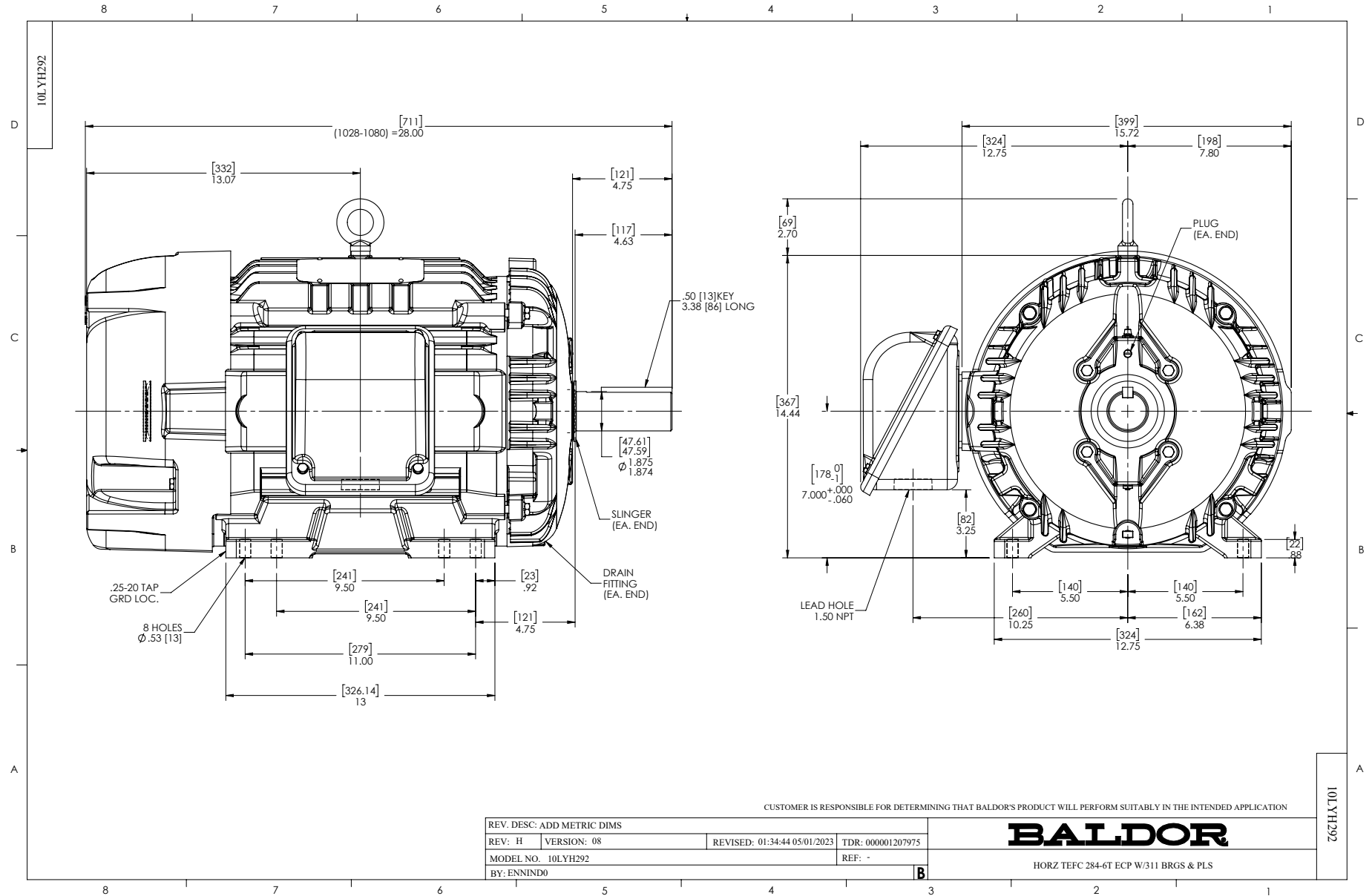
WINDING # 10WGY161

Typical performance - not guaranteed values.

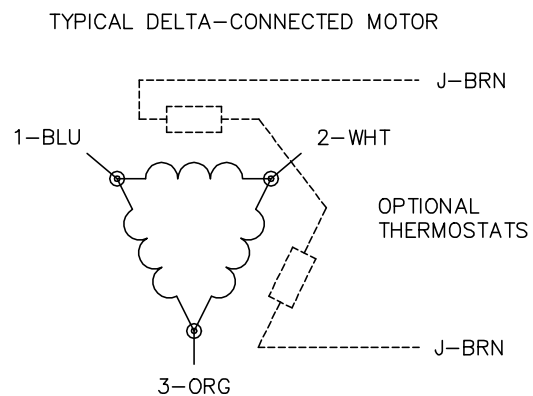
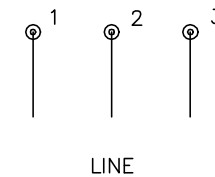
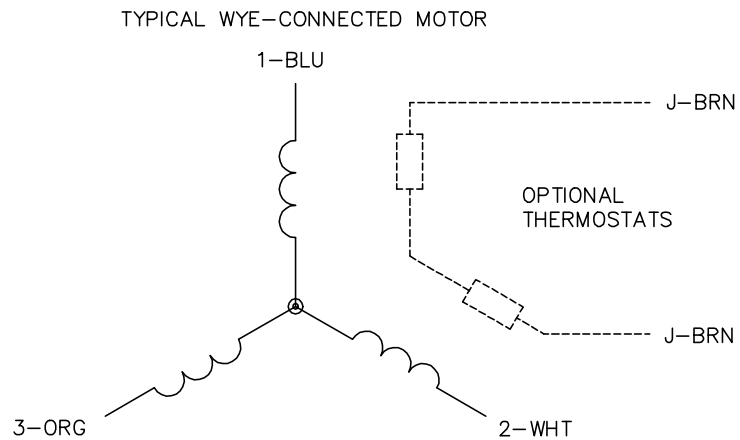
20 HP 3 PH 60 HZ 1180 RPM 575 V 1062M

TORQUES (LB-FT): PO=281 PU=110 LR=156 LRA=135





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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