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# Customer information packet

## ECP4104T-4

30HP, 1760RPM, 3PH, 60HZ, 286T, 1056M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

## Specifications

Enclosure	TEFC
Frame	286T
Frame Material	Iron
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
XP Class and Group	CLI GP A,B,C,D
XP Division	Division II
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	1.3
Current @ Voltage	38.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

## Part detail

Revision	L
Type	AC
Mech. spec.	10H292
Base	
Status	PRD/A
Elec. spec.	10WGY859
Layout	10LYH292
Eff. date	03-04-2024
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	08-24-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	38.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
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 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.00 IN
Power Factor	80
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	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor

<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>
<b>XP Temp Code</b>	<b>T3C</b>

**Nameplate**

**NP3241**

<b>CAT.NO.</b>	ECP4104T-4	<b>P/N</b>		<b>ENCLOSURE</b>	TEFC
<b>SPEC.</b>	10H292Y859G6	<b>CC</b>	010A	<b>FRAME</b>	286T
<b>HP</b>	30	<b>CLASS</b>	F	<b>HZ</b>	60
<b>RPM</b>	1760	<b>RPM MAX</b>	2700	<b>PH</b>	3
<b>VOLT</b>	460	<b>MOTOR WEIGHT</b>	470	<b>KVA-CODE</b>	J
<b>AMP</b>	38	<b>SER.F.</b>	1.15	<b>PF</b>	80
<b>RATING</b>	40C AMB-CONT	<b>NEMA-NOM-EFF</b>	93.6	<b>ODE BRG</b>	6311
				<b>DE BRG</b>	6311
				<b>GREASE</b>	POLYREX EM
				<b>INV.TYPE</b>	PWM
<b>TEMP CODE</b>	T3C	<b>INVERTER-TEMP-CODE</b>	180		
<b>TEMP =</b>	160	<b>C HP FR</b>	60	<b>C HP TO</b>	90
<b>CT HZ FROM</b>	1.3	<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

**AC Induction Motor Performance Data**

Record # 66468

Typical performance - not guaranteed values

<b>Winding: 10WGY859-R040</b>		<b>Type: 1056M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	30	<b>Full Load Torque</b>	88.7 LB-FT		
<b>Volts</b>	460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	38	<b>Breakdown Torque</b>	330 LB-FT		
<b>R.P.M.</b>	1760	<b>Pull-up Torque</b>	142 LB-FT		
<b>Hz</b>	60	<b>Locked-rotor Torque</b>	178 LB-FT		
<b>NEMA Design Code</b>	A	<b>Starting Current</b>	270 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	17.9 A		
<b>NEMA Nom. Eff.</b>	93.6	<b>Line-line Res. @ 25°C</b>	0.19377 Ω		
<b>Rating - Duty</b>	40C	<b>Temp. Rise @ Rated Load</b>	64°C		
<b>S.F. Amps</b>	AMB-CONT	<b>Temp. Rise @ S.F. Load</b>	76°C		
		<b>Locked-rotor Power Factor</b>	30.9		
		<b>Rotor inertia</b>	4.47 LB-FT <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 30 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>	41	63	73	80	82	85	81
<b>Efficiency</b>	87.6	92.3	93.5	93.7	93.4	92.9	93.5
<b>Speed</b>	1792.2	1787.6	1782.4	1776.5	1770.3	1762.1	1773
<b>Line amperes</b>	19.8	24.3	30.7	37.6	45.6	55.2	42.4

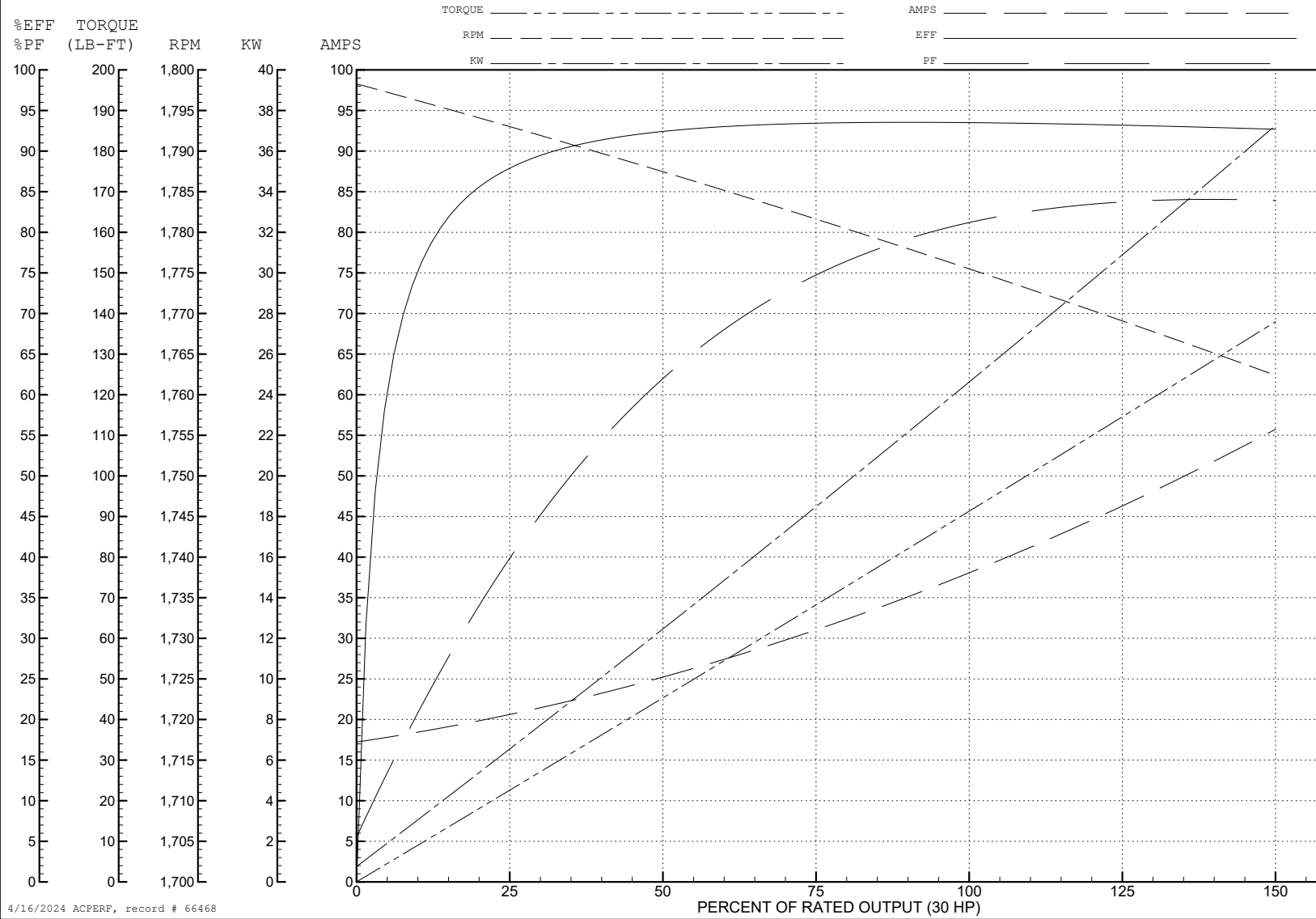
ABB Motors and Mechanical Inc.

WINDING # 10WGY859

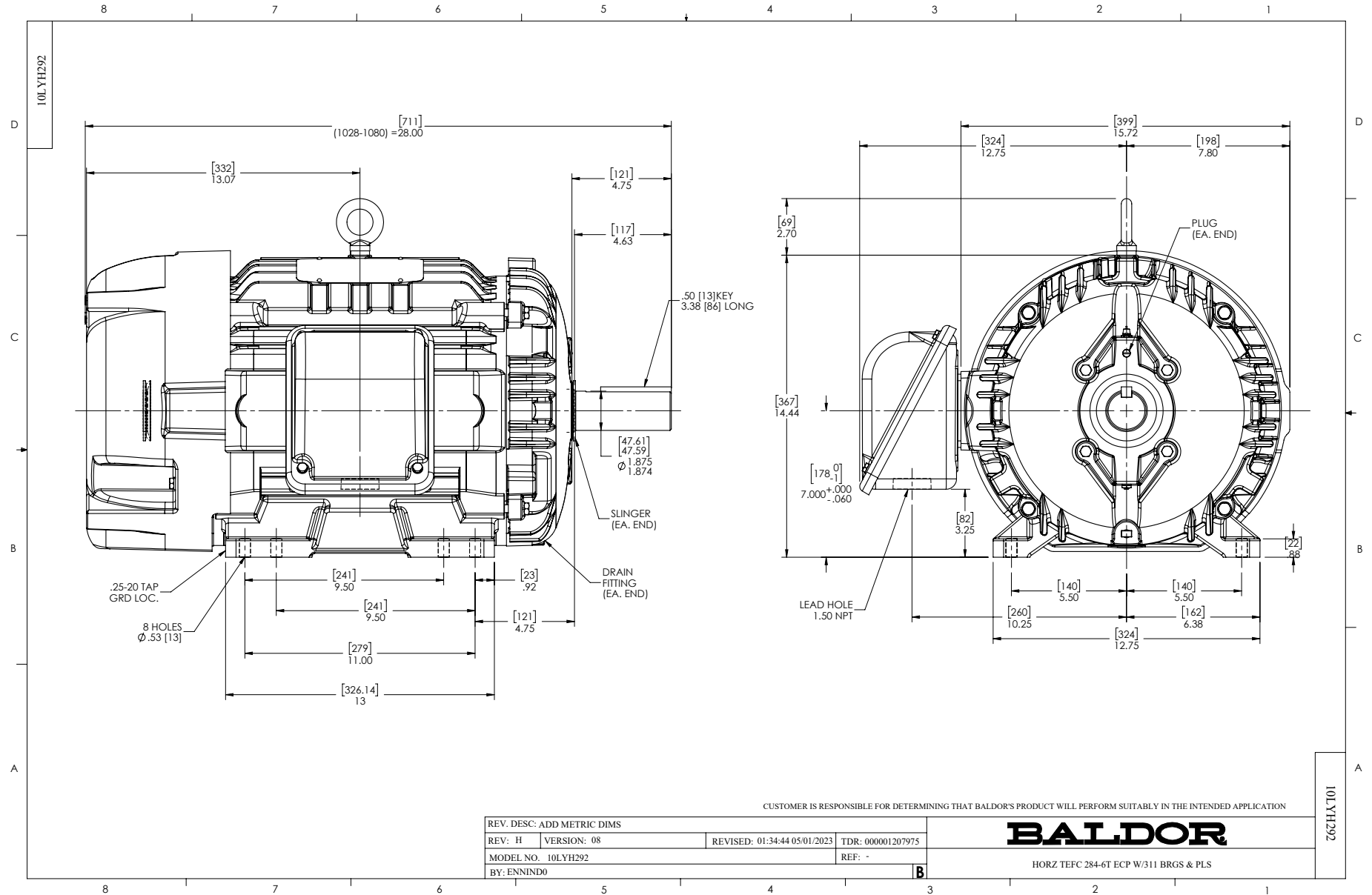
Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

TORQUES (LB-FT): PO=330 PU=142 LR=178 LRA=270



4/16/2024 ACPERF, record # 66468





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
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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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