

**BALDOR® • RELIANCE™**

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# Customer information packet

## ECP84114T-5

50HP, 3530RPM, 3PH, 60HZ, 326TS, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

## Specifications

Enclosure	TEFC
Frame	326TS
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	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
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	1.2
Current @ Voltage	44.200 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3

## Part detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY685
Layout	12LYF808
Eff. date	07-19-2023
CD Diagram	CD0006
Poles	02
Leads	3#8
Proprietary	False
Created date	12-12-2018

Heater Indicator	No Heater
High Voltage Full Load Amps	44.2 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP56
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1266M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	29.24 IN
Power Factor	91
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3530 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**

**NP4332**

<b>STK.NO.</b>	ECP84114T-5	<b>P/N</b>		<b>ENCLOSURE</b>	TEFC
<b>SPEC.</b>	12-0000-0372	<b>CC</b>	010A	<b>FRAME</b>	326TS
<b>HP</b>	50	<b>CLASS</b>	F	<b>HZ</b>	60
<b>RPM</b>	3530	<b>RPM MAX</b>	5400	<b>ODE BRG</b>	6312
<b>VOLT</b>	575	<b>PH</b>	3	<b>DE BRG</b>	6312
<b>AMP</b>	44.2	<b>DES</b>	B	<b>D.E. BRG.</b>	60BC03X30X
<b>RATING</b>	40C AMB-CONT	<b>KVA-CODE</b>	F	<b>O.D.E. BRG.</b>	60BC03X30X
<b>NEMA-NOM-EFF</b>	93	<b>MOTOR WEIGHT</b>	662	<b>GREASE</b>	POLYREX EM
<b>G.MIN.EFF</b>	91.7	<b>MAX. KVAR</b>	5.1	<b>BLANK</b>	
<b>TEMP CODE</b>	T3	<b># OF ROTOR BARS</b>	28	<b>SER.F.</b>	1.15
<b>TEMP =</b>	200	<b># OF STATOR SLOTS</b>	36	<b>IP</b>	56
<b>CT HZ FROM</b>	1.2	<b>PF</b>	91	<b>INV.TYPE</b>	PWM
<b>HTR-VOLTS</b>		<b>INVERTER-TEMP-CODE</b>	200		
<b>HTR-AMPS</b>		<b>C HP FR</b>	60	<b>C HP TO</b>	90
<b>HTR-WATTS</b>		<b>CT HZ TO</b>	60		
<b>MAX. SPACE HEATER TEMP.</b>				<b>VT HZ FROM</b>	0-
				<b>VT HZ TO</b>	60

**AC Induction Motor Performance Data**

Record # 92790

Typical performance - not guaranteed values

Winding: 12WGY685-R001		Type: 1266M	Enclosure: TEFC		
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>		
Rated Output (HP)	50	Full Load Torque	74.6 LB-FT		
Volts	575	Start Configuration	direct on line		
Full Load Amps	44	Breakdown Torque	223 LB-FT		
R.P.M.	3530	Pull-up Torque	79.4 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	99 LB-FT
NEMA Design Code	B	KVA Code	F	Starting Current	290 A
Service Factor (S.F.)	1.15	No-load Current	8.8 A		
NEMA Nom. Eff.	93	Power Factor	91	Line-line Res. @ 25°C	0.172 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	78°C	
S.F. Amps			Temp. Rise @ S.F. Load	96°C	
			Locked-rotor Power Factor	20.1	
			Rotor inertia	5.16 lb-ft <sup>2</sup>	

**Load Characteristics 575 V, 60 Hz, 50 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	75	87	91	91	92	90	92
Efficiency	91	93.4	93.6	93	92.1	90.7	92.5
Speed	3583	3566	3549	3530	3510	3486	3518
Line amperes	14.2	23	33.2	44.2	55.6	68.5	51

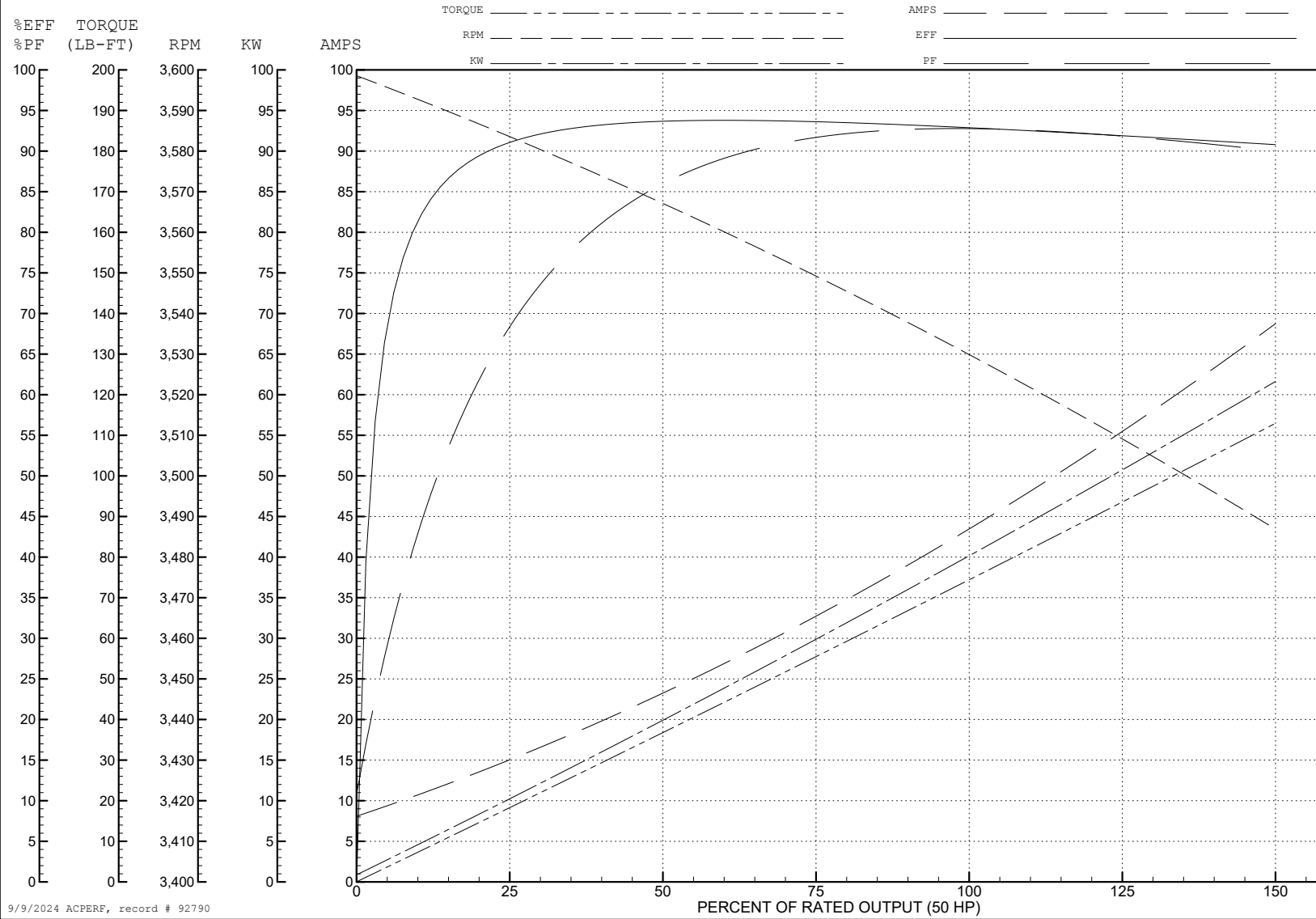
ABB Motors and Mechanical Inc.

WINDING # 12WGY685

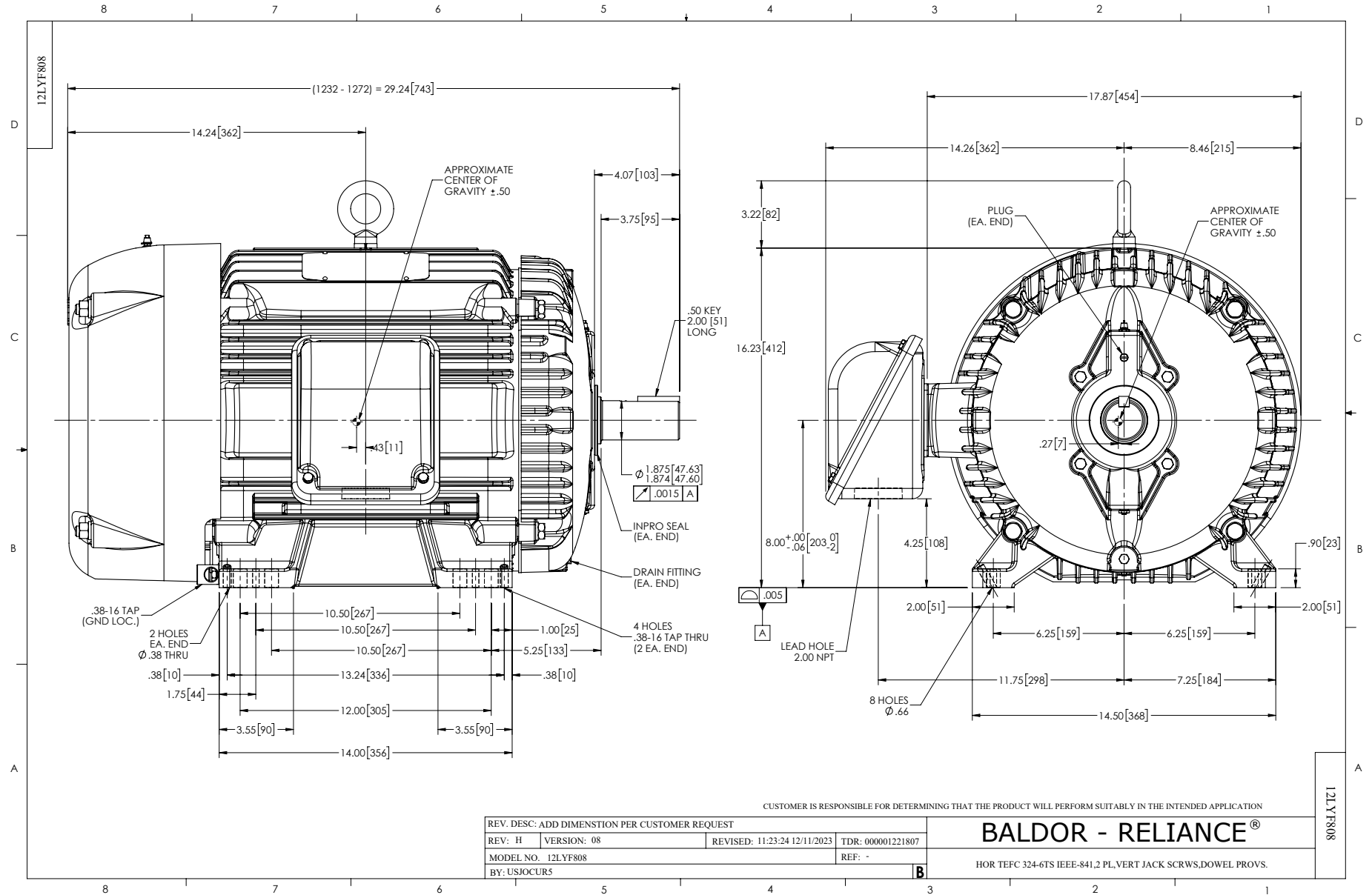
Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 3530 RPM 575 V 1266M

TORQUES (LB-FT): PO=223 PU=79.4 LR=99 LRA=290



9/9/2024 ACPERF, record # 92790



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: -	© □	

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

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