

ABB BALDOR RELIANCE III

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
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	1.2
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	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY685
Layout	12LYF808
Eff. date	11-03-2025
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

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

AC Induction Motor Performance Data

Record # 92790

Typical performance - not guaranteed values

Winding: 12WGY685-R001			Type: 1266M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
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-ft²		

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

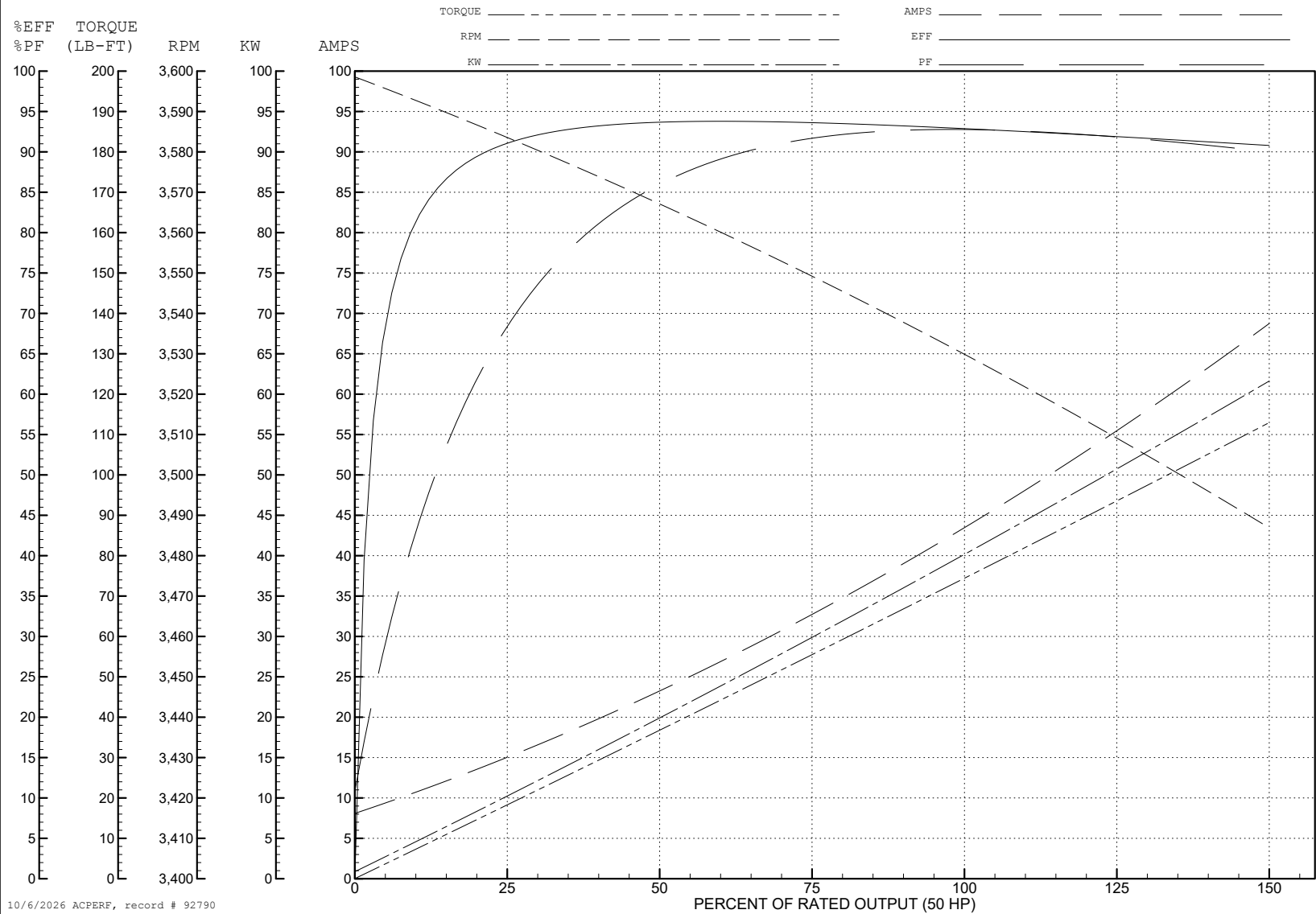
ABB Motors and Mechanical Inc.

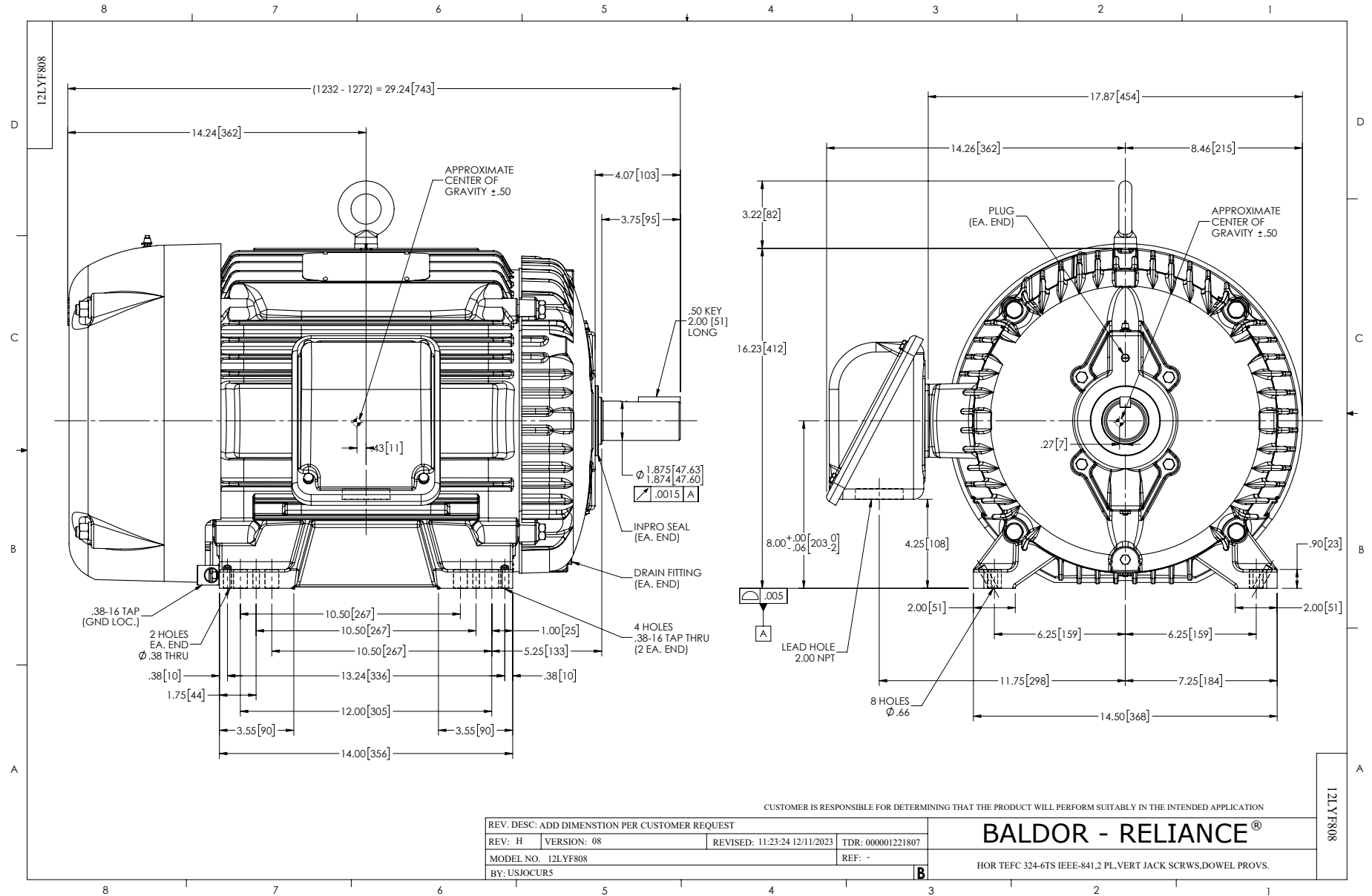
WINDING # 12WGY685

Typical performance - not guaranteed values.

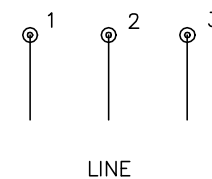
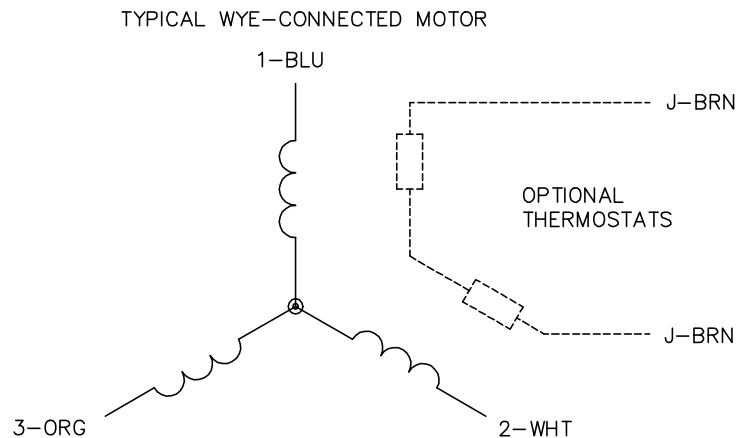
50 HP 3 PH 60 HZ 3530 RPM 575 V 1266M

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





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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