

BALDOR • RELIANCE

Customer information packet

EM4110T-5BG

40HP, 1775RPM, 3PH, 60HZ, 324T, 1254M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	324T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	UR CSA CSA EEV
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
Current @ Voltage	39.000 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	39.0 a
Insulation Class	H

Part detail

Revision	R
Type	AC
Mech. spec.	12G931
Base	
Status	PRD/A
Elec. spec.	12WGY285
Layout	12LYG931
Eff. date	02-12-2024
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	09-19-2014

Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP2138L

CAT.NO.	EM4110T-5BG	P/N		ENCLOSURE	TEFC
SPEC.	12G931Y285G1	CC	010A	FRAME	324T
HP	40	CLASS	H	HZ	60
RPM	1775	PH	3	DES	A
VOLT	575	KVA-CODE	H	ODE BRG	6311
AMP	39	DE BRG	6312		
RATING	40C AMB-CONT	GREASE	POLYREX EM		
NEMA-NOM-EFF	94.1	PF	82	SER.F.	1.15
HTR-VOLTS		HTR-AMPS			

AC Induction Motor Performance Data

Record # 47382

Typical performance - not guaranteed values

Winding: 12WGY285-R003		Type: 1254M	Enclosure: TEFC	
Nameplate Data		575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	40	Full Load Torque	118 LB-FT	
Volts	575	Start Configuration	direct on line	
Full Load Amps	39	Breakdown Torque	367 LB-FT	
R.P.M.	1775	Pull-up Torque	174 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	185 LB-FT
NEMA Design Code	A KVA Code	H	Starting Current	267 A
Service Factor (S.F.)		1.15	No-load Current	15.6 A
NEMA Nom. Eff.	94.1 Power Factor	82	Line-line Res. @ 25°C	0.232 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load	54°C
S.F. Amps			Temp. Rise @ S.F. Load	65°C
			Locked-rotor Power Factor	28
			Rotor inertia	7.19 LB-FT ²

Load Characteristics 575 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	67	77	82	84	85	83
Efficiency	90.1	93.6	94.3	94.3	94.2	93.3	94.2
Speed	1795	1790	1785	1780	1774	1767	1776
Line amperes	18.3	24.1	31.1	38.7	47.6	56.3	44

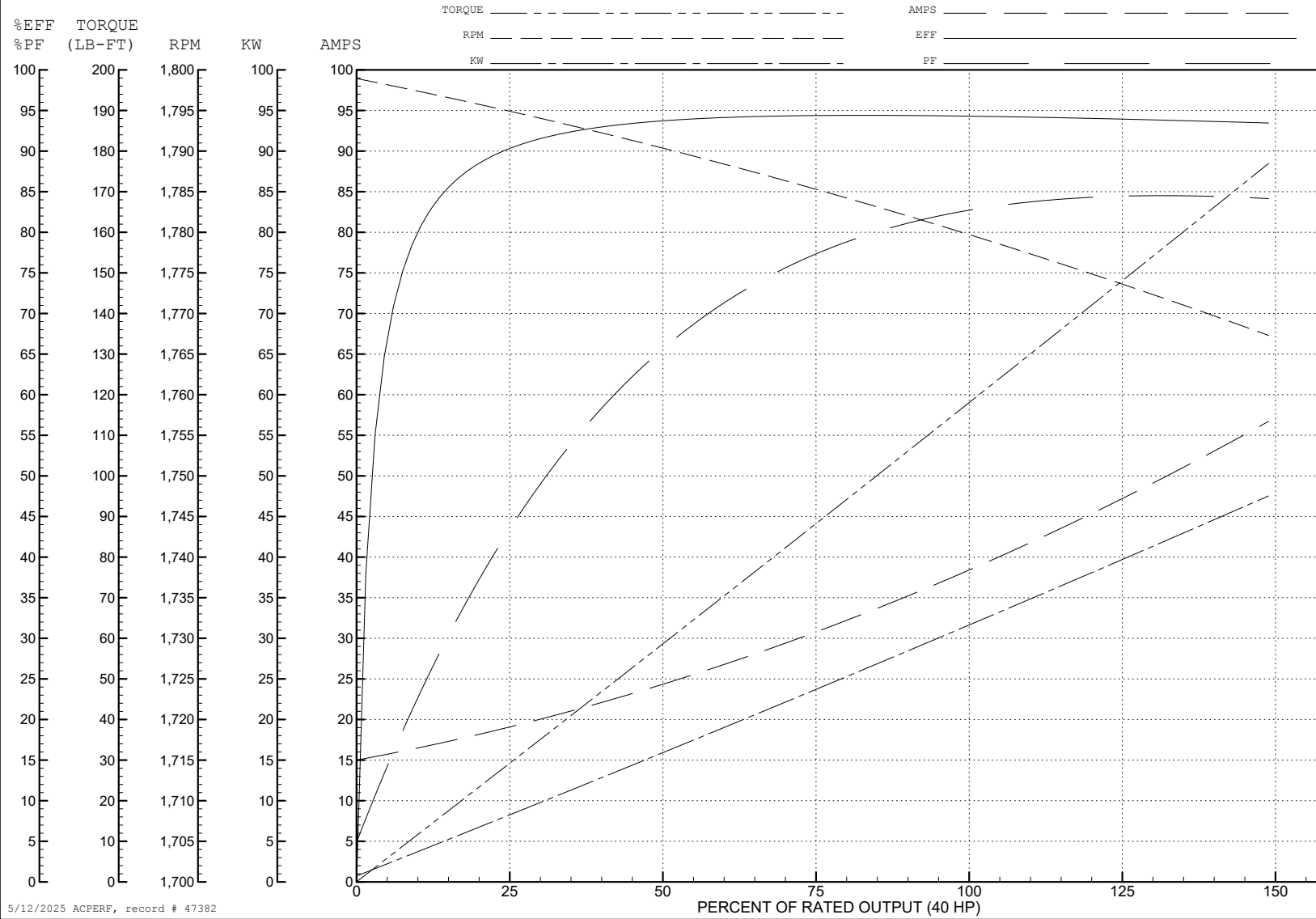
ABB Motors and Mechanical Inc.

WINDING # 12WGY285

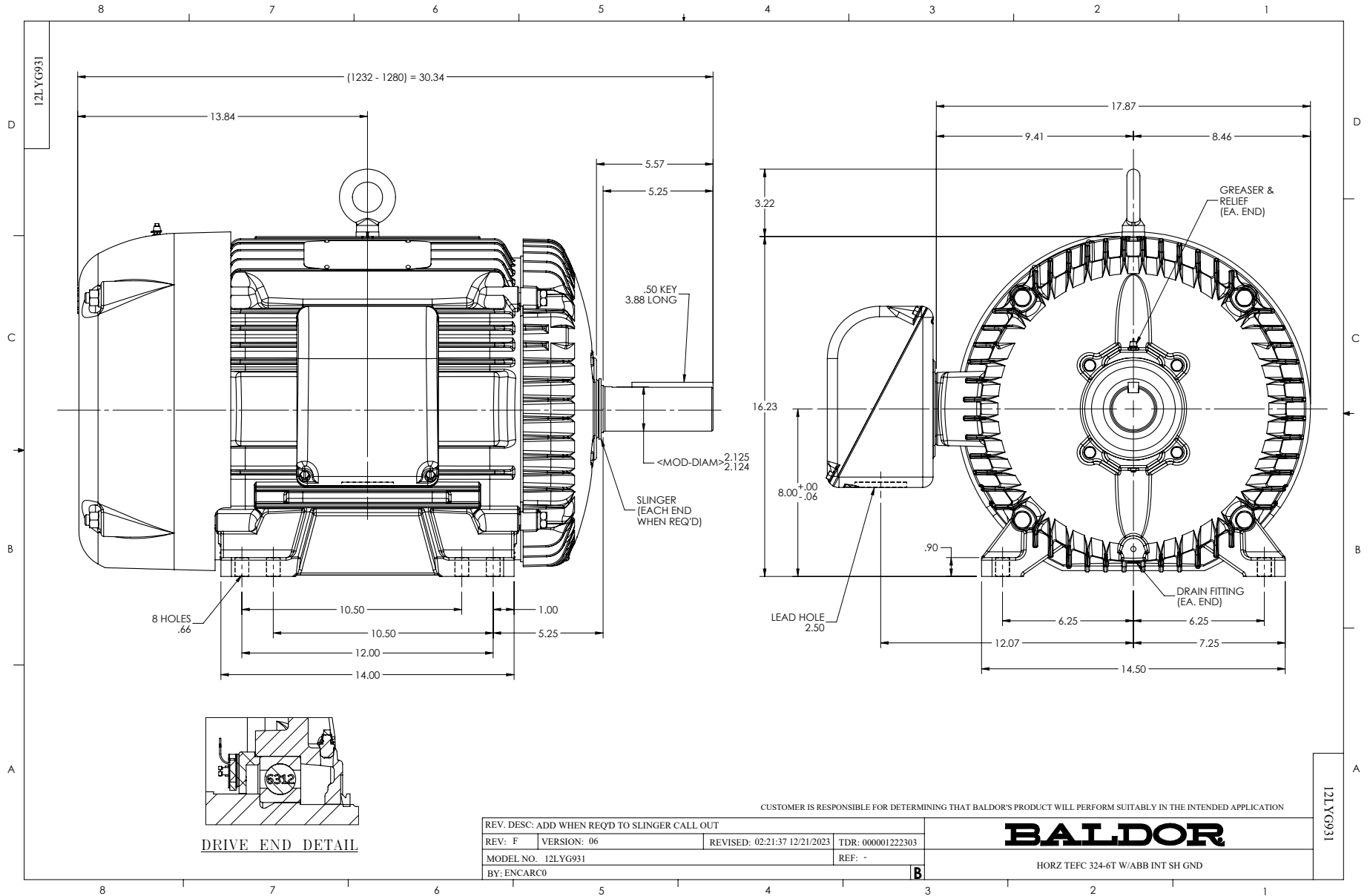
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1775 RPM 575 V 1254M

TORQUES (LB-FT): PO=367 PU=174 LR=185 LRA=267



5/12/2025 ACPERF, record # 47382



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

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

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