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# Customer information packet

## EM4109T-5

40HP, 3530RPM, 3PH, 60HZ, 324TS, 1240M, TEFC, F

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	324TS
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	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA_PREMIUM CURUSEEV NEMA PREMIUM
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	37.000 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
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	37.0 a
Insulation Class	F

## Part detail

Revision	U
Type	AC
Mech. spec.	12H49
Base	
Status	PRD/A
Elec. spec.	12WGY367
Layout	12LYH049
Eff. date	12-05-2024
CD Diagram	CD0006
Poles	02
Leads	3#8
Proprietary	False
Created date	05-14-2012

Inverter Code	Inverter Ready
KVA Code	G
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	1240M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	28.84 IN
Power Factor	88
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	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
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**

**NP3443L**

<b>CAT.NO.</b>	EM4109T-5	<b>CUST. P/N</b>				<b>ENCL</b>	<b>TEFC</b>
<b>SPEC.</b>	12H049Y367	<b>CC</b>	010A	<b>FRAME</b>	324TS	<b>SER.NO.</b>	
<b>HP</b>	40	<b>CLASS</b>		F	<b>HZ</b>	60	
<b>R.P.M.</b>	3530	<b>PH</b>	3	<b>DES</b>		A	
<b>VOLTS</b>	575	<b>CODE</b>		G	<b>ODE BRG</b>	6311	<b>DE BRG</b> 6312
<b>AMPS</b>	37						
<b>RATING</b>	40C AMB-CONT	<b>NEMA NOM. EFF.</b>			92.4	<b>GREASE</b>	POLYREX EM
<b>P.F.</b>	88	<b>SER.F.</b>	1.15	<b>VPWM INVERTER READY</b>			
<b>HTR-VOLTS</b>		<b>HTR-AMPS</b>		<b>HTR-WATTS</b>			

**Accessories**

<b>Part number</b>	<b>Description</b>	<b>Multiplier</b>
12-1105	C FACE KIT	A8
12EP1501A03SP	D-FLANGE KIT	A8

## AC Induction Motor Performance Data

Record # 32547

Typical performance - not guaranteed values

Winding: 12WGY367-R001		Type: 1240M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>	
Rated Output (HP)	40	Full Load Torque	59.2 LB-FT	
Volts	575	Start Configuration	direct on line	
Full Load Amps	37	Breakdown Torque	237 LB-FT	
R.P.M.	3530	Pull-up Torque	80.9 LB-FT	
Hz	60 Phase	Locked-rotor Torque	111 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	250 A	
Service Factor (S.F.)	1.15	No-load Current	11.5 A	
NEMA Nom. Eff.	92.4 Power Factor	Line-line Res. @ 25°C	0.224 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	65°C	
S.F. Amps		Temp. Rise @ S.F. Load	78°C	
		Locked-rotor Power Factor	21.7	
		Rotor inertia	3.13 LB-FT <sup>2</sup>	

## Load Characteristics 575 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	59	78	85	88	89	89	89
Efficiency	85.3	91.1	92.1	92.6	91.9	91.2	92.2
Speed	3586	3573	3559	3544	3528	3512	3534
Line amperes	14.8	21.1	28.6	36.9	45.9	55.3	42.3

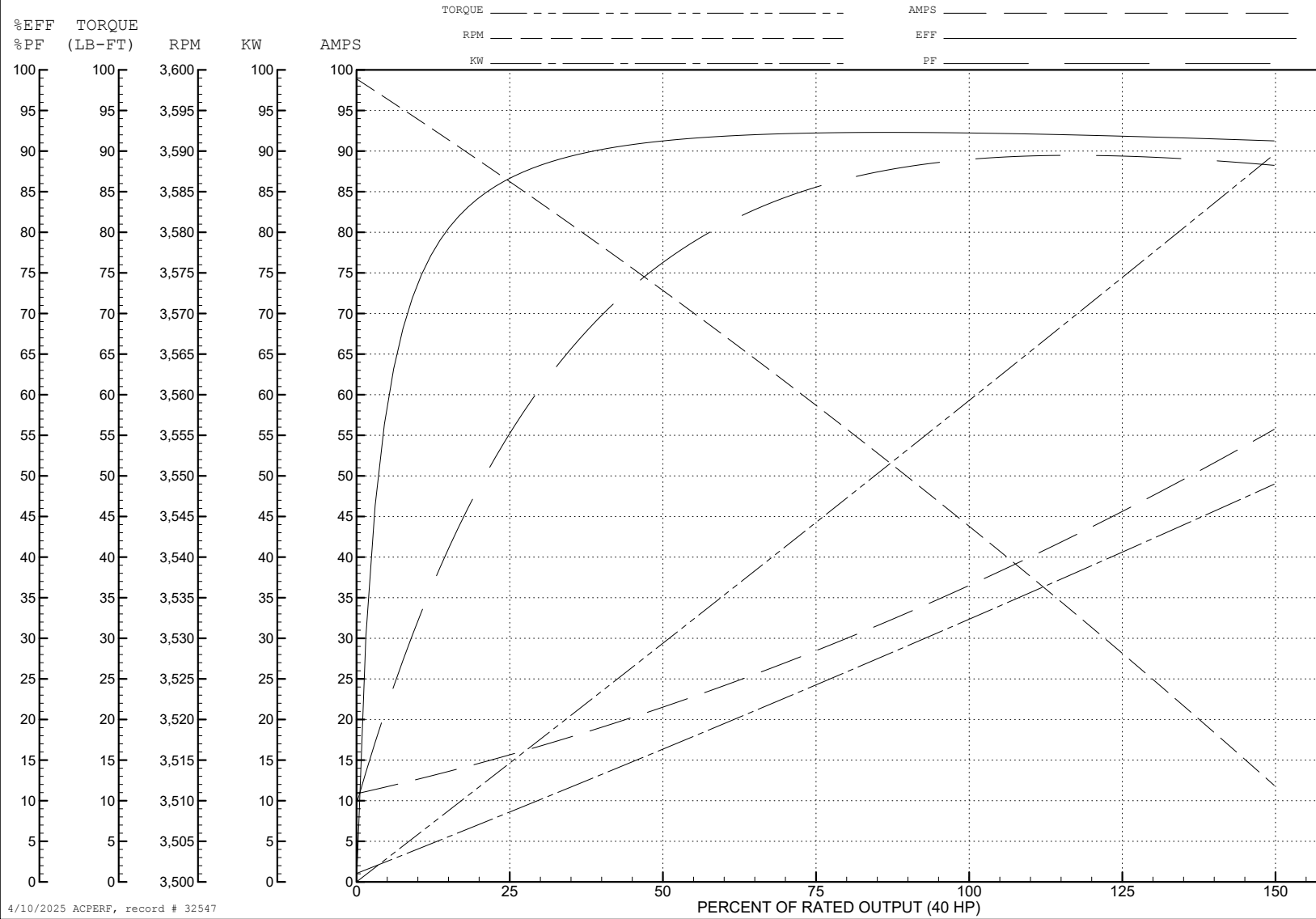
ABB Motors and Mechanical Inc.

WINDING # 12WGY367

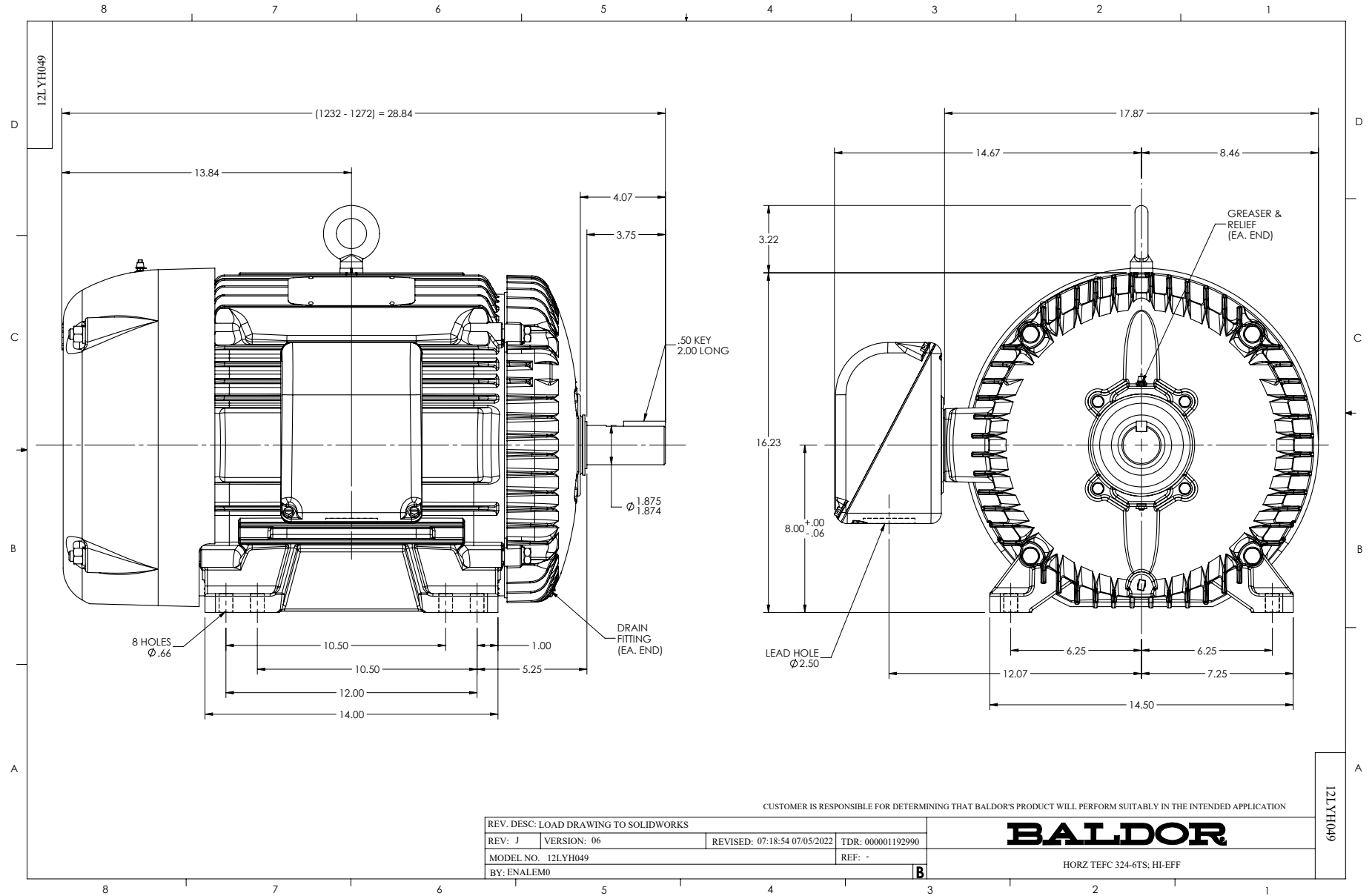
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 3530 RPM 575 V 1240M

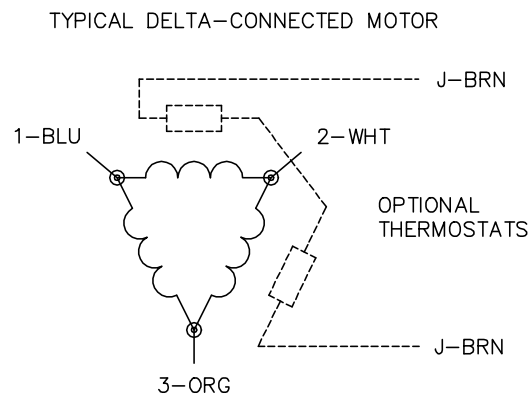
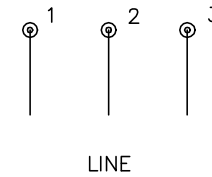
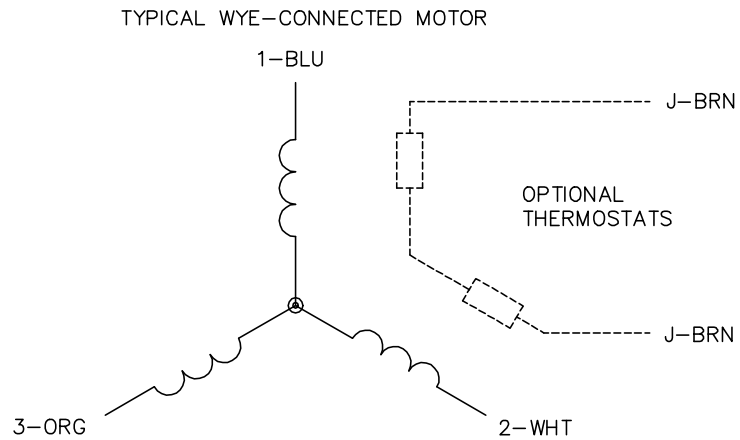
TORQUES (LB-FT): PO=237 PU=80.9 LR=111 LRA=250



4/10/2025 ACPERF, record # 32547



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
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MTL: -		© □

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

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