

ABB BALDOR RELIANCE III

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 (OLD LOGO) CURUSEEV NEMA PREMIUM
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
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	CD00006
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													
CAT.NO.	EM4109T-5				CUST. P/N				ENCL				TEFC
SPEC.	12H049Y367		CC	010A		FRAME	324TS		SER.NO.				
HP	40			CLASS	F		HZ	60					
R.P.M.	3530			PH	3		DES	A					
VOLTS	575			CODE		G		ODE BRG	6311	DE BRG	6312		
AMPS	37												
RATING	40C AMB-CONT			NEMA NOM. EFF.				92.4		GREASE	POLYREX EM		
P.F.	88	SER.F.		1.15		VPWM INVERTER READY							
HTR-VOLTS	HTR-AMPS		HTR-WATTS										

Accessories

Part number	Description	Multiplier
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	
Nameplate Data				575 V, 60 Hz: Single Voltage Motor			
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	3	Locked-rotor Torque		111 LB-FT	
NEMA Design Code		A	KVA Code	G	Starting Current		250 A
Service Factor (S.F.)		1.15		No-load Current		11.5 A	
NEMA Nom. Eff.		92.4	Power Factor	88	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 ²	

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

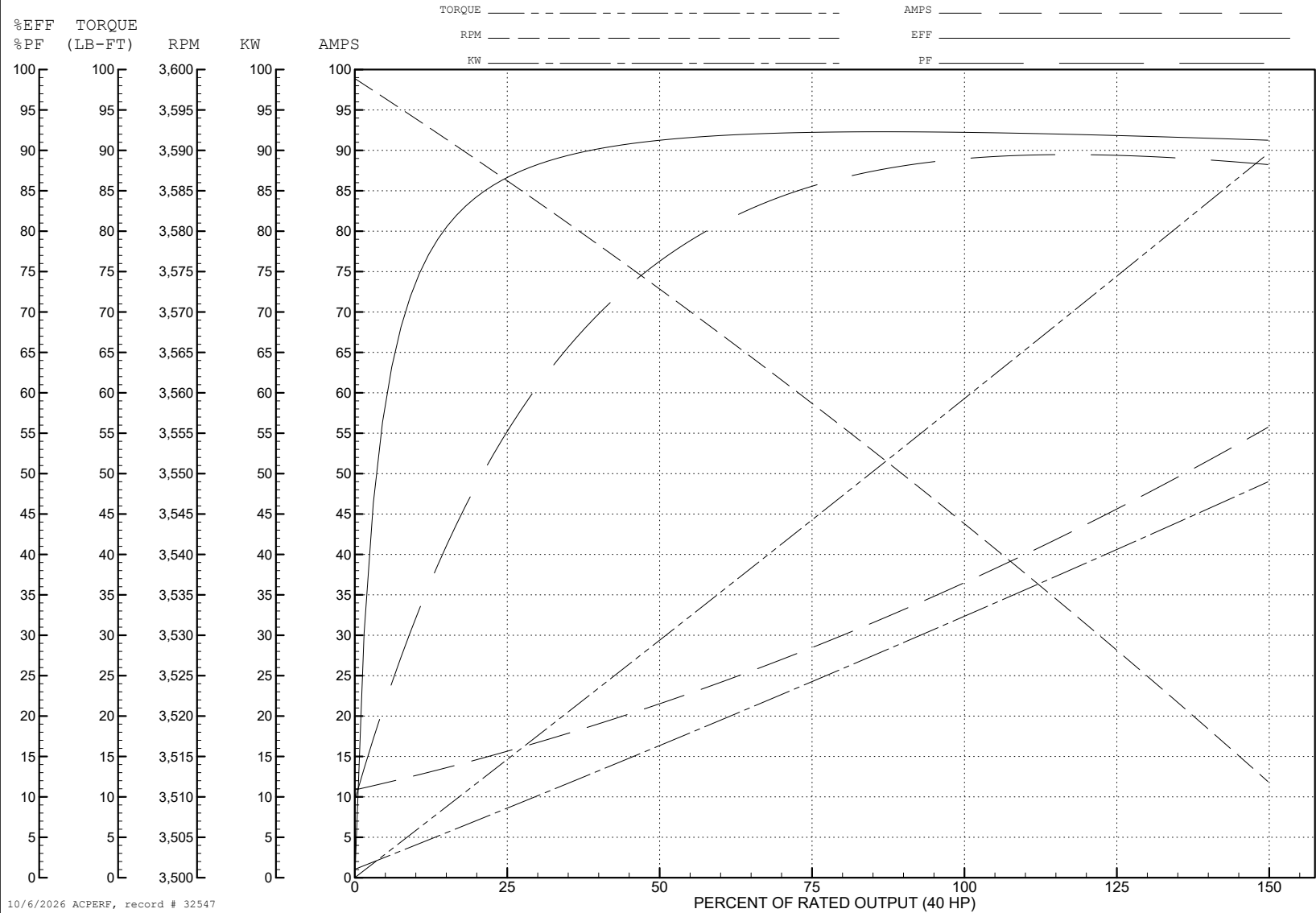
ABB Motors and Mechanical Inc.

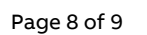
WINDING # 12WGY367

Typical performance - not guaranteed values.

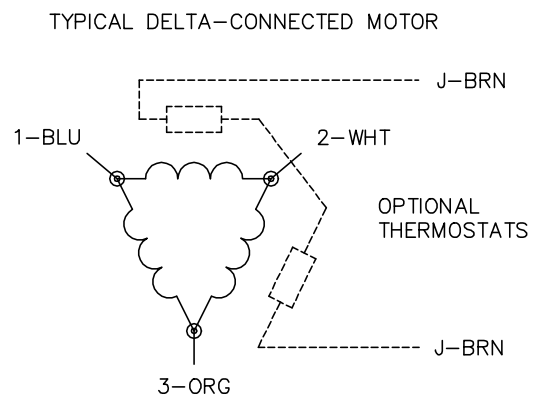
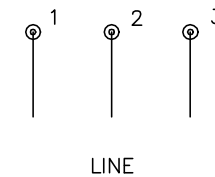
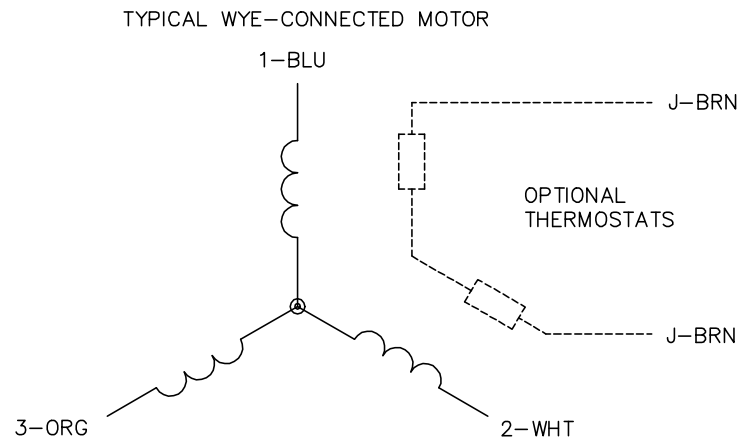
40 HP 3 PH 60 HZ 3530 RPM 575 V 1240M

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





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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