

BALDOR® • RELIANCE 

Product Information Packet

EM4109T-5

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

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY367	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	12H49	Layout:	12LYH049	Poles:	02	Created Date:	05-14-2012
Base:	RG	Eff. Date:	01-13-2022	Leads:	3#8		

Specs			
Catalog Number:	EM4109T-5	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Not Inverter
Frame:	324TS	KVA Code:	G
Frame Material:	Iron	Lifting Lugs:	Standard Lifting Lugs
Motor Letter Type:	Three Phase	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	40.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 8 AWG
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	1240M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	88
	CSA EEV	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding

Current @ Voltage:	37.000 A @ 575.0 V	Shaft Rotation:	Reversible
Design Code:	A	Shaft Slinger Indicator:	Shaft Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	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		USABLE AT 208V							
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				

Parts List		
Part Number	Description	Quantity
SA244718	SA 12H049Y367	1.000 EA
RA231603	RA 12H049Y367	1.000 EA
09FN3001D03	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 EA
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
12EP1107A05	FR ENDPLATE, MACH	1.000 EA
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
12EP1106A01	PU ENDPLATE, MACH	1.000 EA
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
12FH1002SP	FAN COVER, CAST	1.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H18	KEY, 1/2 SQ X 2.000	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3443L	SS SUPER-E UL CSA-EEV PREM CC	1.000 EA
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 EA

PE-0000013	ZRTG PE ASSEMBLY	1.000 EA
FE-0000022	ZRTG FE ASSEMBLY	1.000 EA

Accessories		
Part Number	Description	Multiplier
12-1105	C FACE KIT	A8
12EP1501A03SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 32547

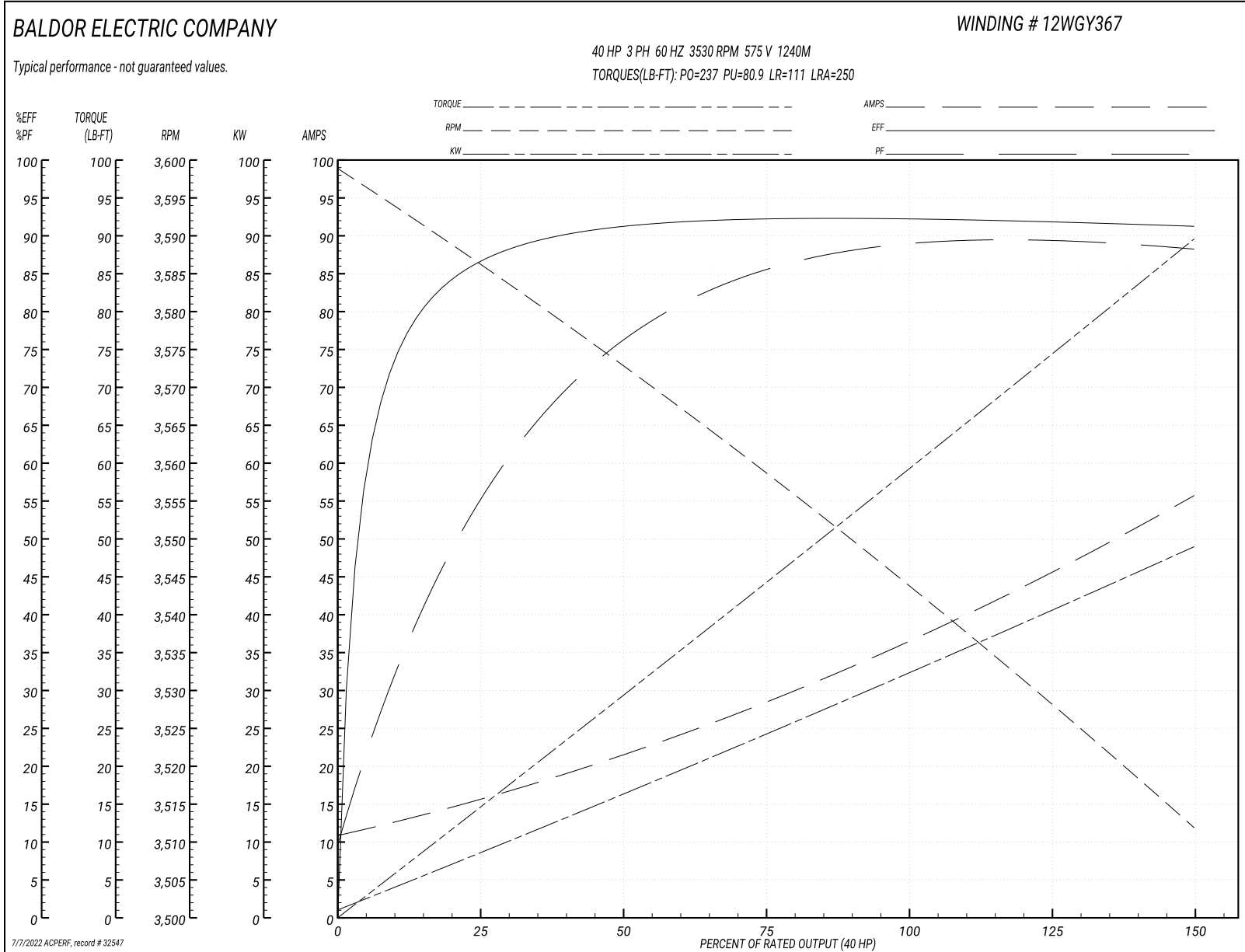
Typical performance - not guaranteed values

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	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 ²

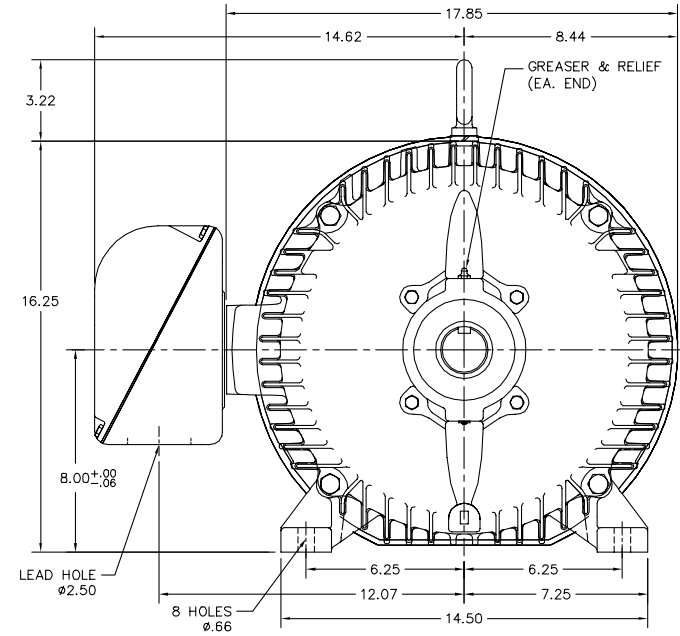
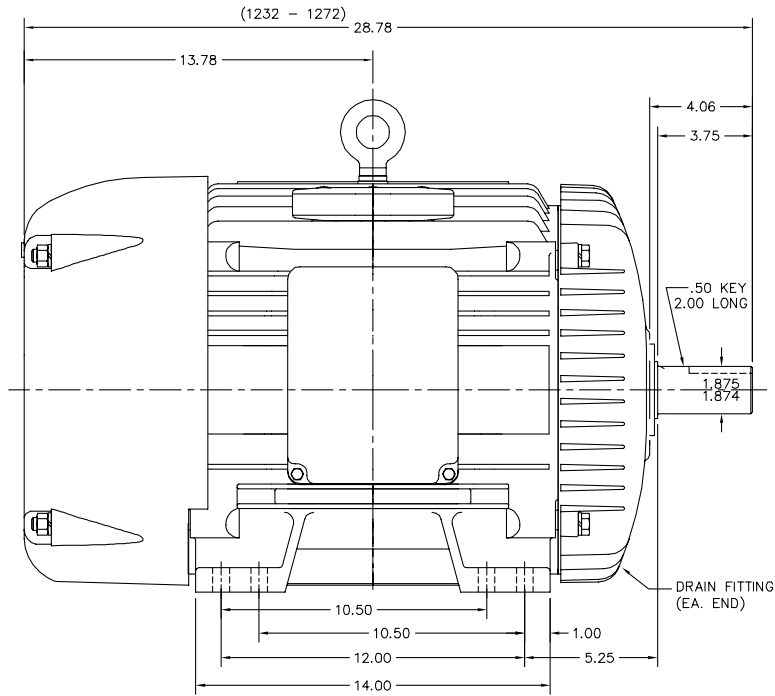
Load Characteristics 575 V, 60 Hz, 40 HP

% 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

Performance Graph at 575V, 60Hz, 40.0HP Typical performance - Not guaranteed values



12LYH049



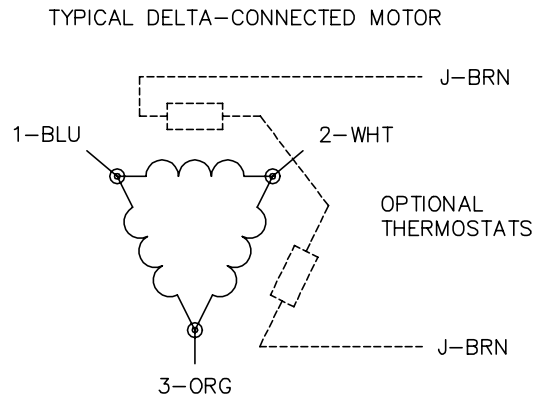
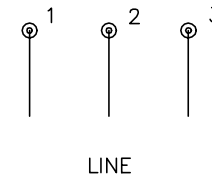
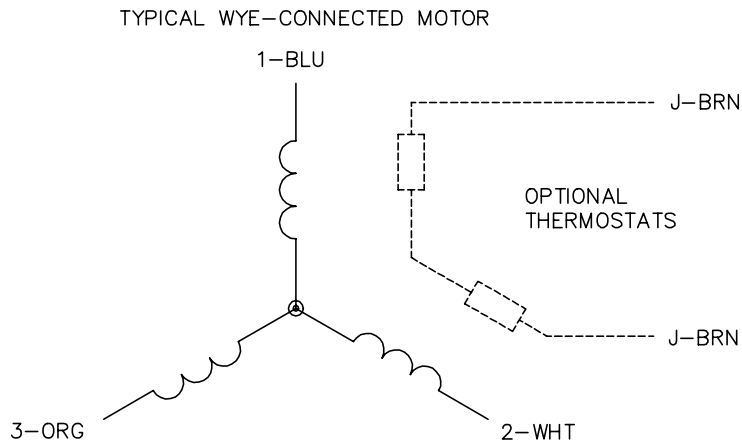
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: REMOVE LOCKNUT	VERSION: 05	TDR: 000000954270
REV. LTR: H	REVISED: 01:37:43 11/19/2015	BY: ENMARSO
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BALDOR
 HORZ TEFC 324-6TS; HI-EFF
 SH 1 of 1

12LYH049

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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BALDOR - RELIANCE®

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

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