

# **BALDOR**® • **RELIANCE**

## **Product Information Packet**

# **EM4109T-G**

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

Part Detail							
Revision:	M	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	1240M	Elec. Spec:	12WGY292	CD Diagram:	CD0180
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	12H135	Layout:	12LYH135
Frame:	324TS	Mounting:	F1	Poles:	02	Created Date:	12-08-2011
Base:	RG	Rotation:	R	Insulation:	H	Eff. Date:	06-07-2016
Leads:	9#8					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP2138L											
CAT.NO.	EM4109T-G			P/N				ENCLOSURE	TEFC		
SPEC.	12H135Y292G1		CC	010A	FRAME	324TS		S/N			
HP	40			CLASS	H	HZ	60				
RPM	3530			PH	3	DES	A				
VOLT	230/460				KVA-CODE	H		ODE BRG	6311	DE BRG	6312
AMP	92/46			USABLE AT 208V	100						
RATING	40C AMB-CONT			GREASE	POLYREX EM						
NEMA-NOM-EFF	92.4	PF	88	SER.F.	1.15						
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA235547	SA 12H135Y292G1	1.000 EA
RA222508	RA 12H135Y292G1	1.000 EA
S/P107-000-004	SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E	1.000 EA
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
12GS1000SP	GASKET	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
WD1000B16	T&B CX70TN TERMINAL	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	1.000 EA
12EP1107A05	FR ENDPLATE, MACH 324-6T	1.000 EA
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
10XN3118K36	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
12EP1106A01	PU ENDPLATE, MACH 324-6T	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
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 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
12FH1002SP	FAN COVER, CAST QF,WAUPACA QUALITY	1.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
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 (1000/bx) 11/14	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	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
37FN3002C04	EXFN, PLASTIC, 6.00 OD, 2.000 ID	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	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
LC0181	CONNECTION LABEL	1.000 EA
NP2138L	ALUM SUPER-E UL CSA-EEV PREM CC (300	1.000 EA

12PA1000	PACKAGING GROUP PRINT PK1024A06	1.000 EA
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**AC Induction Motor Performance Data**

Record # 50236 - Typical performance - not guaranteed values

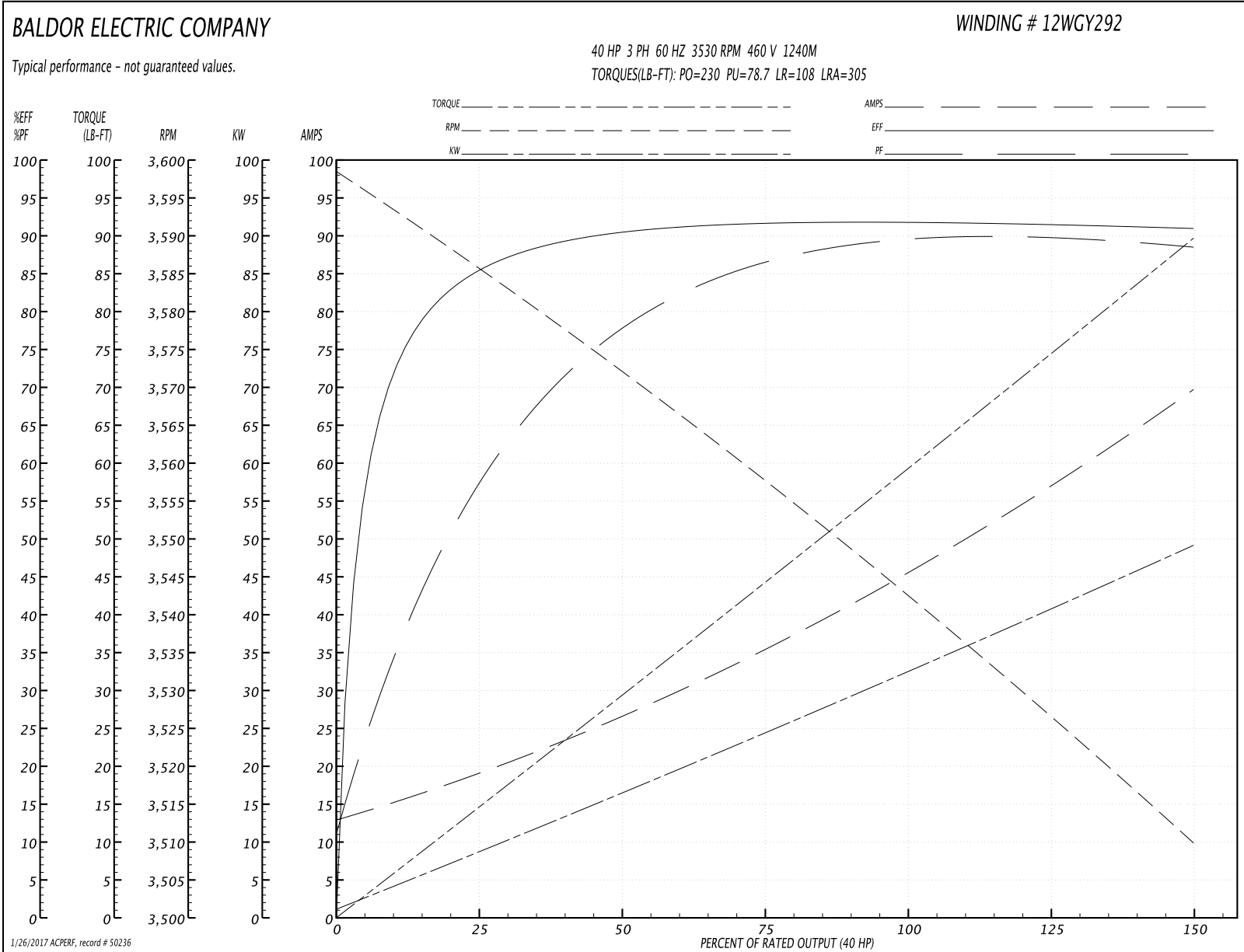
<b>Winding:</b> 12WGY292-R015	<b>Type:</b> 1240M	<b>Enclosure:</b> TEFC
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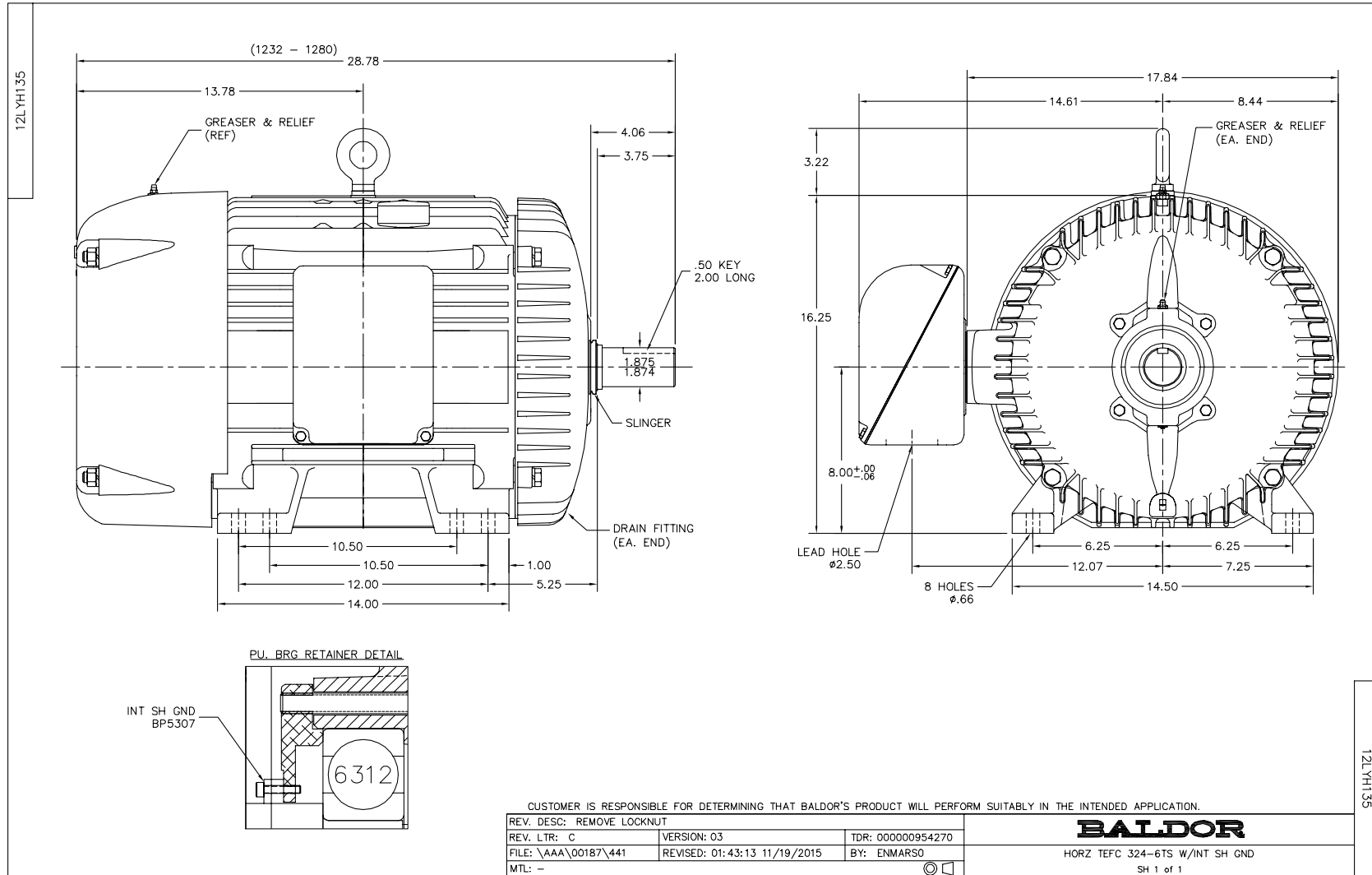
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40			Full Load Torque	59.2 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	92/46			Breakdown Torque	230 LB-FT
R.P.M.	3530			Pull-up Torque	78.7 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	108 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	305 A
Service Factor (S.F.)	1.15			No-load Current	13.7 A
NEMA Nom. Eff.	92.4	Power Factor	88	Line-line Res. @ 25°C	0.15743 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	22
				Rotor inertia	3.13 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 40 HP

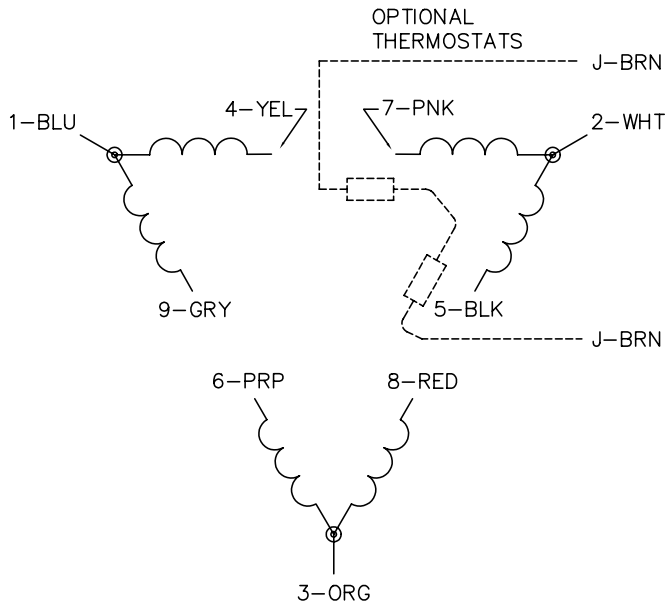
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	61	79	86	88	89	89	89
Efficiency	87.1	91.6	92.6	92.6	92.1	91.3	92.3
Speed	3585.4	3571.9	3557.9	3543.1	3526.6	3509.7	3533
Line amperes	18	26.1	35.6	46	57.4	69.2	52.8

Performance Graph at 460V, 60Hz, 40.0HP Typical performance - Not guaranteed values

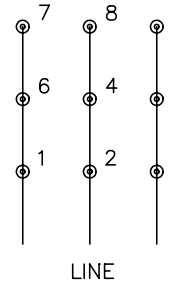




CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: C	BY: JLP	REVISED: 01/21/99 2:28	TDR: 0171435
0810D0		FILE: AAA00005148	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180