

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM4109T-G**

**40HP,3530RPM,3PH,60HZ,324TS,1058M,TEFC,F**

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	10WGY652	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	10L266	Layout:	10LYL266	Poles:	02	Created Date:	06-19-2018
Base:	RG	Eff. Date:	02-18-2022	Leads:	9#8		

Specs			
Catalog Number:	EM4109T-G	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	H
Frame:	324TS	Inverter Code:	Inverter Ready
Frame Material:	Iron	KVA Code:	H
Output @ Frequency:	40.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	1058M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	90
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	100.000 A @ 208.0 V	<b>Shaft Ground Indicator:</b>	Shaft Grounding
	45.000 A @ 460.0 V	<b>Shaft Rotation:</b>	Reversible
	90.000 A @ 230.0 V	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3443LUA</b>										
CAT.NO.	EM4109T-G				CUST. P/N				ENCL	TEFC
SPEC.	10L266Y652G1		CC	010A	FRAME	324TS		SER.NO.		
HP	40		CLASS	H	HZ	60				
R.P.M.	3530		PH.	3	DES.	A				
VOLTS	230/460		CODE	H	ODE BRG	6309		DE BRG	6312	
AMPS	90/45		USABLE AT 208V	100						
RATING	40C AMB-CONT		NEMA NOM. EFF.	92.4		GREASE	POLYREX EM			
P.F.	90		SER.F.	1.15		CT6-60H(10:1)VT3-60H(20:1)				
USABLE AT	50HZ 40HP 190/380V 110/55A				SF1.0					
VOLTS		AMPS		MAX. SPACE HEATER TEMP.						

Parts List		
Part Number	Description	Quantity
SA357319	SA 10L266Y652G1	1.000 EA
RA346307	RA 10L266Y652G1	1.000 EA
37FN3002C03	EXFN, PLASTIC, 6.00 OD, 1.690 ID	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
10EP1106A73	FREP TEFC W/"O" DRAIN W/O RET RING HLS	1.000 EA
10XN3816K32	BOLT, 3/8-16X2 HH YZ(5)	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
10XN3118K40	5/16-18 X 2.75" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
10EP1108A16	PULLEY ENDPLATE - 312 BRG.- ENCL.	1.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 EA
10FH4000	310 FAN HOUSING STAMPED	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	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

Parts List (continued)		
Part Number	Description	Quantity
HW2501H18	KEY, 1/2 SQ X 2.000	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	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
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.130 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	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,	0.125 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP3443LUA	SS SUPER-E UL CSA-EEV PREM CC	1.000 EA
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

**AC Induction Motor Performance Data**

Record # 70959

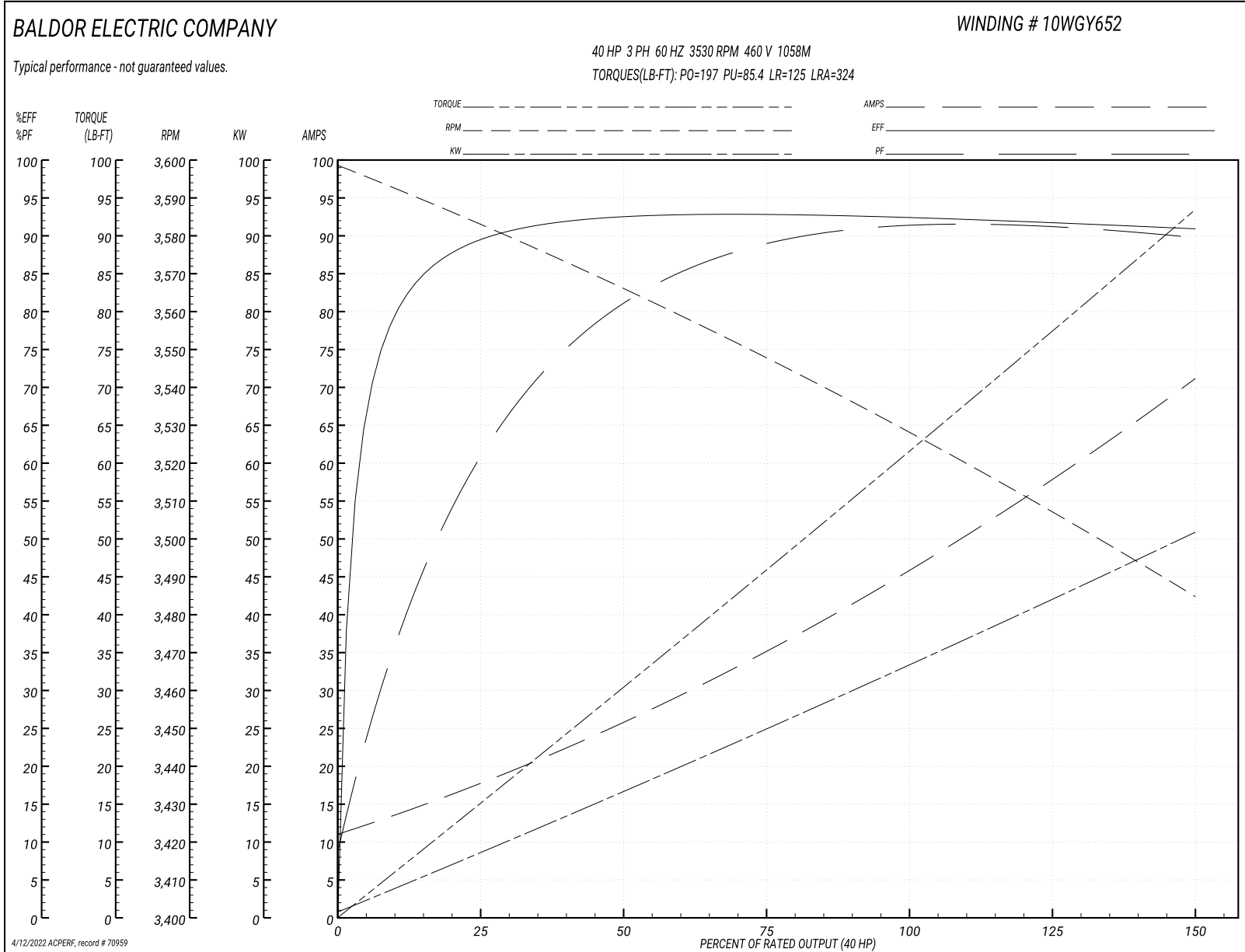
Typical performance - not guaranteed values

<b>Winding: 10WGY652-R011</b>		<b>Type: 1058M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	40	<b>Full Load Torque</b>	59.5 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	90/45	<b>Breakdown Torque</b>	197 LB-FT		
<b>R.P.M.</b>	3530	<b>Pull-up Torque</b>	85.4 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	125 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	H	<b>Starting Current</b>	324 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	12 A		
<b>NEMA Nom. Eff.</b>	92.4 <b>Power Factor</b>	90	<b>Line-line Res. @ 25°C</b>	0.14992 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	78°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	97°C		
		<b>Locked-rotor Power Factor</b>	22.8		
		<b>Rotor inertia</b>	2.49 LB-FT <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 40 HP**

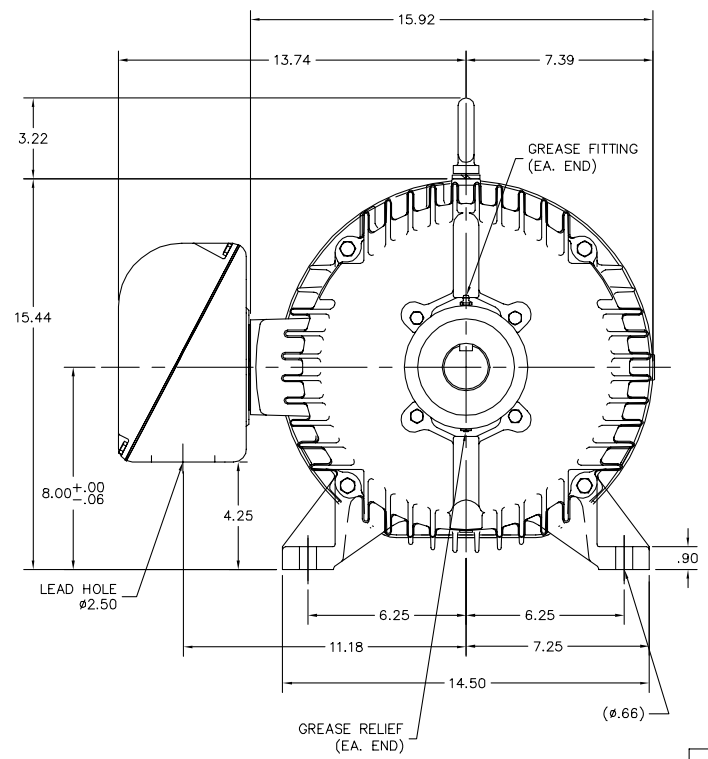
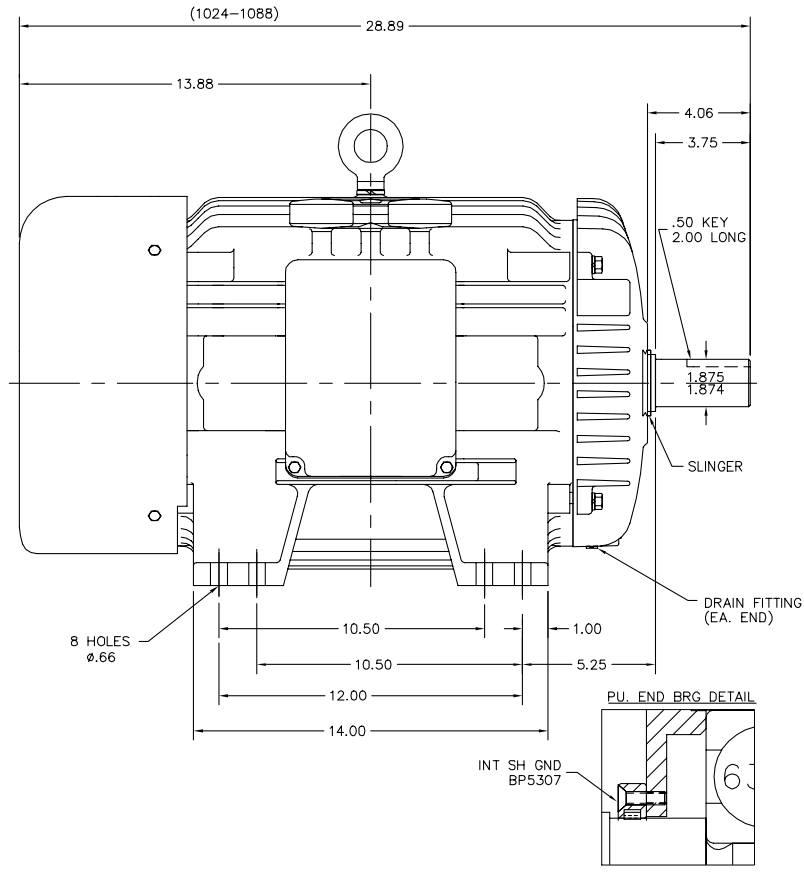
<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	65	82	88	90	90	91	90
<b>Efficiency</b>	90.7	93.4	93.7	93.2	92.4	91.1	92.7
<b>Speed</b>	3583.2	3567.3	3549.7	3530.6	3511.2	3484.5	3519
<b>Line amperes</b>	16.3	24.7	34.3	45.1	56.3	70.6	51.8

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





10L.Y1.266



10L.Y1.266

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

REV. DESC: LIFE CYCLE, REPLACE 10SF1118A01 WITH 10SF1117A02		
REV. LTR: B	VERSION: 02	TDR: 000001185722
FILE: \AAA\00243\303	REVISED: 04:14:16 02/11/2022	BY: ENFRAJO
MTL: -		

**BALDOR - RELIANCE**<sup>®</sup>  
TEFC HORZ 324-6TS W/INTERNAL SH GND  
SH 1 of 1

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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

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