

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2539T-BG**

**40HP, 1770RPM, 3PH, 60HZ, 324T, 4064M, OPSB, F1**

Part Detail							
Revision:	N	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX166	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	40E331	Layout:	40LYE331	Poles:	04	Created Date:	10-08-2013
Base:	RG	Eff. Date:	05-12-2021	Leads:	9#8		

Specs			
Catalog Number:	EM2539T-BG	Insulation Class:	H
Enclosure:	OPSB	Inverter Code:	Inverter Ready
Frame:	324T	KVA Code:	H
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	40.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
Agency Approvals:	CSA	Motor Type:	4064M
	CSA EEV	Mounting Arrangement:	F1
	UR	Power Factor:	82
Auxillary Box:	No Auxillary Box	Product Family:	General Purpose
Auxillary Box Lead Termination:	None	Pulley End Bearing Type:	Ball
Base Indicator:	Rigid	Pulley Face Code:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley Shaft Indicator:	Standard
Blower:	None	Rodent Screen:	None
Current @ Voltage:	99.000 A @ 208.0 V	Shaft Extension Location:	Pulley End
	98.000 A @ 230.0 V	Shaft Ground Indicator:	Shaft Grounding

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

Nameplate NP3554LUA											
CAT.NO.	EM2539T-BG			P/N				ENCL	OPSB		
SPEC.	40E331X166G1		CC	010A		FRAME	324T		SER.NO.		
HP	40		CLASS	H		HZ	60				
RPM	1770		PH	3		DES	A				
VOLTS	230/460			CODE	H		ODE BRG	6309		DE BRG	6312
AMPS	98/49			USABLE AT 208V	99						
RATING	40C AMB-CONT			NEMA-NOM-EFF	94.1		GREASE	POLYREX EM			
PF	82		SER.F.	1.15		CT30-60(2:1)		VT3-60(20:1)			
USABLE AT	50HZ 40HP 190/380V 114/57A				SF1.0						
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA270435	SA 40E331X166G1	1.000 EA
RA257070	RA 40E331X166G1	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 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
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
40EP3200A02	STD FREP OPEN 309 BRG	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	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
40EP3201A04	PUEP, MACH - OPEN - FOR 312 BRG W/RET. R	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	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
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA3159A08	THRUBOLT- .38-16 X 20.00 LONG STUD	4.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.030 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3554LUA	SS SUPER-E VPWM INV READY UL CSA-EEV PRE	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

**AC Induction Motor Performance Data**

Record # 35574

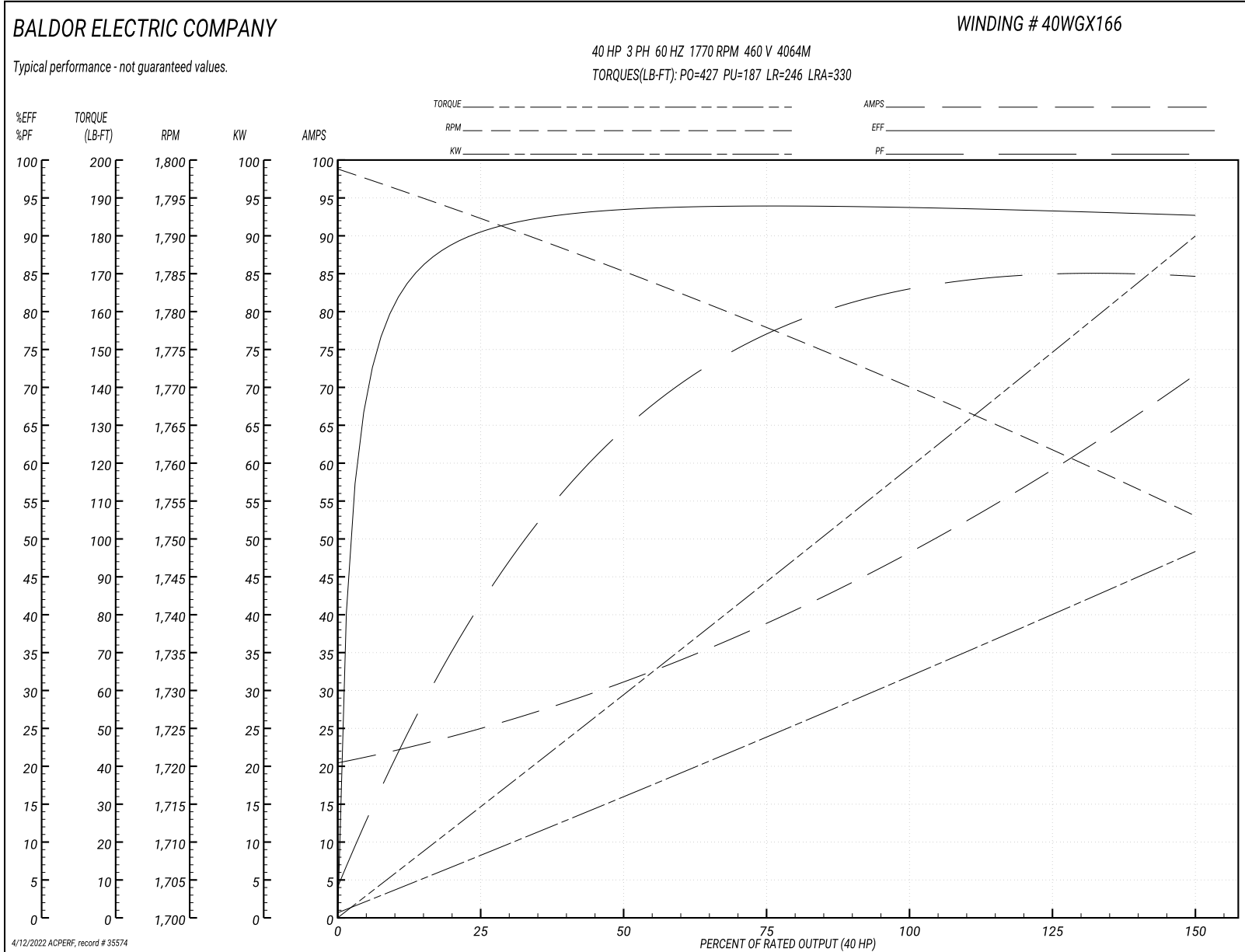
Typical performance - not guaranteed values

<b>Winding: 40WGX166-R003</b>		<b>Type: 4064M</b>		<b>Enclosure: OPSB</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>	119 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	98/49	<b>Breakdown Torque</b>	427 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	187 LB-FT		
<b>Hz</b>	60 Phase	<b>Locked-rotor Torque</b>	246 LB-FT		
<b>NEMA Design Code</b>	A	<b>Starting Current</b>	330 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	21.1 A		
<b>NEMA Nom. Eff.</b>	94.1	<b>Line-line Res. @ 25°C</b>	0.16236 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	41°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	51°C		
		<b>Locked-rotor Power Factor</b>	32		
		<b>Rotor inertia</b>	5.09 LB-FT <sup>2</sup>		

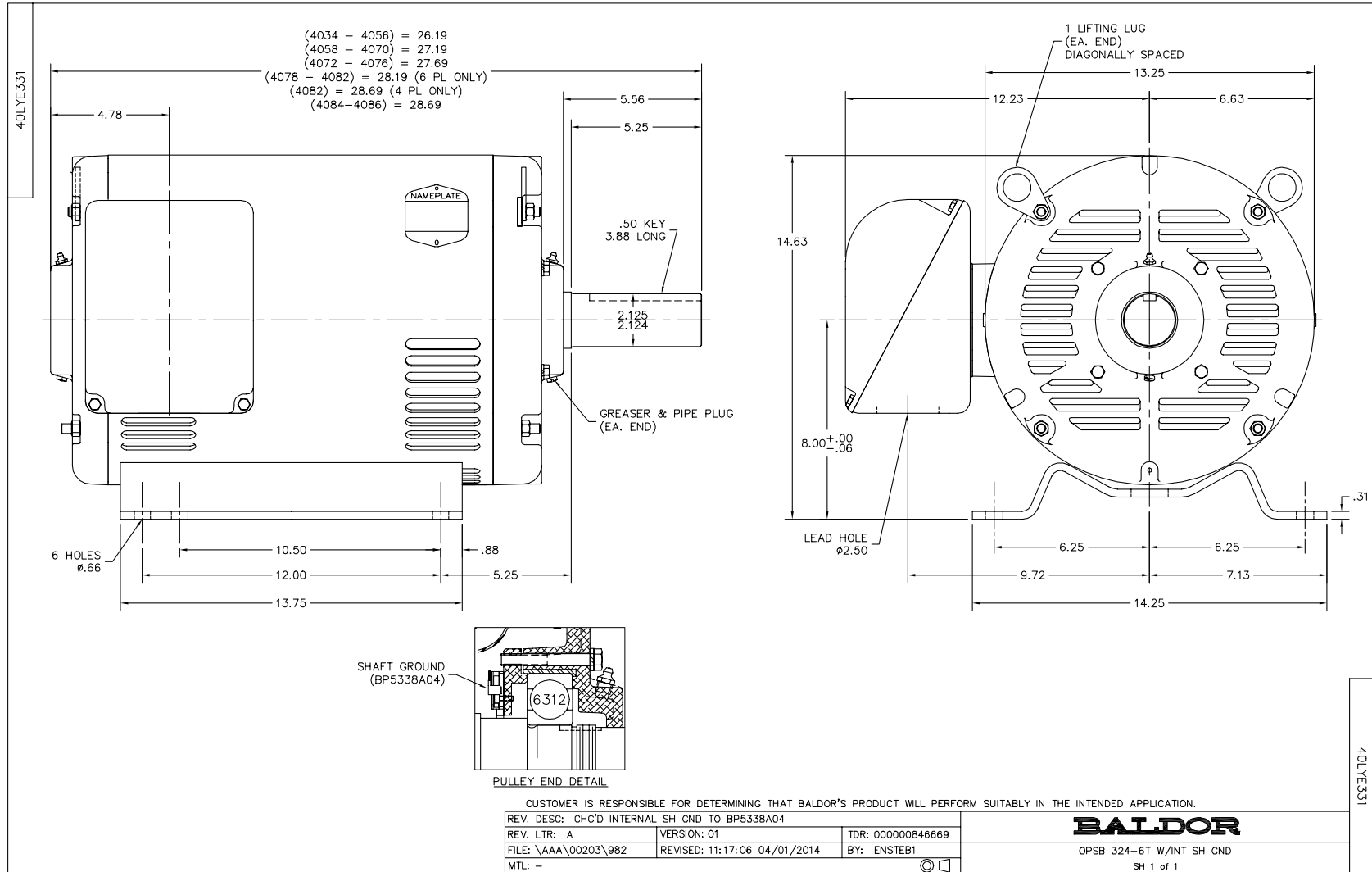
**Load Characteristics 460 V, 60 Hz, 40 HP**

<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>	43	65	76	82	85	85	84
<b>Efficiency</b>	91.1	94	94.5	94.2	93.6	92.8	93.8
<b>Speed</b>	1792.4	1785	1777.8	1770.2	1762.1	1752.8	1765
<b>Line amperes</b>	24.1	30.7	39.2	48.7	59.3	71.3	55.1

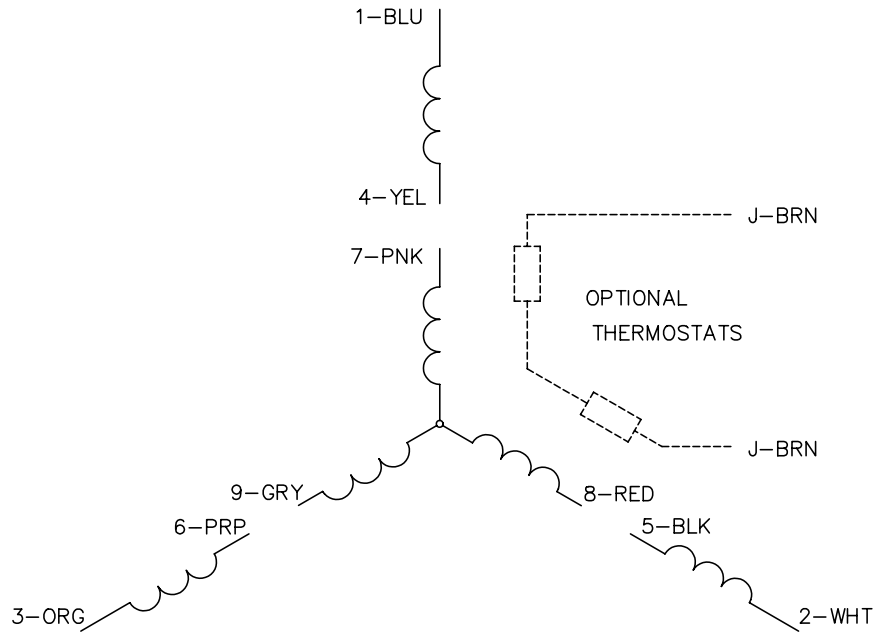
Performance Graph at 460V, 60Hz, 40.0HP Typical performance - Not guaranteed values



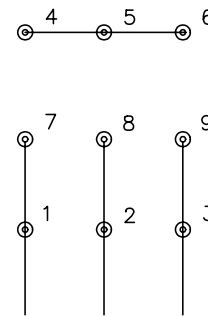




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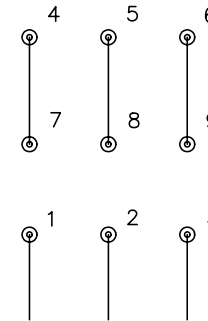


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

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