

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2539T**

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

Part Detail							
Revision:	Z	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WG166	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	40J002	Layout:	40LYJ002	Poles:	04	Created Date:	10-22-2010
Base:	RG	Eff. Date:	05-16-2018	Leads:	9#8		

Specs			
Catalog Number:	EM2539T	Insulation Class:	F
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:	No 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 (OLD)
<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

<b>Nameplate NP3554LUA</b>										
<b>CAT.NO.</b>	EM2539T			<b>P/N</b>					<b>ENCL</b>	OPSB
<b>SPEC.</b>	40J002X166G1		<b>CC</b>	010A	<b>FRAME</b>	324T		<b>SER.NO.</b>		
<b>HP</b>	40		<b>CLASS</b>	F	<b>HZ</b>	60				
<b>RPM</b>	1770		<b>PH</b>	3	<b>DES</b>	A				
<b>VOLTS</b>	230/460			<b>CODE</b>	H		<b>ODE BRG</b>	6309	<b>DE BRG</b>	6312
<b>AMPS</b>	98/49		<b>USABLE AT 208V</b>			99				
<b>RATING</b>	40C AMB-CONT			<b>NEMA-NOM-EFF</b>			94.1		<b>GREASE</b>	POLYREX EM
<b>PF</b>	82		<b>SER.F.</b>	1.15		<b>VPWM INVERTER READY</b>				
<b>USABLE AT</b>	50Hz 40Hp 190/380V 114/57A				<b>SF 1.0</b>					
<b>HTR-VOLTS</b>			<b>HTR-AMPS</b>			<b>MAX. SPACE HEATER TEMP.</b>				

Parts List		
Part Number	Description	Quantity
SA205150	SA 40J002X166G1	1.000 EA
RA192394	RA 40J002X166G1	1.000 EA
S/P107-000-004	SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E	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
40EP3201A01	PU ENDPLATE, MACH - OPEN - FOR 312 BRG	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 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 (1200/bx) 5/18	1.000 EA
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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 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
HA3113A13	THRUBOLT 3/8-16 X 19.750 W/4.00 THD LENG	4.000 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 # 31313 - Typical performance - not guaranteed values

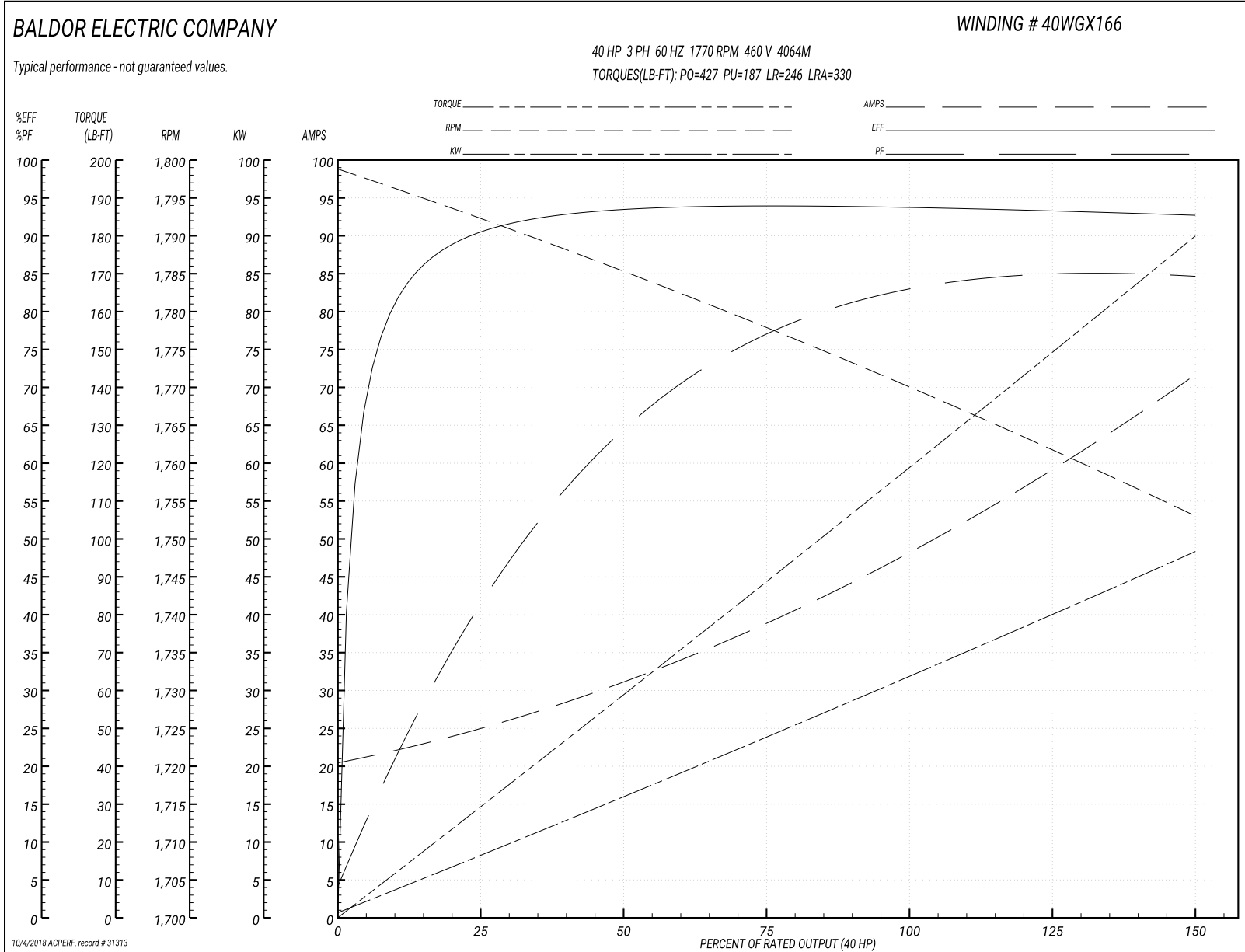
<b>Winding:</b> 40WGX166-R002	<b>Type:</b> 4064M	<b>Enclosure:</b> OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40			Full Load Torque	119 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	98/49			Breakdown Torque	427 LB-FT
R.P.M.	1770			Pull-up Torque	187 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	246 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	330 A
Service Factor (S.F.)	1.15			No-load Current	21.1 A
NEMA Nom. Eff.	94.1	Power Factor	82	Line-line Res. @ 25°C	0.16236 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	41°C
S.F. Amps				Temp. Rise @ S.F. Load	51°C
				Locked-rotor Power Factor	31.9
				Rotor inertia	5.09 LB-FT <sup>2</sup>

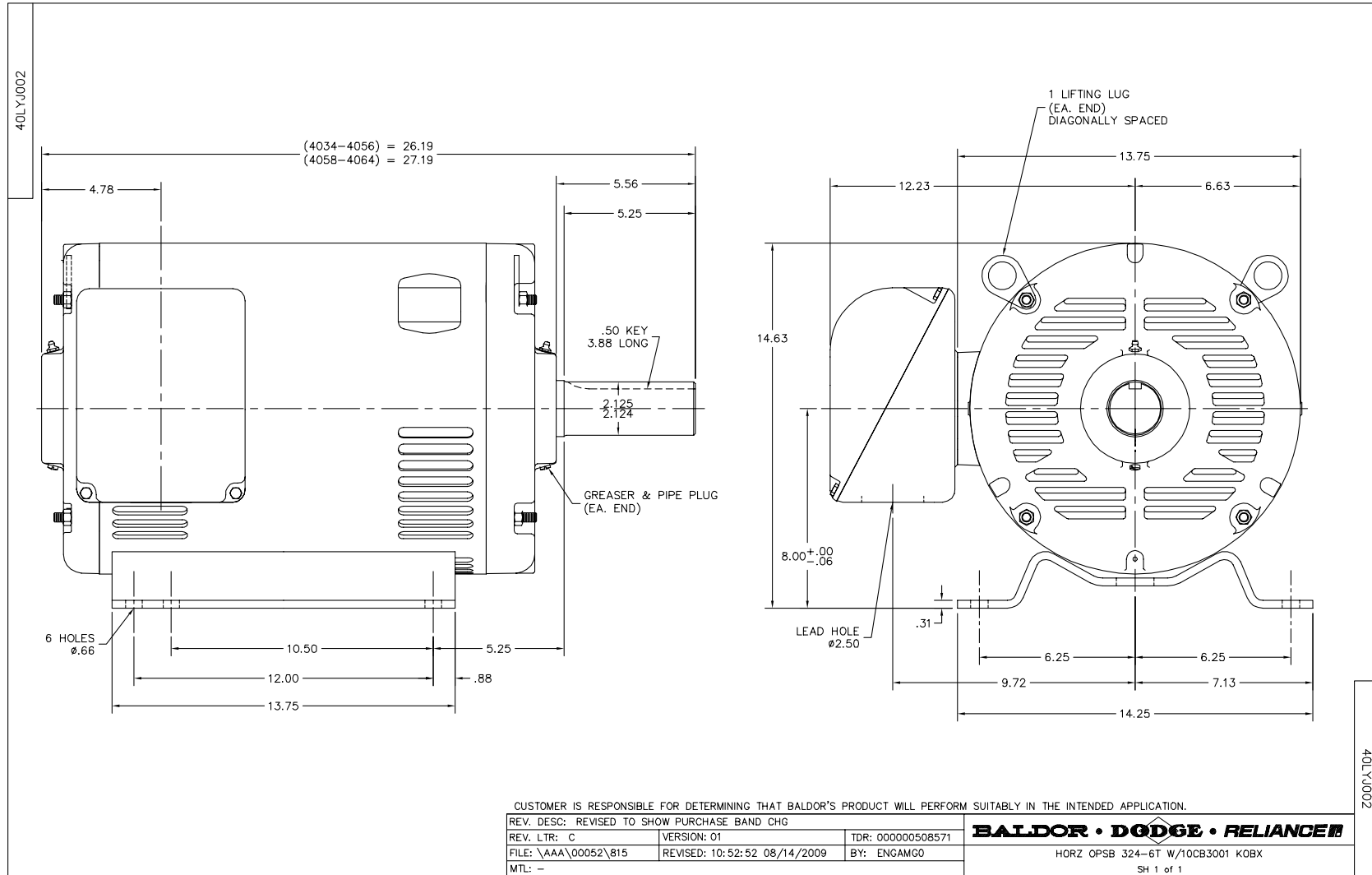
Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	76	82	85	85	84
Efficiency	91.1	94	94.5	94.2	93.6	92.8	93.8
Speed	1792.4	1785	1777.8	1770.2	1762.1	1752.8	1765
Line amperes	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







CD0005

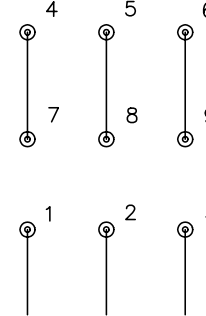


LOW VOLTAGE  
(2Y)



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

CD0005