

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2538T-8**

**40HP,3530RPM,3PH,60HZ,286TS,4046M,OPSB,F**

Part Detail							
Revision:	M	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX239	CD Diagram:	CD0695	Mfg Plant:	
Mech. Spec:	40G51	Layout:	40LYG051	Poles:	02	Created Date:	05-14-2012
Base:	RG	Eff. Date:	04-15-2019	Leads:	6#4		

Specs			
Catalog Number:	EM2538T-8	IP Rating:	NONE
Enclosure:	OPSB	KVA Code:	G
Frame:	286TS	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	40.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	6 @ 4 AWG
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	200.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
Agency Approvals:	UR	Motor Type:	4046M
	CSA EEV	Mounting Arrangement:	F1
	CSA	Power Factor:	89
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:	105.000 A @ 200.0 V	Shaft Extension Location:	Pulley End
Design Code:	B	Shaft Ground Indicator:	No Shaft Grounding
Drip Cover:	No Drip Cover	Shaft Rotation:	Reversible

<b>Duty Rating:</b>	CONT	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Speed Code:</b>	Single Speed
<b>Feedback Device:</b>	NO FEEDBACK	<b>Motor Standards:</b>	NEMA
<b>Front Face Code:</b>	Standard	<b>Starting Method:</b>	Part Winding
<b>Front Shaft Indicator:</b>	None	<b>Thermal Device - Bearing:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Thermal Device - Winding:</b>	None
<b>Insulation Class:</b>	F	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Inverter Code:</b>	Inverter Ready	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP3554L											
CAT.NO.	EM2538T-8			P/N				ENCL	OPSB		
SPEC.	40G051X239		CC	010A		FRAME	286TS		SER.NO.		
HP	40		CLASS	F		HZ	60				
RPM	3530		PH	3		DES	B				
VOLTS	200			CODE	G		ODE BRG	6309		DE BRG	6311
AMPS	105			USABLE AT 208V							
RATING	40C AMB-CONT			NEMA-NOM-EFF	92.4		GREASE	POLYREX EM			
PF	89		SER.F.	1.15		VPWM INVERTER READY					
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA244596	SA 40G051X239	1.000 EA
RA231479	RA 40G051X239	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
10CB3000SP	KOBX, CAST W/2.00 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
40EP3200B05	STD PUEP OPEN 311 BRG	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
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HW2501G17	KEY, 3/8 SQ X 1.875	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
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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	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,	0.070 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
40AD2002B01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
40AD2002B01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
HA3154A03	STUD, 3/8-16 X 17.75	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0695	CONNECTION LABEL	1.000 EA
NP3554L	SS SUPER-E UL CSA-EEV PREM CC	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
40-1400	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 38392

Typical performance - not guaranteed values

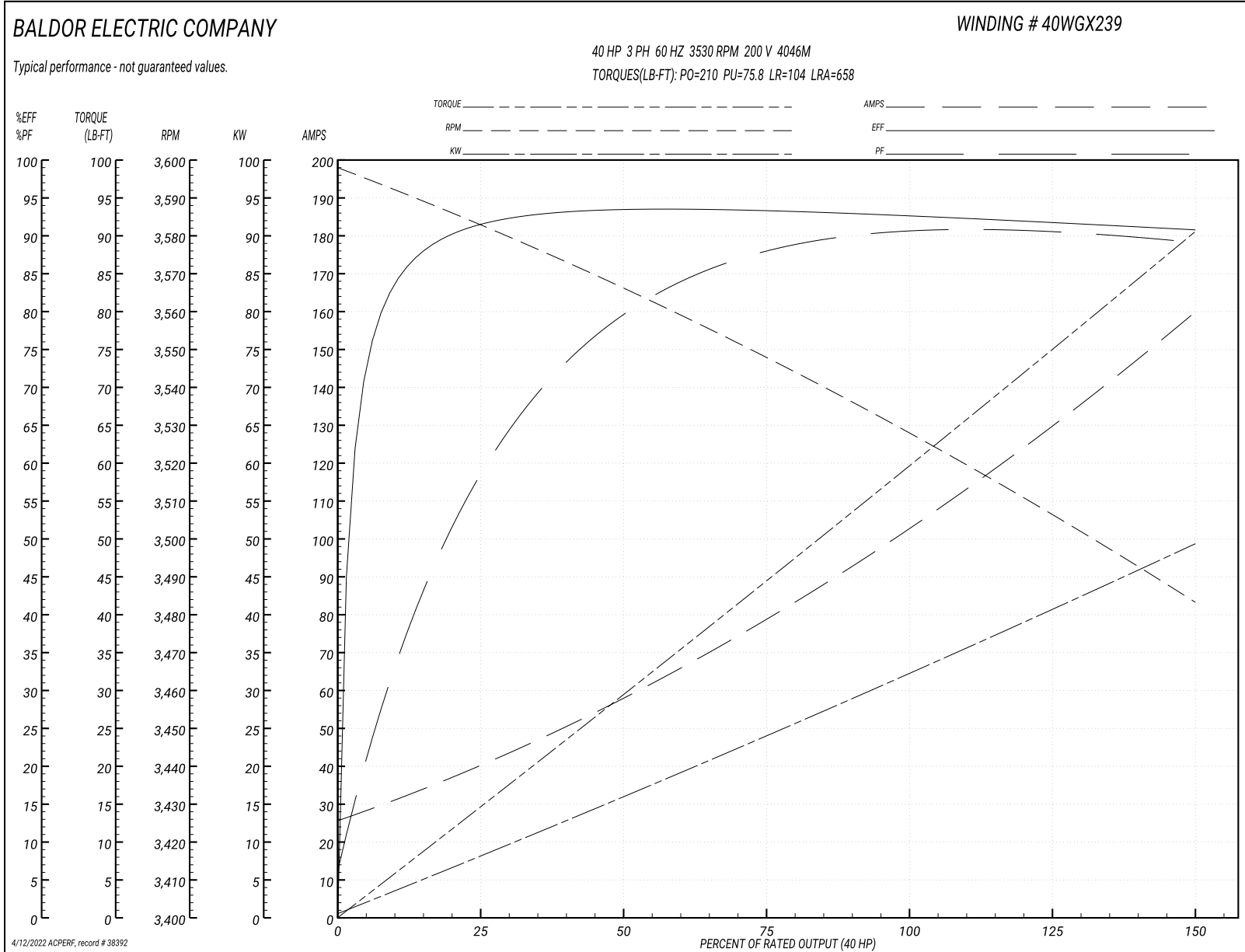
<b>Winding: 40WGX239-R001</b>		<b>Type: 4046M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>200 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	40	<b>Full Load Torque</b>	59.6 LB-FT		
<b>Volts</b>	200	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	105	<b>Breakdown Torque</b>	210 LB-FT		
<b>R.P.M.</b>	3530	<b>Pull-up Torque</b>	75.8 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	104 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	G	<b>Starting Current</b>	658 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	27.6 A		
<b>NEMA Nom. Eff.</b>	92.4	<b>Power Factor</b>	89	<b>Line-line Res. @ 25°C</b>	0.0332 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	35°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	43°C	
			<b>Locked-rotor Power Factor</b>	24	
			<b>Rotor inertia</b>	1.97 LB-FT <sup>2</sup>	

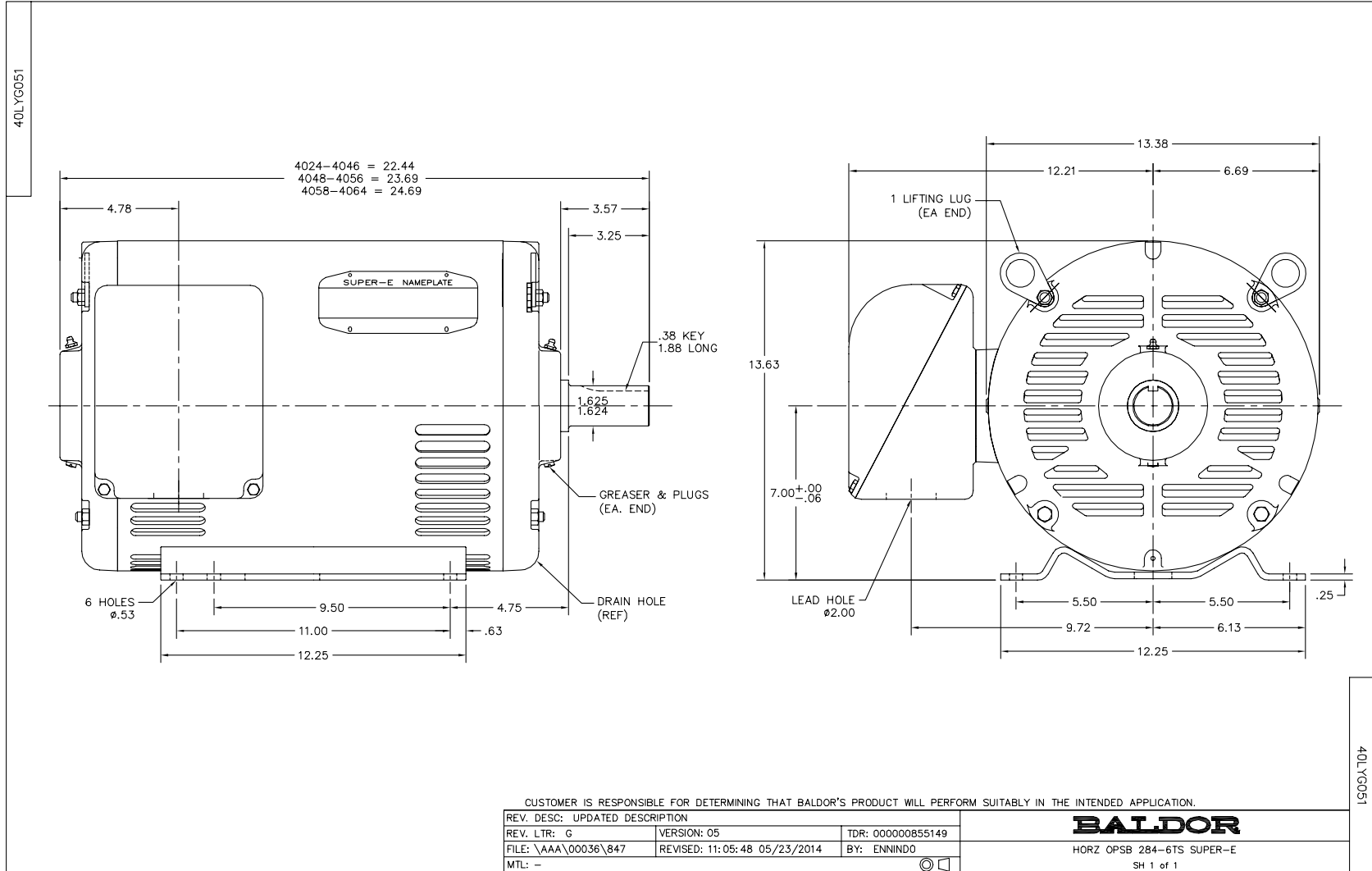
**Load Characteristics 200 V, 60 Hz, 40 HP**

<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>	64	81	88	89	90	90	90
<b>Efficiency</b>	90.6	93.4	93.4	92.7	91.8	90.7	92.2
<b>Speed</b>	3581	3566	3548	3529	3506	3483	3515
<b>Line amperes</b>	37.8	57	79.4	105	130	159	120

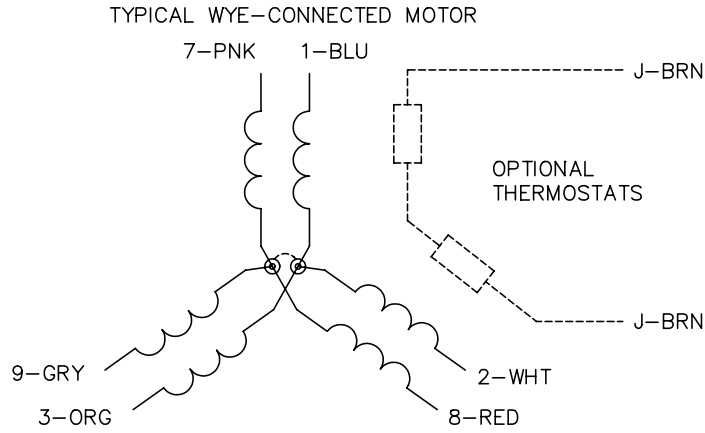


Performance Graph at 200V, 60Hz, 40.0HP Typical performance - Not guaranteed values

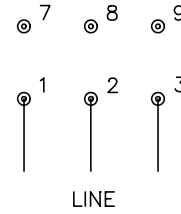




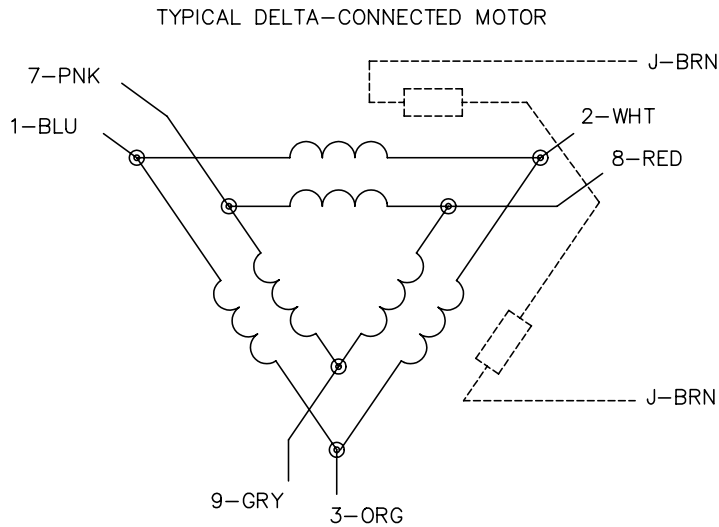
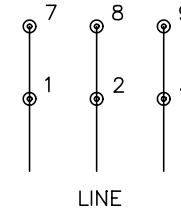
CD0695



START CONNECTION



RUN CONNECTION



NOTES:

1. MOTOR MAY BE 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 ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: C BY: JLP

REVISED: 01/21/99 3:19

TDR: 0171435

9690D0

FILE: AAA00005151

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, SV, 6 LEADS, PART WINDING START

CD0695

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