

**BALDOR • RELIANCE**

---

# Customer information packet

## EM2538T-8

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

## Specifications

Enclosure	OPSB
Frame	286TS
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	CSA EEV UR NEMA_PREMIUM NEMA PREMIUM
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	105.000 A @ 200.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	105.0 a
Insulation Class	F
Inverter Code	Inverter Ready

## Part detail

Revision	Q
Type	AC
Mech. spec.	40G51
Base	
Status	PRD/A
Elec. spec.	40WGX239
Layout	40LYG051
Eff. date	06-27-2024
CD Diagram	CD0695
Poles	02
Leads	6#4
Proprietary	False
Created date	05-14-2012

IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 4 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4046M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	22.44 IN
Power Factor	89
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3530 rpm
Speed Code	Single Speed
Starting Method	Part Winding
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

**Nameplate**

**NP3554L**

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

**Accessories**

<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:</b> 40WGX239-R001		<b>Type:</b> 4046M		<b>Enclosure:</b> OPSB	
<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>Locked-rotor Torque</b>	104 LB-FT		
<b>NEMA Design Code</b>	B	<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>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

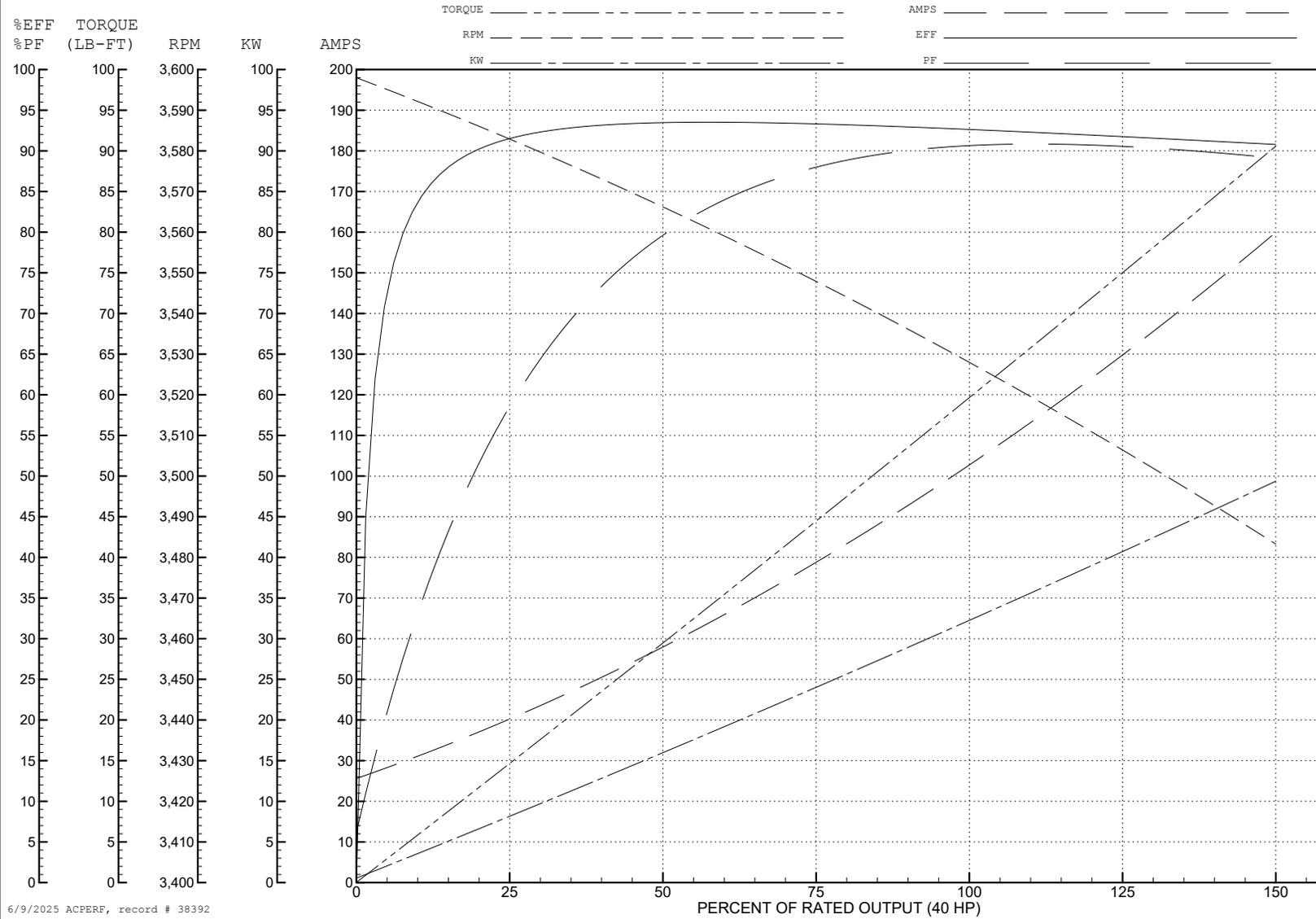
ABB Motors and Mechanical Inc.

WINDING # 40WGx239

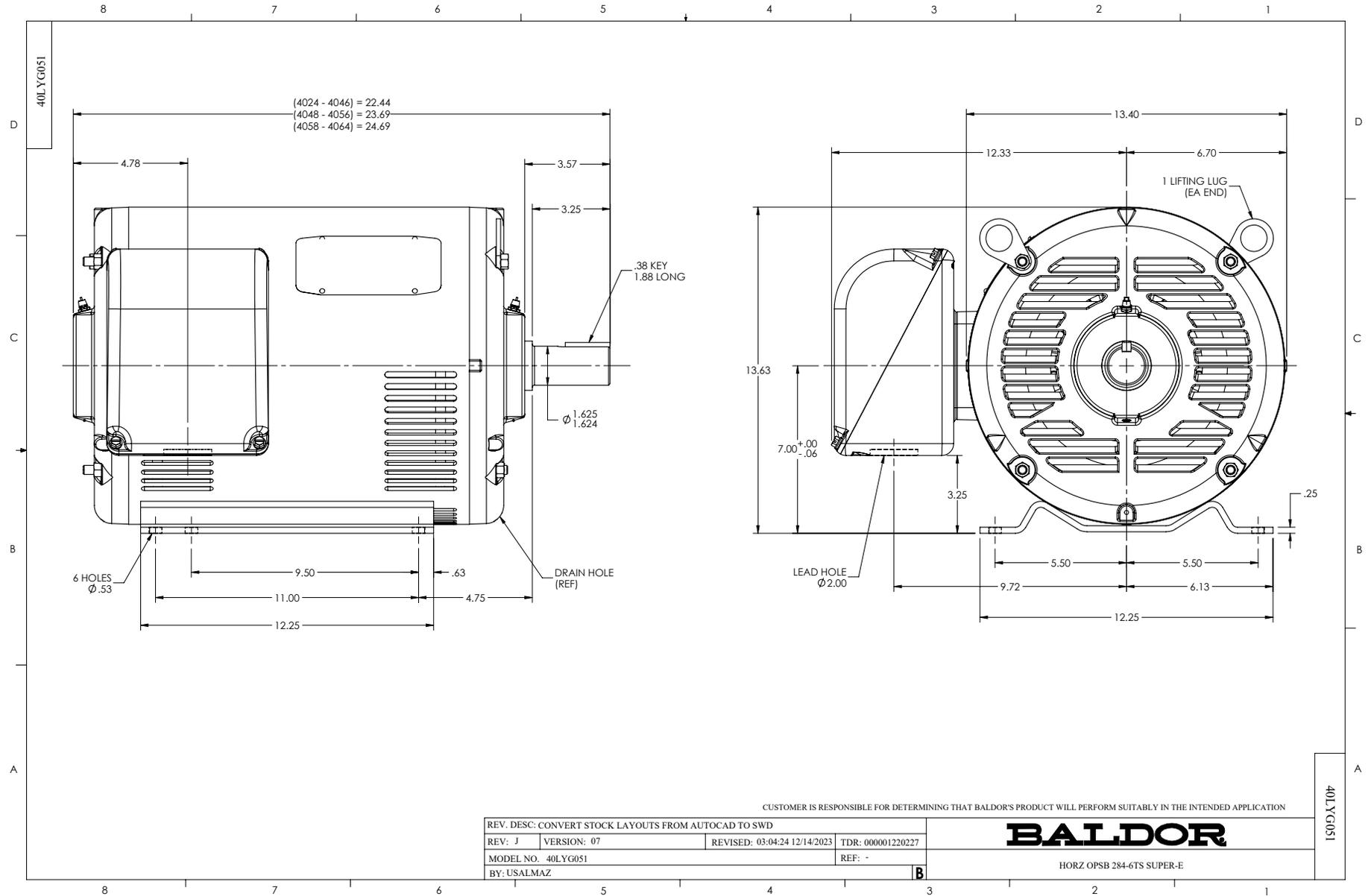
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 3530 RPM 200 V 4046M

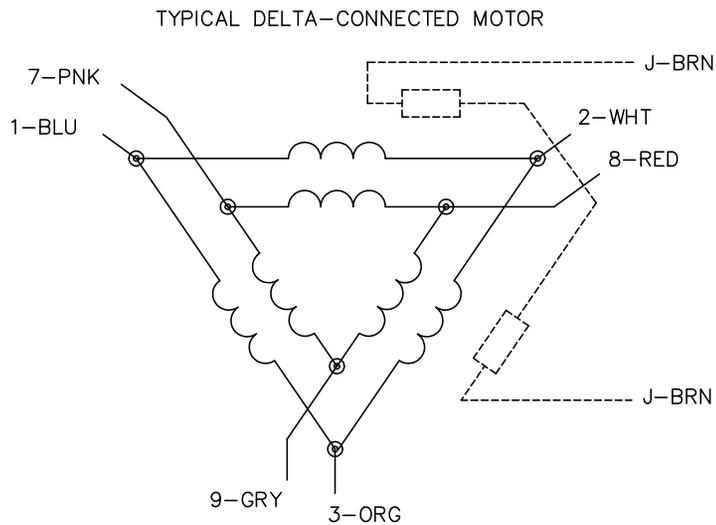
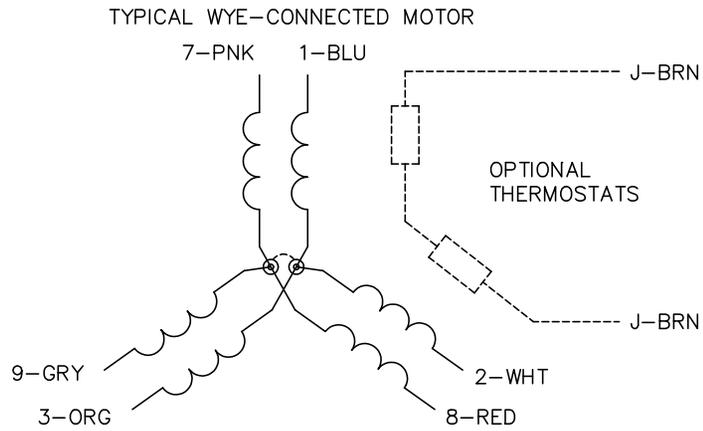
TORQUES (LB-FT): PO=210 PU=75.8 LR=104 LRA=658



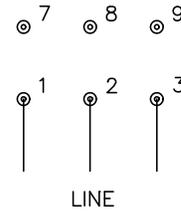
6/9/2025 ACPERF, record # 38392



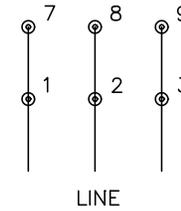
CD0695



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.

CD0695

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: C

BY: JLP

REVISED: 01/21/99 3:19

TDR: 0171435

S69000

FILE: AAA00005151

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START