

**BALDOR® • RELIANCE™**

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# Customer information packet

## EM2538T-G

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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
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	46.000 A @ 460.0 V 92.000 A @ 230.0 V 100.000 A @ 208.0 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	46.0 a

## Part detail

Revision	U
Type	AC
Mech. spec.	40E275
Base	
Status	PRD/A
Elec. spec.	40WGX194
Layout	40LYE275
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	11-29-2011

<b>Insulation Class</b>	H
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	No Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	9 @ 8 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	4046M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	22.44 IN
<b>Power Factor</b>	89
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.625 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	3530 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

NP3554LUA										
<b>CAT.NO.</b>	EM2538T-G			<b>P/N</b>				<b>ENCL</b>		<b>OPSB</b>
<b>SPEC.</b>	40E275X194G1	<b>CC</b>	010A	<b>FRAME</b>		286TS	<b>SER.NO.</b>			
<b>HP</b>	40	<b>CLASS</b>		H	<b>HZ</b>	60				
<b>RPM</b>	3530	<b>PH</b>	3	<b>DES</b>		B				
<b>VOLTS</b>	230/460			<b>CODE</b>		G	<b>ODE BRG</b>	6309	<b>DE BRG</b>	6311
<b>AMPS</b>	92/46									
<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>CT30-60(2:1) VT3-60(20:1)</b>						
<b>USABLE AT</b>	50HZ 40HP 190/380V 112/56A			SF1.0						
<b>HTR-VOLTS</b>	<b>HTR-AMPS</b>	<b>MAX. SPACE HEATER TEMP.</b>								

**AC Induction Motor Performance Data**

Record # 53043

Typical performance - not guaranteed values

<b>Winding:</b> 40WGX194-R006		<b>Type:</b> 4046M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	40	<b>Full Load Torque</b>	59.6 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	92/46	<b>Breakdown Torque</b>	207 LB-FT		
<b>R.P.M.</b>	3530	<b>Pull-up Torque</b>	74.8 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	103 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	G	<b>Starting Current</b>	282 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	11.7 A		
<b>NEMA Nom. Eff.</b>	92.4 <b>Power Factor</b>	89	<b>Line-line Res. @ 25°C</b>	0.1848 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>	44°C	
			<b>Locked-rotor Power Factor</b>	24	
			<b>Rotor inertia</b>	1.97 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>	66	82	88	89	90	90	90
<b>Efficiency</b>	91.4	93.7	93.7	93	92	90.7	92.4
<b>Speed</b>	3580.7	3565.4	3547.1	3527.4	3504.7	3481	3514
<b>Line amperes</b>	16.4	24.9	34.7	45.9	57	69.7	52.6

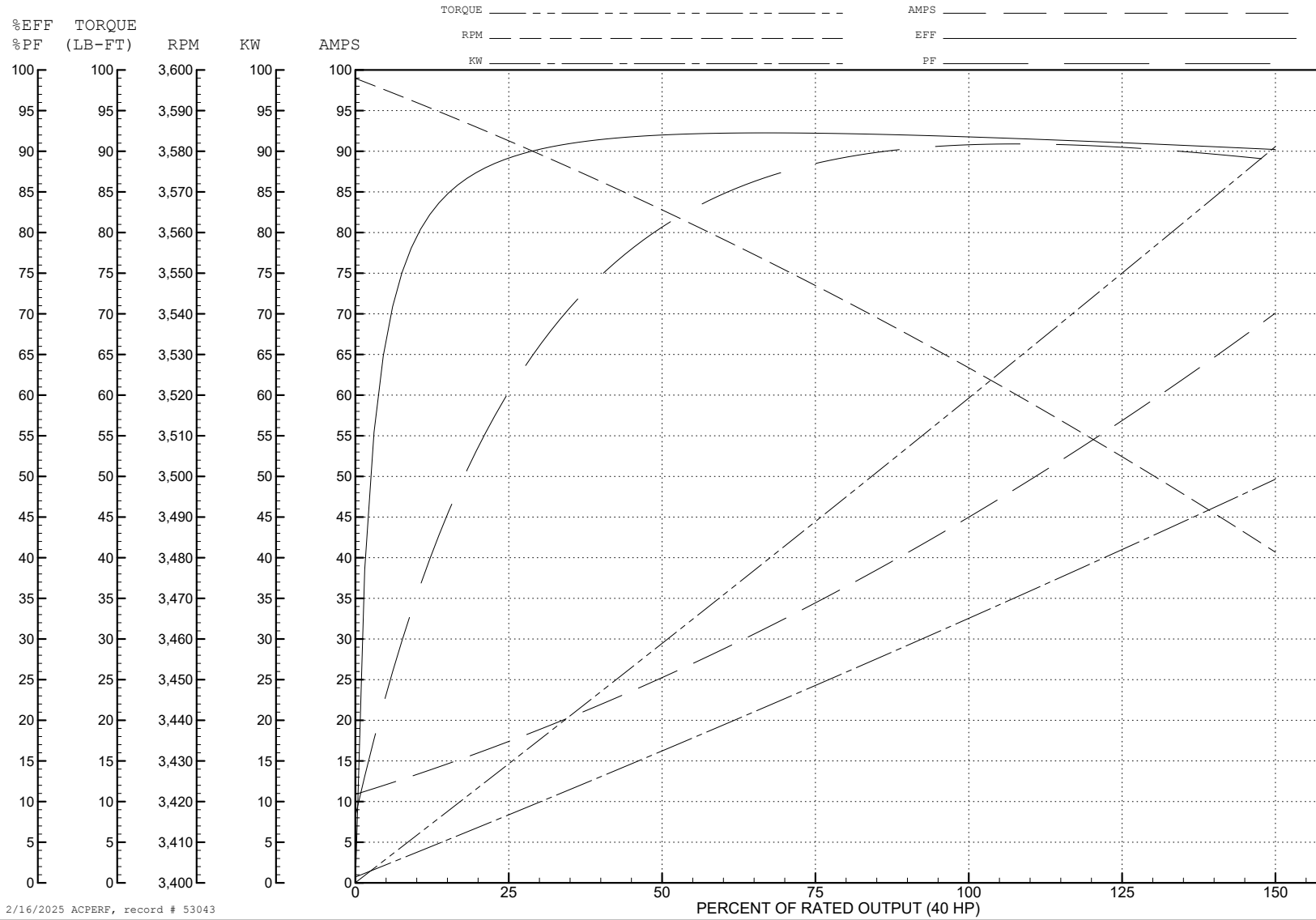
ABB Motors and Mechanical Inc.

WINDING # 40WG194

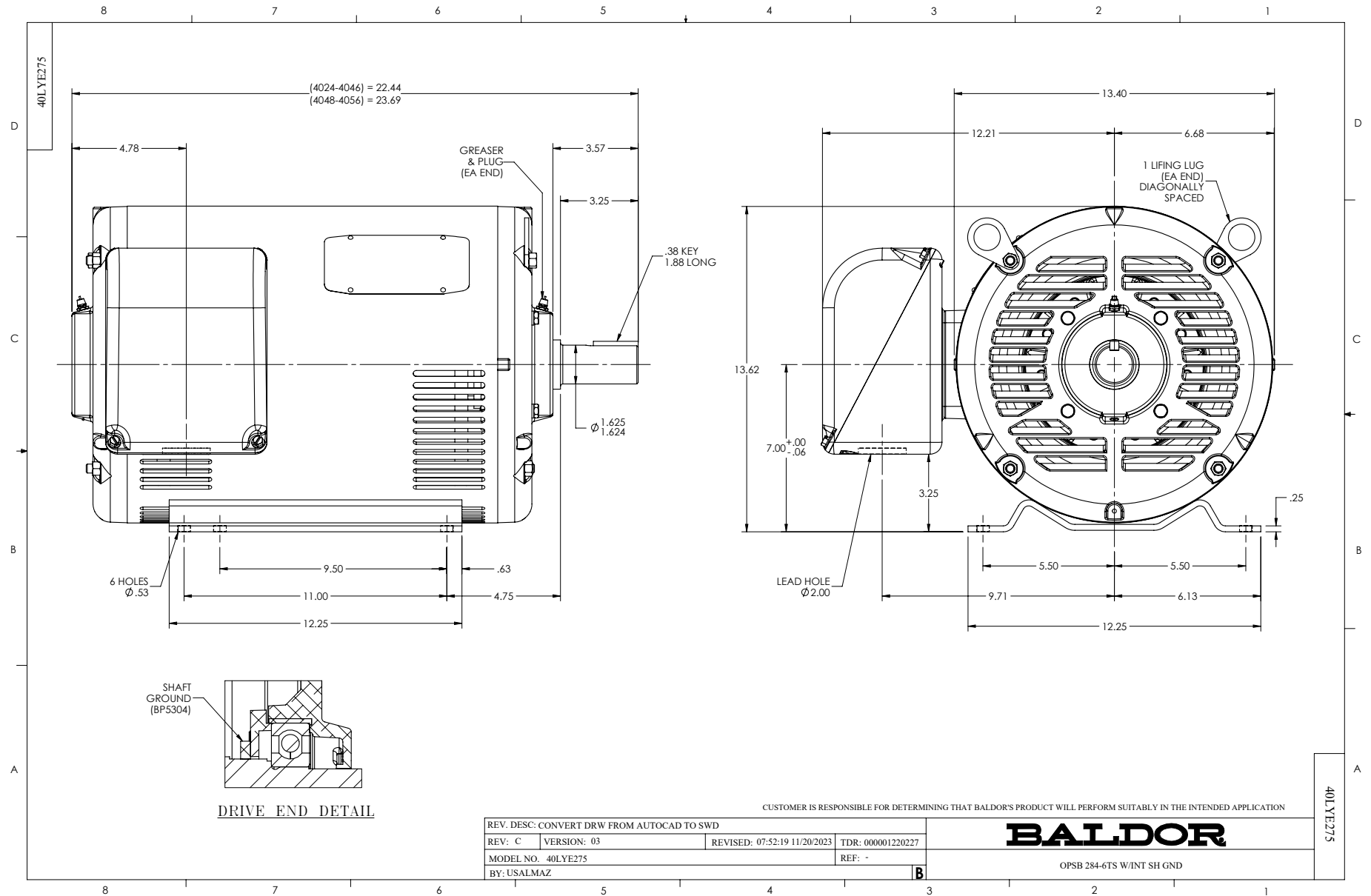
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 3530 RPM 460 V 4046M

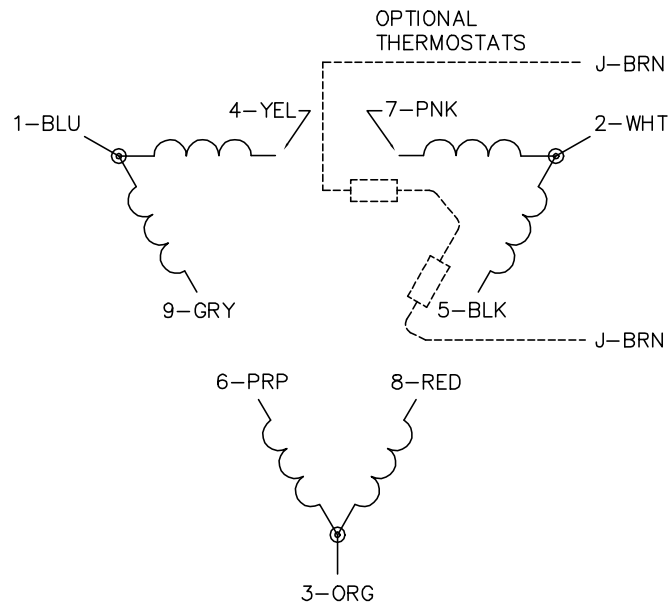
TORQUES (LB-FT): PO=207 PU=74.8 LR=103 LRA=282



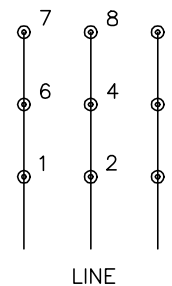
2/16/2025 ACPERF, record # 53043



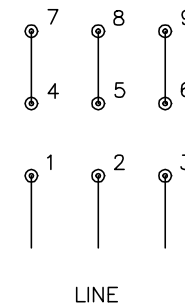
CD0180



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

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