

**BALDOR • RELIANCE**

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# Customer information packet

## EM2542T-8

50HP, 3525RPM, 3PH, 60HZ, 324TS, 4058M, OPSB, F

## Specifications

Enclosure	OPSB
Frame	324TS
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	50.000 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
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	129.000 A @ 200.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
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	129.0 a
Insulation Class	F
Inverter Code	Inverter Ready

## Part detail

Revision	K
Type	AC
Mech. spec.	40E213
Base	
Status	PRD/A
Elec. spec.	40WGX311
Layout	40LYE213
Eff. date	06-27-2024
CD Diagram	CD0695
Poles	02
Leads	6#6
Proprietary	False
Created date	08-12-2015

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 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4058M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	25.69 IN
Power Factor	90
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	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3525 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>	EM2542T-8	<b>P/N</b>		<b>ENCL</b>	OPSB
<b>SPEC.</b>	40E213X311	<b>CC</b>	010A	<b>FRAME</b>	324TS
<b>HP</b>	50	<b>CLASS</b>	F	<b>HZ</b>	60
<b>RPM</b>	3525	<b>PH</b>	3	<b>DES</b>	A
<b>VOLTS</b>	200	<b>CODE</b>	G	<b>ODE BRG</b>	6309
<b>AMPS</b>	129	<b>DE BRG</b>	6312		
<b>RATING</b>	40C AMB-CONT	<b>NEMA-NOM-EFF</b>	93	<b>GREASE</b>	POLYREX EM
<b>PF</b>	90	<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>			

**AC Induction Motor Performance Data**

Record # 52219

Typical performance - not guaranteed values

<b>Winding:</b> 40WGX311-R001		<b>Type:</b> 4058M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>200 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	50	<b>Full Load Torque</b>	74.7 LB-FT		
<b>Volts</b>	200	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	129	<b>Breakdown Torque</b>	174 LB-FT		
<b>R.P.M.</b>	3525	<b>Pull-up Torque</b>	119 LB-FT		
<b>Hz</b>	60	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	139 LB-FT
<b>NEMA Design Code</b>	A	<b>KVA Code</b>	G	<b>Starting Current</b>	892 A
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	34.3 A	
<b>NEMA Nom. Eff.</b>	93	<b>Power Factor</b>	90	<b>Line-line Res. @ 25°C</b>	0.0243 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	46°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	57°C	
			<b>Locked-rotor Power Factor</b>	23	
			<b>Rotor inertia</b>	2.49 LB-FT <sup>2</sup>	

**Load Characteristics 200 V, 60 Hz, 50 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>	63	82	88	90	90	90	90
<b>Efficiency</b>	92.5	94.5	94.2	93.4	92.2	90.5	92.7
<b>Speed</b>	3582	3566	3547	3529	3508	3479	3516
<b>Line amperes</b>	46.8	70	98.2	129	162	205	149

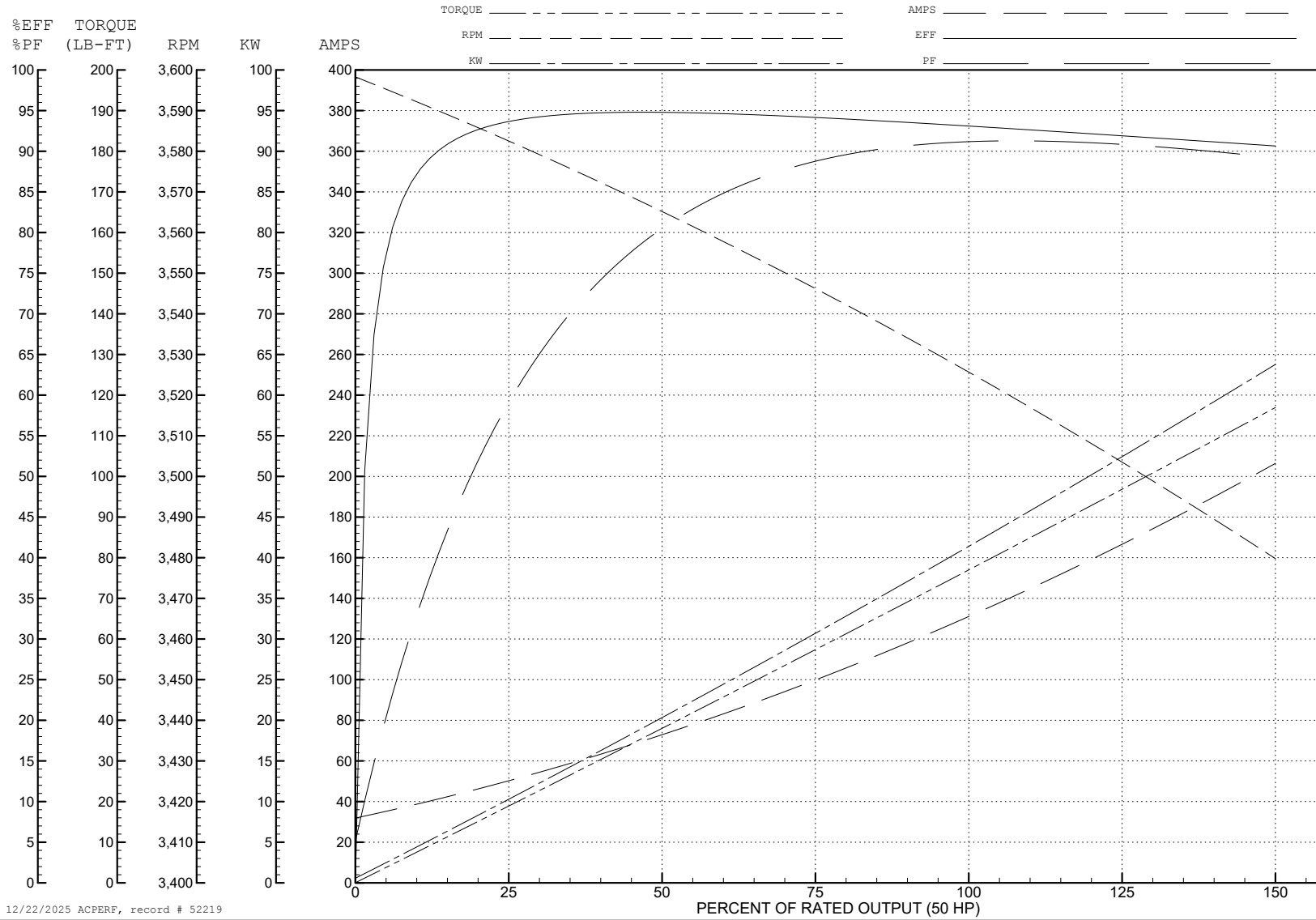
ABB Motors and Mechanical Inc.

WINDING # 40WGX311

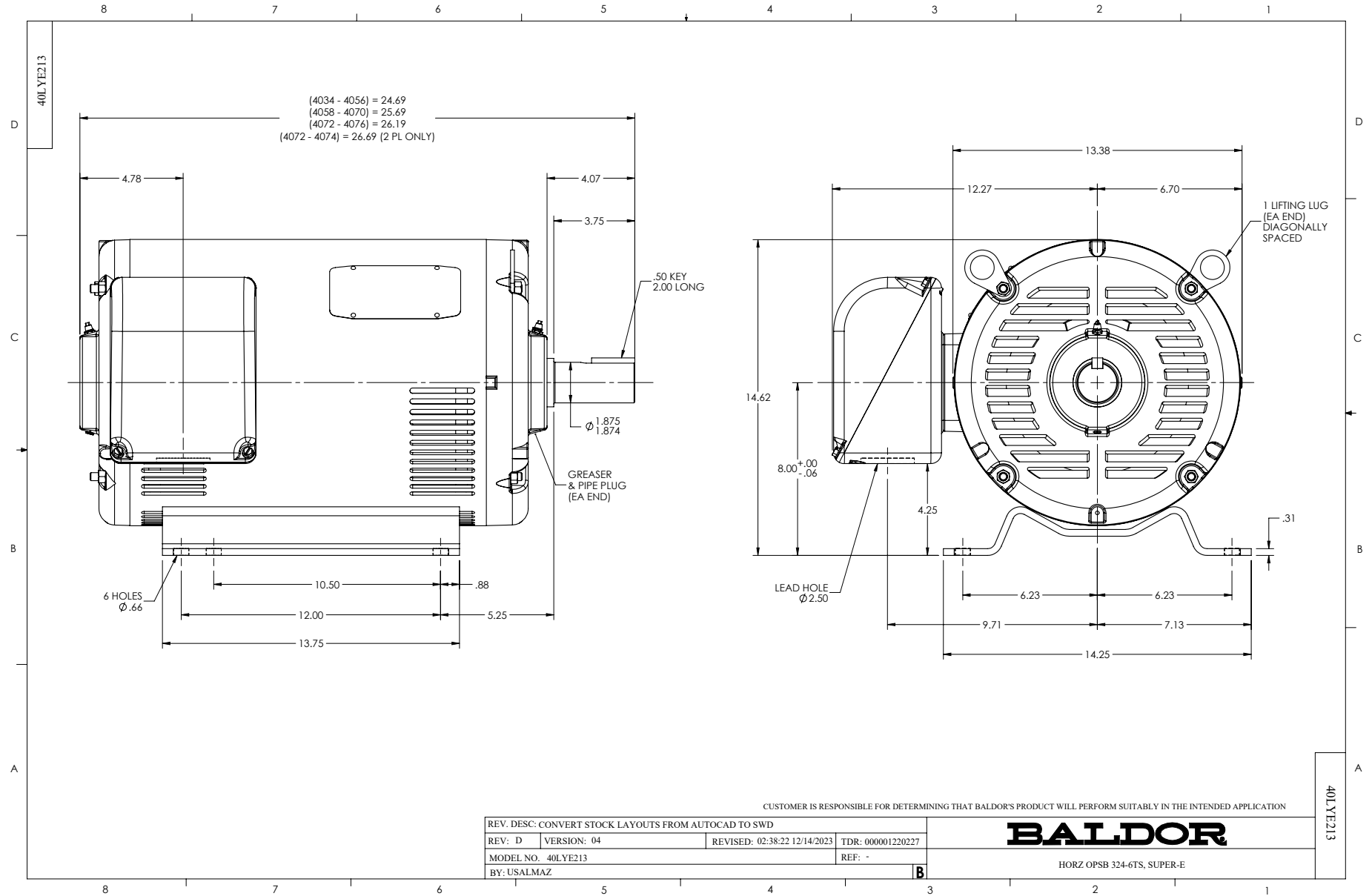
Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 3525 RPM 200 V 4058M

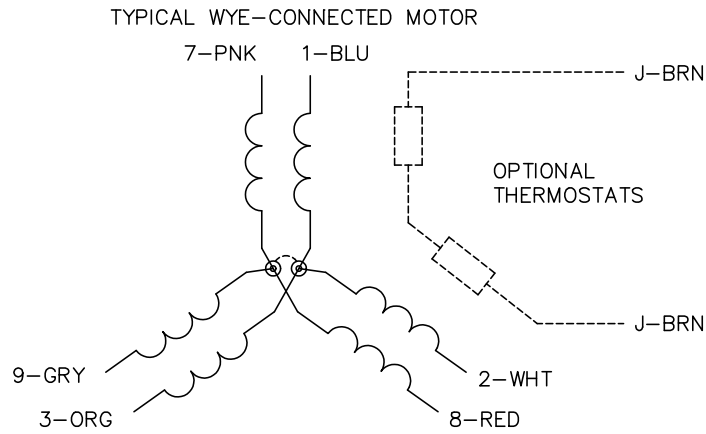
TORQUES (LB-FT): PO=174 PU=119 LR=139 LRA=892



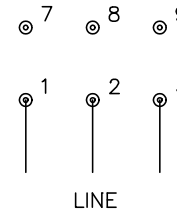
12/22/2025 ACPERF, record # 52219



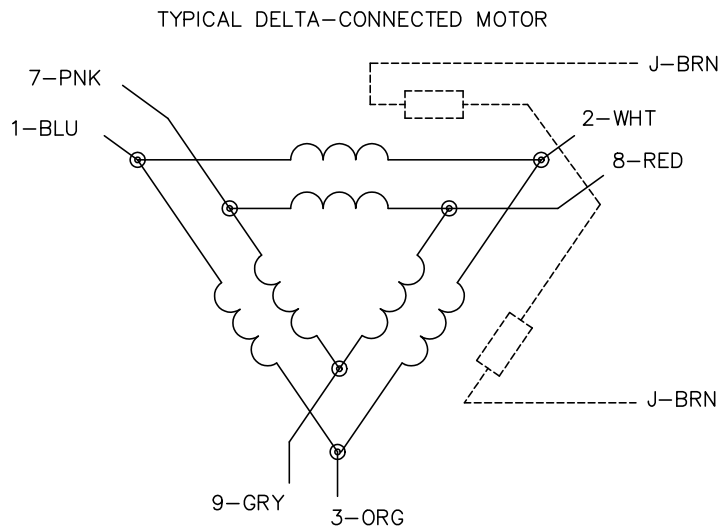
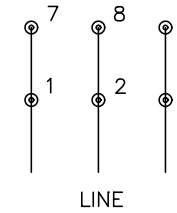
CD0695



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: AAA0005151	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, SV, 6 LEADS, PART WINDING START