

**BALDOR • RELIANCE**

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# Customer information packet

## EM2542T-CI

50HP, 3540RPM, 3PH, 60HZ, 324TS, 1250M, OPEN, F

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPEN
Frame	324TS
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	50.000 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 EEV NEMA PREMIUM NEMA_PREMIUM UR
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	56.000 A @ 460.0 V 124.000 A @ 208.0 V 112.000 A @ 230.0 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

## Part detail

Revision	U
Type	AC
Mech. spec.	12E01
Base	
Status	PRD/A
Elec. spec.	12WGY256
Layout	12LYE001
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#6
Proprietary	False
Created date	03-08-2010

<b>Front Shaft Indicator</b>	None
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	56.0 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>IP Rating</b>	NONE
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	9 @ 6 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	1250M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	24.63 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>	1.875 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	3540 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

**Vibration Sensor Indicator****No Vibration Sensor****Winding Thermal 1**

None

**Winding Thermal 2**

None

**Nameplate**

**NP3554LUA**

<b>CAT.NO.</b>	EM2542T-CI		<b>P/N</b>			<b>ENCL</b>	OPEN
<b>SPEC.</b>	12E001Y256G1	<b>CC</b>	010A	<b>FRAME</b>	324TS	<b>SER.NO.</b>	
<b>HP</b>	50	<b>CLASS</b>	F	<b>HZ</b>	60		
<b>RPM</b>	3540	<b>PH</b>	3	<b>DES</b>	A		
<b>VOLTS</b>	230/460	<b>CODE</b>	G	<b>ODE BRG</b>	6311	<b>DE BRG</b>	6311
<b>AMPS</b>	112/56						
<b>RATING</b>	40C AMB-CONT	<b>NEMA-NOM-EFF</b>	93	<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 50HP 190/380V 138/69A			SF 1.0			
<b>HTR-VOLTS</b>	<b>HTR-AMPS</b>	<b>MAX. SPACE HEATER TEMP.</b>					

**AC Induction Motor Performance Data**

Record # 53034

Typical performance - not guaranteed values

<b>Winding:</b> 12WGY256-R003		<b>Type:</b> 1250M		<b>Enclosure:</b> OPEN	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	50	<b>Full Load Torque</b>	74.1 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	112/56	<b>Breakdown Torque</b>	276 LB-FT		
<b>R.P.M.</b>	3540	<b>Pull-up Torque</b>	91.7 LB-FT		
<b>Hz</b>	60	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	126 LB-FT
<b>NEMA Design Code</b>	A	<b>KVA Code</b>	G	<b>Starting Current</b>	383 A
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	16.6 A		
<b>NEMA Nom. Eff.</b>	93	<b>Power Factor</b>	89	<b>Line-line Res. @ 25°C</b>	0.117 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	81°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	100°C	
			<b>Locked-rotor Power Factor</b>	21	
			<b>Rotor inertia</b>	3.91 LB-FT <sup>2</sup>	

**Load Characteristics 460 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>	59	80	86	89	90	90	90
<b>Efficiency</b>	90.6	93.7	94.2	94	93.3	92.4	93.6
<b>Speed</b>	3584	3572	3560	3547	3535	3521	3540
<b>Line amperes</b>	21.6	31.4	43.1	56	69.8	83.7	64.3

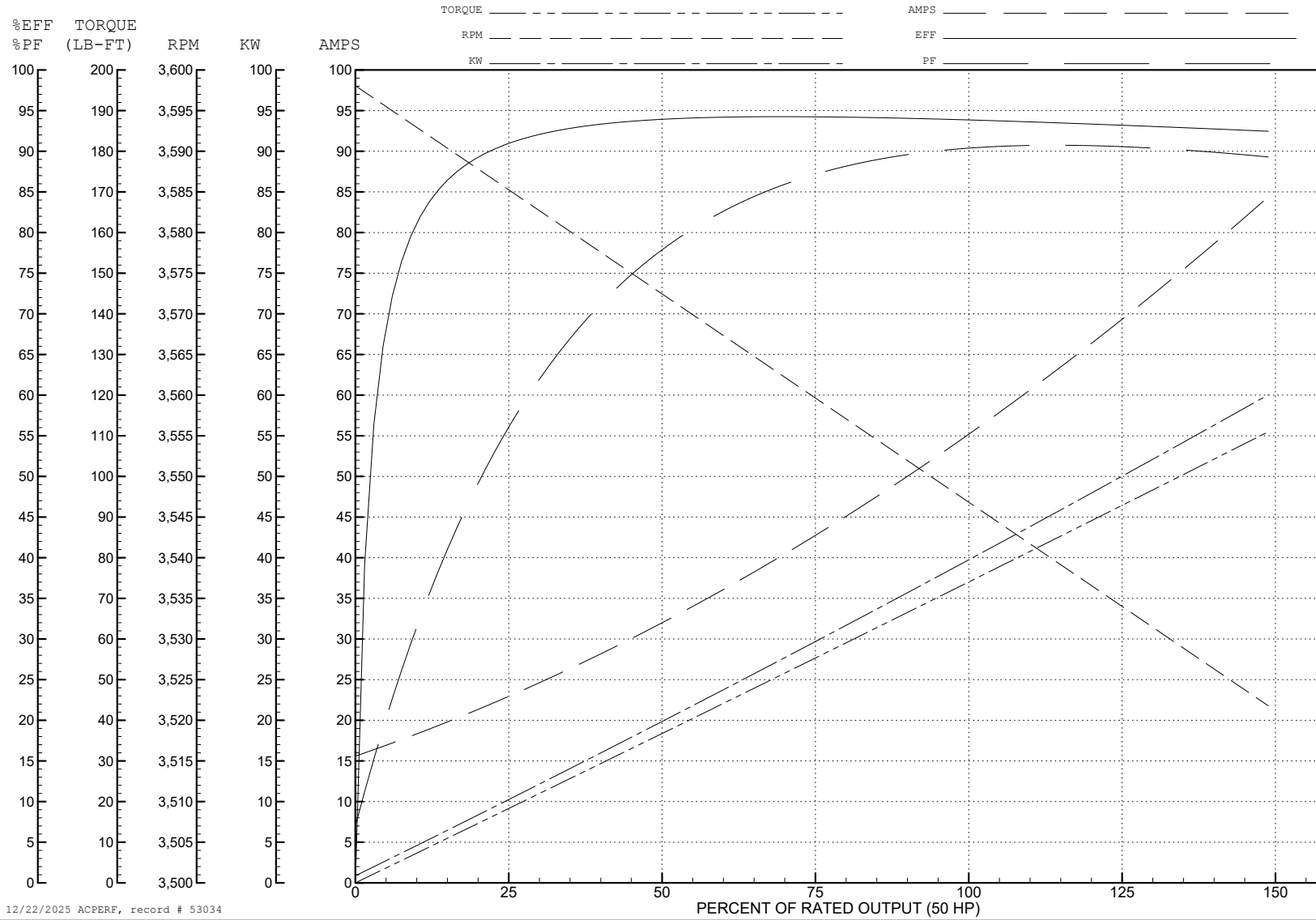
ABB Motors and Mechanical Inc.

WINDING # 12WGY256

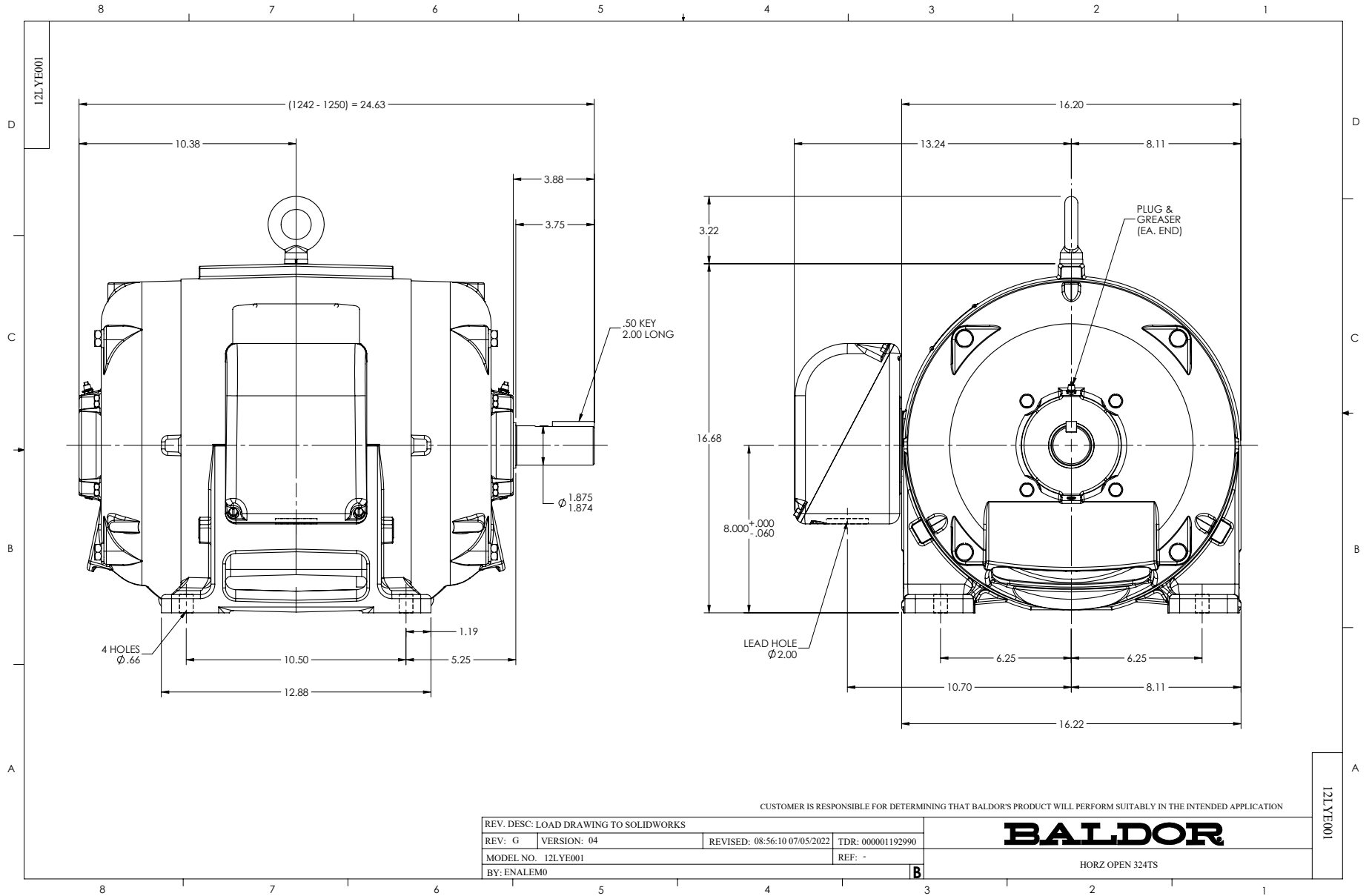
Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 3540 RPM 460 V 1250M

TORQUES (LB-FT): PO=276 PU=91.7 LR=126 LRA=383

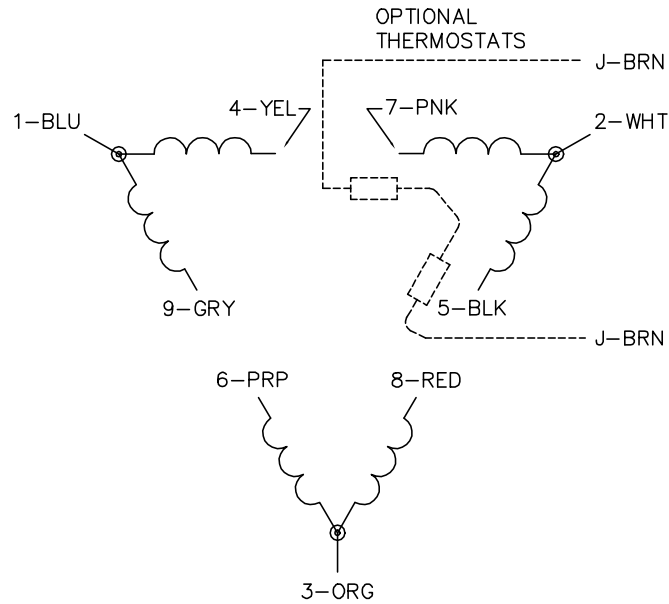


12/22/2025 ACPERF, record # 53034

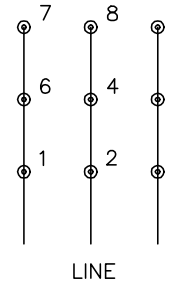




CD0180



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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