

**BALDOR • RELIANCE**

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# Customer information packet

## EM2549T

75HP, 3540RPM, 3PH, 60HZ, 364TS, 4254M, OPSB, F

## Specifications

Enclosure	OPSB
Frame	364TS
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM 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	82.000 A @ 460.0 V 178.000 A @ 208.0 V 164.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

## Part detail

Revision	R
Type	AC
Mech. spec.	42E212
Base	
Status	PRD/A
Elec. spec.	42WGW903
Layout	42LYE212
Eff. date	11-29-2023
CD Diagram	CD0180
Poles	02
Leads	9#6
Proprietary	False
Created date	01-21-2011

High Voltage Full Load Amps	82.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4254M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	25.81 IN
Power Factor	91
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	3540 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

**Nameplate**

**NP2138LUA**

<b>CAT.NO.</b>	EM2549T	<b>P/N</b>		<b>ENCLOSURE</b>	OPSB
<b>SPEC.</b>	42E212W903	<b>CC</b>	010A	<b>FRAME</b>	364TS
<b>HP</b>	75	<b>CLASS</b>	F	<b>HZ</b>	60
<b>RPM</b>	3540	<b>PH</b>	3	<b>DES</b>	A
<b>VOLT</b>	230/460	<b>KVA-CODE</b>	G	<b>ODE BRG</b>	6311
<b>AMP</b>	164/82	<b>DE BRG</b>			6313
<b>RATING</b>	40C AMB-CONT	<b>GREASE</b>	POLYREX EM		
<b>NEMA-NOM-EFF</b>	93.6	<b>PF</b>	91	<b>SER.F.</b>	1.15
	50Hz 75Hp 190/380V 198/99A			SF 1.0	
<b>HTR-VOLTS</b>		<b>HTR-AMPS</b>			

**Accessories**

<b>Part number</b>	<b>Description</b>	<b>Multiplier</b>
42-1400	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 33387

Typical performance - not guaranteed values

<b>Winding:</b> 42WGW903-R001		<b>Type:</b> 4254M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	75		<b>Full Load Torque</b>	111 LB-FT	
<b>Volts</b>	230/460		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	164/82		<b>Breakdown Torque</b>	382 LB-FT	
<b>R.P.M.</b>	3540		<b>Pull-up Torque</b>	135 LB-FT	
<b>Hz</b>	<b>60 Phase</b>	3	<b>Locked-rotor Torque</b>	172 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	G	<b>Starting Current</b>	556 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	18.5 A	
<b>NEMA Nom. Eff.</b>	<b>93.6 Power Factor</b>	91	<b>Line-line Res. @ 25°C</b>	0.0817 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	42°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	52°C	
			<b>Locked-rotor Power Factor</b>	22	
			<b>Rotor inertia</b>	4.22 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 75 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>	72	86	90	91	90	89	90
<b>Efficiency</b>	93	95.1	95	94.3	93.7	92.6	94
<b>Speed</b>	3588	3574	3558	3540	3521	3500	3529
<b>Line amperes</b>	26.4	43	61.6	81.5	103	126	94.4

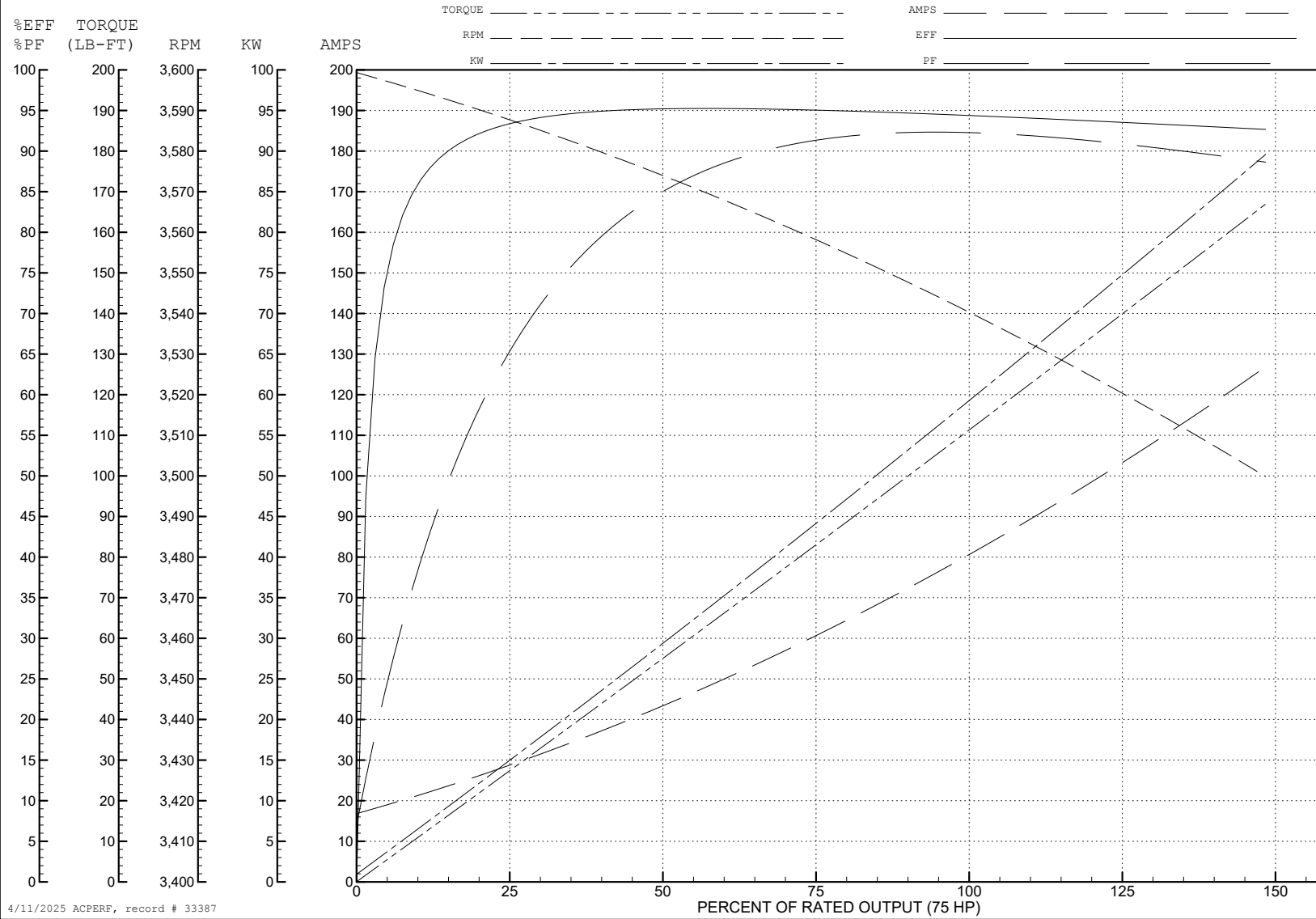
ABB Motors and Mechanical Inc.

WINDING # 42WGW903

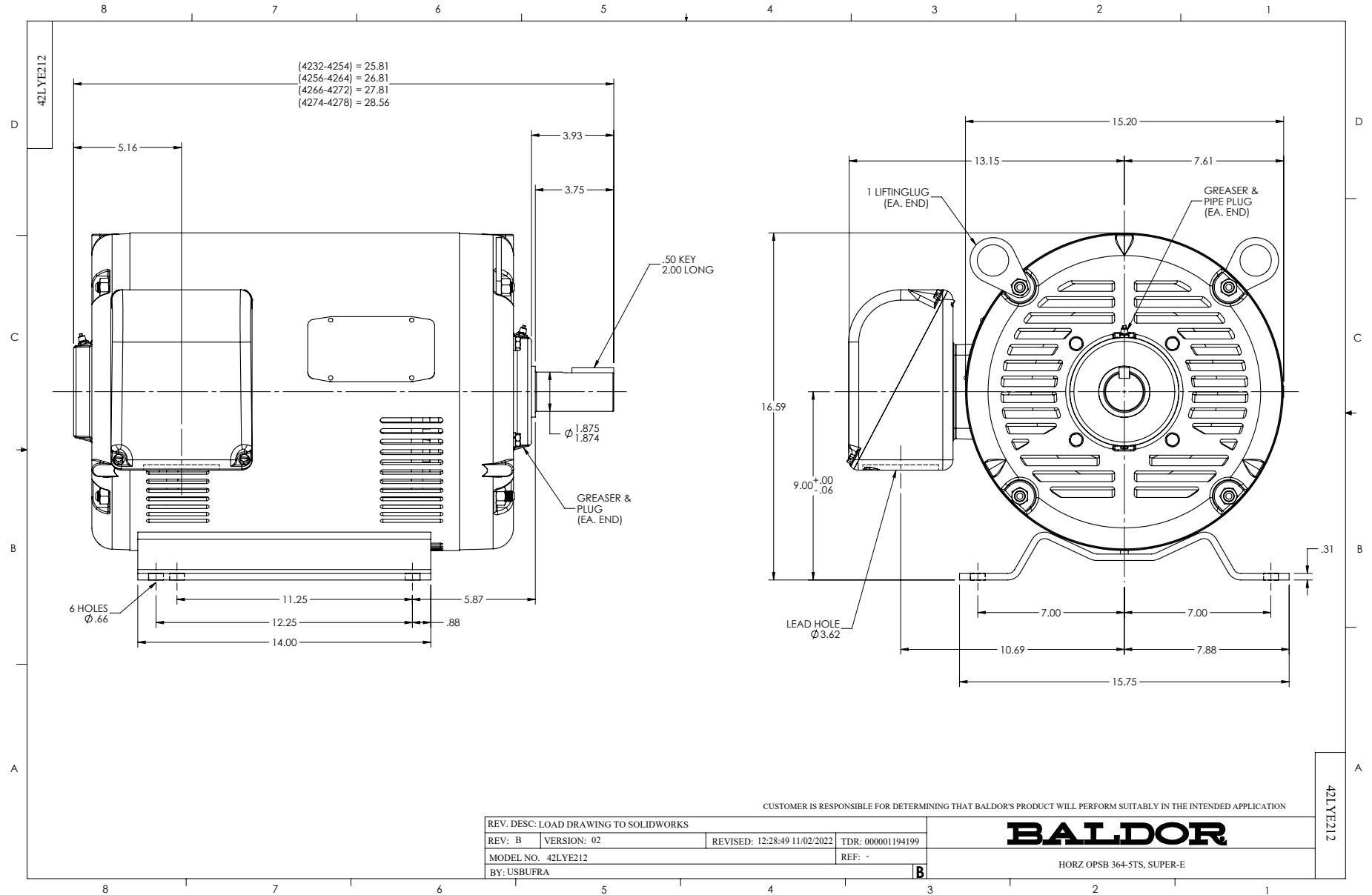
Typical performance - not guaranteed values.

75 HP 3 PH 60 HZ 3540 RPM 460 V 4254M

TORQUES (LB-FT): PO=382 PU=135 LR=172 LRA=556



4/11/2025 ACPERF, record # 33387



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		
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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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