

**BALDOR • RELIANCE**

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# Customer information packet

## EFM2543T

50HP, 1775RPM, 3PH, 60HZ, 326T, 4256M, OPSB, F2

## Specifications

Enclosure	OPSB
Frame	326T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	57.000 A @ 460.0 V 121.000 A @ 208.0 V 114.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
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	T
Type	AC
Mech. spec.	42E214
Base	
Status	PRD/A
Elec. spec.	42WGW387
Layout	42LYE214
Eff. date	08-23-2018
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	07-13-2009

High Voltage Full Load Amps	57.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4256M
Mounting Arrangement	F2
Number of Poles	4
Overall Length	27.69 IN
Power Factor	87
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	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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**

**NP3554L**

<b>CAT.NO.</b>	EFM2543T		<b>P/N</b>			<b>ENCL</b>	OPSB
<b>SPEC.</b>	42E214W387	<b>CC</b>	010A	<b>FRAME</b>	326T	<b>SER.NO.</b>	
<b>HP</b>	50	<b>CLASS</b>	F	<b>HZ</b>	60		
<b>RPM</b>	1775	<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>	6312
<b>AMPS</b>	114/57	<b>USABLE AT 208V</b>		121			
<b>RATING</b>	40C AMB-CONT	<b>NEMA-NOM-EFF</b>		94.5	<b>GREASE</b>	POLYREX EM	
<b>PF</b>	87	<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>
42-1300	C FACE KIT	A8
42EP1601A01	SP'L D-FLANGE MTD. PU. E.P. MDL.42 W/BFL	P1

**AC Induction Motor Performance Data**

Record # 53755

Typical performance - not guaranteed values

<b>Winding: 42WGW387-R001</b>		<b>Type: 4256M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	50	<b>Full Load Torque</b>	149 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	114/57	<b>Breakdown Torque</b>	420 LB-FT		
<b>R.P.M.</b>	1775	<b>Pull-up Torque</b>	217 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	311 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	G	<b>Starting Current</b>	373 A	
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>	20.2 A	
<b>NEMA Nom. Eff.</b>	94.5 <b>Power Factor</b>	87	<b>Line-line Res. @ 25°C</b>	0.12266 Ω	
<b>Rating - Duty</b>		40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	39°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	47°C	

**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>	54	75	83	87	88	88	88
<b>Efficiency</b>	92	94.5	94.9	94.7	94.2	93.4	94.4
<b>Speed</b>	1791	1786.1	1781.1	1775.2	1769.2	1762.1	1772
<b>Line amperes</b>	24.4	33.4	44.7	57.4	71	85.6	65.6

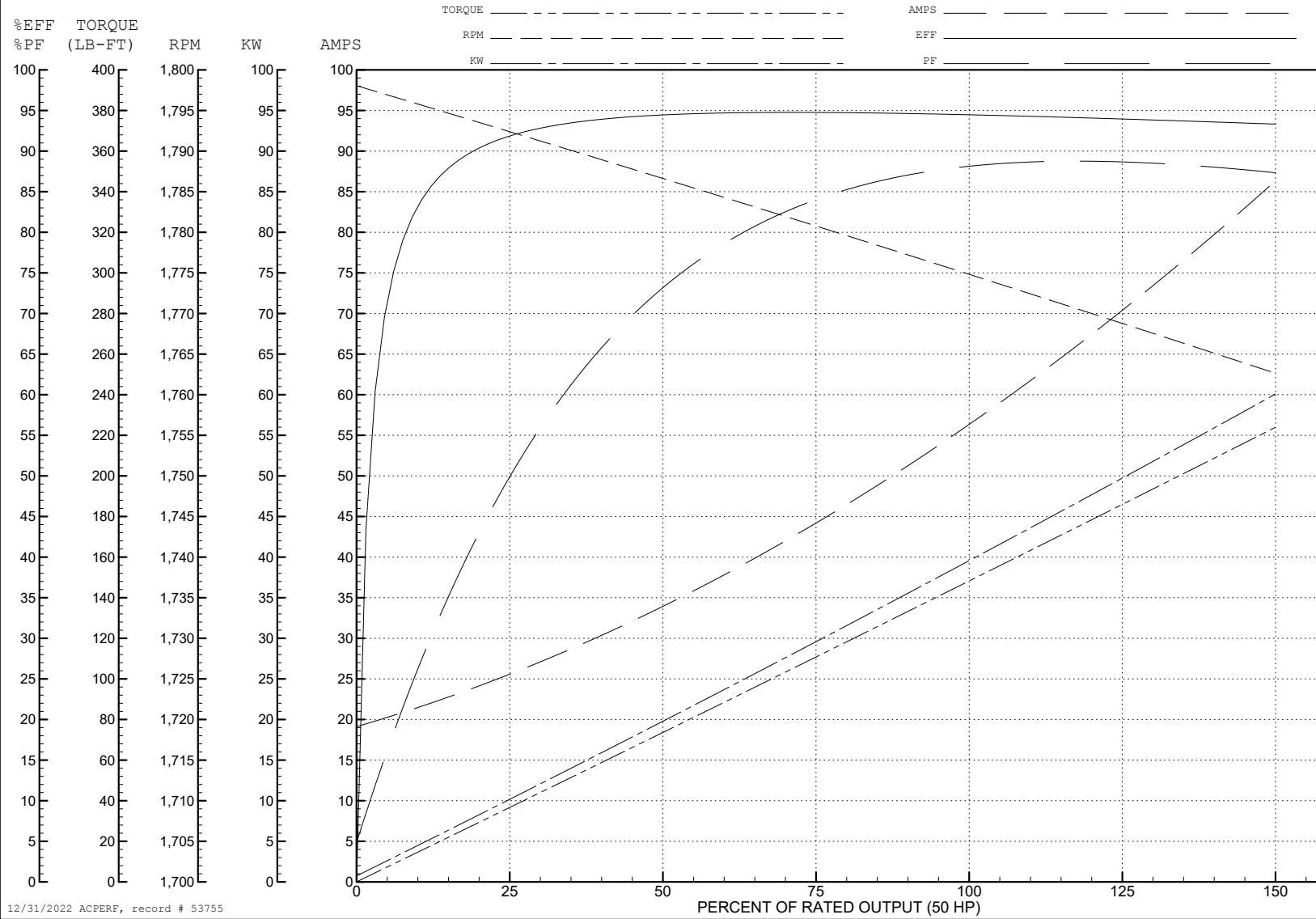
ABB Motors and Mechanical Inc.

WINDING # 42WGW387

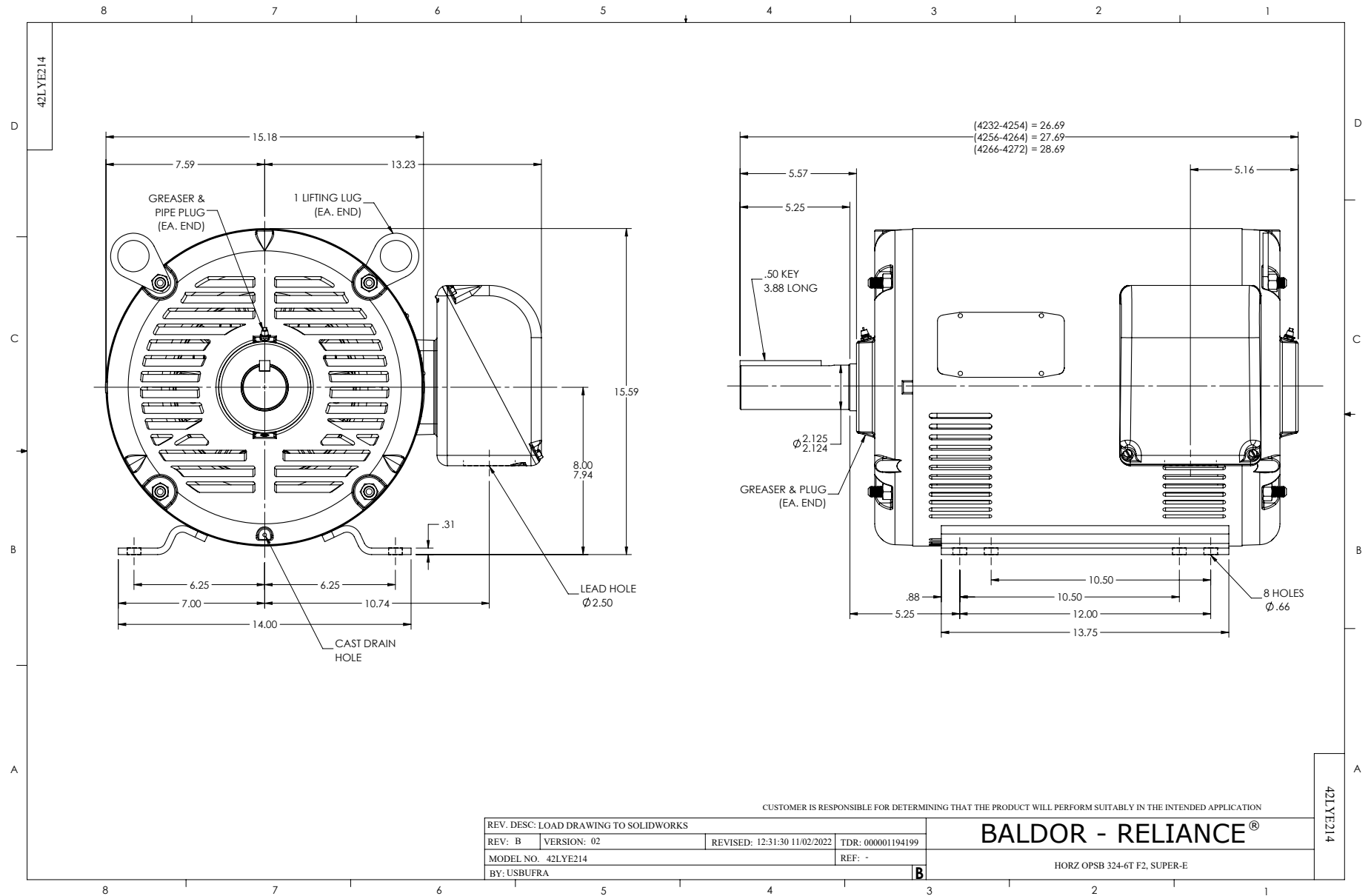
Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 1775 RPM 460 V 4256M

TORQUES (LB-FT): PO=420 PU=217 LR=311 LRA=373

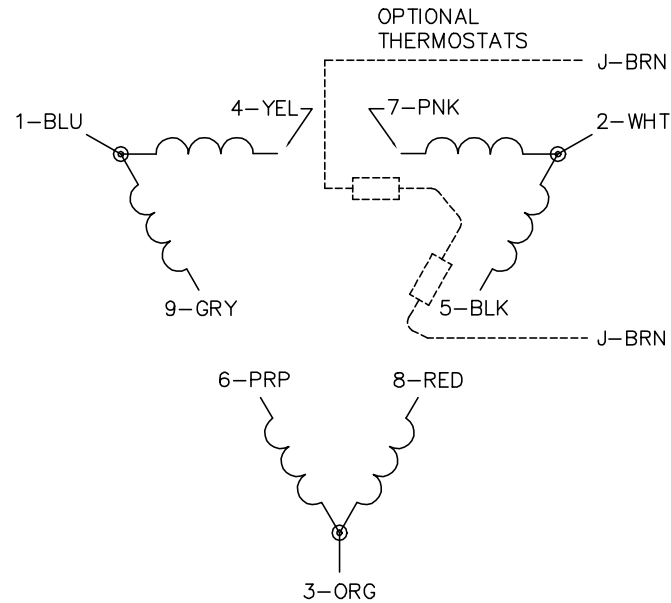


12/31/2022 ACPERF, record # 53755





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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