

# **BALDOR**® • *RELIANCE*

## **Product Information Packet**

# **EFM2543T**

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

Part Detail							
Revision:	S	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	42WGW387	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	42E214	Layout:	42LYE214	Poles:	04	Created Date:	07-13-2009
Base:	RG	Eff. Date:	09-06-2017	Leads:	9#8		

Specs			
Catalog Number:	EFM2543T	Insulation Class:	F
Enclosure:	OPSB	Inverter Code:	Inverter Ready
Frame:	326T	KVA Code:	G
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	50.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
Agency Approvals:	CSA	Motor Type:	4256M
	CSA EEV	Mounting Arrangement:	F2
	UR	Power Factor:	87
Auxillary Box:	No Auxillary Box	Product Family:	General Purpose
Auxillary Box Lead Termination:	None	Pulley End Bearing Type:	Ball
Base Indicator:	Rigid	Pulley Face Code:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley Shaft Indicator:	Standard
Blower:	None	Rodent Screen:	None
Current @ Voltage:	57.000 A @ 460.0 V	Shaft Extension Location:	Pulley End
	121.000 A @ 208.0 V	Shaft Ground Indicator:	No Shaft Grounding

	114.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
<b>Design Code:</b>	A	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	None
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP3554L											
CAT.NO.	EFM2543T			P/N				ENCL	OPSB		
SPEC.	42E214W387		CC	010A		FRAME	326T		SER.NO.		
HP	50		CLASS	F		HZ	60				
RPM	1775		PH	3		DES	A				
VOLTS	230/460			CODE	G		ODE BRG	6311		DE BRG	6312
AMPS	114/57			USABLE AT 208V	121						
RATING	40C AMB-CONT			NEMA-NOM-EFF	94.5		GREASE	POLYREX EM			
PF	87		SER.F.	1.15		VPWM INVERTER READY					
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

**AC Induction Motor Performance Data**

Record # 53755 - Typical performance - not guaranteed values

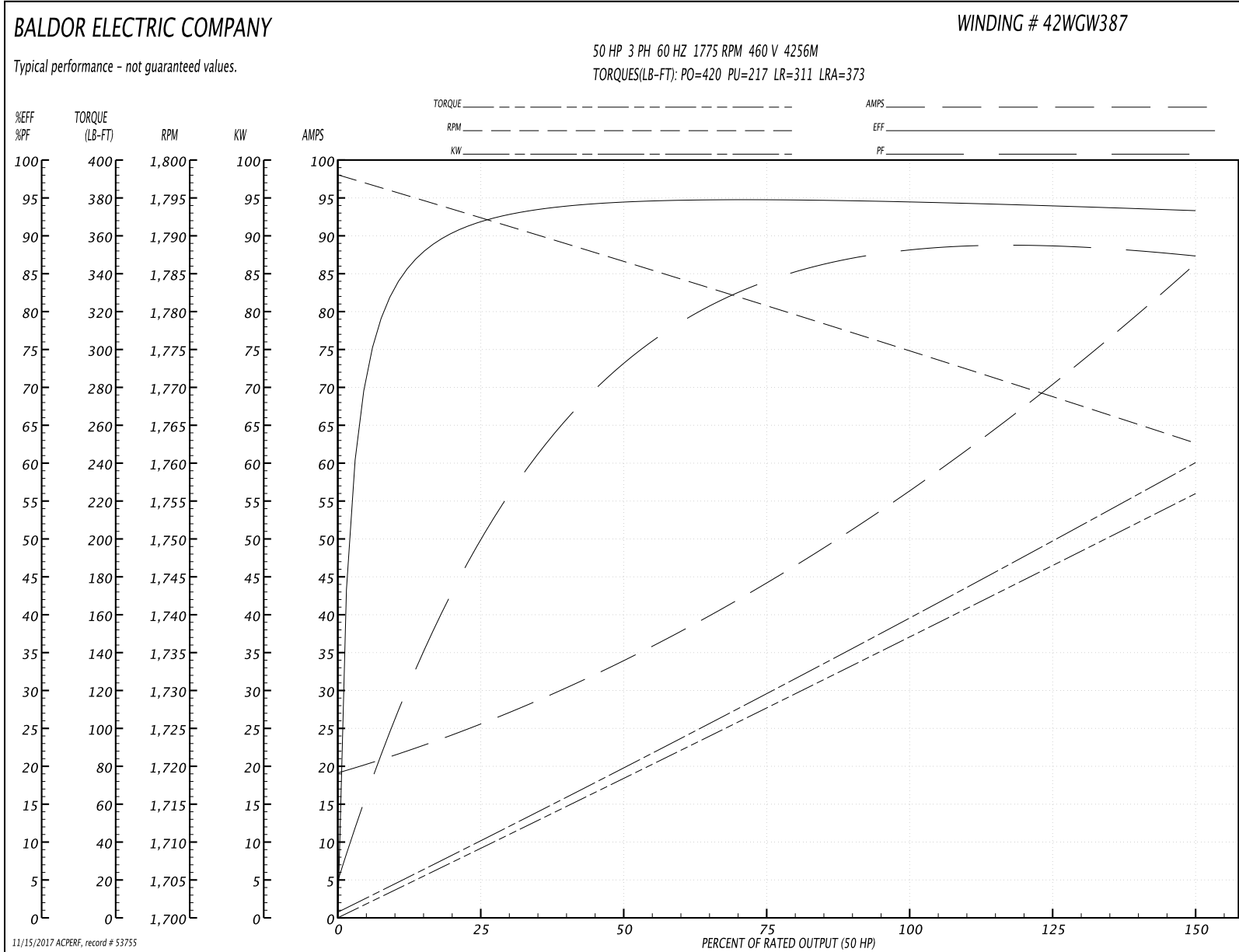
<b>Winding:</b> 42WGW387-R001	<b>Type:</b> 4256M	<b>Enclosure:</b> OPSB
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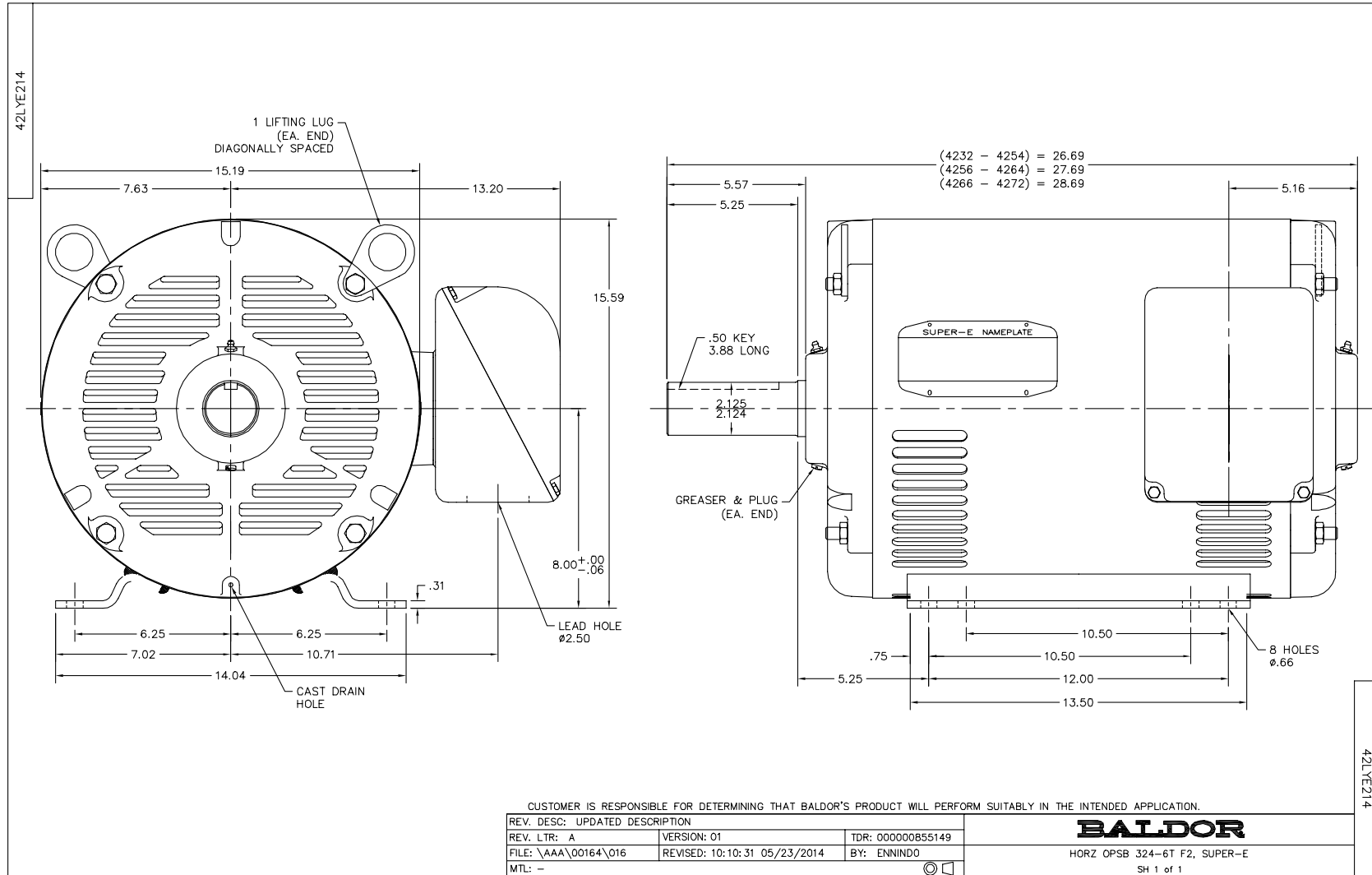
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	50			Full Load Torque	149 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	114/57			Breakdown Torque	420 LB-FT
R.P.M.	1775			Pull-up Torque	217 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	311 LB-FT
NEMA Design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

Load Characteristics 460 V, 60 Hz, 50 HP

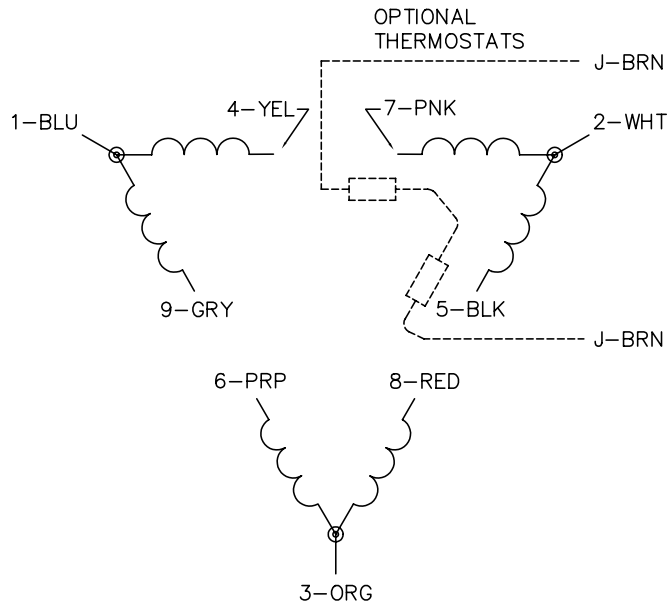
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	54	75	83	87	88	88	88
Efficiency	92	94.5	94.9	94.7	94.2	93.4	94.4
Speed	1791	1786.1	1781.1	1775.2	1769.2	1762.1	1772
Line amperes	24.4	33.4	44.7	57.4	71	85.6	65.6

Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values

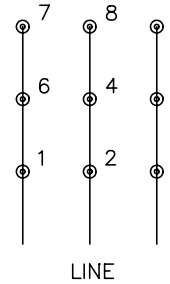




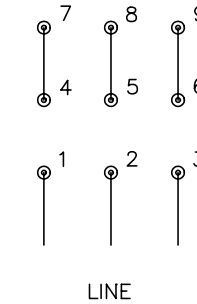
CD0180



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: C	BY: JLP	REVISED: 01/21/99 2:28	TDR: 0171435
0810D0		FILE: AAA00005148	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180