

BALDOR • RELIANCE

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 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	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	W
Type	AC
Mech. spec.	42E214
Base	
Status	PRD/A
Elec. spec.	42WGW387
Layout	42LYE214
Eff. date	06-27-2024
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

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								
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.					

Accessories

Part number	Description	Multiplier
42-1300	C FACE KIT	A8
42EP1601A01	SP'L D-FLANGE MTD. PU. E.P. MDL.42 W/BFL	

AC Induction Motor Performance Data

Record # 53755

Typical performance - not guaranteed values

Winding: 42WGW387-R001		Type: 4256M		Enclosure: OPSB	
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	A 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

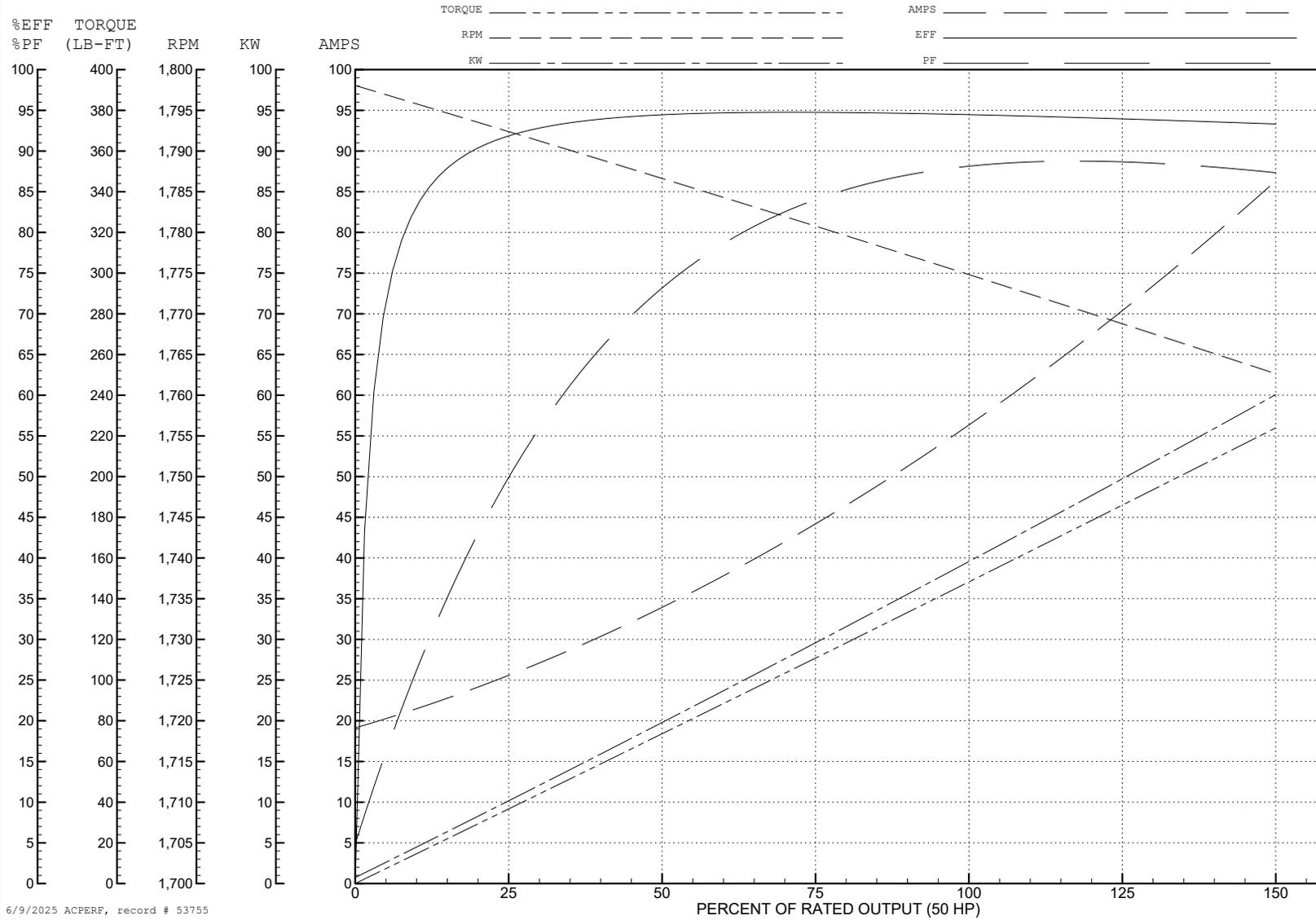
ABB Motors and Mechanical Inc.

WINDING # 42WGW387

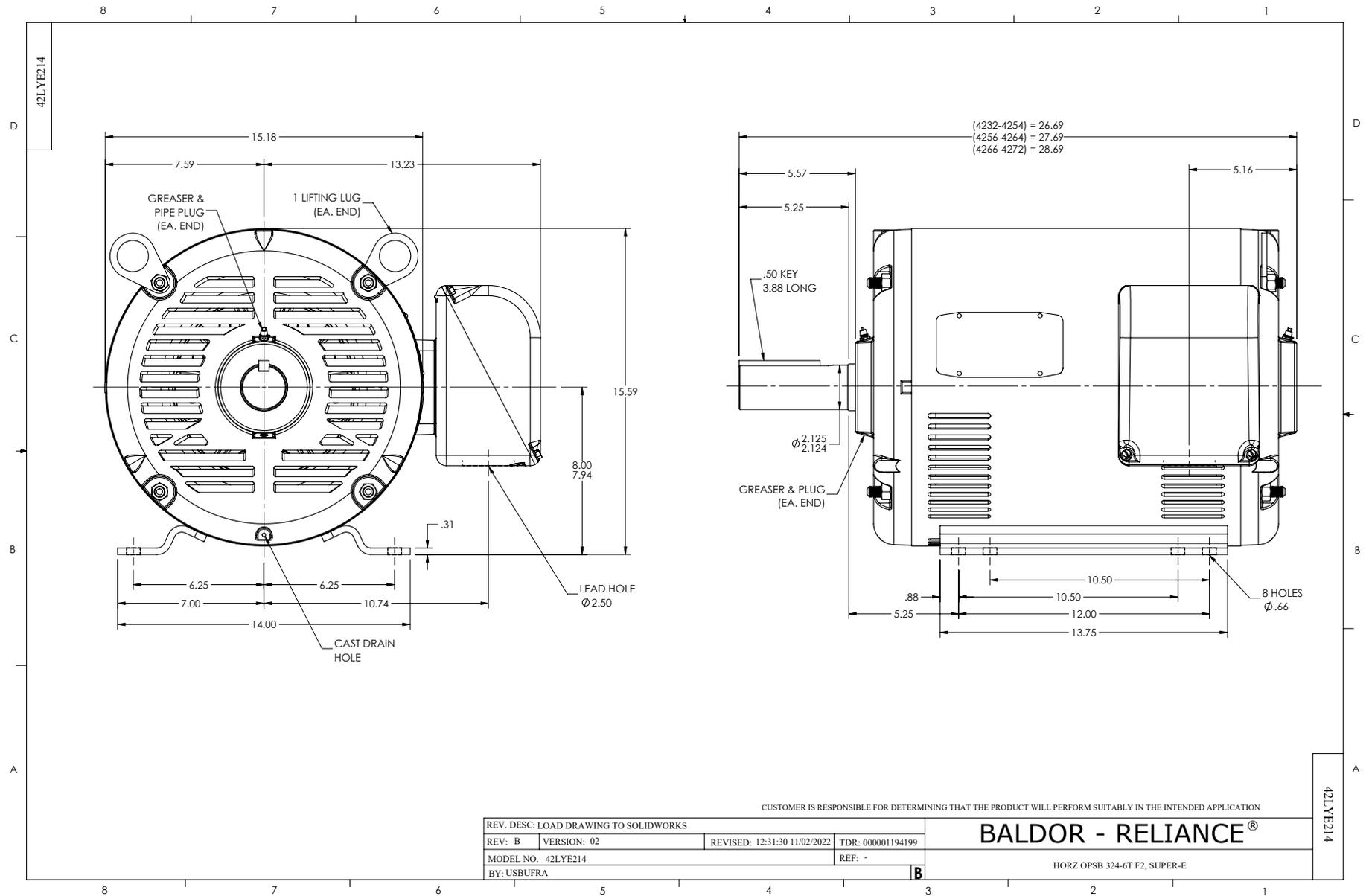
Typical performance - not guaranteed values.

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

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



6/9/2025 ACPERF, record # 53755



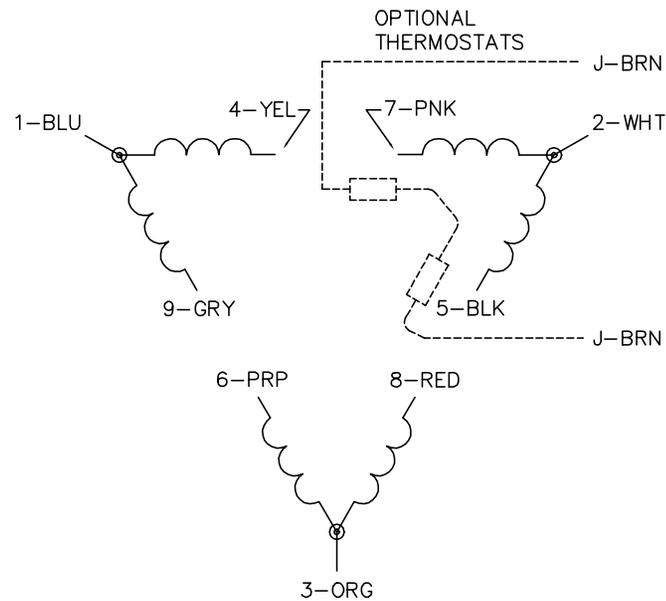
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: LOAD DRAWING TO SOLIDWORKS		TDR: 000001194199	
REV: B	VERSION: 02	REVISED: 12:31:30 11/02/2022	REF: -
MODEL NO. 42LYE214			
BY: USBUFRA			

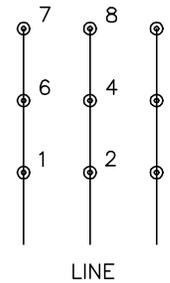
BALDOR - RELIANCE®

HORZ OPSB 324-6T F2, SUPER-E

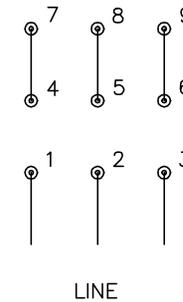
CD0180



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: -	© □	

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3PH, DV, 9 LEADS, DELTA CONNECTION

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