

BALDOR® • RELIANCE 

Product Information Packet

EHFM2543T

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

Part Detail							
Revision:	T	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	42WGW387	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	42E133	Layout:	42LYE133	Poles:	04	Created Date:	06-16-2006
Base:	RG	Eff. Date:	03-12-2018	Leads:	9#8		

Specs			
Catalog Number:	EHFM2543T	Inverter Code:	Inverter Ready
Enclosure:	OPSB	KVA Code:	G
Frame:	326T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	50.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	460.0 V @ 60 HZ	Motor Type:	4256M
Agency Approvals:	CSA	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:	114.000 A @ 230.0 V	Shaft Extension Location:	Pulley End
	121.000 A @ 208.0 V	Shaft Ground Indicator:	Mounting Provisions Only
	57.000 A @ 460.0 V	Shaft Rotation:	Reversible

Design Code:	A	Shaft Slinger Indicator:	No Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	NONE (OLD)
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
Insulation Class:	F	Winding Thermal 2:	None

Nameplate NP2094E06B03	
CAT.NO.	EHFM2543T
SPEC.	42E133W387G1
HP	50
VOLTS	230/460
AMPS	114/57
RPM	1775
FRAME	326T
	HZ 60
	PH 3
SER.F.	1.15
CODE	G
DES	A
CL	F
NEMA-NOM-EFF	94.5
	PF 87
RATING	40C AMB-CONT
CC	010A
	USABLE AT 208V 121
DE	6312
	ODE 6311
AUTO	
MANUAL	
NONE	
ENCL	OPSB
SN	
BLANK	

Parts List		
Part Number	Description	Quantity
SA144128	SA 42E133W387G1	1.000 EA
RA133339	RA 42E133W387G1	1.000 EA
S/P107-000-004	SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E	1.000 EA
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	2.000 EA
42CB4000A01	CONDUIT BOX 40, STAMPED	1.000 EA
19XW2520A08	SCREW,1/4-20X1/2 TAPTITE-II OR ROLOC 91	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
WD1000B16	T&B CX70TN TERMINAL	1.000 EA
418199008A	N/P GRD I/D	1.000 EA
42EP3200A01	FR ENDPLATE, MACH	1.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
42EP3200B13	PUEP, MACH FOR 1/2 SH GND MTG	1.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 EA
42CB4500A01	CONDUIT BOX LID 42, STAMPED, W/ PRIMER	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	2.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
84XN0540J08	5-40 X 1/2" SHCS, BLACK OXIDE	2.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.030 LB
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.080 GA
HA3151A03	THRUBOLT STUD 1/2-13 X 20.5	4.000 EA
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP2094E06B03	NP LABEL W/BARCODE (PREM EFF HVAC MTR)	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

AC Induction Motor Performance Data

Record # 53755 - Typical performance - not guaranteed values

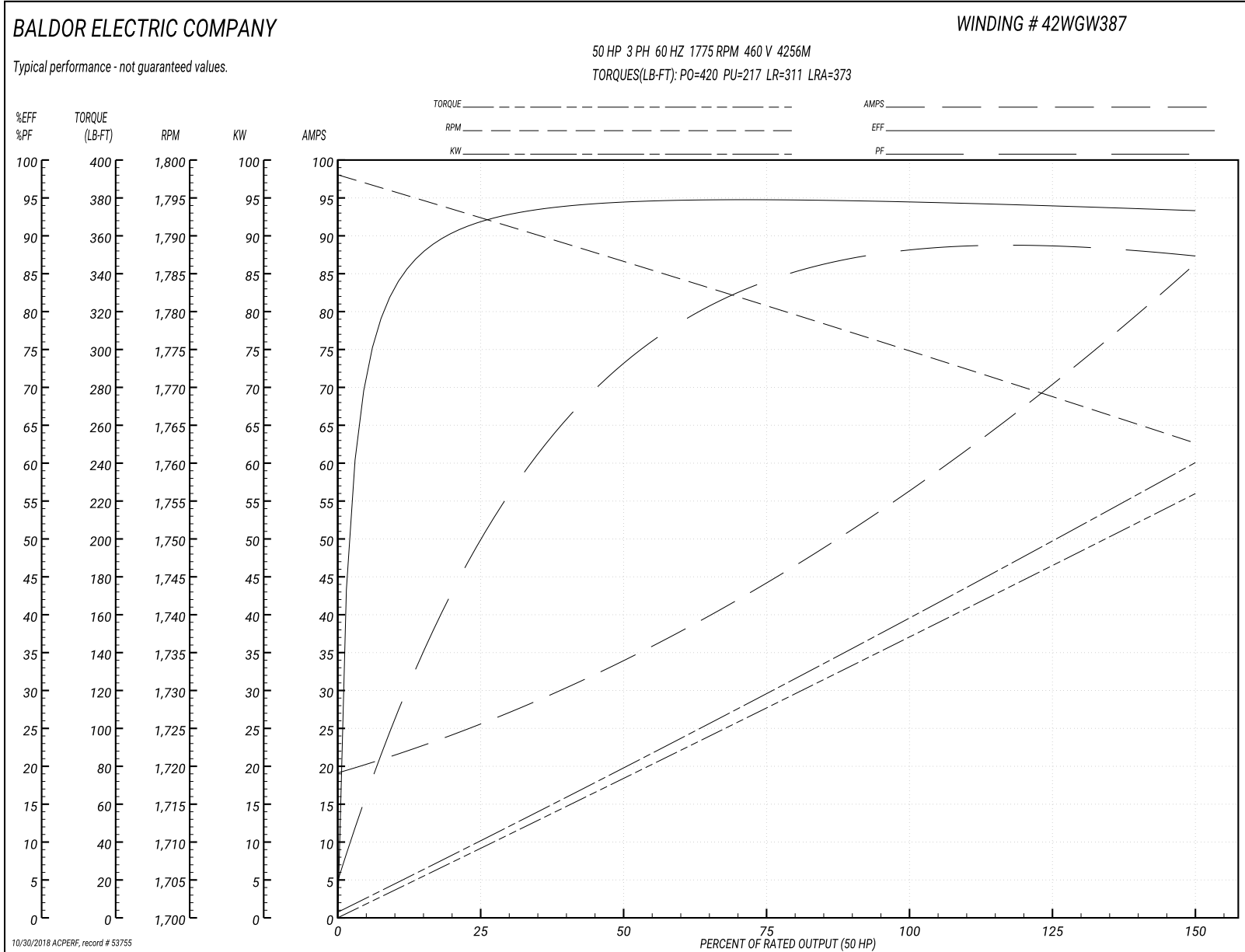
Winding: 42WGW387-R001	Type: 4256M	Enclosure: OPSB
-------------------------------	--------------------	------------------------

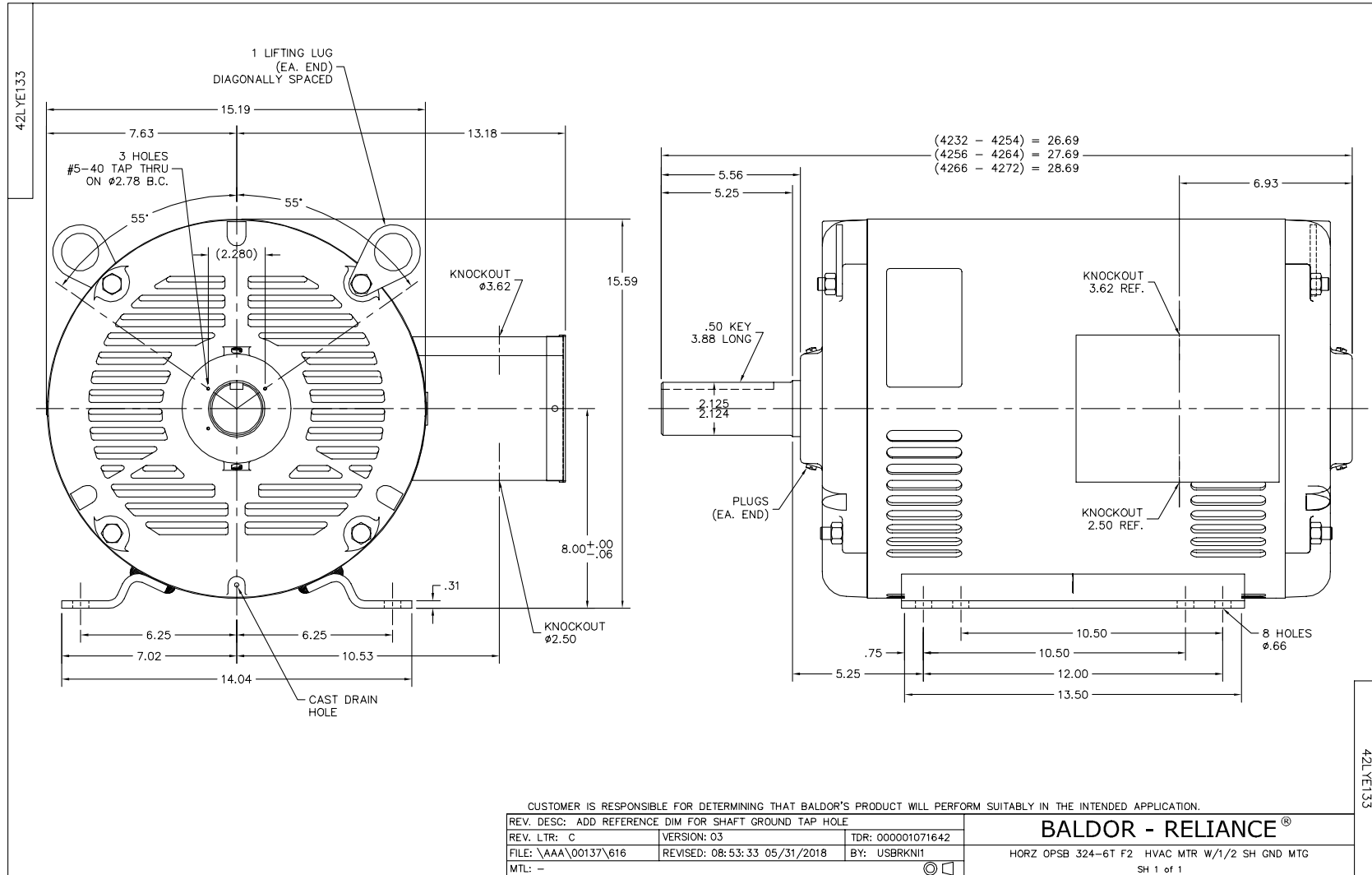
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	50			Full Load Torque	149 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	114/57			Breakdown Torque	420 LB-FT
R.P.M.	1775			Pull-up Torque	217 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	311 LB-FT
NEMA Design Code	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





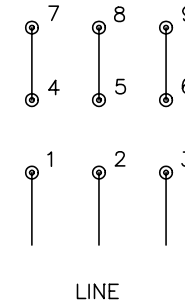
CD0180



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