

**BALDOR • RELIANCE**

---

# Customer information packet

## EHF2543T

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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CSA
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	114.000 A @ 230.0 V 121.000 A @ 208.0 V 57.000 A @ 460.0 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
High Voltage Full Load Amps	57.0 a
Insulation Class	F

## Part detail

Revision	X
Type	AC
Mech. spec.	42E133
Base	
Status	PRD/A
Elec. spec.	42WGW387
Layout	42LYE133
Eff. date	07-10-2024
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	06-16-2006

<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	No Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	9 @ 8 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	4256M
<b>Mounting Arrangement</b>	F2
<b>Number of Poles</b>	4
<b>Overall Length</b>	27.69 IN
<b>Power Factor</b>	87
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.125 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	Mounting Provisions Only
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1775 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

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

## Parts list

Part number	Description	Quantity
SA144128	SA 42E133W387G1	1.000 ea
RA133339	RA 42E133W387G1	1.000 ea
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	2.000 ea
42CB4000A01	CONDUIT BOX 40, STAMPED	1.000 ea
51XF2520A08	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 OR L70P TERMINAL LUG	1.000 ea
418199008A	N/P GRD I/D	1.000 ea
42EP3200A01	FR ENDPLATE, MACH	1.000 ea
HW5100A13	W4627-047 WVY WSHR	1.000 ea
42EP3200B13	PUEP, MACH FOR 1/2 SH GND MTG	1.000 ea
84XN0632J08	#6-32 X .50 SOCK HD, BK OX	2.000 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 (2500bx)4/22	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	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
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

<b>Winding:</b> 42WGW387-R001		<b>Type:</b> 4256M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
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	Locked-rotor Torque	311 LB-FT		
NEMA Design Code	A KVA Code	Starting Current	373 A		
Service Factor (S.F.)	1.15	No-load Current	20.2 A		
NEMA Nom. Eff.	94.5 Power Factor	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

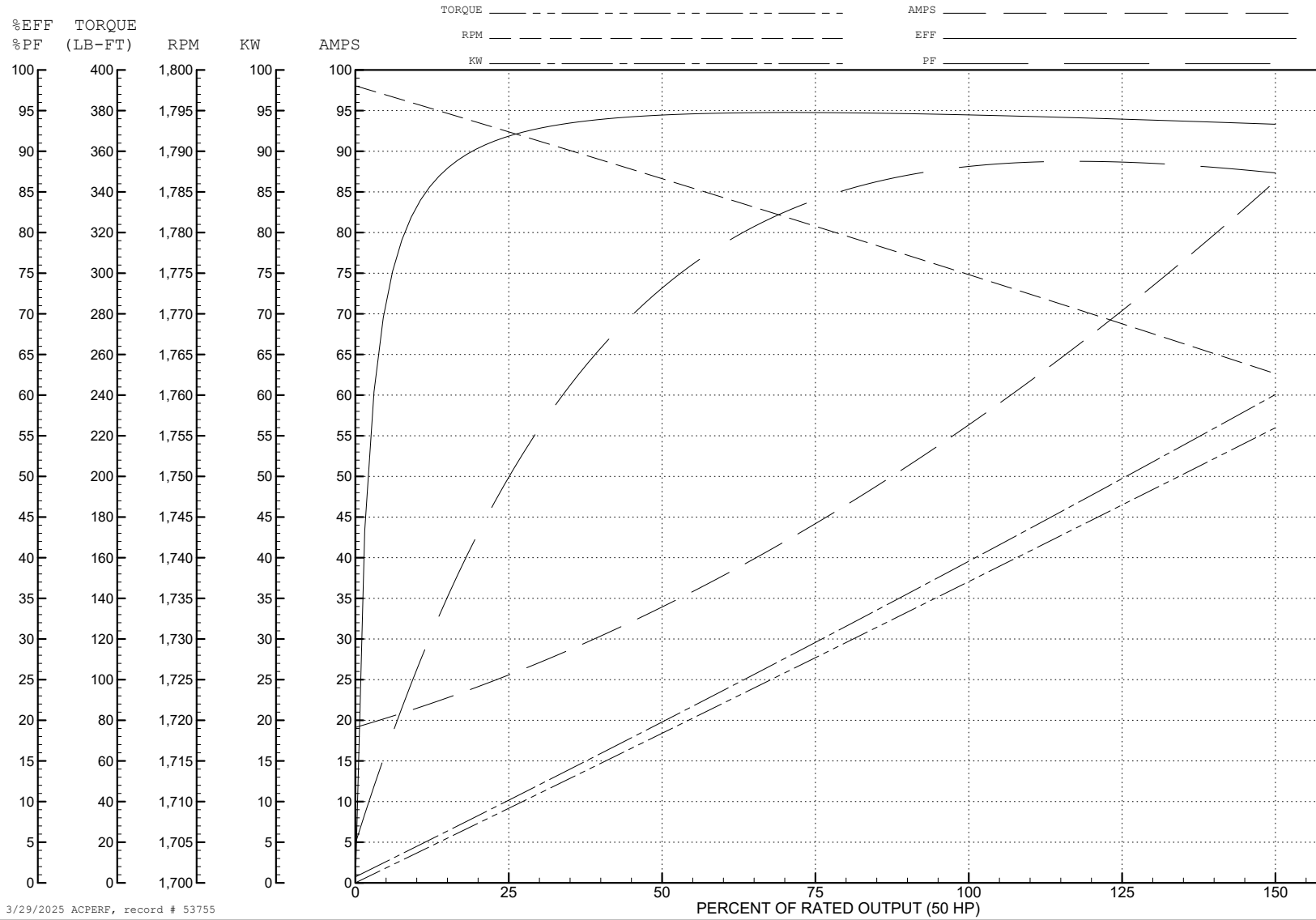
ABB Motors and Mechanical Inc.

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



3/29/2025 ACPERF, record # 53755

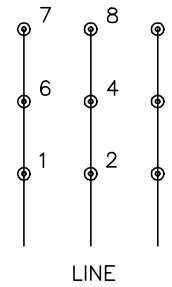




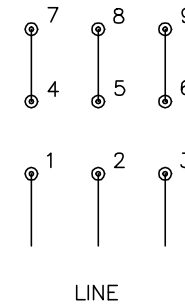
CD0180



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		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10: 25: 29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1