

**BALDOR • RELIANCE**

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# Customer information packet

## EM2544T

50HP, 1185RPM, 3PH, 60HZ, 365T, 4466M, OPSB, F1

## Specifications

Enclosure	OPSB
Frame	365T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	62.000 A @ 460.0 V 132.000 A @ 208.0 V 124.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
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	S
Type	AC
Mech. spec.	44E196
Base	
Status	PRD/A
Elec. spec.	44WGW235
Layout	44LYE196
Eff. date	08-07-2024
CD Diagram	CD0180
Poles	06
Leads	9#6
Proprietary	False
Created date	05-10-2010

High Voltage Full Load Amps	62.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4466M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	33.72 IN
Power Factor	80
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	2.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1185 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**

**NP2138LUA**

<b>CAT.NO.</b>	EM2544T	<b>P/N</b>		<b>ENCLOSURE</b>	OPSB
<b>SPEC.</b>	44E196W235G1	<b>CC</b>	010A	<b>FRAME</b>	365T
<b>HP</b>	50	<b>CLASS</b>	F	<b>HZ</b>	60
<b>RPM</b>	1185	<b>PH</b>	3	<b>DES</b>	B
<b>VOLT</b>	230/460	<b>KVA-CODE</b>	G	<b>ODE BRG</b>	6312
<b>AMP</b>	124/62	<b>DE BRG</b>			6313
<b>RATING</b>	40C AMB-CONT	<b>GREASE</b>	POLYREX EM		
<b>NEMA-NOM-EFF</b>	94.1	<b>PF</b>	80	<b>SER.F.</b>	1.15
<b>HTR-VOLTS</b>	50Hz 50Hp 190/380V 148/74A			<b>SF</b>	1.0
<b>HTR-AMPS</b>					

**AC Induction Motor Performance Data**

Record # 22264

Typical performance - not guaranteed values

Winding: 44WGW235-R001		Type: 4466M	Enclosure: OPSB
<b>Nameplate Data</b>		<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	50	Full Load Torque	221 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	124/62	Breakdown Torque	669 LB-FT
R.P.M.	1185	Pull-up Torque	263 LB-FT
Hz	60 Phase	Locked-rotor Torque	343 LB-FT
NEMA Design Code	B KVA Code	Starting Current	391 A
Service Factor (S.F.)	1.15	No-load Current	24.6 A
NEMA Nom. Eff.	94.1 Power Factor	Line-line Res. @ 25°C	0.119 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	31°C
S.F. Amps		Temp. Rise @ S.F. Load	37°C
		Locked-rotor Power Factor	29.3
		Rotor inertia	18.8 LB-FT <sup>2</sup>

**Load Characteristics 460 V, 60 Hz, 50 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	76	79	80	80	80
Efficiency	91.1	93.7	94.7	94.2	93.5	92.4	93.8
Speed	1196	1193	1189	1185	1180	1175	1182
Line amperes	28.7	37.5	49.1	62.5	77.4	93.8	71.4

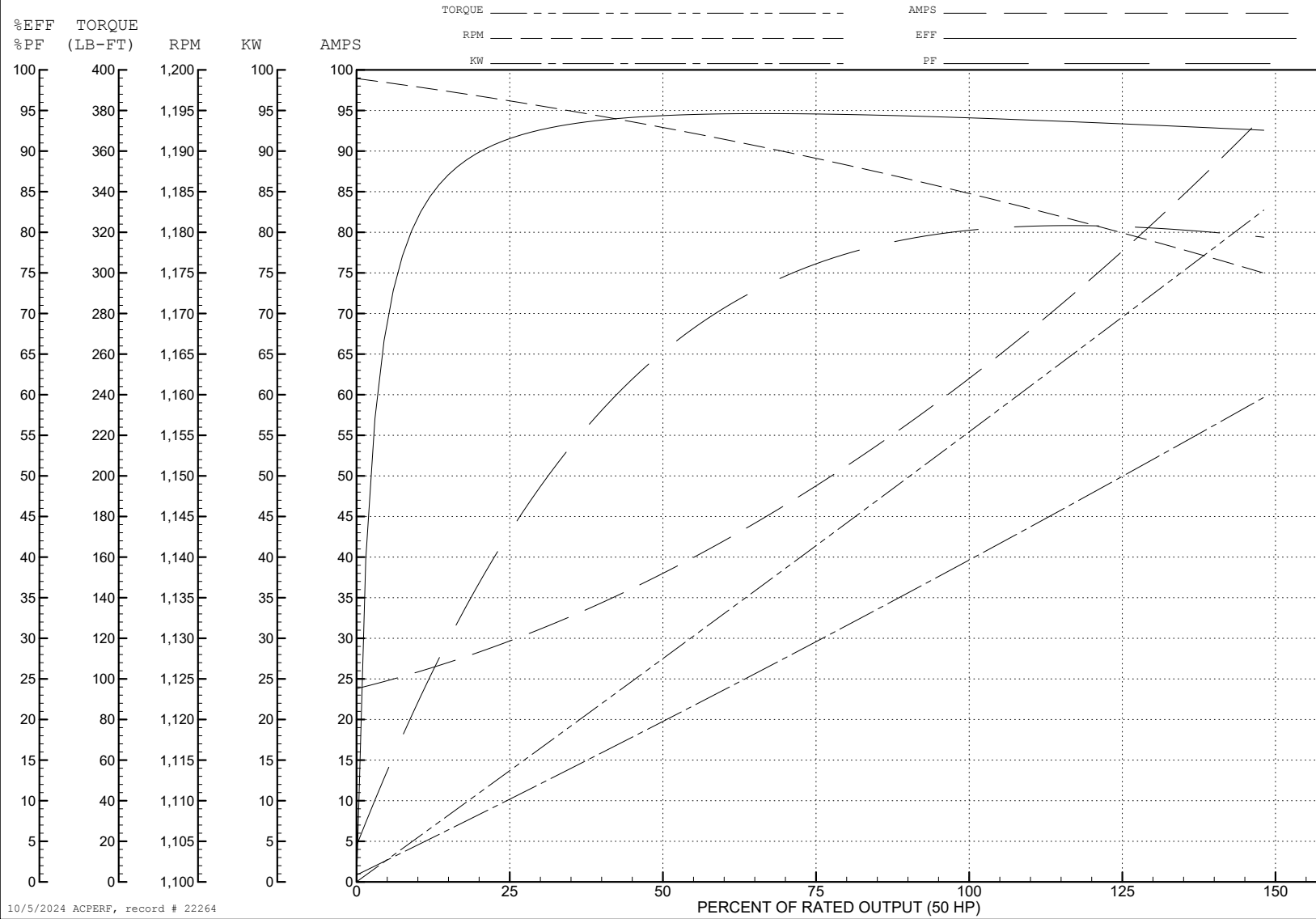
ABB Motors and Mechanical Inc.

WINDING # 44WG235

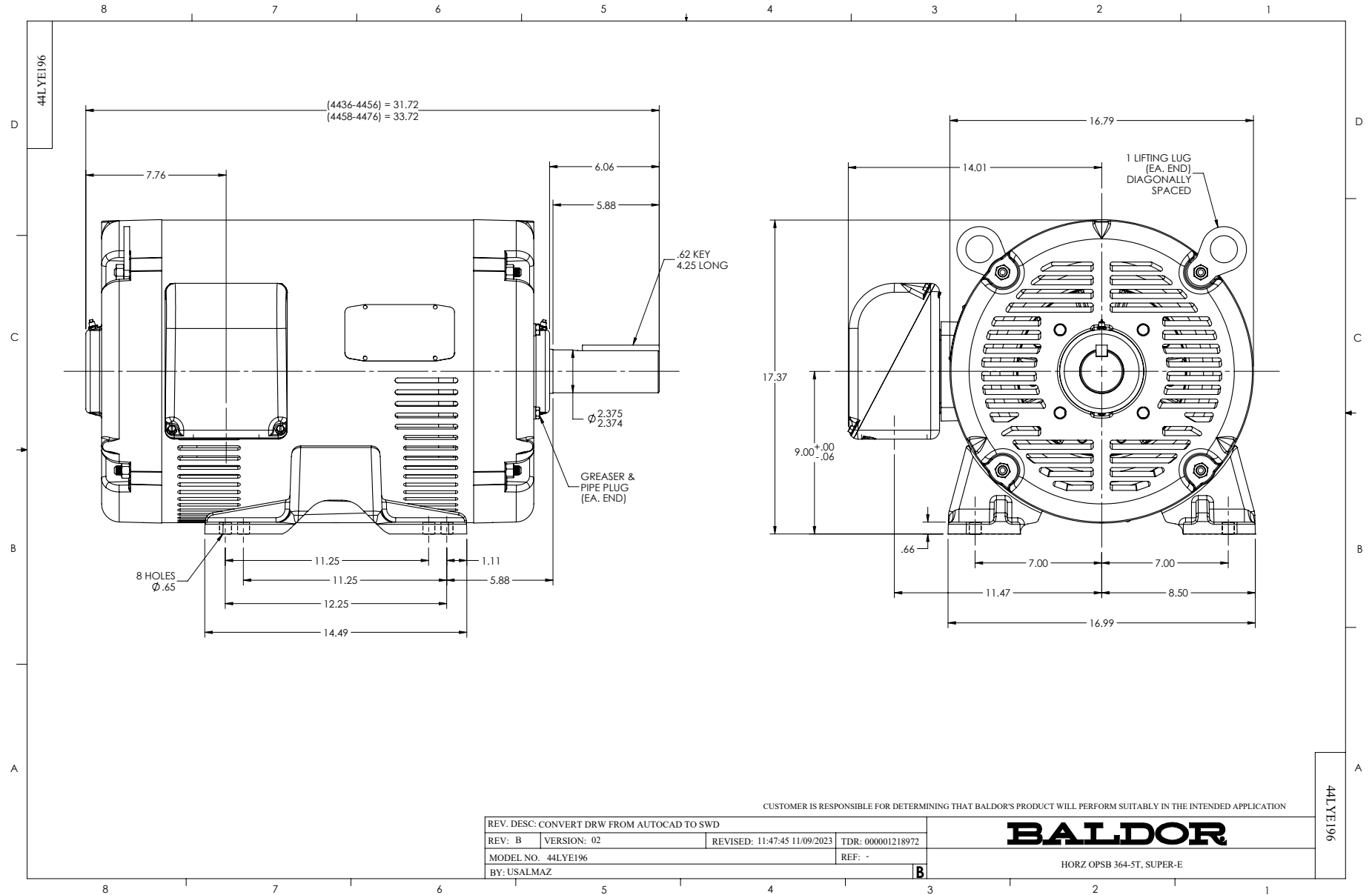
50 HP 3 PH 60 HZ 1185 RPM 460 V 4466M

Typical performance - not guaranteed values.

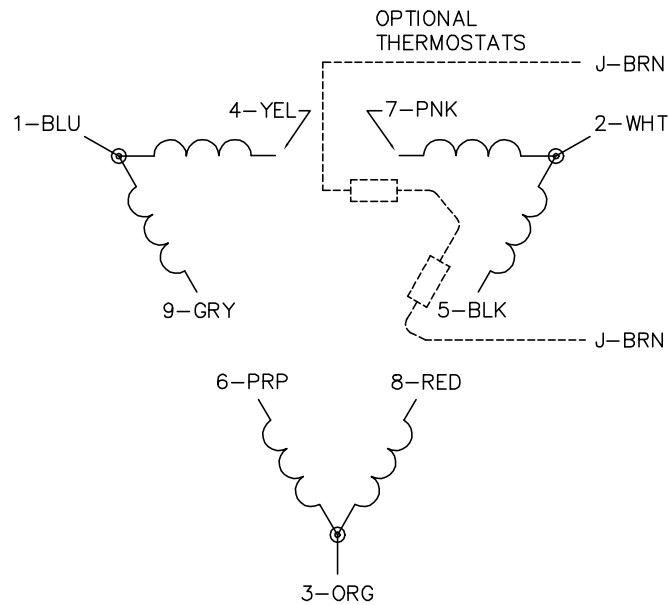
TORQUES (LB-FT): PO=669 PU=263 LR=343 LRA=391



10/5/2024 ACPERF, record # 22264



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
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**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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