

BALDOR • RELIANCE

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	T
Type	AC
Mech. spec.	44E196
Base	
Status	PRD/A
Elec. spec.	44WGW235
Layout	44LYE196
Eff. date	10-31-2024
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

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

Parts list

Part number	Description	Quantity
SA194636	SA 44E196W235G1	1.000 ea
RA182222	RA 44E196W235G1	1.000 ea
HA6731	LIFTING LUG FOR 44 FRAME MOTORS.	2.000 ea
HA6616A01	CAST ADAPTOR, 44 FRAME - NEMA 364-5 - MA	1.000 ea
19XW3816A12	.38-16 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	2.000 ea
10CB3002A02	CB 309 3.62 LD HOLE, .38 MTG HOLE & 3.50	1.000 ea
19XW3118A16	.31-18 HEX WASHER HEAD TAPTITE II 1.00 L	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
44EP1203A02	FREP, MACH	1.000 ea
HW5100A15	W4997-050 WVY WSHR (WB)	1.000 ea
10XN3816K48	3/8-16 X 3 HEX HD CAP SCREW,Z/P	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
44EP1203A01	PU ENDPLATE, MACH	1.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501J36	KEY, 5/8 SQ X 4.250	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.080 ga
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
44AD2001A01	BAFFLE 44 OPEN,"X"=1.00, SLOTTED BAND MT	1.000 ea

44AD2001A01	BAFFLE 44 OPEN,"X"=1.00, SLOTTED BAND MT	1.000 ea
HA3175A02	THRUBOLT STUD 1/2-13 X 24.500 - GRADE 2	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP2138LUA	ALUM SUPER-E UL PREM CC (300SER)	1.000 ea
44PA2000	PKGP, CTN ID 42X34X25, STD BASE	1.000 ea

AC Induction Motor Performance Data

Record # 22264

Typical performance - not guaranteed values

Winding: 44WGW235-R001		Type: 4466M	Enclosure: OPSB
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
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 ²

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

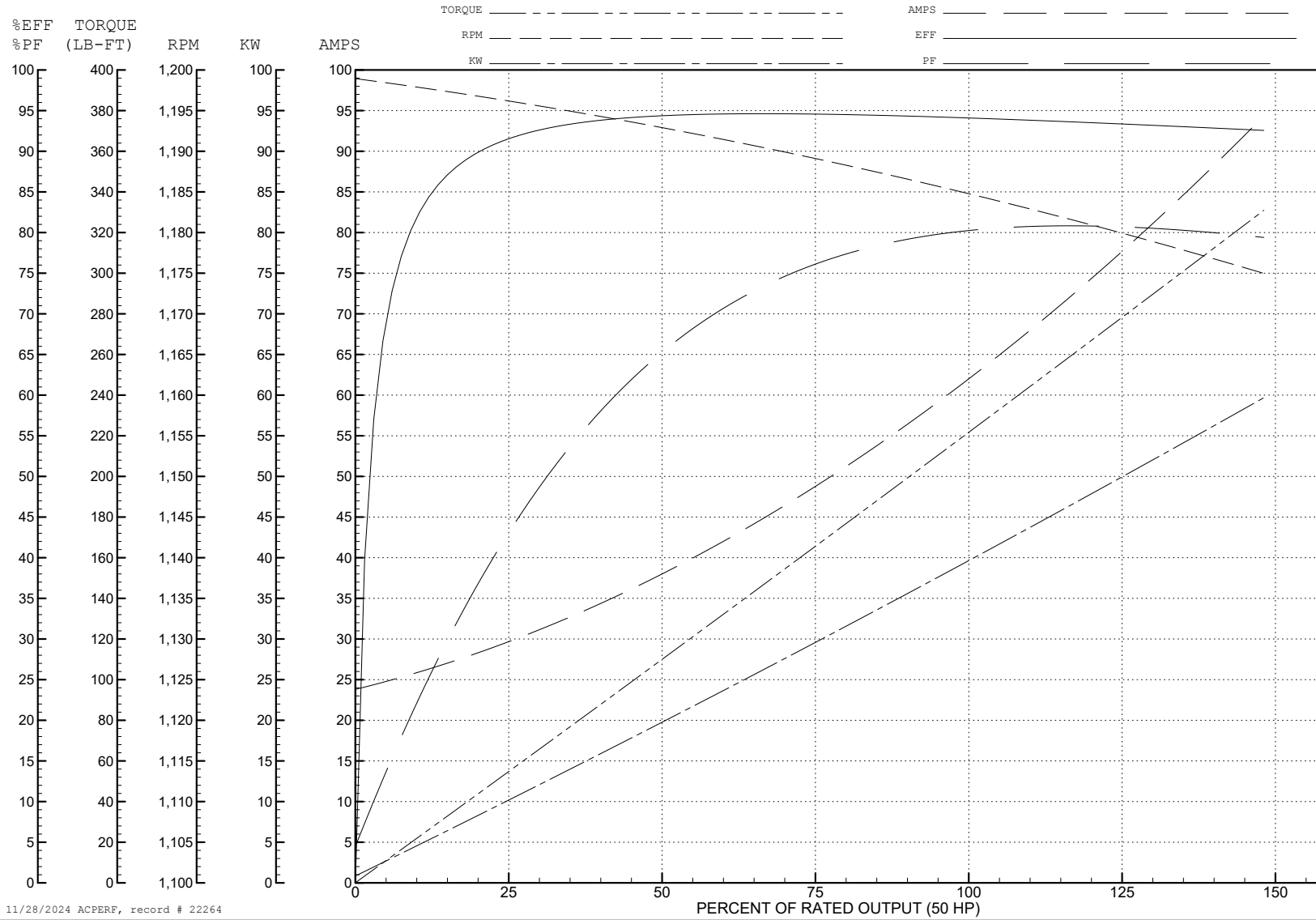
ABB Motors and Mechanical Inc.

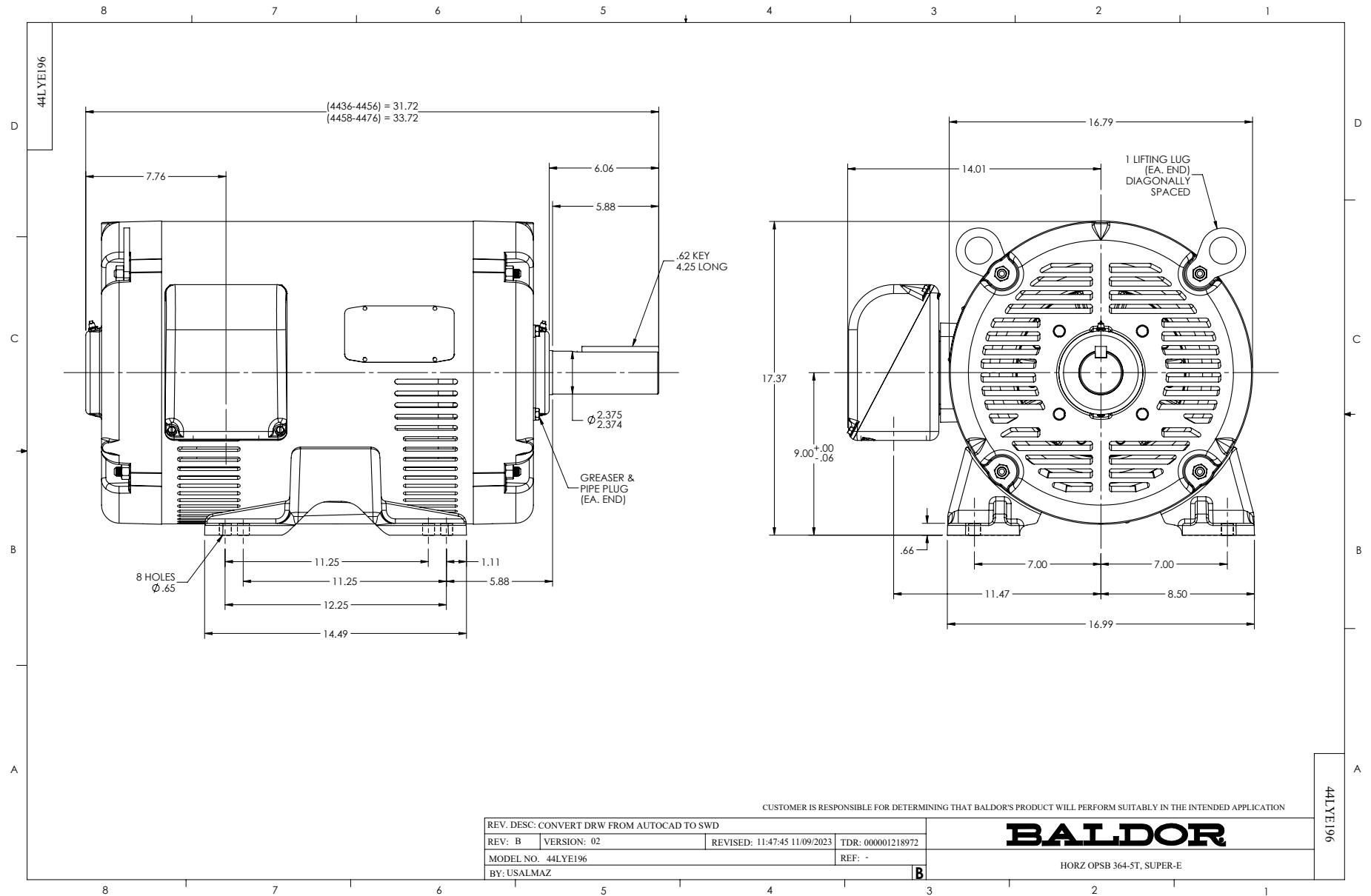
WINDING # 44WG235

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

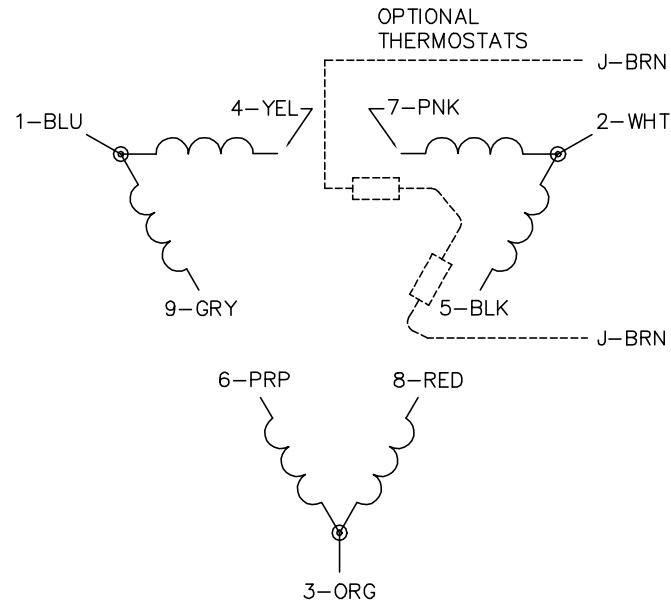
Typical performance - not guaranteed values.

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

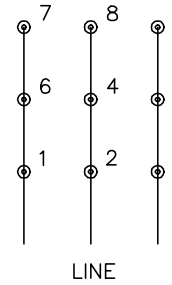




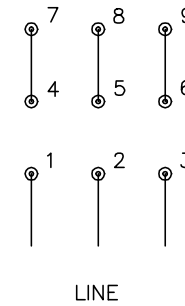
CD0180



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		
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MTL: -	© □	

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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