

BALDOR® • RELIANCE 

Product Information Packet

EM2555T-4G

100HP,1780RPM,3PH,60HZ,404T,4484M,OPSB,F

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | A | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 44WG390 | CD Diagram: | CD0382 | Mfg Plant: | |
| Mech. Spec: | 44E227 | Layout: | 44LYE227 | Poles: | 04 | Created Date: | 09-01-2017 |
| Base: | RG | Eff. Date: | 08-21-2018 | Leads: | 6#4 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | EM2555T-4G | KVA Code: | H |
| Enclosure: | OPSB | Lifting Lugs: | Standard Lifting Lugs |
| Frame: | 404T | Locked Bearing Indicator: | Locked Bearing |
| Frame Material: | Steel | Motor Lead Quantity/Wire Size: | 6 @ 4 AWG |
| Output @ Frequency: | 100.000 HP @ 60 HZ | Motor Lead Exit: | Ko Box |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Motor Lead Termination: | Flying Leads |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Type: | 4484M |
| Agency Approvals: | CSA | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 83 |
| | UR | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | Standard |
| Base Indicator: | Rigid | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | Shaft Extension Location: | Pulley End |
| Current @ Voltage: | 118.000 A @ 460.0 V | Shaft Ground Indicator: | Shaft Grounding |
| Design Code: | A | Shaft Rotation: | Reversible |
| Drip Cover: | No Drip Cover | Shaft Slinger Indicator: | No Slinger |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|-----------------------|
| Duty Rating: | CONT | Speed Code: | Single Speed |
| Electrically Isolated Bearing: | Not Electrically Isolated | Motor Standards: | NEMA |
| Feedback Device: | NO FEEDBACK | Starting Method: | Wye Start - Delta Run |
| Front Face Code: | Standard | Thermal Device - Bearing: | None |
| Front Shaft Indicator: | None | Thermal Device - Winding: | None |
| Heater Indicator: | No Heater | Vibration Sensor Indicator: | No Vibration Sensor |
| Insulation Class: | H | Winding Thermal 1: | None |
| Inverter Code: | Inverter Ready | Winding Thermal 2: | None |

| Nameplate NP2138L | | | | | | | | | | | |
|-------------------|--------------|----|----------|----------------|------------|------|----|-----------|------|--------|------|
| CAT.NO. | EM2555T-4G | | | P/N | | | | ENCLOSURE | OPSB | | |
| SPEC. | 44E227W390G1 | | CC | 010A | FRAME | 404T | | S/N | | | |
| HP | 100 | | | CLASS | H | HZ | 60 | | | | |
| RPM | 1780 | | PH | 3 | DES | A | | | | | |
| VOLT | 460 | | | | KVA-CODE | H | | ODE BRG | 6312 | DE BRG | 6316 |
| AMP | 118 | | | USABLE AT 208V | | | | | | | |
| RATING | 40C AMB-CONT | | | GREASE | POLYREX EM | | | | | | |
| NEMA-NOM-EFF | 95.4 | PF | 83 | SER.F. | 1.15 | | | | | | |
| HTR-VOLTS | | | HTR-AMPS | | | | | | | | |

| Parts List | | |
|-------------|--|----------|
| Part Number | Description | Quantity |
| SA344155 | SA 44E227W390G1 | 1.000 EA |
| RA332631 | RA 44E227W390G1 | 1.000 EA |
| HA6731 | LIFTING LUG FOR 44 FRAME MOTORS. | 2.000 EA |
| HA6648A01 | CAST ADAPTER, 44 FRAME - NEMA 404-5 - MA | 1.000 EA |
| 19XW3816A16 | .38-16 X 1.00 HEX WASHER HEAD TAPTITE II | 2.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 2.000 EA |
| 18CB1006A04 | CB 318 3.62 LD HOLE, .38 MTG HOLE & 3.88 | 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 |
| 10XN3118K08 | 5/16-18 X .50 GRADE #5, STL, ZINC PLATE | 1.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 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 |
| 44EP1202A01 | PU ENDPLATE, MACH. | 1.000 EA |
| XY5013A12 | NUT,1/2-13,HEX,STEEL,ZINCPLATED | 8.000 EA |
| 18CB1506A01 | CB LID 318 FOR 18CB1006 | 1.000 EA |
| 10XN3118K16 | 5/16-18 X 1' GRADE #5, STL, ZINC PLATE | 4.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| HW2501K66 | KEY, 3/4 SQ X 5.625 | 1.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |

| Parts List (continued) | | |
|-------------------------------|--|-----------------|
| Part Number | Description | Quantity |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| MJ1000A02 | GREASE, POLYREX EM EXXON (USe 4824-15A) | 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 |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.080 GA |
| 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 |
| HA3175A04 | THRUBOLT STUD 1/2-13 X 26.000 - GRADE 2 | 4.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0382 | CONNECTION LABEL | 1.000 EA |
| NP2138L | ALUM SUPER-E UL CSA-EEV PREM CC (300 | 1.000 EA |
| 44PA1000 | PK GP COMB PRINT 39-3/8X31X23-7/8 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 5/18 | 1.000 EA |

AC Induction Motor Performance Data

Record # 66624 - Typical performance - not guaranteed values

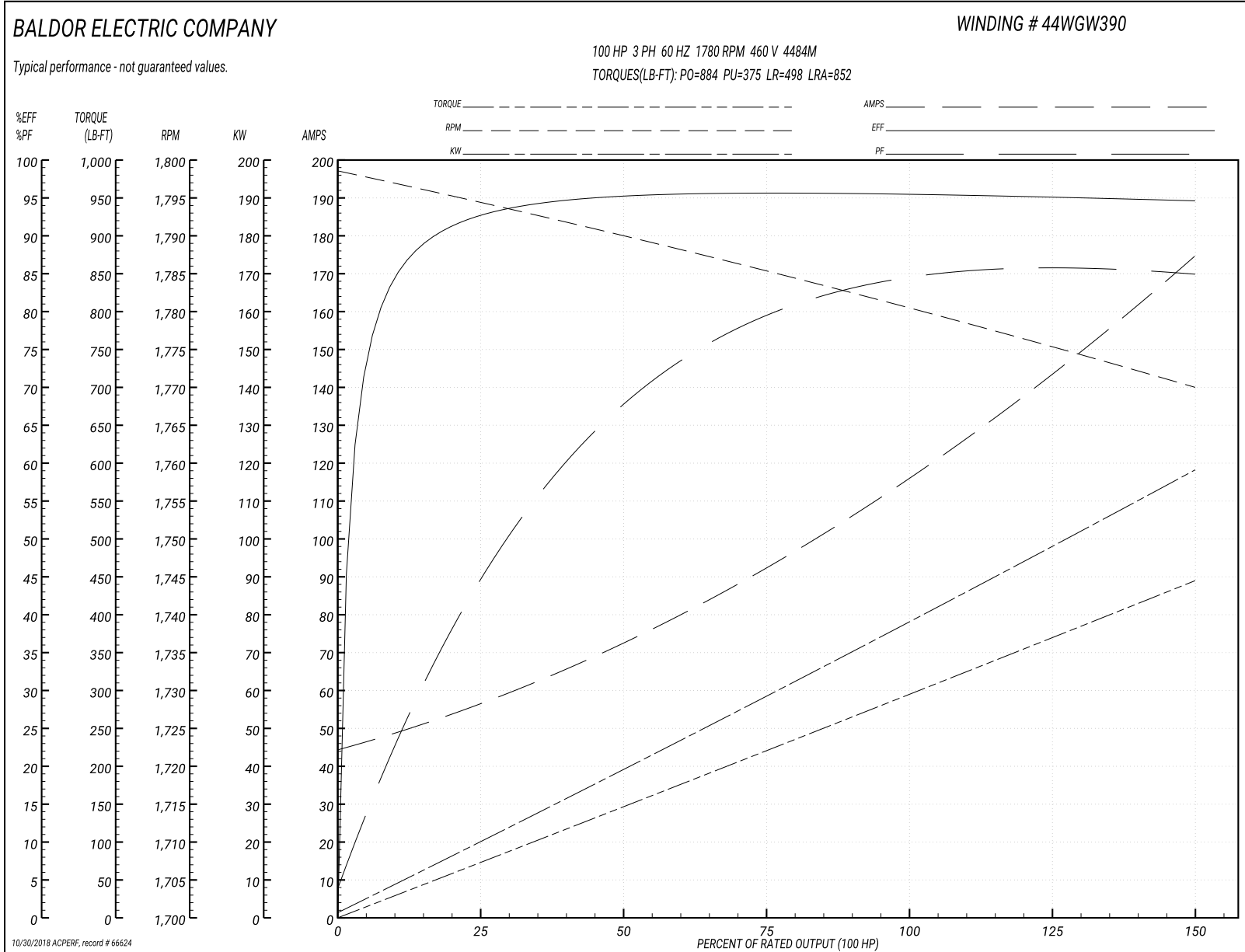
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 44WGW390-R002 | Type: 4484M | Enclosure: OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|--|-------------------------|
| Rated Output (HP) | 100 | | | Full Load Torque | 295 LB-FT |
| Volts | 460 | | | Start Configuration | direct on line |
| Full Load Amps | 118 | | | Breakdown Torque | 884 LB-FT |
| R.P.M. | 1780 | | | Pull-up Torque | 375 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 498 LB-FT |
| NEMA Design Code | A | KVA Code | H | Starting Current | 852 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 46.4 A |
| NEMA Nom. Eff. | 95.4 | Power Factor | 83 | Line-line Res. @ 25°C | 0.045551 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 47°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 57°C |
| | | | | Locked-rotor Power Factor | 25.4 |
| | | | | Rotor inertia | 15.9 LB-FT ² |

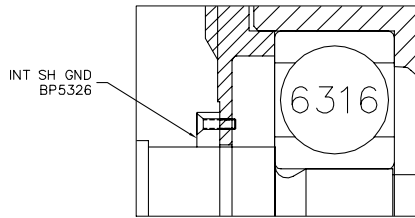
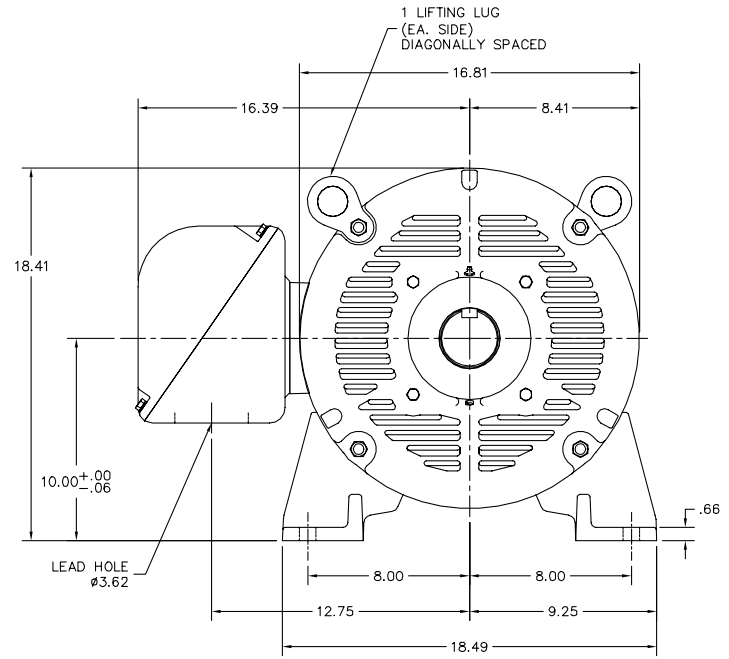
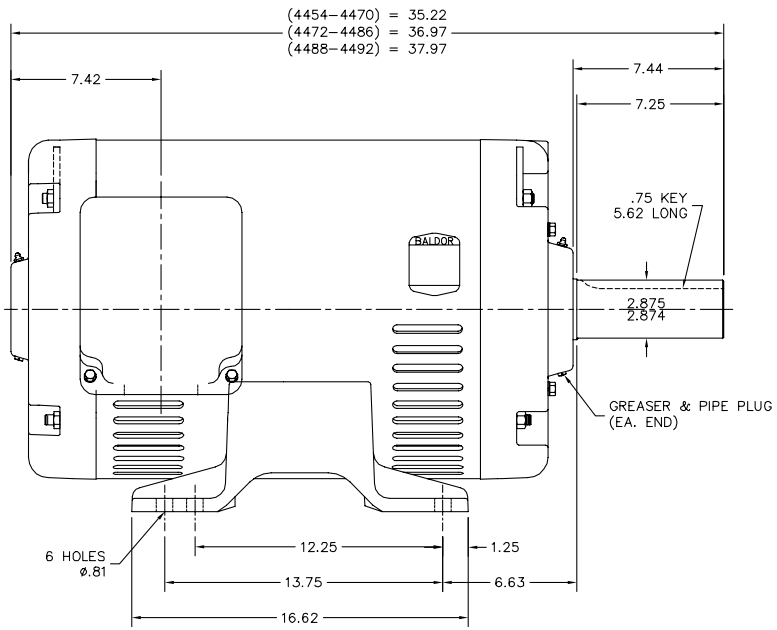
Load Characteristics 460 V, 60 Hz, 100 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|--------|--------|--------|--------|--------|------|
| Power Factor | 46 | 70 | 79 | 83 | 85 | 86 | 84 |
| Efficiency | 92.6 | 95.3 | 95.7 | 95.6 | 95.2 | 94.6 | 95.4 |
| Speed | 1794 | 1789.8 | 1785.5 | 1780.7 | 1775.5 | 1769.8 | 1778 |
| Line amperes | 54.2 | 70.6 | 92.8 | 118 | 145 | 173 | 134 |

Performance Graph at 460V, 60Hz, 100.0HP Typical performance - Not guaranteed values



44LYE227



PU. RETAINER DETAIL

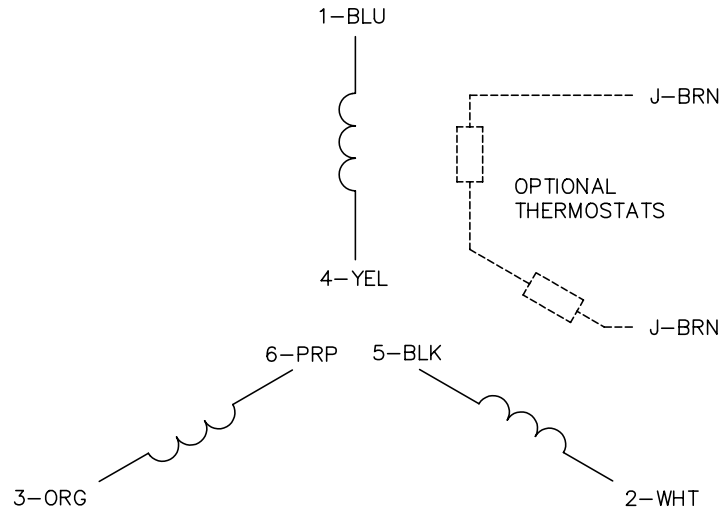
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

| | | |
|--------------------------------------|------------------------------|-------------------|
| REV. DESC: REMOVE LOCKNUT PROVISIONS | | |
| REV. LTR: A | VERSION: 01 | TDR: 000000959631 |
| FILE: \AAA\00187\459 | REVISED: 09:41:45 01/05/2016 | BY: ENMARSO |
| MTL: - | | |

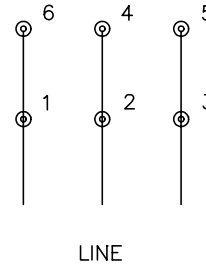
BALDOR
 HORZ OPSB 404-5T W/INT SH GND
 SH 1 of 1

44LYE227

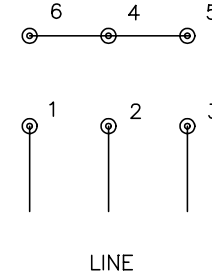
CD0382



RUN CONNECTION
(1D)



START CONNECTION
(1Y)



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.
5. FOR ACROSS-THE-LINE STARTING, USE 'RUN' CONNECTION.

| | | | |
|--|---------|------------------------|--------------|
| REV. DESC: ADD NOTE 5 FOR DOL STARTING | | | |
| REV. LTR: E | BY: JLP | REVISED: 11/30/00 2:26 | TDR: 0226155 |
| CD0382 | | FILE: AAA00005243 | REF: - |
| | | MTL: - | |

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3PH, SV, 6 LEADS, Y START/D RUN

CD0382

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