

BALDOR® • RELIANCE 

Product Information Packet

EM2528T

20HP, 1180RPM, 3PH, 60HZ, 286T, 4056M, OPSB, F1

| Part Detail | | | | | | | |
|-------------|-------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | S | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 40WG191 | CD Diagram: | CD0180 | Mfg Plant: | |
| Mech. Spec: | 40G48 | Layout: | 40LYG048 | Poles: | 06 | Created Date: | 10-14-2010 |
| Base: | RG | Eff. Date: | 01-12-2021 | Leads: | 9#10 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | EM2528T | Inverter Code: | Inverter Ready |
| Enclosure: | OPSB | IP Rating: | NONE |
| Frame: | 286T | KVA Code: | H |
| Frame Material: | Steel | Lifting Lugs: | Standard Lifting Lugs |
| Output @ Frequency: | 20.000 HP @ 60 HZ | Locked Bearing Indicator: | No Locked Bearing |
| Synchronous Speed @ Frequency: | 1200 RPM @ 60 HZ | Motor Lead Quantity/Wire Size: | 9 @ 10 AWG |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| | 230.0 V @ 60 HZ | Motor Lead Termination: | Flying Leads |
| Agency Approvals: | CSA | Motor Type: | 4056M |
| | CSA EEV | Mounting Arrangement: | F1 |
| | UR | Power Factor: | 74 |
| 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: | 56.000 A @ 208.0 V | Shaft Extension Location: | Pulley End |
| | 54.000 A @ 230.0 V | Shaft Ground Indicator: | No Shaft Grounding |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| | 27.000 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 |
| 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 NP2138LUA | | | | | | | | | | | |
|---------------------|----------------------------|----|----|----------------|------------|-------|---------|-----------|------|--------|------|
| CAT.NO. | EM2528T | | | P/N | | | | ENCLOSURE | OPSB | | |
| SPEC. | 40G048X191 | | CC | 010A | | FRAME | 286T | | S/N | | |
| HP | 20 | | | CLASS | F | | HZ | 60 | | | |
| RPM | 1180 | | | PH | 3 | | DES | A | | | |
| VOLT | 230/460 | | | KVA-CODE | H | | ODE BRG | 6309 | | DE BRG | 6311 |
| AMP | 54/27 | | | USABLE AT 208V | 56 | | | | | | |
| RATING | 40C AMB-CONT | | | GREASE | POLYREX EM | | | | | | |
| NEMA-NOM-EFF | 92.4 | PF | 74 | SER.F. | 1.15 | | | | | | |
| HTR-VOLTS | 50hz 20 hp 190/380v 62/31a | | | | | | sf 1.0 | | | | |
| | HTR-AMPS | | | | | | | | | | |

| Parts List | | |
|-------------|--|----------|
| Part Number | Description | Quantity |
| SA204467 | SA 40G048X191 | 1.000 EA |
| RA191713 | RA 40G048X191 | 1.000 EA |
| HA6361A01 | LIFTING LUG FOR 37, 39 & 40 FRAME ZINC | 2.000 EA |
| HA6017 | CAST ADAPTER, 40,42 KOBX | 1.000 EA |
| 19XW3118A12 | .31-18 X .75 HEX WASHER HEAD TAPTITE II | 2.000 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 |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 2.000 EA |
| 10CB3000SP | KOBX, CAST W/2.00 LEAD HOLE | 1.000 EA |
| 19XW3118A12 | .31-18 X .75 HEX WASHER HEAD TAPTITE II | 4.000 EA |
| 40EP3200A02 | STD FREP OPEN 309 BRG | 1.000 EA |
| HW5100A11 | W3917-042 WVY WSHR (WB) | 1.000 EA |
| 40EP3200B05 | STD PUEP OPEN 311 BRG | 1.000 EA |
| XY3816A12 | 3/8-16 FINISHED NUT | 8.000 EA |
| 10CB3500SP | CONDUIT BOX LID, CAST | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 4.000 EA |
| HW2501H28 | KEY, 1/2 SQ X 3.250 | 1.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (2100/bx) 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 |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.050 LB |
| 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 |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.070 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 4.000 EA |
| 40AD2002A01 | LEXAN BAFFLE 40 FR OPEN | 1.000 EA |
| HA3154A04 | THRUBOLT STUD 3/8-16 X 18.750 | 4.000 EA |
| 40AD2002A01 | LEXAN BAFFLE 40 FR OPEN | 1.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0181 | CONNECTION LABEL | 1.000 EA |
| NP2138LUA | ALUM SUPER-E UL CSA-EEV PREM CC (300SER) | 1.000 EA |
| 40PA1000 | PACKAGING GROUP | 1.000 EA |

| Accessories | | |
|--------------------|--------------------|-------------------|
| Part Number | Description | Multiplier |
| 40-1400 | C FACE KIT | A8 |

AC Induction Motor Performance Data

Record # 66052

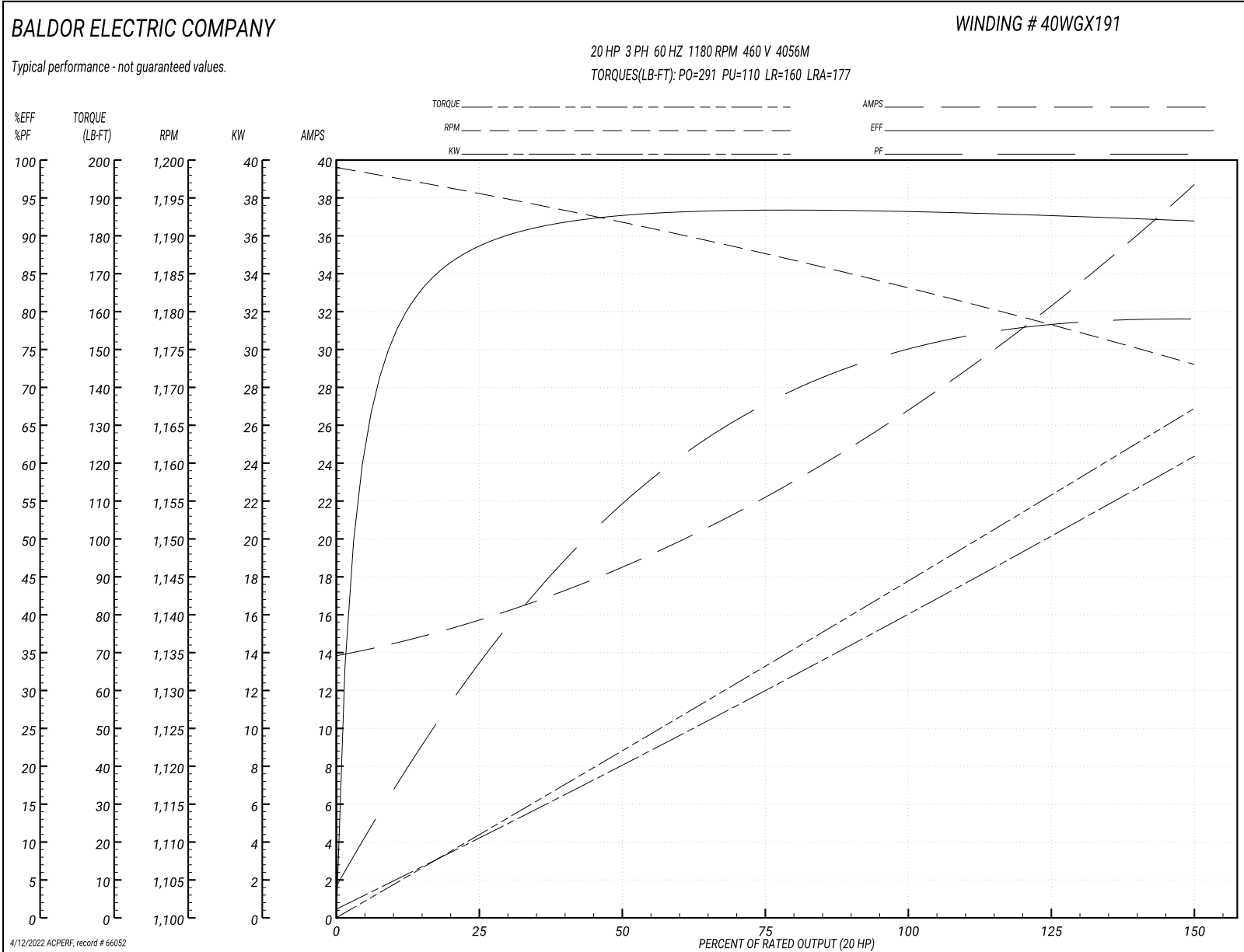
Typical performance - not guaranteed values

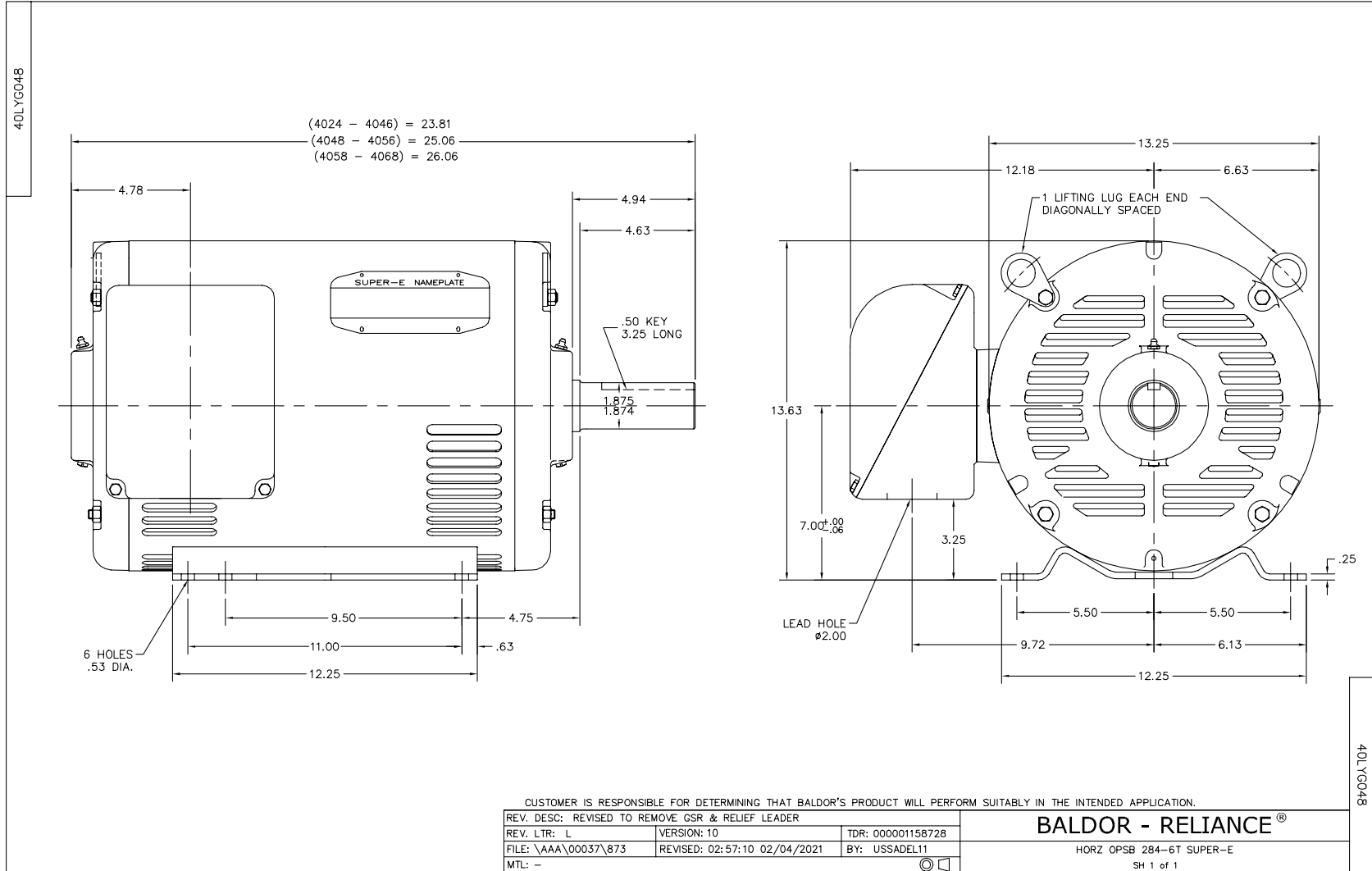
| Winding: 40WGX191-R001 | | Type: 4056M | | Enclosure: OPSB | | | |
|-------------------------------|-----------------|----------------------------|--|------------------------------|-----------|--|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | | | |
| Rated Output (HP) | 20 | Full Load Torque | 88.68 LB-FT | | | | |
| Volts | 230/460 | Start Configuration | direct on line | | | | |
| Full Load Amps | 54/27 | Breakdown Torque | 291 LB-FT | | | | |
| R.P.M. | 1180 | Pull-up Torque | 110 LB-FT | | | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 160 LB-FT | | | |
| NEMA Design Code | A | KVA Code | H | Starting Current | 177 A | | |
| Service Factor (S.F.) | 1.15 | | No-load Current | 14.1 A | | | |
| NEMA Nom. Eff. | 92.4 | Power Factor | 74 | Line-line Res. @ 25°C | 0.38967 Ω | | |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 29°C | | | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 35°C | | | |
| | | | Locked-rotor Power Factor | 31.3 | | | |

Load Characteristics 460 V, 60 Hz, 20 HP

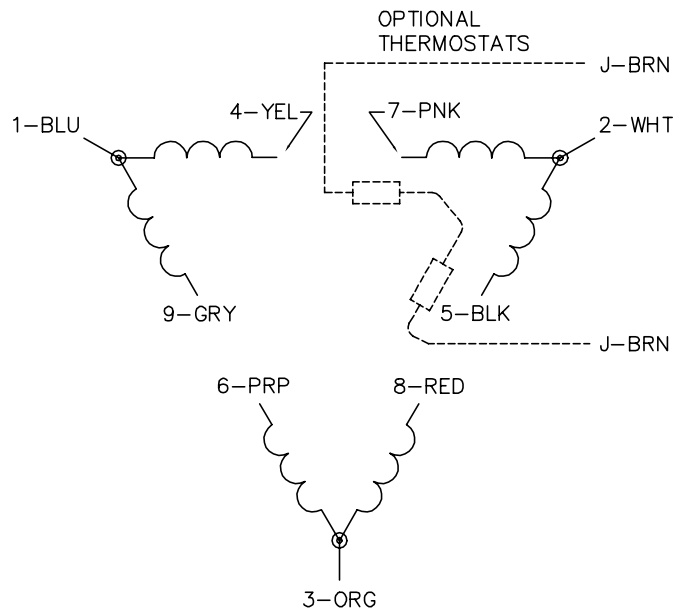
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 34 | 55 | 68 | 74 | 78 | 79 | 76 |
| Efficiency | 88.4 | 92.5 | 93.3 | 93.2 | 92.7 | 91.9 | 92.9 |
| Speed | 1195.7 | 1191.7 | 1187.5 | 1183.3 | 1178.5 | 1172.9 | 1180 |
| Line amperes | 15.4 | 18.3 | 22.2 | 27 | 32.4 | 38.5 | 30.2 |

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values

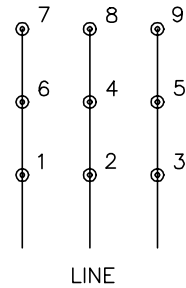




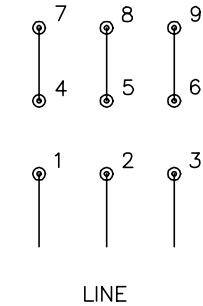
CD0180



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.

CD0180

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|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: D | VERSION: 01 | TDR: 000001099922 |
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3PH, DV, 9 LEADS, DELTA CONNECTION

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