BALDOR • RELIANCE

# Product Information Packet

# EFM2515T

## 20HP,1765RPM,3PH,60HZ,256T,3948M,OPSB,F2

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## Part Detail

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Revision:** | C | **Status:** | PRD/A | **Change #:** | | **Proprietary:** | No |
| **Type:** | AC | **Elec. Spec:** | 39WGX952 | **CD Diagram:** | CD0180 | **Mfg Plant:** | |
| **Mech. Spec:** | 39K70 | **Layout:** | 39LYK070 | **Poles:** | 04 | **Created Date:** | 06-22-2016 |
| **Base:** | RG | **Eff. Date:** | 10-23-2017 | **Leads:** | 9#10 | | |

## Specs

| | | | |
|---|---|---|---|
| **Catalog Number:** | EFM2515T | **Heater Indicator:** | No Heater |
| **Enclosure:** | OPSB | **Insulation Class:** | F |
| **Frame:** | 256T | **Inverter Code:** | Inverter Ready |
| **Frame Material:** | Steel | **KVA Code:** | G |
| **Output @ Frequency:** | 20.000 HP @ 60 HZ | **Lifting Lugs:** | Standard Lifting Lugs |
| **Synchronous Speed @ Frequency:** | 1800 RPM @ 60 HZ | **Locked Bearing Indicator:** | No Locked Bearing |
| **Voltage @ Frequency:** | 460.0 V @ 60 HZ | **Motor Lead Quantity/Wire Size:** | 9 @ 10 AWG |
| | 230.0 V @ 60 HZ | **Motor Lead Exit:** | Ko Box |
| **XP Class and Group:** | None | **Motor Lead Termination:** | Flying Leads |
| **XP Division:** | Not Applicable | **Motor Type:** | 3948M |
| **Agency Approvals:** | UR | **Mounting Arrangement:** | F2 |
| | CSA EEV | **Power Factor:** | 85 |
| | CSA | **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:** | 24.000 A @ 460.0 V |
| | 48.000 A @ 230.0 V |
| | 52.000 A @ 208.0 V |
| **Design Code:** | A |
| **Drip Cover:** | No Drip Cover |
| **Duty Rating:** | CONT |
| **Electrically Isolated Bearing:** | Not Electrically Isolated |
| **Feedback Device:** | NO FEEDBACK |
| **Front Face Code:** | Standard |
| **Front Shaft Indicator:** | None |

| | |
|---|---|
| **Shaft Ground Indicator:** | No Shaft Grounding |
| **Shaft Rotation:** | Reversible |
| **Shaft Slinger Indicator:** | No Slinger |
| **Speed Code:** | Single Speed |
| **Motor Standards:** | NEMA |
| **Starting Method:** | Direct on line |
| **Thermal Device - Bearing:** | NONE (OLD) |
| **Thermal Device - Winding:** | None |
| **Vibration Sensor Indicator:** | No Vibration Sensor |
| **Winding Thermal 1:** | None |
| **Winding Thermal 2:** | None |

## Nameplate NP1259L

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | EFM2515T | | | | | | | | |
| **SPEC.** | 39K070X952G1 | | | | | | | | |
| **HP** | 20 | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | |
| **AMP** | 48/24 | | | | | | | | |
| **RPM** | 1765 | | | | | | | | |
| **FRAME** | 256T | | **HZ** | 60 | | | **PH** | 3 | |
| **SER.F.** | 1.15 | **CODE** | G | **DES** | A | **CL** | F | | |
| **NEMA-NOM-EFF** | 93 | **PF** | 85 | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | |
| **CC** | 010A | | | | | **USABLE AT 208V** | 52 | | |
| **DE** | 6309 | | | **ODE** | 6208 | | | | |
| **ENCL** | OPSB | **SN** | | | | | | | |
| | | | | | | | | | |

## Parts List

| Part Number | Description | Quantity |
|---|---|---|
| SA322622 | SA 39K070X952G1 | 1.000 EA |
| RA310417 | RA 39K070X952G1 | 1.000 EA |
| S/P107-000-005 | SUPER-E PROC'S(254/6 FR.) ZK PLANT - POL | 1.000 EA |
| HA6361A01 | LIFTING LUG FOR 37, 39 & 40 FRAME ZINC | 2.000 EA |
| HA6016 | ADAPTER, CAST CONDUIT BOX | 1.000 EA |
| 09CB3002SP | CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30 | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| WD1000B16 | T&B CX70TN TERMINAL | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 1.000 EA |
| 39EP3200A01SP | FR/PU ENDPLATE, MACH | 1.000 EA |
| HW5100A08 | W3118-035 WVY WSHR (WB) | 1.000 EA |
| 39EP3201A13 | PU ENDPLATE, MACH | 1.000 EA |
| XY3816A12 | 3/8-16 FINISHED NUT | 8.000 EA |
| 09CB3501SP | CONDUIT BOX LID FOR 09CB3001 & 09CB3002 | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 EA |
| HW2501G25 | KEY, 3/8 SQ X 2.875 | 1.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 1.000 EA |
| MJ1000A02 | GREASE, POLYREX EM EXXON (USe 4824-15A) | 0.030 LB |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 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 |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.050 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| 39AD2002A01 | BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS | 1.000 EA |
| 39AD2002A01 | BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS | 1.000 EA |
| HA3154A03 | STUD, 3/8-16 X 17.75 | 4.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0181 | CONNECTION LABEL | 1.000 EA |
| NP1259L | ALUM SUPER-E UL CSA-EEV CC NEMA PREMIUM | 1.000 EA |
| 39PA1000 | PACKAGING GROUP 39 PRINT | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 5/18 | 1.000 EA |

## Accessories

| Part Number | Description | Multiplier |
|---|---|---|
| 39-3400 | C FACE KIT | A8 |

**AC Induction Motor Performance Data**

Record # 56778 - Typical performance - not guaranteed values

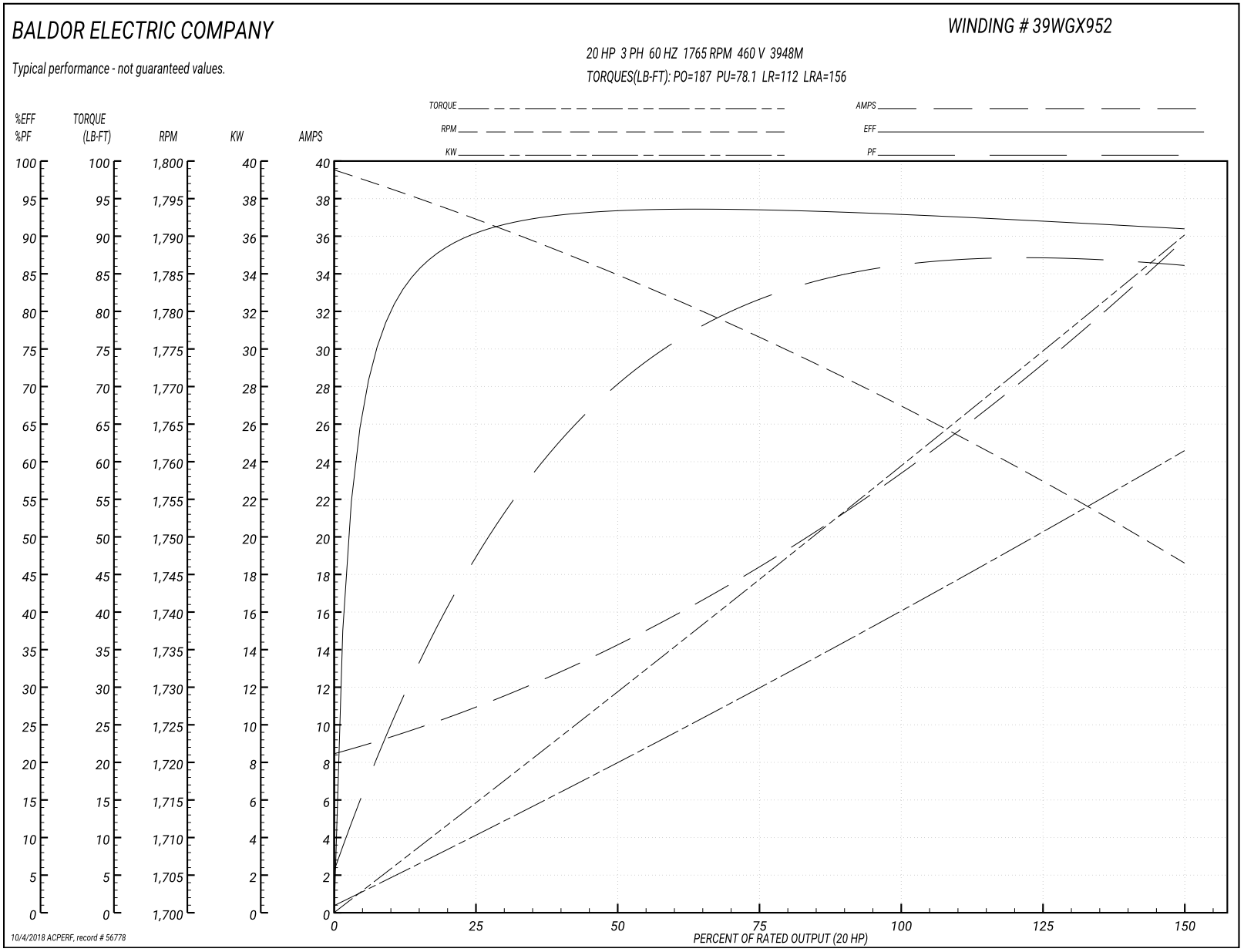
| **Winding:** 39WGX952-R001 | **Type:** 3948M | **Enclosure:** OPSB |
|---|---|---|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|---|---|---|---|---|---|
| Rated Output (HP) | 20 | | | Full Load Torque | 59.7 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 48/24 | | | Breakdown Torque | 187 LB-FT |
| R.P.M. | 1765 | | | Pull-up Torque | 78.1 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 112 LB-FT |
| NEMA Design Code | A | KVA Code | G | Starting Current | 156 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 8.83 A |
| NEMA Nom. Eff. | 93 | Power Factor | 85 | Line-line Res. @ 25ºC | 0.48438 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 37°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 46°C |
| | | | | Locked-rotor Power Factor | 33.3 |

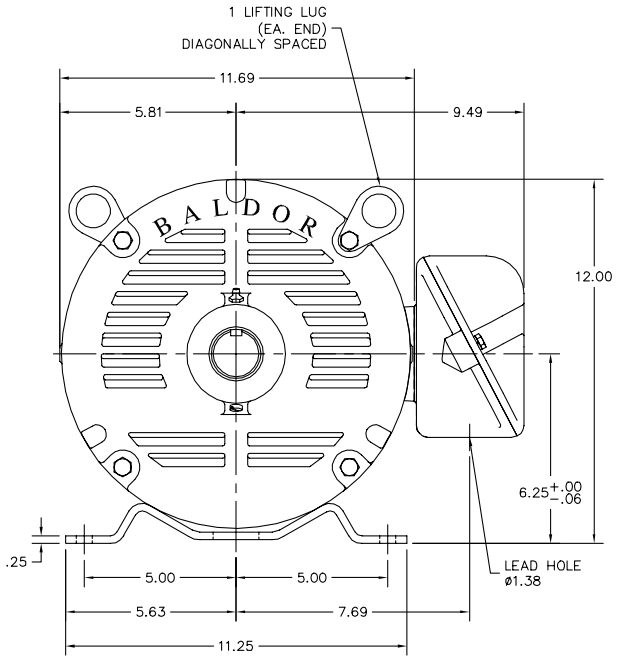
Load Characteristics 460 V, 60 Hz, 20 HP

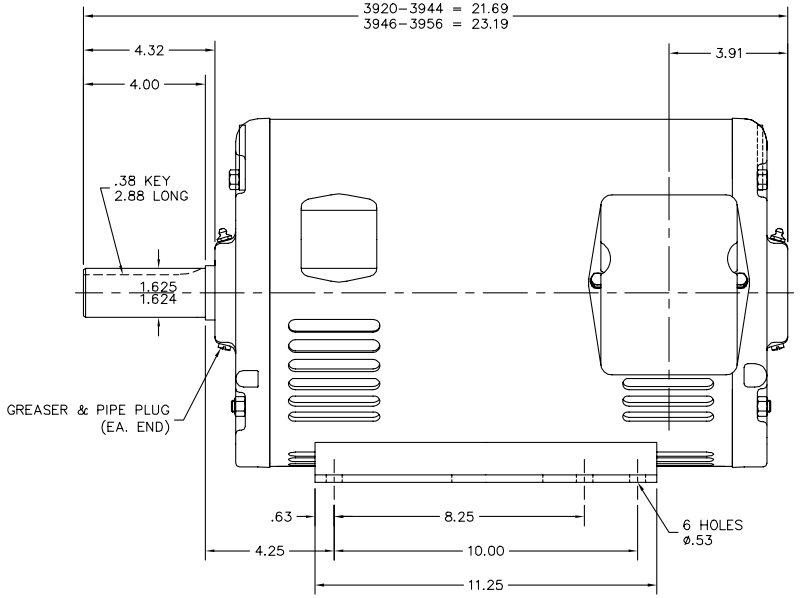
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|---|---|---|---|---|---|---|---|
| Power Factor | 50 | 72 | 81 | 85 | 87 | 87 | 86 |
| Efficiency | 90.2 | 93.3 | 93.5 | 93 | 92.2 | 91 | 92.5 |
| Speed | 1792.2 | 1784.8 | 1776.1 | 1767.5 | 1757.6 | 1746.3 | 1762 |
| Line amperes | 10.5 | 14 | 18.6 | 23.8 | 29.4 | 35.6 | 27.2 |

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



39LYK070




39LYK070

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

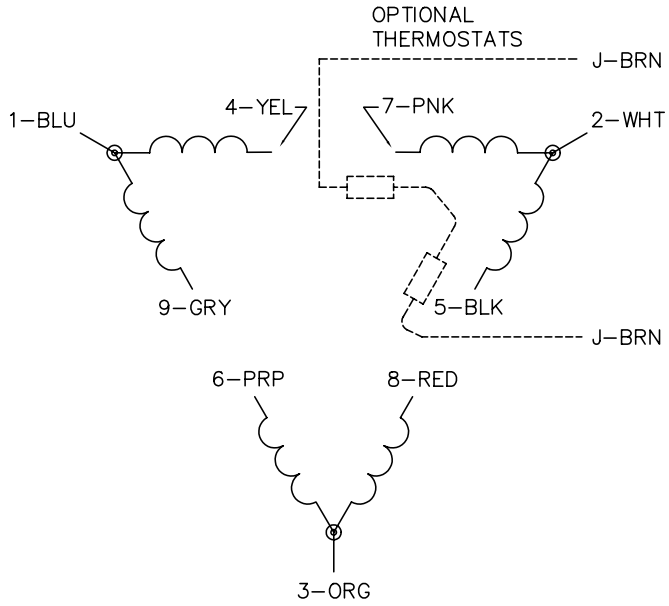
| | | |
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| MTL: – | | |

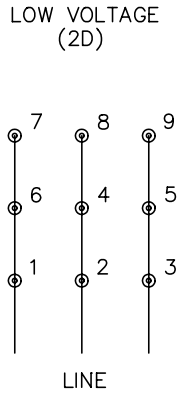
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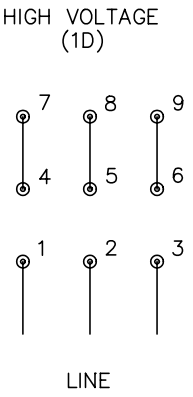
HORZ OPSB 254-6T F2

SH 1 of 1

CD0180




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: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: C | BY: JLP | REVISED: 01/21/99 2:28 | TDR: 0171435 |
| CD0180 | | FILE: AAA00005148 | MDL: – |
| | | MTL: – | 3PH, DV, 9 LEADS, DELTA CONNECTION |

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