

BALDOR • RELIANCE

Customer information packet

EHM2515T

20HP, 1765RPM, 3PH, 60HZ, 256T, 3948M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|--|
| Enclosure | OPSB |
| Frame | 256T |
| Frame Material | Steel |
| Frequency | 60.00 Hz |
| Haz Area Class and Group | None |
| Haz Area Division | Not Applicable |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 20.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| Agency Approvals | CSA 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 | 52.000 A @ 208.0 V 48.000 A @ 230.0 V 24.000 A @ 460.0 V |
| Design Code | A |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 93.0 % |
| 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 | N |
| Type | AC |
| Mech. spec. | 39R006 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 39WGX952 |
| Layout | 39LYR006 |
| Eff. date | 07-10-2024 |
| CD Diagram | CD0180 |
| Poles | 04 |
| Leads | 9#10 |
| Proprietary | False |
| Created date | 06-22-2016 |

| | |
|-------------------------------|-----------------------|
| High Voltage Full Load Amps | 24.0 a |
| Insulation Class | F |
| Inverter Code | Inverter Ready |
| KVA Code | G |
| Lifting Lugs | Standard Lifting Lugs |
| Locked Bearing Indicator | No Locked Bearing |
| Motor Lead Exit | Ko Box |
| Motor Lead Quantity/Wire Size | 9 @ 10 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3948M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 23.19 IN |
| Power Factor | 85 |
| 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 | 1.625 IN |
| Shaft Extension Location | Pulley End |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |
| Speed | 1765 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

| NP2094E06B03 | | | | | | | | | |
|---------------------|--------------|---------------|-----------------------|-------------|---|-----------|-----|--|--|
| CAT.NO. | EHM2515T | | | | | | | | |
| SPEC. | 39R006X952G1 | | | | | | | | |
| HP | 20 | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| AMPS | 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 | | | | N/A | | |
| DE | 6309 | | ODE | 6208 | | | | | |
| AUTO | | MANUAL | | NONE | | | | | |
| ENCL | OPSB | SN | | | | | | | |
| BLANK | | | | | | | | | |

Parts list

| Part number | Description | Quantity |
|---------------|--|----------|
| SA322717 | SA 39R006X952G1 | 1.000 ea |
| RA310516 | RA 39R006X952G1 | 1.000 ea |
| HA6361A01 | LIFTING LUG FOR 37, 39 & 40 FRAME ZINC | 2.000 ea |
| 09CB3003 | CB W/1.75" DIA LD HL - 37, 39, 307 & 309 | 1.000 ea |
| HA6016 | ADAPTER, CAST CONDUIT BOX | 1.000 ea |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 ea |
| 59XW2520G07 | .25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN | 1.000 ea |
| WD1000B16 | T&B CX70TN OR L70P TERMINAL LUG | 1.000 ea |
| 39EP3200A01SP | FR/PU ENDPLATE, MACH | 1.000 ea |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 2.000 ea |
| HW5100A08 | W3118-035 WVY WSHR (WB) | 1.000 ea |
| 39EP3201A23 | PU ENDPLATE, MACH W/AEGIS SH RING MTG | 1.000 ea |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 2.000 ea |
| 84XN0632J08 | #6-32 X .50 SOCK HD, BK OX | 2.000 ea |
| 84XN0540J08 | 5-40 X 1/2" SHCS, BLACK OXIDE | 3.000 ea |
| XY3816A12 | 3/8-16 FINISHED NUT W/SERRATIONS | 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 |
| 39AD2002A01 | BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS | 1.000 ea |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.030 lb |
| 39AD2002A01 | BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS | 1.000 ea |
| HA3154A03 | STUD, 3/8-16 X 17.75 | 4.000 ea |
| MG1050G01 | CELEROL MEDIUM CHARCOAL METALLIC GRAY | 0.050 ga |
| LC0181 | CONNECTION LABEL | 1.000 ea |
| NP2094E06B03 | NP LABEL W/BARCODE (PREM EFF HVAC MTR) | 1.000 ea |
| 39PA1000 | PACKAGING GROUP 39 PRINT | 1.000 ea |
| LD7020E09 | LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS | 1.000 ea |

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. @ 25°C | 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 |

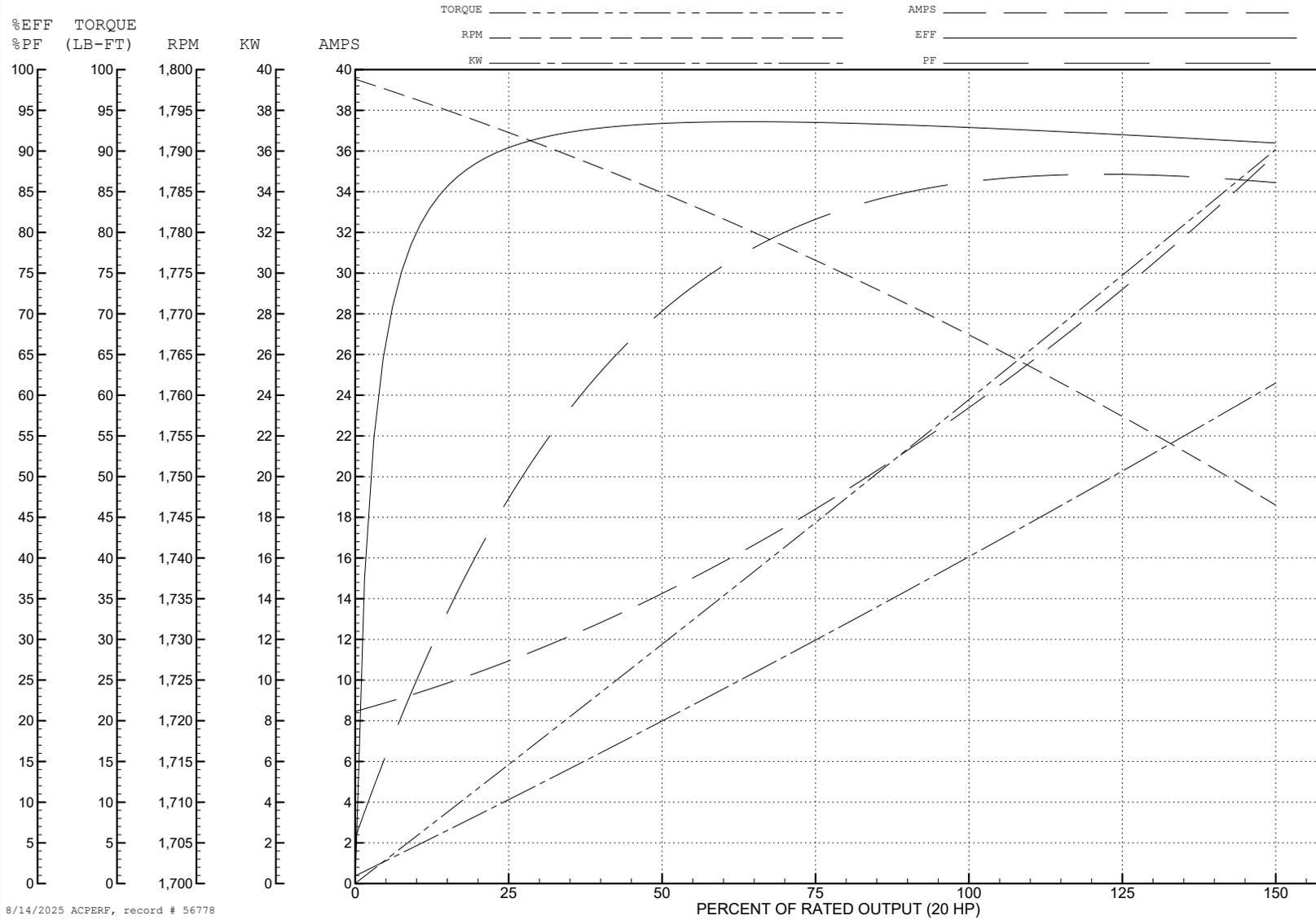
ABB Motors and Mechanical Inc.

WINDING # 39WGX952

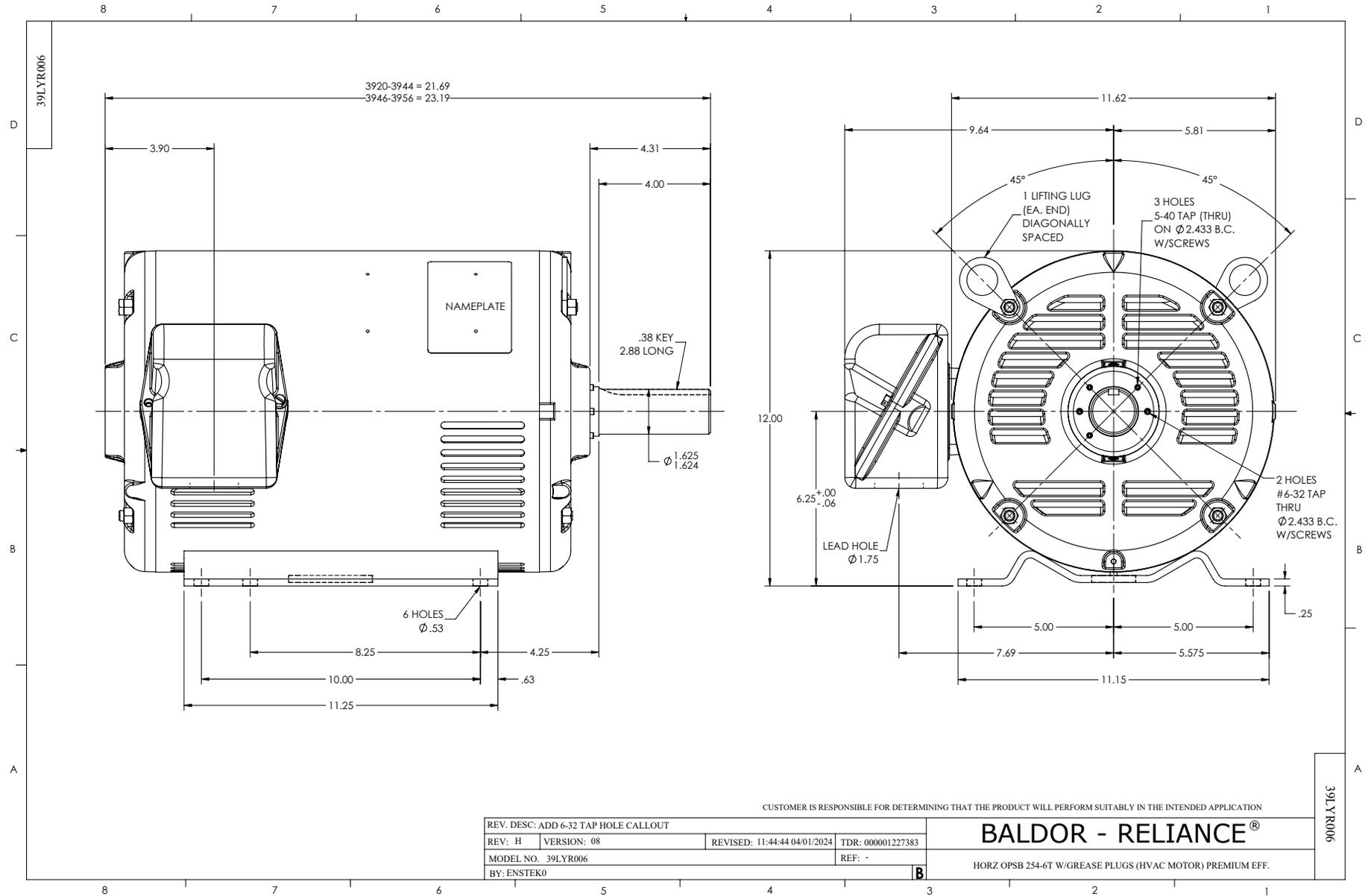
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1765 RPM 460 V 3948M

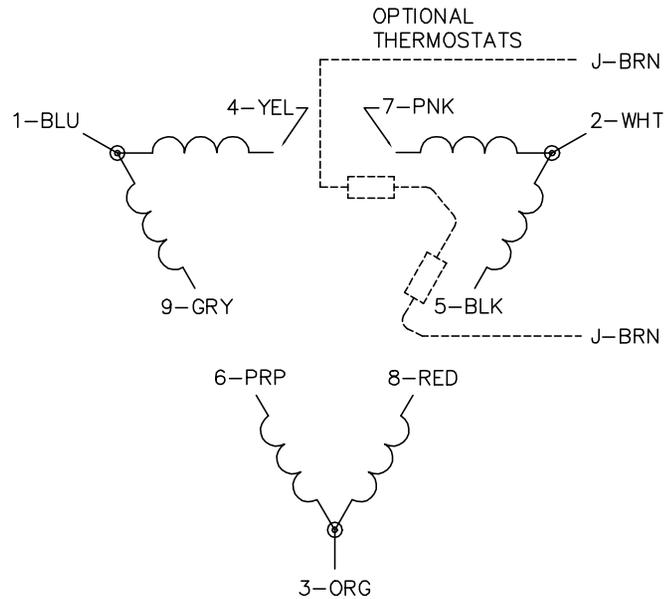
TORQUES (LB-FT): PO=187 PU=78.1 LR=112 LRA=156



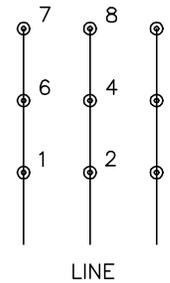
8/14/2025 ACPERF, record # 56778



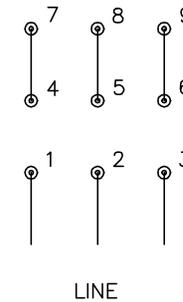
CD0180



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 |
| FILE: \AAA\00005\148 | REVISED: 10: 25: 29 02/19/2019 | BY: ENBRIRO |
| MTL: - | © □ | |

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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