ABB BALDOR RELIANCE

# Customer information packet

## EHM2515T

20HP, 1765RPM, 3PH, 60HZ, 256T, 3948M, OPSB, F1
Class - None
Division - Not Applicable

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## 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 |
| **Auxiliary Box** | NO AUXILLARY BOX |
| **Auxiliary 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** | P |
| **Type** | AC |
| **Mech. spec.** | 39R006 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 39WGX952 |
| **Layout** | 39LYR006 |
| **Eff. date** | 12-12-2025 |
| **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** | | | | | | | | | | | |

**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 |

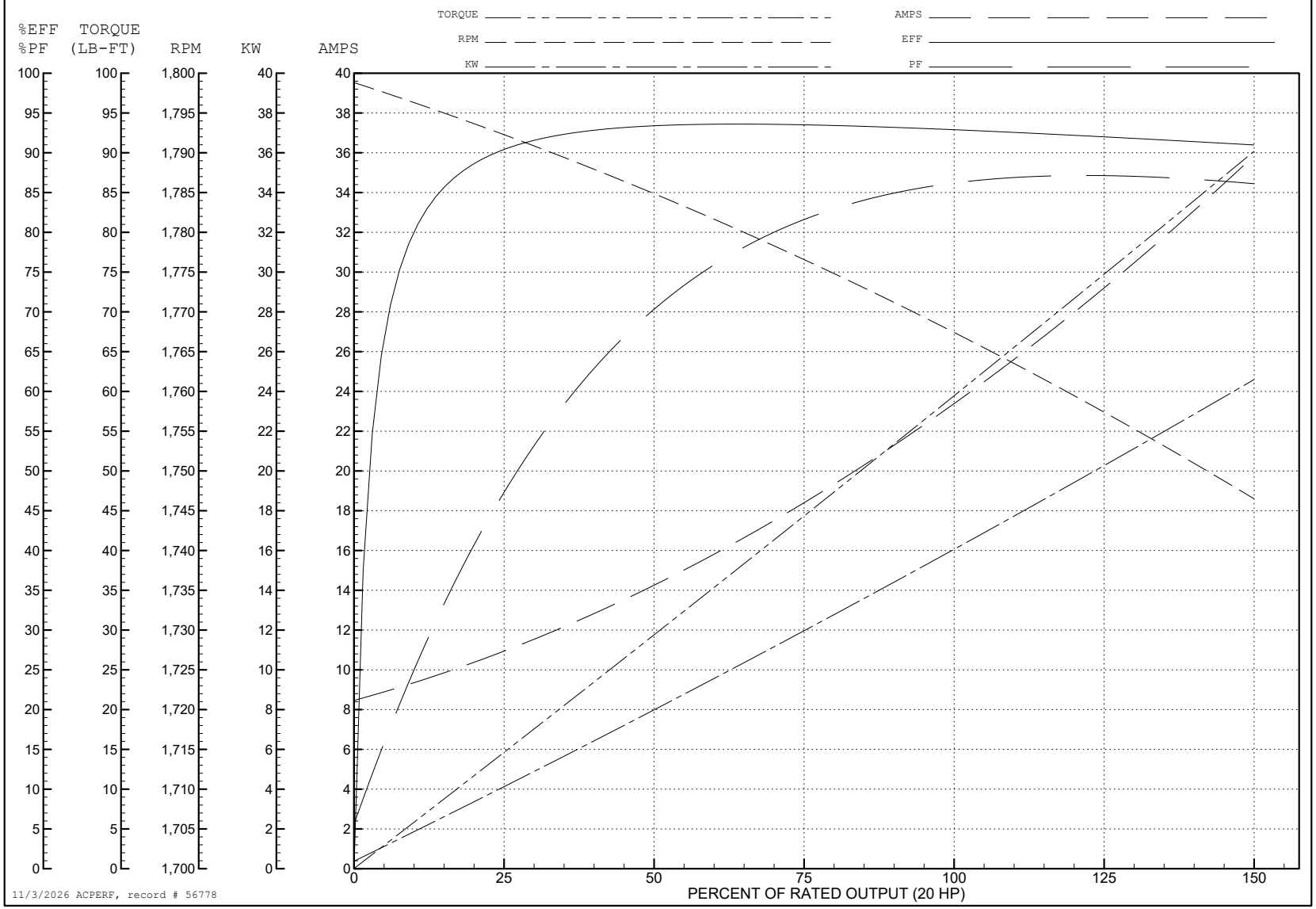
ABB Motors and Mechanical Inc.

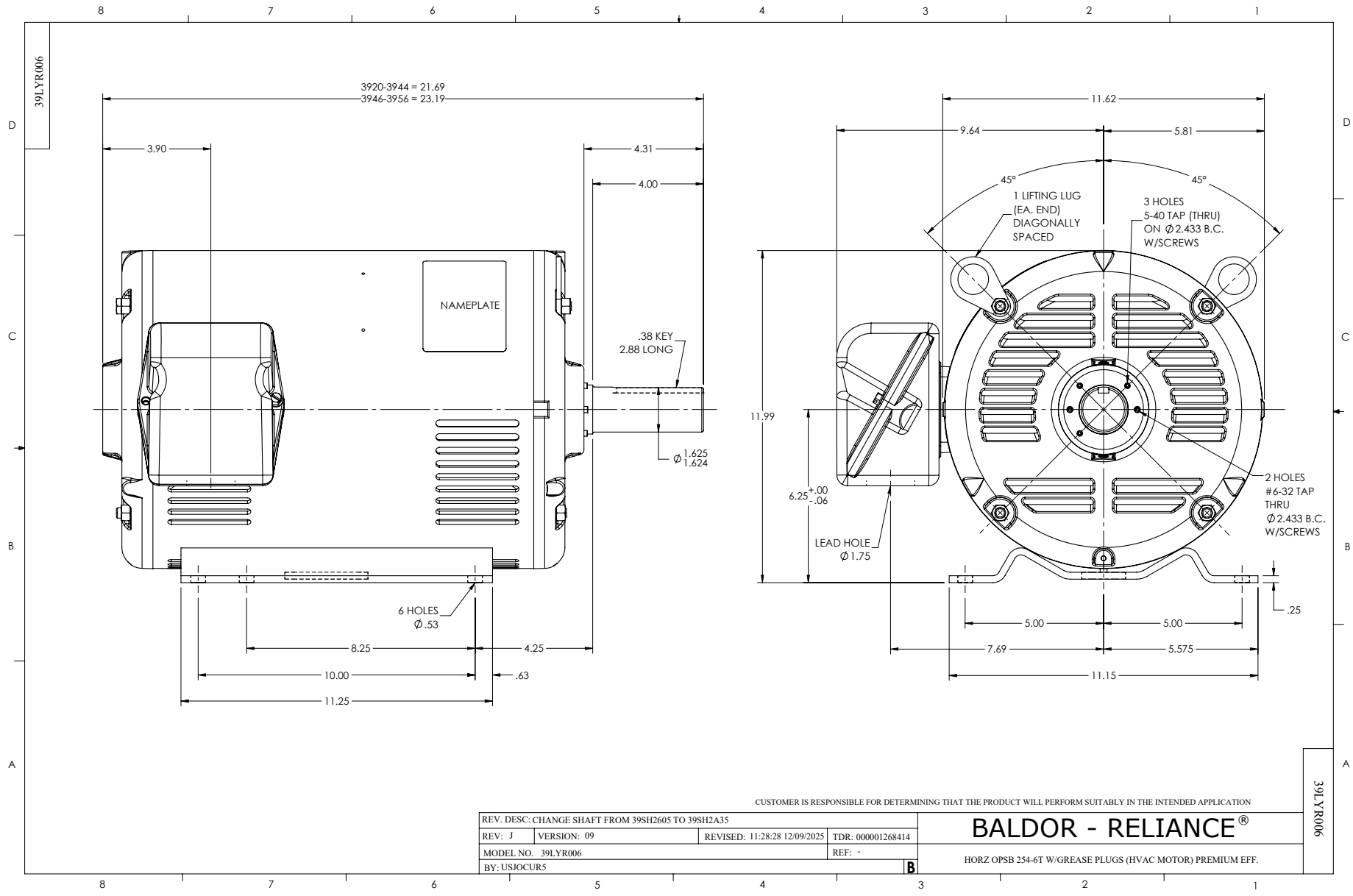
WINDING # 39WGX952

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

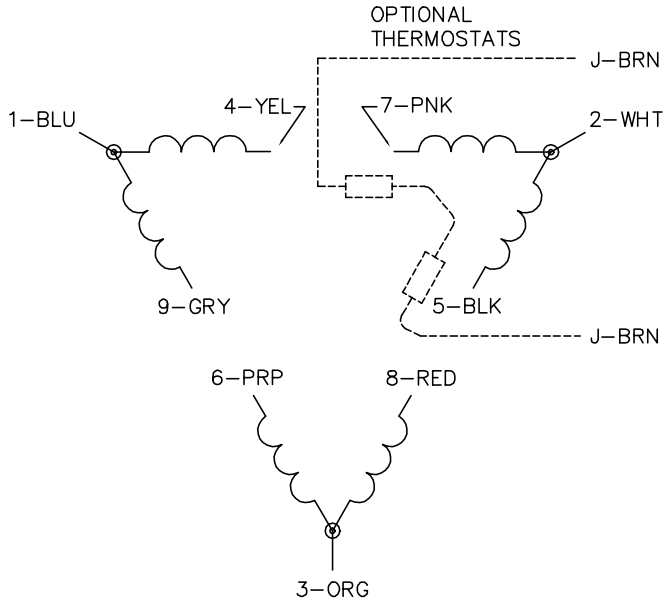
Typical performance - not guaranteed values.

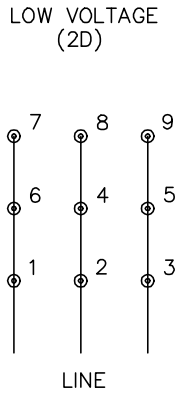
TORQUES(LB-FT): PO=187 PU=78.1 LR=112 LRA=156

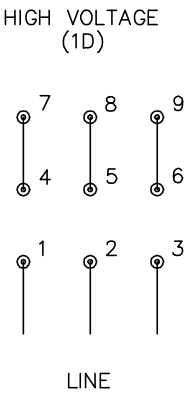



39LYR006
3920-3944 = 21.69
3946-3956 = 23.19
3.90
4.31
4.00
NAMEPLATE
.38 KEY
2.88 LONG
Ø 1.625
1.624
6 HOLES
Ø .53
8.25
4.25
10.00
.63
11.25
11.62
9.64
5.81
45°
45°
1 LIFTING LUG
(EA. END)
DIAGONALLY
SPACED
3 HOLES
5-40 TAP (THRU)
ON Ø 2.433 B.C.
W/SCREWS
11.99
6.25 +.00 -.06
LEAD HOLE
Ø 1.75
2 HOLES
#6-32 TAP
THRU
Ø 2.433 B.C.
W/SCREWS
.25
5.00
5.00
7.69
5.575
11.15
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHANGE SHAFT FROM 39SH2605 TO 39SH2A35
REV: J
VERSION: 09
REVISED: 11:28:28 12/09/2025
TDR: 000001268414
MODEL NO. 39LYR006
REF: -
BY: USJOCUR5
B
BALDOR - RELIANCE®
HORZ OPSB 254-6T W/GREASE PLUGS (HVAC MOTOR) PREMIUM EFF.
39LYR006

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: ADD CLASS CONN00000007 | | |
| REV. LTR: D | VERSION: 01 | TDR: 000001099922 |
| FILE: \AAA\00005\148 | REVISED: 10:25:29 02/19/2019 | BY: ENBRIR0 |
| MTL: – | | |

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1