ABB BALDOR RELIANCE

# Customer information packet

## EHM2528T

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

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## Specifications

| | |
|---|---|
| **Enclosure** | OPSB |
| **Frame** | 286T |
| **Frame Material** | Steel |
| **Frequency** | 60.00 Hz |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | 20.000 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1200 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** | 56.000 A @ 208.0 V |
| | 54.000 A @ 230.0 V |
| | 27.000 A @ 460.0 V |
| **Design Code** | A |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 92.4 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 27.0 a |
| **Insulation Class** | F |
| **Inverter Code** | Inverter Ready |

## Part Detail

| | |
|---|---|
| **Revision** | G |
| **Type** | AC |
| **Mech. spec.** | 40J098 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 40WGX191 |
| **Layout** | 40LYJ098 |
| **Eff. date** | 04-25-2025 |
| **CD Diagram** | CD0180 |
| **Poles** | 06 |
| **Leads** | 9#10 |
| **Proprietary** | False |
| **Created date** | 08-01-2017 |

| | |
|---|---|
| **KVA Code** | H |
| **Lifting Lugs** | Standard Lifting Lugs |
| **Locked Bearing Indicator** | No Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 9 @ 10 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 4056M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 6 |
| **Overall Length** | 25.06 IN |
| **Power Factor** | 74 |
| **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** | 1.875 IN |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 1180 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.** | EHM2528T | | | | | | | | |
| **SPEC.** | 40J098X191G1 | | | | | | | | |
| **HP** | 20 | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | |
| **AMPS** | 54/27 | | | | | | | | |
| **RPM** | 1180 | | | | | | | | |
| **FRAME** | 286T | **HZ** | 60 | **PH** | 3 | | | | |
| **SER.F.** | 1.15 | **CODE** | H | **DES** | A | **CL** | F | | |
| **NEMA-NOM-EFF** | 92.4 | **PF** | 74 | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | |
| **CC** | 010A | **USABLE AT 208V** | | | | N/A | | | |
| **DE** | 6311 | **ODE** | 6309 | | | | | | |
| **AUTO** | | **MANUAL** | | | **NONE** | | | | |
| **ENCL** | OPSB | **SN** | | | | | | | |
| **BLANK** | | | | | | | | | |

**Parts List**

| Part number | Description | Quantity |
|---|---|---|
| SA342649 | SA 40J098X191G1 | 1.000 ea |
| RA331085 | RA 40J098X191G1 | 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 |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 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 |
| 10CB3001 | CONDUIT BOX CAST W/2.500 LEAD HOLE | 1.000 ea |
| 19XW3118A12 | .31-18 X .75 HEX WASHER HEAD TAPTITE II | 2.000 ea |
| 40EP3200A02 | STD FREP OPEN 309 BRG | 1.000 ea |
| HW5100A11 | W3917-042 WVY WSHR (WB) | 1.000 ea |
| 40EP3200B31 | PUEP OPEN 311 BRG W/SH GND MTG | 1.000 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 |
| 10CB3500 | 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 |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 ea |
| MG1050G01 | CELEROL MEDIUM CHARCOAL METALLIC GRAY | 0.070 ga |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 2.000 ea |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.050 lb |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 2.000 ea |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 ea |
| HA3154A04 | THRUBOLT STUD 3/8-16 X 18.750 | 4.000 ea |
| 40AD2002A01 | LEXAN BAFFLE 40 FR OPEN | 1.000 ea |
| 40AD2002A01 | LEXAN BAFFLE 40 FR OPEN | 1.000 ea |
| LC0181 | CONNECTION LABEL | 1.000 ea |
| NP2094E06B03 | NP LABEL W/BARCODE (PREM EFF HVAC MTR) | 1.000 ea |

| | | |
|---|---|---|
| 40PA1000 | PACKAGING GROUP | 1.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2500 bx)11/25 | 1.000 ea |
| FE-0000022 | ZRTG FE ASSEMBLY | 1.000 ea |

**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. @ 25ºC** | 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 |

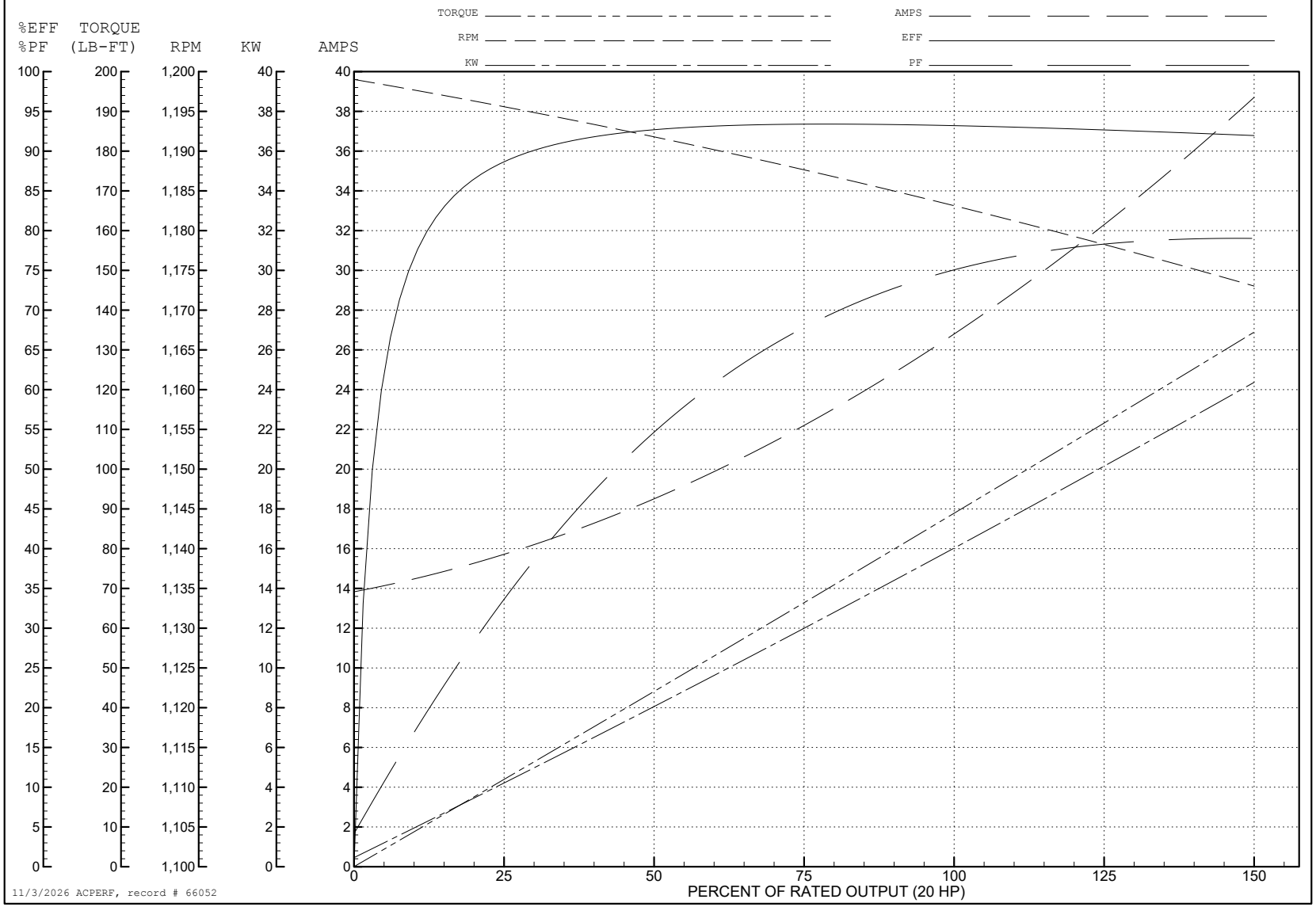
ABB Motors and Mechanical Inc.

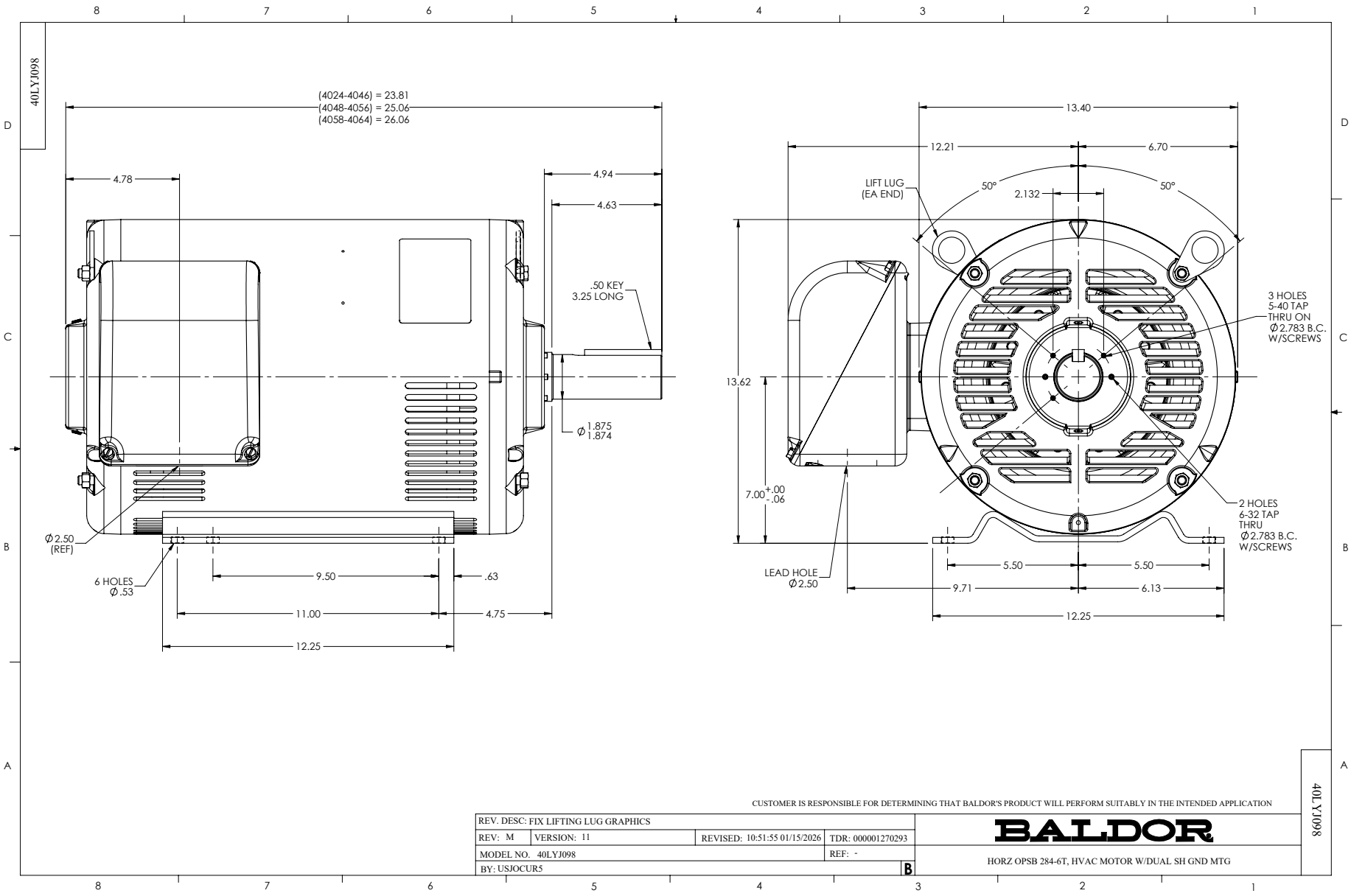
WINDING # 40WGX191

20 HP 3 PH 60 HZ 1180 RPM 460 V 4056M

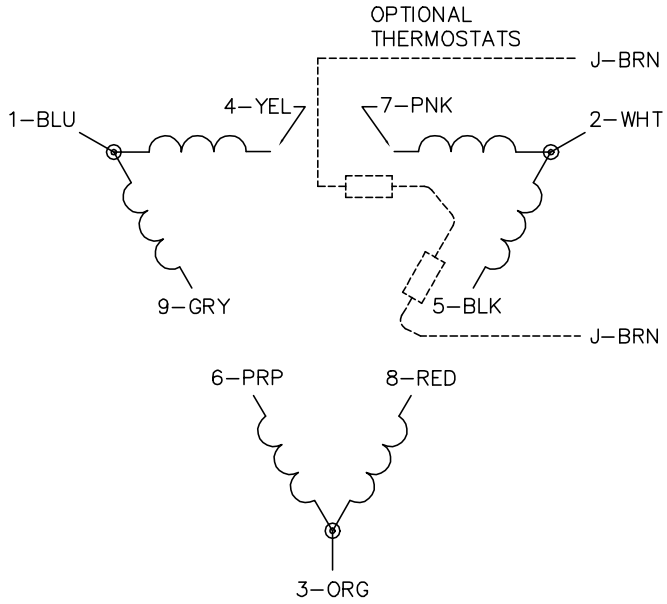
Typical performance - not guaranteed values.

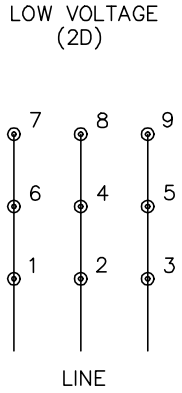
TORQUES(LB-FT): PO=291 PU=110 LR=160 LRA=177

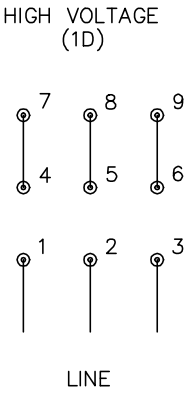



40LYJ098
(4024-4046) = 23.81
(4048-4056) = 25.06
(4058-4064) = 26.06
4.78
4.94
4.63
.50 KEY
3.25 LONG
Ø 1.875
1.874
Ø 2.50
(REF)
6 HOLES
Ø .53
9.50
.63
11.00
4.75
12.25
13.40
12.21
6.70
LIFT LUG
(EA END)
50°
2.132
50°
3 HOLES
5-40 TAP
THRU ON
Ø 2.783 B.C.
W/SCREWS
13.62
7.00 +.00 -.06
2 HOLES
6-32 TAP
THRU
Ø 2.783 B.C.
W/SCREWS
LEAD HOLE
Ø 2.50
5.50
5.50
9.71
6.13
12.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: FIX LIFTING LUG GRAPHICS
REV: M
VERSION: 11
REVISED: 10:51:55 01/15/2026
TDR: 000001270293
MODEL NO. 40LYJ098
REF: -
BY: USJOCUR5
B
BALDOR
HORZ OPSB 284-6T, HVAC MOTOR W/DUAL SH GND MTG
40LYJ098

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