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# Customer information packet

## EHM2528T

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

## 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<br>460.0 V @ 60 HZ                             |
| Agency Approvals               | CSA<br>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<br>54.000 A @ 230.0 V<br>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 |

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>KVA Code</b>                      | <b>H</b>                     |
| <b>Lifting Lugs</b>                  | <b>Standard Lifting Lugs</b> |
| <b>Locked Bearing Indicator</b>      | <b>No Locked Bearing</b>     |
| <b>Motor Lead Quantity/Wire Size</b> | <b>9 @ 10 AWG</b>            |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>          |
| <b>Motor Standards</b>               | <b>NEMA</b>                  |
| <b>Motor Type</b>                    | <b>4056M</b>                 |
| <b>Mounting Arrangement</b>          | <b>F1</b>                    |
| <b>Number of Poles</b>               | <b>6</b>                     |
| <b>Overall Length</b>                | <b>25.06 IN</b>              |
| <b>Power Factor</b>                  | <b>74</b>                    |
| <b>Product Family</b>                | <b>General Purpose</b>       |
| <b>Pulley End Bearing Type</b>       | <b>Ball</b>                  |
| <b>Pulley Face Code</b>              | <b>Standard</b>              |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</b>              |
| <b>Rodent Screen</b>                 | <b>None</b>                  |
| <b>Service Factor</b>                | <b>1.15</b>                  |
| <b>Shaft Diameter</b>                | <b>1.875 IN</b>              |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>    |
| <b>Shaft Rotation</b>                | <b>Reversible</b>            |
| <b>Shaft Slinger Indicator</b>       | <b>No Slinger</b>            |
| <b>Speed</b>                         | <b>1180 rpm</b>              |
| <b>Speed Code</b>                    | <b>Single Speed</b>          |
| <b>Starting Method</b>               | <b>Direct on line</b>        |
| <b>Thermal Device - Bearing</b>      | <b>None</b>                  |
| <b>Thermal Device - Winding</b>      | <b>None</b>                  |
| <b>Vibration Sensor Indicator</b>    | <b>No Vibration Sensor</b>   |
| <b>Winding Thermal 1</b>             | <b>None</b>                  |
| <b>Winding Thermal 2</b>             | <b>None</b>                  |

## 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        |              |        |                |      |   |    |     |  |  |

## 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:<br>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 |

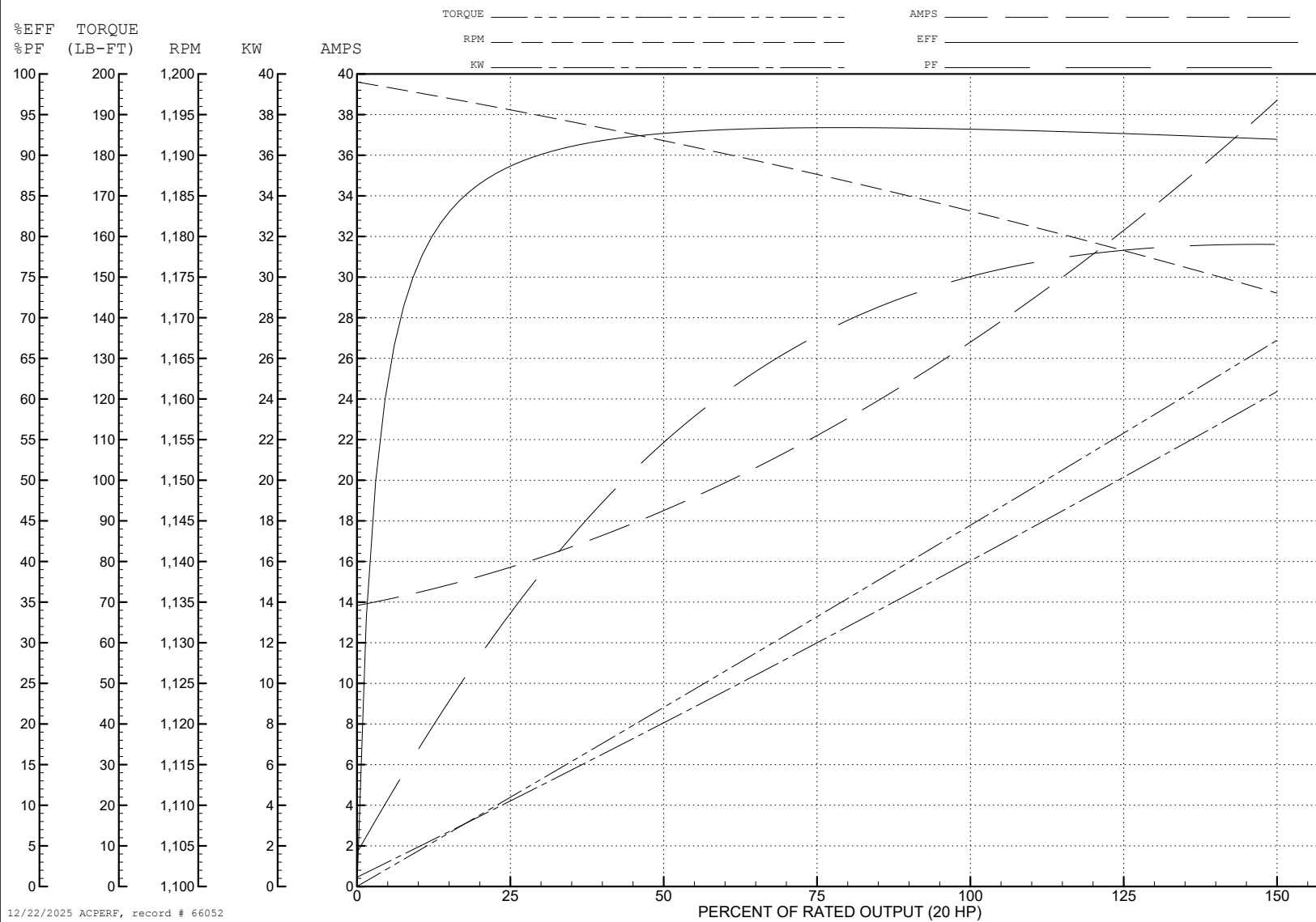
ABB Motors and Mechanical Inc.

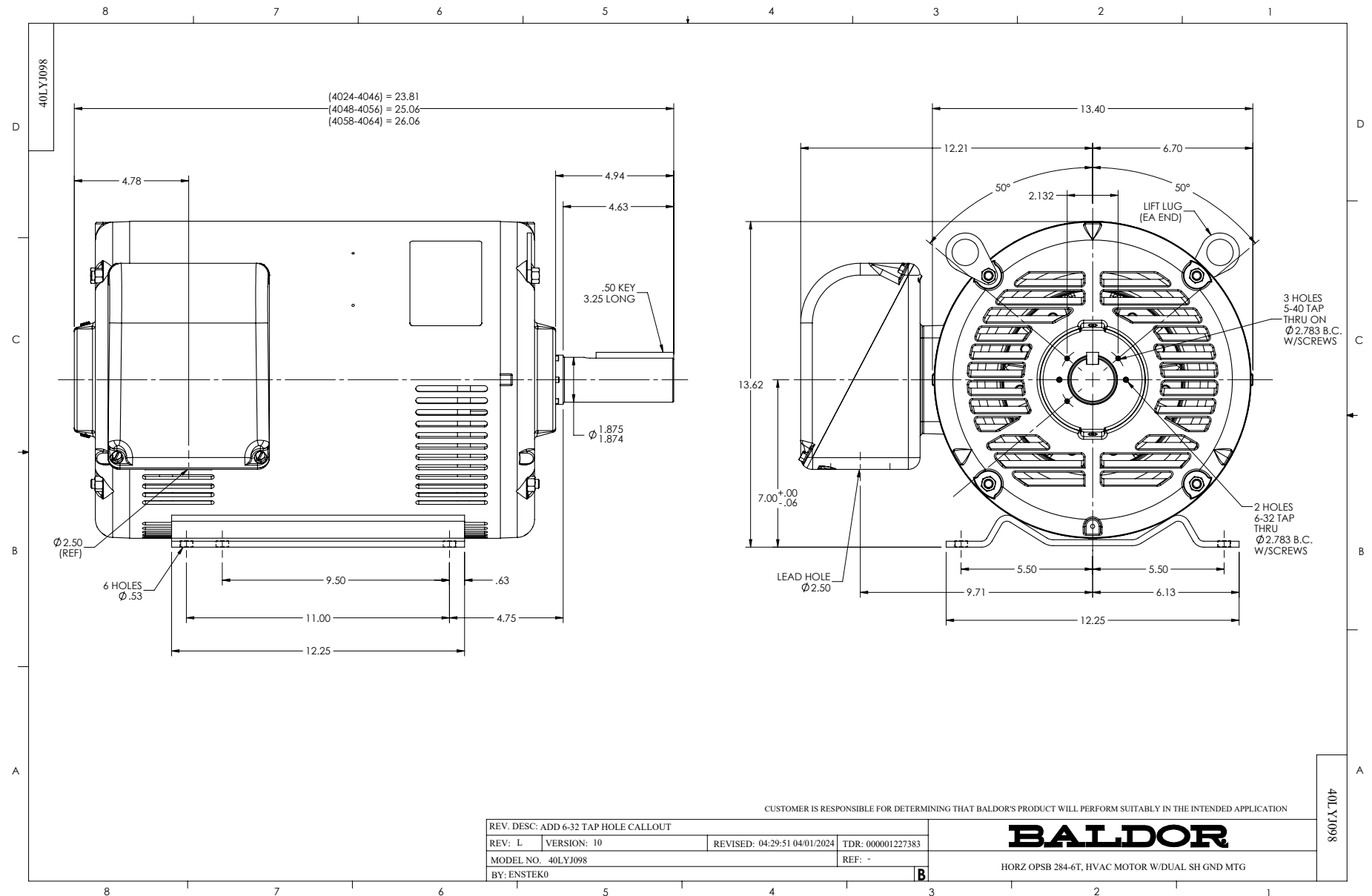
WINDING # 40WGX191

Typical performance - not guaranteed values.

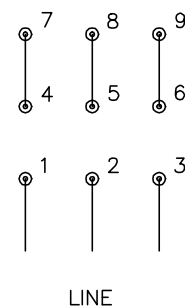
20 HP 3 PH 60 HZ 1180 RPM 460 V 4056M

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





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

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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