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# Customer information packet

## EHM4104T-5

30HP, 1770RPM, 3PH, 60HZ, 286T, 1056M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                           |
|--------------------------------|---------------------------|
| Enclosure                      | TEFC                      |
| Frame                          | 286T                      |
| Frame Material                 | Iron                      |
| Frequency                      | 60.00 Hz                  |
| Haz Area Class and Group       | None                      |
| Haz Area Division              | Not Applicable            |
| Motor Letter Type              | Three Phase               |
| Output @ Frequency             | 30.000 HP @ 60 HZ         |
| Phase                          | 3                         |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ          |
| Voltage @ Frequency            | 575.0 V @ 60 HZ           |
| Agency Approvals               | UR<br>CSA<br>CSA EEV      |
| 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              | 29.000 A @ 575.0 V        |
| Design Code                    | A                         |
| Drip Cover                     | No Drip Cover             |
| Duty Rating                    | CONT                      |
| Efficiency @ 100% Load         | 93.6 %                    |
| Electrically Isolated Bearing  | Not Electrically Isolated |
| Feedback Device                | NO FEEDBACK               |
| Front Face Code                | Standard                  |
| Front Shaft Indicator          | None                      |
| Heater Indicator               | No Heater                 |
| High Voltage Full Load Amps    | 29.0 a                    |
| Insulation Class               | F                         |

## Part detail

|              |            |
|--------------|------------|
| Revision     | AA         |
| Type         | AC         |
| Mech. spec.  | 10H756     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 10WGY759   |
| Layout       | 10LYH756   |
| Eff. date    | 07-10-2024 |
| CD Diagram   | CD0006     |
| Poles        | 04         |
| Leads        | 3#10       |
| Proprietary  | False      |
| Created date | 12-12-2011 |

|                               |                          |
|-------------------------------|--------------------------|
| Inverter Code                 | Inverter Ready           |
| KVA Code                      | G                        |
| Lifting Lugs                  | Standard Lifting Lugs    |
| Locked Bearing Indicator      | Locked Bearing           |
| Motor Lead Exit               | Ko Box                   |
| Motor Lead Quantity/Wire Size | 3 @ 10 AWG               |
| Motor Lead Termination        | Flying Leads             |
| Motor Standards               | NEMA                     |
| Motor Type                    | 1056M                    |
| Mounting Arrangement          | F1                       |
| Number of Poles               | 4                        |
| Overall Length                | 27.76 IN                 |
| Power Factor                  | 83                       |
| 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 Extension Location      | Pulley End               |
| Shaft Ground Indicator        | Mounting Provisions Only |
| Shaft Rotation                | Reversible               |
| Shaft Slinger Indicator       | No Slinger               |
| Speed                         | 1770 rpm                 |
| Speed Code                    | Single Speed             |
| 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

## NP2138L

|              |              |    |          |        |       |        |       |            |           |   |     |  |         |  |      |        |      |
|--------------|--------------|----|----------|--------|-------|--------|-------|------------|-----------|---|-----|--|---------|--|------|--------|------|
| CAT.NO.      | EHM4104T-5   |    |          |        | P/N   |        |       |            | ENCLOSURE |   |     |  | TEFC    |  |      |        |      |
| SPEC.        | 10H756Y759G1 |    |          | CC     | 010A  |        | FRAME |            | 286T      |   | S/N |  |         |  |      |        |      |
| HP           | 30           |    |          |        | CLASS |        | F     |            | HZ        |   | 60  |  |         |  |      |        |      |
| RPM          | 1770         |    |          |        | PH    | 3      |       | DES        |           | A |     |  |         |  |      |        |      |
| VOLT         | 575          |    |          |        |       |        |       |            | KVA-CODE  |   | G   |  | ODE BRG |  | 6309 | DE BRG | 6311 |
| AMP          | 29           |    |          |        |       |        |       |            |           |   |     |  |         |  |      |        |      |
| RATING       | 40C AMB-CONT |    |          |        |       | GREASE |       | POLYREX EM |           |   |     |  |         |  |      |        |      |
| NEMA-NOM-EFF | 93.6         | PF | 83       | SER.F. |       | 1.15   |       |            |           |   |     |  |         |  |      |        |      |
|              | SFA 32.9     |    |          |        |       |        |       |            |           |   |     |  |         |  |      |        |      |
| HTR-VOLTS    |              |    | HTR-AMPS |        |       |        |       |            |           |   |     |  |         |  |      |        |      |

**AC Induction Motor Performance Data**

Record # 30991

Typical performance - not guaranteed values

| Winding: 10WGY759-R001 |    |       | Type: 1056M                           |                     | Enclosure: TEFC           |           |             |
|------------------------|----|-------|---------------------------------------|---------------------|---------------------------|-----------|-------------|
| Nameplate Data         |    |       | 575 V, 60 Hz:<br>Single Voltage Motor |                     |                           |           |             |
| Rated Output (HP)      |    | 30    | Full Load Torque                      |                     | 89.2 LB-FT                |           |             |
| Volts                  |    | 575   | Start Configuration                   |                     | direct on line            |           |             |
| Full Load Amps         |    | 29    | Breakdown Torque                      |                     | 255 LB-FT                 |           |             |
| R.P.M.                 |    | 1770  | Pull-up Torque                        |                     | 120 LB-FT                 |           |             |
| Hz                     | 60 | Phase | 3                                     | Locked-rotor Torque |                           | 136 LB-FT |             |
| NEMA Design Code       |    | B     | KVA Code                              | G                   | Starting Current          |           | 177 A       |
| Service Factor (S.F.)  |    | 1.15  | No-load Current                       |                     | 11.5 A                    |           |             |
| NEMA Nom. Eff.         |    | 93.6  | Power Factor                          | 83                  | Line-line Res. @ 25°C     |           | 0.375 Ω     |
| Rating - Duty          |    | 40C   | AMB-CONT                              |                     | Temp. Rise @ Rated Load   |           | 58°C        |
| S.F. Amps              |    |       |                                       |                     | Temp. Rise @ S.F. Load    |           | 71°C        |
|                        |    |       |                                       |                     | Locked-rotor Power Factor |           | 32          |
|                        |    |       |                                       |                     | Rotor inertia             |           | 4.45 LB-FT2 |

**Load Characteristics 575 V, 60 Hz, 30 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 47   | 69   | 77   | 84   | 84   | 83   | 84   |
| Efficiency      | 90.9 | 93.9 | 94.4 | 94   | 92.9 | 92.5 | 93.4 |
| Speed           | 1794 | 1786 | 1780 | 1773 | 1764 | 1754 | 1768 |
| Line amperes    | 13.3 | 17.6 | 23.4 | 28.5 | 35.9 | 43.6 | 32.9 |

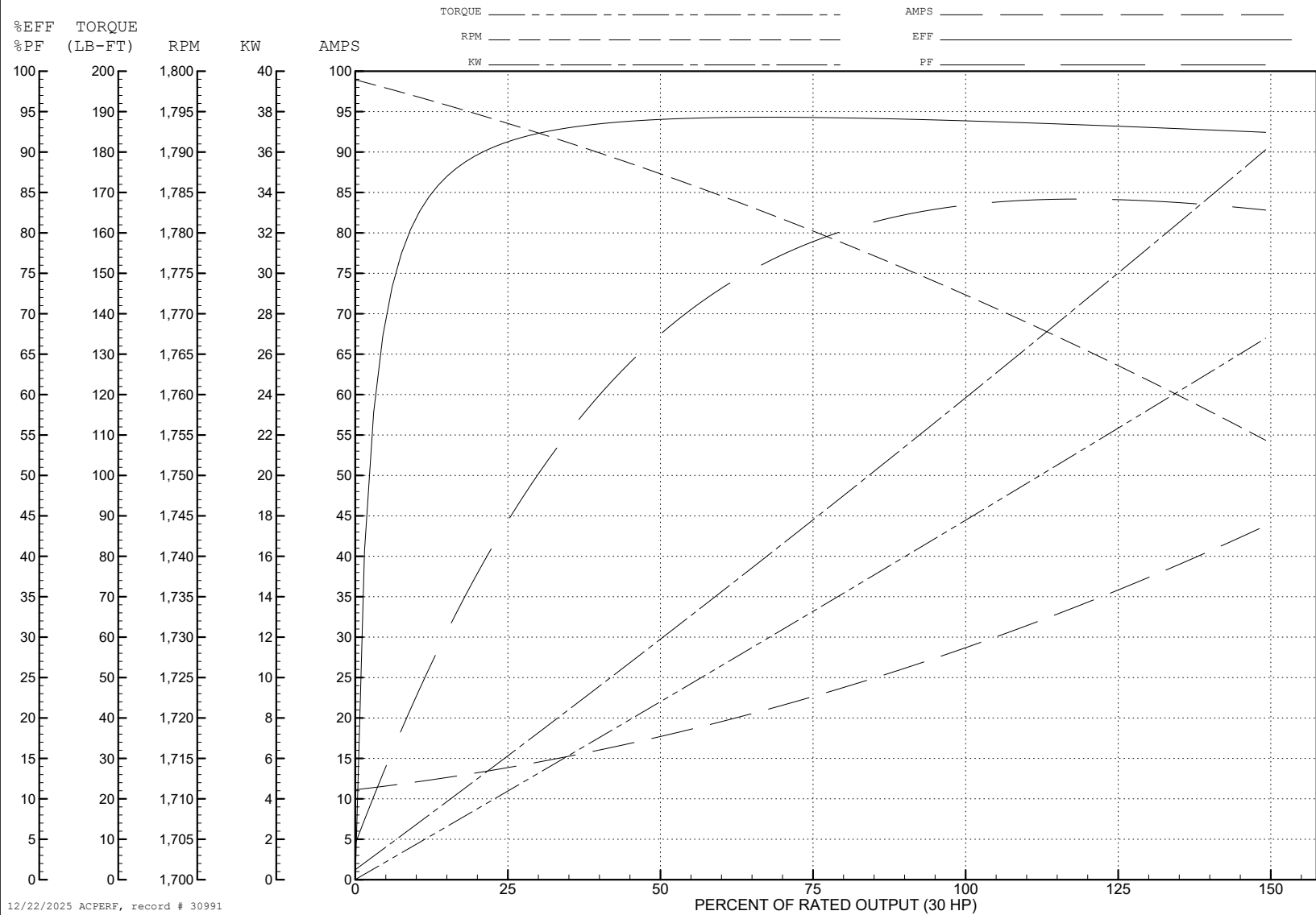
ABB Motors and Mechanical Inc.

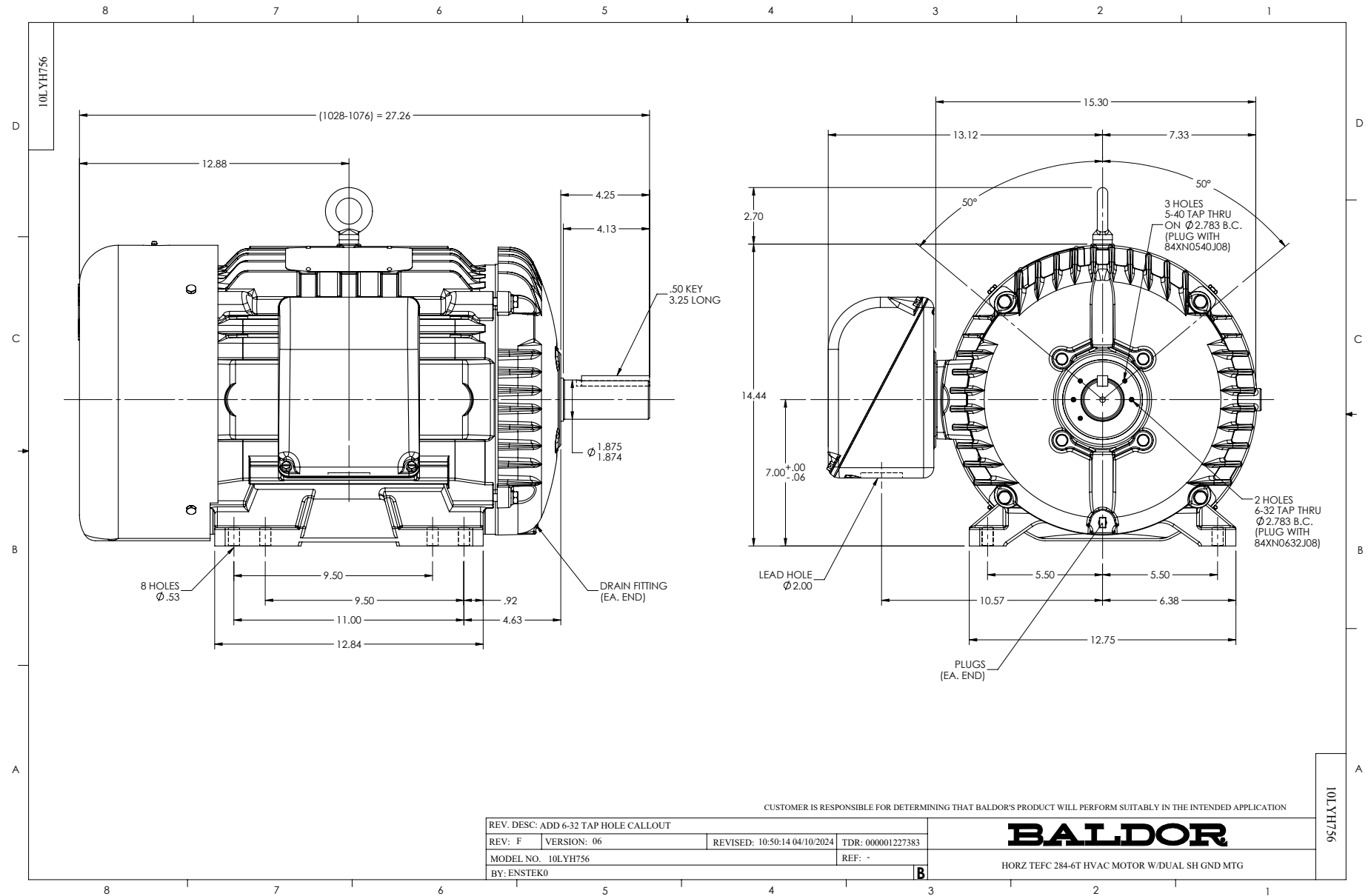
WINDING # 10WGY759

Typical performance - not guaranteed values.

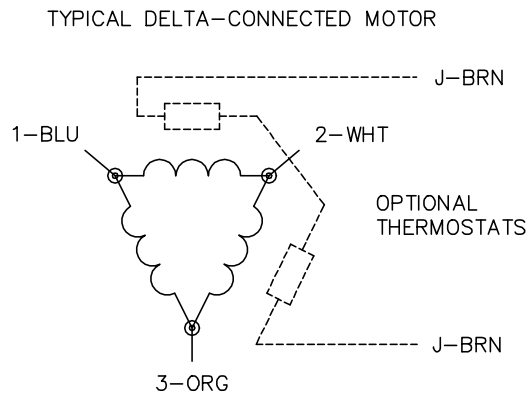
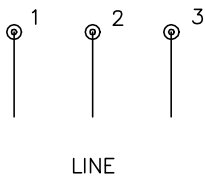
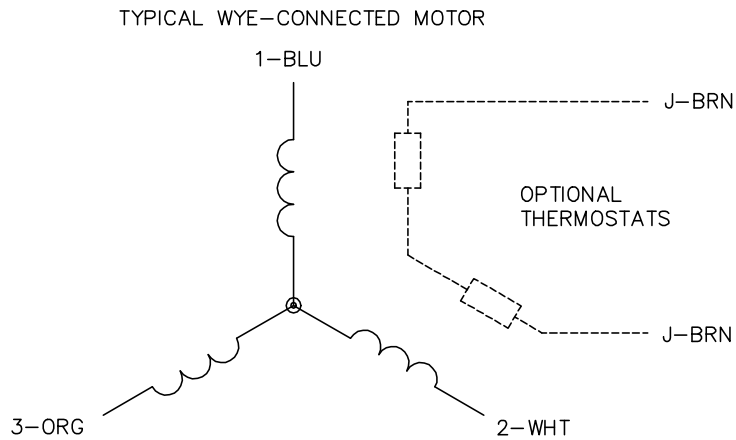
30 HP 3 PH 60 HZ 1770 RPM 575 V 1056M

TORQUES (LB-FT): PO=255 PU=120 LR=136 LRA=177





CD0006



- NOTES:
- 1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
  - 2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
  - 3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
  - 4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
  - 5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

|                                   |                                |                   |
|-----------------------------------|--------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 |                                |                   |
| REV. LTR: E                       | VERSION: 01                    | TDR: 000001099922 |
| FILE: \AAA\00005\141              | REVISED: 10: 24: 49 02/19/2019 | BY: ENBRIRO       |
| MTL: —                            |                                |                   |

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1