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# Customer information packet

## CECP82334T-5

20HP, 1760RPM, 3PH, 60HZ, 256TC, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

## Specifications

|                                |  |
|--------------------------------|--|
| Enclosure                      | TEFC   |
| Frame                          | 256TC  |
| Frame Material                 | Iron   |
| Frequency                      | 60.00 Hz   |
| Haz Area Class and Group       | CLI GP A,B,C,D   |
| Haz Area Division              | Division II  |
| Motor Letter Type              | Three Phase  |
| Output @ Frequency             | 20.000 HP @ 60 HZ  |
| Phase                          | 3  |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ   |
| Voltage @ Frequency            | 575.0 V @ 60 HZ  |
| Agency Approvals               | CCSA US<br>CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>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   |
| Constant Torque Speed Range    | 1.3  |
| Current @ Voltage              | 18.300 A @ 575.0 V                                       |
| Design Code                    | B  |
| Drip Cover                     | No Drip Cover  |
| Duty Rating                    | CONT   |
| Efficiency @ 100% Load         | 93.0 %   |
| Electrically Isolated Bearing  | Not Electrically Isolated                                |
| Enclosure Modification         | 841  |
| Feedback Device                | NO FEEDBACK  |
| Haz Area Temp Code             | T3C  |

## Part detail

|              |              |
|--------------|--------------|
| Revision     | P            |
| Type         | AC           |
| Mech. spec.  |              |
| Base         |              |
| Status       | PRD/A        |
| Elec. spec.  | 09WGT460     |
| Layout       | 09LY-000-401 |
| Eff. date    | 11-14-2023   |
| CD Diagram   | CD0006       |
| Poles        | 04           |
| Leads        | 3#12         |
| Proprietary  | False        |
| Created date | 01-27-2019   |

|                             |                                |
|-----------------------------|--------------------------------|
| Heater Indicator            | No Heater                      |
| High Voltage Full Load Amps | 18.3 a                         |
| Insulation Class            | F                              |
| Inverter Code               | Inverter Duty                  |
| IP Rating                   | IP56                           |
| KVA Code                    | G                              |
| Lifting Lugs                | Standard Lifting Lugs          |
| Locked Bearing Indicator    | Locked Bearing                 |
| Max Speed                   | 2700 rpm                       |
| Motor Lead Termination      | Ring Terminals                 |
| Motor Standards             | NEMA                           |
| Motor Type                  | 0964M                          |
| Mounting Arrangement        | F1                             |
| Number of Poles             | 4                              |
| Overall Length              | 25.28 IN                       |
| Power Factor                | 87                             |
| Product Family              | Chem Process S/P 32-8 IEEE 841 |
| Pulley Face Code            | C-Face                         |
| Rodent Screen               | None                           |
| Service Factor              | 1.15                           |
| Shaft Diameter              | 1.625 IN                       |
| Shaft Ground Indicator      | No Shaft Grounding             |
| Shaft Rotation              | Reversible                     |
| Speed                       | 1760 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**

**NP4332**

|                                |              |                           |      |                    |            |
|--------------------------------|--------------|---------------------------|------|--------------------|------------|
| <b>STK.NO.</b>                 | CECP82334T-5 | <b>P/N</b>                |      | <b>ENCLOSURE</b>   | TEFC       |
| <b>SPEC.</b>                   | 09-0000-0980 | <b>CC</b>                 | 010A | <b>FRAME</b>       | 256TC      |
| <b>HP</b>                      | 20           | <b>CLASS</b>              | F    | <b>HZ</b>          | 60         |
| <b>RPM</b>                     | 1760         | <b>RPM MAX</b>            | 2700 | <b>ODE BRG</b>     | 6309       |
| <b>VOLT</b>                    | 575          | <b>PH</b>                 | 3    | <b>DE BRG</b>      | 6309       |
| <b>AMP</b>                     | 18.3         | <b>DES</b>                | B    | <b>D.E. BRG.</b>   | 45BC03X30X |
| <b>RATING</b>                  | 40C AMB-CONT | <b>PH 3</b>               |      | <b>D.E. BRG.</b>   | 45BC03X30X |
| <b>NEMA-NOM-EFF</b>            | 93           | <b>KVA-CODE</b>           | G    | <b>O.D.E. BRG.</b> | 45BC03X30X |
| <b>G.MIN.EFF</b>               | 91.7         | <b>MOTOR WEIGHT</b>       | 357  | <b>GREASE</b>      | POLYREX EM |
| <b>TEMP CODE</b>               | T3C          | <b>MAX. KVAR</b>          | 3.6  | <b>BLANK</b>       |            |
| <b>TEMP =</b>                  | 160          | <b># OF ROTOR BARS</b>    | 40   | <b>SER.F.</b>      | 1.15       |
| <b>CT HZ FROM</b>              | 1.3          | <b># OF STATOR SLOTS</b>  | 48   | <b>IP</b>          | 56         |
| <b>HTR-VOLTS</b>               |              | <b>PF</b>                 | 87   | <b>INV.TYPE</b>    | PWM        |
| <b>HTR-AMPS</b>                |              | <b>INVERTER-TEMP-CODE</b> | 180  |                    |            |
| <b>HTR-WATTS</b>               |              | <b>C HP FR</b>            | 60   | <b>C HP TO</b>     | 90         |
| <b>MAX. SPACE HEATER TEMP.</b> |              | <b>CT HZ TO</b>           | 60   |                    |            |
| <b>VT HZ FROM</b>              |              |                           |      | <b>VT HZ TO</b>    | 60         |

**AC Induction Motor Performance Data**

Record # 92353

Typical performance - not guaranteed values

| Winding: 09WGT460-R001 |              | Type: 0964M         | Enclosure: TEFC                               |                         |           |
|------------------------|--------------|---------------------|---|-------------------------|-----------|
| <b>Nameplate Data</b>  |              |                     | <b>575 V, 60 Hz:<br/>Single Voltage Motor</b> |                         |           |
| Rated Output (HP)      | 20           | Full Load Torque    | 59.57 LB-FT                                   |                         |           |
| Volts                  | 575          | Start Configuration | direct on line                                |                         |           |
| Full Load Amps         | 18.3         | Breakdown Torque    | 181 LB-FT                                     |                         |           |
| R.P.M.                 | 1760         | Pull-up Torque      | 92.68 LB-FT                                   |                         |           |
| Hz                     | 60           | Phase               | 3   | Locked-rotor Torque     | 113 LB-FT |
| NEMA Design Code       | B            | KVA Code            | G   | Starting Current        | 116 A     |
| Service Factor (S.F.)  | 1.15         | No-load Current     | 5.49 A  |                         |           |
| NEMA Nom. Eff.         | 93           | Power Factor        | 87  | Line-line Res. @ 25°C   | 0.632 Ω   |
| Rating - Duty          | 40C AMB-CONT |                     | Temp. Rise @ Rated Load                       | 60°C                    |           |
| S.F. Amps              |              |                     | Temp. Rise @ S.F. Load                        | 75°C                    |           |
|                        |              |                     | Locked-rotor Power Factor                     | 29.3                    |           |
|                        |              |                     | Rotor inertia                                 | 2.81 lb-ft <sup>2</sup> |           |

**Load Characteristics 575 V, 60 Hz, 20 HP**

| % of Rated Load | 25   | 50    | 75    | 100   | 125   | 150   | S.F. |
|-----------------|------|-------|-------|-------|-------|-------|------|
| Power Factor    | 58   | 78    | 85    | 88    | 88    | 88    | 88   |
| Efficiency      | 91.5 | 93.8  | 93.9  | 93    | 92.2  | 90.9  | 92.4 |
| Speed           | 1792 | 1783  | 1774  | 1764  | 1753  | 1739  | 1755 |
| Line amperes    | 7.06 | 10.17 | 14.04 | 18.31 | 22.96 | 28.15 | 21.2 |

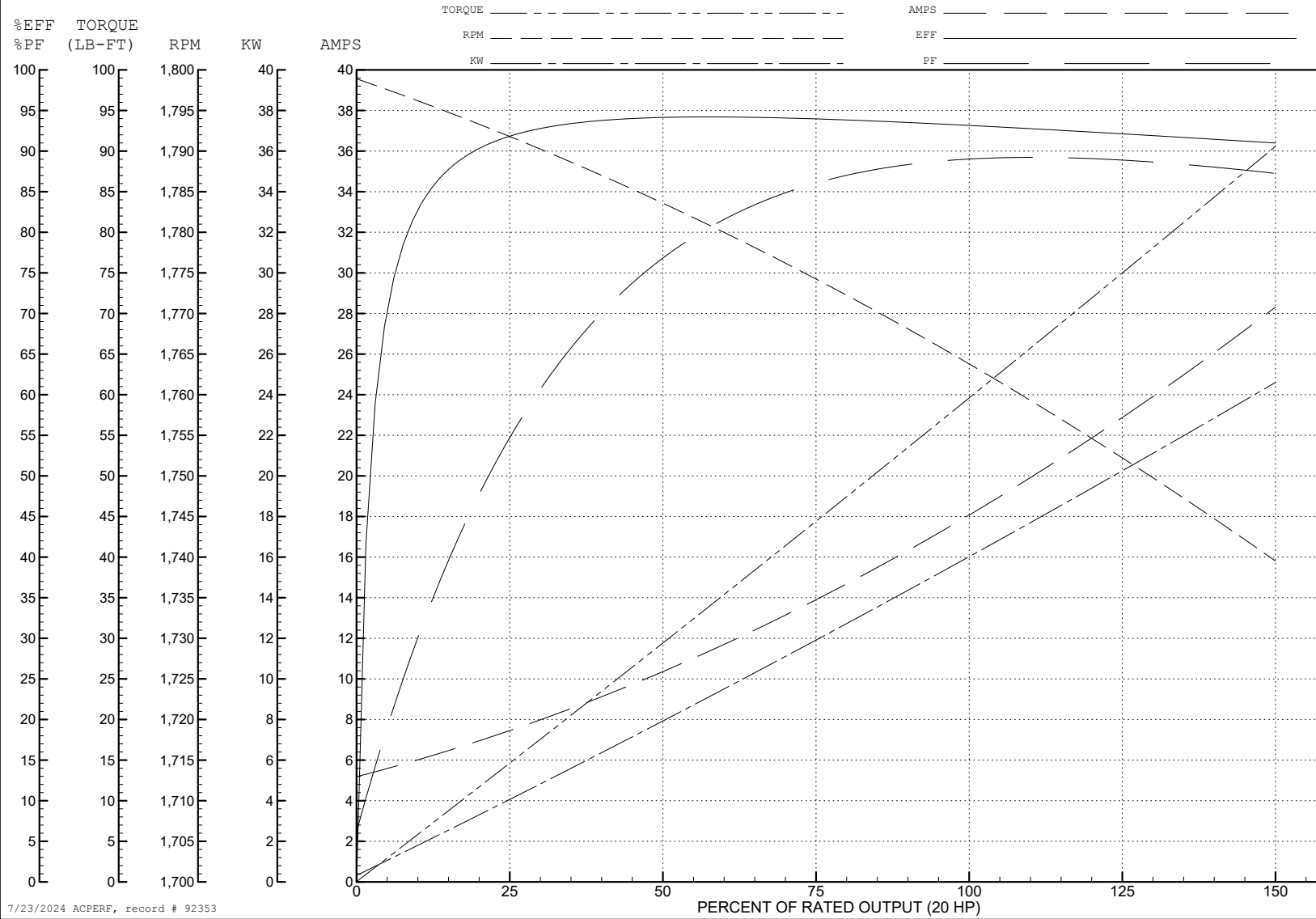
ABB Motors and Mechanical Inc.

WINDING # 09WGT460

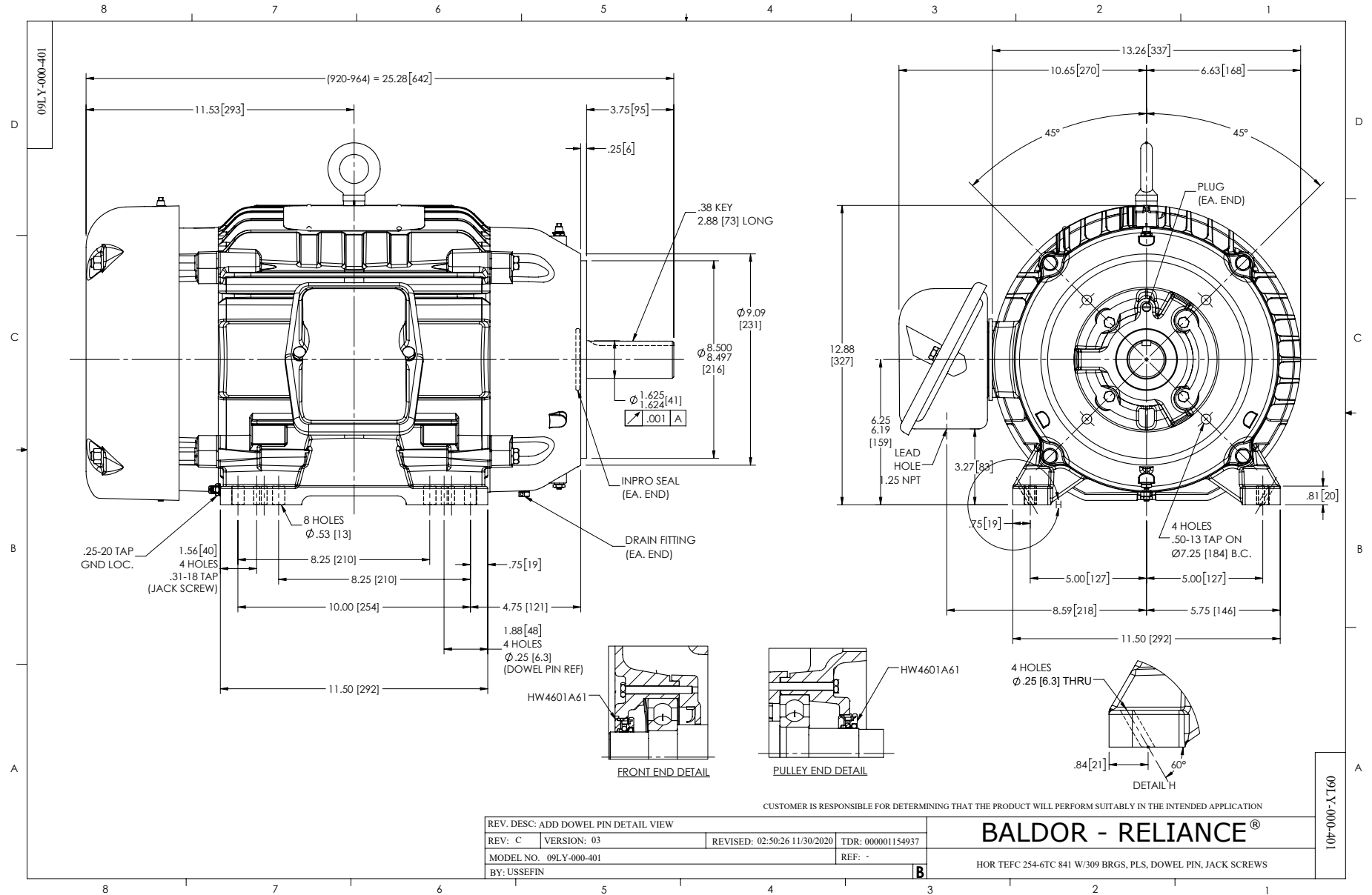
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1760 RPM 575 V 0964M

TORQUES (LB-FT): PO=181 PU=92.68 LR=113 LRA=116



7/23/2024 ACPERF, record # 92353



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