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# Customer information packet

## VEM3665T-5

5HP, 1750RPM, 3PH, 60HZ, 184TC, 0641M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                                                           |
|--------------------------------|-----------------------------------------------------------|
| Enclosure                      | TEFC                                                      |
| Frame                          | 184TC                                                     |
| 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             | 5.000 HP @ 60 HZ                                          |
| Phase                          | 3                                                         |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                                          |
| Voltage @ Frequency            | 575.0 V @ 60 HZ                                           |
| Agency Approvals               | CSA EEV<br>CURUSEEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR |
| Ambient Temperature            | 40 °C                                                     |
| Auxiliary Box                  | NO AUXILLARY BOX                                          |
| Auxiliary Box Lead Termination | None                                                      |
| Base Indicator                 | No Mounting                                               |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                   |
| Blower                         | None                                                      |
| Current @ Voltage              | 5.300 A @ 575.0 V                                         |
| Design Code                    | B                                                         |
| Drip Cover                     | No Drip Cover                                             |
| Duty Rating                    | CONT                                                      |
| Efficiency @ 100% Load         | 89.5 %                                                    |
| 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.  | 06H016     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 06WGX200   |
| Layout       | 06LYH016   |
| Eff. date    | 06-09-2025 |
| CD Diagram   | CD0006     |
| Poles        | 04         |
| Leads        | 3#16       |
| Proprietary  | False      |
| Created date | 08-04-2010 |

|                               |                       |
|-------------------------------|-----------------------|
| High Voltage Full Load Amps   | 5.3 a                 |
| Insulation Class              | F                     |
| Inverter Code                 | Inverter Ready        |
| KVA Code                      | J                     |
| Lifting Lugs                  | Standard Lifting Lugs |
| Locked Bearing Indicator      | Locked Bearing        |
| Motor Lead Exit               | Ko Box                |
| Motor Lead Quantity/Wire Size | 3 @ 16 AWG            |
| Motor Lead Termination        | Flying Leads          |
| Motor Standards               | NEMA                  |
| Motor Type                    | 0642M                 |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 4                     |
| Overall Length                | 15.98 IN              |
| Power Factor                  | 79                    |
| Product Family                | General Purpose       |
| Pulley End Bearing Type       | Ball                  |
| Pulley Face Code              | C-Face                |
| Pulley Shaft Indicator        | Standard              |
| Rodent Screen                 | None                  |
| RoHS Status                   | ROHS COMPLIANT        |
| Service Factor                | 1.15                  |
| Shaft Diameter                | 1.125 IN              |
| Shaft Extension Location      | Pulley End            |
| Shaft Ground Indicator        | No Shaft Grounding    |
| Shaft Rotation                | Reversible            |
| Shaft Slinger Indicator       | No Slinger            |
| Speed                         | 1750 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

| NP3441L                   |              |      |     |      |   |    |   |  |  |
|---------------------------|--------------|------|-----|------|---|----|---|--|--|
| CAT.NO.                   | VEM3665T-5   |      |     |      |   |    |   |  |  |
| SPEC.                     | 06H016X200G1 |      |     |      |   |    |   |  |  |
| HP                        | 5            |      |     |      |   |    |   |  |  |
| VOLTS                     | 575          |      |     |      |   |    |   |  |  |
| AMP                       | 5.3          |      |     |      |   |    |   |  |  |
| RPM                       | 1750         |      |     |      |   |    |   |  |  |
| FRAME                     | 184TC        |      | HZ  | 60   |   | PH | 3 |  |  |
| SER.F.                    | 1.15         | CODE | J   | DES  | B | CL | F |  |  |
| NEMA-NOM-EFF              | 89.5         | PF   | 79  |      |   |    |   |  |  |
| RATING                    | 40C AMB-CONT |      |     |      |   |    |   |  |  |
| CC                        | 010A         |      |     |      |   |    |   |  |  |
| DE                        | 6206         |      | ODE | 6205 |   |    |   |  |  |
| ENCL                      | TEFC         | SN   |     |      |   |    |   |  |  |
| VPWM INVERTER READY       |              |      |     |      |   |    |   |  |  |
| CT6-60H(10:1)VT3-60H(20:1 |              |      |     |      |   |    |   |  |  |
|                           | SFA 5.8      |      |     |      |   |    |   |  |  |

**AC Induction Motor Performance Data**

Record # 81830

Typical performance - not guaranteed values

| Winding: 06WGX200-R001 |    |              | Type: 0642M                           |                           | Enclosure: TEFC  |                       |         |
|------------------------|----|--------------|---------------------------------------|---------------------------|------------------|-----------------------|---------|
| Nameplate Data         |    |              | 575 V, 60 Hz:<br>Single Voltage Motor |                           |                  |                       |         |
| Rated Output (HP)      |    | 5            | Full Load Torque                      |                           | 15.03 LB-FT      |                       |         |
| Volts                  |    | 575          | Start Configuration                   |                           | direct on line   |                       |         |
| Full Load Amps         |    | 5.3          | Breakdown Torque                      |                           | 52.33 LB-FT      |                       |         |
| R.P.M.                 |    | 1750         | Pull-up Torque                        |                           | 21.64 LB-FT      |                       |         |
| Hz                     | 60 | Phase        | 3                                     | Locked-rotor Torque       |                  | 30.73 LB-FT           |         |
| NEMA Design Code       |    | B            | KVA Code                              | J                         | Starting Current |                       | 36.26 A |
| Service Factor (S.F.)  |    | 1.15         |                                       | No-load Current           |                  | 2.34 A                |         |
| NEMA Nom. Eff.         |    | 89.5         | Power Factor                          |                           | 79               | Line-line Res. @ 25°C | 4.27 Ω  |
| Rating - Duty          |    | 40C AMB-CONT |                                       | Temp. Rise @ Rated Load   |                  | 54°C                  |         |
| S.F. Amps              |    |              |                                       | Temp. Rise @ S.F. Load    |                  | 67°C                  |         |
|                        |    |              |                                       | Locked-rotor Power Factor |                  | 40.6                  |         |
|                        |    |              |                                       | Rotor inertia             |                  | 0.391 lb-ft²          |         |

**Load Characteristics 575 V, 60 Hz, 5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 42   | 64   | 76   | 81   | 84   | 85   | 83   |
| Efficiency      | 85.2 | 89.8 | 90.3 | 89.6 | 88.2 | 86.6 | 88.8 |
| Speed           | 1788 | 1777 | 1764 | 1751 | 1736 | 1719 | 1742 |
| Line amperes    | 2.61 | 3.26 | 4.13 | 5.14 | 6.31 | 7.59 | 5.84 |

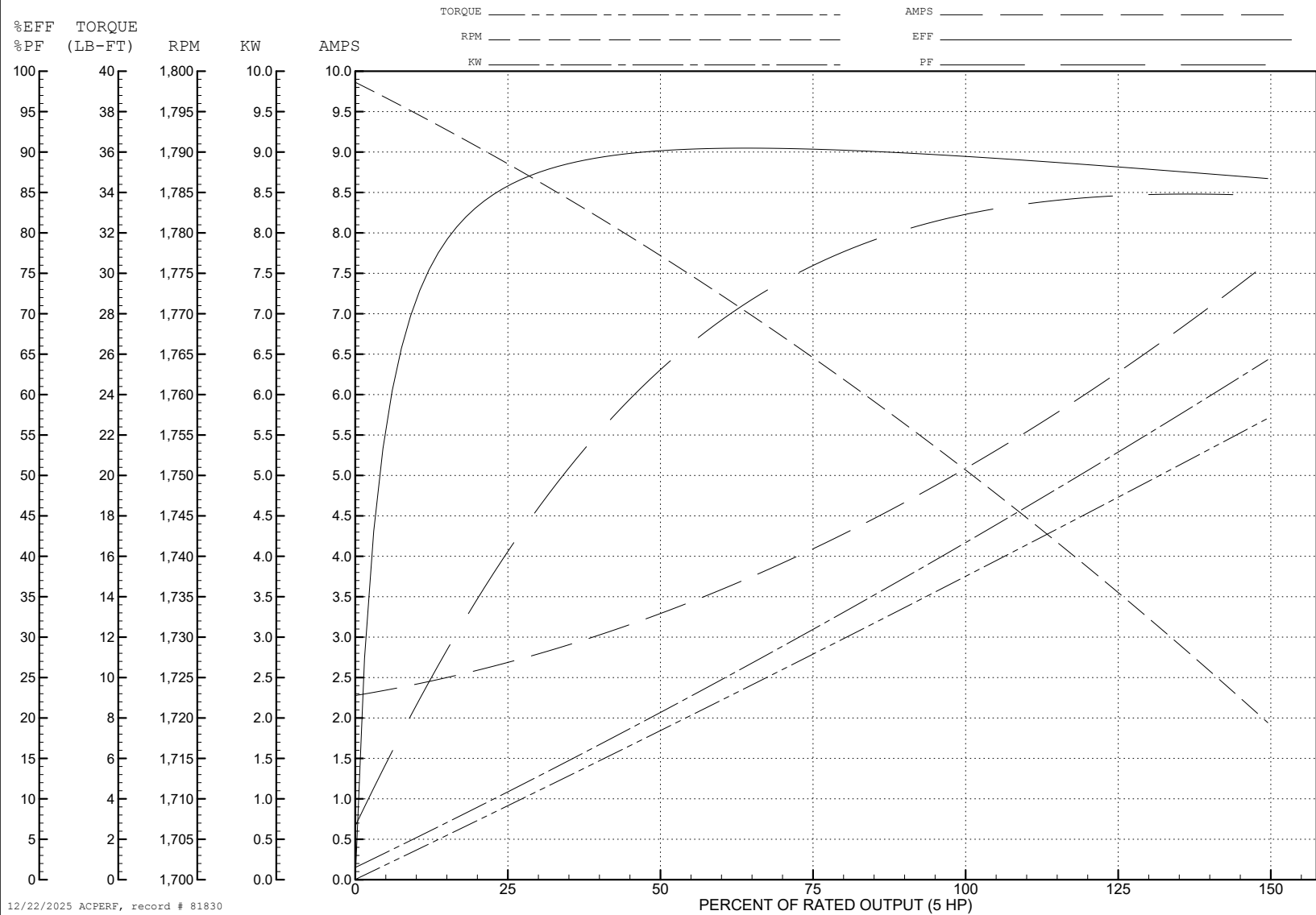
ABB Motors and Mechanical Inc.

WINDING # 06WGX200

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 575 V 0642M

TORQUES (LB-FT) : PO=52.33 PU=21.64 LR=30.73 LRA=36.26



**AC Induction Motor Performance Data**

Record # 84795

Typical performance - not guaranteed values

| Winding: 06WGX200-R001 |    |       | Type: 0642M                           |                     | Enclosure: TEFC           |          |             |
|------------------------|----|-------|---------------------------------------|---------------------|---------------------------|----------|-------------|
| Nameplate Data         |    |       | 575 V, 60 Hz:<br>Single Voltage Motor |                     |                           |          |             |
| Rated Output (KW)      |    | 3.7   | Full Load Torque                      |                     | 14.85 N-M                 |          |             |
| Volts                  |    | 575   | Start Configuration                   |                     | direct on line            |          |             |
| Full Load Amps         |    | 5.3   | Breakdown Torque                      |                     | 52.3 N-M                  |          |             |
| R.P.M.                 |    | 1750  | Pull-up Torque                        |                     | 21.6 N-M                  |          |             |
| Hz                     | 60 | Phase | 3                                     | Locked-rotor Torque |                           | 30.7 N-M |             |
| NEMA Design Code       |    | B     | KVA Code                              | J                   | Starting Current          |          | 36.3 A      |
| Service Factor (S.F.)  |    | 1.15  | No-load Current                       |                     | 2.34 A                    |          |             |
| NEMA Nom. Eff.         |    | 89.5  | Power Factor                          | 79                  | Line-line Res. @ 25°C     |          | 4.27 Ω      |
| Rating - Duty          |    | 40C   | AMB-CONT                              |                     | Temp. Rise @ Rated Load   |          | 53°C        |
| S.F. Amps              |    |       |                                       |                     | Temp. Rise @ S.F. Load    |          | 66°C        |
|                        |    |       |                                       |                     | Locked-rotor Power Factor |          | 40.6        |
|                        |    |       |                                       |                     | Rotor inertia             |          | 0.391 kg-m² |

**Load Characteristics 575 V, 60 Hz, 3.7 KW**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 42   | 64   | 75   | 81   | 84   | 85   | 83   |
| Efficiency      | 62.6 | 66.2 | 66.4 | 66   | 65.1 | 63.8 | 65.5 |
| Speed           | 1788 | 1777 | 1764 | 1751 | 1736 | 1720 | 1742 |
| Line amperes    | 2.6  | 3.25 | 4.11 | 5.1  | 6.27 | 7.52 | 5.8  |

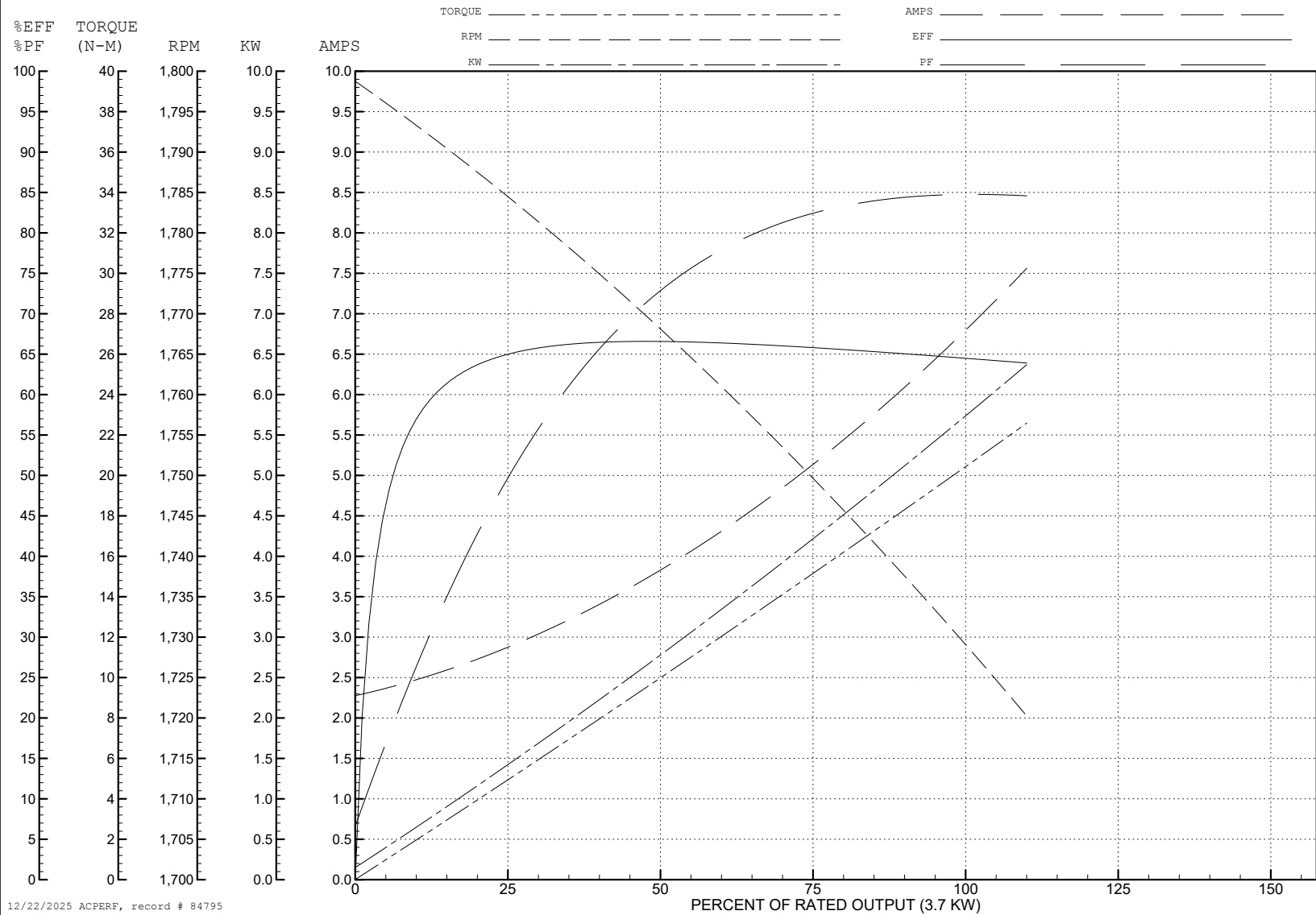
ABB Motors and Mechanical Inc.

WINDING # 06WGX200

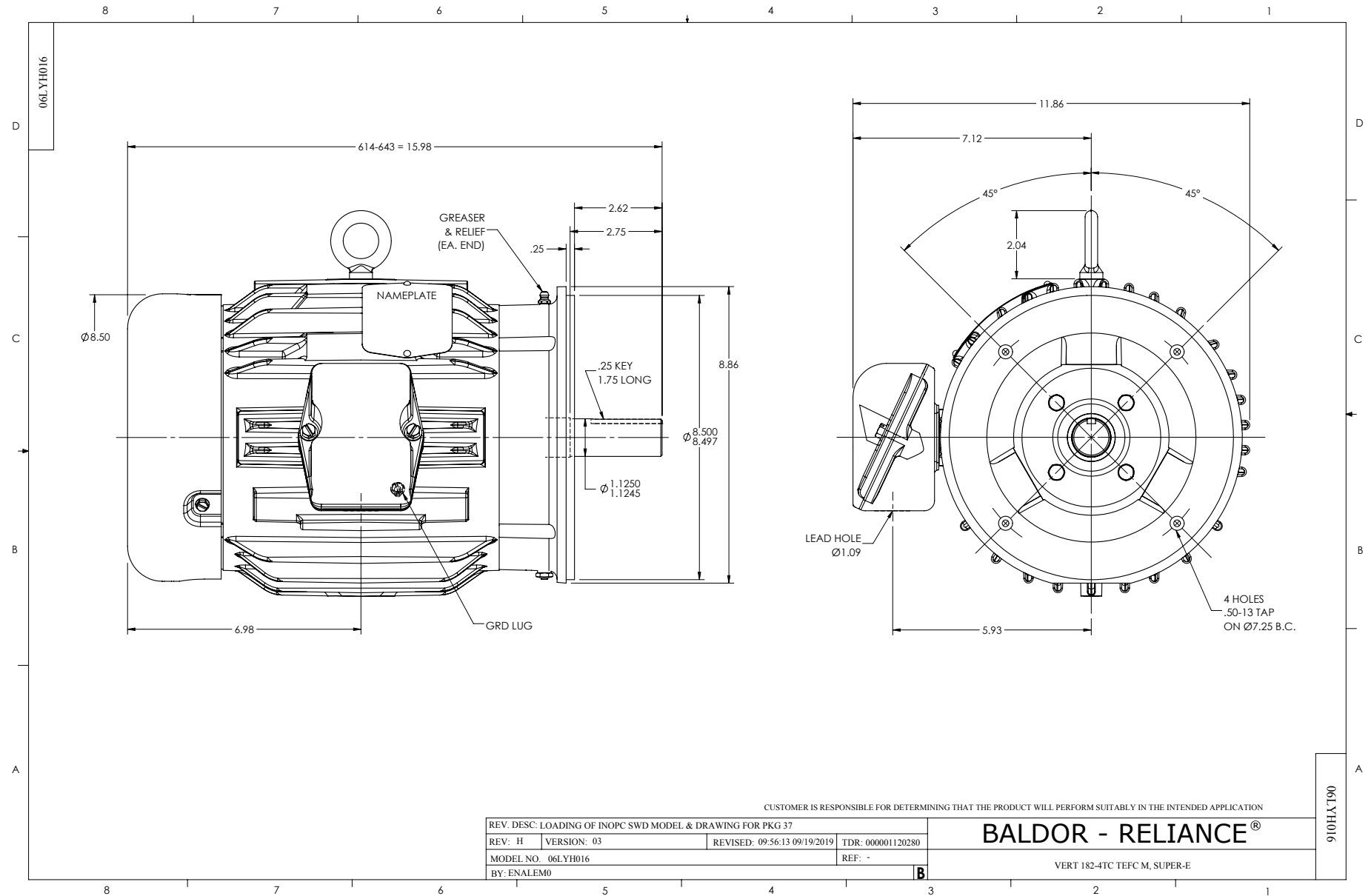
Typical performance - not guaranteed values.

3.7 KW 3 PH 60 HZ 1750 RPM 575 V 0642M

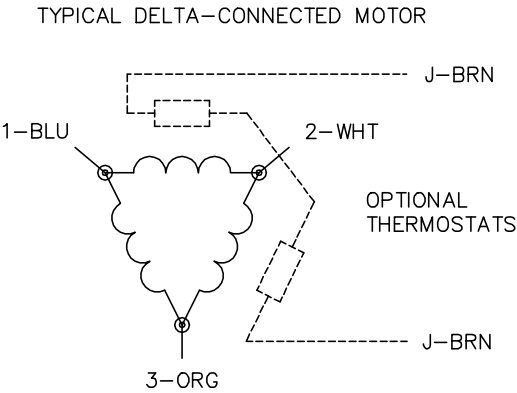
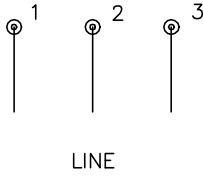
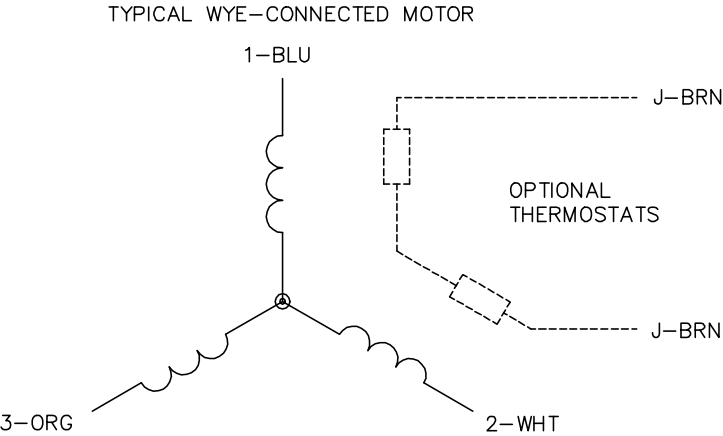
TORQUES (N-M) : PO=52.3 PU=21.6 LR=30.7 LRA=36.3



12/22/2025 ACPERF, record # 84795



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