



---

# Customer information packet

## VECP4100T

15HP, 1175RPM, 3PH, 60HZ, 284TC, 1046M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

## Specifications

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| Enclosure                      | TEFC                                                           |
| Frame                          | 284TC                                                          |
| Frame Material                 | Iron                                                           |
| Frequency                      | 60.00 Hz                                                       |
| Haz Area Class and Group       | CL I GP A,B,C,D                                                |
| Haz Area Division              | Division II                                                    |
| Motor Letter Type              | Three Phase                                                    |
| Output @ Frequency             | 15.000 HP @ 60 HZ                                              |
| Phase                          | 3                                                              |
| Synchronous Speed @ Frequency  | 1200 RPM @ 60 HZ                                               |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                             |
| Agency Approvals               | CCSA US<br>CSA EEV<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                                                           |
| Constant Torque Speed Range    | 1.3                                                            |
| Current @ Voltage              | 42.000 A @ 230.0 V<br>42.000 A @ 208.0 V<br>21.000 A @ 460.0 V |
| Design Code                    | A                                                              |
| Drip Cover                     | Drip Cover                                                     |
| Duty Rating                    | CONT                                                           |
| Efficiency @ 100% Load         | 91.7 %                                                         |
| Electrically Isolated Bearing  | Not Electrically Isolated                                      |

## Part detail

|              |            |
|--------------|------------|
| Revision     | J          |
| Type         | AC         |
| Mech. spec.  | 10H462     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 10WGY561   |
| Layout       | 10LYH462   |
| Eff. date    | 09-29-2025 |
| CD Diagram   | CD0180     |
| Poles        | 06         |
| Leads        | 9#10       |
| Proprietary  | False      |
| Created date | 12-13-2017 |

|                               |                             |
|-------------------------------|-----------------------------|
| Feedback Device               | NO FEEDBACK                 |
| Front Face Code               | Standard                    |
| Front Shaft Indicator         | None                        |
| Haz Area Temp Code            | T3C                         |
| Heater Indicator              | No Heater                   |
| High Voltage Full Load Amps   | 21.0 a                      |
| Insulation Class              | F                           |
| Inverter Code                 | Inverter Duty               |
| KVA Code                      | H                           |
| Lifting Lugs                  | Standard Lifting Lugs       |
| Locked Bearing Indicator      | Locked Bearing              |
| Max Speed                     | 1800 rpm                    |
| Motor Lead Exit               | Ko Box                      |
| Motor Lead Quantity/Wire Size | 9 @ 10 AWG                  |
| Motor Lead Termination        | Flying Leads                |
| Motor Standards               | NEMA                        |
| Motor Type                    | 1046M                       |
| Mounting Arrangement          | F1                          |
| Number of Poles               | 6                           |
| Overall Length                | 30.70 IN                    |
| Power Factor                  | 73                          |
| Product Family                | Super-E Chemical Processing |
| Pulley End Bearing Type       | Ball                        |
| Pulley Face Code              | C-Face                      |
| Pulley Shaft Indicator        | Standard                    |
| Rodent Screen                 | None                        |
| Service Factor                | 1.15                        |
| Shaft Diameter                | 1.875 IN                    |
| Shaft Extension Location      | Pulley End                  |
| Shaft Ground Indicator        | No Shaft Grounding          |
| Shaft Rotation                | Reversible                  |
| Shaft Slinger Indicator       | Shaft Slinger               |
| Speed                         | 1175 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

## NP3241

|            |              |         |                    |              |       |           |                         |         |            |             |
|------------|--------------|---------|--------------------|--------------|-------|-----------|-------------------------|---------|------------|-------------|
| CAT.NO.    | VECP4100T    |         |                    | P/N          |       | ENCLOSURE |                         |         | TEFC       |             |
| SPEC.      | 10H462Y561G1 |         | CC                 | 010A         | FRAME | 284TC     |                         | S/N     |            |             |
| HP         | 15           |         |                    | CLASS        | F     | HZ        | 60                      | DES     | A          |             |
| RPM        | 1175         |         |                    | RPM MAX      | 1800  |           | PH                      | 3       | KVA-CODE   | H           |
| VOLT       | 230/460      |         |                    | MOTOR WEIGHT |       | 475       |                         |         |            |             |
| AMP        | 42/21        |         |                    | SER.F.       | 1.15  | PF        | 73                      | ODE BRG | 6311       | DE BRG 6311 |
| RATING     | 40C AMB-CONT |         |                    | NEMA-NOM-EFF |       | 91.7      |                         | GREASE  | POLYREX EM |             |
|            |              |         |                    |              |       |           |                         |         |            |             |
|            |              |         |                    |              |       | INV.TYPE  |                         | PWM     |            |             |
| TEMP CODE  | T3C          |         | INVERTER-TEMP-CODE |              | 180   |           |                         |         |            |             |
| TEMP =     | 160          | C HP FR | 60                 | C HP TO      | 90    |           |                         |         |            |             |
| CT HZ FROM | 1.3          |         | CT HZ TO           |              | 60    |           |                         |         |            |             |
| HTR-VOLTS  | HTR-AMPS     |         | HTR-WATTS          |              |       |           | MAX. SPACE HEATER TEMP. |         |            |             |
|            |              |         |                    |              |       |           | VT HZ FROM              |         | O          | VT HZ TO 60 |

**AC Induction Motor Performance Data**

Record # 29743

Typical performance - not guaranteed values

| Winding: 10WGY561-R001 |  |              |  | Type: 1046M                              |  | Enclosure: TEFC |  |
|------------------------|--|--------------|--|------------------------------------------|--|-----------------|--|
| Nameplate Data         |  |              |  | 460 V, 60 Hz:<br>High Voltage Connection |  |                 |  |
| Rated Output (HP)      |  | 15           |  | Full Load Torque                         |  | 66.68 LB-FT     |  |
| Volts                  |  | 230/460      |  | Start Configuration                      |  | direct on line  |  |
| Full Load Amps         |  | 42/21        |  | Breakdown Torque                         |  | 213 LB-FT       |  |
| R.P.M.                 |  | 1175         |  | Pull-up Torque                           |  | 93.1 LB-FT      |  |
| Hz                     |  | 60           |  | Phase                                    |  | 3               |  |
| NEMA Design Code       |  | A            |  | KVA Code                                 |  | H               |  |
| Service Factor (S.F.)  |  | 1.15         |  | Locked-rotor Torque                      |  | 114 LB-FT       |  |
| NEMA Nom. Eff.         |  | 91.7         |  | Starting Current                         |  | 144 A           |  |
| Power Factor           |  | 73           |  | No-load Current                          |  | 12.4 A          |  |
| Line-line Res. @ 25°C  |  | 0.502 Ω      |  | Temp. Rise @ Rated Load                  |  | 43°C            |  |
| Rating - Duty          |  | 40C AMB-CONT |  | Temp. Rise @ S.F. Load                   |  | 51°C            |  |
| S.F. Amps              |  |              |  | Locked-rotor Power Factor                |  | 32.9            |  |
|                        |  |              |  | Rotor inertia                            |  | 5.63 LB-FT2     |  |

**Load Characteristics 460 V, 60 Hz, 15 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 32   | 52   | 65   | 72   | 76   | 78   | 75   |
| Efficiency      | 83   | 89.4 | 91.3 | 91.7 | 91.4 | 90.8 | 91.7 |
| Speed           | 1196 | 1193 | 1189 | 1185 | 1181 | 1177 | 1181 |
| Line amperes    | 13.2 | 15.1 | 17.9 | 21.3 | 25.3 | 29.6 | 23.4 |

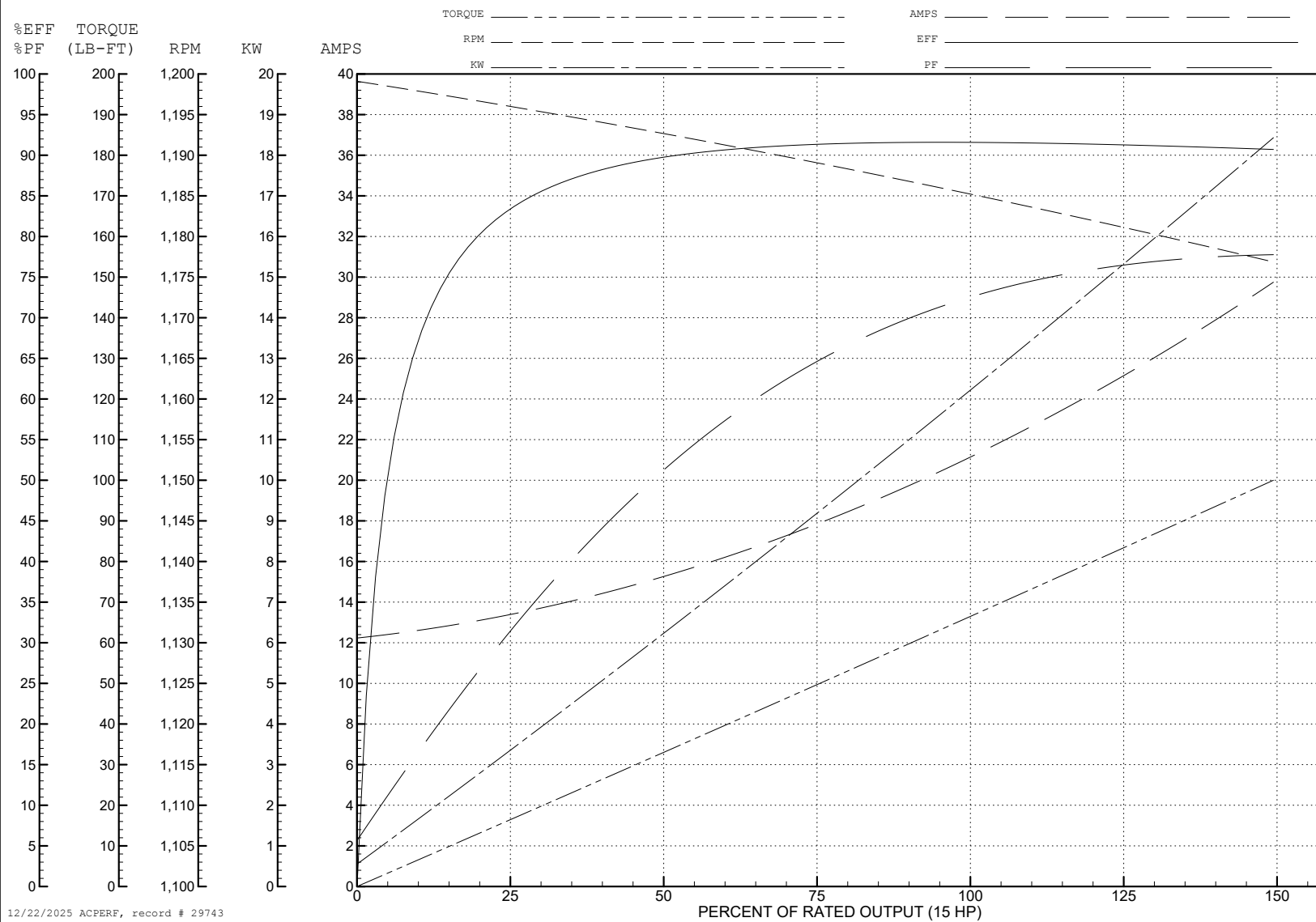
ABB Motors and Mechanical Inc.

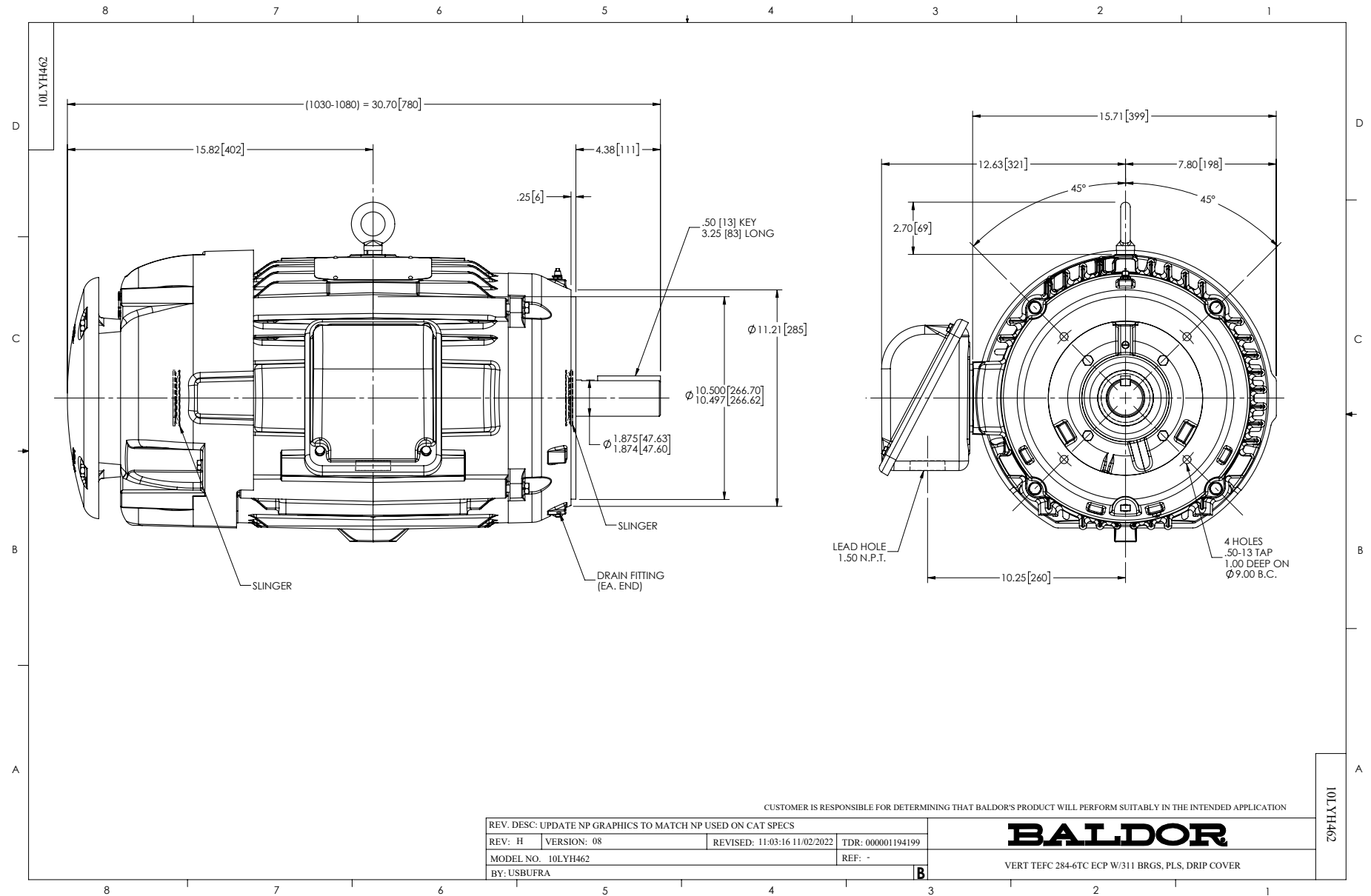
WINDING # 10WGY561

Typical performance - not guaranteed values.

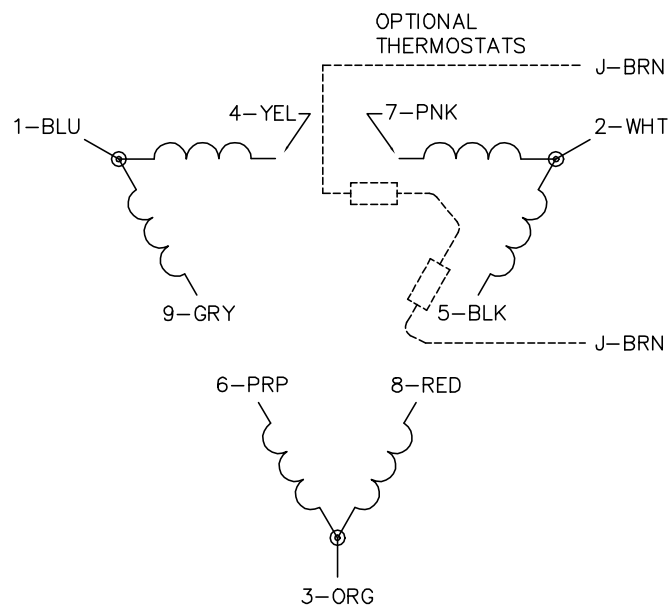
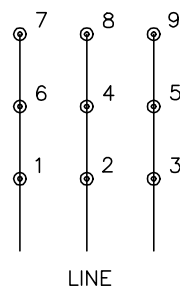
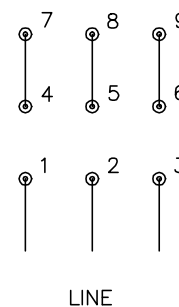
15 HP 3 PH 60 HZ 1175 RPM 460 V 1046M

TORQUES (LB-FT): PO=213 PU=93.1 LR=114 LRA=144





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

SH 1 of 1