

## Submittal Data

| PROJECT:        | UNIT TAG:        | QUANTITY: |
|-----------------|------------------|-----------|
|                 | TYPE OF SERVICE: |           |
| REPRESENTATIVE: | SUBMITTED BY:    | DATE:     |
| ENGINEER:       | APPROVED BY:     | DATE:     |
| CONTRACTOR:     | ORDER NO.:       | DATE:     |

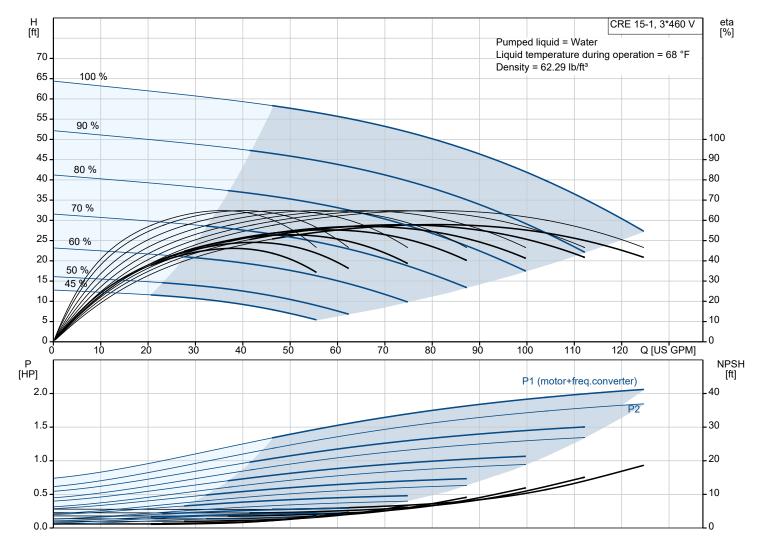


#### CRE 15-1 N-GJ-A-E-HQQE

Vertical, multistage centrifugal pump with integrated frequency converter. The pump head and base are in cast iron - all other wetted parts are in stainless steel (EN 1.4301)

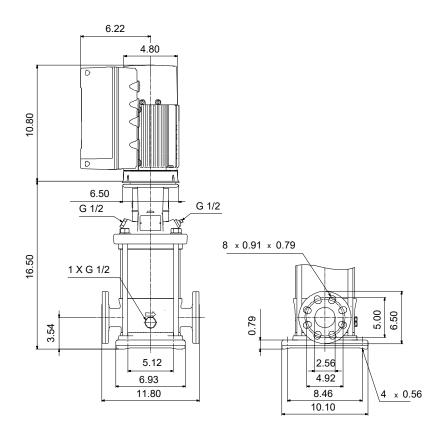
Note! Product picture may differ from actual product

| Conditions of Service                        |                         | Pump Data   |   | Motor Data   |  |
|--|-------------------------|---|---|--|--|
| Liquid:<br>Temperature:<br>Specific Gravity: | Water<br>68 °F<br>1.000 | Max pressure at stated temp:<br>Liquid temperature range:<br>Maximum ambient temperature:<br>Shaft seal:<br>Product number: | 232 psi / 250 °F<br>-4 248 °F<br>122 °F<br>HQQE<br>99341022 | Rated power - P2:<br>Rated voltage:<br>Mains frequency:<br>Enclosure class:<br>Insulation class:<br>Motor protection:<br>Motor type:<br>Eta 1/1: | 2 HP<br>440-480 V<br>60 Hz<br>IP55<br>F<br>ELEC<br>90C<br>89.4 % |



## Submittal Data

# 

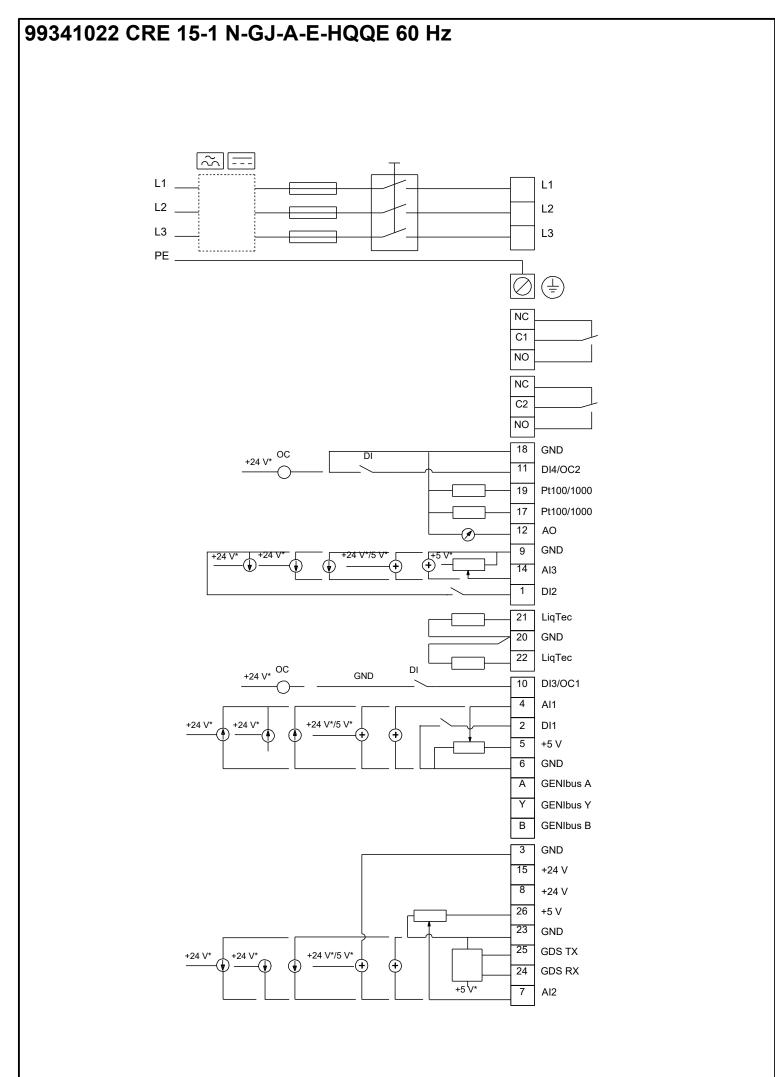


#### Materials:

Base: Cast iron Base: EN 1561 EN-GJL-200 Base: **ASTM A48-25B** Impeller: Stainless steel Impeller: AISI 304 Impeller: EN 1.4301 Material code: А Code for rubber: Е

| Qty.      | Description  |  |  |
|-----------|--|--|--|
| <u></u> 1 | CRE 15-1 N-GJ-A-E-HQQE   |  |  |
| 1         |  |  |  |
|           |  |  |  |
|           |  |  |  |
|           | X  |  |  |
|           |  |  |  |
|           |  |  |  |
|           |  |  |  |
|           |  |  |  |
|           |  |  |  |
|           |  |  |  |
|           |  | Note the state of the second state of the st |  |
|           |  | Note! Product picture may differ from actual product   |  |
|           | Product No.: 99341022  |  |  |
|           | Vertical multistage centrifugal n  | ump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron  |  |
|           | – all other wetted parts are in sta  | ainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and   |  |
|           | service. Power transmission is v   | ia a rigid split coupling. Pipe connection is via combined ANSI-JIS flanges.   |  |
|           | The pump is fitted with a 3-phas   | e, fan-cooled, permanent-magnet, synchronous motor.  |  |
|           |  | I as IE5 in accordance with IEC 60034-30-2.  |  |
|           | The motor includes a frequency   | converter and PI controller in the motor terminal box. This enables continuously variable control of   |  |
|           |  | hables adaptation of the performance to a given requirement.   |  |
|           | The operating panel on the moto  | or terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.   |  |
|           |  |  |  |
|           |  | d user-friendly interface to all functions.  |  |
|           | The push-buttons are used to na  | avigate through the menu structure to access pump and performance data on site and enable ell as setting of pump to "Min." or "Max." operation or to "Stop".   |  |
|           |  | en as setting of pump to min. of max. operation of to Stop .   |  |
|           |  |  |  |
|           | Communication with the nump is   | s also possible by means of Grundfos GO Remote (accessory). The remote control enables further   |  |
|           | settings as well as reading out o  | f a number of parameters such as "Actual value", "Speed", "Power input" and total "Power   |  |
|           | consumption".  |  |  |
|           |  |  |  |
|           | The Grundfos Eye indicator on the  | he operating panel provides visual indication of pump status:  |  |
|           | <ul> <li>"Power on": Motor is runr</li> </ul>  | ning (rotating green indicator lights) or not running (permanently green indicator lights)   |  |
|           | <ul> <li>"Warning": Motor is still rule</li> </ul>   | unning (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)   |  |
|           |  | ed (flashing red indicator lights).  |  |
|           |  | of inputs and outputs enabling the motor to be used in advanced applications where many inputs   |  |
|           | and outputs are required:  |  |  |
|           | two dedicated digital inputs   |  |  |
|           | <ul> <li>three analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the factory-fitted pressure sensor is connected to one<br/>inputs</li> </ul> |  |  |
|           |  | antiamater and aspect  |  |
|           | 5 V voltage supply to pote   |  |  |
|           | one analog output, 0-10  | puts or open-collector outputs   |  |
|           | <ul> <li>two configurable digital if</li> <li>two Pt100/Pt1000 inputs</li> </ul>   |  |  |
|           | <ul> <li>LiqTec, dry-running prote</li> </ul>  | ction sensor input   |  |
|           | Grundfos Digital Sensor i  |  |  |
|           | <ul> <li>24 V voltage supply for set</li> </ul>  |  |  |
|           | <ul> <li>two signal-relay outputs (</li> </ul>   |  |  |
|           | GENIbus connection   | · /  |  |
|           | <ul> <li>interface for Grundfos CIM fieldbus module.</li> </ul>  |  |  |
|           |  |  |  |
|           | Liquid:  |  |  |
|           | Pumped liquid:   | Water  |  |
|           | Liquid temperature range:  | -4 248 °F  |  |
|           | Selected liquid temperature:   | 68 °F  |  |
|           | Density:   | 62.29 lb/ft <sup>3</sup>   |  |
|           | Technical:   |  |  |
|           | Pump speed on which pump dat   | a are based: 3452 rpm  |  |
|           | Rated flow:  | 79.3 US GPM  |  |
|           | Rated head:  | 50.53 ft   |  |
|           | Actual impeller diameter:  | 4.13 in  |  |
|           | Pump orientation:  | Vertical   |  |
|           | Shaft seal arrangement:  | Single   |  |
|           | Code for shaft seal:   | HQQE   |  |
|           | Approvals:   | CURUS  |  |
|           | Approvals for drinking water:  | NSF/ANSI 61  |  |
|           | Curve tolerance:   | ISO9906:2012 3B  |  |
|           |  |  |  |

| De  | escription                     |                    |
|-----|--------------------------------|--------------------|
| M   | aterials:                      |                    |
| Ba  | ase:                           | Cast iron          |
|     |                                | EN 1561 EN-GJL-200 |
|     |                                | ASTM A48-25B       |
| Im  | npeller:                       | Stainless steel    |
|     | ipeliel.                       | EN 1.4301          |
|     |                                |                    |
|     |                                | AISI 304           |
| Be  | earing:                        | SIC                |
|     |                                |                    |
| In  | stallation:                    |                    |
| ltn | nax amb:                       | 122 °F             |
|     | aximum operating pressure:     | 232.06 psi         |
|     | ax pressure at stated temp:    | 232 psi / 250 °F   |
|     | ax pressure at stated temp.    |                    |
|     | <b>e</b>                       | 232 psi / -4 °F    |
|     | /pe of connection:             | ANSI / JIS         |
| Si  | ze of inlet connection:        | DN 50              |
| Si  | ze of outlet connection:       | DN 50              |
| Pr  | ressure rating for connection: | PN 25              |
| Fla | ange rating inlet:             | 300 lb             |
|     | ange size for motor:           | 56C                |
|     | ange size for motor.           | 300                |
|     |                                |                    |
|     | ectrical data:                 |                    |
| Me  | otor standard:                 | NEMA               |
| M   | otor type:                     | 90C                |
| IE  | Efficiency class:              | IE5                |
|     | ated power - P2:               | 2 HP               |
|     | ower (P2) required by pump:    | 2 HP               |
|     |                                | 60 Hz              |
|     | ains frequency:                |                    |
|     | ated voltage:                  | 3 x 440-480 V      |
|     | ervice factor:                 | 1.15               |
| Ra  | ated current:                  | 2.65 A             |
| C   | os phi - power factor:         | 0.87               |
| Ra  | ated speed:                    | 360-4000 rpm       |
|     | ficiency:                      | 89.4%              |
|     | otor efficiency at full load:  | 89.4 %             |
|     |                                |                    |
|     | nclosure class (IEC 34-5):     | IP55               |
|     | sulation class (IEC 85):       | F                  |
|     | otor No:                       | 98362281           |
|     |                                |                    |
|     | ontrols:                       |                    |
|     | equency converter:             | Built-in           |
| Pr  | ressure sensor:                | Y                  |
|     |                                |                    |
| Ot  | thers:                         |                    |
|     | OE Pump Energy Index VL:       | 0.46               |
|     |                                |                    |
|     | et weight:                     | 106 lb             |
|     | ross weight:                   | 123 lb             |
| Sł  | nipping volume:                | 6.11 ft³           |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |
|     |                                |                    |



Note! All units are in [in] unless others are stated.