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

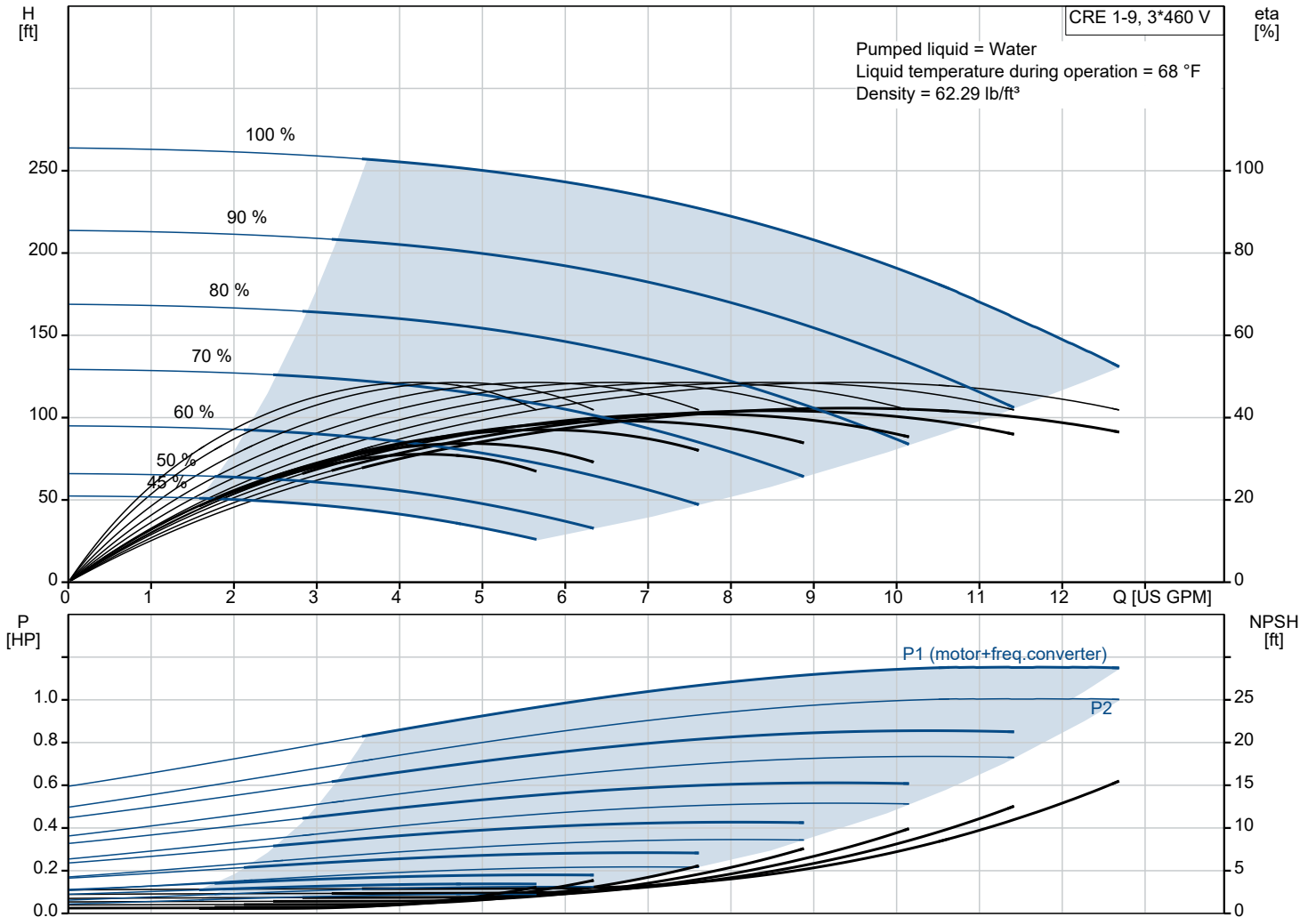


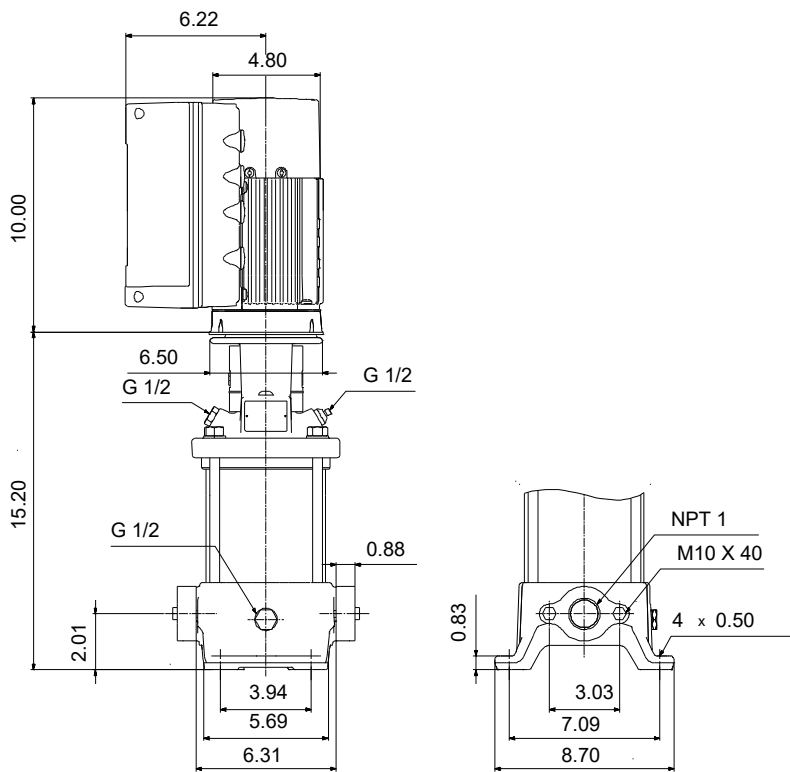
CRE 1-9 N-B-A-E-HQQE

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: | Water | Max pressure at stated temp: | 232 psi / 250 °F | Rated power - P2: | 1 HP |
| Temperature: | 68 °F | Liquid temperature range: | -4 .. 248 °F | Rated voltage: | 440-480 V |
| Specific Gravity: | 1.000 | Maximum ambient temperature: | 122 °F | Mains frequency: | 60 Hz |
| | | Shaft seal: | HQQE | Enclosure class: | IP55 |
| | | Product number: | 99340733 | Insulation class: | F |
| | | | | Motor protection: | ELEC |
| | | | | Motor type: | 80A |
| | | | | Eta 1/1: | 86.4 % |





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: A
- Code for rubber: E

| Qty. | Description |
|------|---|
| 1 | <p data-bbox="124 85 399 116">CRE 1-9 N-B-A-E-HQQE</p>  <p data-bbox="517 434 989 456">Note! Product picture may differ from actual product</p> <p data-bbox="124 465 387 488">Product No.: 99340733</p> <p data-bbox="124 524 1520 600">Vertical, multistage centrifugal pump 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 stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via oval flanges with internal NPT threads.</p> <p data-bbox="124 609 1050 631">The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor.</p> <p data-bbox="124 640 938 663">The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="124 667 1520 721">The motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement.</p> <p data-bbox="124 725 1469 748">The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.</p> <p data-bbox="124 784 890 806">The display gives an intuitive and user-friendly interface to all functions.</p> <p data-bbox="124 815 1461 869">The push-buttons are used to navigate through the menu structure to access pump and performance data on site and enable setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop".</p> <p data-bbox="124 931 1520 1008">Communication with the pump is also possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".</p> <p data-bbox="124 1048 1114 1070">The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="165 1079 1433 1164" style="list-style-type: none"> • "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights) • "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights) • "Alarm": Motor has stopped (flashing red indicator lights). <p data-bbox="124 1169 1501 1223">The terminal box has a number of inputs and outputs enabling the motor to be used in advanced applications where many inputs and outputs are required:</p> <ul data-bbox="165 1227 1501 1608" style="list-style-type: none"> • two dedicated digital inputs • 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 of these inputs • 5 V voltage supply to potentiometer and sensor • one analog output, 0-10 V, 0(4)-20 mA • two configurable digital inputs or open-collector outputs • two Pt100/Pt1000 inputs • LiqTec, dry-running protection sensor input • Grundfos Digital Sensor input and output • 24 V voltage supply for sensors • two signal-relay outputs (potential-free contacts) • GENIbus connection • interface for Grundfos CIM fieldbus module. <p data-bbox="124 1639 197 1662">Liquid:</p> <p data-bbox="124 1671 612 1787">Pumped liquid: Water Liquid temperature range: -4 .. 248 °F Selected liquid temperature: 68 °F Density: 62.29 lb/ft³</p> <p data-bbox="124 1818 236 1841">Technical:</p> <p data-bbox="124 1850 743 2114">Pump speed on which pump data are based: 3484 rpm Rated flow: 9.69 US GPM Rated head: 190.6 ft 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</p> <p data-bbox="124 2145 229 2168">Materials:</p> |

| Qty. | Description |
|------|---|
| | <p>Base: Cast iron EN 1561 EN-GJL-200 ASTM A48-25B</p> <p>Impeller: Stainless steel EN 1.4301 AISI 304</p> <p>Bearing: SIC</p> <p>Installation:</p> <p>t max amb: 122 °F</p> <p>Maximum operating pressure: 232.06 psi</p> <p>Max pressure at stated temp: 232 psi / 250 °F 232 psi / -4 °F</p> <p>Type of connection: Oval / NPT(F)</p> <p>Size of inlet connection: 1 inch</p> <p>Size of outlet connection: 1 inch</p> <p>Pressure rating for connection: PN 16</p> <p>Flange size for motor: 56C</p> <p>Electrical data:</p> <p>Motor standard: NEMA</p> <p>Motor type: 80A</p> <p>IE Efficiency class: IE5</p> <p>Rated power - P2: 1 HP</p> <p>Power (P2) required by pump: 1 HP</p> <p>Mains frequency: 60 Hz</p> <p>Rated voltage: 3 x 440-480 V</p> <p>Service factor: 1.25</p> <p>Rated current: 1.65 A</p> <p>Cos phi - power factor: 0.73</p> <p>Rated speed: 360-4000 rpm</p> <p>Efficiency: 86.4%</p> <p>Motor efficiency at full load: 86.4 %</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 99256782</p> <p>Controls:</p> <p>Frequency converter: Built-in</p> <p>Pressure sensor: Y</p> <p>Others:</p> <p>Net weight: 61.5 lb</p> <p>Gross weight: 72.5 lb</p> <p>Shipping volume: 6.11 ft³</p> |

99340733 CRE 1-9 N-B-A-E-HQQE 60 Hz



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