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

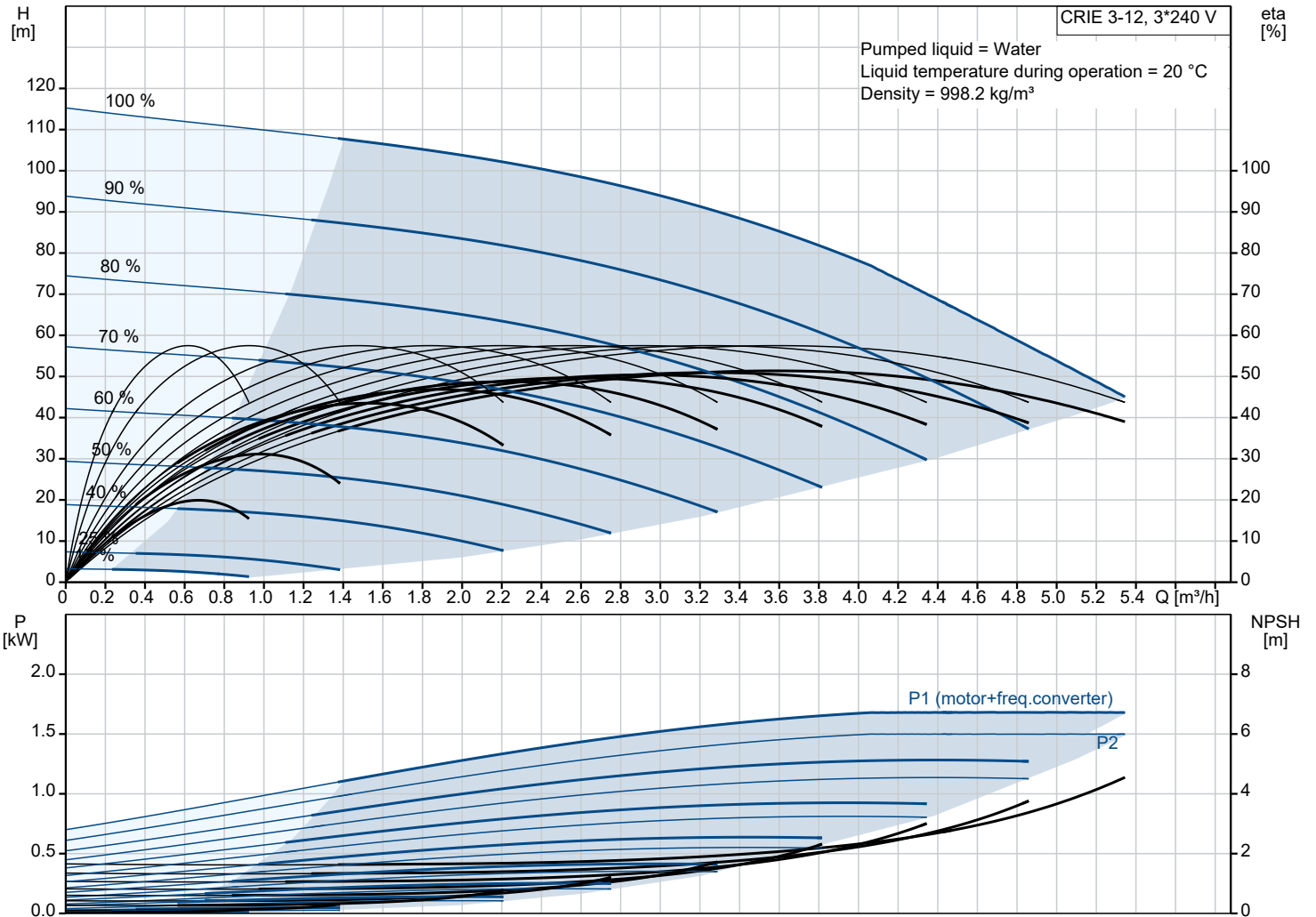


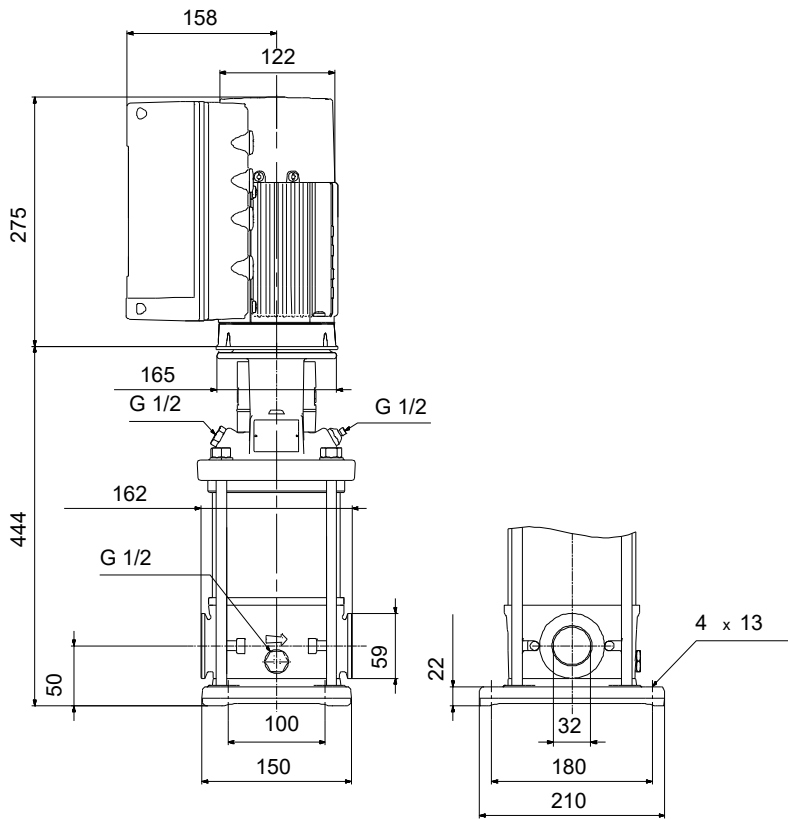
CRIE 3-12 NP-CA-A-E-HQQE

Vertical, multistage centrifugal pump with integrated frequency converter.
Pump materials in contact with the liquid 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: | 25 bar / 120 °C | Rated power - P2: | 1.5 kW |
| Temperature: | 20 °C | Liquid temperature range: | -20 .. 120 °C | Rated voltage: | 200-240 V |
| Specific Gravity: | 1.000 | Maximum ambient temperature: | 40 °C | Mains frequency: | 60 Hz |
| | | Shaft seal: | HQQE | Enclosure class: | IP55 |
| | | Product number: | 99391823 | Insulation class: | F |
| | | | | Motor protection: | ELEC |
| | | | | Motor type: | 90C |
| | | | | Eta 1/1: | 88.9 % |





Materials:

- Base: Stainless steel
- Base: EN 1.4408
- Base: AISI 316
- Impeller: Stainless steel
- Impeller: AISI 304
- Impeller: EN 1.4301
- Material code: A
- Code for rubber: E

| Qty. | Description |
|------|---|
| 1 | <p data-bbox="124 85 453 114">CRIE 3-12 NP-CA-A-E-HQQE</p>  <p data-bbox="517 434 989 456">Note! Product picture may differ from actual product</p> <p data-bbox="124 463 389 490">Product No.: 99391823</p> <p data-bbox="124 521 1513 600">Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid 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 FlexiClamps.</p> <p data-bbox="124 609 1051 636">The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor.</p> <p data-bbox="124 638 940 665">The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="124 667 1520 719">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="124 723 1469 750">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="124 784 890 810">The display gives an intuitive and user-friendly interface to all functions.</p> <p data-bbox="124 813 1461 864">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 1005">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 1115 1075">The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="164 1077 1434 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 1167 1501 1218">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="164 1223 1501 1606" 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 1637 201 1664">Liquid:</p> <p data-bbox="124 1666 557 1693">Pumped liquid: Water</p> <p data-bbox="124 1695 627 1722">Liquid temperature range: -20 .. 120 °C</p> <p data-bbox="124 1724 552 1751">Selected liquid temperature: 20 °C</p> <p data-bbox="124 1753 620 1780">Density: 998.2 kg/m³</p> <p data-bbox="124 1814 239 1841">Technical:</p> <p data-bbox="124 1843 743 1870">Pump speed on which pump data are based: 3452 rpm</p> <p data-bbox="124 1872 580 1899">Rated flow: 3.5 m³/h</p> <p data-bbox="124 1901 544 1928">Rated head: 83 m</p> <p data-bbox="124 1930 572 1957">Pump orientation: Vertical</p> <p data-bbox="124 1960 384 1986">Shaft seal arrangement: Single</p> <p data-bbox="124 1989 561 2016">Code for shaft seal: HQQE</p> <p data-bbox="124 2018 576 2045">Approvals: CURUS</p> <p data-bbox="124 2047 635 2074">Approvals for drinking water: NSF/ANSI 61</p> <p data-bbox="124 2076 684 2103">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="124 2139 233 2166">Materials:</p> |

| Qty. | Description |
|------|--|
| | <p>Base: Stainless steel EN 1.4408 AISI 316</p> <p>Impeller: Stainless steel EN 1.4301 AISI 304</p> <p>Bearing: SIC</p> <p>Installation:</p> <p>t max amb: 40 °C</p> <p>Maximum operating pressure: 25 bar</p> <p>Max pressure at stated temp: 25 bar / 120 °C 25 bar / -20 °C</p> <p>Type of connection: FlexiClamp</p> <p>Size of inlet connection: DN 32</p> <p>Size of outlet connection: DN 32</p> <p>Pressure rating for connection: PN 25</p> <p>Flange size for motor: 56C</p> <p>Electrical data:</p> <p>Motor standard: NEMA</p> <p>Motor type: 90C</p> <p>IE Efficiency class: IE5</p> <p>Rated power - P2: 1.5 kW</p> <p>Power (P2) required by pump: 1.5 kW</p> <p>Mains frequency: 60 Hz</p> <p>Rated voltage: 3 x 200-240 V</p> <p>Service factor: 1.00</p> <p>Rated current: 5.40-4.60 A</p> <p>Cos phi - power factor: 0.92</p> <p>Rated speed: 360-4000 rpm</p> <p>Efficiency: 88.9%</p> <p>Motor efficiency at full load: 88.9 %</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 99301706</p> <p>Controls:</p> <p>Frequency converter: Built-in</p> <p>Pressure sensor: Y</p> <p>Others:</p> <p>Net weight: 29.7 kg</p> <p>Gross weight: 67.7 kg</p> <p>Shipping volume: 0.173 m³</p> |

99391823 CRIE 3-12 NP-CA-A-E-HQQE 60 Hz



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