

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

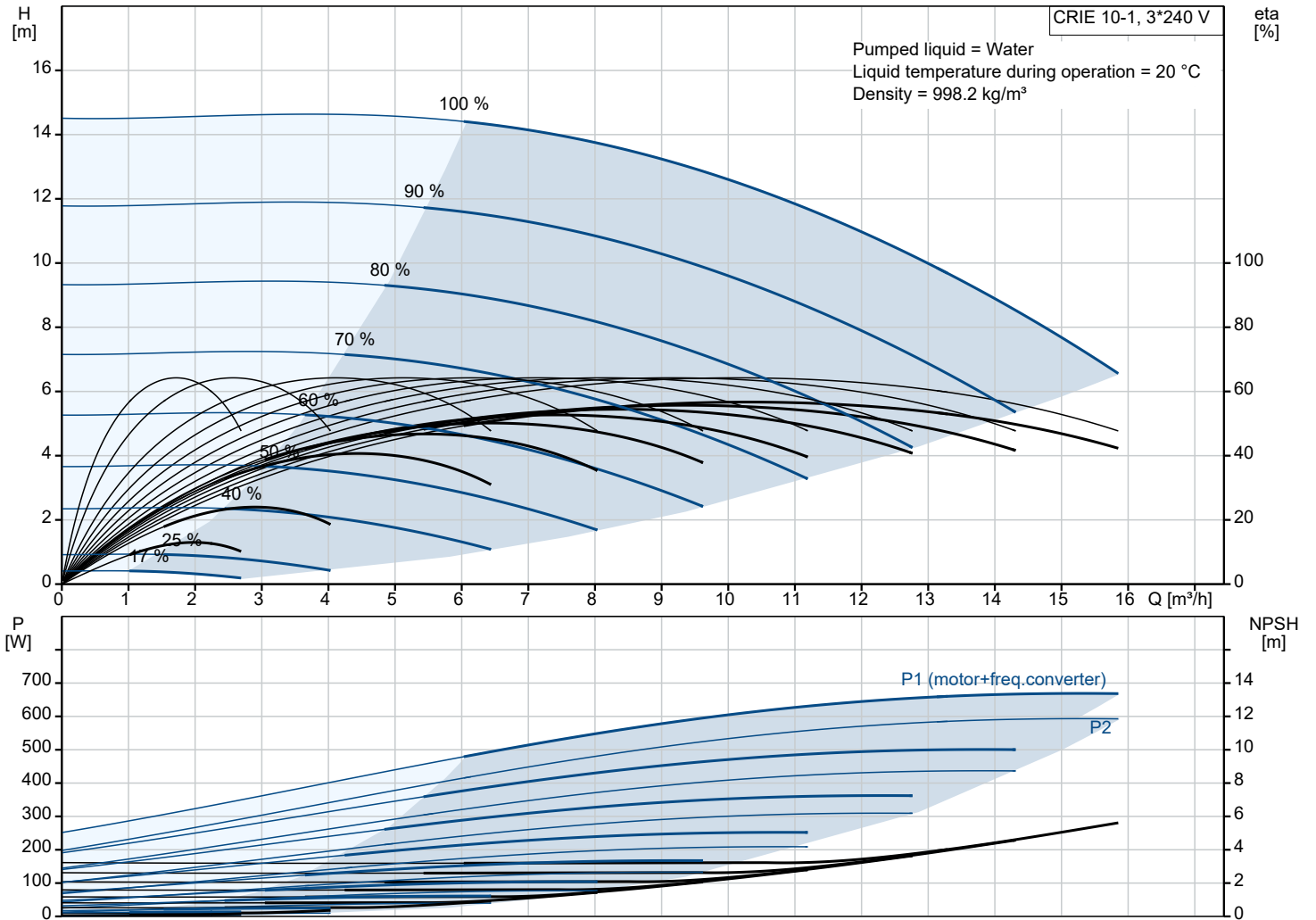


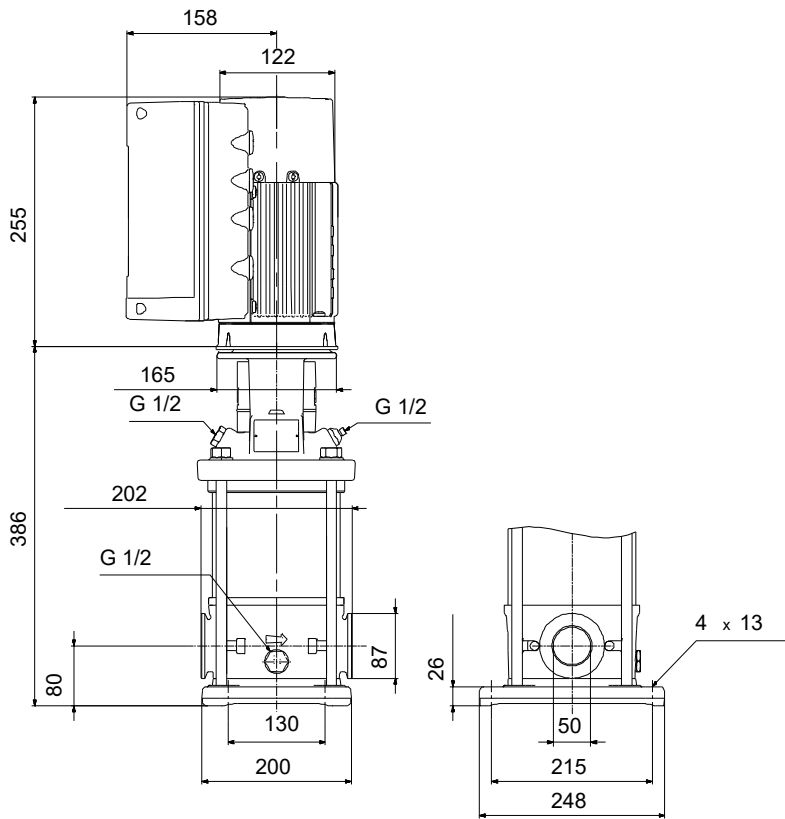
CRIE 10-1 BN-CA-A-E-HQQE

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:	16 bar / 120 °C	Rated power - P2:	1.1 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:	99392019	Insulation class:	F
				Motor protection:	ELEC
				Motor type:	80B
				Eta 1/1:	89.3 %





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 85 454 116">CRIE 10-1 BN-CA-A-E-HQQE</p>  <p data-bbox="518 432 989 459">Note! Product picture may differ from actual product</p> <p data-bbox="124 463 391 492">Product No.: 99392019</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="124 607 1053 636">The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor.</p> <p data-bbox="124 638 941 667">The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="124 669 1519 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 1468 752">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="124 784 890 813">The display gives an intuitive and user-friendly interface to all functions.</p> <p data-bbox="124 815 1460 866">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 1519 1010">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 1077">The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="164 1079 1433 1167" 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 1500 1220">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 1500 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 199 1668">Liquid:</p> <p data-bbox="124 1671 558 1700">Pumped liquid: Water</p> <p data-bbox="124 1702 630 1731">Liquid temperature range: -20 .. 120 °C</p> <p data-bbox="124 1733 550 1762">Selected liquid temperature: 20 °C</p> <p data-bbox="124 1765 614 1794">Density: 998.2 kg/m³</p> <p data-bbox="124 1818 239 1848">Technical:</p> <p data-bbox="124 1850 742 1879">Pump speed on which pump data are based: 3439 rpm</p> <p data-bbox="124 1881 598 1910">Rated flow: 12.1 m³/h</p> <p data-bbox="124 1912 550 1942">Rated head: 10 m</p> <p data-bbox="124 1944 598 1973">Actual impeller diameter: 92.96 mm</p> <p data-bbox="124 1975 574 2004">Pump orientation: Vertical</p> <p data-bbox="124 2007 550 2036">Shaft seal arrangement: Single</p> <p data-bbox="124 2038 566 2067">Code for shaft seal: HQQE</p> <p data-bbox="124 2069 582 2098">Approvals: CURUS</p> <p data-bbox="124 2101 638 2130">Approvals for drinking water: NSF/ANSI 61</p> <p data-bbox="124 2132 686 2161">Curve tolerance: ISO9906:2012 3B</p>

Qty.	Description
	<p>Materials:</p> <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: 16 bar</p> <p>Max pressure at stated temp: 16 bar / 120 °C 16 bar / -20 °C</p> <p>Type of connection: FlexiClamp</p> <p>Size of inlet connection: DN 50</p> <p>Size of outlet connection: DN 50</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: 80B</p> <p>IE Efficiency class: IE5</p> <p>Rated power - P2: 1.1 kW</p> <p>Power (P2) required by pump: 1.1 kW</p> <p>Mains frequency: 60 Hz</p> <p>Rated voltage: 3 x 200-240 V</p> <p>Service factor: 1.15</p> <p>Rated current: 4.10-3.50 A</p> <p>Cos phi - power factor: 0.91</p> <p>Rated speed: 360-4000 rpm</p> <p>Efficiency: 89.3%</p> <p>Motor efficiency at full load: 89.3 %</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 99301705</p> <p>Controls:</p> <p>Frequency converter: Built-in</p> <p>Pressure sensor: Y</p> <p>Others:</p> <p>DOE Pump Energy Index VL: 0.43</p> <p>Net weight: 38 kg</p> <p>Gross weight: 77 kg</p> <p>Shipping volume: 0.173 m³</p>

99392019 CRIE 10-1 BN-CA-A-E-HQQE 60 Hz



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