

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

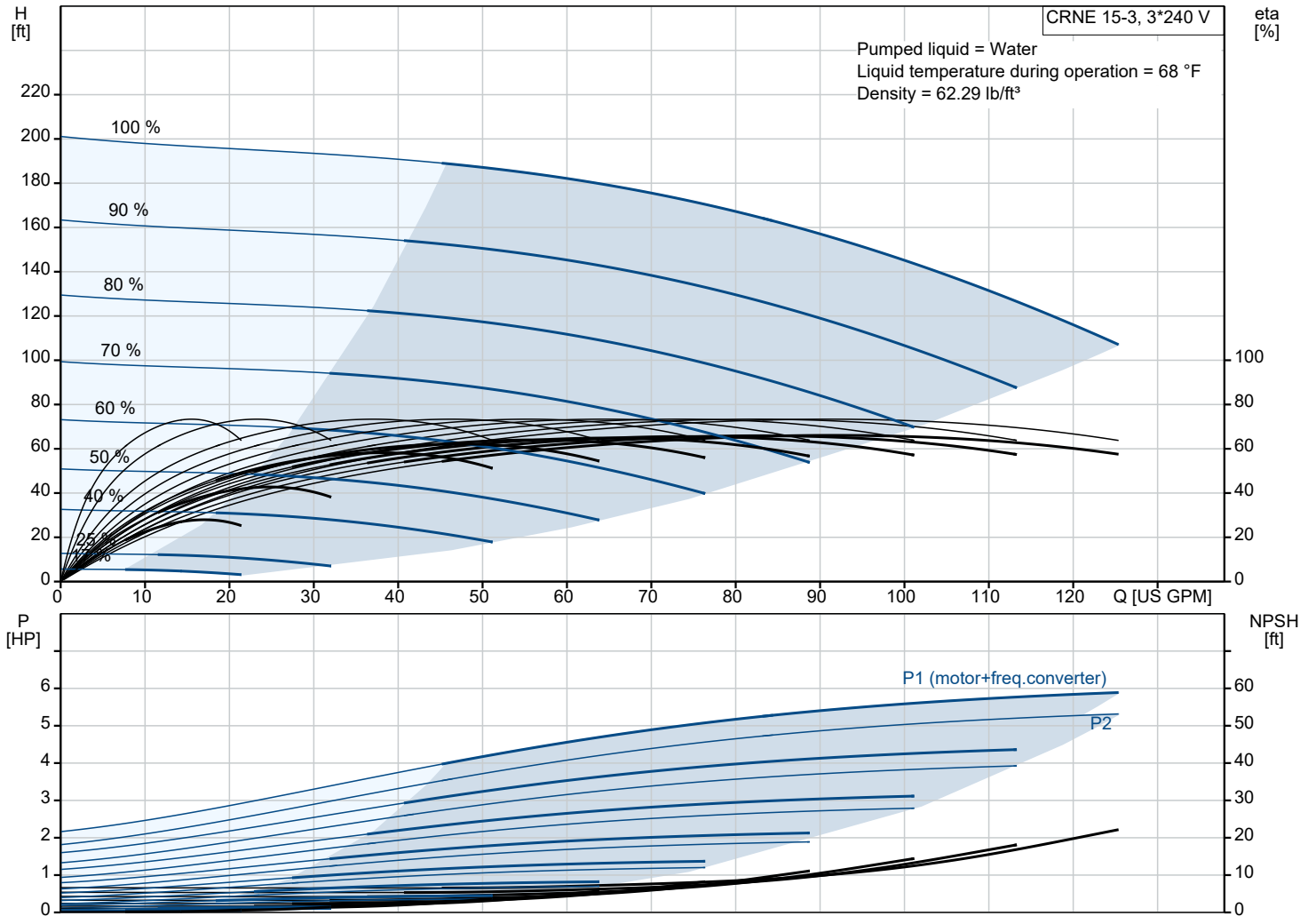


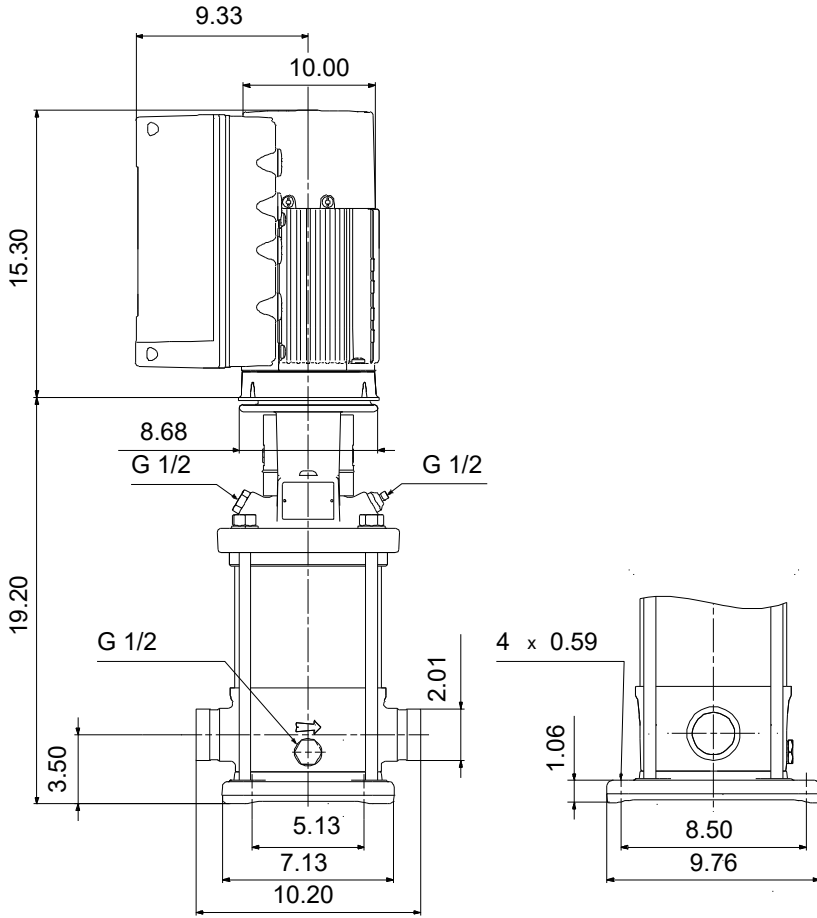
CRNE 15-3 N-P-A-E-HQQE

Vertical, multistage centrifugal pump with integrated frequency converter. Pump materials in contact with the liquid are in high-grade stainless steel (EN 1.4401)

Note! Product picture may differ from actual product

Conditions of Service		Pump Data		Motor Data	
Liquid:	Water	Max pressure at stated temp:	363 psi / 250 °F	Rated power - P2:	7.5 HP
Temperature:	68 °F	Liquid temperature range:	-4 .. 248 °F	Rated voltage:	200-240 V
Specific Gravity:	1.000	Maximum ambient temperature:	104 °F	Mains frequency:	60 Hz
		Shaft seal:	HQQE	Enclosure class:	IP55
		Product number:	99392147	Insulation class:	F
				Motor protection:	ELEC
				Motor type:	132F
				Eta 1/1:	90.2 %





Materials:

- Base: Stainless steel
- Base: EN 1.4408
- Base: AISI 316
- Impeller: Stainless steel
- Impeller: AISI 316
- Impeller: EN 1.4401
- Material code: A
- Code for rubber: E

Qty.	Description
1	<p data-bbox="124 85 427 116">CRNE 15-3 N-P-A-E-HQQE</p> <p data-bbox="124 116 387 138">Product No.: 99392147</p> <p data-bbox="124 174 1519 250">Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in high-grade 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 PJE (Victaulic®) couplings.</p> <p data-bbox="124 264 1050 295">The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor.</p> <p data-bbox="124 295 938 318">The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="124 324 1519 376">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="124 380 1471 407">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="124 443 890 470">The display gives an intuitive and user-friendly interface to all functions.</p> <p data-bbox="124 470 1465 519">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="124 586 1519 660">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="124 698 1114 725">The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="162 730 1436 817" 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="124 822 1503 873">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="162 878 1503 1258" 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 1294 199 1321">Liquid:</p> <p data-bbox="124 1326 555 1348">Pumped liquid: Water</p> <p data-bbox="124 1352 609 1375">Liquid temperature range: -4 .. 248 °F</p> <p data-bbox="124 1379 545 1402">Selected liquid temperature: 68 °F</p> <p data-bbox="124 1406 603 1429">Density: 62.29 lb/ft³</p> <p data-bbox="124 1473 236 1500">Technical:</p> <p data-bbox="124 1505 742 1527">Pump speed on which pump data are based: 3461 rpm</p> <p data-bbox="124 1532 641 1554">Rated flow: 90.3 US GPM</p> <p data-bbox="124 1559 571 1581">Rated head: 152.9 ft</p> <p data-bbox="124 1585 561 1608">Actual impeller diameter: 4.13 in</p> <p data-bbox="124 1612 571 1635">Pump orientation: Vertical</p> <p data-bbox="124 1639 545 1662">Shaft seal arrangement: Single</p> <p data-bbox="124 1666 561 1688">Code for shaft seal: HQQE</p> <p data-bbox="124 1693 577 1715">Approvals: CURUS</p> <p data-bbox="124 1720 635 1742">Approvals for drinking water: NSF/ANSI 61</p> <p data-bbox="124 1747 683 1769">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="124 1827 231 1854">Materials:</p> <p data-bbox="124 1859 646 1944">Base: Stainless steel EN 1.4408 AISI 316</p> <p data-bbox="124 1948 646 2033">Impeller: Stainless steel EN 1.4401 AISI 316</p> <p data-bbox="124 2038 529 2060">Bearing: SIC</p> <p data-bbox="124 2096 247 2123">Installation:</p> <p data-bbox="124 2128 561 2150">t max amb: 104 °F</p> <p data-bbox="124 2154 603 2177">Maximum operating pressure: 362.59 psi</p>

Qty.	Description
	<p>Max pressure at stated temp: 363 psi / 250 °F 363 psi / -4 °F</p> <p>Type of connection: PJE</p> <p>Size of inlet connection: DN 50</p> <p>Size of outlet connection: DN 50</p> <p>Pressure rating for connection: PN 50</p> <p>Flange size for motor: 213TC</p> <p>Electrical data:</p> <p>Motor standard: NEMA</p> <p>Motor type: 132F</p> <p>IE Efficiency class: IE5</p> <p>Rated power - P2: 7.5 HP</p> <p>Power (P2) required by pump: 7.5 HP</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: 20.0-16.6 A</p> <p>Cos phi - power factor: 0.94</p> <p>Rated speed: 360-4000 rpm</p> <p>Efficiency: 90.2%</p> <p>Motor efficiency at full load: 90.2 %</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 99301703</p> <p>Controls:</p> <p>Frequency converter: Built-in</p> <p>Pressure sensor: Y</p> <p>Others:</p> <p>DOE Pump Energy Index VL: 0.42</p> <p>Net weight: 170 lb</p> <p>Gross weight: 256 lb</p> <p>Shipping volume: 13.1 ft³</p>

99392147 CRNE 15-3 N-P-A-E-HQQE 60 Hz



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