

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

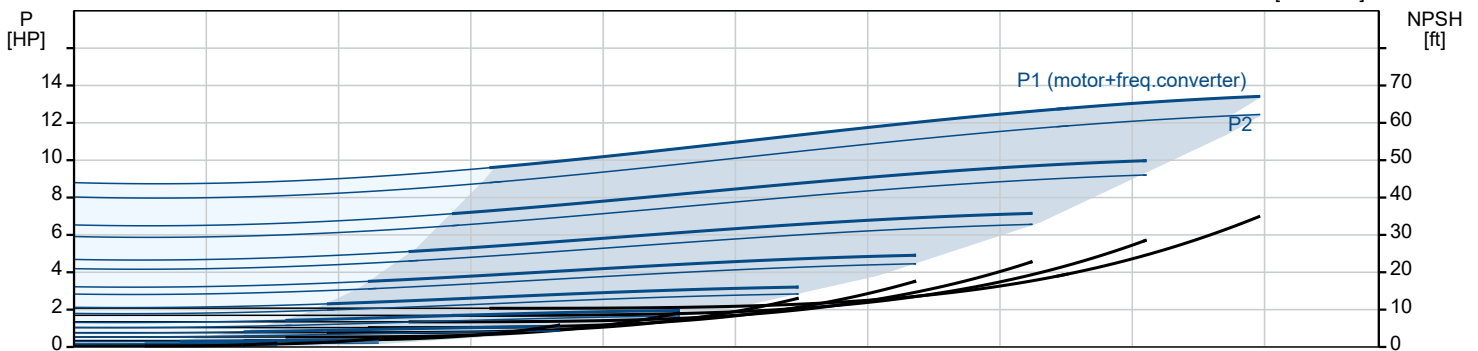
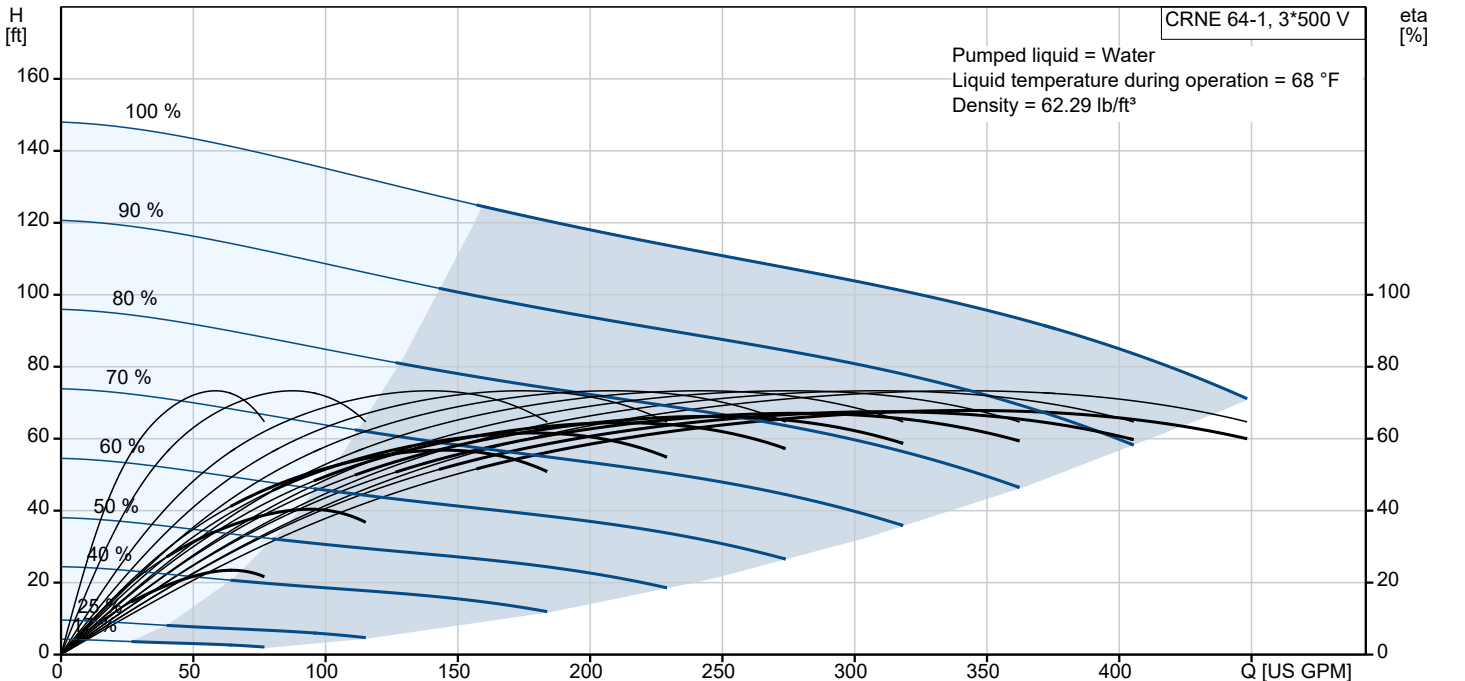


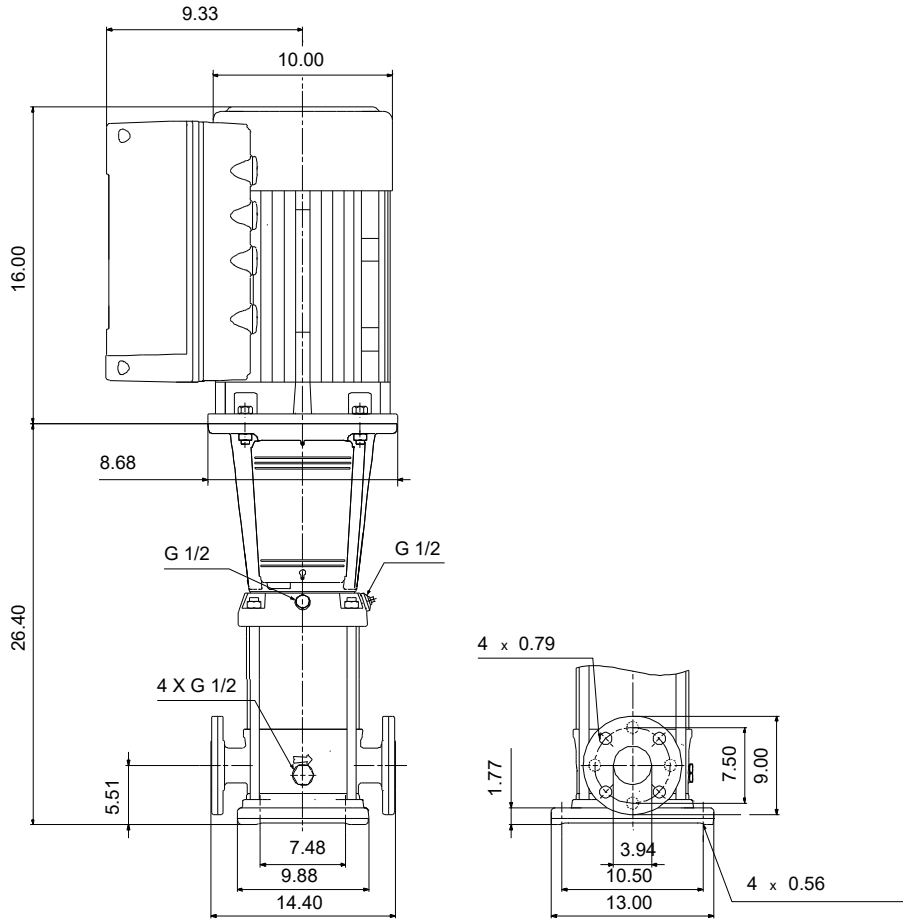
CRNE 64-1 N-G-A-E-HQQE

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:	232 psi / 250 °F	Rated power - P2:	15 HP
Temperature:	68 °F	Liquid temperature range:	-40 .. 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:	99076558	Insulation class:	F
				Motor protection:	ELEC
				Motor type:	160H
				Eta 1/1:	93.2 %





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 85 432 114">CRNE 64-1 N-G-A-E-HQQE</p> <p data-bbox="124 114 389 143">Product No.: 99076558</p> <p data-bbox="124 174 1517 248">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 ANSI flanges.</p> <p data-bbox="124 259 1051 288">The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor.</p> <p data-bbox="124 293 940 322">The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="124 327 1517 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 1469 409">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="124 441 890 470">The display gives an intuitive and user-friendly interface to all functions.</p> <p data-bbox="124 474 1461 524">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="124 589 1517 663">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="124 701 1114 730">The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="164 734 1433 819" 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="124 824 1501 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="164 878 1501 1263" 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 197 1323">Liquid:</p> <p data-bbox="124 1328 557 1357">Pumped liquid: Water</p> <p data-bbox="124 1361 624 1391">Liquid temperature range: -40 .. 248 °F</p> <p data-bbox="124 1395 549 1424">Selected liquid temperature: 68 °F</p> <p data-bbox="124 1429 606 1458">Density: 62.29 lb/ft³</p> <p data-bbox="124 1489 237 1518">Technical:</p> <p data-bbox="124 1523 743 1552">Pump speed on which pump data are based: 3444 rpm</p> <p data-bbox="124 1556 635 1585">Rated flow: 339 US GPM</p> <p data-bbox="124 1590 572 1619">Rated head: 103.4 ft</p> <p data-bbox="124 1624 563 1653">Actual impeller diameter: 5.63 in</p> <p data-bbox="124 1657 572 1686">Pump orientation: Vertical</p> <p data-bbox="124 1691 549 1720">Shaft seal arrangement: Single</p> <p data-bbox="124 1724 563 1753">Code for shaft seal: HQQE</p> <p data-bbox="124 1758 576 1787">Approvals: CURUS</p> <p data-bbox="124 1792 635 1821">Approvals for drinking water: NSF/ANSI 61</p> <p data-bbox="124 1825 683 1854">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="124 1886 233 1915">Materials:</p> <p data-bbox="124 1919 647 1977">Base: Stainless steel EN 1.4408 AISI 316</p> <p data-bbox="124 1982 647 2040">Impeller: Stainless steel EN 1.4401 AISI 316</p> <p data-bbox="124 2045 533 2074">Bearing: SIC</p> <p data-bbox="124 2078 571 2107">Support bearing: Graflon</p> <p data-bbox="124 2139 248 2168">Installation:</p> <p data-bbox="124 2172 563 2201">t max amb: 122 °F</p>

Qty.	Description
	<p>Maximum operating pressure: 232.06 psi</p> <p>Max pressure at stated temp: 232 psi / 250 °F 232 psi / -40 °F</p> <p>Type of connection: ANSI</p> <p>Size of inlet connection: 4 inch</p> <p>Size of outlet connection: 4 inch</p> <p>Pressure rating for connection: PN 16</p> <p>Flange rating inlet: 150 lb</p> <p>Flange size for motor: 254TC</p> <p>Electrical data:</p> <p>Motor standard: NEMA</p> <p>Motor type: 160H</p> <p>IE Efficiency class: IE5</p> <p>Rated power - P2: 15 HP</p> <p>Power (P2) required by pump: 15 HP</p> <p>Mains frequency: 60 Hz</p> <p>Rated voltage: 3 x 440-480 V</p> <p>Service factor: 1.15</p> <p>Rated current: 17.9-16.6 A</p> <p>Cos phi - power factor: 0.92-0.91</p> <p>Rated speed: 360-4000 rpm</p> <p>Efficiency: 93.2%</p> <p>Motor efficiency at full load: 93.2 %</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 99256777</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: 281 lb</p> <p>Gross weight: 299 lb</p> <p>Shipping volume: 17.5 ft³</p>

99076558 CRNE 64-1 N-G-A-E-HQQE 60 Hz



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