

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

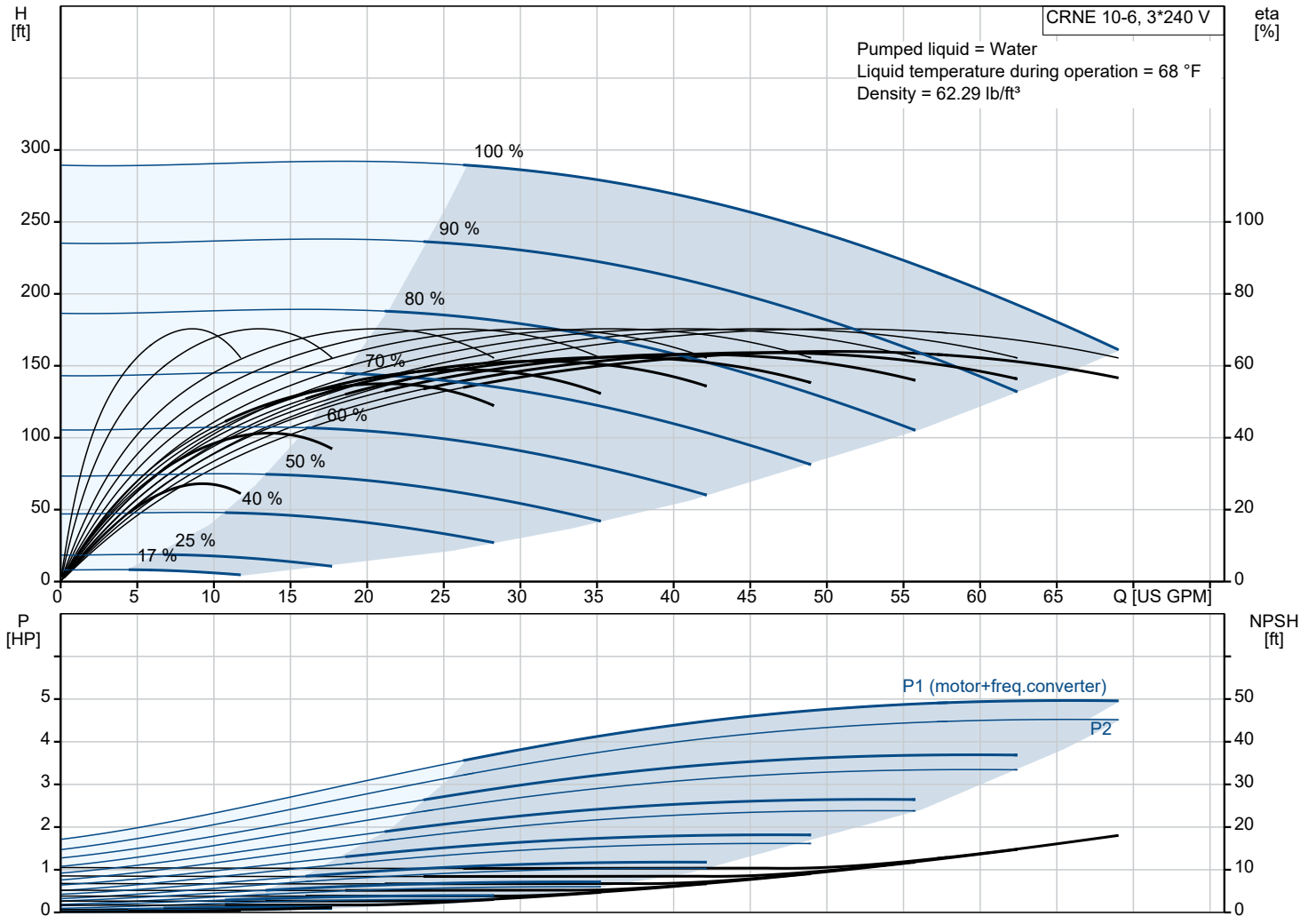


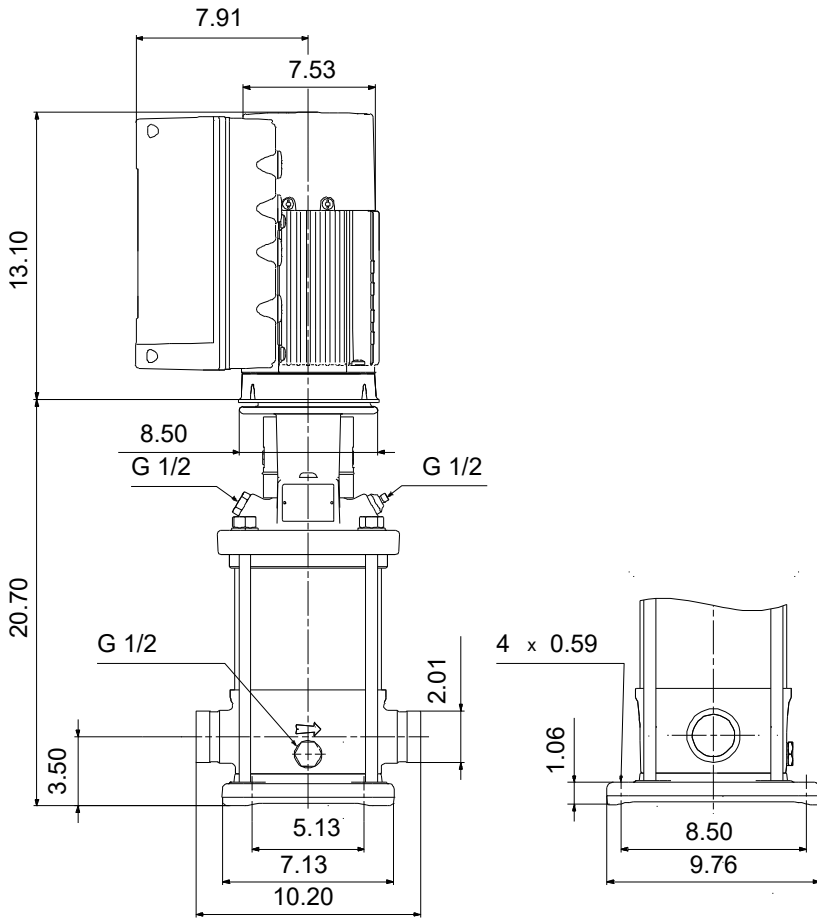
## CRNE 10-6 N-P-A-E-HQQE

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:	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:	99392050	Insulation class:	F
				Motor protection:	ELEC
				Motor type:	112C
				Eta 1/1:	90.9 %





**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 85 427 118"><b>CRNE 10-6 N-P-A-E-HQQE</b></p> <p data-bbox="124 118 389 141">Product No.: <a href="#">99392050</a></p> <p data-bbox="124 174 1520 253">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 286">The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor.</p> <p data-bbox="124 293 938 315">The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="124 322 1520 378">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="124 385 1469 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="124 441 890 463">The display gives an intuitive and user-friendly interface to all functions.</p> <p data-bbox="124 470 1461 526">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="124 582 1520 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="124 694 1114 716">The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="164 723 1433 813" style="list-style-type: none"> <li>• "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights)</li> <li>• "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)</li> <li>• "Alarm": Motor has stopped (flashing red indicator lights).</li> </ul> <p data-bbox="124 819 1501 875">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="164 882 1501 1263" style="list-style-type: none"> <li>• two dedicated digital inputs</li> <li>• 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</li> <li>• 5 V voltage supply to potentiometer and sensor</li> <li>• one analog output, 0-10 V, 0(4)-20 mA</li> <li>• two configurable digital inputs or open-collector outputs</li> <li>• two Pt100/Pt1000 inputs</li> <li>• LiqTec, dry-running protection sensor input</li> <li>• Grundfos Digital Sensor input and output</li> <li>• 24 V voltage supply for sensors</li> <li>• two signal-relay outputs (potential-free contacts)</li> <li>• GENIbus connection</li> <li>• interface for Grundfos CIM fieldbus module.</li> </ul> <p data-bbox="124 1296 197 1319">Liquid:</p> <p data-bbox="124 1326 555 1348">Pumped liquid: Water</p> <p data-bbox="124 1355 611 1377">Liquid temperature range: -4 .. 248 °F</p> <p data-bbox="124 1384 547 1406">Selected liquid temperature: 68 °F</p> <p data-bbox="124 1413 603 1435">Density: 62.29 lb/ft<sup>3</sup></p> <p data-bbox="124 1469 236 1491">Technical:</p> <p data-bbox="124 1498 743 1520">Pump speed on which pump data are based: 3461 rpm</p> <p data-bbox="124 1527 639 1550">Rated flow: 53.3 US GPM</p> <p data-bbox="124 1556 555 1579">Rated head: 227 ft</p> <p data-bbox="124 1585 563 1608">Actual impeller diameter: 3.66 in</p> <p data-bbox="124 1615 571 1637">Pump orientation: Vertical</p> <p data-bbox="124 1644 547 1666">Shaft seal arrangement: Single</p> <p data-bbox="124 1673 563 1695">Code for shaft seal: HQQE</p> <p data-bbox="124 1702 576 1724">Approvals: CURUS</p> <p data-bbox="124 1731 635 1753">Approvals for drinking water: NSF/ANSI 61</p> <p data-bbox="124 1760 683 1783">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="124 1816 229 1839">Materials:</p> <p data-bbox="124 1845 647 1935">Base: Stainless steel EN 1.4408 AISI 316</p> <p data-bbox="124 1942 647 2031">Impeller: Stainless steel EN 1.4401 AISI 316</p> <p data-bbox="124 2038 531 2060">Bearing: SIC</p> <p data-bbox="124 2094 245 2116">Installation:</p> <p data-bbox="124 2123 563 2145">t max amb: 104 °F</p> <p data-bbox="124 2152 603 2175">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: 182TC</p> <p>Electrical data:</p> <p>Motor standard: NEMA</p> <p>Motor type: 112C</p> <p>IE Efficiency class: IE5</p> <p>Rated power - P2: 5 HP</p> <p>Power (P2) required by pump: 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: 13.2-10.9 A</p> <p>Cos phi - power factor: 0.94</p> <p>Rated speed: 360-4000 rpm</p> <p>Efficiency: 90.9%</p> <p>Motor efficiency at full load: 90.9 %</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 99301701</p> <p>Controls:</p> <p>Frequency converter: Built-in</p> <p>Pressure sensor: Y</p> <p>Others:</p> <p>DOE Pump Energy Index VL: 0.41</p> <p>Net weight: 130 lb</p> <p>Gross weight: 216 lb</p> <p>Shipping volume: 8.26 ft³</p>

# 99392050 CRNE 10-6 N-P-A-E-HQQE 60 Hz



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