

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

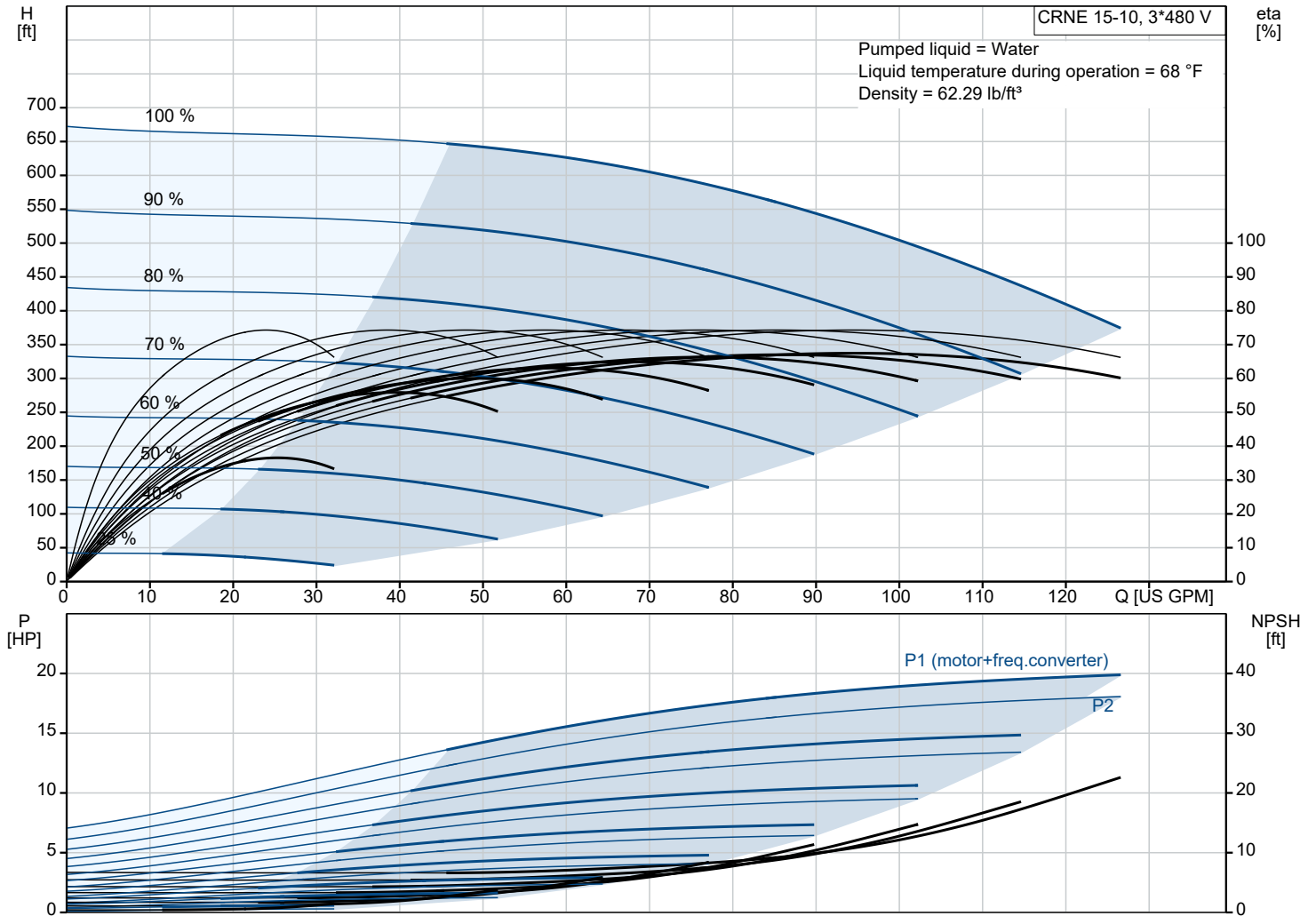


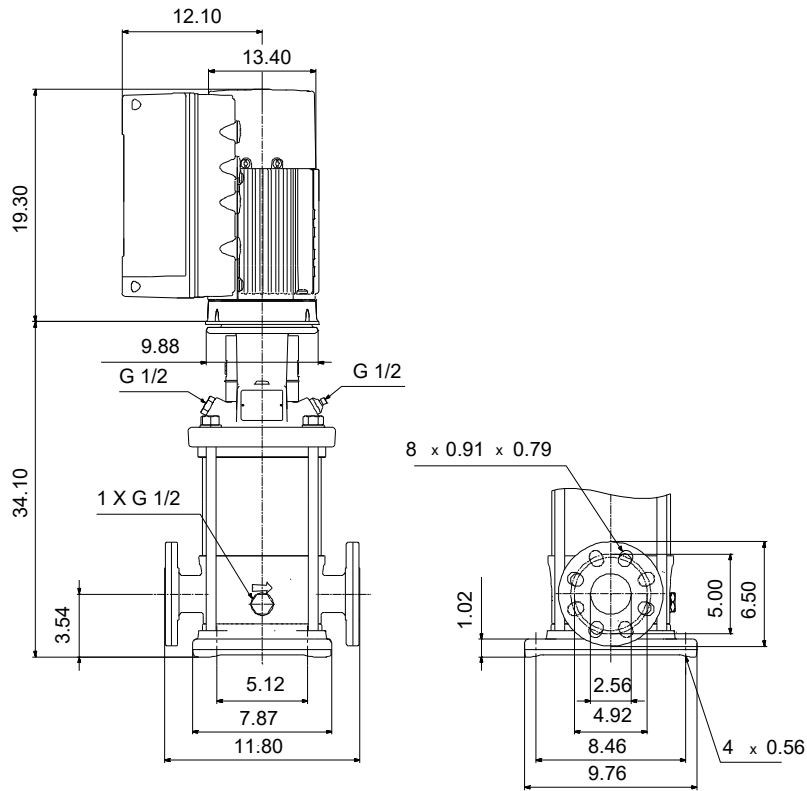
CRNE 15-10 N-FGJ-A-E-HQQE

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:	20 HP
Temperature:	68 °F	Liquid temperature range:	-4 .. 248 °F	Rated voltage:	460 V
Specific Gravity:	1.000	Maximum ambient temperature:	104 °F	Mains frequency:	60 Hz
		Shaft seal:	HQQE	Enclosure class:	IP55
		Product number:	98181593	Insulation class:	F
				Motor protection:	YES
				Motor type:	160AB
				Eta 1/1:	91.0 %





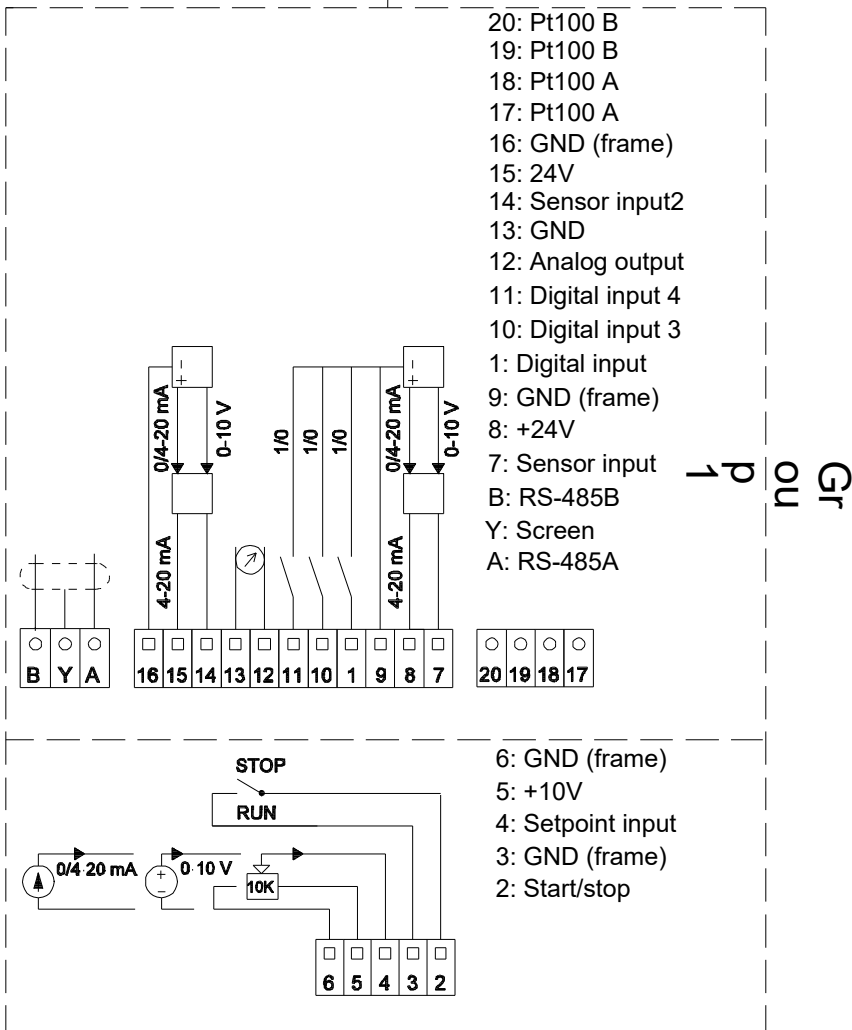
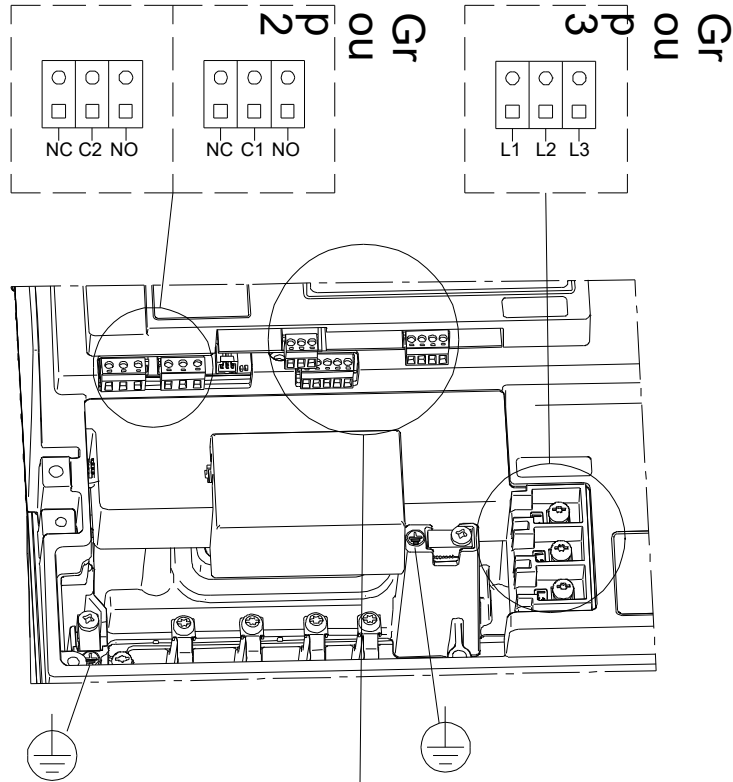
Materials:

- 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 85 472 114">CRNE 15-10 N-FGJ-A-E-HQQE</p> <p data-bbox="124 116 389 145">Product No.: 98181593</p> <p data-bbox="124 174 1520 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 combined DIN-ANSI-JIS flanges.</p> <p data-bbox="124 262 839 291">The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="124 293 1520 344">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="124 347 1477 403">An operating panel on the motor terminal box enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The operating panel has indicator lights for "Operation" and "Fault".</p> <p data-bbox="124 405 1469 483">Communication with the pump is 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="124 495 719 524">The terminal box holds terminals for these connections:</p> <ul data-bbox="164 526 1453 846" style="list-style-type: none"> • pump start/stop input (potential-free contact) • remote setpoint setting via analog signal, 0-10 V, 0(4)-20 mA • 10 V voltage supply for setpoint potentiometer, I_{max} = 5 mA • three analog sensor inputs, 0-10 V, 0(4)-20 mA; the factory-fitted pressure sensor is connected to one of these inputs • 24 V voltage supply for sensor, I_{max} = 40 mA • one analog output • three digital inputs • two Pt100 inputs • two potential-free fault signal relays with changeover contact, reporting "Fault", "Operation" or "Ready" • RS-485 GENIbus connection • interface for Grundfos CIM fieldbus module. <p data-bbox="124 880 201 909">Liquid:</p> <p data-bbox="124 911 555 940">Pumped liquid: Water</p> <p data-bbox="124 943 611 972">Liquid temperature range: -4 .. 248 °F</p> <p data-bbox="124 974 549 1003">Selected liquid temperature: 68 °F</p> <p data-bbox="124 1005 606 1034">Density: 62.29 lb/ft³</p> <p data-bbox="124 1059 237 1088">Technical:</p> <p data-bbox="124 1090 743 1120">Pump speed on which pump data are based: 3497 rpm</p> <p data-bbox="124 1122 639 1151">Rated flow: 90.3 US GPM</p> <p data-bbox="124 1153 574 1182">Rated head: 529.9 ft</p> <p data-bbox="124 1184 563 1214">Actual impeller diameter: 4.13 in</p> <p data-bbox="124 1216 571 1245">Pump orientation: Vertical</p> <p data-bbox="124 1247 558 1276">Shaft seal arrangement: Single</p> <p data-bbox="124 1279 563 1308">Code for shaft seal: HQQE</p> <p data-bbox="124 1310 576 1339">Approvals: CURUS</p> <p data-bbox="124 1341 635 1370">Approvals for drinking water: NSF/ANSI 61</p> <p data-bbox="124 1373 683 1402">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="124 1426 233 1456">Materials:</p> <p data-bbox="124 1458 647 1532">Base: Stainless steel EN 1.4408 AISI 316</p> <p data-bbox="124 1534 647 1630">Impeller: Stainless steel EN 1.4401 AISI 316</p> <p data-bbox="124 1632 533 1662">Bearing: SIC</p> <p data-bbox="124 1686 250 1715">Installation:</p> <p data-bbox="124 1718 563 1747">t max amb: 104 °F</p> <p data-bbox="124 1749 603 1778">Maximum operating pressure: 362.59 psi</p> <p data-bbox="124 1780 660 1832">Max pressure at stated temp: 363 psi / 250 °F 363 psi / -4 °F</p> <p data-bbox="124 1834 665 1863">Type of connection: DIN / ANSI / JIS</p> <p data-bbox="124 1865 560 1895">Size of inlet connection: DN 50</p> <p data-bbox="124 1897 560 1926">Size of outlet connection: DN 50</p> <p data-bbox="124 1928 560 1957">Pressure rating for connection: PN 25</p> <p data-bbox="124 1960 560 1989">Flange rating inlet: 300 lb</p> <p data-bbox="124 1991 563 2020">Flange size for motor: 254TC</p> <p data-bbox="124 2045 287 2074">Electrical data:</p> <p data-bbox="124 2076 563 2105">Motor standard: NEMA</p> <p data-bbox="124 2107 563 2136">Motor type: 160AB</p> <p data-bbox="124 2139 783 2168">IE Efficiency class: NEMA Premium / IE3 60Hz</p>

Qty.	Description
	Rated power - P2: 20 HP
	Power (P2) required by pump: 20 HP
	Mains frequency: 60 Hz
	Rated voltage: 3 x 460 V
	Service factor: 1.15
	Rated current: 26 A
	Cos phi - power factor: 0.89
	Rated speed: 480-3540 rpm
	Efficiency: IE3 91,0%
	Motor efficiency at full load: 91.0 %
	Number of poles: 2
	Enclosure class (IEC 34-5): IP55
	Insulation class (IEC 85): F
	Motor No: 85901137
	Controls:
	Frequency converter: Built-in
	Pressure sensor: Y
	Others:
	DOE Pump Energy Index VL: 0.47
	Net weight: 401 lb
	Gross weight: 516 lb
	Shipping volume: 28.4 ft ³

98181593 CRNE 15-10 N-FGJ-A-E-HQQE 60 Hz



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