

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

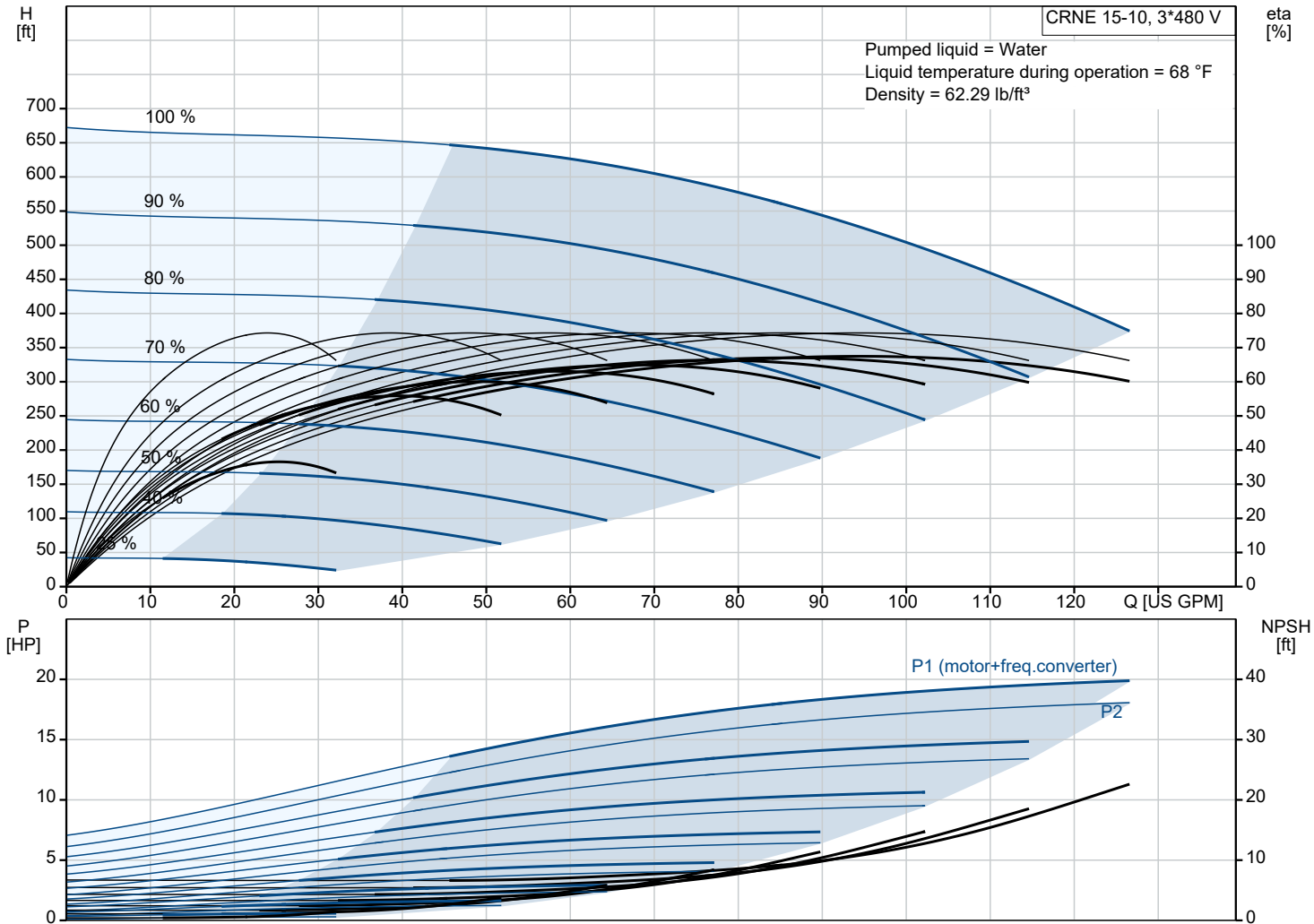


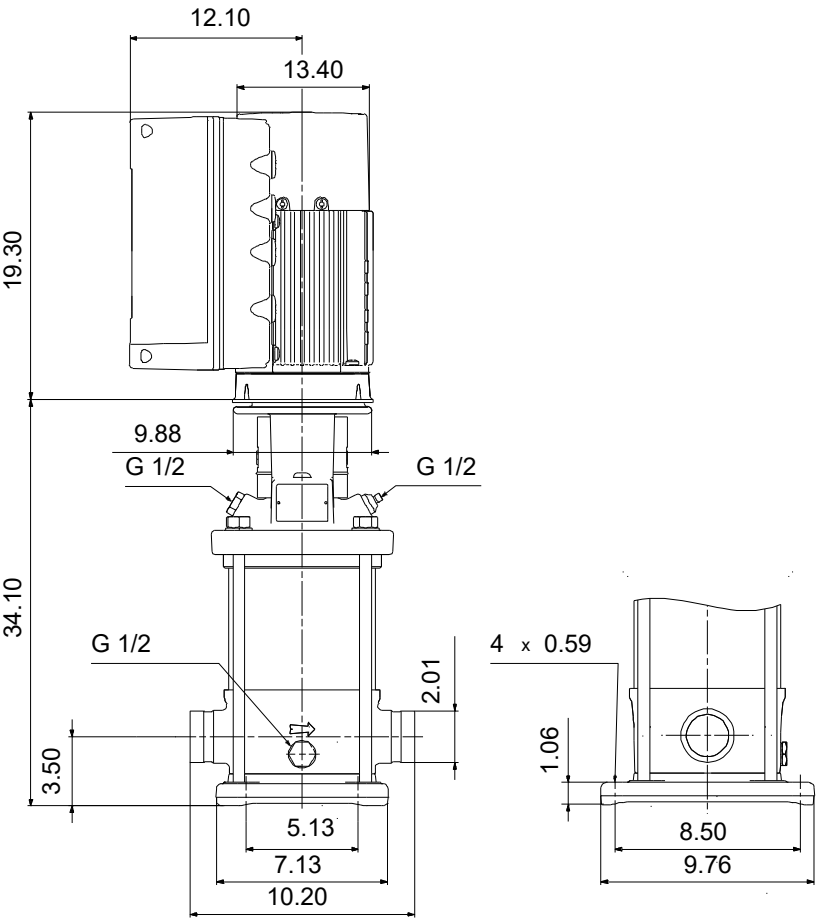
CRNE 15-10 N-P-A-E-HQQE

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:	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:	98181587	Insulation class:	F
				Motor protection:	YES
				Motor type:	160AB
				Eta 1/1:	91.0 %



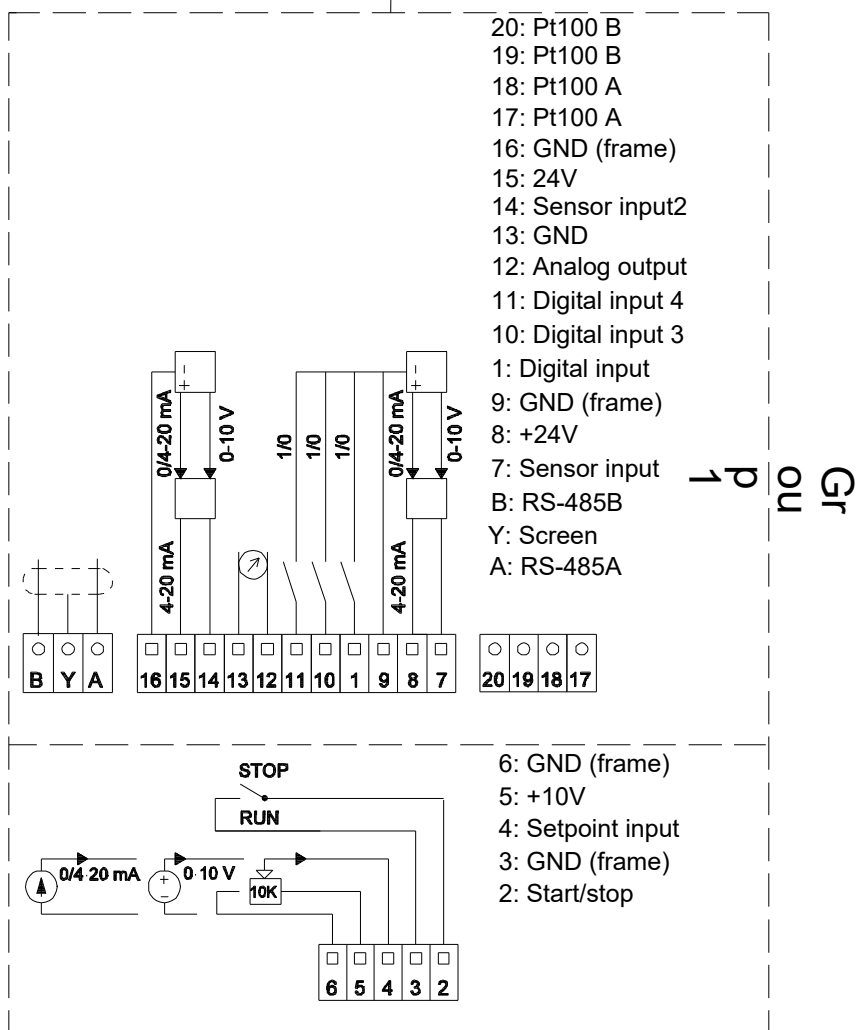
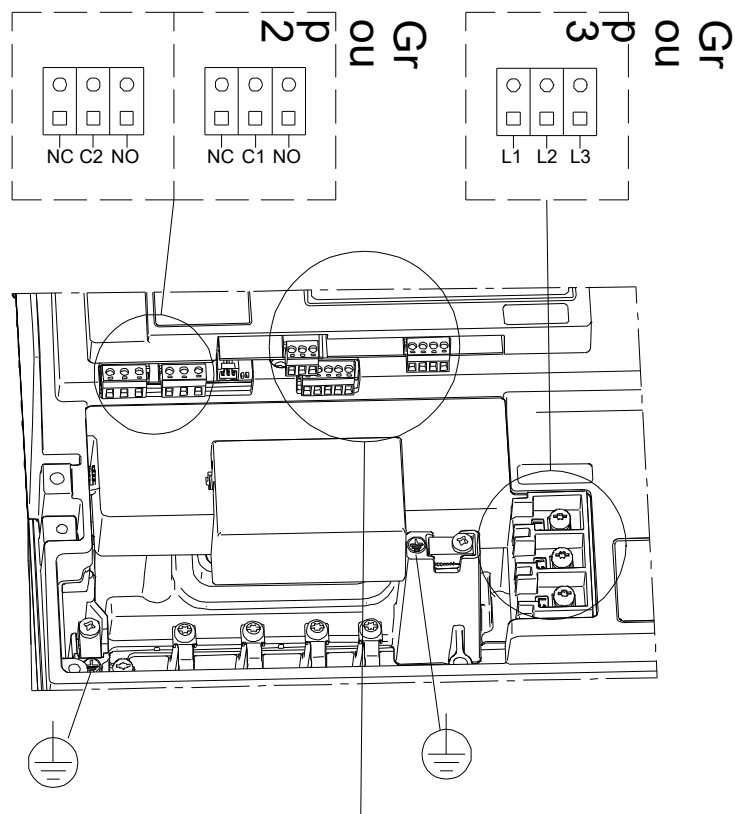


Materials:	
Base:	Stainless steel
Base:	EN 1.4408
Base:	AISI 316
Impeller:	Stainless steel
Impeller:	AISI 316
Impeller:	EN 1.4401
Material code:	A
Code for rubber:	E

Qty.	Description
1	<p>CRNE 15-10 N-P-A-E-HQQE Product No.: 98181587</p> <p>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>The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p>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>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>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>The terminal box holds terminals for these connections:</p> <ul 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>Liquid: Pumped liquid: Water Liquid temperature range: -4 .. 248 °F Selected liquid temperature: 68 °F Density: 62.29 lb/ft³</p> <p>Technical: Pump speed on which pump data are based: 3497 rpm Rated flow: 90.3 US GPM Rated head: 529.9 ft Actual impeller diameter: 4.13 in Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQE Approvals: CURUS Approvals for drinking water: NSF/ANSI 61 Curve tolerance: ISO9906:2012 3B</p> <p>Materials: Base: Stainless steel EN 1.4408 AISI 316 Impeller: Stainless steel EN 1.4401 AISI 316 Bearing: SIC</p> <p>Installation: t max amb: 104 °F Maximum operating pressure: 362.59 psi Max pressure at stated temp: 363 psi / 250 °F 363 psi / -4 °F Type of connection: PJE Size of inlet connection: DN 50 Size of outlet connection: DN 50 Pressure rating for connection: PN 50 Flange size for motor: 254TC</p> <p>Electrical data: Motor standard: NEMA Motor type: 160AB IE Efficiency class: NEMA Premium / IE3 60Hz Rated power - P2: 20 HP</p>

Qty.	Description
	<div> <div>Power (P2) required by pump:</div> <div>20 HP</div> </div> <div> <div>Mains frequency:</div> <div>60 Hz</div> </div> <div> <div>Rated voltage:</div> <div>3 x 460 V</div> </div> <div> <div>Service factor:</div> <div>1.15</div> </div> <div> <div>Rated current:</div> <div>26 A</div> </div> <div> <div>Cos phi - power factor:</div> <div>0.89</div> </div> <div> <div>Rated speed:</div> <div>480-3540 rpm</div> </div> <div> <div>Efficiency:</div> <div>IE3 91,0%</div> </div> <div> <div>Motor efficiency at full load:</div> <div>91.0 %</div> </div> <div> <div>Number of poles:</div> <div>2</div> </div> <div> <div>Enclosure class (IEC 34-5):</div> <div>IP55</div> </div> <div> <div>Insulation class (IEC 85):</div> <div>F</div> </div> <div> <div>Motor No:</div> <div>85901137</div> </div> <div> <div>Controls:</div> <div></div> </div> <div> <div>Frequency converter:</div> <div>Built-in</div> </div> <div> <div>Pressure sensor:</div> <div>Y</div> </div> <div> <div>Others:</div> <div></div> </div> <div> <div>DOE Pump Energy Index VL:</div> <div>0.47</div> </div> <div> <div>Net weight:</div> <div>390 lb</div> </div> <div> <div>Gross weight:</div> <div>505 lb</div> </div> <div> <div>Shipping volume:</div> <div>28.4 ft³</div> </div>

98181587 CRNE 15-10 N-P-A-E-HQQE 60 Hz



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