

## **Submittal Data**

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



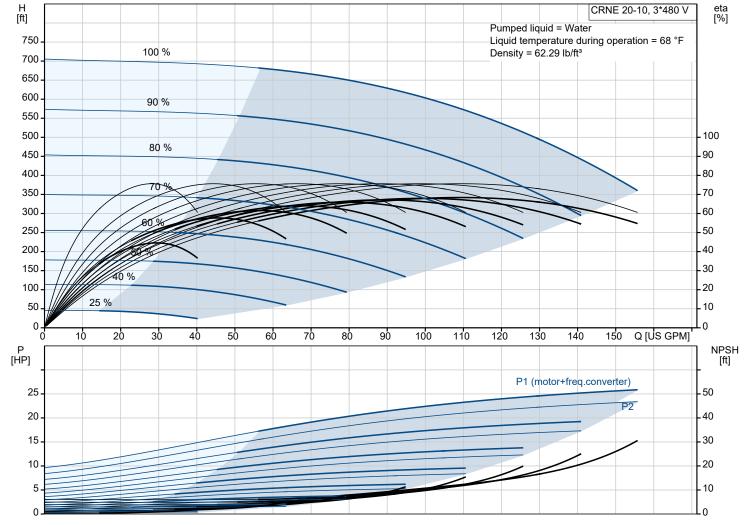
### CRNE 20-10 N-FGJ-A-E-HQQE

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

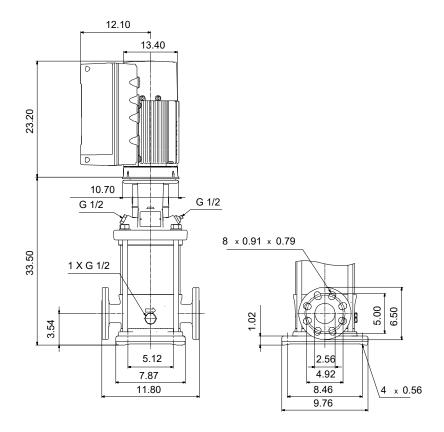
Conditions of Service		
Liquid:	Water	
Temperature:	68 °F	
Specific Gravity:	1.000	

Pump Data			
Max pressure at stated temp:	363 psi / 250 °F		
Liquid temperature range:	-4 248 °F		
Maximum ambient temperature:	104 °F		
Shaft seal:	HQQE		
Product number:	98183570		

Motor Data			
Rated power - P2:	25 HP		
Rated voltage:	460 V		
Mains frequency:	60 Hz		
Enclosure class:	IP55		
Insulation class:	F		
Motor protection:	YES		
Motor type:	160AC		
Eta 1/1:	91.7 %		







### 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

#### CRNE 20-10 N-FGJ-A-E-HQQE

Product No.: 98183570

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.

The pump is fitted with a 3-phase, fan-cooled asynchronous motor.

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.

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".

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".

The terminal box holds terminals for these connections:

- · 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, Imax = 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, Imax = 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.

Liquid:

Pumped liquid: Water
Liquid temperature range: -4 .. 248 °F
Selected liquid temperature: 68 °F
Density: 62.29 lb/ft³

Technical:

Pump speed on which pump data are based: 3521 rpm

Rated flow: 111 US GPM Rated head: 561.4 ft 4 13 in Actual impeller diameter: Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQE **CURUS** Approvals: Approvals for drinking water: NSF/ANSI 61 Curve tolerance: ISO9906:2012 3B

Materials:

Impeller:

Base: Stainless steel

EN 1.4408 AISI 316 Stainless steel FN 1.4401

AISI 316

Bearing: SIC

Installation:

t max amb: 104 °F

Maximum operating pressure: 362.59 psi

Max pressure at stated temp: 363 psi / 250 °F

363 psi / 40 °F

363 psi / -4 °F DIN / ANSI / JIS

284TC

Size of inlet connection: DN 50
Size of outlet connection: DN 50
Pressure rating for connection: PN 25
Flange rating inlet: 300 lb

Electrical data:

Type of connection:

Flange size for motor:

Motor standard: NEMA Motor type: 160AC

IE Efficiency class: NEMA Premium / IE3 60Hz

# Description Rated power - P2: 25 HP Power (P2) required by pump: 25 HP Mains frequency: 60 Hz Rated voltage: 3 x 460 V Service factor: 1.15 Rated current: 30.5 A Cos phi - power factor: 88.0 Rated speed: 480-3540 rpm Efficiency: IE3 91,7% Motor efficiency at full load: 91.7 % Number of poles: 2 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): 85901138 Motor No: Controls: Built-in Frequency converter: Pressure sensor: Others: DOE Pump Energy Index VL: 0.46 428 lb Net weight: Gross weight: 542 lb Shipping volume: 28.4 ft<sup>3</sup>

