

## Submittal Data

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

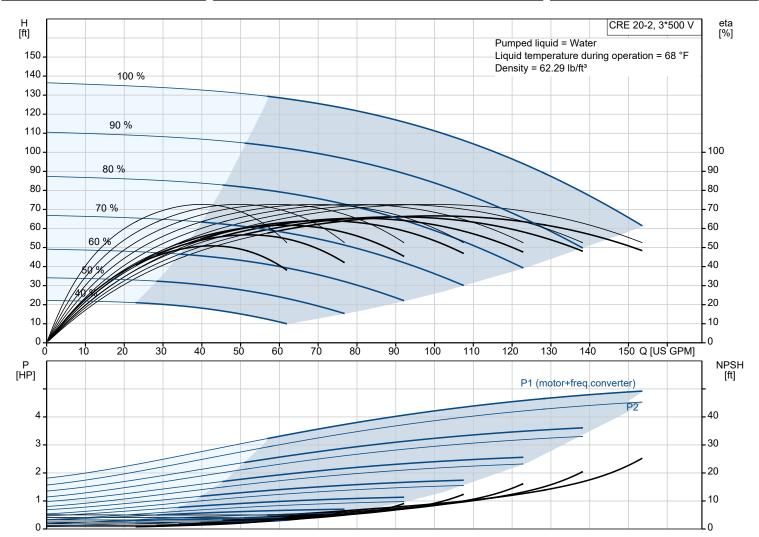


## CRE 20-2 N-GJ-A-E-HQQE

Vertical, multistage centrifugal pump with integrated frequency converter. The pump head and base are in cast iron - all other wetted parts are in stainless steel (EN 1.4301)

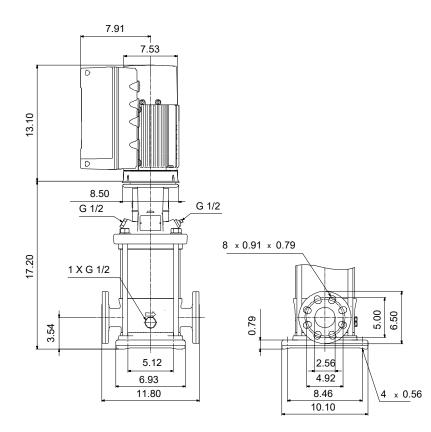
Note! Product picture may differ from actual product

Conditions of Service		Pump Data		Motor Data	
Liquid: Temperature: Specific Gravity:	Water 68 °F 1.000	Max pressure at stated temp: Liquid temperature range: Maximum ambient temperature: Shaft seal: Product number:	232 psi / 250 °F -4 248 °F 122 °F HQQE 99076271	Rated power - P2: Rated voltage: Mains frequency: Enclosure class: Insulation class: Motor protection: Motor type: Eta 1/1:	5 HP 440-480 V 60 Hz IP55 F ELEC 112C 92.5 %



## Submittal Data

## **GRUNDFOS**

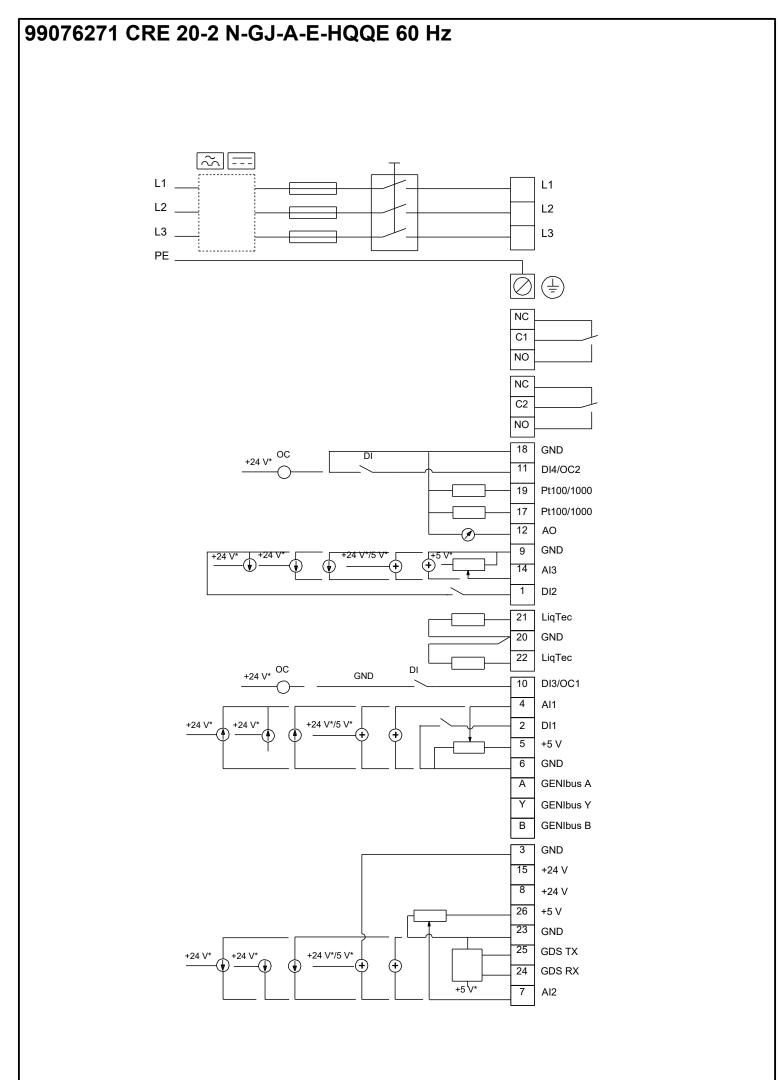


Materials:

Base: Cast iron Base: EN 1561 EN-GJL-200 Base: **ASTM A48-25B** Impeller: Stainless steel Impeller: AISI 304 Impeller: EN 1.4301 Material code: А Code for rubber: Е

011/	Description				
Qty.	Description				
1	CRE 20-2 N-GJ-A-E-HQQE				
	Product No.: 99076271	Note! Product picture may differ from actual product			
	Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in 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 ANSI-JIS flanges.				
	The motor efficiency is classified The motor includes a frequency the motor speed, which again er	e, fan-cooled, permanent-magnet, synchronous motor. I as IE5 in accordance with IEC 60034-30-2. converter and PI controller in the motor terminal box. This enables continuously variable control of nables adaptation of the performance to a given requirement.			
	The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicate The display gives an intuitive and user-friendly interface to all functions. 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".				
	Communication with the pump is settings as well as reading out o consumption".	s also possible by means of Grundfos GO Remote (accessory). The remote control enables further f a number of parameters such as "Actual value", "Speed", "Power input" and total "Power			
	<ul><li>"Power on": Motor is runr</li><li>"Warning": Motor is still ru</li></ul>	he operating panel provides visual indication of pump status: ning (rotating green indicator lights) or not running (permanently green indicator lights) unning (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights) ed (flashing red indicator lights).			
	The terminal box has a number of inputs and outputs enabling the motor to be used in advanced applications where many inp and outputs are required:				
	<ul> <li>two dedicated digital input</li> <li>three analog inputs, 0(4)- inputs</li> </ul>	ts 20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the factory-fitted pressure sensor is connected to one of these			
	<ul> <li>5 V voltage supply to potentiometer and sensor</li> <li>one analog output, 0-10 V, 0(4)-20 mA</li> </ul>				
<ul> <li>two configurable digital inputs or open-collector outputs</li> <li>two Pt100/Pt1000 inputs</li> </ul>					
	<ul> <li>LiqTec, dry-running protection sensor input</li> <li>Grundfos Digital Sensor input and output</li> <li>24 V voltage supply for sensore</li> </ul>				
	<ul> <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>				
	Liquid:				
	Pumped liquid:	Water			
	Liquid temperature range: Selected liquid temperature:	-4 248 °F 68 °F			
	Density:	62.29 lb/ft <sup>3</sup>			
	Technical:				
	Pump speed on which pump dat Rated flow:	a are based: 3461 rpm 111 US GPM			
	Rated head:	104 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			

Qty.	Description	
	Materials:	Costing
	Base:	
		EN 1561 EN-GJL-200
		ASTM A48-25B
	Impeller:	Stainless steel
		EN 1.4301
		AISI 304
	Bearing:	SIC
	Dealing:	
	Installation:	
	t max amb:	122 °F
	Maximum operating pressure:	232.06 psi
	Max pressure at stated temp:	232 psi / 250 °F
		232 psi / -4 °F
	Type of connection:	ANSI / JIS
	Size of inlet connection:	DN 50
	Size of outlet connection:	DN 50
	Pressure rating for connection:	PN 25
	Flange rating inlet:	250 lb
	Flange size for motor:	182TC
	Electrical data:	
	Motor standard:	NEMA
	Motor type:	112C
	IE Efficiency class:	IE5
	Rated power - P2:	5 HP
	Power (P2) required by pump:	5 HP
	Mains frequency:	60 Hz
	Rated voltage:	3 x 440-480 V
	Service factor:	1.15
	Rated current:	6.20-5.80 A
	Cos phi - power factor:	0.90-0.88
	Rated speed:	360-4000 rpm
	Efficiency:	92.5%
	Motor efficiency at full load:	92.5 %
	Enclosure class (IEC 34-5):	IP55
	Insulation class (IEC 85):	F
	Motor No:	99256771
	Controls:	
	Frequency converter:	Built-in
	Pressure sensor:	Y
	Others:	
	DOE Pump Energy Index VL:	0.41
	Net weight:	154 lb
	Gross weight:	170 lb
	Shipping volume:	13.1 ft <sup>3</sup>
1		



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