

## Submittal Data

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

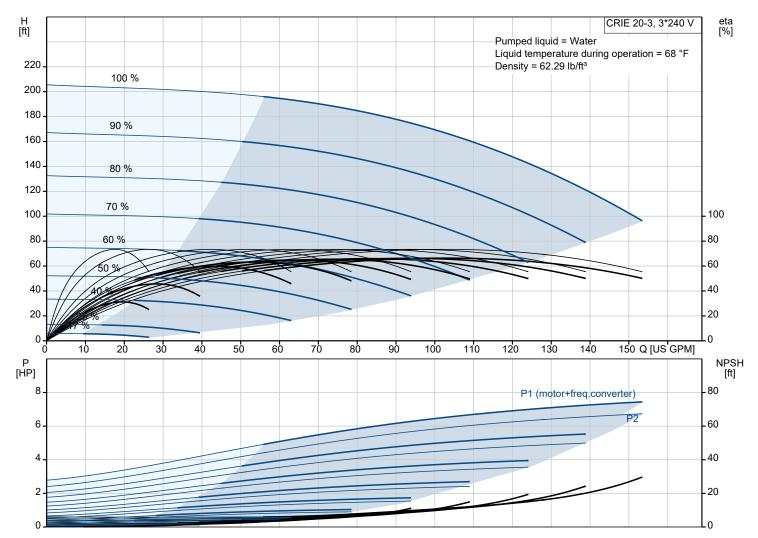


CRIE 20-3 N-CA-A-E-HQQE

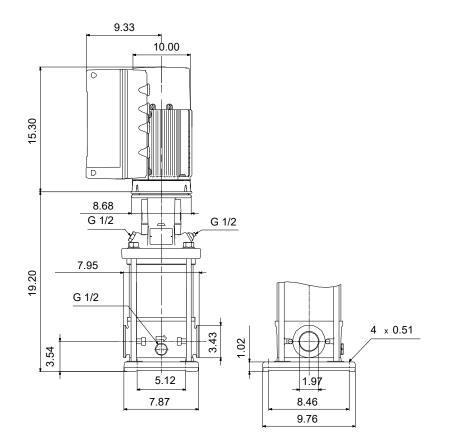
Vertical, multistage centrifugal pump with integrated frequency converter. Pump materials in contact with the liquid are in stainless steel (EN 1.4301)

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 104 °F HQQE 99392201	Rated power - P2: Rated voltage: Mains frequency: Enclosure class: Insulation class: Motor protection: Motor type: Eta 1/1:	7.5 HP 200-240 V 60 Hz IP55 F ELEC 132F 90.2 %





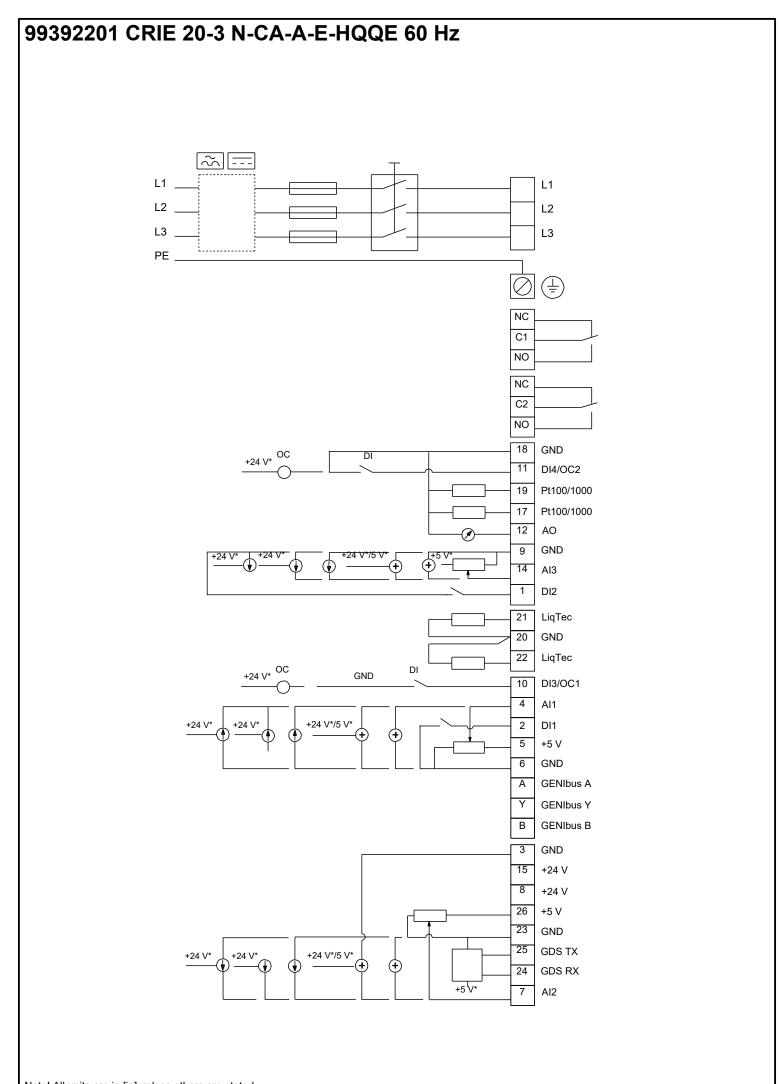


Materials:
------------

Base:	Stainless steel
Base:	EN 1.4408
Base:	AISI 316
Impeller:	Stainless steel
Impeller:	AISI 304
Impeller:	EN 1.4301
Material code:	А
Code for rubber:	E

Qty.	Description		
<u>uiy.</u> 1	CRIE 20-3 N-CA-A-E-HQQE		
I			
	X		
	Product No.: 99392201	Note! Product picture may differ from actual product	
	are in stainless steel. A cartridge	ump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid s shaft seal ensures high reliability, safe handling, and easy access and service. Power pupling. Pipe connection is via FlexiClamps.	
	The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor. The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.		
	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. The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.		
	The display gives an intuitive an	d user-friendly interface to all functions.	
	The push-buttons are used to na setting of required setpoint as w	avigate through the menu structure to access pump and performance data on site and enable ell 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 rung</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 and outputs are required:	of inputs and outputs enabling the motor to be used in advanced applications where many inputs	
	<ul> <li>two dedicated digital input</li> <li>three analog inputs, 0(4)- inputs</li> </ul>	its 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 pot</li> <li>one analog output, 0-10 V</li> </ul>	/, 0(4)-20 mA	
	<ul> <li>two configurable digital ir</li> <li>two Pt100/Pt1000 inputs</li> <li>LiqTec, dry-running prote</li> </ul>	puts or open-collector outputs	
	<ul> <li>Grundfos Digital Sensor input and output</li> <li>24 V voltage supply for sensors</li> </ul>		
	<ul> <li>two signal-relay outputs (</li> <li>GENIbus connection</li> <li>interface for Grundfos CI</li> </ul>		
	Liquid:		
	Pumped liquid: Liquid temperature range:	Water -4 248 °F	
	Selected liquid temperature:	68 °F	
	Density:	62.29 lb/ft <sup>3</sup>	
	Technical: Pump speed on which pump data are based: 3467 rpm Rated flow: 111 US GPM		
	Rated head:	159.1 ft	
	Actual impeller diameter:	4.13 in	
	Pump orientation: Shaft seal arrangement:	Vertical Single	
	Code for shaft seal:	HQQE	
	Approvals:	CURUS	
	Approvals for drinking water:	NSF/ANSI 61	
	Curve tolerance:	ISO9906:2012 3B	

Qty.	Description	
	Materials:	
1	Base:	Stainless steel
		EN 1.4408
		AISI 316
	Impeller:	Stainless steel
		EN 1.4301
		AISI 304
	Bearing:	SIC
	Installation:	
	t max amb:	104 °F
	Maximum operating pressure:	232.06 psi
	Max pressure at stated temp:	232 psi / 250 °F
		232 psi / -4 °F
	Type of connection:	FlexiClamp
	Size of inlet connection:	DN 50
	Size of outlet connection:	DN 50
	Pressure rating for connection:	PN 25
	Flange size for motor:	213TC
	Electrical data:	
	Motor standard:	NEMA
	Motor type:	132F
	IE Efficiency class:	IE5
	Rated power - P2:	7.5 HP
	Power (P2) required by pump: Mains frequency:	7.5 HP 60 Hz
	Rated voltage:	3 x 200-240 V
	Service factor:	1.15
	Rated current:	20.0-16.6 A
	Cos phi - power factor:	0.94
	Rated speed:	360-4000 rpm
	Efficiency:	90.2%
	Motor efficiency at full load:	90.2 %
	Enclosure class (IEC 34-5):	IP55
	Insulation class (IEC 85):	F
	Motor No:	99301703
	Controls:	
	Pressure sensor:	Υ
	Others:	
	DOE Pump Energy Index VL:	0.42
	Net weight:	172 lb
	Gross weight:	258 lb
	Shipping volume:	13.1 ft <sup>3</sup>
1		
1		
1		
1		
	1	



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