

## Submittal Data

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

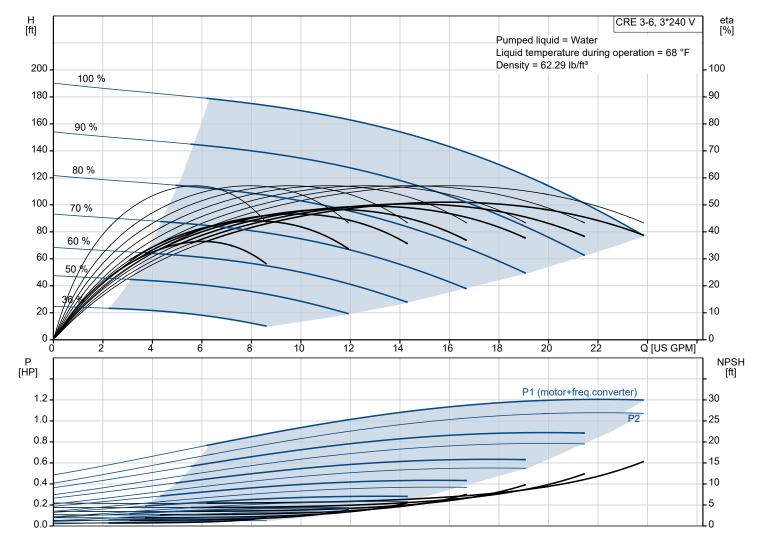


CRE 3-6 BN-B-A-E-HQQE

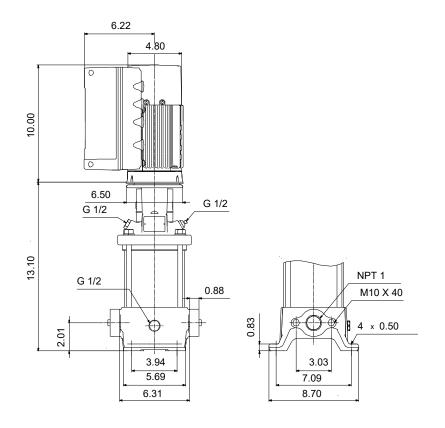
Vertical, multistage centrifugal pump with integrated frequency converter. The pump head and base are in cast iron - all other wetted parts are in stainless steel (EN 1.4301)

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 104 °F HQQE 99392533	Rated power - P2: Rated voltage: Mains frequency: Enclosure class: Insulation class: Motor protection: Motor type: Eta 1/1:	1.5 HP 200-240 V 60 Hz IP55 F ELEC 80B 89.3 %





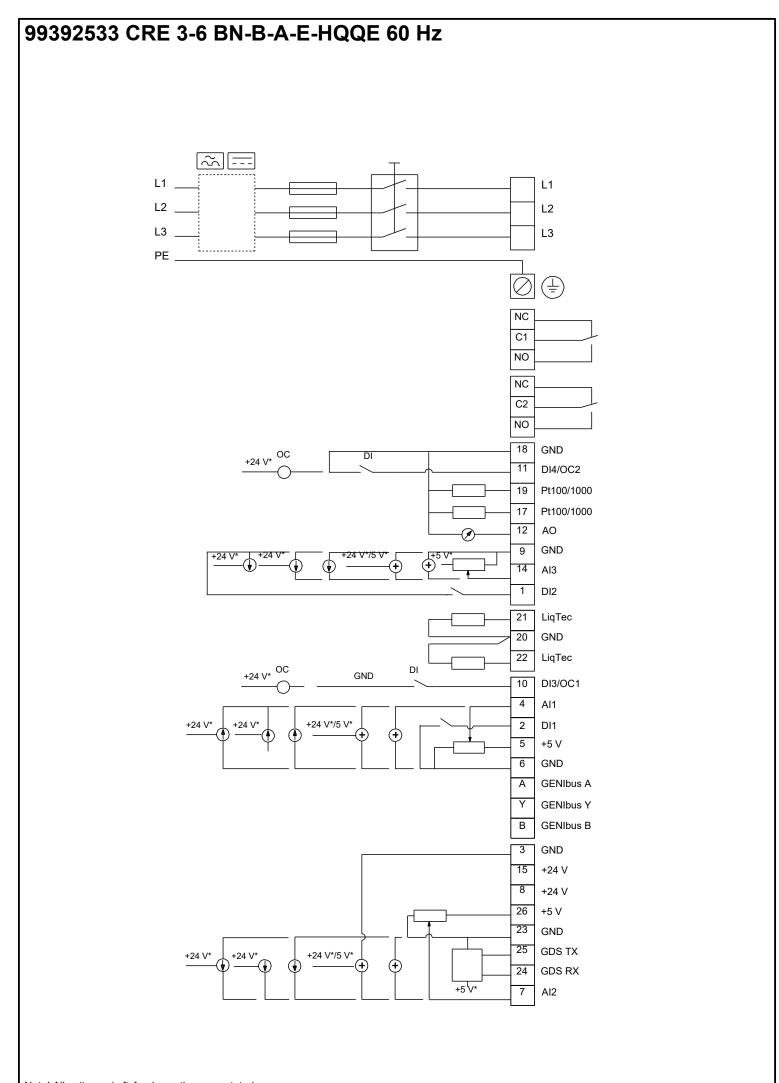


Materials:

Cast iron
EN 1561 EN-GJL-200
ASTM A48-25B
Stainless steel
AISI 304
EN 1.4301
A
E

Description		
CRE 3-6 BN-B-A-E-HQQE		
Grunders X		
	Note! Product picture may differ from actual product	
Product No.: 99392533		
<ul> <li>– all other wetted parts are in s</li> </ul>	pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and via a rigid split coupling. Pipe connection is via oval flanges with internal NPT threads.	
	ase, fan-cooled, permanent-magnet, synchronous motor.	
	ed as IE5 in accordance with IEC 60034-30-2. Ty converter and PI controller in the motor terminal box. This enables continuously variable control of	
the motor speed, which again e	enables adaptation of the performance to a given requirement.	
The operating panel on the mo	tor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.	
The display gives an intuitive a	and user-friendly interface to all functions.	
The push-buttons are used to r	navigate through the menu structure to access pump and performance data on site and enable well as setting of pump to "Min." or "Max." operation or to "Stop".	
Communication with the pump settings as well as reading out consumption".	is also possible by means of Grundfos GO Remote (accessory). The remote control enables further of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power	
The Grundfos Eye indicator on the operating panel provides visual indication of pump status:		
	nning (rotating green indicator lights) or not running (permanently green indicator lights)	
"Warning": Motor is still	running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)	
	oped (flashing red indicator lights). r of inputs and outputs enabling the motor to be used in advanced applications where many inputs	
and outputs are required:	i of inputs and outputs enabling the motor to be used in advanced applications where many inputs	
	<ul> <li>two dedicated digital inputs</li> <li>three analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the factory-fitted pressure sensor is connected to one of these inputs</li> <li>5 V voltage supply to potentiometer and sensor</li> <li>one analog output, 0-10 V, 0(4)-20 mA</li> <li>two configurable digital inputs or open-collector outputs</li> <li>two Pt100/Pt1000 inputs</li> <li>LiqTec, dry-running protection sensor input</li> <li>Grundfos Digital Sensor input and output</li> </ul>	
<ul> <li>24 V voltage supply for</li> <li>two signal relay outputs</li> </ul>	sensors s (potential-free contacts)	
GENIbus connection	s (potential-nee contacts)	
interface for Grundfos C	CIM fieldbus module.	
Liquid:		
Pumped liquid:	Water	
Liquid temperature range:	-4 248 °F	
Selected liquid temperature: Density:	68 °F 62.29 lb/ft³	
Density.		
Technical:		
Pump speed on which pump d Rated flow:	ata are based: 3484 rpm 15.4 US GPM	
Rated head:	137.5 ft	
Pump orientation:	Vertical	
Shaft seal arrangement:	Single	
Code for shaft seal:	HQQE	
Approvals:	CURUS	
Approvals for drinking water: Curve tolerance:	NSF/ANSI 61 ISO9906:2012 3B	
Materials:		
I		

Description	
Base:	Cast iron
	EN 1561 EN-GJL-200
	ASTM A48-25B
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:	Oval / NPT(F)
 Size of inlet connection:	1 inch
Size of outlet connection:	1 inch
Pressure rating for connection:	PN 16
Flange size for motor:	56C
Electrical data:	
Motor standard:	NEMA
Motor type:	80B
IE Efficiency class:	IE5
Rated power - P2:	1.5 HP
Power (P2) required by pump:	1.5 HP
Mains frequency:	60 Hz
Rated voltage:	3 x 200-240 V
Service factor:	1.15
 Rated current:	4.10-3.50 A
Cos phi - power factor:	0.91
Rated speed:	360-4000 rpm
Efficiency:	89.3%
Motor efficiency at full load:	89.3 %
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor No:	99301705
Original	
Controls:	
Frequency converter:	Built-in
Pressure sensor:	Y
Others:	
	60.4 lb
Net weight:	
Gross weight:	144 lb
Shipping volume:	4.94 ft <sup>3</sup>



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