# Submittal Data

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

Note! Product picture may differ from actual product

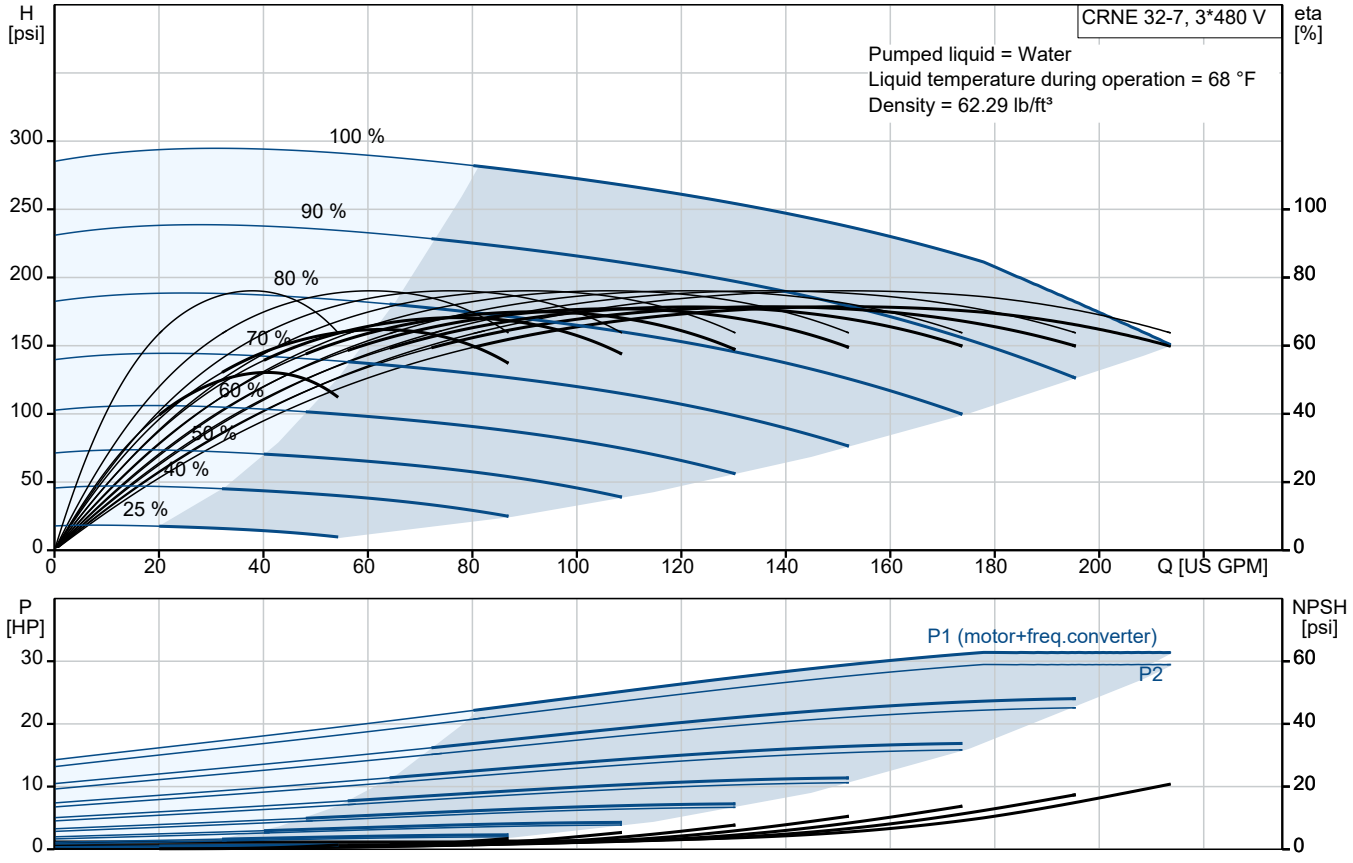
## CRNE 32-7 N-G-A-E-HQQE

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

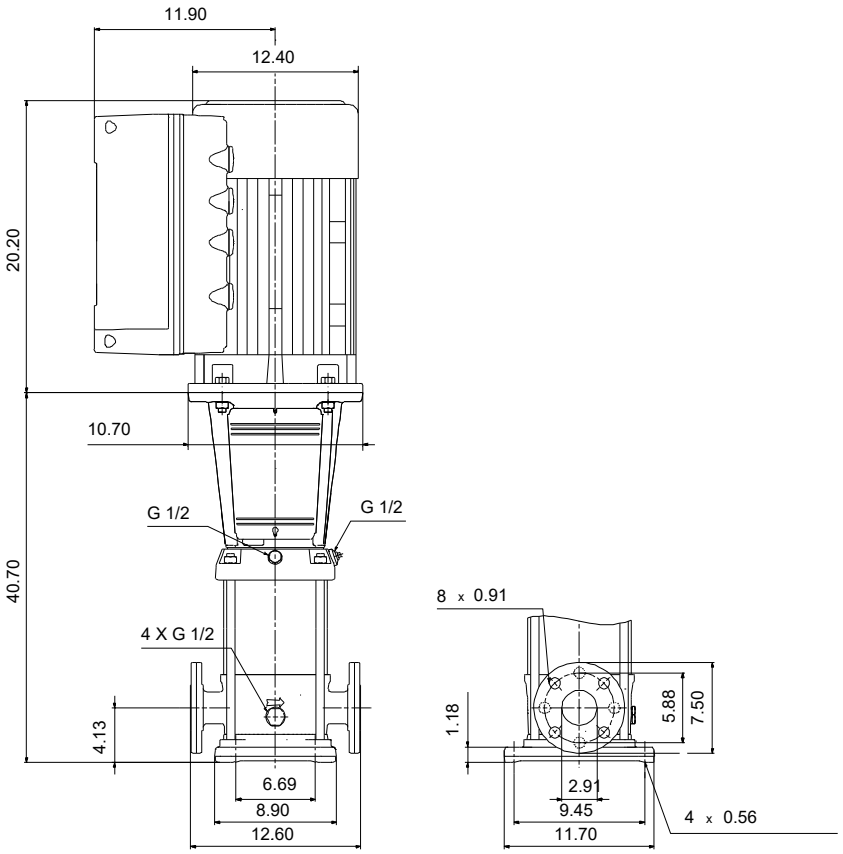
| Conditions of Service | |
|---|---|
| Liquid: | Water |
| Temperature: | 68 °F |
| Specific Gravity: | 1.000 |

| Pump Data | |
|---|---|
| Max pressure at stated temp: | 435 psi / 250 °F |
| Liquid temperature range: | -40 .. 248 °F |
| Maximum ambient temperature: | 122 °F |
| Shaft seal: | HQQE |
| Product number: | 92962956 |

| Motor Data | |
|---|---|
| Rated power - P2: | 30 HP |
| Rated voltage: | 440-480 V |
| Mains frequency: | 60 Hz |
| Enclosure class: | IP55 |
| Insulation class: | F |
| Motor protection: | ELEC |
| Motor type: | 180C |
| Eta 1/1: | 94.1 % |



# Submittal Data




**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 |

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**Company name:**
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**Date:** 11/10/2024

| Qty. | Description |
|---|---|
| 1 | **CRNE 32-7 N-G-A-E-HQQE** |

**Note! Product picture may differ from actual product**

Product No.: 92962956

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 ANSI flanges.

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 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".

The Grundfos Eye indicator on the operating panel provides visual indication of pump status:

- "Power on": Motor is running (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)
- "Alarm": Motor has stopped (flashing red indicator lights).

Communication with the pump is also 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".

## Further product details

The pump is equipped with a pressure sensor registering pump outlet pressure and enabling controlled pump operation based on constant pressure.

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 and user-friendly interface to all functions.
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Steel, cast iron and aluminium components have an epoxy-based coating made in a cathodic electro-deposition (CED) process.

CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

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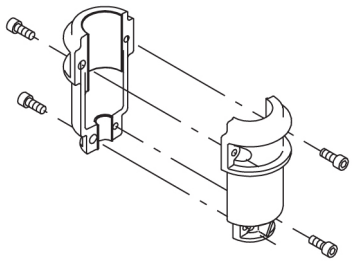
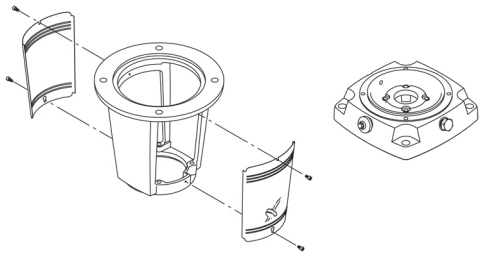
| Qty. | Description |
|---|---|
| 1 | An integral part of the process is a pretreatment.<br>The entire process consists of these elements:<br>1) Alkaline-based cleaning.<br>2) Zinc phosphating.<br>3) Cathodic electro-deposition.<br>4) Curing to a dry film thickness 18-22 my m.<br>The colour code for the finished product is NCS 9000/RAL 9005. |

## Pump

A long split coupling connects the pump and motor shaft. It is enclosed in the motor stool by means of two coupling guards. The long coupling makes it possible to replace the shaft seal without removing the motor from the pump.



The motor stool connects the pump head and motor. The pump head has a combined 1/2" priming plug and vent screw.



The pump is fitted with a balanced O-ring seal unit with a rigid torque-transmission system.

This seal type is assembled in a cartridge unit which makes replacement safe and easy.

Due to the balancing, this seal type is suitable for high-pressure applications.

The cartridge construction also protects the pump shaft from possible wear from a dynamic O-ring between pump shaft and shaft seal.

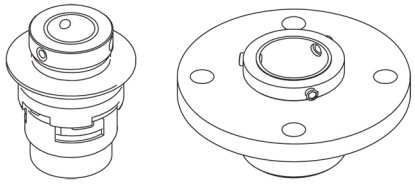
Seal faces:

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.



The shaft seal is retained in the pump head by a cover and screws. It can be replaced without removing the motor.

The chambers and impellers are made of stainless-steel sheet. The chambers are provided with a PTFE neck ring offering improved sealing and high efficiency. The impellers have smooth surfaces, and the shape of the blades ensure a high efficiency.

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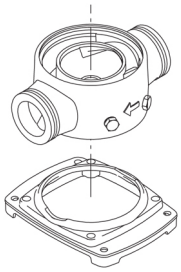
| Qty. | Description |
|---|---|
| 1 | The pump has a stainless-steel base mounted on a separate base plate.<br>The base and base plate are kept in position by the tension of the staybolts which hold the pump together.<br>Both the inlet and the outlet side of the base have two pressure gauge tappings.<br>The pump is secured to the foundation by four bolts through the base plate.<br>The flanges are fastened to the base by means of locking rings. |



## Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with free-hole flange (FF).

Motor-mounting designation in accordance with IEC 60034-7: IM B 5 (Code I) / IM 3001 (Code II).

Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.

The motor requires no external motor protection. The motor control unit incorporates protection against slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

## Technical data

Liquid:

| | |
|---|---|
| Pumped liquid: | Water |
| Liquid temperature range: | -40 .. 248 °F |
| Selected liquid temperature: | 68 °F |
| Density: | 62.29 lb/ft³ |

Technical:

| | |
|---|---|
| Pump speed on which pump data are based: | 3541 rpm |
| Rated flow: | 159 US GPM |
| Rated head: | 218.4 psi |
| Actual impeller diameter: | 4.66 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 |

Materials:

| | |
|---|---|
| Base: | Stainless steel<br>EN 1.4408<br>AISI 316 |
| Impeller: | Stainless steel<br>EN 1.4401<br>AISI 316 |
| Bearing: | SIC |
| Support bearing: | Graflon |

Installation:

| | |
|---|---|
| Maximum ambient temperature: | 122 °F |
| Maximum operating pressure: | 435.11 psi |

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| Qty. | Description | |
|---|---|---|
| 1 | Max pressure at stated temp: | 435 psi / 250 °F |
| | | 435 psi / -40 °F |
| | Type of connection: | ANSI |
| | Size of inlet connection: | 2 1/2 inch |
| | Size of outlet connection: | 2 1/2 inch |
| | Pressure rating for connection: | PN 40 |
| | Flange rating inlet: | 300 lb |
| | Flange size for motor: | 284TC |
| | | |
| | Electrical data: | |
| | Motor standard: | NEMA |
| | Motor type: | 180C |
| | Rated power - P2: | 30 HP |
| | Power (P2) required by pump: | 30 HP |
| | Over/undersize motor: | Standard motor size |
| | Mains frequency: | 60 Hz |
| | Rated voltage: | 3 x 440-480 V |
| | Service factor: | 1.15 |
| | Rated current: | 34.3-31.6 A |
| | Cos phi - power factor: | 0.94 |
| | Rated speed: | 360-4000 rpm |
| | IE Efficiency class: | IE5 |
| | Motor efficiency at full load: | 94.1 % |
| | Enclosure class (IEC 34-5): | IP55 |
| | Insulation class (IEC 85): | F |
| | Motor No: | 92917801 |
| | | |
| | Controls: | |
| | Frequency converter: | Built-in |
| | Pressure sensor: | Y |
| | | |
| | Others: | |
| | Terminal box position: | 6 |
| | DOE Pump Energy Index VL: | 0.40 |
| | Net weight: | 392 lb |
| | Gross weight: | 410 lb |
| | Shipping volume: | 28.9 ft³ |
| | Country of origin: | US |
| | Custom tariff no.: | 8413.70.2040 |

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**Company name:**
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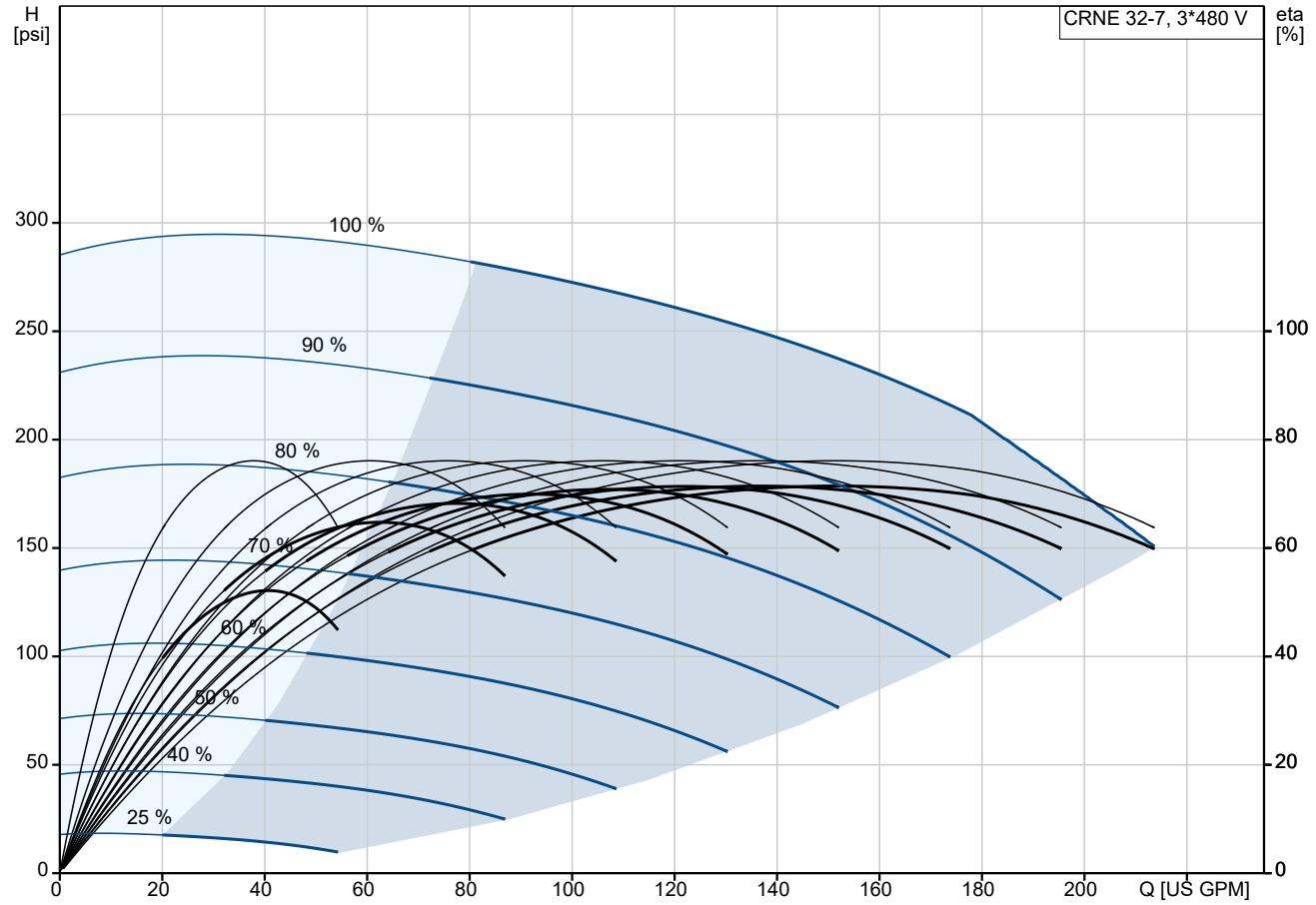
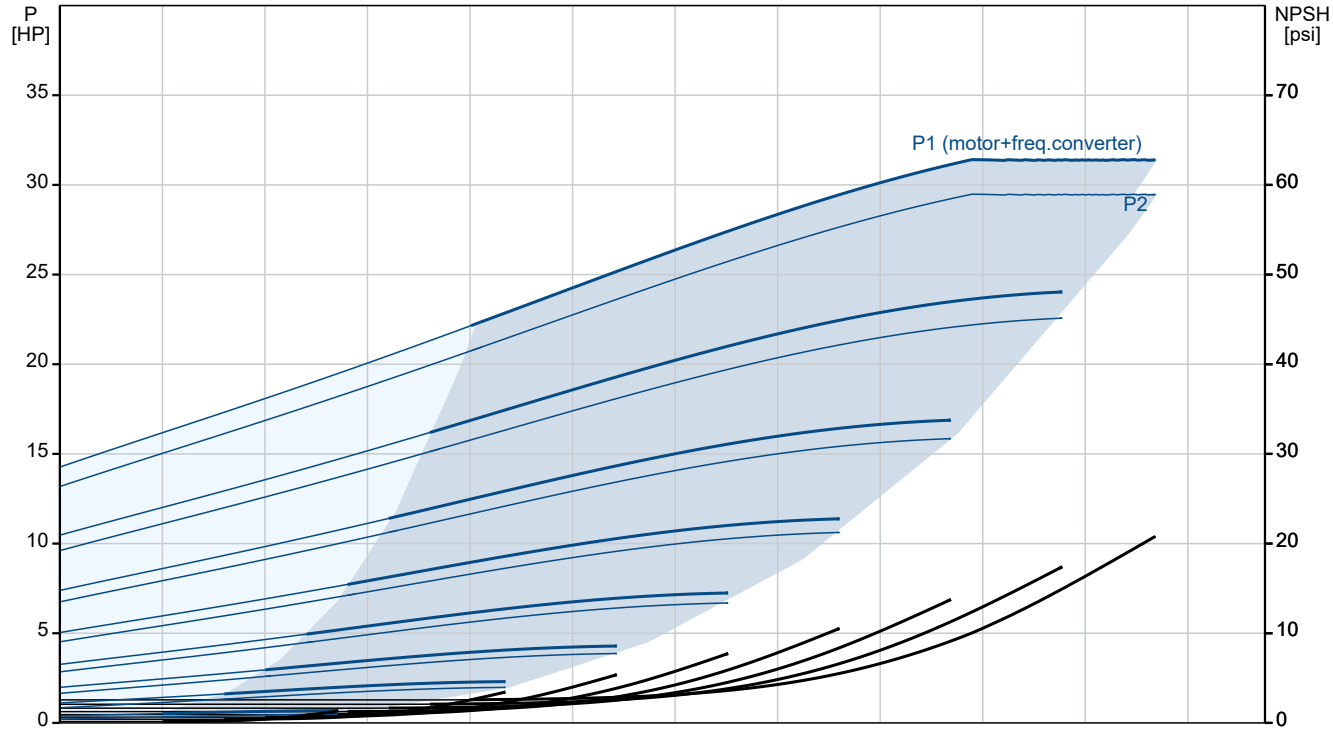
**Date:** 11/10/2024

# 92962956 CRNE 32-7 N-G-A-E-HQQE 60 Hz



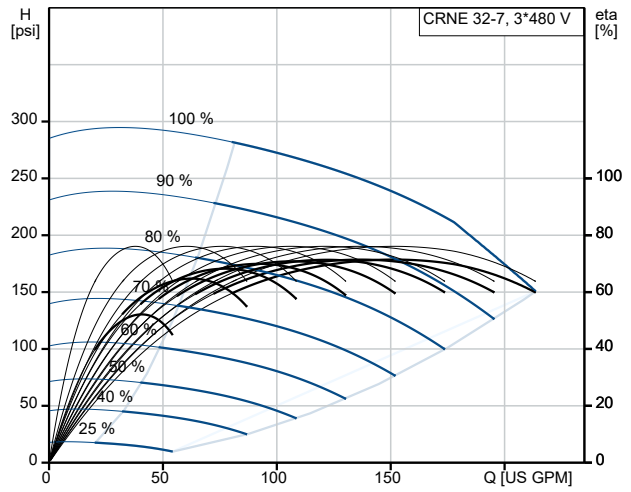

Pumped liquid = Water
Liquid temperature during operation = 68 °F
Density = 62.29 lb/ft³



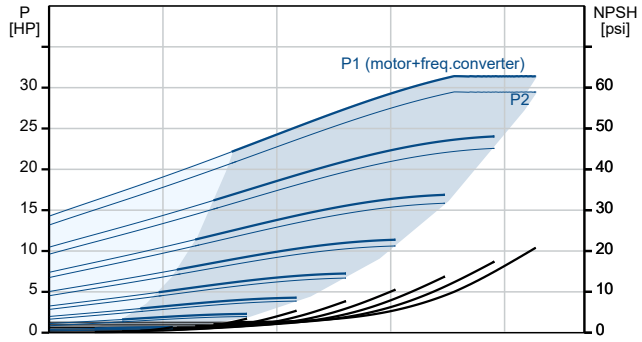
**Company name:**
**Created by:**
**Phone:**

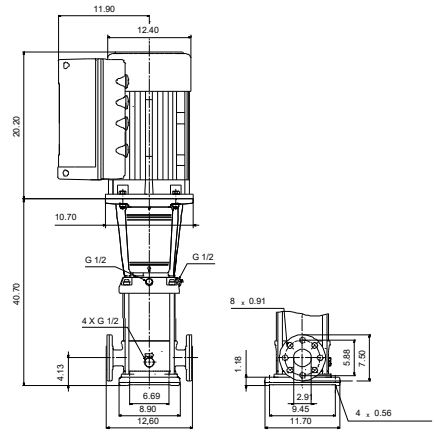
**Date:** 11/10/2024

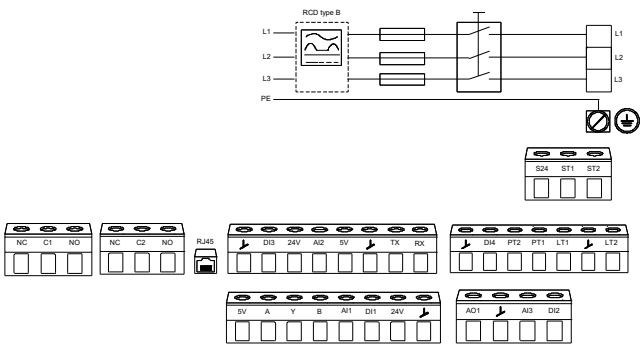
| Description | Value |
|---|---|
| **General information:** | |
| Product name: | CRNE 32-7 N-G-A-E-HQQE |
| Product No: | 92962956 |
| EAN number: | 5715122237023 |
| **Technical:** | |
| Pump speed on which pump data are based: | 3541 rpm |
| Rated flow: | 159 US GPM |
| Rated head: | 218.4 psi |
| Maximum head: | 279.4 psi |
| Actual impeller diameter: | 4.66 in |
| Stages: | 7 |
| Impellers: | 7 |
| Number of reduced-diameter impellers: | 0 |
| Low NPSH: | N |
| 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 |
| Pump version: | N |
| Model: | B |
| **Materials:** | |
| Base: | Stainless steel |
| Base: | EN 1.4408 |
| Base: | AISI 316 |
| Impeller: | Stainless steel |
| Impeller: | EN 1.4401 |
| Impeller: | AISI 316 |
| Material code: | A |
| Code for rubber: | E |
| Bearing: | SIC |
| Support bearing: | Graflon |
| **Installation:** | |
| Maximum ambient temperature: | 122 °F |
| Maximum operating pressure: | 435.11 psi |
| Max pressure at stated temp: | 435 psi / 250 °F |
| Max pressure at stated temp: | 435 psi / -40 °F |
| Type of connection: | ANSI |
| Size of inlet connection: | 2 1/2 inch |
| Size of outlet connection: | 2 1/2 inch |
| Pressure rating for connection: | PN 40 |
| Flange rating inlet: | 300 lb |
| Flange size for motor: | 284TC |
| Connect code: | G |
| **Liquid:** | |
| Pumped liquid: | Water |
| Liquid temperature range: | -40 .. 248 °F |
| Selected liquid temperature: | 68 °F |
| Density: | 62.29 lb/ft³ |
| **Electrical data:** | |
| Motor standard: | NEMA |
| Motor type: | 180C |
| Rated power - P2: | 30 HP |
| Power (P2) required by pump: | 30 HP |
| Over/undersize motor: | Standard motor size |




Pumped liquid = Water
Liquid temperature during operation = 68 °F
Density = 62.29 lb/ft³





*Printed from Grundfos Product Centre [2024.40.003]*

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**Date:** 11/10/2024

| Description | Value |
|---|---|
| Mains frequency: | 60 Hz |
| Rated voltage: | 3 x 440-480 V |
| Service factor: | 1.15 |
| Rated current: | 34.3-31.6 A |
| Cos phi - power factor: | 0.94 |
| Rated speed: | 360-4000 rpm |
| IE Efficiency class: | IE5 |
| Motor efficiency at full load: | 94.1 % |
| Enclosure class (IEC 34-5): | IP55 |
| Insulation class (IEC 85): | F |
| Built-in motor protection: | ELEC |
| Motor No: | 92917801 |
| **Controls:** | |
| Control panel: | Graphical |
| Function Module: | FM310 - Advanced |
| Frequency converter: | Built-in |
| Pressure sensor: | Y |
| **Others:** | |
| Terminal box position: | 6 |
| DOE Pump Energy Index VL: | 0.40 |
| Net weight: | 392 lb |
| Gross weight: | 410 lb |
| Shipping volume: | 28.9 ft³ |
| Config. file no: | 92939005 |
| Country of origin: | US |
| Custom tariff no.: | 8413.70.2040 |

**Company name:**
**Created by:**
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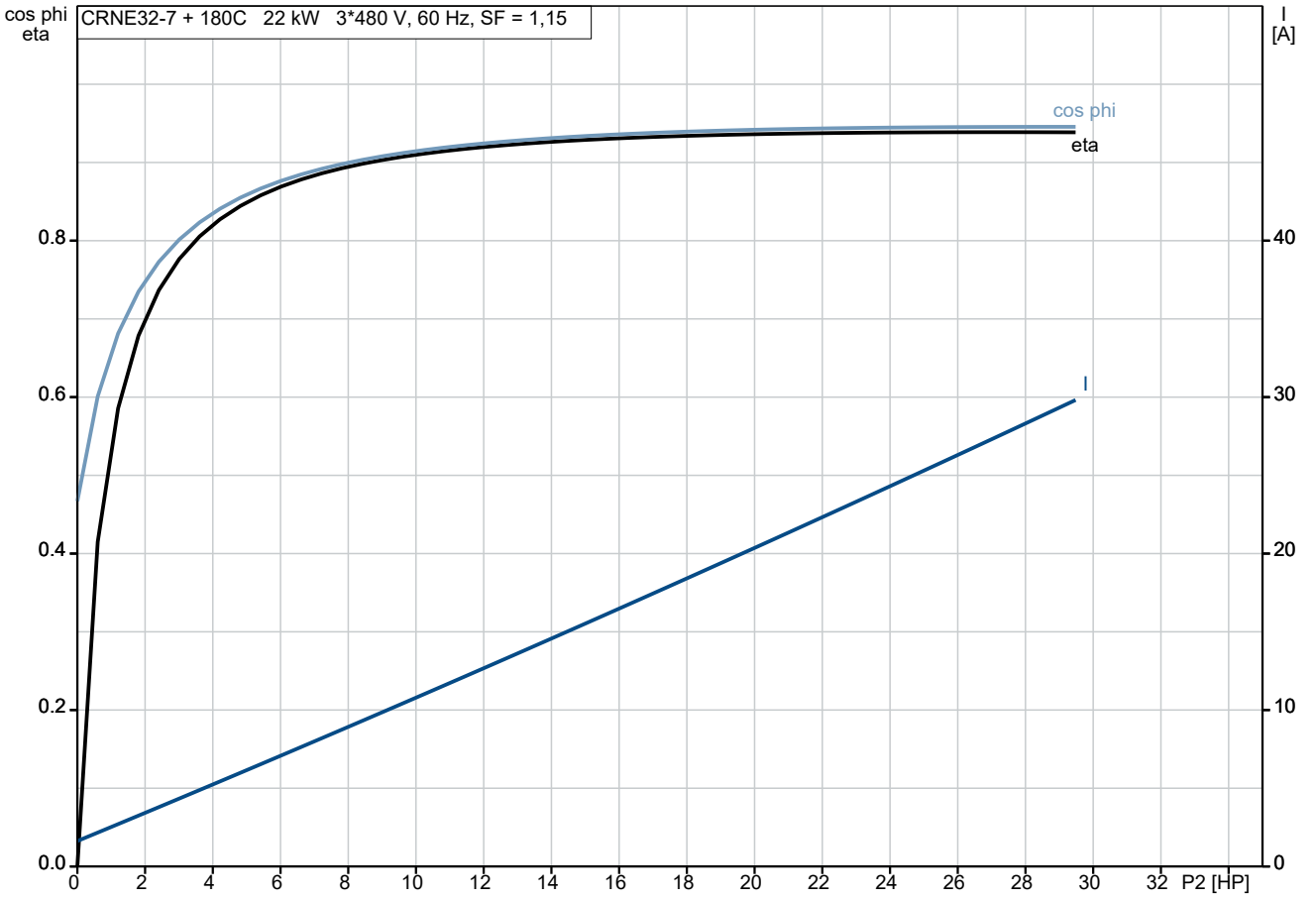
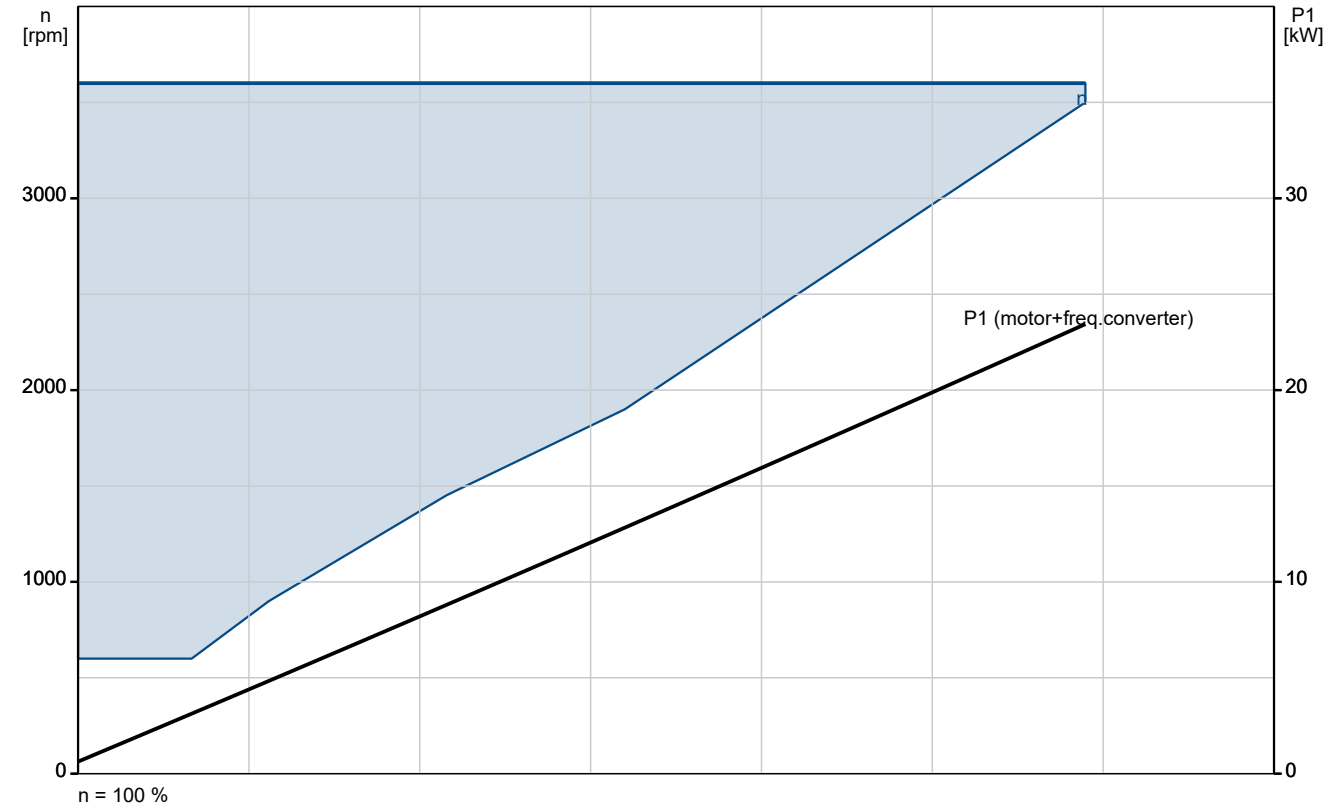
**Date:** 11/10/2024

# 92962956 CRNE 32-7 N-G-A-E-HQQE 60 Hz



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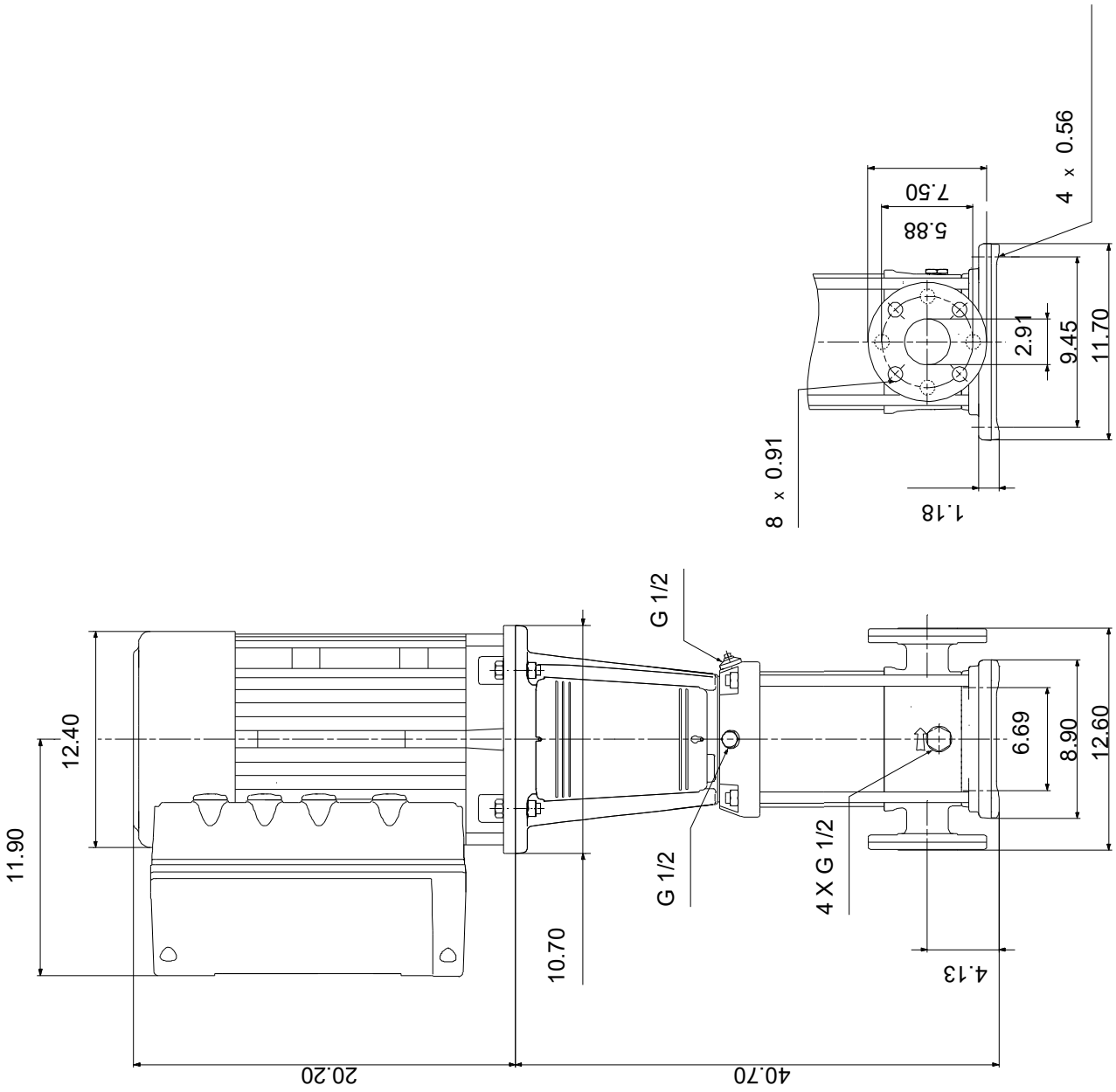
**Date:** 11/10/2024

# 92962956 CRNE 32-7 N-G-A-E-HQQE 60 Hz

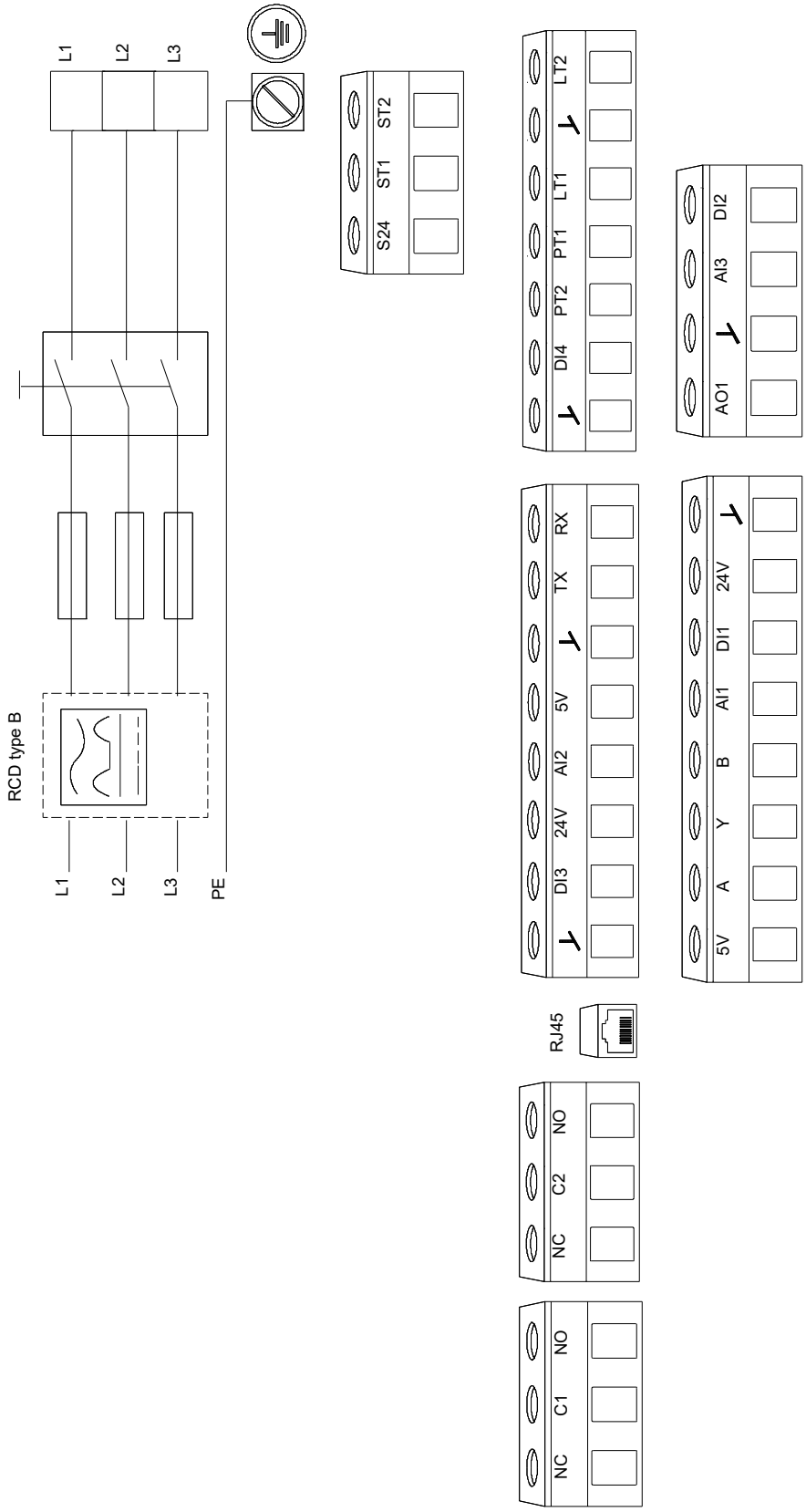



Note! All units are in [in] unless others are stated.
Disclaimer: This simplified dimensional drawing does not show all details.

**Company name:**
**Created by:**
**Phone:**

**Date:** 11/10/2024

# 92962956 CRNE 32-7 N-G-A-E-HQQE 60 Hz

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