

# Submittal Data

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

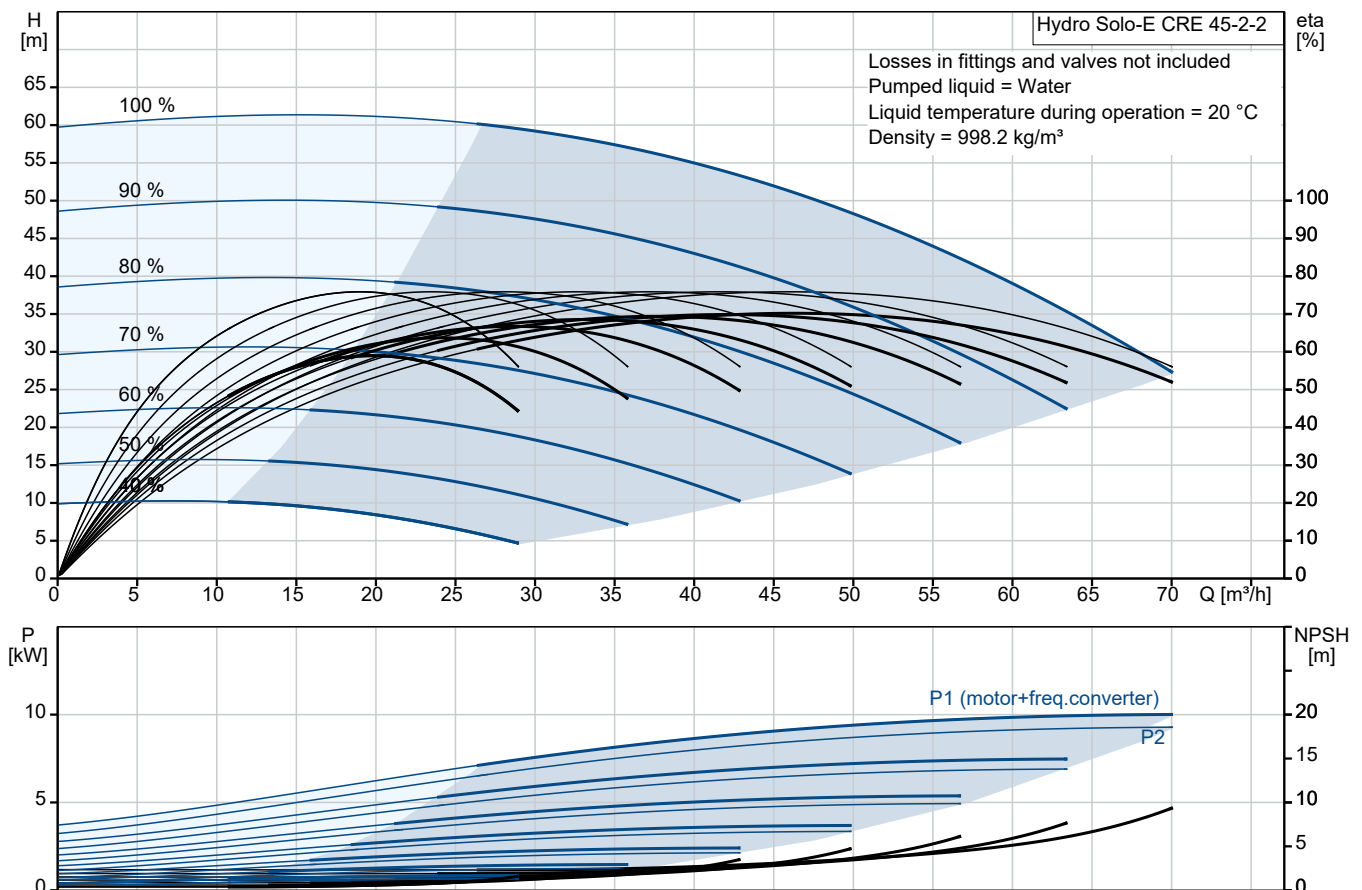
## Hydro Solo-E CRE 45-2-2



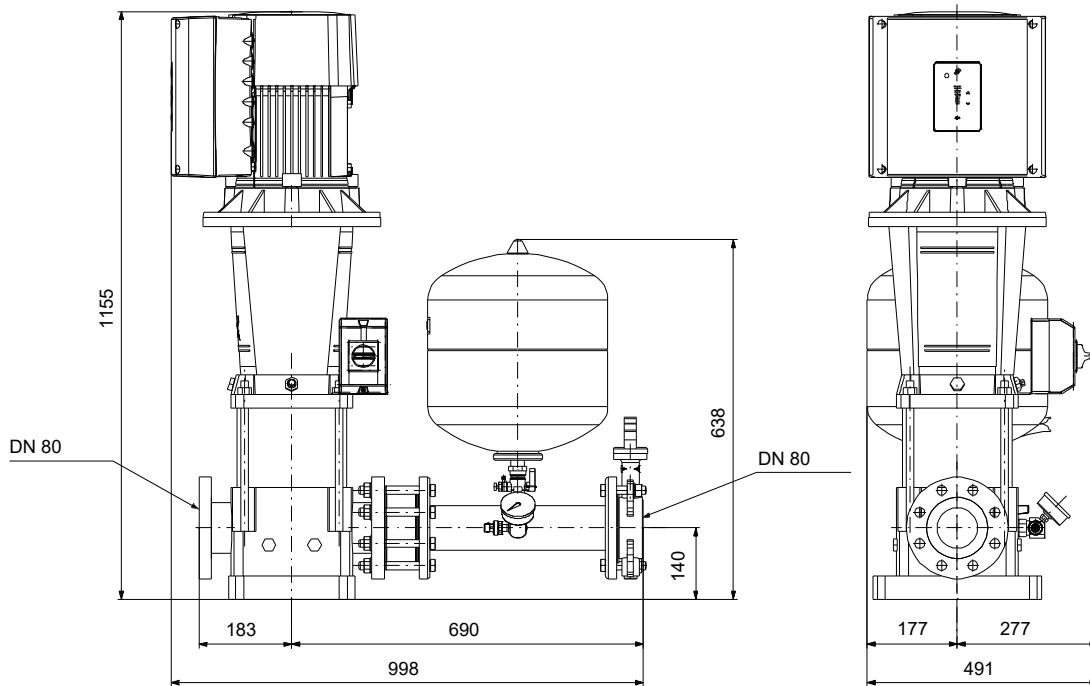
Hydro Solo-E is a fully-optimised booster system designed for systems where it is crucial to keep constant pressure. It features constant-pressure control, flow estimation and plug-and-pump installation.

Note! Product picture may differ from actual product

| Conditions of Service | Pump Data                            | Motor Data                  |
|-----------------------|--------------------------------------|-----------------------------|
|                       | Maximum operating pressure: 10 bar   | Rated power - P2: 11 kW     |
|                       | Liquid temperature range: 0 .. 60 °C | Rated voltage: 380-500 V    |
|                       | Maximum ambient temperature: 50 °C   | Mains frequency: 50 / 60 Hz |
|                       | Shaft seal: HQQE                     | Enclosure class: IP55       |
|                       | Product number: On request           | Insulation class: F         |
|                       |                                      | Motor protection: ELEC      |
|                       |                                      | Motor type: 160MH           |



# Submittal Data



## Materials:

- Base: Cast iron
- Base: EN 1563 EN-GJS-500-7
- Base: ASTM A536 80-55-06
- Impeller: Stainless steel
- Impeller: AISI 304
- Impeller: EN 1.4301

Qty. Description

1 Hydro Solo-E CRE 45-2-2



Note! Product picture may differ from actual product

Product No.: On request

Grundfos Hydro Solo-E booster set is a combined unit consisting of one Variable speed driven pump (CRE) fitted with isolating valve, non-return valve, discharge pipe, pressure transmitter, pressure gauge, diaphragm tank and Main power switch.

The Booster system is factory configured and tested ready for constant pressure operation.

The pump is fitted with an IEC-flanged three-phase MGE motor with frequency converter and PI-controller integrated in the motor terminal box. No additional motor protection is required as both motor and electronics are protected by integrated overload and temperature protection.

A control panel enables setting of required setpoint as well as setting of pump to MIN or MAX operation or to STOP.

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

- "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 possible by means of the 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".

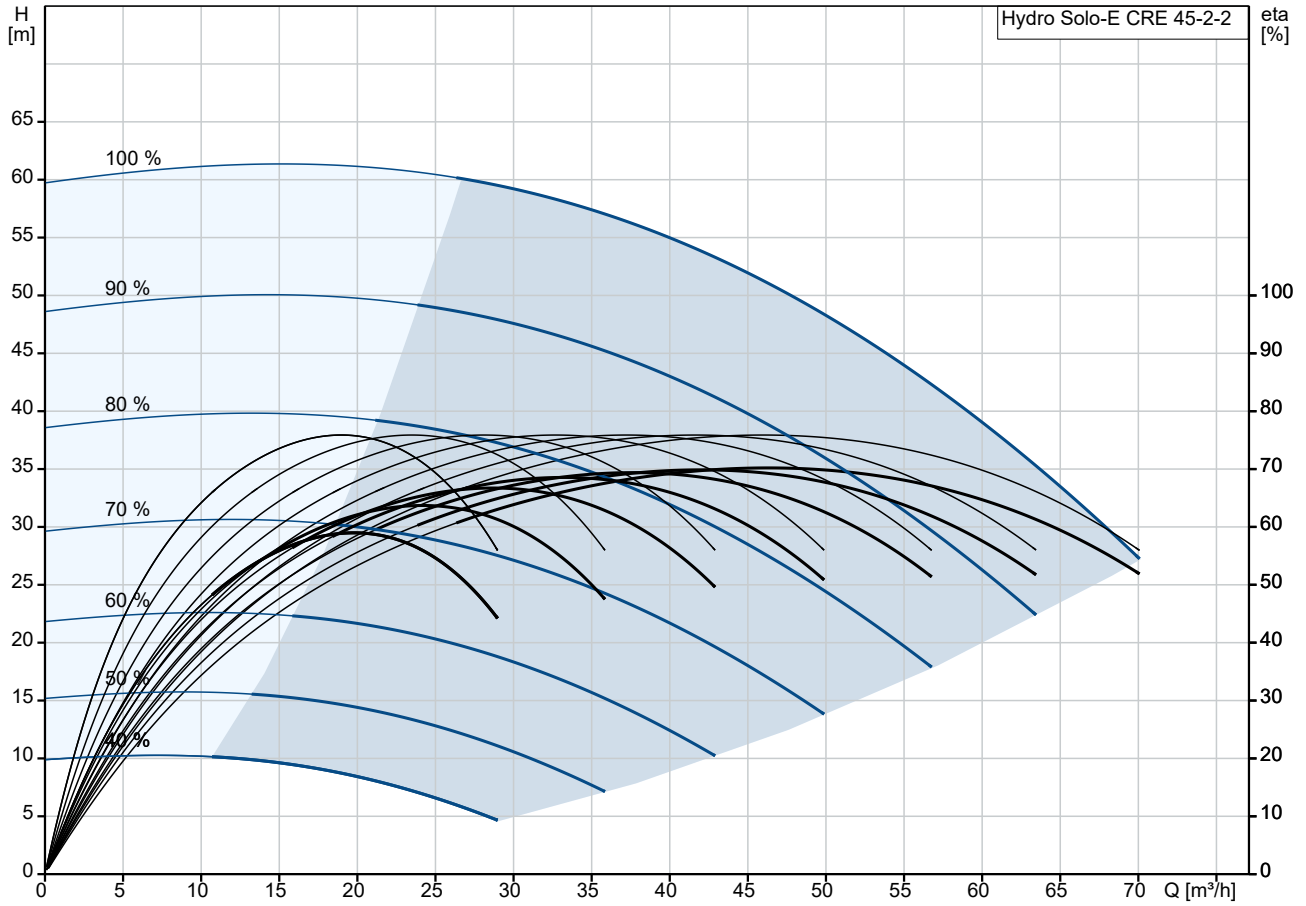
The terminal box has a number of inputs and outputs enabling the motor to be used in advanced applications where many inputs and outputs are required:

- Two dedicated digital inputs
- Three analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V
- 5 V voltage supply to potentiometer and sensor
- One analog output, 0-10 V, 0(4)-20 mA
- Two configurable digital inputs or open-collector outputs
- Two Pt100/Pt1000 inputs
- LiqTec, dry-running protection sensor input
- Grundfos Digital Sensor input and output
- 24 V voltage supply for sensors
- Two signal relay outputs (potential-free contacts)
- GENibus connection
- Interface for Grundfos CIM fieldbus module.

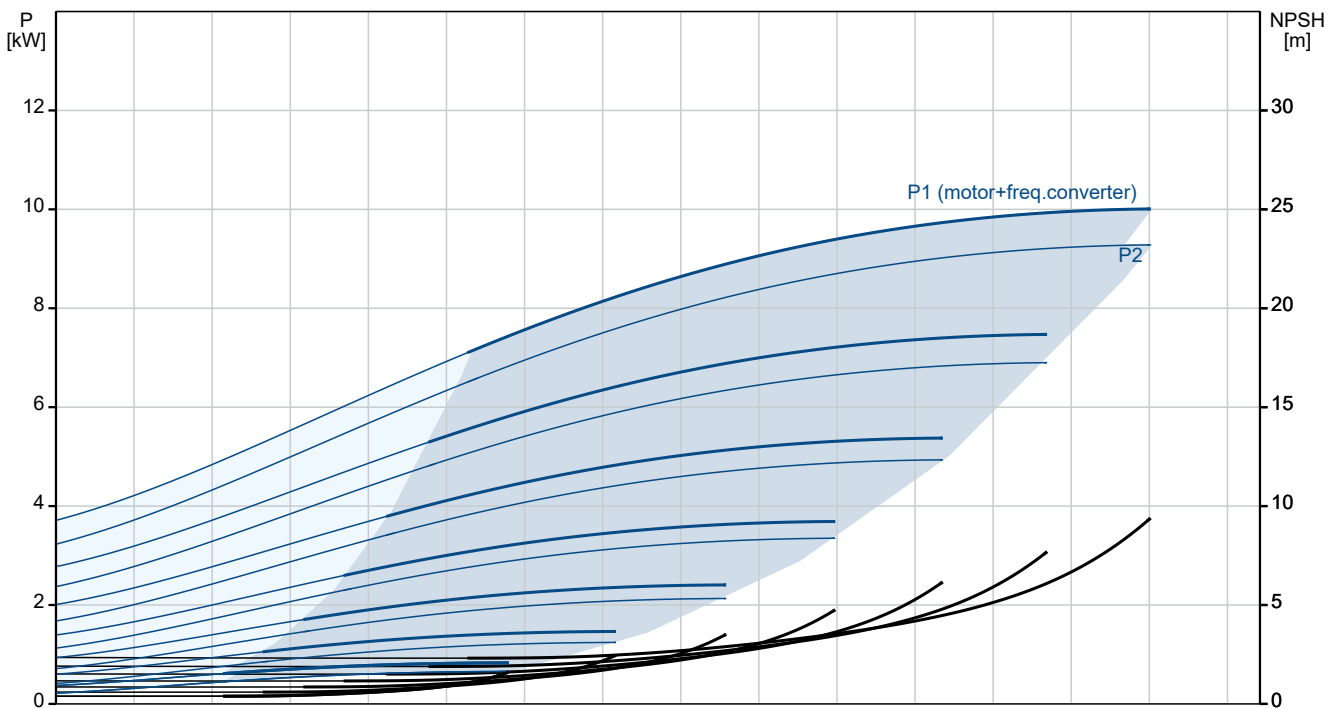
Liquid:

| Qty. | Description   |
|------|---|
| 1    | <p>Liquid temperature range: 0 .. 60 °C</p> <p>Technical:</p> <p>Rated flow: 54 m³/h</p> <p>Rated head: 46.4 m</p> <p>Code for shaft seal: HQQE</p> <p>Materials:</p> <p>Base: Cast iron<br/>EN 1563 EN-GJS-500-7<br/>ASTM A536 80-55-06</p> <p>Impeller: Stainless steel<br/>EN 1.4301<br/>AISI 304</p> <p>Installation:</p> <p>Maximum ambient temperature: 50 °C</p> <p>Maximum operating pressure: 10 bar</p> <p>Standard for inlet connection: DIN</p> <p>Type of inlet connection: DIN</p> <p>Type of outlet connection: DIN</p> <p>Size of inlet connection: DN 80</p> <p>Size of outlet connection: DN 80</p> <p>Flange size for motor: FF300</p> <p>Electrical data:</p> <p>Motor type: 160MH</p> <p>Rated power - P2: 11 kW</p> <p>Mains frequency: 50 / 60 Hz</p> <p>Rated voltage: 3 x 380-500 V</p> <p>Rated current: 20.3-16.0 A</p> <p>Cos phi - power factor: 0.93-0.90</p> <p>Rated speed: 360-4000 rpm</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 98971053</p> <p>Tank:</p> <p>Volume of pressure tank: 33 l</p> <p>Others:</p> <p>Net weight: 172 kg</p> <p>Gross weight: 206 kg</p> <p>Shipping volume: 0.6 m³</p> <p>Danish VVS No.: 385550722</p> <p>Finnish LVI No.: 4925348</p> <p>Country of origin: DE</p> <p>Custom tariff no.: 84137075</p> |

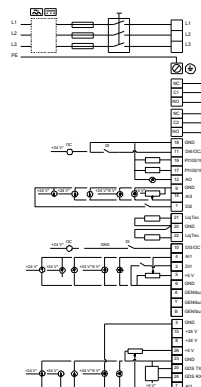
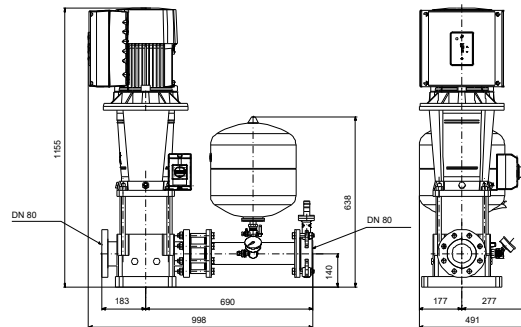
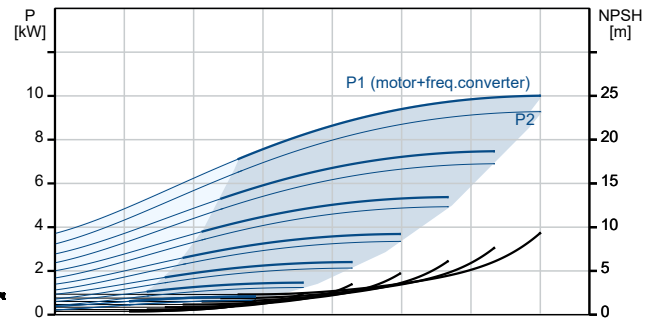
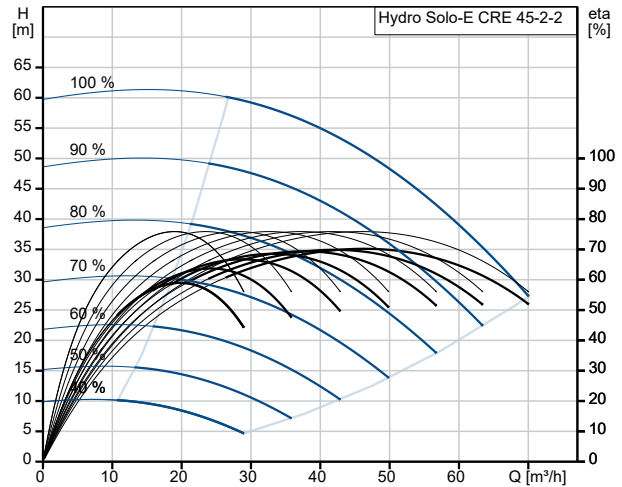
## On request Hydro Solo-E CRE 45-2-2



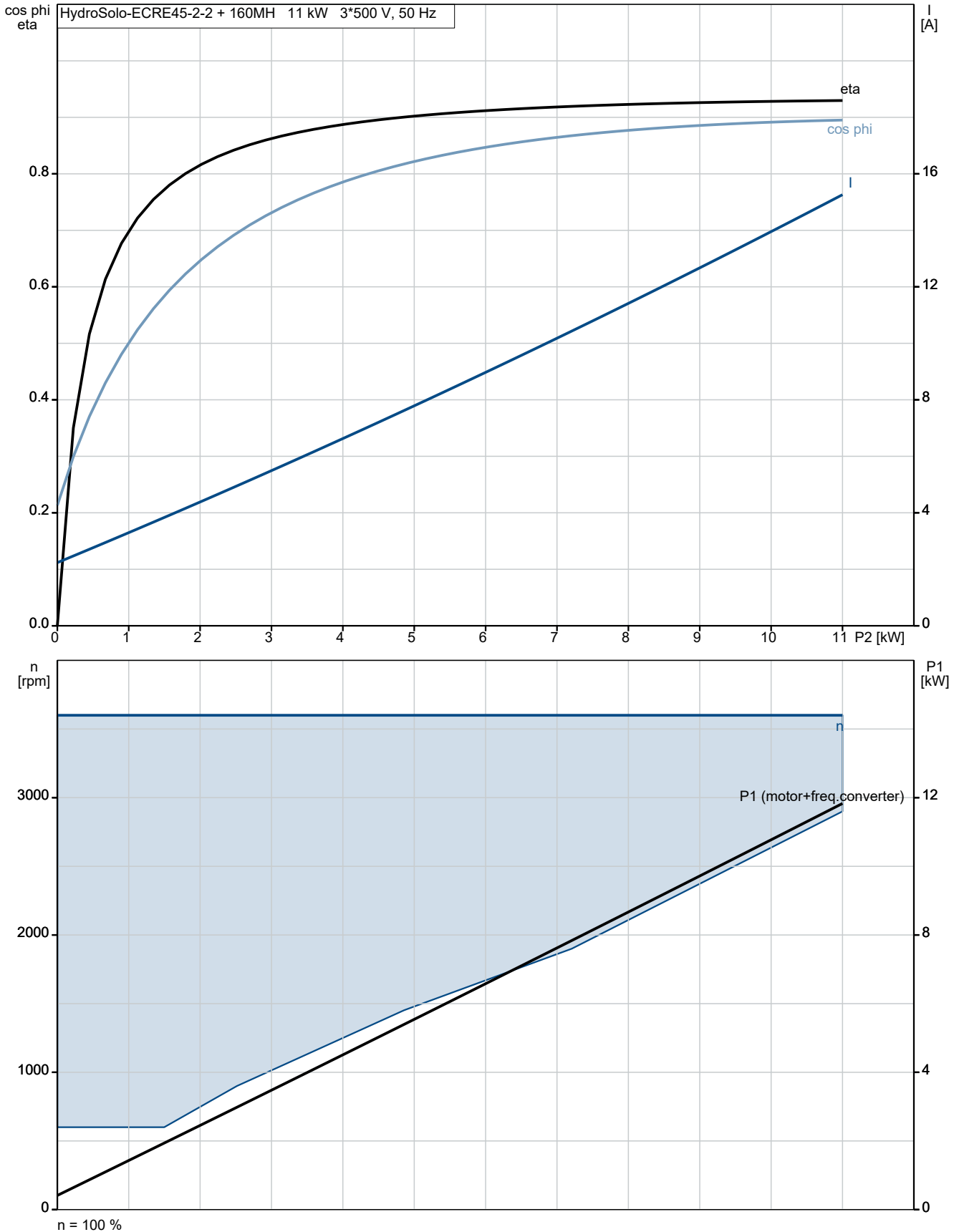
Losses in fittings and valves not included  
 Pumped liquid = Water  
 Liquid temperature during operation = 20 °C  
 Density = 998.2 kg/m<sup>3</sup>



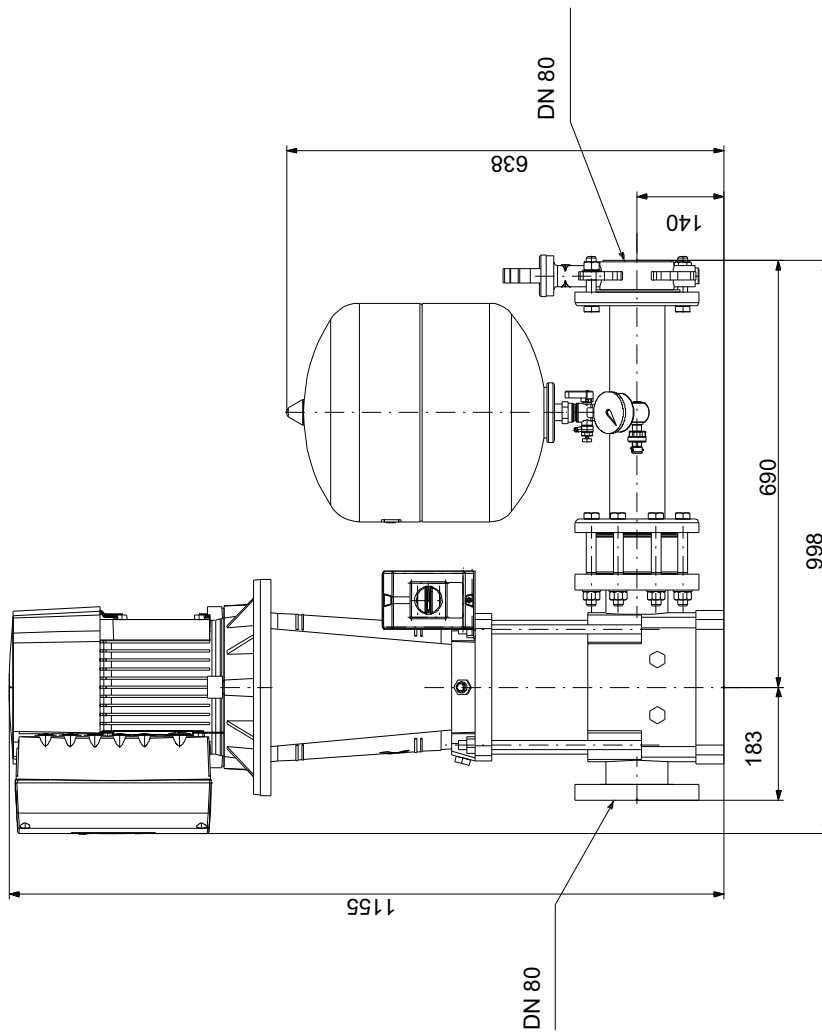
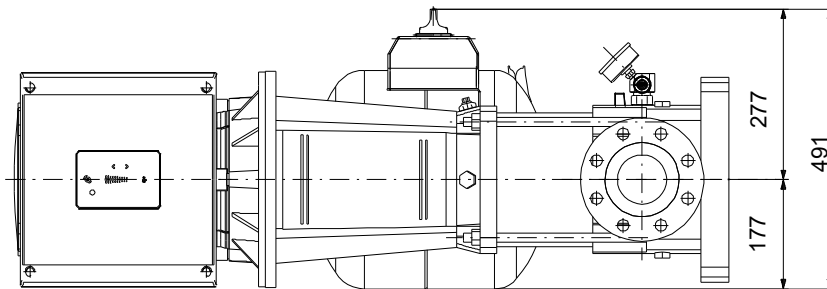
| Description                    | Value                   |
|--------------------------------|-------------------------|
| <b>General information:</b>    |                         |
| Product name:                  | Hydro Solo-E CRE 45-2-2 |
| Product No:                    | On request              |
| EAN number:                    | On request              |
| <b>Technical:</b>              |                         |
| Rated flow:                    | 54 m <sup>3</sup> /h    |
| Rated head:                    | 46.4 m                  |
| Stages:                        | 2                       |
| Impellers:                     | 2                       |
| Code for shaft seal:           | HQQE                    |
| Pump No:                       | 99072012                |
| <b>Materials:</b>              |                         |
| Base:                          | Cast iron               |
| Base:                          | EN 1563 EN-GJS-500-7    |
| Base:                          | ASTM A536 80-55-06      |
| Impeller:                      | Stainless steel         |
| Impeller:                      | EN 1.4301               |
| Impeller:                      | AISI 304                |
| <b>Installation:</b>           |                         |
| Maximum ambient temperature:   | 50 °C                   |
| Maximum operating pressure:    | 10 bar                  |
| Standard for inlet connection: | DIN                     |
| Type of inlet connection:      | DIN                     |
| Type of outlet connection:     | DIN                     |
| Size of inlet connection:      | DN 80                   |
| Size of outlet connection:     | DN 80                   |
| Flange size for motor:         | FF300                   |
| <b>Liquid:</b>                 |                         |
| Liquid temperature range:      | 0 .. 60 °C              |
| <b>Electrical data:</b>        |                         |
| Motor type:                    | 160MH                   |
| Rated power - P2:              | 11 kW                   |
| Mains frequency:               | 50 / 60 Hz              |
| Rated voltage:                 | 3 x 380-500 V           |
| Rated current:                 | 20.3-16.0 A             |
| Cos phi - power factor:        | 0.93-0.90               |
| Rated speed:                   | 360-4000 rpm            |
| Enclosure class (IEC 34-5):    | IP55                    |
| Insulation class (IEC 85):     | F                       |
| Built-in motor protection:     | ELEC                    |
| Motor No:                      | 98971053                |
| <b>Controls:</b>               |                         |
| Control type:                  | ME                      |
| <b>Tank:</b>                   |                         |
| Volume of pressure tank:       | 33 l                    |
| <b>Others:</b>                 |                         |
| Net weight:                    | 172 kg                  |
| Gross weight:                  | 206 kg                  |
| Shipping volume:               | 0.6 m <sup>3</sup>      |
| Product range:                 | International           |
| Config. file no:               | 99059364                |
| Danish VVS No.:                | 385550722               |
| Finnish LVI No.:               | 4925348                 |
| Country of origin:             | DE                      |
| Custom tariff no.:             | 84137075                |



## On request Hydro Solo-E CRE 45-2-2



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

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

