

Submittal Data

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

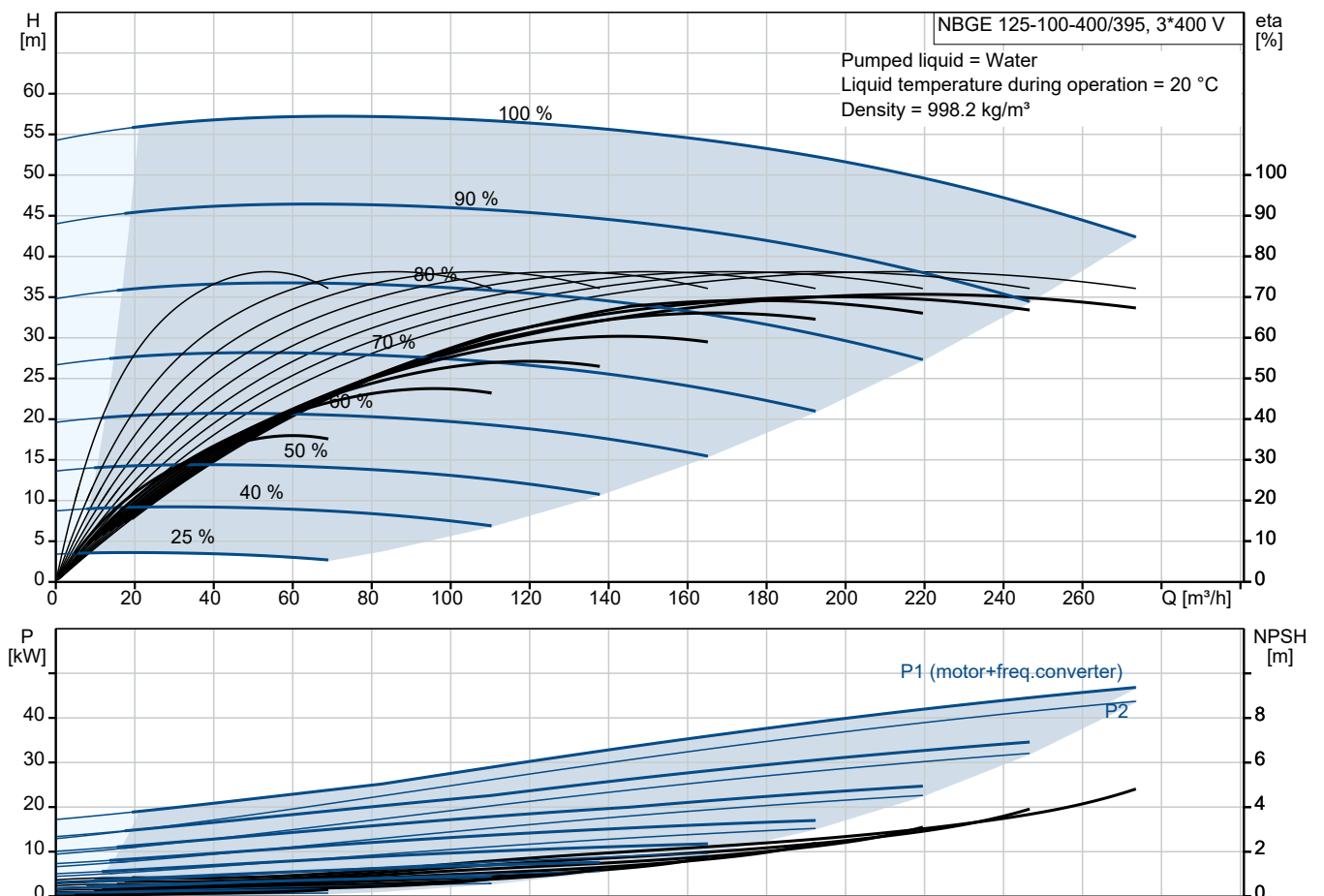


NBGE 125-100-400/395 BIASF2LESBQQETW3

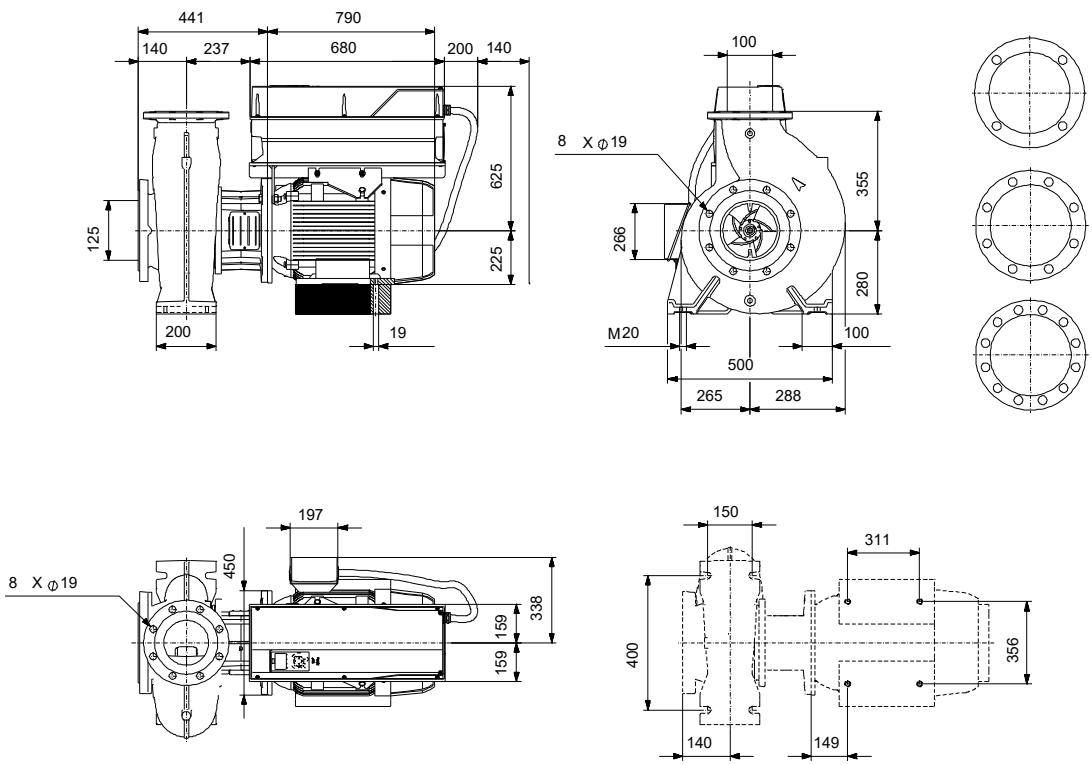
End-suction close-coupled pumps according to ISO 2858 with frequency-controlled motors.

Note! Product picture may differ from actual product

| Conditions of Service | Pump Data | Motor Data |
|-------------------------|---|------------------------------------|
| Liquid: Water | Liquid temperature range: -25 .. 120 °C | Rated voltage: 380-420D/660-725Y V |
| Temperature: 20 °C | Maximum ambient temperature: 50 °C | Mains frequency: 50 Hz |
| Specific Gravity: 1.000 | Shaft seal: BQQE | Enclosure class: IP55 |
| | Product number: On request | Insulation class: F |
| | | Motor protection: PTC |
| | | Eta 1/1: 95.4 % |



Submittal Data



Materials:
 Pump housing: Stainless steel
 Pump housing: ASTM CD4MCuN
 Impeller: Stainless steel
 Impeller: ASTM CD4MCuN
 Impeller: EN 1.4517
 Material code: L
 Code for rubber: E

Qty. Description

1 NBGE 125-100-400/395 BIASF2LESBQQETW3



Note! Product picture may differ from actual product

Product No.: On request

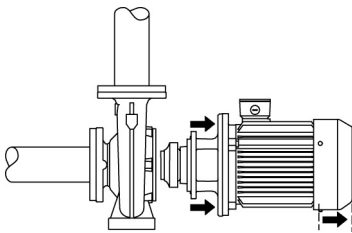
Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to ISO 2858 (16 bar). Flanges are PN 16 with dimensions according to EN 1092-1. The pump has an axial suction port, radial discharge port, horizontal shaft and a back pull-out design enabling removal of the motor, motor stool, cover and impeller without disturbing the pump housing or pipework.

The unbalanced rubber bellows seal is according to DIN EN 12756.

The pump is close-coupled to a fan-cooled asynchronous motor.

The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013.

The back pull-out design means that the pump can be serviced by a single person without disturbing the pump housing or pipes.



Pump

The pump housing has both a priming and a drain hole closed by plugs. The impeller is a closed impeller with double-curved blades with smooth surfaces. The impeller is statically balanced according to ISO 1940-1 class G6.3 and hydraulically balanced to compensate for axial thrust.

The motor stool is made of cast iron (EN-GJL-250) and the pump cover is made of stainless steel (EN 1.4517). Coupling guards are fitted to the motor stool.

The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.

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 pump housing has feet.

The pump is to be secured to the foundation with bolts through the pump housing feet and motor feet. The pump is delivered with steel support blocks. The support blocks provide horizontal alignment of the pump and ensure clearance between the motor stool/motor flange and the foundation.

The pump has loose flanges.

The loose flanges are made of cast iron (EN-GJS-500-7/ASTM 70-50-05).

The language on the pump nameplate is English.

Qty. Description

1

Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as IE4 in accordance with IEC 60034-30-1.

The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.

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.

The motor is equipped with bearing current protection. This protects the bearings from failure due to bearing currents, which can be caused e.g. by the high-frequency switching of a variable frequency drive.

Further product details

Technical data

Controls:

VFD product number: 99616825
 Frequency converter: Built-in
 Type of frequency converter: CUE 3X380-500V IP55 RUG 45KW
 Appr. for VFD: CE, CULUS, C-TICK
 Pressure sensor: N

Liquid:

Pumped liquid: Water
 Liquid temperature range: -25 .. 120 °C
 Selected liquid temperature: 20 °C
 Density: 998.2 kg/m³

Technical:

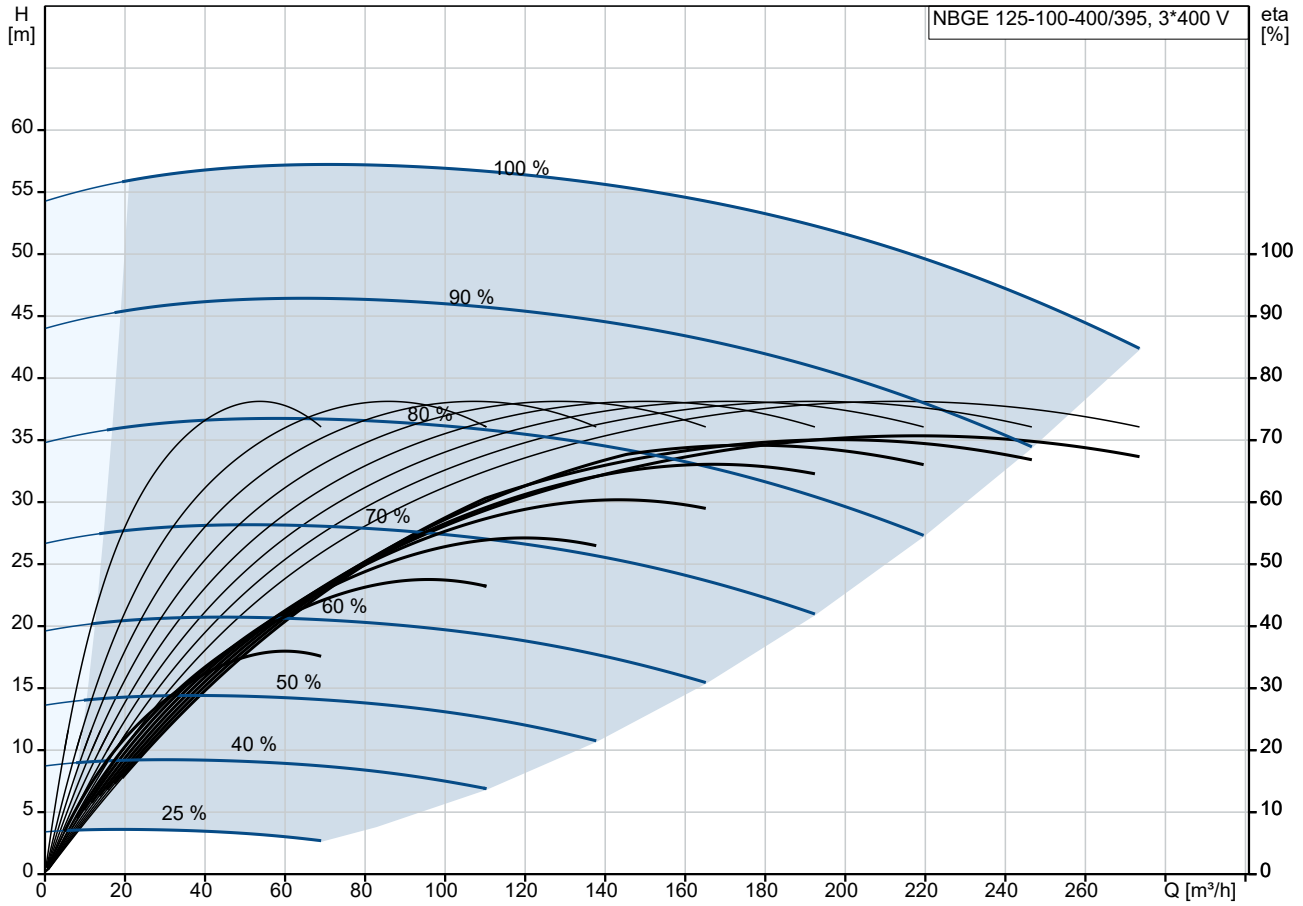
Pump speed on which pump data are based: 1485 rpm
 Rated flow: 212 m³/h
 Rated head: 50.34 m
 Actual impeller diameter: 395 mm
 Nominal impeller diameter: 400
 Type of impeller: Standard
 Shaft seal arrangement: Single
 Code for shaft seal: BQQE
 Curve tolerance: ISO9906:2012 3B
 Bearing design: Standard

Materials:

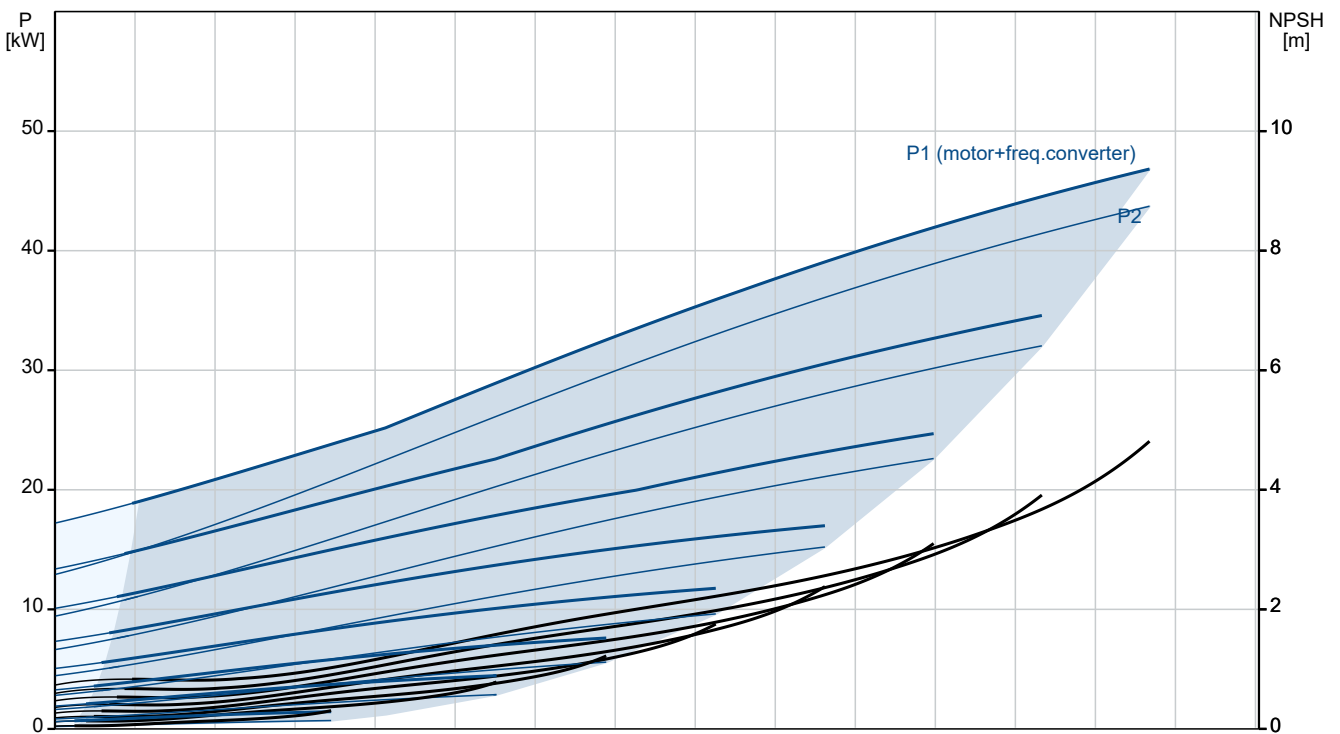
Pump housing: Stainless steel
 EN 1.4517
 ASTM CD4MCuN
 Wear ring: Stainless steel
 Flange: Cast iron
 EN-GJS-500-7
 ASTM 70-50-05
 Impeller: Stainless steel
 EN 1.4517
 ASTM CD4MCuN
 Internal pump house coating: No coating
 Shaft: Stainless steel

| Qty. | Description |
|------|---|
| 1 | <p data-bbox="564 338 683 371">EN 1.4462</p> <p data-bbox="564 371 683 405">SAF 2205</p> <p data-bbox="196 427 328 461">Installation:</p> <p data-bbox="196 461 691 495">Range of ambient temperature: -10 .. 50 °C</p> <p data-bbox="196 495 636 528">Maximum operating pressure: 16 bar</p> <p data-bbox="196 528 683 562">Pipe connection standard: EN 1092-1</p> <p data-bbox="196 562 651 595">Size of inlet connection: DN 125</p> <p data-bbox="196 595 651 629">Size of outlet connection: DN 100</p> <p data-bbox="196 629 636 663">Pressure rating for connection: PN 16</p> <p data-bbox="196 663 651 696">Bearing lubrication: Grease</p> <p data-bbox="196 696 611 730">Pump housing with feet: Yes</p> <p data-bbox="196 730 584 763">Support block (Yes/No): Y</p> <p data-bbox="196 775 363 808">Electrical data:</p> <p data-bbox="196 808 636 842">Rated power - P2: 45 kW</p> <p data-bbox="196 842 636 875">Mains frequency: 50 Hz</p> <p data-bbox="196 875 847 909">Rated voltage: 3 x 380-420D/660-725Y V</p> <p data-bbox="196 909 691 943">Rated current: 81.0/47.0 A</p> <p data-bbox="196 943 636 976">Starting current: 800 %</p> <p data-bbox="196 976 611 1010">Cos phi - power factor: 0.84</p> <p data-bbox="196 1010 671 1043">Rated speed: 1485 rpm</p> <p data-bbox="196 1043 683 1077">IE efficiency: IE4 95,4%</p> <p data-bbox="196 1077 604 1111">IE Efficiency class: IE4</p> <p data-bbox="196 1111 651 1144">Motor efficiency at full load: 95.4 %</p> <p data-bbox="196 1144 651 1178">Motor efficiency at 3/4 load: 95.7 %</p> <p data-bbox="196 1178 651 1211">Motor efficiency at 1/2 load: 95.4 %</p> <p data-bbox="196 1211 584 1245">Number of poles: 4</p> <p data-bbox="196 1245 611 1279">Enclosure class (IEC 34-5): IP55</p> <p data-bbox="196 1279 584 1312">Insulation class (IEC 85): F</p> <p data-bbox="196 1312 671 1346">Motor No: 92691594</p> <p data-bbox="196 1346 879 1379">Bearing insulation type N-end: CERAMIC SHAFT COATING</p> <p data-bbox="196 1391 284 1424">Others:</p> <p data-bbox="196 1424 636 1458">Minimum efficiency index, MEI ≥: 0.70</p> <p data-bbox="196 1458 651 1491">Net weight: 631 kg</p> <p data-bbox="196 1491 651 1525">Gross weight: 717 kg</p> <p data-bbox="196 1525 651 1559">Shipping volume: 1.88 m³</p> <p data-bbox="196 1559 604 1592">Country of origin: HU</p> <p data-bbox="196 1592 671 1626">Custom tariff no.: 84137051</p> <p data-bbox="196 1626 604 1659">Language on pump nameplate: GB</p> |

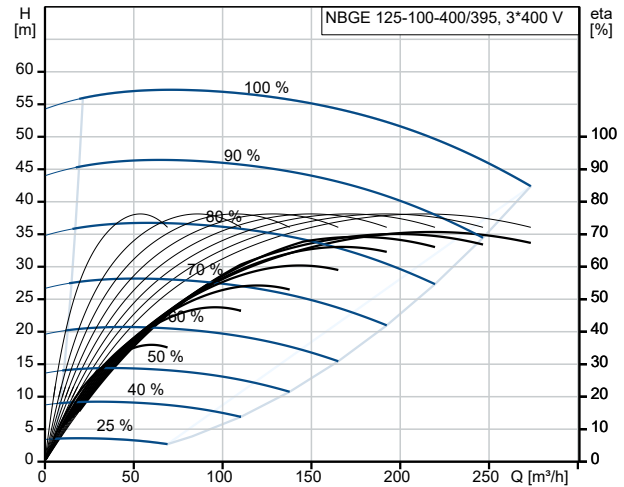
On request NBGE 125-100-400/395 BIASF2LESBQQETW3 50 Hz



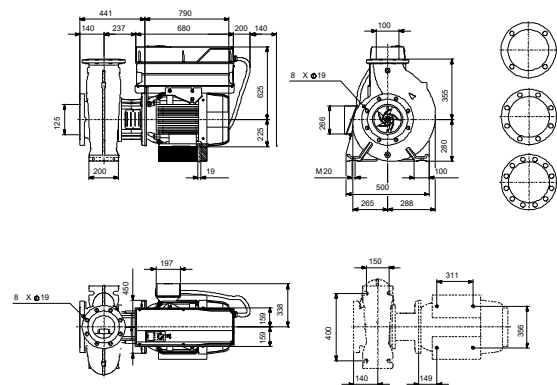
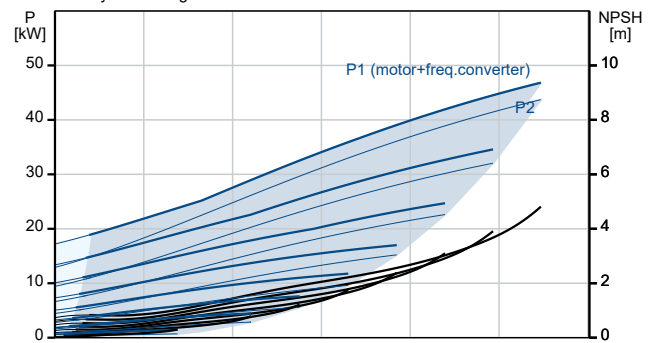
Pumped liquid = Water
 Liquid temperature during operation = 20 °C
 Density = 998.2 kg/m³



| Description | Value |
|--|---|
| General information: | |
| Product name: | NBGE 125-100-400/395 BIASF2LESBQQUETW3 |
| Product No: | On request |
| EAN number: | On request |
| Technical: | |
| Pump speed on which pump data are based: | 1485 rpm |
| Rated flow: | 212 m ³ /h |
| Rated head: | 50.34 m |
| Actual impeller diameter: | 395 mm |
| Nominal impeller diameter: | 400 |
| Type of impeller: | Standard |
| Shaft seal arrangement: | Single |
| Shaft diameter: | 42 mm |
| Code for shaft seal: | BQQE |
| Curve tolerance: | ISO9906:2012 3B |
| Pump version: | AS |
| Bearing design: | Standard |
| Materials: | |
| Pump housing: | Stainless steel |
| Pump housing: | EN 1.4517 |
| Pump housing: | ASTM CD4MCuN |
| Wear ring: | Stainless steel |
| Flange: | Cast iron |
| Flange: | EN-GJS-500-7 |
| Flange: | ASTM 70-50-05 |
| Impeller: | Stainless steel |
| Impeller: | EN 1.4517 |
| Impeller: | ASTM CD4MCuN |
| Internal pump house coating: | No coating |
| Material code: | L |
| Code for rubber: | E |
| Shaft: | Stainless steel |
| Shaft: | EN 1.4462 |
| Shaft: | SAF 2205 |
| Installation: | |
| Range of ambient temperature: | -10 .. 50 °C |
| Maximum operating pressure: | 16 bar |
| Pipe connection standard: | EN 1092-1 |
| Size of inlet connection: | DN 125 |
| Size of outlet connection: | DN 100 |
| Pressure rating for connection: | PN 16 |
| Bearing lubrication: | Grease |
| Pump housing with feet: | Yes |
| Support block (Yes/No): | Y |
| Connect code: | F2 |
| Liquid: | |
| Pumped liquid: | Water |
| Liquid temperature range: | -25 .. 120 °C |
| Selected liquid temperature: | 20 °C |
| Density: | 998.2 kg/m ³ |
| Electrical data: | |
| Rated power - P2: | 45 kW |
| Mains frequency: | 50 Hz |
| Rated voltage: | 3 x 380-420D/660-725Y V |
| Rated current: | 81.0/47.0 A |
| Starting current: | 800 % |



Pumped liquid = Water
Liquid temperature during operation = 20 °C
Density = 998.2 kg/m³





Company name:

Created by:

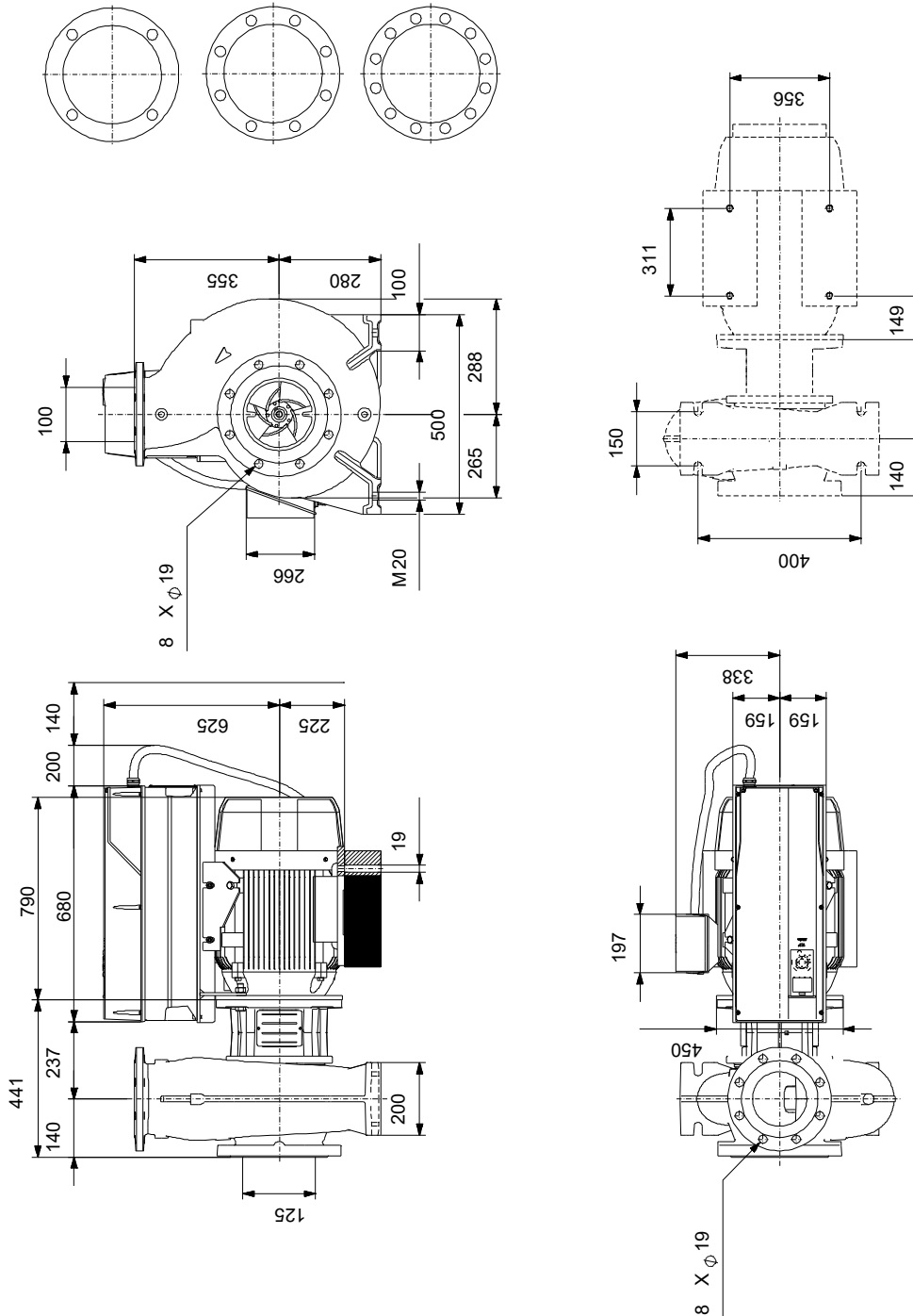
Phone:

Date:

24/10/2024

| Description | Value |
|----------------------------------|---------------------------------|
| Cos phi - power factor: | 0.84 |
| Rated speed: | 1485 rpm |
| IE efficiency: | IE4 95,4% |
| IE Efficiency class: | IE4 |
| Motor efficiency at full load: | 95.4 % |
| Motor efficiency at 3/4 load: | 95.7 % |
| Motor efficiency at 1/2 load: | 95.4 % |
| Number of poles: | 4 |
| Enclosure class (IEC 34-5): | IP55 |
| Insulation class (IEC 85): | F |
| Built-in motor protection: | PTC |
| Motor No: | 92691594 |
| Mount. design. acc. IEC 34-7: | IM B35 |
| Bearing insulation type N-end: | CERAMIC SHAFT COATING |
| Controls: | |
| VFD product number: | 99616825 |
| Frequency converter: | Built-in |
| Type of frequency converter: | CUE 3X380-500V IP55 RUG 45KW |
| Appr. for VFD: | CE, CULUS, C-TICK |
| Pressure sensor: | N |
| Others: | |
| Minimum efficiency index, MEI ≥: | 0.70 |
| Net weight: | 631 kg |
| Gross weight: | 717 kg |
| Shipping volume: | 1.88 m ³ |
| Country of origin: | HU |
| Custom tariff no.: | 84137051 |
| Language on pump nameplate: | GB |

On request NBGE 125-100-400/395 BIASF2LESBQQETW3 50 Hz



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

On request NBGE 125-100-400/395 BIASF2LESBQQETW3 50 Hz



IEC TP211 THERMALLY PROTECTED WHEN THE THERMISTORS ARE
CONNECTED TO AMPLIFIER RELAY FOR CONTROL OF MAIN SUPPLY
THERMISTORS PTC ACCORDING TO DIN 44082

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

