

# Submittal Data

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

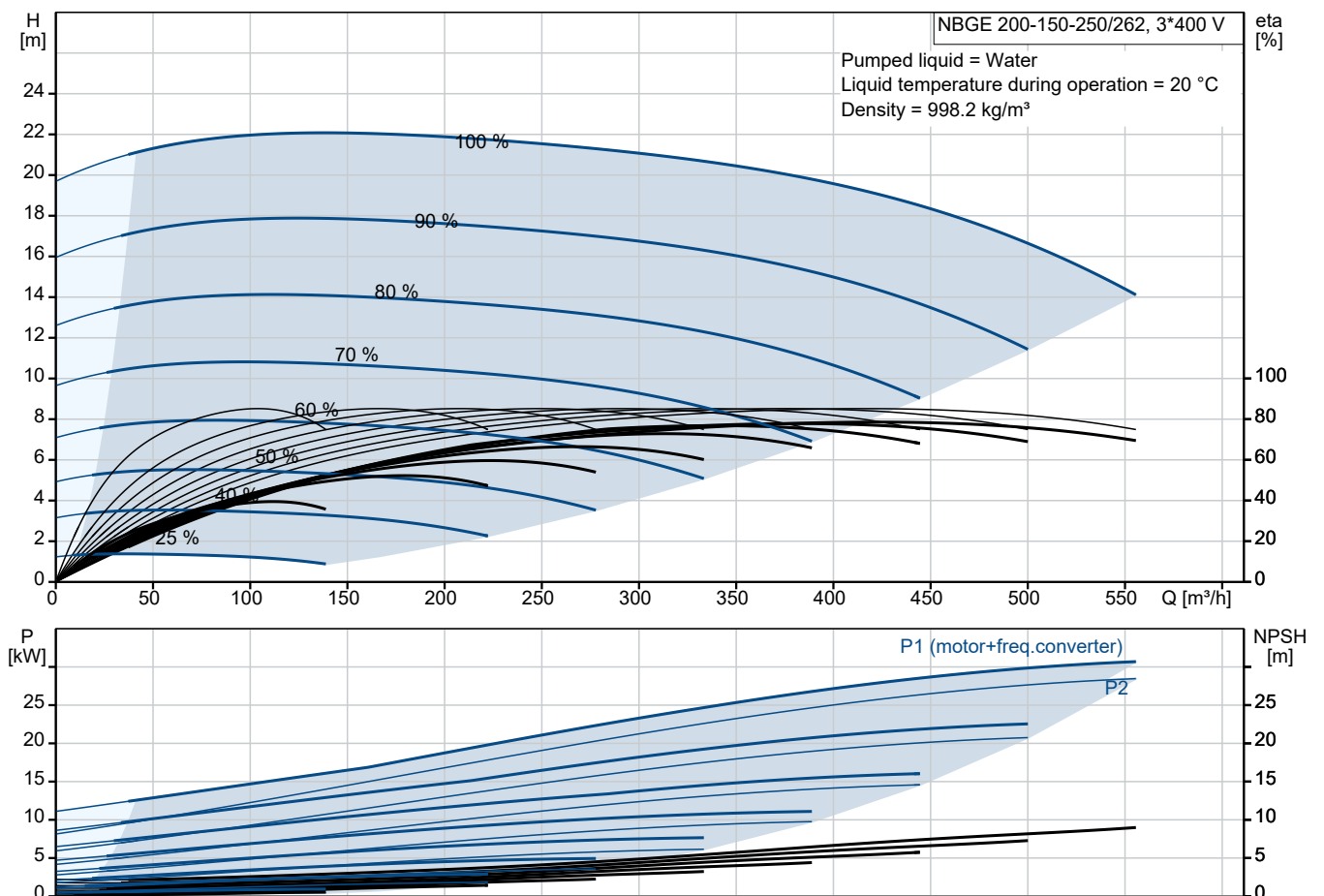


## NBGE 200-150-250/262 BIASF2AVSBQQVRW3

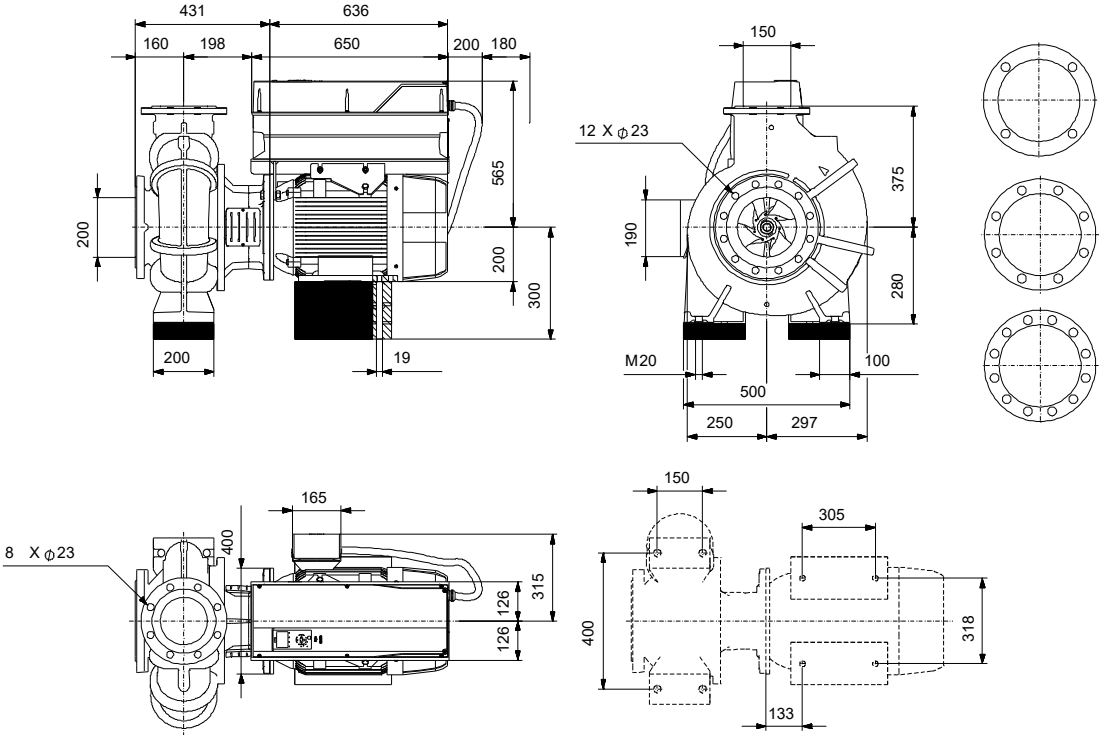
End-suction close-coupled pumps according to ISO 2858 with frequency-controlled motors.

Note! Product picture may differ from actual product

Conditions of Service		Pump Data		Motor Data	
Liquid:	Water	Liquid temperature range:	-10 .. 90 °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:	BQQV	Enclosure class:	IP55
		Product number:	On request	Insulation class:	F
				Motor protection:	PTC
				Eta 1/1:	94.9 %



# Submittal Data



- Materials:**
- Pump housing: Cast iron
  - Pump housing: ASTM class 35
  - Impeller: Cast iron
  - Impeller: ASTM class 30
  - Impeller: EN-GJL-200
  - Material code: A
  - Code for rubber: V

**Qty. Description**

1 NBGE 200-150-250/262 BIASF2AVSBQQVRW3



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 1092-2. 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 back pull-out design means that the pump can be serviced by a single person without disturbing the pump housing or pipes.



Cast-iron parts 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.

## 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.

Motor stool and pump cover are made of cast iron (EN-GJL-250). 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: FKM (fluorocarbon rubber)

FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.

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 language on the pump nameplate is English.

## Motor

**Qty. Description**

1 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.

**Further product details**

Cast-iron parts 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.

**Technical data**

**Controls:**

VFD product number: 99616823  
 Frequency converter: Built-in  
 Type of frequency converter: CUE 3X380-500V IP55 RUG 30KW  
 Appr. for VFD: CE, CULUS, C-TICK  
 Pressure sensor: N

**Liquid:**

Pumped liquid: Water  
 Liquid temperature range: -10 .. 90 °C  
 Selected liquid temperature: 20 °C  
 Density: 998.2 kg/m<sup>3</sup>

**Technical:**

Pump speed on which pump data are based: 1475 rpm  
 Rated flow: 418.1 m<sup>3</sup>/h  
 Rated head: 19.14 m  
 Actual impeller diameter: 262 mm  
 Nominal impeller diameter: 250  
 Type of impeller: Standard  
 Shaft seal arrangement: Single  
 Code for shaft seal: BQQV  
 Curve tolerance: ISO9906:2012 3B  
 Bearing design: Standard

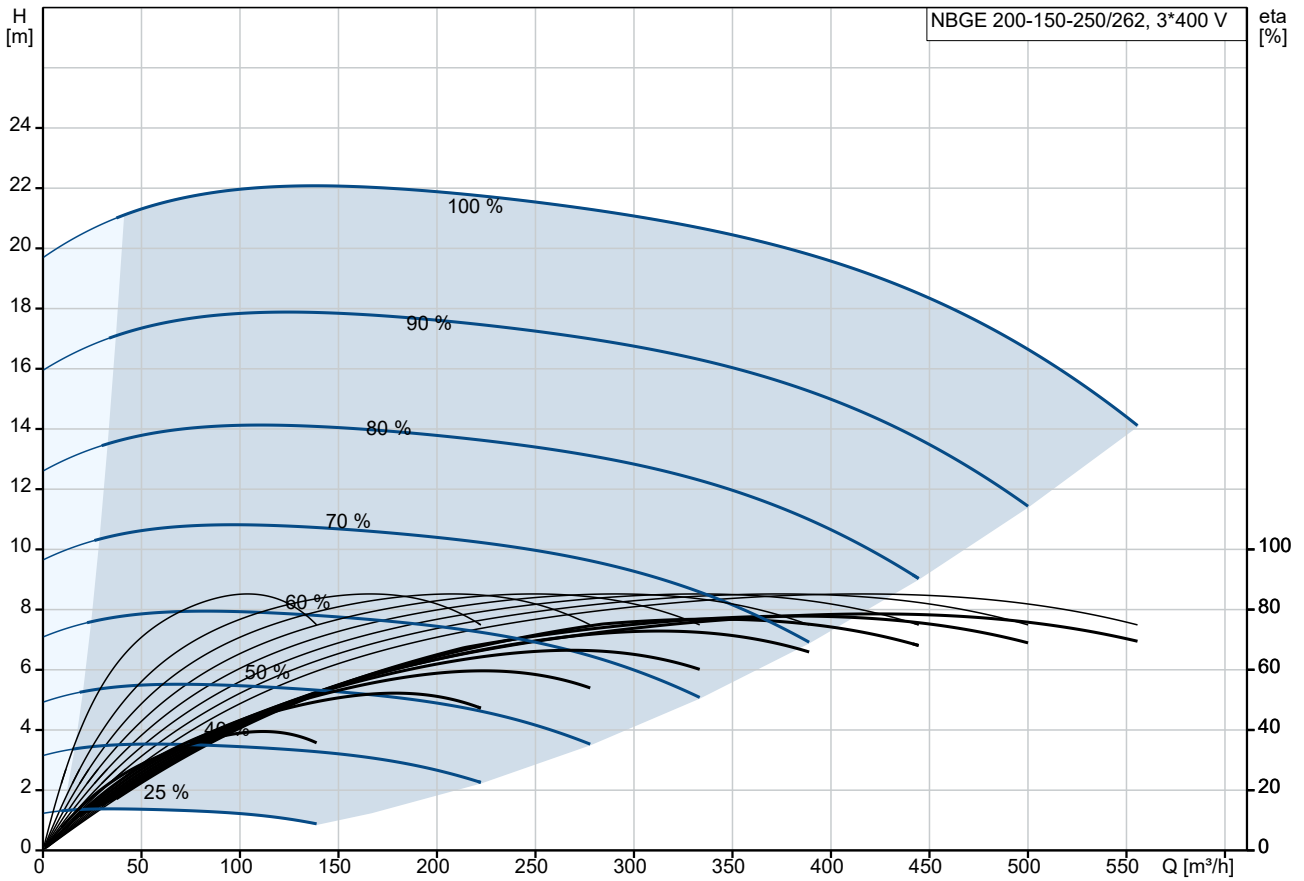
**Materials:**

Pump housing: Cast iron  
 EN-GJL-250  
 ASTM class 35  
 Wear ring: Brass  
 Impeller: Cast iron  
 EN-GJL-200  
 ASTM class 30  
 Internal pump house coating: CED  
 Shaft: Stainless steel  
 EN 1.4301  
 AISI 304

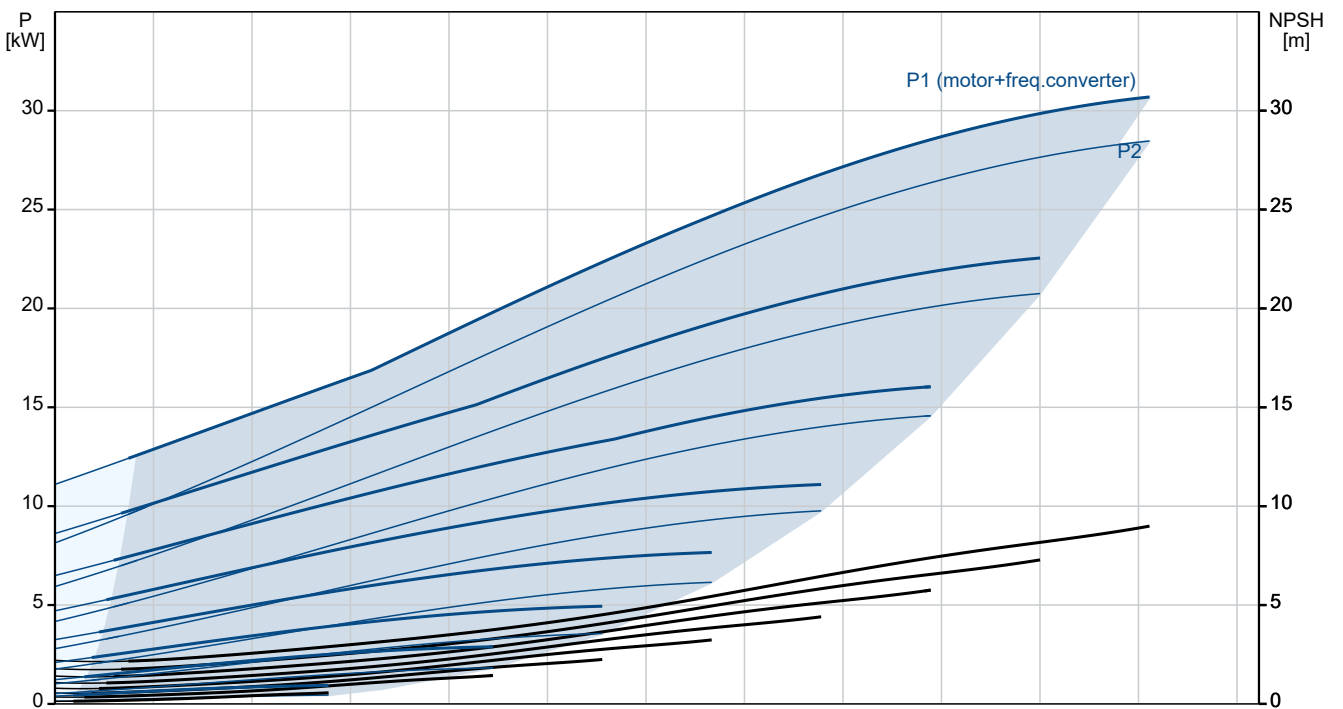
**Qty. Description**

1	<p>Installation:</p> <p>Range of ambient temperature: -10 .. 50 °C</p> <p>Maximum operating pressure: 16 bar</p> <p>Pipe connection standard: EN 1092-2</p> <p>Size of inlet connection: DN 200</p> <p>Size of outlet connection: DN 150</p> <p>Pressure rating for connection: PN 16</p> <p>Bearing lubrication: Grease</p> <p>Pump housing with feet: Yes</p> <p>Support block (Yes/No): Y</p> <p>Electrical data:</p> <p>Rated power - P2: 30 kW</p> <p>Mains frequency: 50 Hz</p> <p>Rated voltage: 3 x 380-420D/660-725 V</p> <p>Rated current: 56.0/32.5 A</p> <p>Starting current: 730 %</p> <p>Cos phi - power factor: 0.81</p> <p>Rated speed: 1475 rpm</p> <p>IE efficiency: IE4 94,9%</p> <p>IE Efficiency class: IE4</p> <p>Motor efficiency at full load: 94.9 %</p> <p>Motor efficiency at 3/4 load: 95.2 %</p> <p>Motor efficiency at 1/2 load: 94.9 %</p> <p>Number of poles: 4</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 92691562</p> <p>Bearing insulation type N-end: COATED RING</p> <p>Others:</p> <p>Minimum efficiency index, MEI ≥: 0.68</p> <p>Net weight: 583 kg</p> <p>Gross weight: 664 kg</p> <p>Shipping volume: 1.6 m<sup>3</sup></p> <p>Country of origin: HU</p> <p>Custom tariff no.: 84137051</p> <p>Language on pump nameplate: GB</p>
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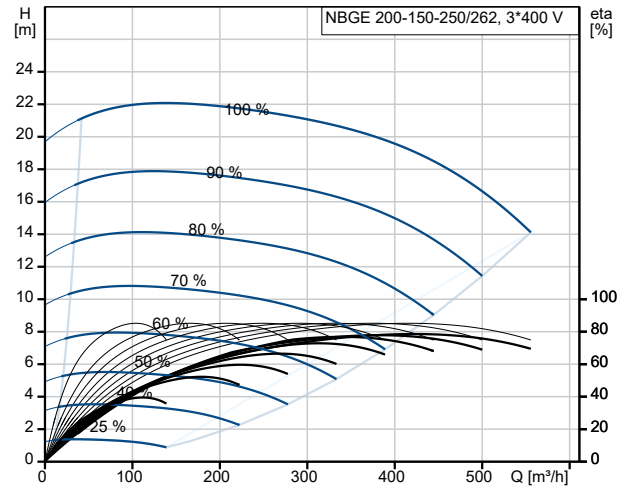
## On request NBGE 200-150-250/262 BIASF2AVSBQQVRW3 50 Hz



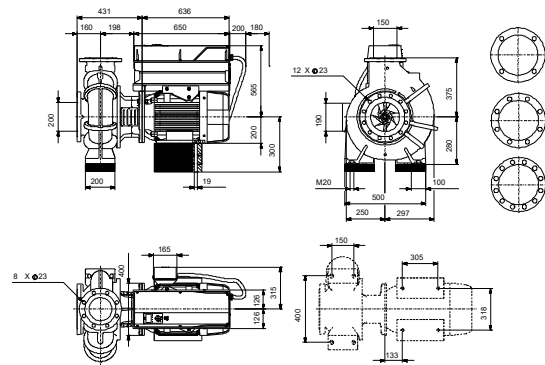
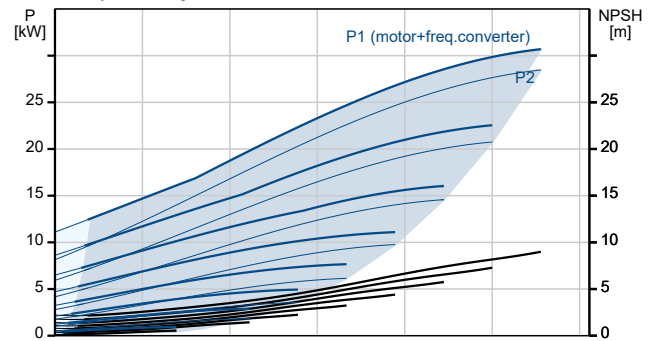
Pumped liquid = Water  
 Liquid temperature during operation = 20 °C  
 Density = 998.2 kg/m³



Description	Value
<b>General information:</b>	
Product name:	NBGE 200-150-250/262 BIASF2AVSBQQVRW3
Product No:	On request
EAN number:	On request
<b>Technical:</b>	
Pump speed on which pump data are based:	1475 rpm
Rated flow:	418.1 m <sup>3</sup> /h
Rated head:	19.14 m
Actual impeller diameter:	262 mm
Nominal impeller diameter:	250
Type of impeller:	Standard
Shaft seal arrangement:	Single
Shaft diameter:	42 mm
Code for shaft seal:	BQQV
Curve tolerance:	ISO9906:2012 3B
Pump version:	AS
Bearing design:	Standard
<b>Materials:</b>	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM class 35
Wear ring:	Brass
Impeller:	Cast iron
Impeller:	EN-GJL-200
Impeller:	ASTM class 30
Internal pump house coating:	CED
Material code:	A
Code for rubber:	V
Shaft:	Stainless steel
Shaft:	EN 1.4301
Shaft:	AISI 304
<b>Installation:</b>	
Range of ambient temperature:	-10 .. 50 °C
Maximum operating pressure:	16 bar
Pipe connection standard:	EN 1092-2
Size of inlet connection:	DN 200
Size of outlet connection:	DN 150
Pressure rating for connection:	PN 16
Bearing lubrication:	Grease
Pump housing with feet:	Yes
Support block (Yes/No):	Y
Connect code:	F2
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	-10 .. 90 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
Rated power - P2:	30 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	56.0/32.5 A
Starting current:	730 %
Cos phi - power factor:	0.81
Rated speed:	1475 rpm
IE efficiency:	IE4 94,9%



Pumped liquid = Water  
Liquid temperature during operation = 20 °C  
Density = 998.2 kg/m<sup>3</sup>





Company name:

Created by:

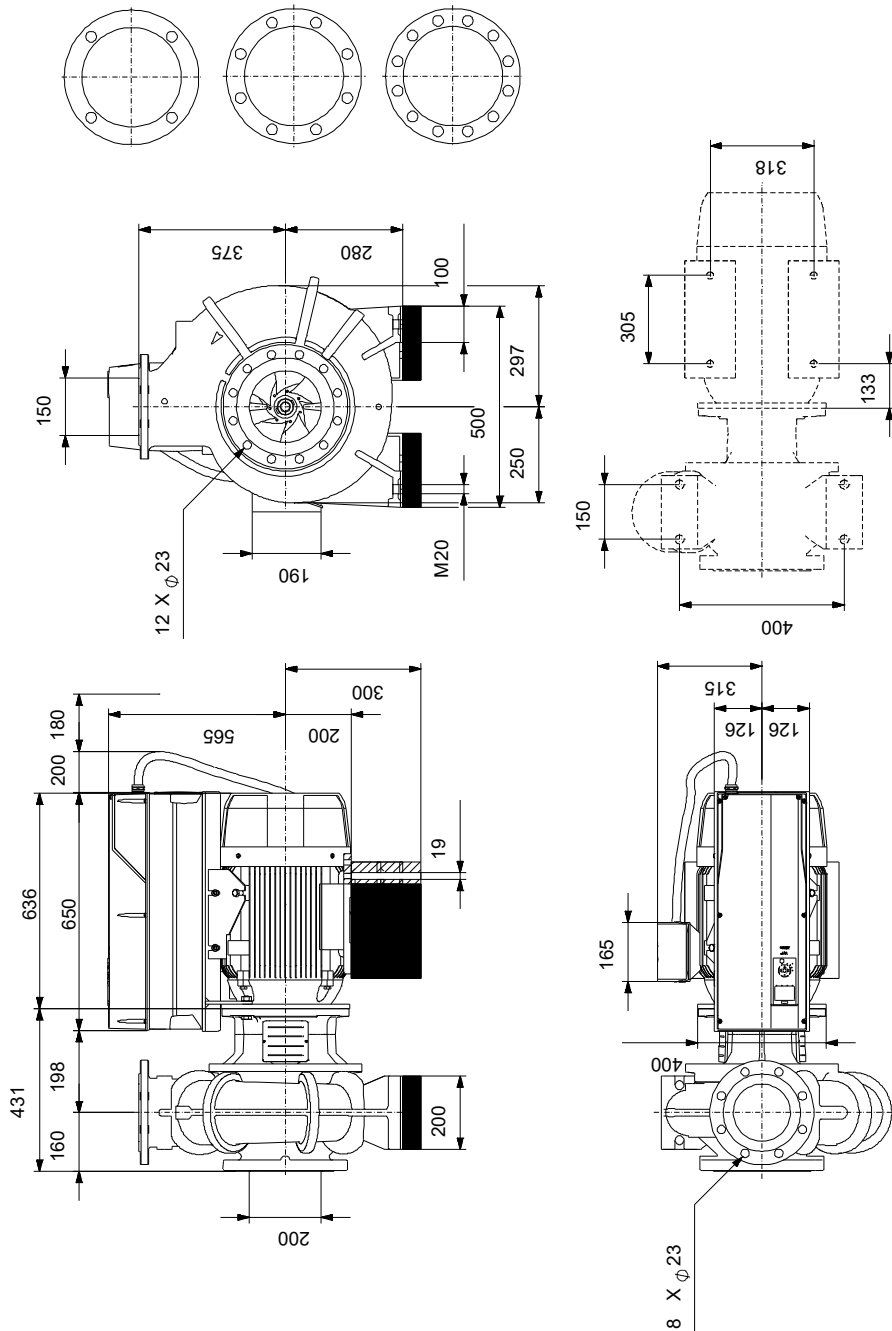
Phone:

Date:

24/10/2024

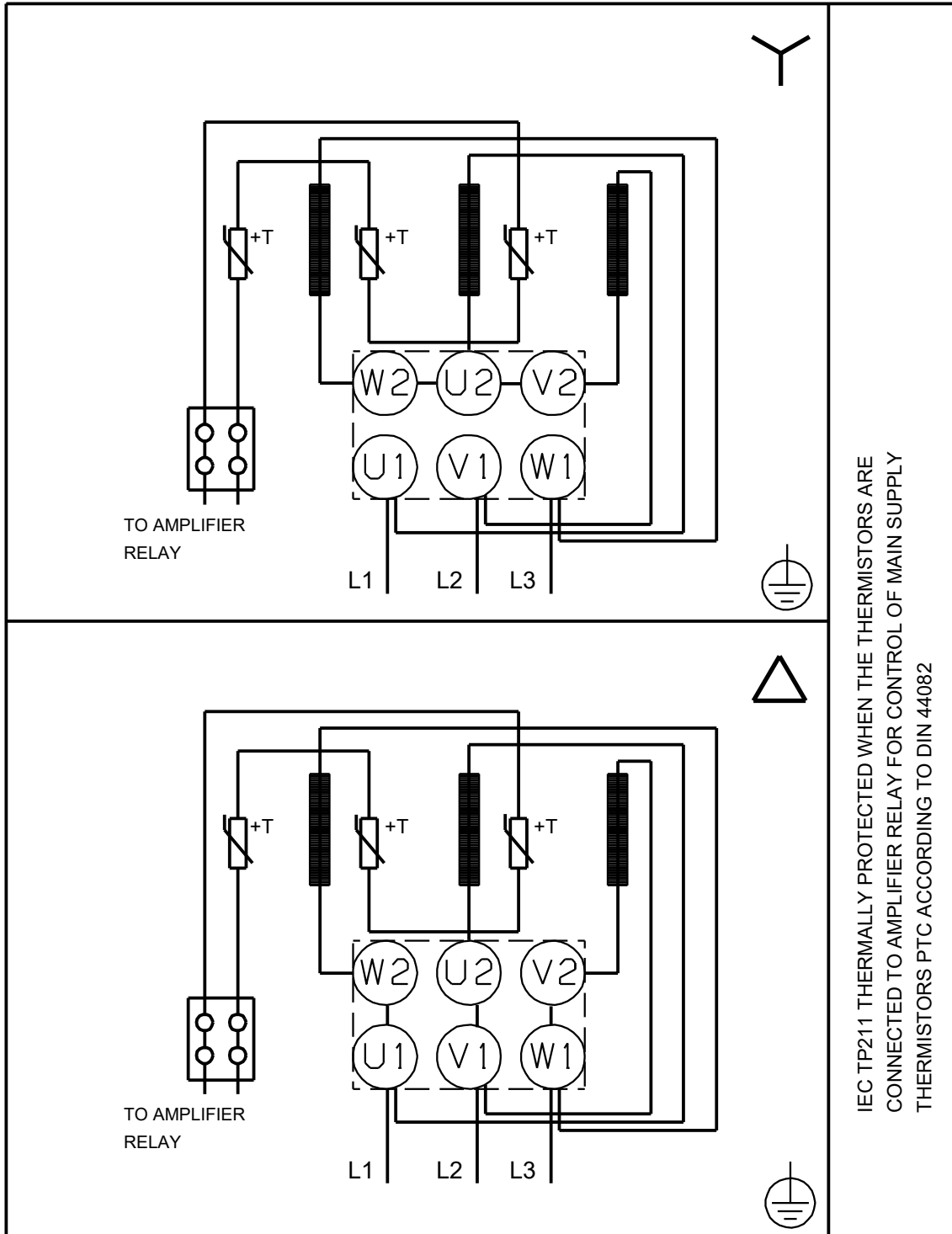
Description	Value
IE Efficiency class:	IE4
Motor efficiency at full load:	94.9 %
Motor efficiency at 3/4 load:	95.2 %
Motor efficiency at 1/2 load:	94.9 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	92691562
Mount. design. acc. IEC 34-7:	IM B35
Bearing insulation type N-end:	COATED RING
<b>Controls:</b>	
VFD product number:	99616823
Frequency converter:	Built-in
Type of frequency converter:	CUE 3X380-500V IP55 RUG 30KW
Appr. for VFD:	CE, CULUS, C-TICK
Pressure sensor:	N
<b>Others:</b>	
Minimum efficiency index, MEI $\geq$ :	0.68
Net weight:	583 kg
Gross weight:	664 kg
Shipping volume:	1.6 m <sup>3</sup>
Country of origin:	HU
Custom tariff no.:	84137051
Language on pump nameplate:	GB

## On request NBGE 200-150-250/262 BIASF2AVSBQQVRW3 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 200-150-250/262 BIASF2AVSBQQVRW3 50 Hz



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

