

Submittal Data

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

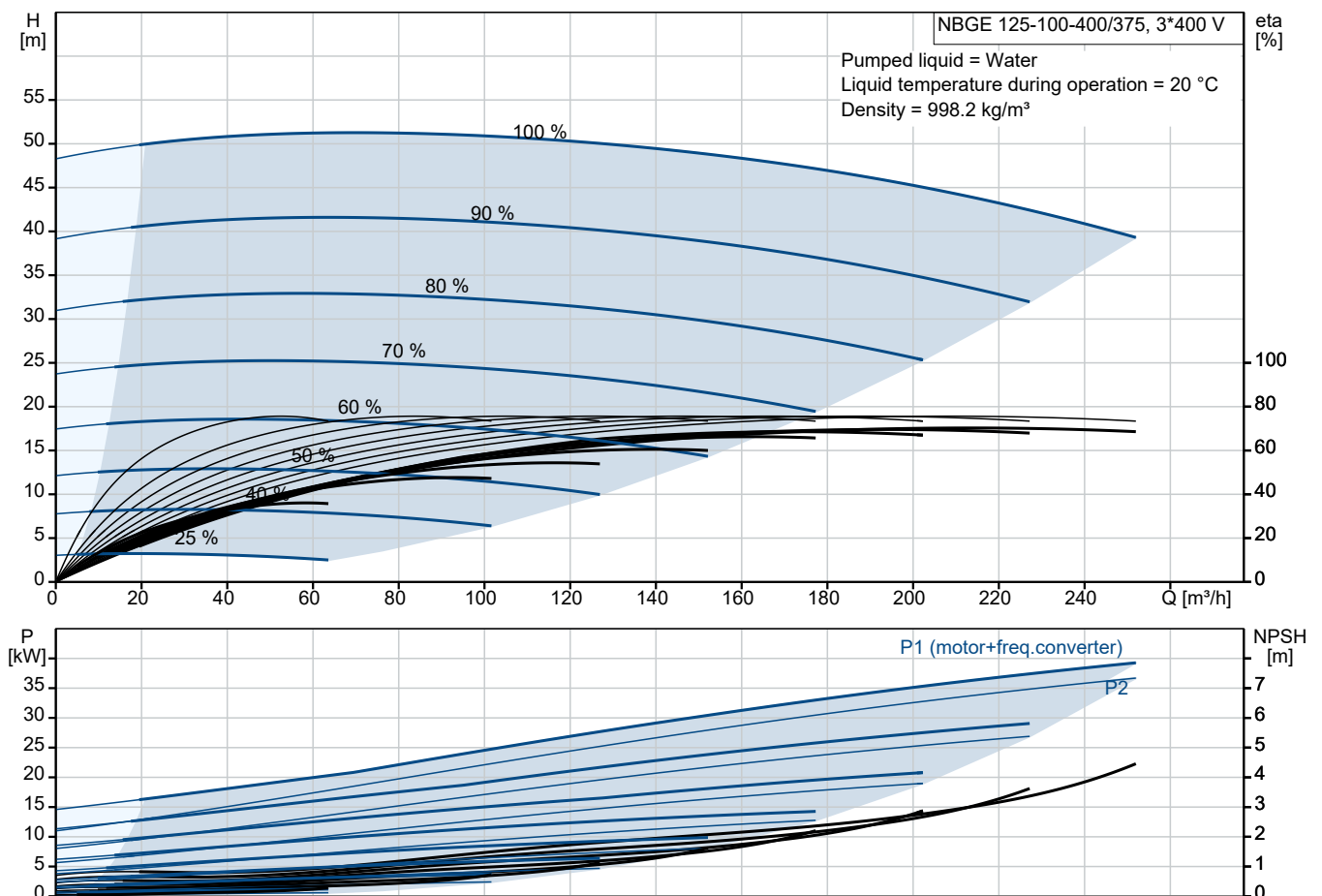


NBGE 125-100-400/375 BIASF2LESBQQESW3

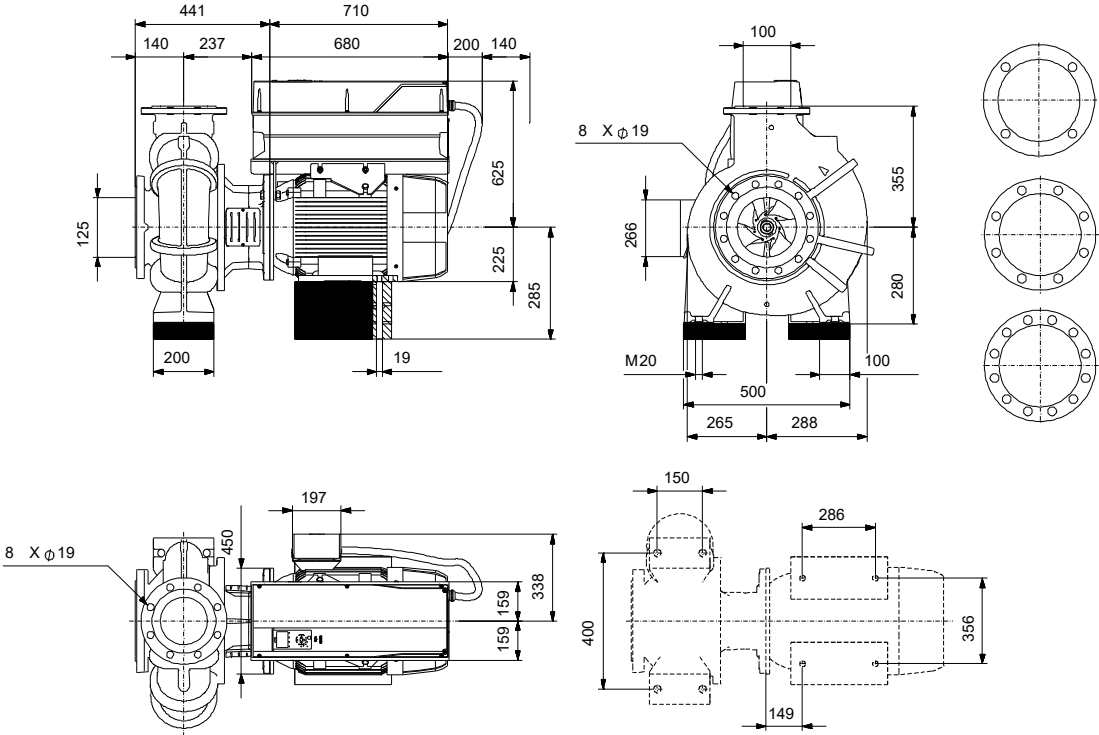
End-suction close-coupled pumps according to ISO 2858 with frequency-controlled motors.

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 125-100-400/375 BIASF2LESBQQESW3



Note! Product picture may differ from actual product

Product No.: On request

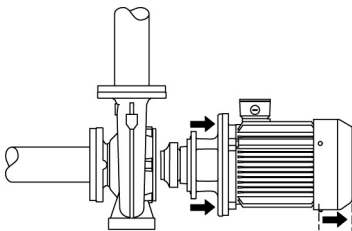
Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to ISO 2858 (16 bar). Flanges are PN 16 with dimensions according to EN 1092-1. The pump has an axial suction port, radial discharge port, horizontal shaft and a back 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.

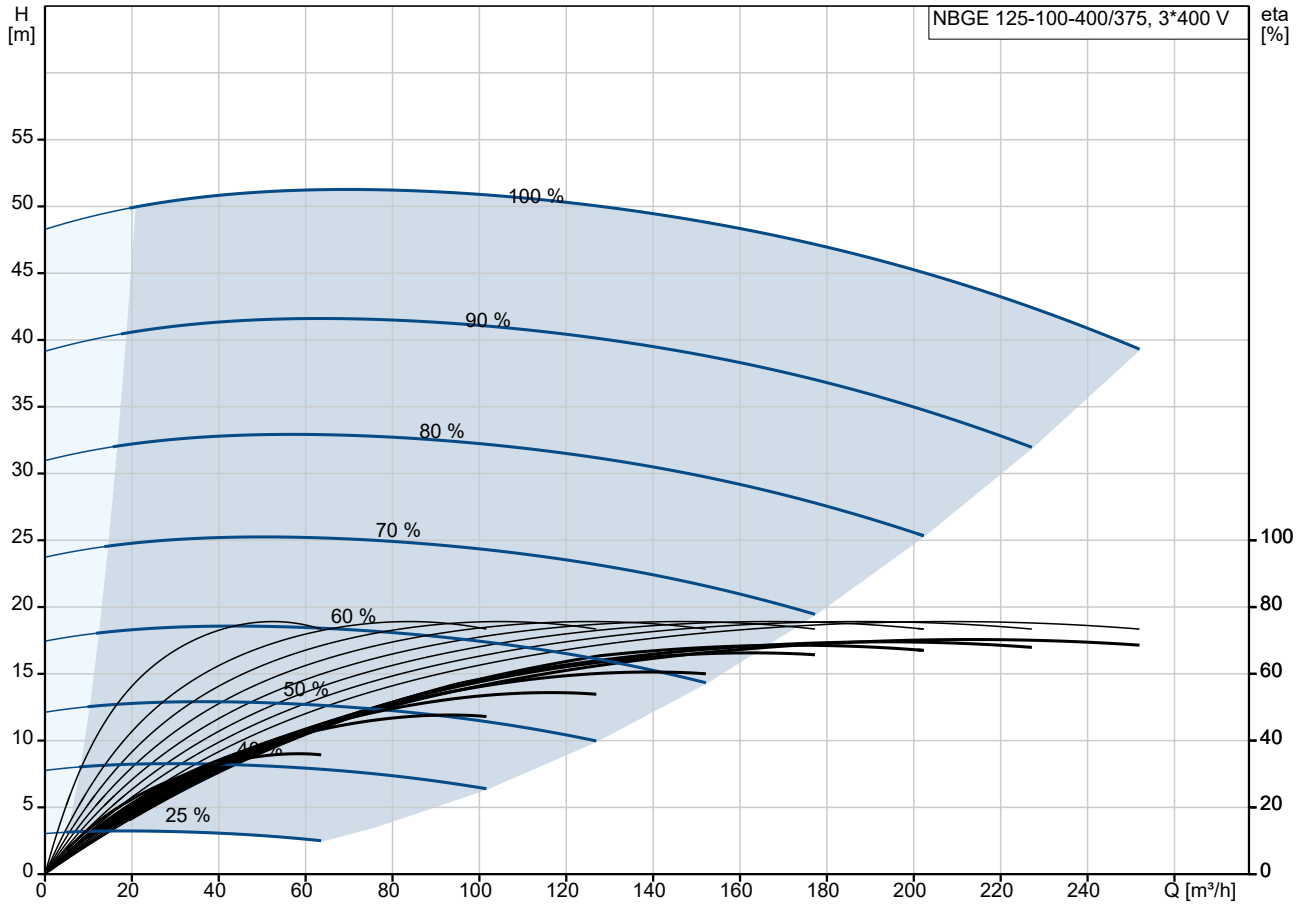
The loose flanges are made of cast iron (EN-GJS-500-7/ASTM 70-50-05).

The language on the pump nameplate is English.

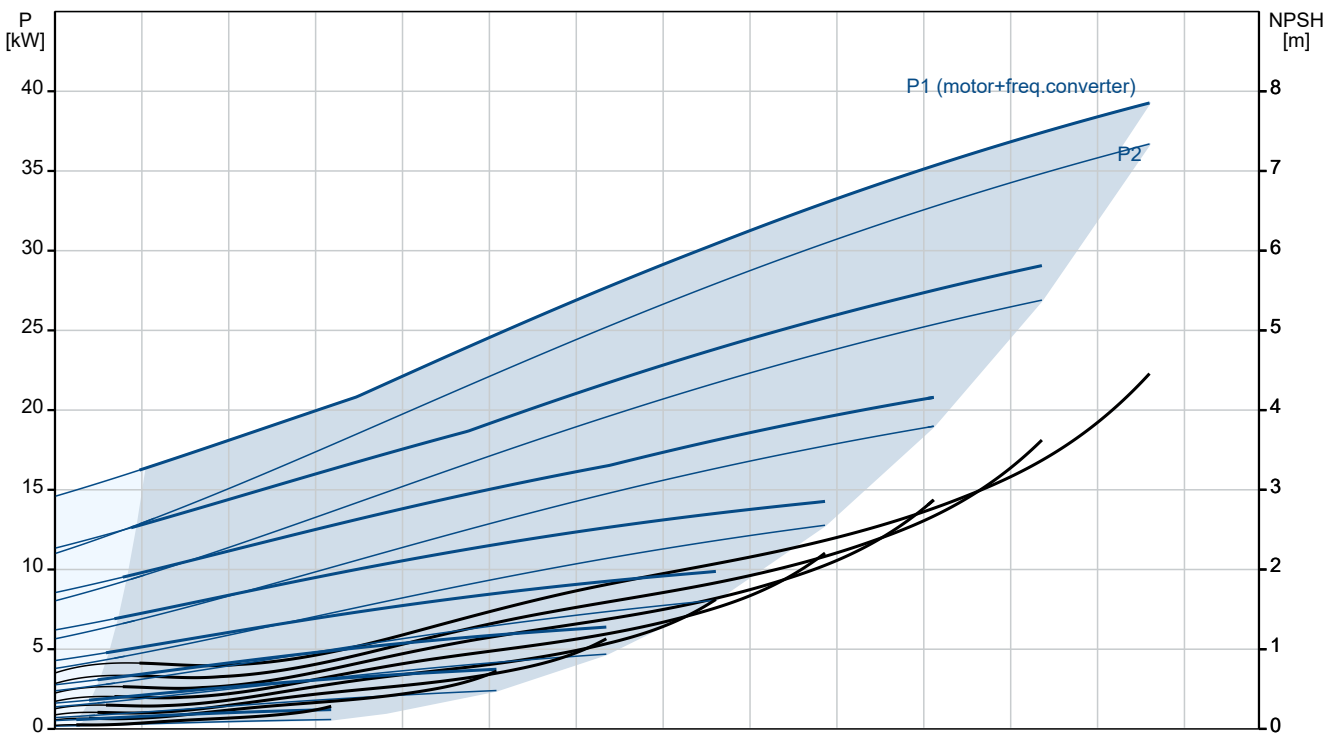
Qty.	Description
1	<p data-bbox="201 338 284 371">Motor</p> <p data-bbox="201 376 1394 427">The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p data-bbox="201 432 1015 461">The motor efficiency is classified as IE4 in accordance with IEC 60034-30-1.</p> <p data-bbox="201 465 1434 517">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.</p> <p data-bbox="201 521 1422 598">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.</p> <p data-bbox="201 602 1410 654">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.</p> <p data-bbox="201 658 1457 710">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.</p> <p data-bbox="201 781 512 815">Further product details</p> <p data-bbox="201 880 400 913">Technical data</p> <p data-bbox="201 943 301 972">Controls:</p> <p data-bbox="201 974 675 1003">VFD product number: 99616824</p> <p data-bbox="201 1005 639 1034">Frequency converter: Built-in</p> <p data-bbox="201 1037 948 1066">Type of frequency converter: CUE 3X380-500V IP55 RUG 37KW</p> <p data-bbox="201 1068 791 1097">Appr. for VFD: CE, CULUS, C-TICK</p> <p data-bbox="201 1099 584 1128">Pressure sensor: N</p> <p data-bbox="201 1158 276 1187">Liquid:</p> <p data-bbox="201 1189 632 1218">Pumped liquid: Water</p> <p data-bbox="201 1220 703 1249">Liquid temperature range: -25 .. 120 °C</p> <p data-bbox="201 1252 628 1281">Selected liquid temperature: 20 °C</p> <p data-bbox="201 1283 695 1312">Density: 998.2 kg/m³</p> <p data-bbox="201 1341 314 1370">Technical:</p> <p data-bbox="201 1373 818 1402">Pump speed on which pump data are based: 1485 rpm</p> <p data-bbox="201 1404 663 1433">Rated flow: 210 m³/h</p> <p data-bbox="201 1435 655 1464">Rated head: 44.16 m</p> <p data-bbox="201 1467 655 1496">Actual impeller diameter: 375 mm</p> <p data-bbox="201 1498 608 1527">Nominal impeller diameter: 400</p> <p data-bbox="201 1529 665 1559">Type of impeller: Standard</p> <p data-bbox="201 1561 635 1590">Shaft seal arrangement: Single</p> <p data-bbox="201 1592 636 1621">Code for shaft seal: BQQE</p> <p data-bbox="201 1624 759 1653">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="201 1655 665 1684">Bearing design: Standard</p> <p data-bbox="201 1713 309 1742">Materials:</p> <p data-bbox="201 1744 759 1821">Pump housing: Stainless steel EN 1.4517 ASTM CD4MCuN</p> <p data-bbox="201 1823 724 1852">Wear ring: Stainless steel</p> <p data-bbox="201 1854 738 1930">Flange: Cast iron EN-GJS-500-7 ASTM 70-50-05</p> <p data-bbox="201 1933 759 2031">Impeller: Stainless steel EN 1.4517 ASTM CD4MCuN</p> <p data-bbox="201 2033 683 2063">Internal pump house coating: No coating</p> <p data-bbox="201 2065 724 2094">Shaft: Stainless steel</p>

Qty.	Description
1	<p data-bbox="564 338 683 371">EN 1.4462</p> <p data-bbox="564 371 676 405">SAF 2205</p> <p data-bbox="196 432 325 465">Installation:</p> <p data-bbox="196 465 691 499">Range of ambient temperature: -10 .. 50 °C</p> <p data-bbox="196 499 636 533">Maximum operating pressure: 16 bar</p> <p data-bbox="196 533 683 566">Pipe connection standard: EN 1092-1</p> <p data-bbox="196 566 651 600">Size of inlet connection: DN 125</p> <p data-bbox="196 600 651 633">Size of outlet connection: DN 100</p> <p data-bbox="196 633 636 667">Pressure rating for connection: PN 16</p> <p data-bbox="196 667 647 701">Bearing lubrication: Grease</p> <p data-bbox="196 701 608 734">Pump housing with feet: Yes</p> <p data-bbox="196 734 584 768">Support block (Yes/No): Y</p> <p data-bbox="196 795 363 828">Electrical data:</p> <p data-bbox="196 828 636 862">Rated power - P2: 37 kW</p> <p data-bbox="196 862 632 896">Mains frequency: 50 Hz</p> <p data-bbox="196 896 847 929">Rated voltage: 3 x 380-420D/660-725Y V</p> <p data-bbox="196 929 692 963">Rated current: 67.0/38.5 A</p> <p data-bbox="196 963 636 996">Starting current: 840 %</p> <p data-bbox="196 996 612 1030">Cos phi - power factor: 0.84</p> <p data-bbox="196 1030 671 1064">Rated speed: 1485 rpm</p> <p data-bbox="196 1064 679 1097">IE efficiency: IE4 95,4%</p> <p data-bbox="196 1097 603 1131">IE Efficiency class: IE4</p> <p data-bbox="196 1131 644 1164">Motor efficiency at full load: 95.4 %</p> <p data-bbox="196 1164 644 1198">Motor efficiency at 3/4 load: 95.4 %</p> <p data-bbox="196 1198 644 1232">Motor efficiency at 1/2 load: 94.8 %</p> <p data-bbox="196 1232 580 1265">Number of poles: 4</p> <p data-bbox="196 1265 619 1299">Enclosure class (IEC 34-5): IP55</p> <p data-bbox="196 1299 580 1332">Insulation class (IEC 85): F</p> <p data-bbox="196 1332 671 1366">Motor No: 92691591</p> <p data-bbox="196 1366 882 1400">Bearing insulation type N-end: CERAMIC SHAFT COATING</p> <p data-bbox="196 1426 284 1460">Others:</p> <p data-bbox="196 1460 636 1494">Minimum efficiency index, MEI ≥: 0.70</p> <p data-bbox="196 1494 639 1527">Net weight: 728 kg</p> <p data-bbox="196 1527 639 1561">Gross weight: 814 kg</p> <p data-bbox="196 1561 651 1594">Shipping volume: 1.88 m³</p> <p data-bbox="196 1594 603 1628">Country of origin: HU</p> <p data-bbox="196 1628 671 1662">Custom tariff no.: 84137051</p> <p data-bbox="196 1662 603 1695">Language on pump nameplate: GB</p>

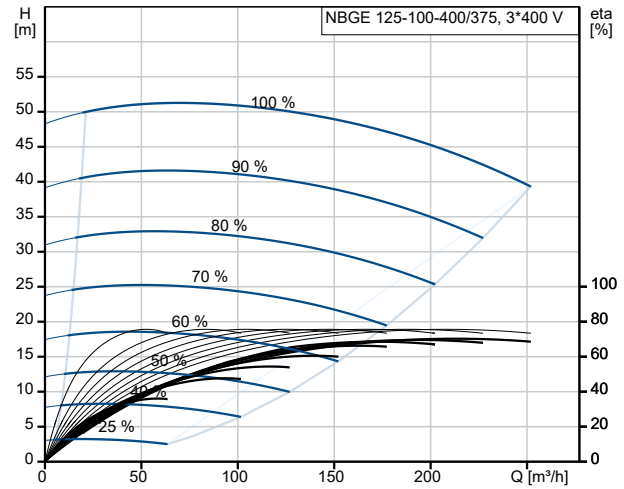
On request NBGE 125-100-400/375 BIASF2LESBQQESW3 50 Hz



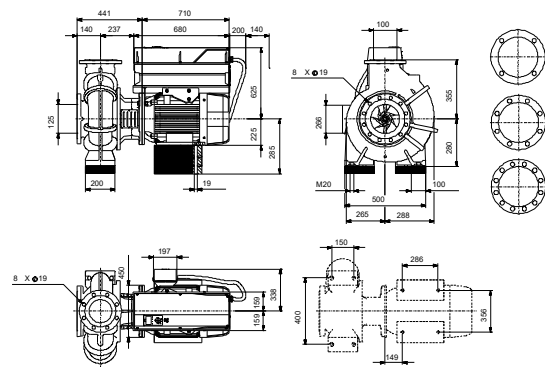
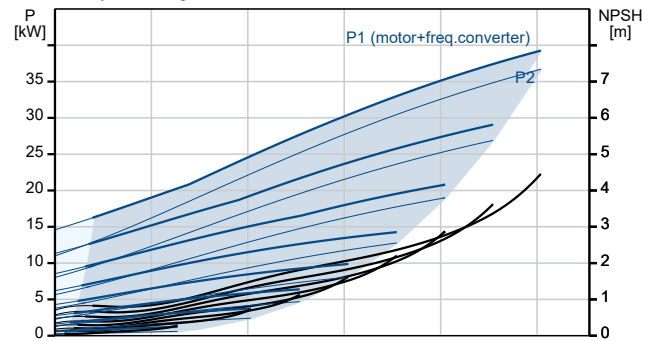
Pumped liquid = Water
 Liquid temperature during operation = 20 °C
 Density = 998.2 kg/m³



Description	Value
General information:	
Product name:	NBGE 125-100-400/375 BIASF2LESBQQESW3
Product No:	On request
EAN number:	On request
Technical:	
Pump speed on which pump data are based:	1485 rpm
Rated flow:	210 m ³ /h
Rated head:	44.16 m
Actual impeller diameter:	375 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:	37 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	67.0/38.5 A
Starting current:	840 %



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





Company name:

Created by:

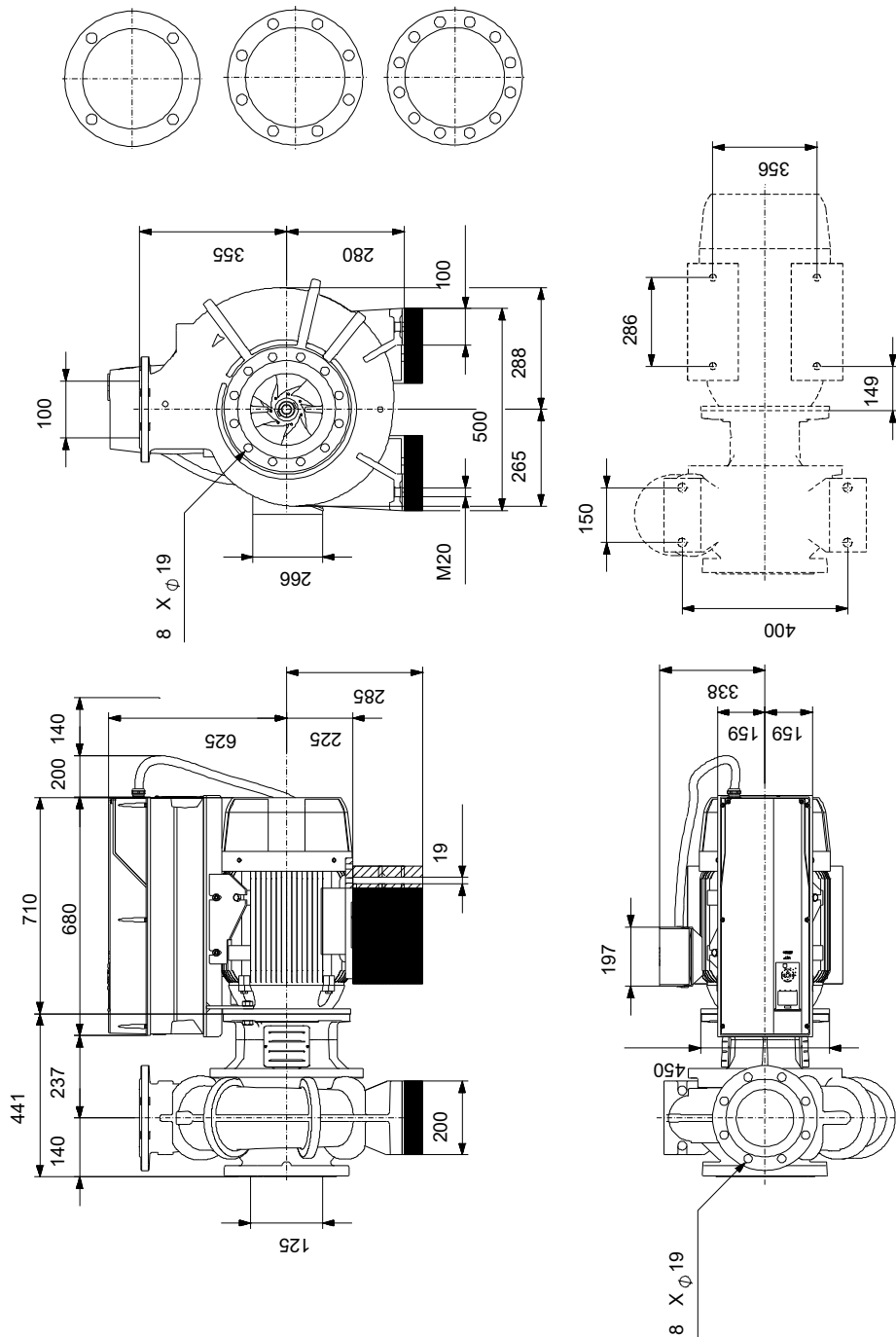
Phone:

Date:

24/10/2024

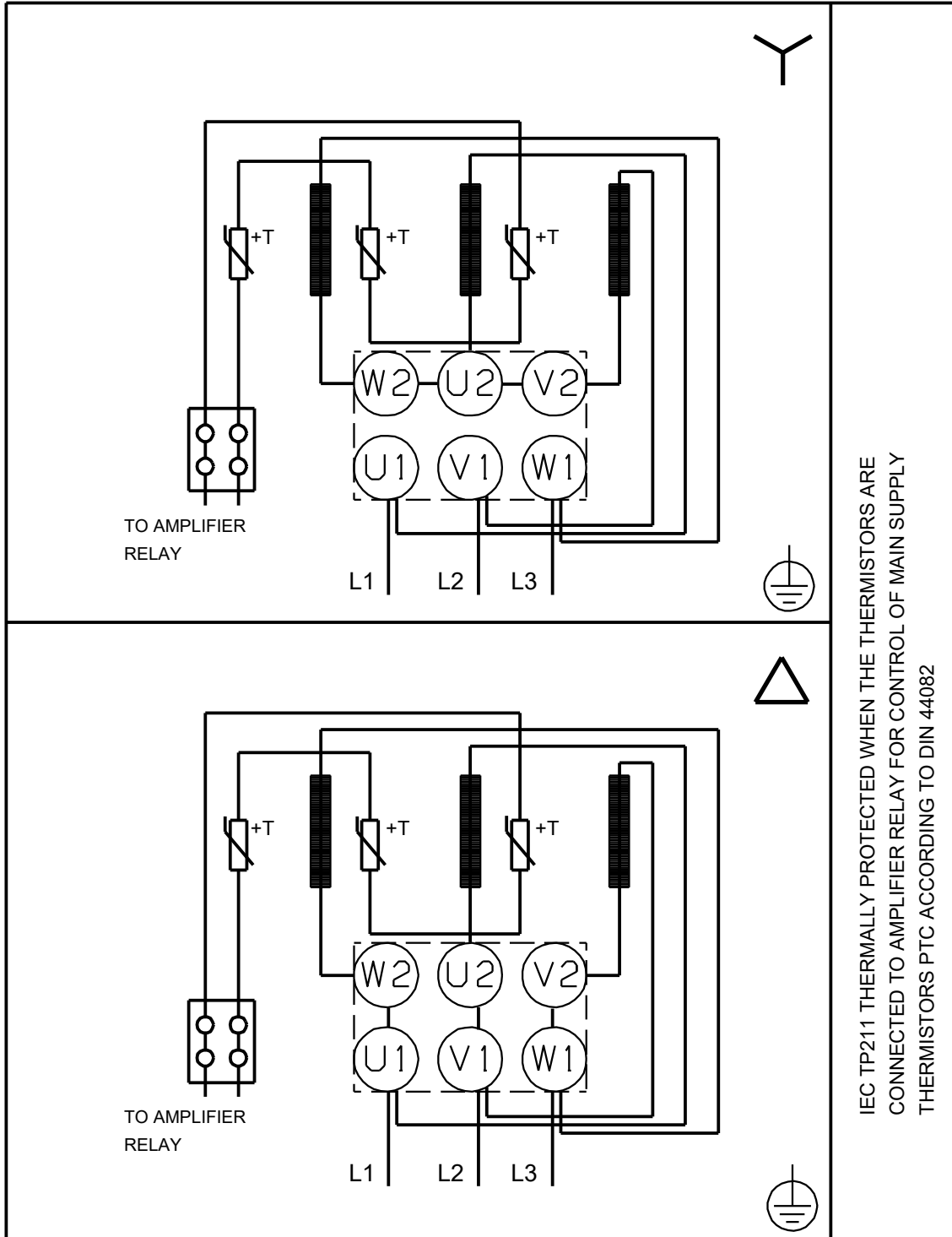
Description	Value
Cos phi - power factor:	0.84
Rated speed:	1485 rpm
IE efficiency:	IE4 95,4%
IE Efficiency class:	IE4
Motor efficiency at full load:	95.4 %
Motor efficiency at 3/4 load:	95.4 %
Motor efficiency at 1/2 load:	94.8 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	92691591
Mount. design. acc. IEC 34-7:	IM B35
Bearing insulation type N-end:	CERAMIC SHAFT COATING
Controls:	
VFD product number:	99616824
Frequency converter:	Built-in
Type of frequency converter:	CUE 3X380-500V IP55 RUG 37KW
Appr. for VFD:	CE, CULUS, C-TICK
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	728 kg
Gross weight:	814 kg
Shipping volume:	1.88 m ³
Country of origin:	HU
Custom tariff no.:	84137051
Language on pump nameplate:	GB

On request NBGE 125-100-400/375 BIASF2LESBQQESW3 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 125-100-400/375 BIASF2LESBQQESW3 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.

