

Submittal Data

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



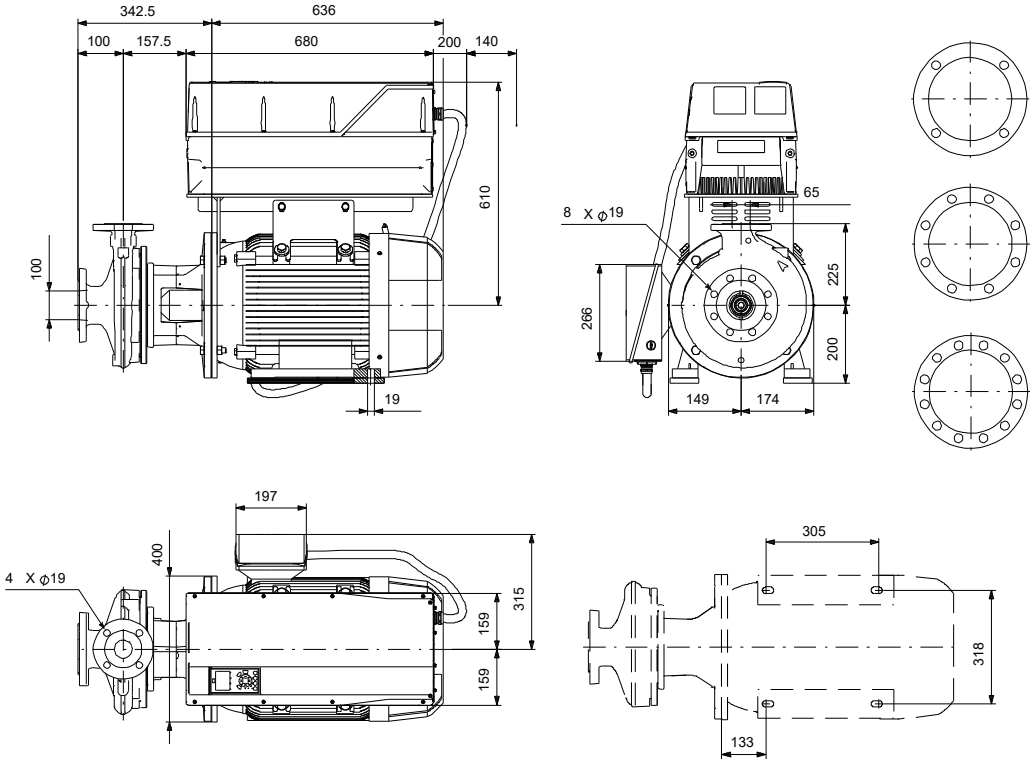
NBGE 100-65-200/219 AIASF2KVSBQQVSW1

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 temperature range: -10 .. 90 °C	Rated voltage: 380-420D/660-725Y V
	Maximum ambient temperature: 50 °C	Mains frequency: 50 Hz
	Shaft seal: BQQV	Enclosure class: IP55
	Product number: On request	Insulation class: F
		Motor protection: PTC
		Eta 1/1: 94.8 %

Submittal Data



- Materials:**
- Pump housing: Stainless steel
 - Pump housing: ASTM CF8M
 - Impeller: Stainless steel
 - Impeller: ASTM CF8M
 - Impeller: EN 1.4408
 - Material code: K
 - Code for rubber: V

Qty. Description

1 NBGE 100-65-200/219 AIASF2KVSBBQQVSW1



Note! Product picture may differ from actual product

Product No.: On request

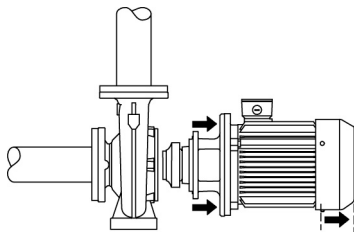
Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to ISO 2858 (16 bar). Flanges are PN 16 with dimensions according to EN 1092-1. The pump has an axial suction port, radial discharge port, horizontal shaft and a back 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 1.4408). 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 no 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.

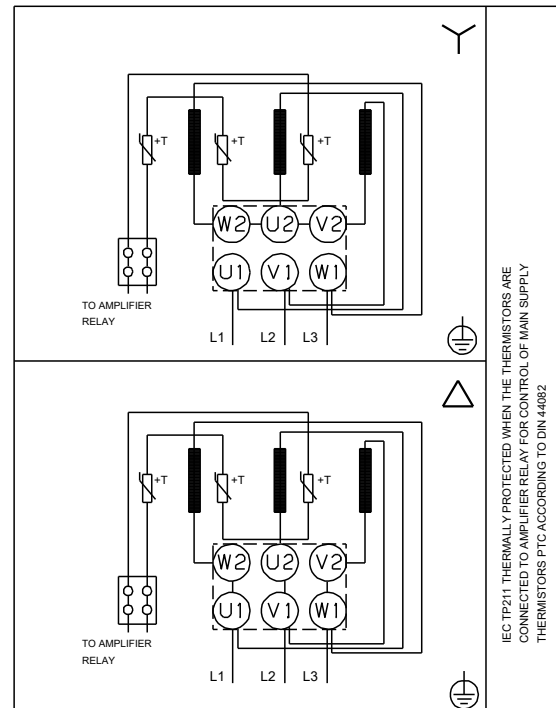
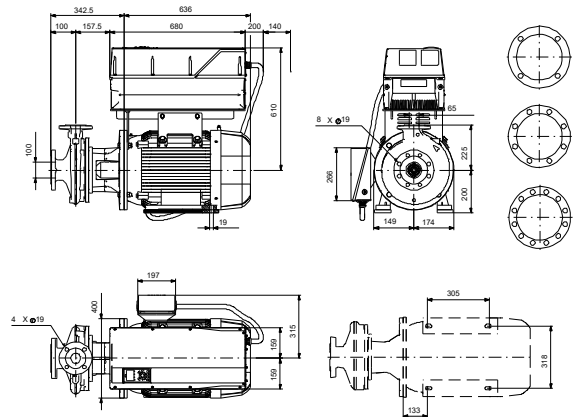
The loose flanges are made of cast iron (EN-GJS-500-7/ASTM 70-50-05).

The language on the pump nameplate is English.

Qty.	Description
1	<p data-bbox="199 336 279 369">Motor</p> <p data-bbox="199 369 1468 425">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="199 425 1013 459">The motor efficiency is classified as IE4 in accordance with IEC 60034-30-1.</p> <p data-bbox="199 459 1468 515">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="199 515 1468 593">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="199 593 1468 660">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="199 716 510 750">Further product details</p> <p data-bbox="199 817 399 851">Technical data</p> <p data-bbox="199 884 303 907">Controls:</p> <p data-bbox="199 907 678 940">VFD product number: 99616824</p> <p data-bbox="199 940 638 974">Frequency converter: Built-in</p> <p data-bbox="199 974 949 1008">Type of frequency converter: CUE 3X380-500V IP55 RUG 37KW</p> <p data-bbox="199 1008 790 1041">Appr. for VFD: CE, CULUS, C-TICK</p> <p data-bbox="199 1041 582 1075">Pressure sensor: N</p> <p data-bbox="199 1097 279 1131">Liquid:</p> <p data-bbox="199 1131 694 1164">Liquid temperature range: -10 .. 90 °C</p> <p data-bbox="199 1187 311 1220">Technical:</p> <p data-bbox="199 1220 821 1254">Pump speed on which pump data are based: 2955 rpm</p> <p data-bbox="199 1254 686 1288">Rated flow: 119.8 m³/h</p> <p data-bbox="199 1288 654 1321">Rated head: 61.57 m</p> <p data-bbox="199 1321 654 1355">Actual impeller diameter: 219 mm</p> <p data-bbox="199 1355 606 1388">Nominal impeller diameter: 200</p> <p data-bbox="199 1388 662 1422">Type of impeller: Standard</p> <p data-bbox="199 1422 630 1456">Shaft seal arrangement: Single</p> <p data-bbox="199 1456 638 1489">Code for shaft seal: BQQV</p> <p data-bbox="199 1489 758 1523">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="199 1523 662 1556">Bearing design: Standard</p> <p data-bbox="199 1579 311 1612">Materials:</p> <p data-bbox="199 1612 726 1668">Pump housing: Stainless steel EN 1.4408 ASTM CF8M</p> <p data-bbox="199 1680 726 1713">Wear ring: Stainless steel</p> <p data-bbox="199 1713 742 1803">Flange: Cast iron EN-GJS-500-7 ASTM 70-50-05</p> <p data-bbox="199 1814 726 1892">Impeller: Stainless steel EN 1.4408 ASTM CF8M</p> <p data-bbox="199 1904 686 1937">Internal pump house coating: No coating</p> <p data-bbox="199 1937 726 2027">Shaft: Stainless steel EN 1.4401 AISI 316</p> <p data-bbox="199 2049 327 2083">Installation:</p> <p data-bbox="199 2083 694 2116">Range of ambient temperature: -10 .. 50 °C</p>

Qty.	Description
1	<p>Maximum operating pressure: 16 bar Pipe connection standard: EN 1092-1 Size of inlet connection: DN 100 Size of outlet connection: DN 65 Pressure rating for connection: PN 16 Bearing lubrication: Grease Pump housing with feet: No Support block (Yes/No): Y</p> <p>Electrical data: Rated power - P2: 37 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-420D/660-725Y V Rated current: 64/37 A Starting current: 780 % Cos phi - power factor: 0.88 Rated speed: 2955 rpm IE efficiency: IE4 94,8% IE Efficiency class: IE4 Motor efficiency at full load: 94.8 % Motor efficiency at 3/4 load: 95.1 % Motor efficiency at 1/2 load: 94.9 % Number of poles: 2 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 92779387 Bearing insulation type N-end: COATED RING</p> <p>Others: Minimum efficiency index, MEI ≥: 0.70 Net weight: 406 kg Gross weight: 487 kg Shipping volume: 1.6 m³ Country of origin: HU Custom tariff no.: 84137051 Language on pump nameplate: GB</p>

Description	Value
General information:	
Product name:	NBGE 100-65-200/219 AIASF2KVSBBQQVSW1
Product No:	On request
EAN number:	On request
Technical:	
Pump speed on which pump data are based:	2955 rpm
Rated flow:	119.8 m ³ /h
Rated head:	61.57 m
Actual impeller diameter:	219 mm
Nominal impeller diameter:	200
Type of impeller:	Standard
Shaft seal arrangement:	Single
Shaft diameter:	32 mm
Code for shaft seal:	BQQV
Curve tolerance:	ISO9906:2012 3B
Pump version:	AS
Bearing design:	Standard
Materials:	
Pump housing:	Stainless steel
Pump housing:	EN 1.4408
Pump housing:	ASTM CF8M
Wear ring:	Stainless steel
Flange:	Cast iron
Flange:	EN-GJS-500-7
Flange:	ASTM 70-50-05
Impeller:	Stainless steel
Impeller:	EN 1.4408
Impeller:	ASTM CF8M
Internal pump house coating:	No coating
Material code:	K
Code for rubber:	V
Shaft:	Stainless steel
Shaft:	EN 1.4401
Shaft:	AISI 316
Installation:	
Range of ambient temperature:	-10 .. 50 °C
Maximum operating pressure:	16 bar
Pipe connection standard:	EN 1092-1
Size of inlet connection:	DN 100
Size of outlet connection:	DN 65
Pressure rating for connection:	PN 16
Bearing lubrication:	Grease
Pump housing with feet:	No
Support block (Yes/No):	Y
Connect code:	F2
Liquid:	
Liquid temperature range:	-10 .. 90 °C
Electrical data:	
Rated power - P2:	37 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	64/37 A
Starting current:	780 %
Cos phi - power factor:	0.88
Rated speed:	2955 rpm
IE efficiency:	IE4 94,8%





Company name:

Created by:

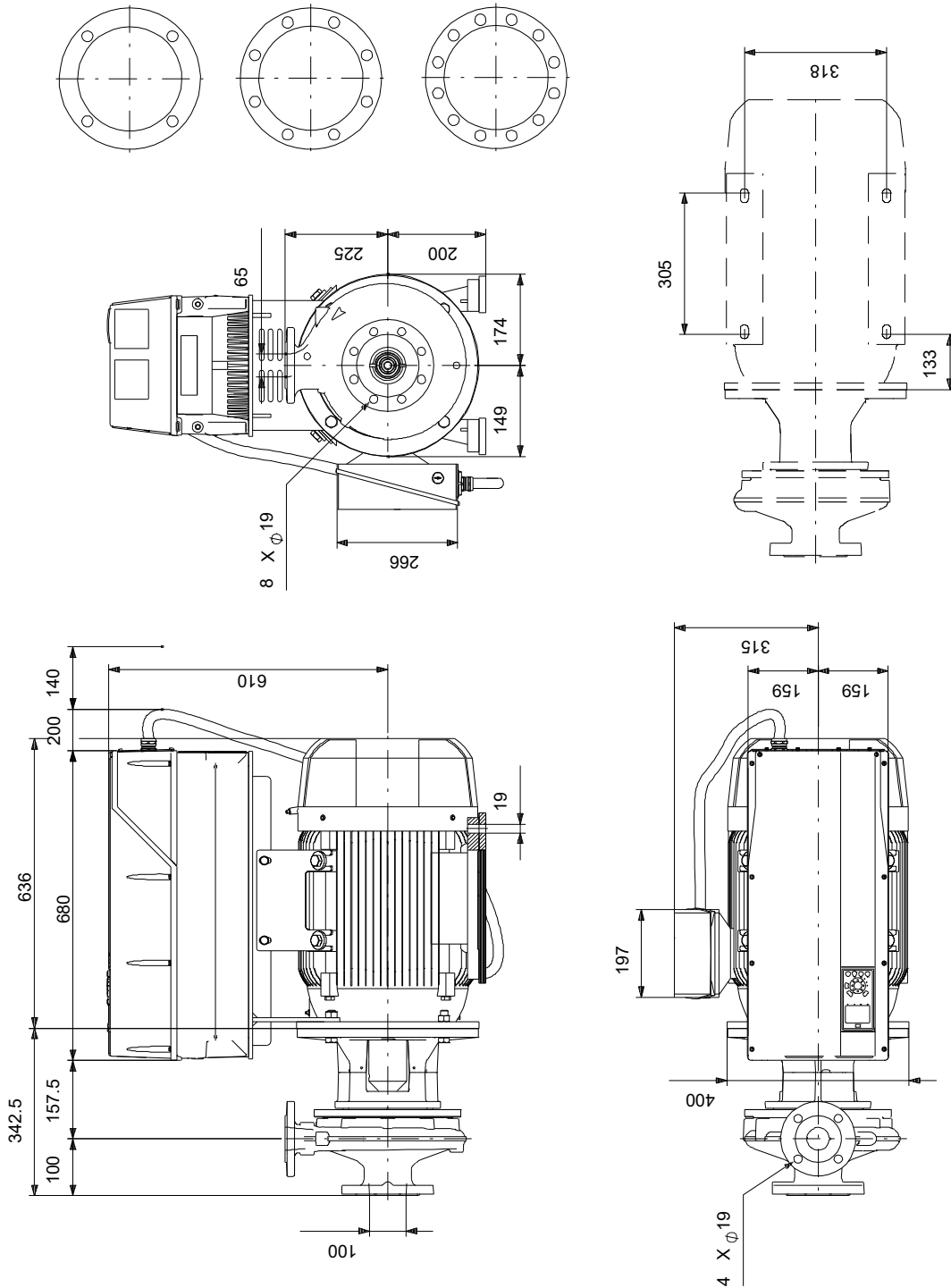
Phone:

Date:

24/10/2024

Description	Value
IE Efficiency class:	IE4
Motor efficiency at full load:	94.8 %
Motor efficiency at 3/4 load:	95.1 %
Motor efficiency at 1/2 load:	94.9 %
Number of poles:	2
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	92779387
Mount. design. acc. IEC 34-7:	IM B35
Bearing insulation type N-end:	COATED RING
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:	406 kg
Gross weight:	487 kg
Shipping volume:	1.6 m ³
Country of origin:	HU
Custom tariff no.:	84137051
Language on pump nameplate:	GB

On request NBGE 100-65-200/219 AIASF2KVSBQQVSW1 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 100-65-200/219 AIASF2KVSBQQVSW1 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.

