

Qty. Description

1 NB 65-315/320 AASF2AESBQQEOW3



Product No.: [98666284](#)

Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to EN 733 (10 bar).

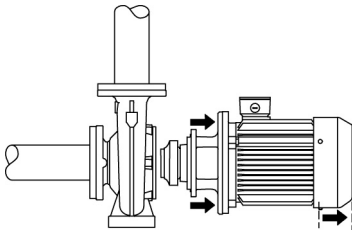
Flanges are PN 16 with dimensions according to EN 1092-2. The pump has an axial suction port, radial discharge port, horizontal shaft and a back pull-out design enabling removal of the motor, motor stool, cover and impeller without disturbing the pump housing or pipework.

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

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

The 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.



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.

Wear rings used in pump housing and for impeller are made of bronze/brass.

Motor stool and pump cover are made of cast iron (EN-GJL-250). Coupling guards are fitted to the motor stool. The pump cover is provided with a manual air vent screw for venting of the pump housing and the shaft seal chamber.

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.

Qty.	Description																																														
1	<p data-bbox="201 338 284 371"><b>Motor</b></p> <p data-bbox="201 376 1481 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 1018 465">The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p data-bbox="201 468 1481 519">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 1481 600">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="201 604 1481 656">The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.</p> <p data-bbox="201 723 512 757"><b>Further product details</b></p> <p data-bbox="201 761 1481 840">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.</p> <p data-bbox="201 907 400 940"><b>Technical data</b></p> <p data-bbox="201 969 300 1003">Controls:</p> <table data-bbox="201 1003 638 1059"> <tr> <td data-bbox="201 1003 432 1037">Frequency converter:</td> <td data-bbox="568 1003 638 1037">NONE</td> </tr> <tr> <td data-bbox="201 1037 384 1059">Pressure sensor:</td> <td data-bbox="568 1037 584 1059">N</td> </tr> </table> <p data-bbox="201 1088 276 1122">Liquid:</p> <table data-bbox="201 1122 702 1238"> <tr> <td data-bbox="201 1122 363 1155">Pumped liquid:</td> <td data-bbox="568 1122 632 1155">Water</td> </tr> <tr> <td data-bbox="201 1155 480 1189">Liquid temperature range:</td> <td data-bbox="568 1155 702 1189">-25 .. 120 °C</td> </tr> <tr> <td data-bbox="201 1189 504 1223">Selected liquid temperature:</td> <td data-bbox="568 1189 632 1223">20 °C</td> </tr> <tr> <td data-bbox="201 1223 292 1245">Density:</td> <td data-bbox="568 1223 695 1245">998.2 kg/m<sup>3</sup></td> </tr> </table> <p data-bbox="201 1267 316 1301">Technical:</p> <table data-bbox="201 1301 818 1563"> <tr> <td data-bbox="201 1301 687 1335">Pump speed on which pump data are based:</td> <td data-bbox="719 1301 818 1335">1475 rpm</td> </tr> <tr> <td data-bbox="201 1335 323 1368">Rated flow:</td> <td data-bbox="568 1335 683 1368">91.96 m<sup>3</sup>/h</td> </tr> <tr> <td data-bbox="201 1368 336 1402">Rated head:</td> <td data-bbox="568 1368 655 1402">32.28 m</td> </tr> <tr> <td data-bbox="201 1402 472 1435">Actual impeller diameter:</td> <td data-bbox="568 1402 655 1435">320 mm</td> </tr> <tr> <td data-bbox="201 1435 488 1469">Nominal impeller diameter:</td> <td data-bbox="568 1435 608 1469">315</td> </tr> <tr> <td data-bbox="201 1469 464 1503">Shaft seal arrangement:</td> <td data-bbox="568 1469 639 1503">Single</td> </tr> <tr> <td data-bbox="201 1503 416 1536">Code for shaft seal:</td> <td data-bbox="568 1503 639 1536">BQQE</td> </tr> <tr> <td data-bbox="201 1536 384 1570">Curve tolerance:</td> <td data-bbox="568 1536 759 1570">ISO9906:2012 3B</td> </tr> <tr> <td data-bbox="201 1570 368 1603">Bearing design:</td> <td data-bbox="568 1570 663 1603">Standard</td> </tr> </table> <p data-bbox="201 1597 308 1630">Materials:</p> <table data-bbox="201 1630 730 1951"> <tr> <td data-bbox="201 1630 363 1664">Pump housing:</td> <td data-bbox="568 1630 730 1709">Cast iron EN-GJL-250 ASTM class 35</td> </tr> <tr> <td data-bbox="201 1709 316 1742">Wear ring:</td> <td data-bbox="568 1709 632 1742">Brass</td> </tr> <tr> <td data-bbox="201 1742 292 1776">Impeller:</td> <td data-bbox="568 1742 730 1821">Cast iron EN-GJL-200 ASTM class 30</td> </tr> <tr> <td data-bbox="201 1821 512 1854">Internal pump house coating:</td> <td data-bbox="568 1821 616 1854">CED</td> </tr> <tr> <td data-bbox="201 1854 268 1888">Shaft:</td> <td data-bbox="568 1854 730 1951">Stainless steel EN 1.4301 AISI 304</td> </tr> </table> <p data-bbox="201 1984 323 2018">Installation:</p> <table data-bbox="201 2018 683 2116"> <tr> <td data-bbox="201 2018 323 2051">t max amb:</td> <td data-bbox="568 2018 632 2051">55 °C</td> </tr> <tr> <td data-bbox="201 2051 523 2085">Maximum operating pressure:</td> <td data-bbox="568 2051 639 2085">16 bar</td> </tr> <tr> <td data-bbox="201 2085 480 2116">Pipe connection standard:</td> <td data-bbox="568 2085 683 2116">EN 1092-2</td> </tr> </table>	Frequency converter:	NONE	Pressure sensor:	N	Pumped liquid:	Water	Liquid temperature range:	-25 .. 120 °C	Selected liquid temperature:	20 °C	Density:	998.2 kg/m <sup>3</sup>	Pump speed on which pump data are based:	1475 rpm	Rated flow:	91.96 m <sup>3</sup> /h	Rated head:	32.28 m	Actual impeller diameter:	320 mm	Nominal impeller diameter:	315	Shaft seal arrangement:	Single	Code for shaft seal:	BQQE	Curve tolerance:	ISO9906:2012 3B	Bearing design:	Standard	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	t max amb:	55 °C	Maximum operating pressure:	16 bar	Pipe connection standard:	EN 1092-2
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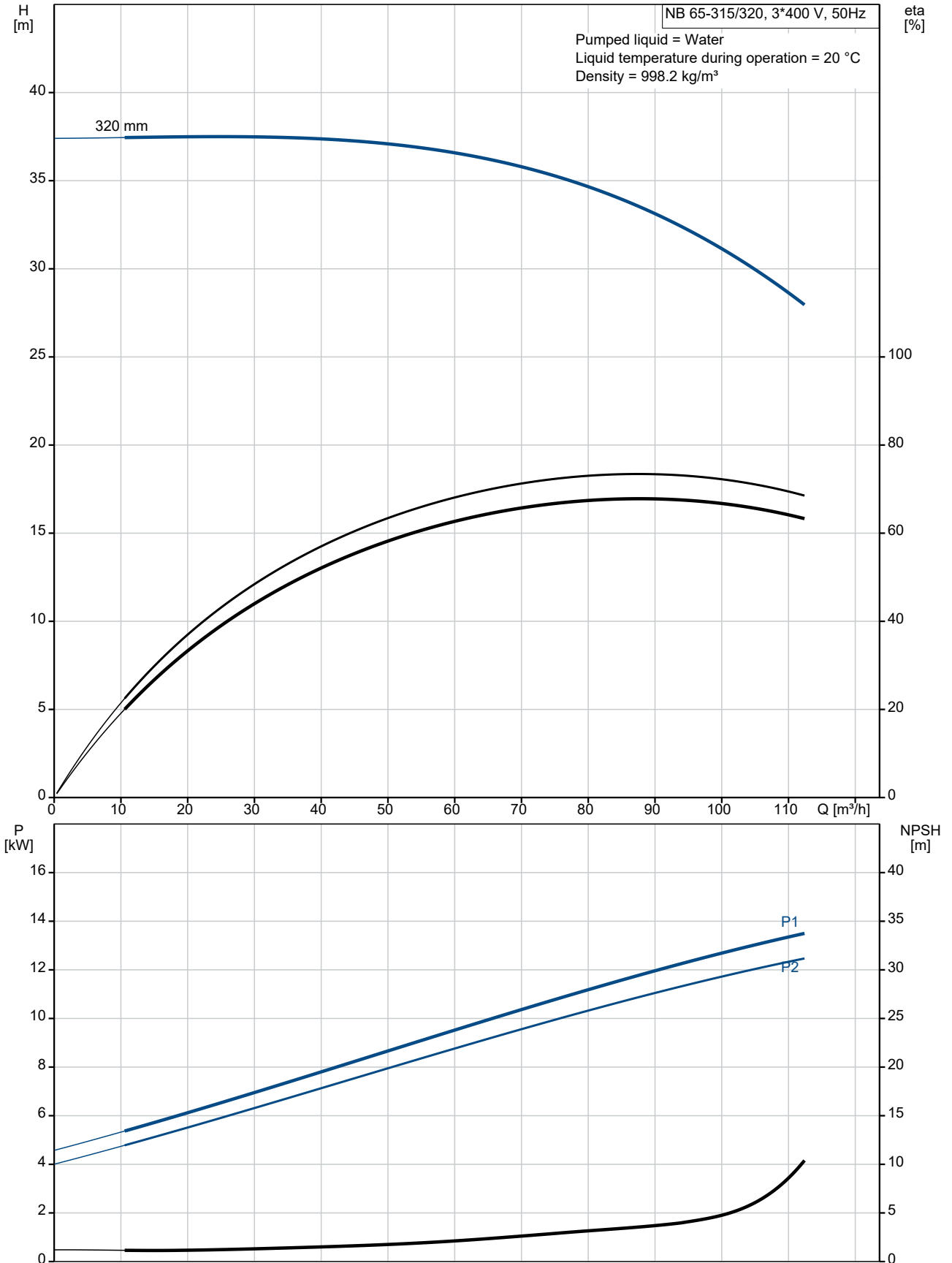
Qty.	Description
1	<p>Size of inlet connection: DN 80            Size of outlet connection: DN 65            Pressure rating for connection: PN 16            Bearing lubrication: Grease            Pump housing with feet: Yes            Support block (Yes/No): Y</p> <p>Electrical data:            Motor type: SIEMENS            IE Efficiency class: IE3            Rated power - P2: 15 kW            Mains frequency: 50 Hz            Rated voltage: 3 x 380-420D/660-725Y V            Rated current: 28.5/16.6 A            Starting current: 850-850 %            Cos phi - power factor: 0.82            Rated speed: 1475 rpm            Efficiency: IE3 92,1%            Motor efficiency at full load: 92.1-92.1 %            Motor efficiency at 3/4 load: 92.3-92.3 %            Motor efficiency at 1/2 load: 91.5-91.5 %            Number of poles: 4            Enclosure class (IEC 34-5): IP55            Insulation class (IEC 85): F            Motor No: 99032190            Bearing insulation type N-end: N</p> <p>Others:            Minimum efficiency index, MEI ≥: 0.70            Net weight: 221 kg            Gross weight: 246 kg            Shipping volume: 0.707 m<sup>3</sup>            Danish VVS No.: 386063323            Country of origin: HU            Custom tariff no.: 84137051</p>



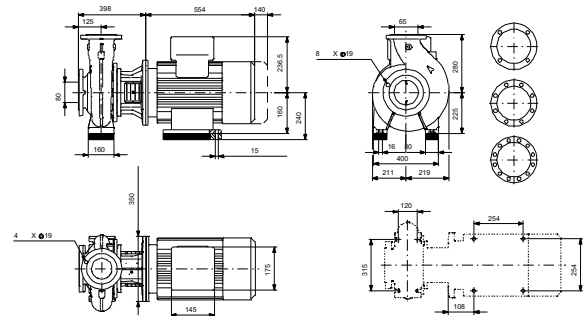
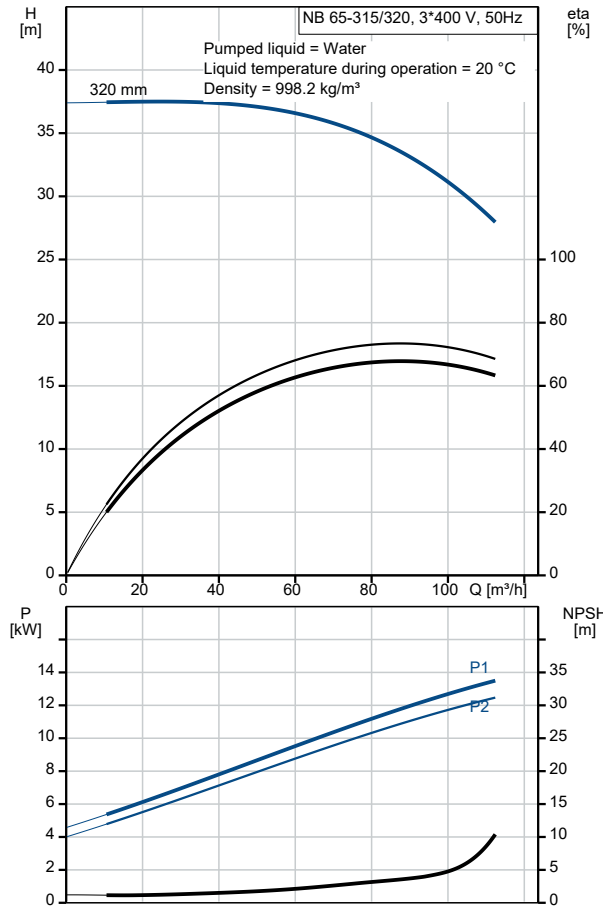
Company name: Pump Sales Direct  
Created by:  
Phone:

Date: 15/08/2022

### 98666284 NB 65-315/320 AASF2AESBQQEOW3 50 Hz



Description	Value
<b>General information:</b>	
Product name:	NB 65-315/320 AASF2AESBQQEOW3
Product No:	98666284
EAN number:	5711499219976
<b>Technical:</b>	
Pump speed on which pump data are based:	1475 rpm
Rated flow:	91.96 m <sup>3</sup> /h
Rated head:	32.28 m
Actual impeller diameter:	320 mm
Nominal impeller diameter:	315
Shaft seal arrangement:	Single
Shaft diameter:	32 mm
Code for shaft seal:	BQQE
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:	E
Shaft:	Stainless steel
Shaft:	EN 1.4301
Shaft:	AISI 304
<b>Installation:</b>	
t max amb:	55 °C
Maximum operating pressure:	16 bar
Pipe connection standard:	EN 1092-2
Size of inlet connection:	DN 80
Size of outlet connection:	DN 65
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:	-25 .. 120 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
Motor type:	SIEMENS
IE Efficiency class:	IE3
Rated power - P2:	15 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	28.5/16.6 A
Starting current:	850-850 %
Cos phi - power factor:	0.82
Rated speed:	1475 rpm
Efficiency:	IE3 92,1%





Company name: Pump Sales Direct

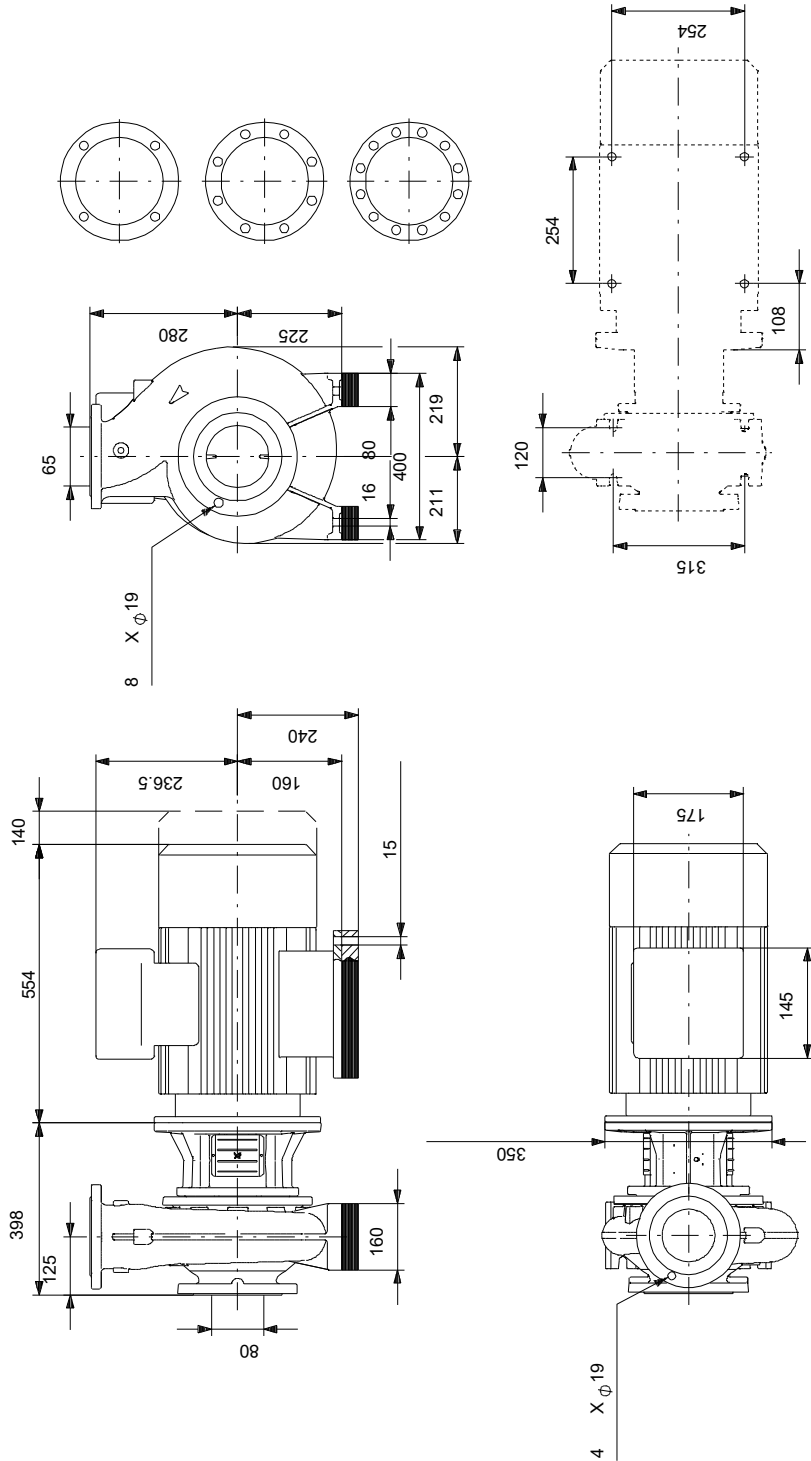
Created by:

Phone:

Date: 15/08/2022

Description	Value
Motor efficiency at full load:	92.1-92.1 %
Motor efficiency at 3/4 load:	92.3-92.3 %
Motor efficiency at 1/2 load:	91.5-91.5 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	99032190
Mount. design. acc. IEC 34-7:	IM B35
Bearing insulation type N-end:	N
<b>Controls:</b>	
Frequency converter:	NONE
Pressure sensor:	N
<b>Others:</b>	
Minimum efficiency index, MEI $\geq$ :	0.70
Net weight:	221 kg
Gross weight:	246 kg
Shipping volume:	0.707 m <sup>3</sup>
Danish VVS No.:	386063323
Country of origin:	HU
Custom tariff no.:	84137051

## 98666284 NB 65-315/320 AASF2AESBQQEOW3 50 Hz



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

## 98666284 NB 65-315/320 AASF2AESBQQEOW3 50 Hz



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





**Company name:** Pump Sales Direct

**Created by:**

**Phone:**

**Date:** 15/08/2022

**Order Data:**

Position	Your pos.	Product name	Amount	Product No	Total
		NB 65-315/320	1	98666284	Price on request