

Qty. Description

1 NB 80-400/419 AASF2AESBQQESW3

Product No.: [98619938](#)

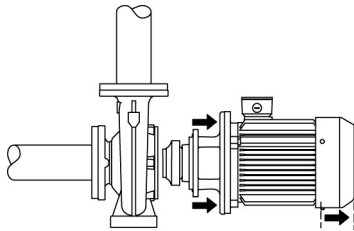
Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to EN 733 (10 bar).

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 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.

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 IE3 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.
 A variable speed drive makes adjustment of pump performance to any duty point possible. If the motor is to be connected to a variable speed drive, the pump must be ordered with an electrically insulated motor bearing.

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:

Frequency converter: NONE
 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: 1478 rpm
 Rated flow: 162.4 m³/h
 Rated head: 53.09 m
 Actual impeller diameter: 419 mm
 Nominal impeller diameter: 400
 Shaft seal arrangement: Single
 Code for shaft seal: BQQE
 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

Installation:

t max amb: 55 °C
 Maximum operating pressure: 16 bar
 Pipe connection standard: EN 1092-2
 Size of inlet connection: DN 100

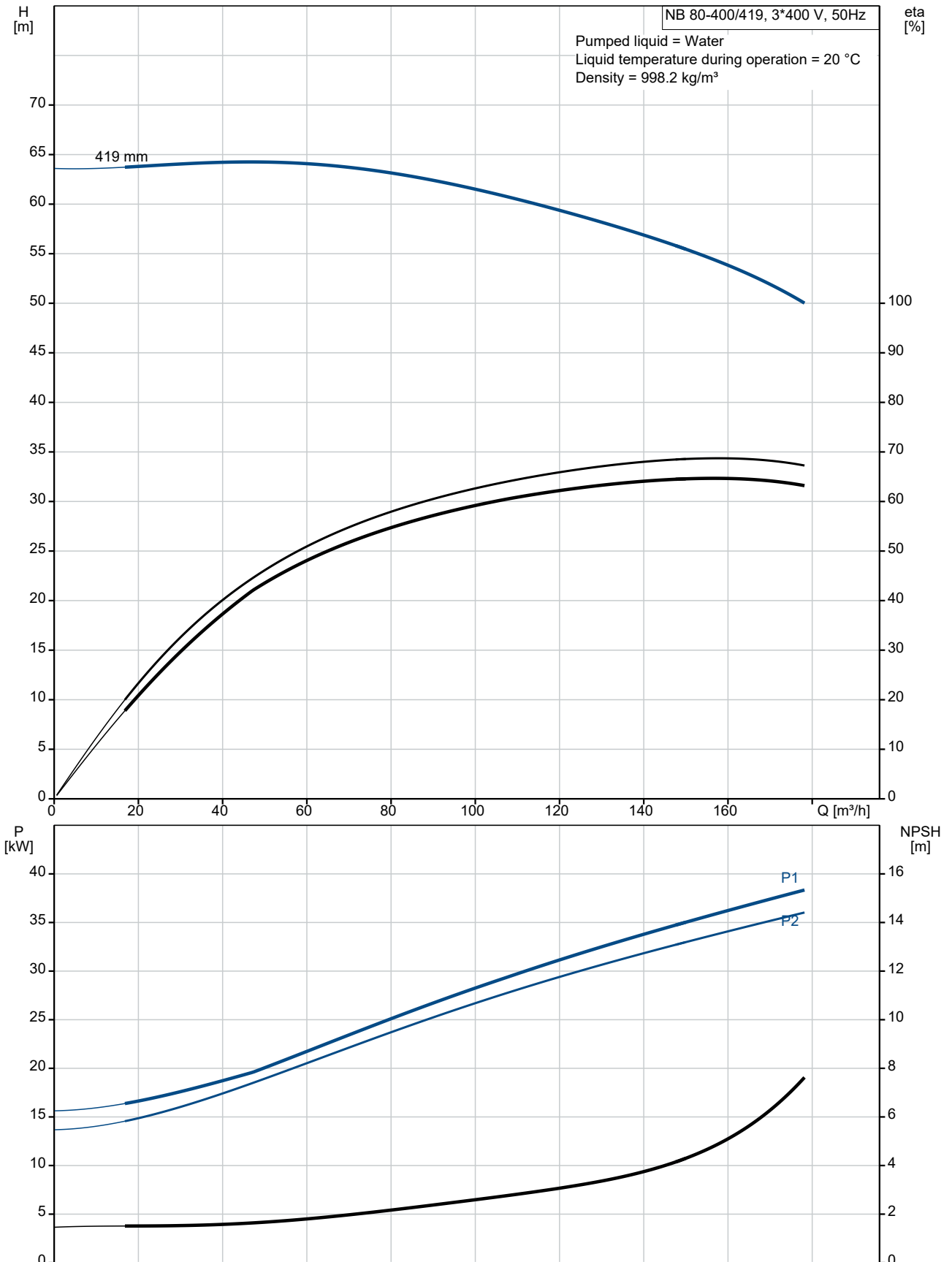
Qty.	Description
1	<p>Size of outlet connection: DN 80 Pressure rating for connection: PN 16 Bearing lubrication: Grease Pump housing with feet: Yes Support block (Yes/No): Y</p> <p>Electrical data: Motor type: SIEMENS IE Efficiency class: IE3 Rated power - P2: 37 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-420D/660-725Y V Rated current: 66/38.5 A Starting current: 640-640 % Cos phi - power factor: 0.86 Rated speed: 1478 rpm Efficiency: IE3 93,9% Motor efficiency at full load: 93.9-93.9 % Motor efficiency at 3/4 load: 94.5-94.5 % Motor efficiency at 1/2 load: 94.4-94.4 % Number of poles: 4 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 99032202 Bearing insulation type N-end: STEEL BEARING</p> <p>Others: Minimum efficiency index, MEI ≥: 0.44 Net weight: 502 kg Gross weight: 534 kg Shipping volume: 0.951 m³ Danish VVS No.: 386064404 Country of origin: HU Custom tariff no.: 84137051</p>



Company name: Pump Sales Direct
Created by:
Phone:

Date: 15/08/2022

98619938 NB 80-400/419 AASF2AESBQQESW3 50 Hz





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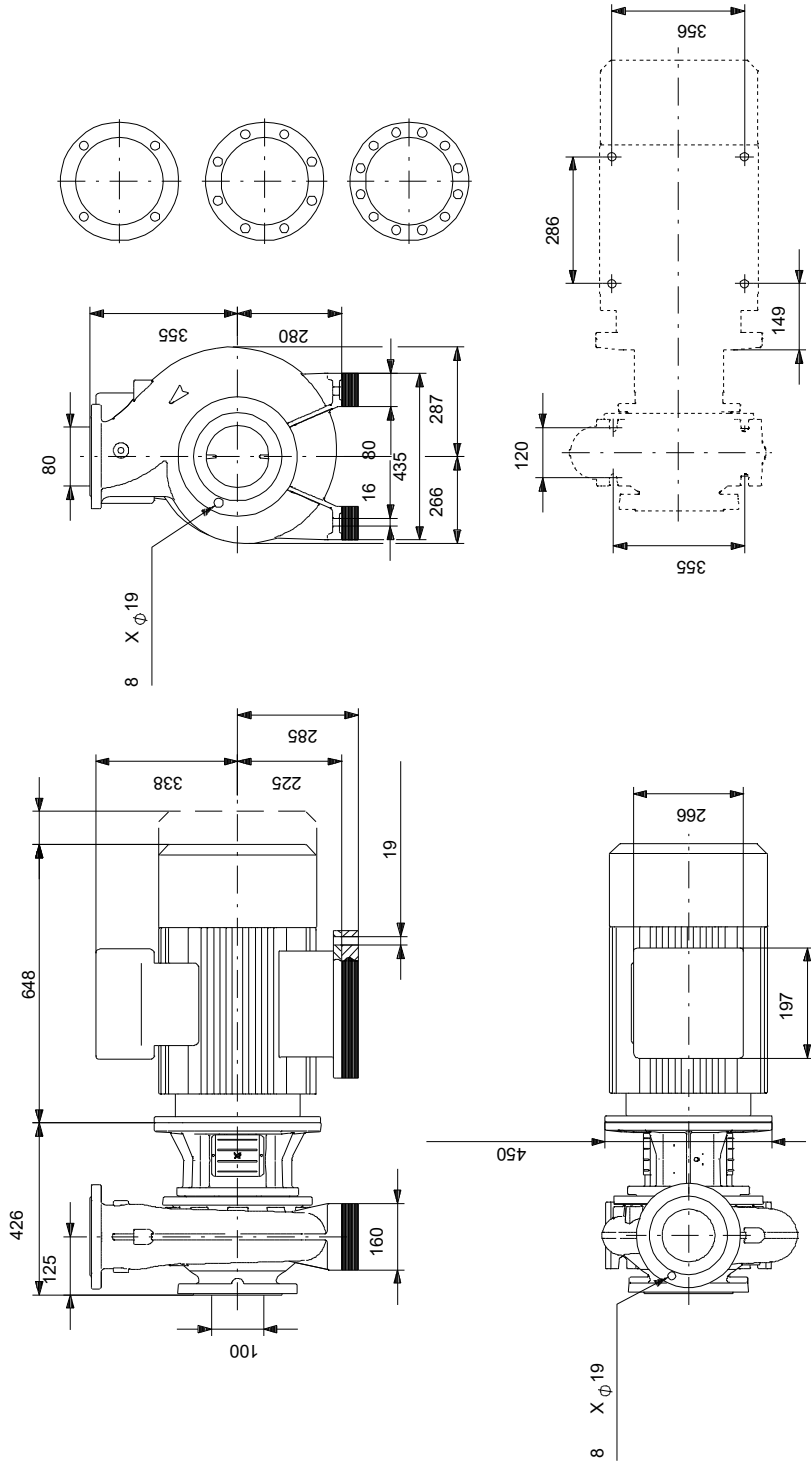
Created by:

Phone:

Date: 15/08/2022

Description	Value
Motor efficiency at full load:	93.9-93.9 %
Motor efficiency at 3/4 load:	94.5-94.5 %
Motor efficiency at 1/2 load:	94.4-94.4 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	99032202
Mount. design. acc. IEC 34-7:	IM B35
Bearing insulation type N-end:	STEEL BEARING
Controls:	
Frequency converter:	NONE
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI \geq :	0.44
Net weight:	502 kg
Gross weight:	534 kg
Shipping volume:	0.951 m ³
Danish VVS No.:	386064404
Country of origin:	HU
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Note! All units are in [mm] unless others are stated.
 Disclaimer: This simplified dimensional drawing does not show all details.

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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.

