

**Qty. Description**

1 NB 150-200/218-202 AF1ABQQE



Product No.: [98974648](#)

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

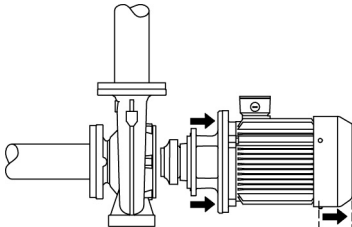
Flanges are PN 10 with dimensions according to EN 1092-2. The pump has an axial suction port, radial discharge port, horizontal shaft and a back pull-out design enabling removal of the motor, motor stool, cover and impeller without disturbing the pump housing or pipework.

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 pipe work.



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 or cast iron.

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.

Primary seal:

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

**Qty. Description**

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.

**Motor**

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.

**Further product details**

**Technical data**

**Controls:**

Frequency converter: NONE

**Liquid:**

Pumped liquid: Water

Liquid temperature range: -25 .. 120 °C

Liquid temperature during operation: 20 °C

Density: 998.2 kg/m<sup>3</sup>

**Technical:**

Rated flow: 786 m<sup>3</sup>/h

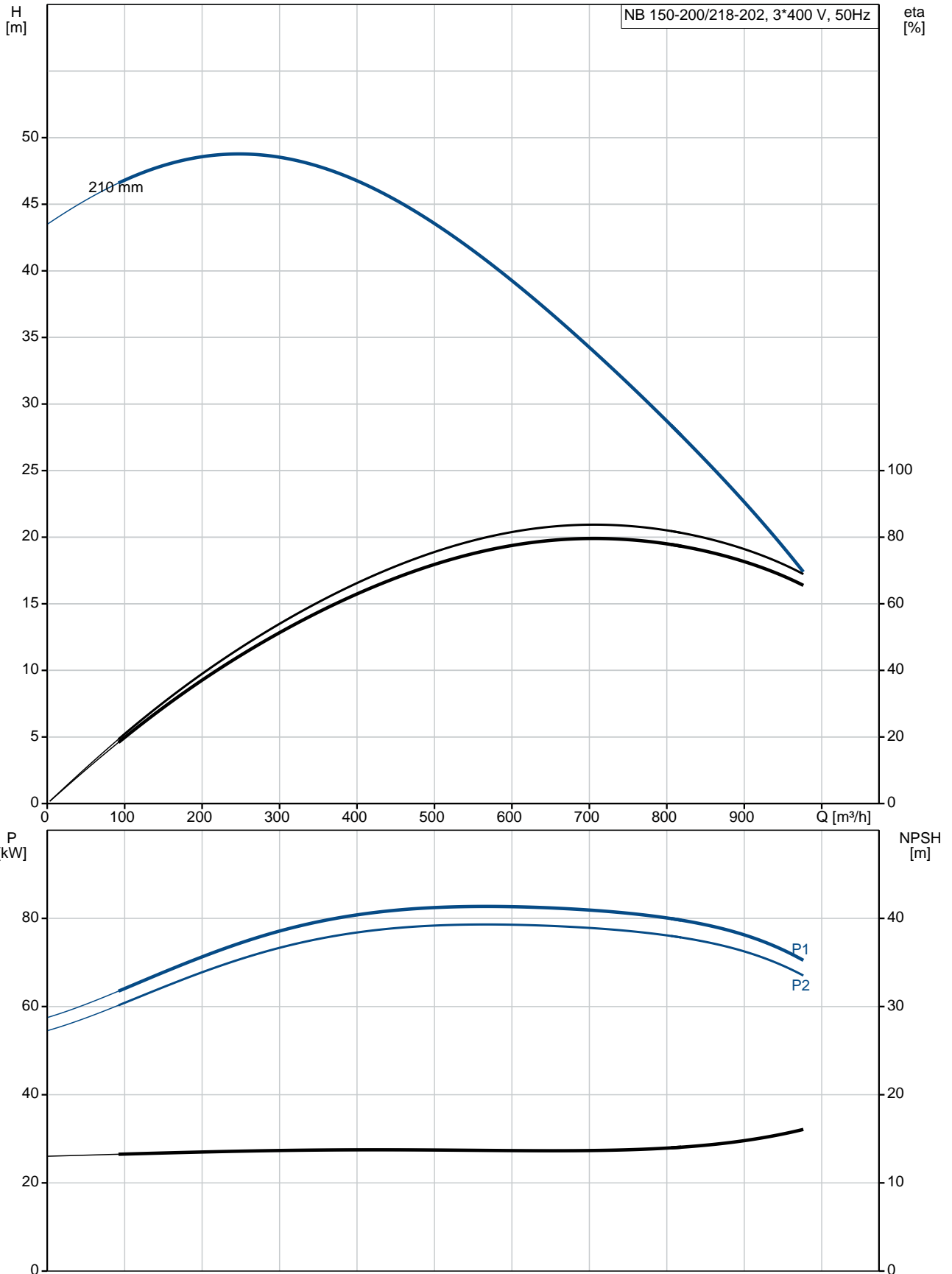
Rated head: 32.94 m

Actual impeller diameter: 218-202 mm

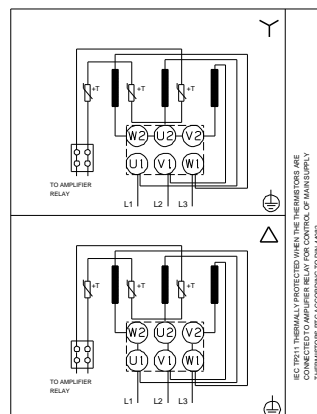
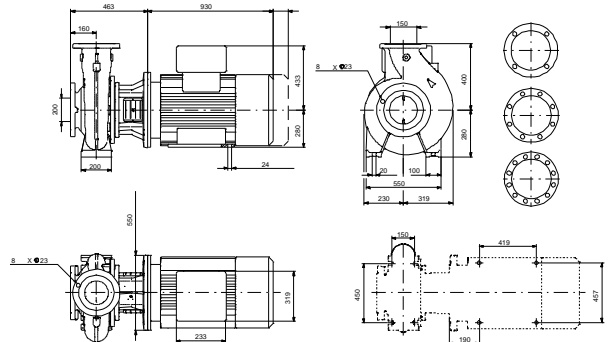
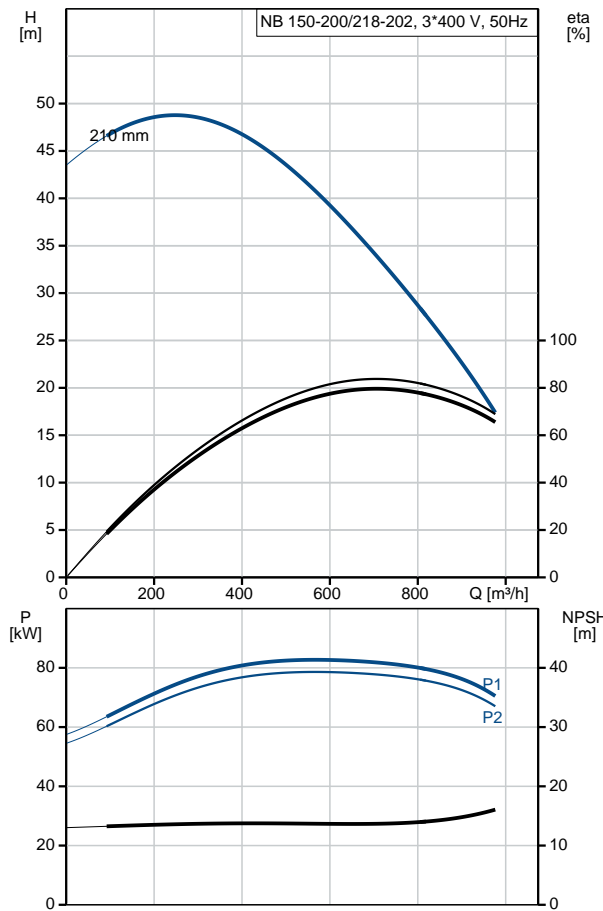
Nominal impeller diameter: 200 mm

Qty.	Description
	<p>Shaft seal arrangement: Single            Code for shaft seal: BQQE            Curve tolerance: ISO9906:2012 3B</p> <p><b>Materials:</b>            Pump housing: Cast iron            EN-GJL-250            ASTM class 35            Wear ring: Brass            Impeller: Cast iron            EN-GJL-200            ASTM class 30            Shaft: Stainless steel            EN 1.4301            AISI 304</p> <p><b>Installation:</b>            Maximum ambient temperature: 55 °C            Maximum operating pressure: 10 bar            Pipe connection standard: EN 1092-2            Size of inlet connection: DN 200            Size of outlet connection: DN 150            Pressure rating for pipe connection: PN 10            Pump housing with feet: Y            Support block: N</p> <p><b>Electrical data:</b>            IE Efficiency class: IE3            P2: 90 kW            Mains frequency: 50 Hz            Rated voltage: 3 x 380-420D/660-725Y V            Rated current: 160-148/92,0-85,0 A            Starting current: 720-720 %            Cos phi - power factor: 0.90            Rated speed: 2975 rpm            Efficiency: IE3 95,0%            Motor efficiency at full load: 95.0-95.0 %            Motor efficiency at 3/4 load: 95.1-95.1 %            Motor efficiency at 1/2 load: 94.6-94.6 %            Number of poles: 2            Enclosure class (IEC 34-5): 55 Dust/Jetting            Insulation class (IEC 85): F</p> <p><b>Others:</b>            Minimum efficiency index, MEI <math>\hat{\alpha}\%</math>: 0.70            Net weight: 816 kg            Gross weight: 841 kg            Shipping volume: 0.848 m<sup>3</sup>            Country of origin: HU            Custom tariff no.: 84137051</p>

## 98974648 NB 150-200/218-202 AF1ABQQE 50 Hz



Description	Value
<b>General information:</b>	
Product name:	NB 150-200/218-202 AF1ABQQE
Product No:	98974648
EAN number:	5712604528181
<b>Technical:</b>	
Rated flow:	786 m <sup>3</sup> /h
Rated head:	32.94 m
Actual impeller diameter:	218-202 mm
Nominal impeller diameter:	200 mm
Shaft seal arrangement:	Single
Shaft diameter:	32 mm
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
<b>Materials:</b>	
Pump housing:	Cast iron EN-GJL-250 ASTM class 35
Wear ring:	Brass
Impeller:	Cast iron EN-GJL-200 ASTM class 30
Shaft:	Stainless steel EN 1.4301 AISI 304
Material code:	A
<b>Installation:</b>	
Maximum ambient temperature:	55 °C
Maximum operating pressure:	10 bar
Pipe connection standard:	EN 1092-2
Size of inlet connection:	DN 200
Size of outlet connection:	DN 150
Pressure rating for pipe connection:	PN 10
Pump housing with feet:	Y
Support block:	N
Connect code:	F1
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
IE Efficiency class:	IE3
P2:	90 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	160-148/92,0-85,0 A
Starting current:	720-720 %
Cos phi - power factor:	0.90
Rated speed:	2975 rpm
Efficiency:	IE3 95,0%
Motor efficiency at full load:	95.0-95.0 %
Motor efficiency at 3/4 load:	95.1-95.1 %
Motor efficiency at 1/2 load:	94.6-94.6 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting





Company name:

Created by:

Phone:

Date:

21/03/2019

Description	Value
Insulation class (IEC 85):	F
Motor protec:	PTC
Motor No:	83U15442
Mount. design. acc. IEC 34-7:	IM B35
<b>Controls:</b>	
Frequency converter:	NONE
<b>Others:</b>	
Minimum efficiency index, MEI â%¥:	0.70
Net weight:	816 kg
Gross weight:	841 kg
Shipping volume:	0.848 m <sup>3</sup>
Country of origin:	HU
Custom tariff no.:	84137051