

**Date:** 22/12/2022

#### Qty. | Description

#### 1 NB 250-500/417 AASF1AESBQQEYW3



Note! Product picture may differ from actual product

Product No.: 98976259

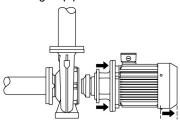
Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to EN 733 (10 bar).

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 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

Motor stool and pump cover are made of cast iron (EN-GJL-250). 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.

#### 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.



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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: 1490 rpm

Rated flow: 791.3 m³/h
Rated head: 52.58 m
Actual impeller diameter: 417 mm
Nominal impeller diameter: 500
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-G.II = 200

EN-GJL-200 ASTM class 30

Internal pump house coating: CED

Shaft: Stainless steel

EN 1.4301 AISI 304

Installation:

55 °C Max. ambient temperature: Maximum operating pressure: 10 bar EN 1092-2 Pipe connection standard: Size of inlet connection: **DN 300** DN 250 Size of outlet connection: Pressure rating for connection: PN 10 Bearing lubrication: Grease Pump housing with feet: Yes Support block (Yes/No): Υ



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1 Electrical data:

Motor type: SIEMENS
IE Efficiency class: IE3
Rated power - P2: 160 kW
Mains frequency: 50 Hz

Rated voltage: 3 x 380-420D/660-725Y V

Rated current: 275/161 A Starting current: 730-730 % Cos phi - power factor: 0.87 Rated speed: 1490 rpm Efficiency: IE3 95,8% Motor efficiency at full load: 95.8-95.8 % Motor efficiency at 3/4 load: 96.1-96.1 % Motor efficiency at 1/2 load: 96.1-96.1 %

Number of poles: 4
Enclosure class (IEC 34-5): IP55
Insulation class (IEC 85): F

Motor No: 83V15448

Bearing insulation type N-end: STEEL BEARING

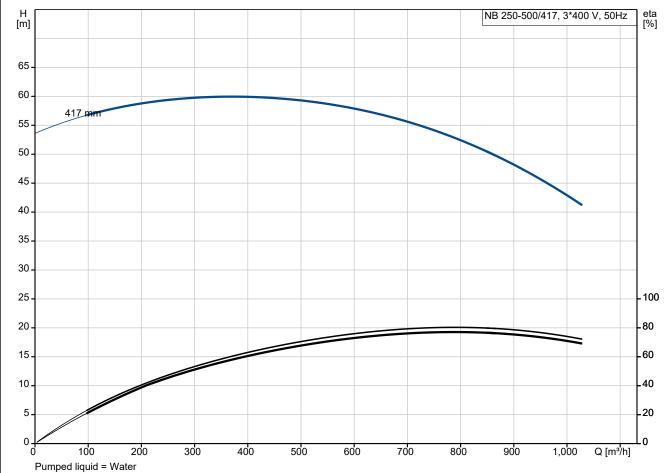
Others:

Minimum efficiency index, MEI  $\geq$ : 0.48
Net weight: 1710 kg
Gross weight: 1800 kg
Shipping volume: 2.5 m³
Danish VVS No.: 386069502
Country of origin: HU
Custom tariff no.: 84137051

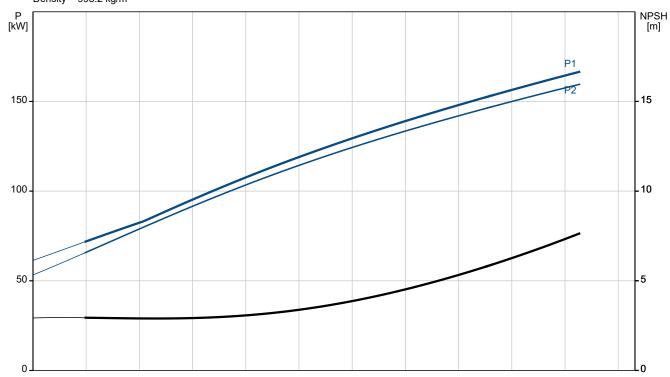


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## 98976259 NB 250-500/417 AASF1AESBQQEYW3 50 Hz



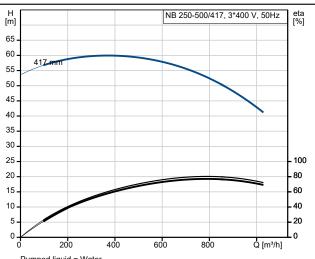
Liquid temperature during operation = 20 °C
Density = 998.2 kg/m³



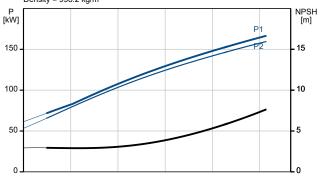


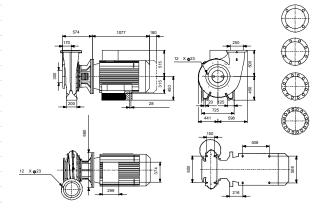
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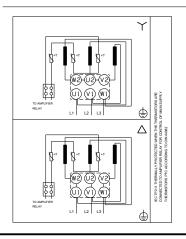
Description	Value		
General information:			
Product name:	NB 250-500/417 AASF1AESBQQEYW3		
Product No:	98976259		
EAN number:	5712604558843		
Technical:			
Pump speed on which pump data are based:	1490 rpm		
Rated flow:	791.3 m³/h		
Rated head:	52.58 m		
Actual impeller diameter:	417 mm		
Nominal impeller diameter:	500		
Shaft seal arrangement:	Single		
Shaft diameter:	60 mm		
Code for shaft seal:	BQQE		
Curve tolerance:	ISO9906:2012 3B		
Pump version:	AS		
Bearing design:	Standard		
Materials:			
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		
Installation:			
Max. ambient temperature:	55 °C		
Maximum operating pressure:	10 bar		
Pipe connection standard:	EN 1092-2		
Size of inlet connection:	DN 300		
Size of outlet connection:	DN 250		
Pressure rating for connection:	PN 10		
Bearing lubrication:	Grease		
Pump housing with feet:	Yes		
Support block (Yes/No):	Υ		
Connect code:	F1		
Liquid:			
Pumped liquid:	Water		
Liquid temperature range:	-25 120 °C		
Selected liquid temperature:	20 °C		
Density:	998.2 kg/m³		
Electrical data:			
Motor type:	SIEMENS		
IE Efficiency class:	IE3		
Rated power - P2:	160 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 380-420D/660-725Y V		
Rated current:	275/161 A		
Starting current:	730-730 %		
Cos phi - power factor:	0.87		
Rated speed:	1490 rpm		
Efficiency:	IE3 95,8%		



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









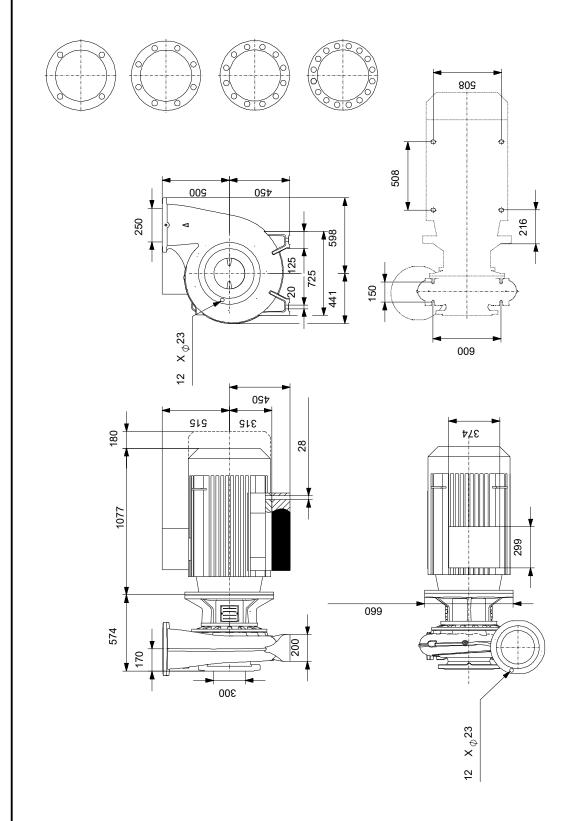
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Description	Value
Motor efficiency at full load:	95.8-95.8 %
Motor efficiency at 3/4 load:	96.1-96.1 %
Motor efficiency at 1/2 load:	96.1-96.1 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	83V15448
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 ≥:	0.48
Net weight:	1710 kg
Gross weight:	1800 kg
Shipping volume:	2.5 m³
Danish VVS No.:	386069502
Country of origin:	HU
Custom tariff no.:	84137051



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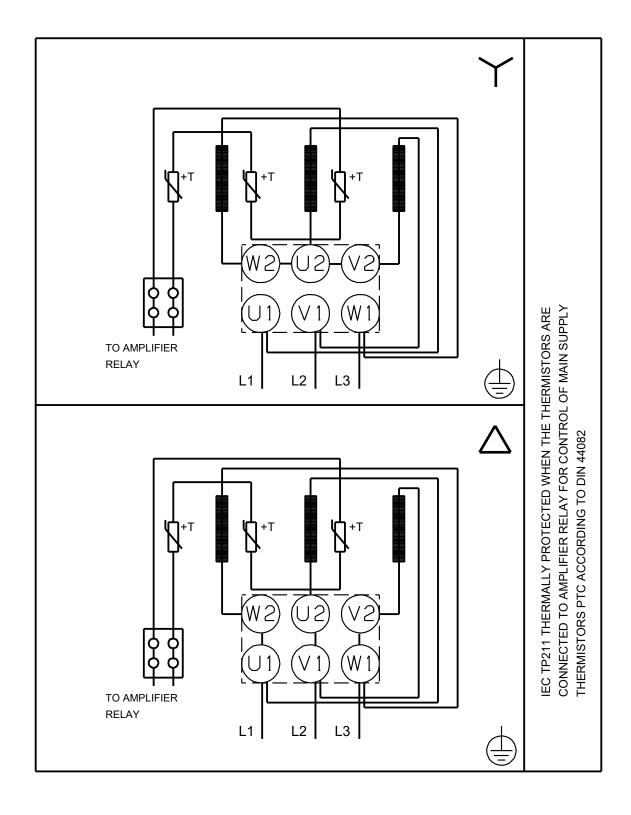


Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



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### Order Data:

Position	Your pos.	Product name		Product No	Total
		NB 250-500/417	1	98976259	Price on request
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