

**Date:** 28/12/2022

Qty. | Description

1 NK 125-315/262 AA2F2AESBQQE2W1



Note! Product picture may differ from actual product

Product No.: 98972906

Non-self-priming, single-stage, centrifugal pump designed according to ISO 5199 with dimensions and rated performance according to EN 733. Flanges are PN 16 with dimensions according to EN 1092-2. The pump has an axial suction port, a radial discharge port and horizontal shaft. It is of the back pull-out design enabling removal of the coupling, bearing bracket and impeller without disturbing the motor, pump housing or pipework.

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

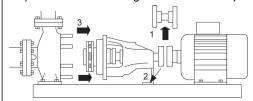
The pump is fitted with a foot-mounted, fan-cooled asynchronous motor. Pump and motor are mounted on a common base frame.

Pump and motor are mounted on a common steel base frame in accordance with ISO 3661.

The back pull-out design together with a spacer coupling makes it possible to service the pump without dismantling the pump housing and motor from the base frame.

This saves realignment of pump and motor after service.

- 1) Remove coupling.
- 2) Remove the bolts in the bearing bracket support foot.
- 3) Remove the bearing bracket from the pump housing.



#### **Pump**

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.

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Seal faces:

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

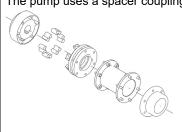
This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.

The shaft is made of stainless steel and has a diameter of 42 mm where the coupling is mounted.

The pump uses a spacer coupling between the pump and motor shaft.





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The base frame is prepared for grouting. Grouting improves the contact of the base frame with the foundation and stiffens the base frame construction. This changes the vibration level.

Grouting is mandatory for all base frame types for all 2-pole pumps equal to and above 55 kW to fulfill the max vibration level requirements stated in standards. For other pump motor combinations grouting of the base frame is optional.

#### 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.

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: 2982 rpm

Rated flow: 382.4 m³/h

Pump with motor (Yes/No): Y
Rated head: 82.26 m
Actual impeller diameter: 262 mm
Nominal impeller diameter: 315
Code for shaft seal: BQQE

Curve tolerance: ISO9906:2012 3B

Bearing design: Standard

Materials:

Mechanical seal type:

Pump housing: Cast iron

EN-GJL-250 ASTM class 35

Single

Wear ring: Brass
Impeller: Cast iron
EN-G IL-200

EN-GJL-200 ASTM class 30

Internal pump house coating: CED

Shaft: Stainless steel



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1 EN 1.4301 AISI 304

Installation:

t max amb: 55 °C Maximum operating pressure: 16 bar EN 1092-2 Pipe connection standard: Type of inlet connection: DIN Type of outlet connection: DIN Size of inlet connection: DN 150 Size of outlet connection: **DN 125** Pressure rating for connection: PN 16

Coupling type: Flexible w/spacer

Base frame design: EN/ISO
Code for base frame: 10
Grouting (Yes/No): Y

Electrical data:

Motor type: SIEMENS
IE Efficiency class: IE3
Rated power - P2: 132 kW
Mains frequency: 50 Hz

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

Rated current: 220/127 A Starting current: 720-720 % Cos phi - power factor: 0.91 Rated speed: 2982 rpm Efficiency: IE3 95,4% Motor efficiency at full load: 95.4-95.4 % Motor efficiency at 3/4 load: 95.5-95.5 % Motor efficiency at 1/2 load: 95.2-95.2 %

Number of poles: 2
Enclosure class (IEC 34-5): IP55
Insulation class (IEC 85): F

Motor No: 98943383

Bearing insulation type N-end: STEEL BEARING

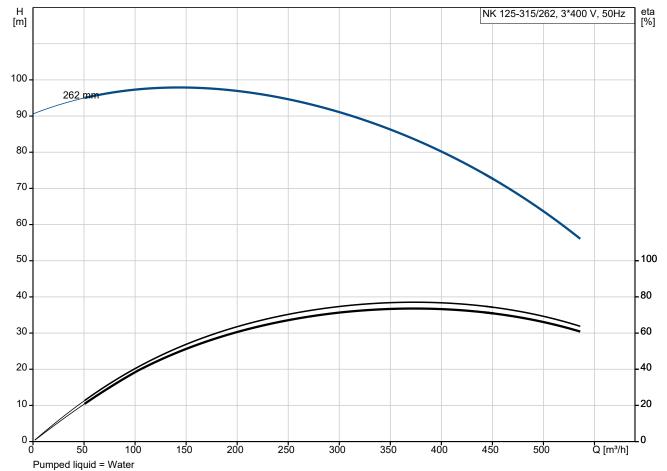
Others:

Minimum efficiency index, MEI ≥: 0.62
Net weight: 1410 kg
Gross weight: 1510 kg
Shipping volume: 2.96 m³

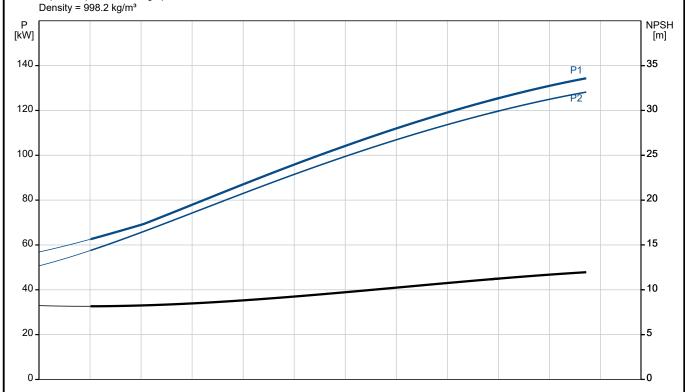


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## 98972906 NK 125-315/262 AA2F2AESBQQE2W1 50 Hz



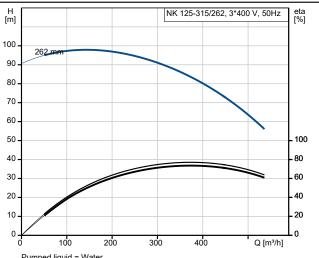
Pumped liquid = Water Liquid temperature during operation = 20 °C



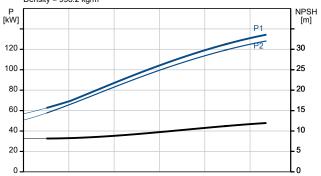


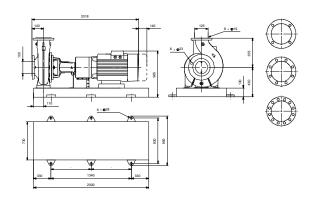
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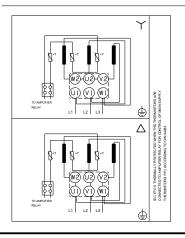
Description	Value		
General information:			
Product name:	NK 125-315/262 AA2F2AESBQQE2W1		
Product No:	98972906		
EAN number:	5712604494547		
Technical:			
Pump speed on which pump data	2982 rpm		
are based:	2002 15111		
Rated flow:	382.4 m³/h		
Pump with motor (Yes/No):	Y		
Rated head:	82.26 m		
Actual impeller diameter:	262 mm		
Nominal impeller diameter:	315		
Shaft diameter:	42 mm		
Code for shaft seal:	BQQE		
Mechanical seal type:	Single		
Curve tolerance:	ISO9906:2012 3B		
Pump version:	A2		
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:			
t max amb:	55 °C		
Maximum operating pressure:	16 bar		
Pipe connection standard:	EN 1092-2		
Type of inlet connection:	DIN		
Type of outlet connection:	DIN		
Size of inlet connection:	DN 150		
Size of outlet connection:	DN 125		
Pressure rating for connection:	PN 16		
Coupling type:	Flexible w/spacer		
Base frame design:	EN/ISO		
Code for base frame:	10		
Grouting (Yes/No):	Y		
Connect code:	F		
Liquid:	\\/_4~		
Pumped liquid:	Water		
Liquid temperature range:	-25 120 °C		
Selected liquid temperature:	20 °C		
Density:	998.2 kg/m³		
Electrical data:	CIEMENIC		
Motor type:	SIEMENS		
IE Efficiency class:	IE3		
Rated power - P2:	132 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 380-420D/660-725Y V		
Rated current:	220/127 A		



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









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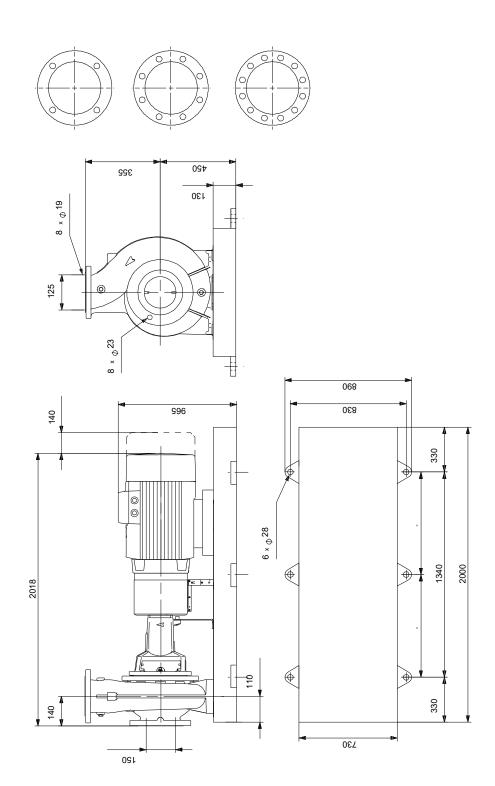
Description	Value
Starting current:	720-720 %
Cos phi - power factor:	0.91
Rated speed:	2982 rpm
Efficiency:	IE3 95,4%
Motor efficiency at full load:	95.4-95.4 %
Motor efficiency at 3/4 load:	95.5-95.5 %
Motor efficiency at 1/2 load:	95.2-95.2 %
Number of poles:	2
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	98943383
Bearing insulation type N-end:	STEEL BEARING
Controls:	
Frequency converter:	NONE
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.62
Net weight:	1410 kg
Gross weight:	1510 kg
Shipping volume:	2.96 m³



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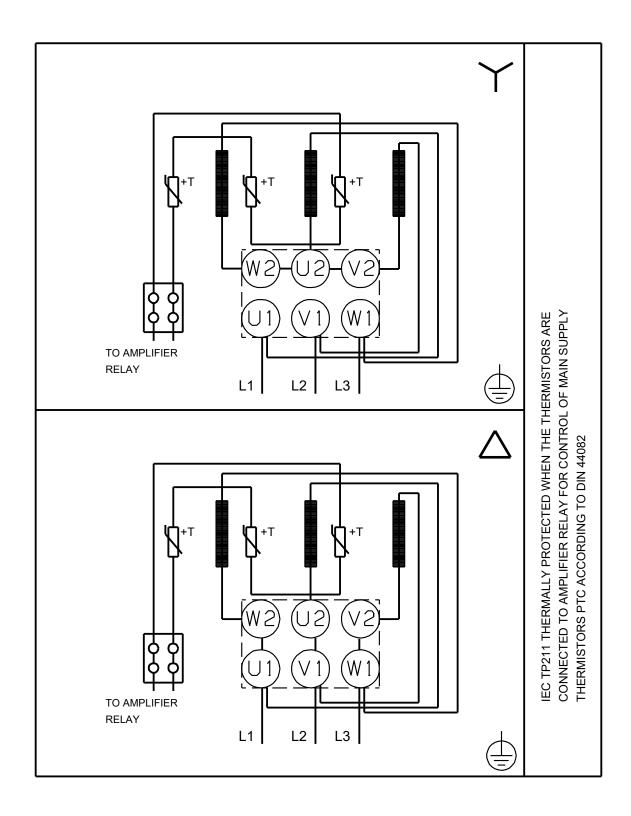
Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



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28/12/2022

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



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### Order Data:

Position	Your pos.	Product name	Amount	Product No	Total
		NK 125-315/262	1	98972906	Price on request
					Tequest
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