

Qty. Description

1 NK 125-400/438 AA2F2AESBQQRW5



Note! Product picture may differ from actual product

Product No.: [98990844](#)

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)

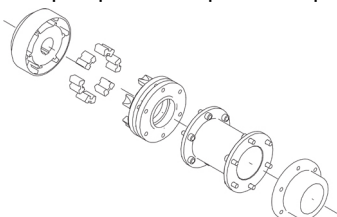
This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

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.

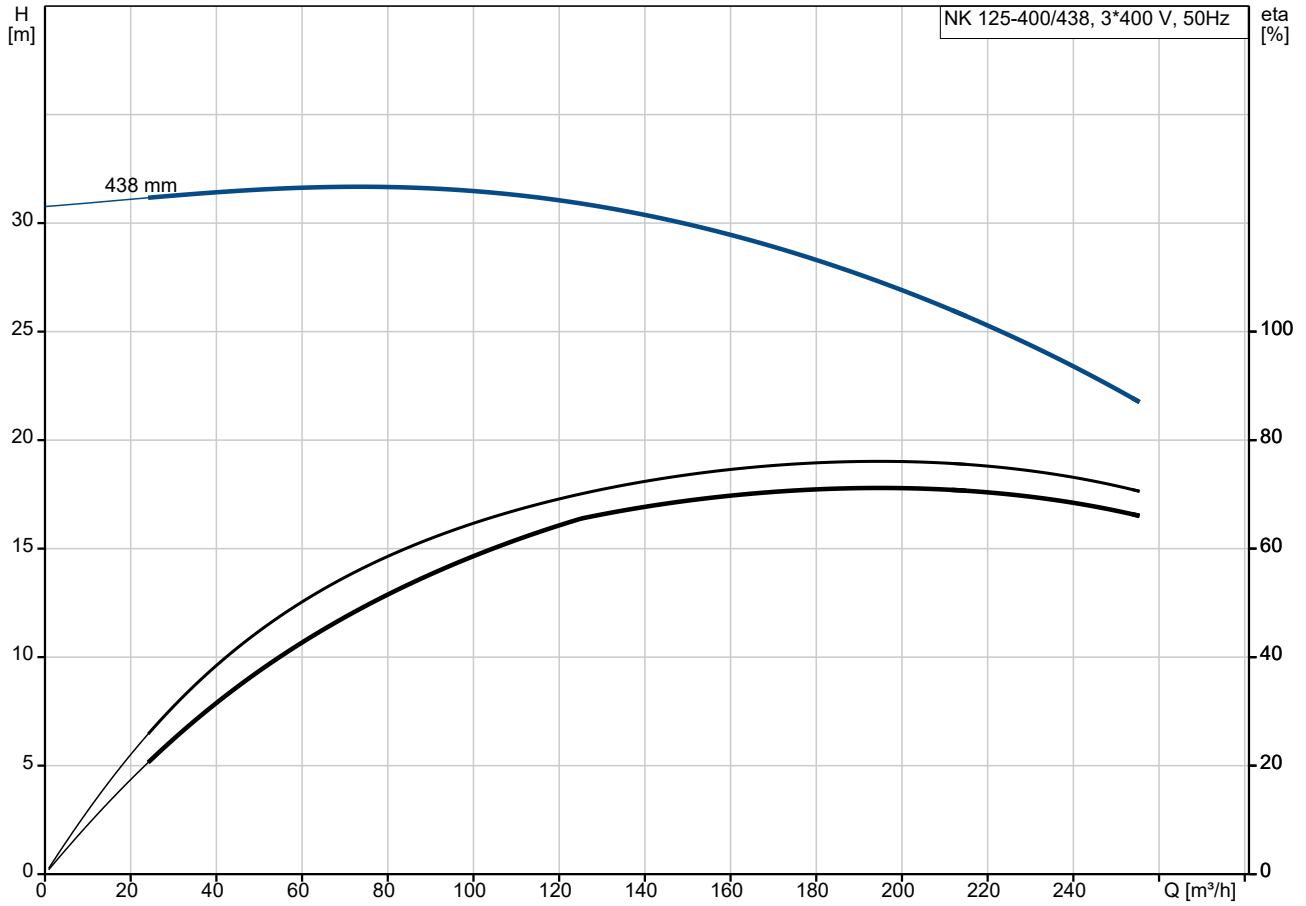


Qty.	Description
1	<p data-bbox="201 338 284 371">Motor</p> <p data-bbox="201 376 1394 427">The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p data-bbox="201 432 1015 461">The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p data-bbox="201 465 1434 517">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 1422 595">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="201 600 1382 651">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.</p> <p data-bbox="201 723 512 757">Further product details</p> <p data-bbox="201 761 1453 835">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">Technical data</p> <p data-bbox="201 969 300 999">Controls:</p> <p data-bbox="201 1003 638 1032">Frequency converter: NONE</p> <p data-bbox="201 1037 584 1066">Pressure sensor: N</p> <p data-bbox="201 1093 276 1122">Liquid:</p> <p data-bbox="201 1126 632 1155">Pumped liquid: Water</p> <p data-bbox="201 1160 703 1189">Liquid temperature range: -25 .. 120 °C</p> <p data-bbox="201 1193 632 1223">Selected liquid temperature: 20 °C</p> <p data-bbox="201 1227 695 1256">Density: 998.2 kg/m³</p> <p data-bbox="201 1283 312 1312">Technical:</p> <p data-bbox="201 1317 807 1346">Pump speed on which pump data are based: 982 rpm</p> <p data-bbox="201 1350 679 1379">Rated flow: 195.1 m³/h</p> <p data-bbox="201 1384 584 1413">Pump with motor (Yes/No): Y</p> <p data-bbox="201 1417 655 1447">Rated head: 26.85 m</p> <p data-bbox="201 1451 655 1480">Actual impeller diameter: 438 mm</p> <p data-bbox="201 1485 608 1514">Nominal impeller diameter: 400</p> <p data-bbox="201 1518 638 1547">Code for shaft seal: BQQE</p> <p data-bbox="201 1552 632 1581">Mechanical seal type: Single</p> <p data-bbox="201 1585 759 1615">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="201 1619 663 1648">Bearing design: Standard</p> <p data-bbox="201 1675 312 1704">Materials:</p> <p data-bbox="201 1709 727 1783">Pump housing: Cast iron EN-GJL-250 ASTM class 35</p> <p data-bbox="201 1787 632 1816">Wear ring: Brass</p> <p data-bbox="201 1821 727 1895">Impeller: Cast iron EN-GJL-200 ASTM class 30</p> <p data-bbox="201 1899 616 1928">Internal pump house coating: CED</p> <p data-bbox="201 1933 727 2007">Shaft: Stainless steel EN 1.4301 AISI 304</p> <p data-bbox="201 2033 328 2063">Installation:</p> <p data-bbox="201 2067 632 2096">t max amb: 55 °C</p> <p data-bbox="201 2101 632 2130">Maximum operating pressure: 16 bar</p>

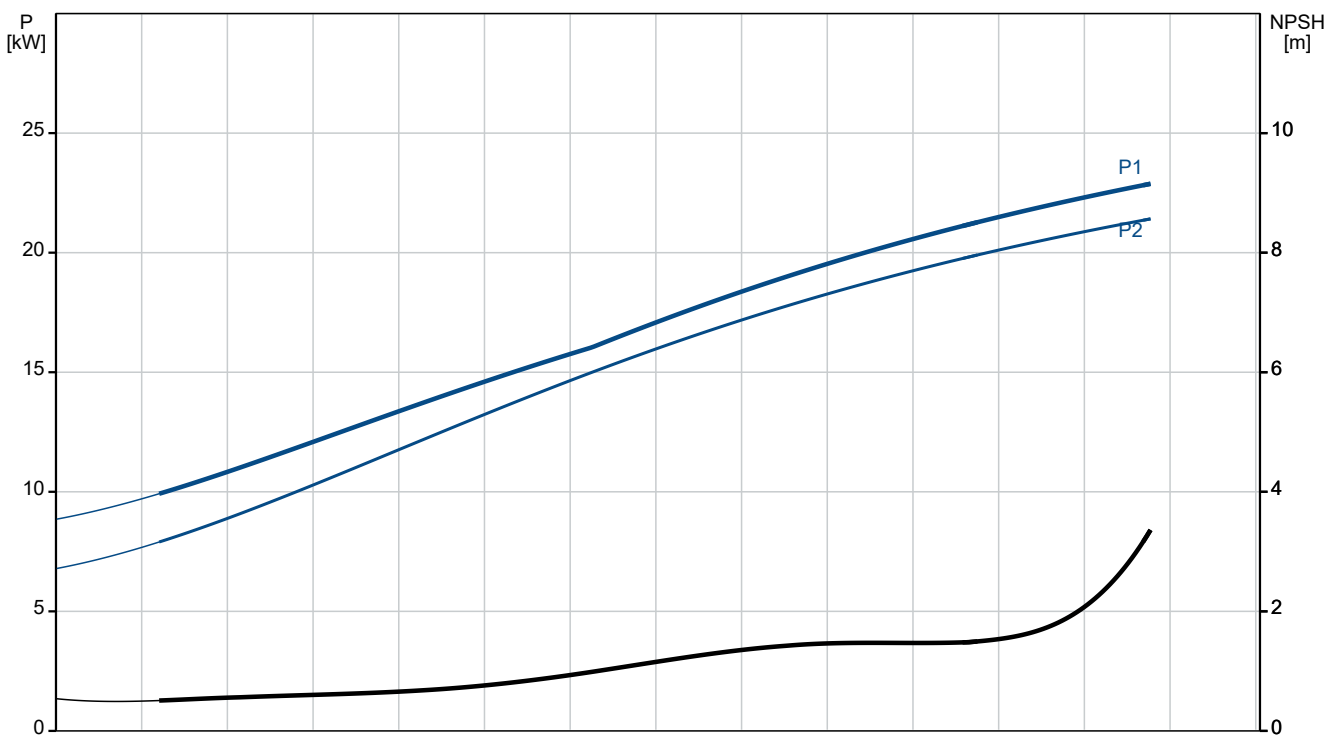
Qty. Description

1	<p>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: 9 Grouting (Yes/No): N</p> <p>Electrical data: Motor type: SIEMENS IE Efficiency class: IE3 Rated power - P2: 30 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-420D/660-725Y V Rated current: 56.0/32.5 A Starting current: 660-660 % Cos phi - power factor: 0.83 Rated speed: 982 rpm Efficiency: IE3 92,9% Motor efficiency at full load: 92.9-92.9 % Motor efficiency at 3/4 load: 93.6-93.6 % Motor efficiency at 1/2 load: 93.5-93.5 % Number of poles: 6 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 98957465 Bearing insulation type N-end: STEEL BEARING</p> <p>Others: Minimum efficiency index, MEI ≥: 0.51 Net weight: 664 kg Gross weight: 732 kg Shipping volume: 1.61 m³</p>
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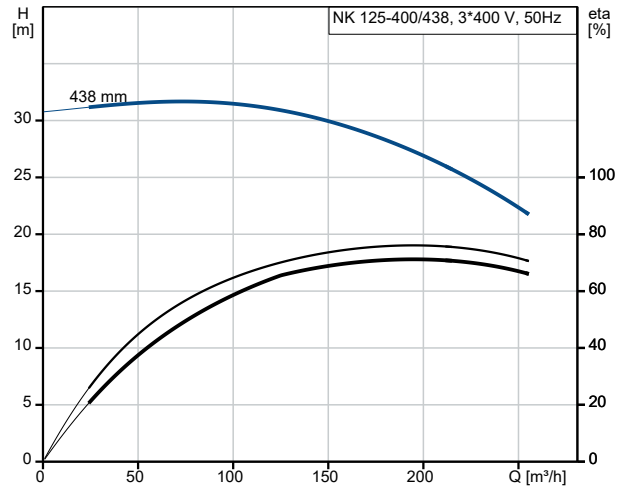
98990844 NK 125-400/438 AA2F2AESBQQERW5 50 Hz



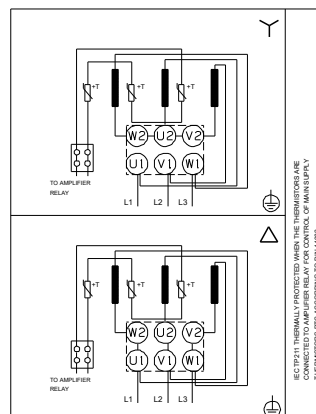
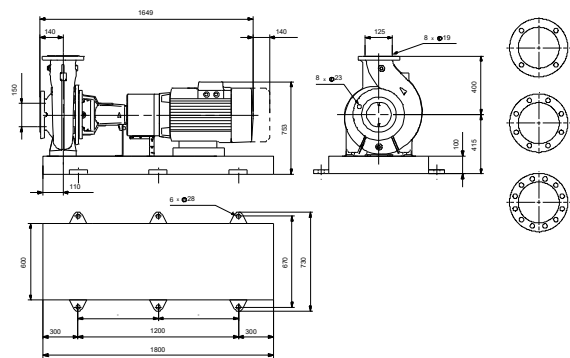
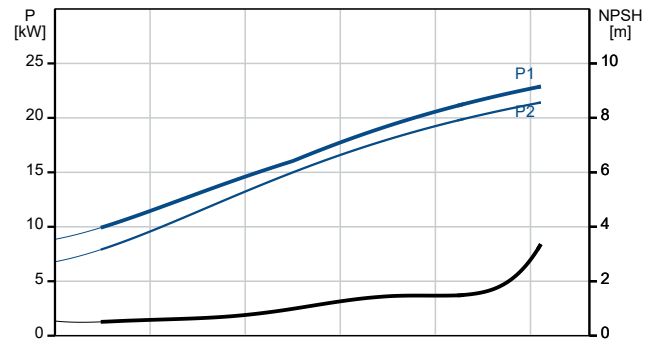
Pumped liquid = Water
Liquid temperature during operation = 20 °C
Density = 998.2 kg/m³



Description	Value
General information:	
Product name:	NK 125-400/438 AA2F2AESBQQERW5
Product No:	98990844
EAN number:	5712604804490
Technical:	
Pump speed on which pump data are based:	982 rpm
Rated flow:	195.1 m ³ /h
Pump with motor (Yes/No):	Y
Rated head:	26.85 m
Actual impeller diameter:	438 mm
Nominal impeller diameter:	400
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:	9
Grouting (Yes/No):	N
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m ³
Electrical data:	
Motor type:	SIEMENS
IE Efficiency class:	IE3
Rated power - P2:	30 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	56.0/32.5 A



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





Company name:

Created by:

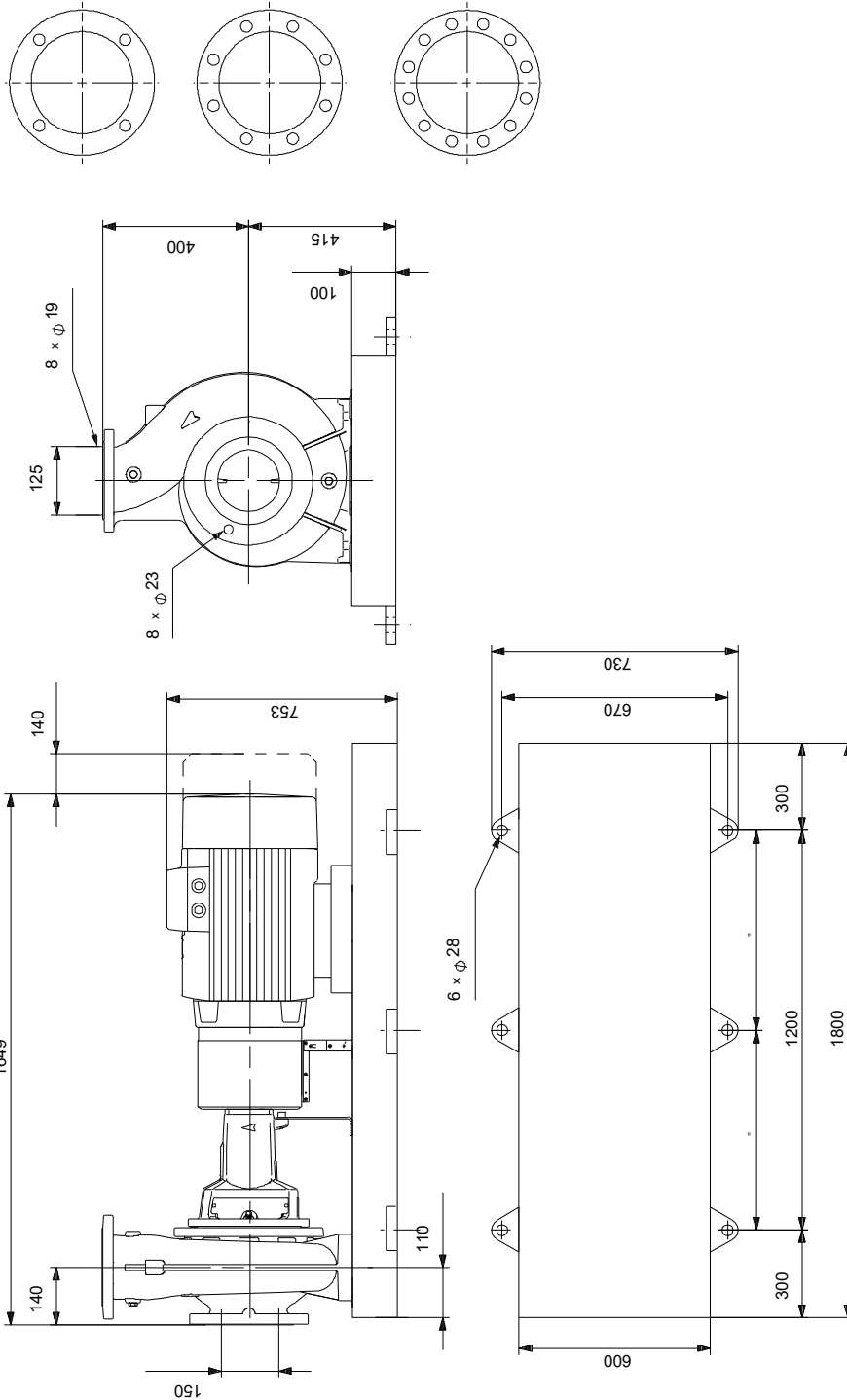
Phone:

Date:

28/12/2022

Description	Value
Starting current:	660-660 %
Cos phi - power factor:	0.83
Rated speed:	982 rpm
Efficiency:	IE3 92,9%
Motor efficiency at full load:	92.9-92.9 %
Motor efficiency at 3/4 load:	93.6-93.6 %
Motor efficiency at 1/2 load:	93.5-93.5 %
Number of poles:	6
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	98957465
Bearing insulation type N-end:	STEEL BEARING
Controls:	
Frequency converter:	NONE
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.51
Net weight:	664 kg
Gross weight:	732 kg
Shipping volume:	1.61 m ³

98990844 NK 125-400/438 AA2F2AESBQQERW5 50 Hz



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

98990844 NK 125-400/438 AA2F2AESBQQERW5 50 Hz



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.

