

Qty. Description

1 NK 125-400/345 AA2F2AESBQQESW3



Note! Product picture may differ from actual product

Product No.: [98972374](#)

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.

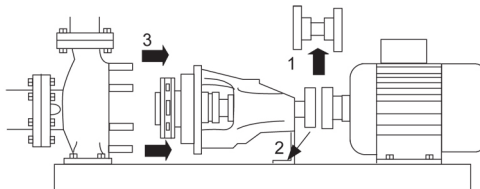
The pump is fitted with a foot-mounted, fan-cooled asynchronous motor. Pump and motor are mounted on a common base frame.

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)

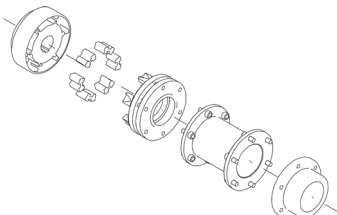
This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

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.

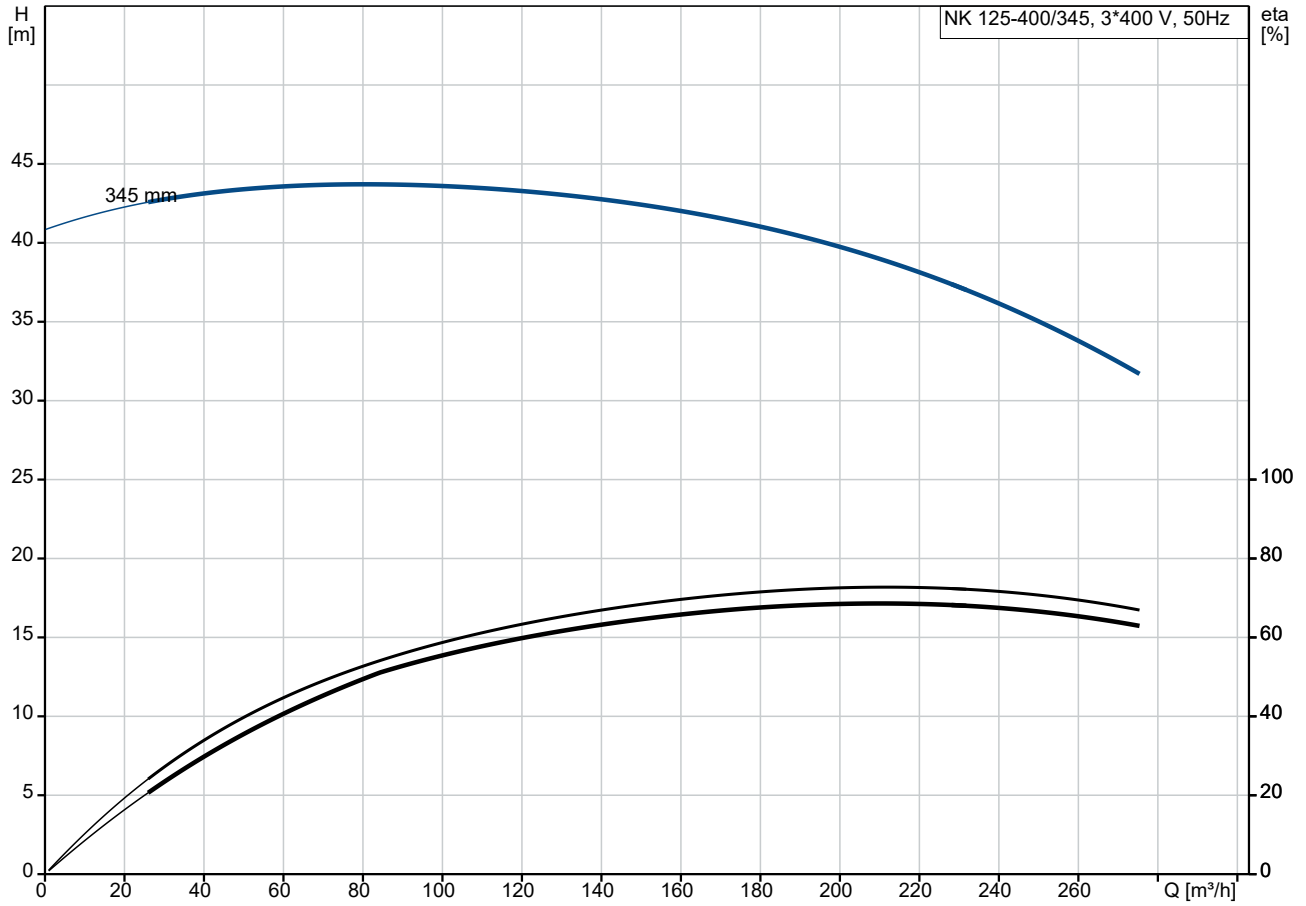


Qty.	Description
1	<p data-bbox="201 338 284 371">Motor</p> <p data-bbox="201 376 1481 427">The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p data-bbox="201 432 1018 465">The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p data-bbox="201 468 1481 519">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 1481 600">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="201 604 1481 656">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 1481 840">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 1003">Controls:</p> <p data-bbox="201 1005 638 1039">Frequency converter: NONE</p> <p data-bbox="201 1041 587 1075">Pressure sensor: N</p> <p data-bbox="201 1104 284 1137">Liquid:</p> <p data-bbox="201 1140 635 1173">Pumped liquid: Water</p> <p data-bbox="201 1176 703 1209">Liquid temperature range: -25 .. 120 °C</p> <p data-bbox="201 1211 635 1245">Selected liquid temperature: 20 °C</p> <p data-bbox="201 1247 699 1281">Density: 998.2 kg/m³</p> <p data-bbox="201 1310 316 1344">Technical:</p> <p data-bbox="201 1346 820 1379">Pump speed on which pump data are based: 1478 rpm</p> <p data-bbox="201 1382 683 1415">Rated flow: 220.2 m³/h</p> <p data-bbox="201 1417 587 1451">Pump with motor (Yes/No): Y</p> <p data-bbox="201 1453 655 1487">Rated head: 37.92 m</p> <p data-bbox="201 1489 655 1523">Actual impeller diameter: 345 mm</p> <p data-bbox="201 1525 608 1559">Nominal impeller diameter: 400</p> <p data-bbox="201 1561 638 1594">Code for shaft seal: BQQE</p> <p data-bbox="201 1597 635 1630">Mechanical seal type: Single</p> <p data-bbox="201 1632 759 1666">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="201 1668 667 1702">Bearing design: Standard</p> <p data-bbox="201 1731 316 1765">Materials:</p> <p data-bbox="201 1767 730 1830">Pump housing: Cast iron EN-GJL-250 ASTM class 35</p> <p data-bbox="201 1832 730 1895">Wear ring: Brass</p> <p data-bbox="201 1897 730 1960">Impeller: Cast iron EN-GJL-200 ASTM class 30</p> <p data-bbox="201 1962 619 1995">Internal pump house coating: CED</p> <p data-bbox="201 1998 724 2060">Shaft: Stainless steel EN 1.4301 AISI 304</p> <p data-bbox="201 2089 325 2123">Installation:</p> <p data-bbox="201 2125 635 2159">t max amb: 55 °C</p> <p data-bbox="201 2161 635 2195">Maximum operating pressure: 16 bar</p>

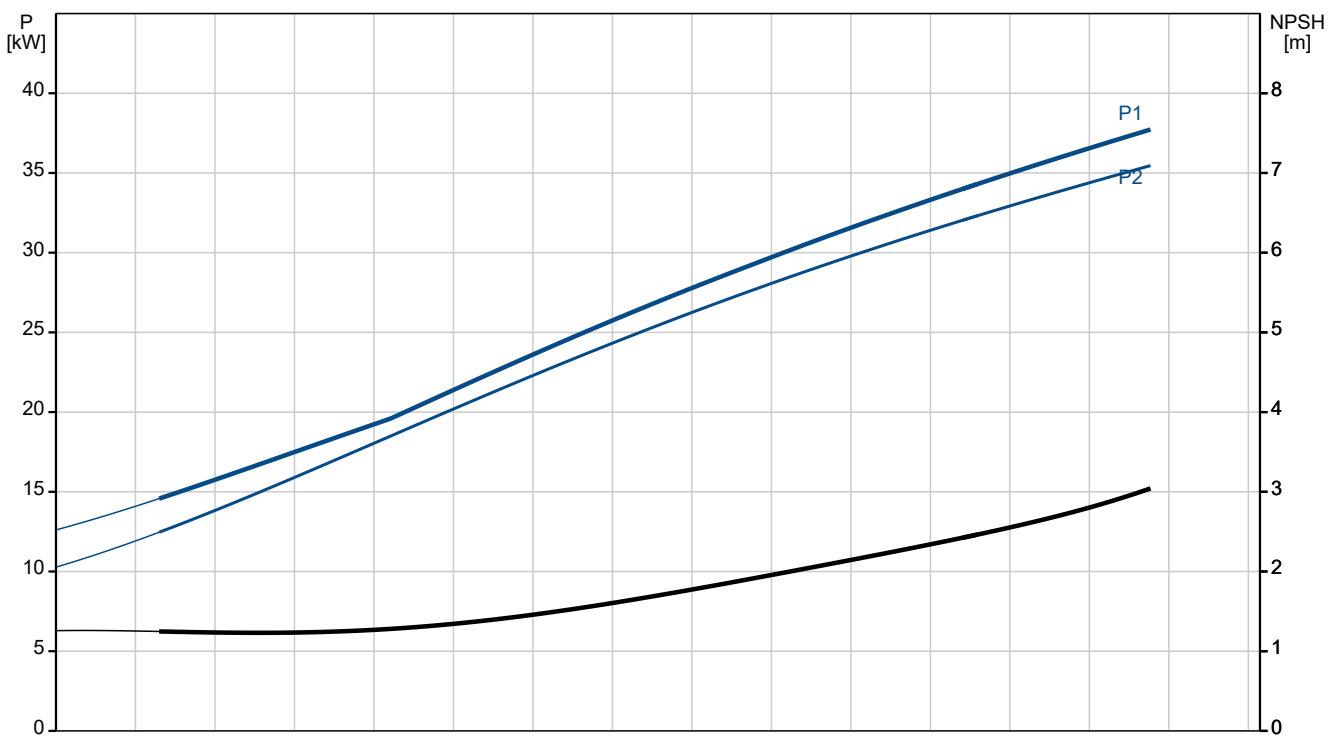
Qty. Description

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: 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: 98957810 Bearing insulation type N-end: STEEL BEARING</p> <p>Others: Minimum efficiency index, MEI ≥: 0.50 Net weight: 708 kg Gross weight: 776 kg Shipping volume: 1.61 m³</p>
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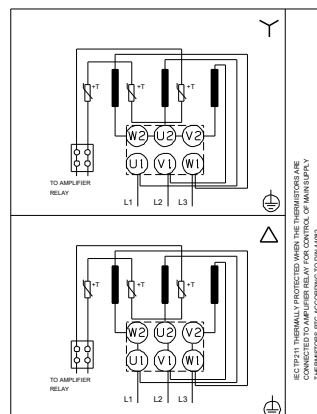
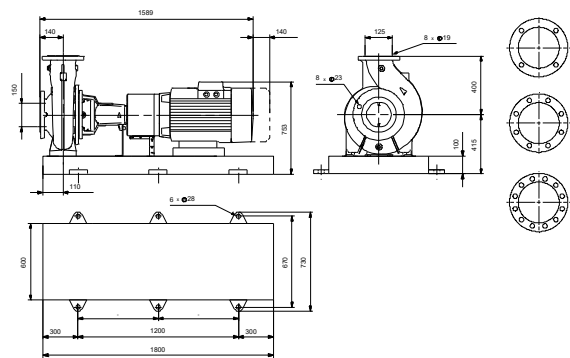
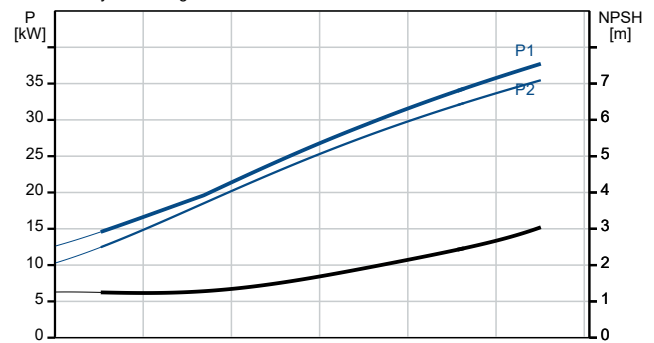
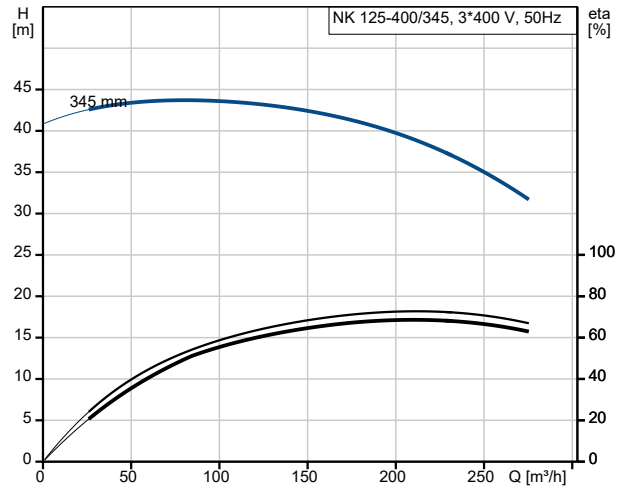
98972374 NK 125-400/345 AA2F2AESBQQESW3 50 Hz



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



Description	Value
General information:	
Product name:	NK 125-400/345 AA2F2AESBQQESW3
Product No:	98972374
EAN number:	5712604484012
Technical:	
Pump speed on which pump data are based:	1478 rpm
Rated flow:	220.2 m ³ /h
Pump with motor (Yes/No):	Y
Rated head:	37.92 m
Actual impeller diameter:	345 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:	37 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	66/38.5 A





Company name:

Created by:

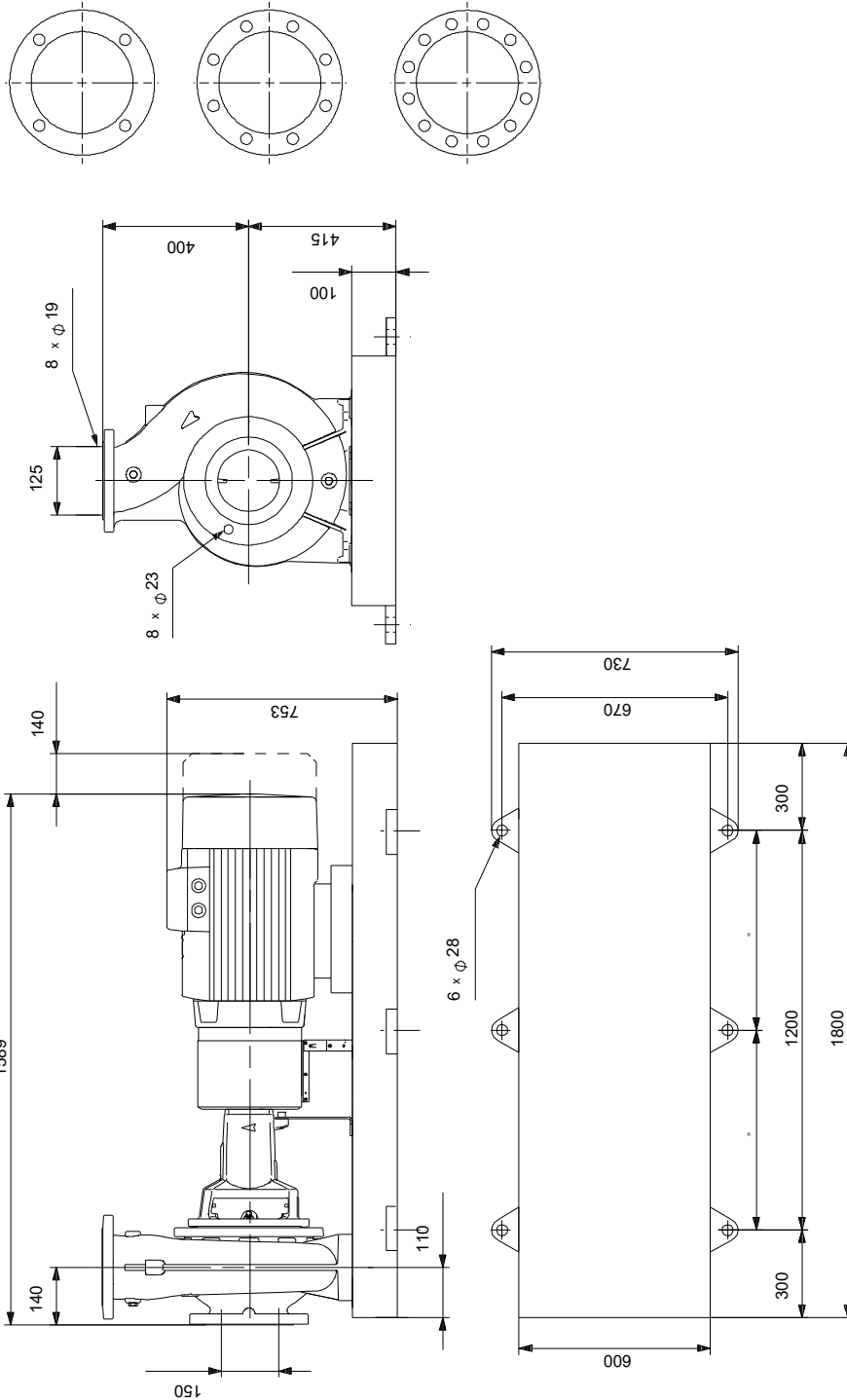
Phone:

Date:

28/12/2022

Description	Value
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
Built-in motor protection:	PTC
Motor No:	98957810
Bearing insulation type N-end:	STEEL BEARING
Controls:	
Frequency converter:	NONE
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.50
Net weight:	708 kg
Gross weight:	776 kg
Shipping volume:	1.61 m ³

98972374 NK 125-400/345 AA2F2AESBQQESW3 50 Hz



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

98972374 NK 125-400/345 AA2F2AESBQQESW3 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.

