

Qty. Description

1 NK 100-400/380 EUP A2F2AE-SBQQE



Note! Product picture may differ from actual product

Product No.: [98973243](#)

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.

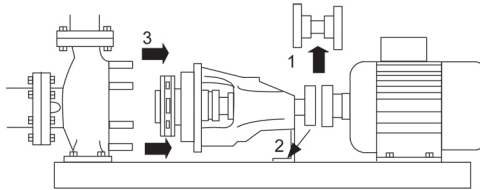
The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013.

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)

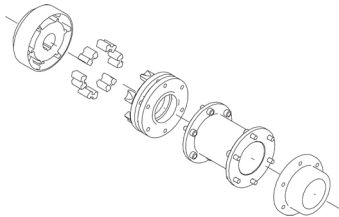
This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

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.

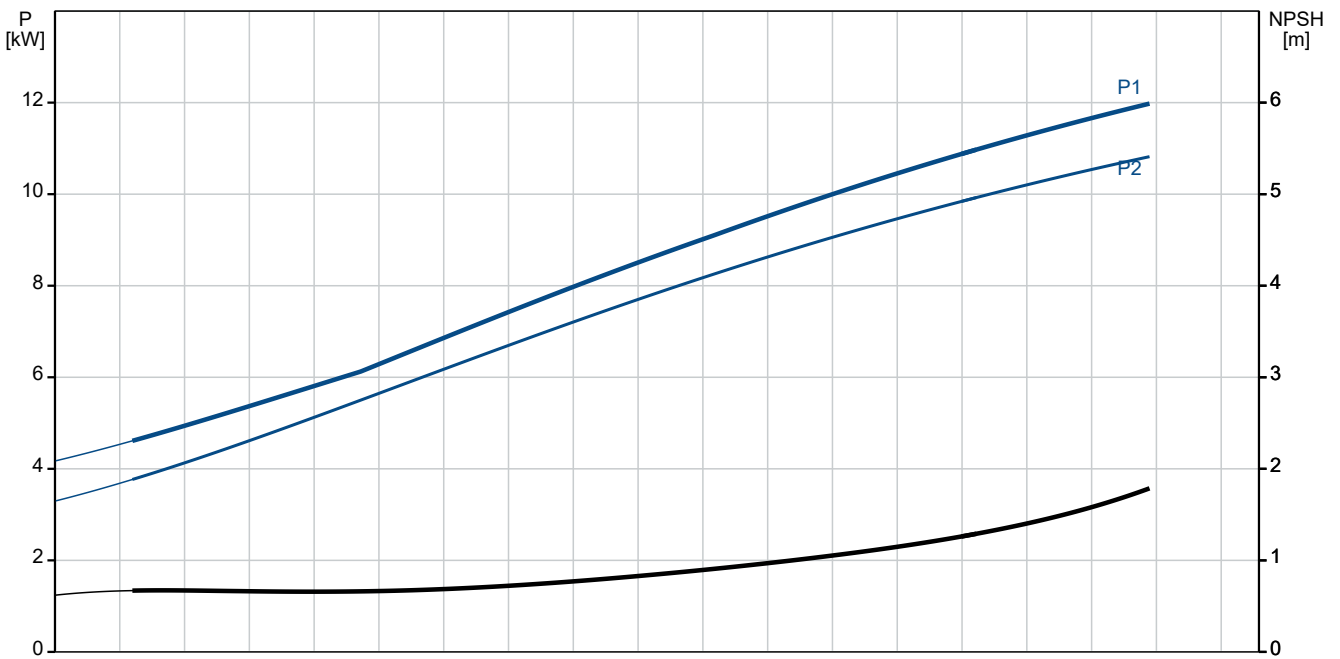
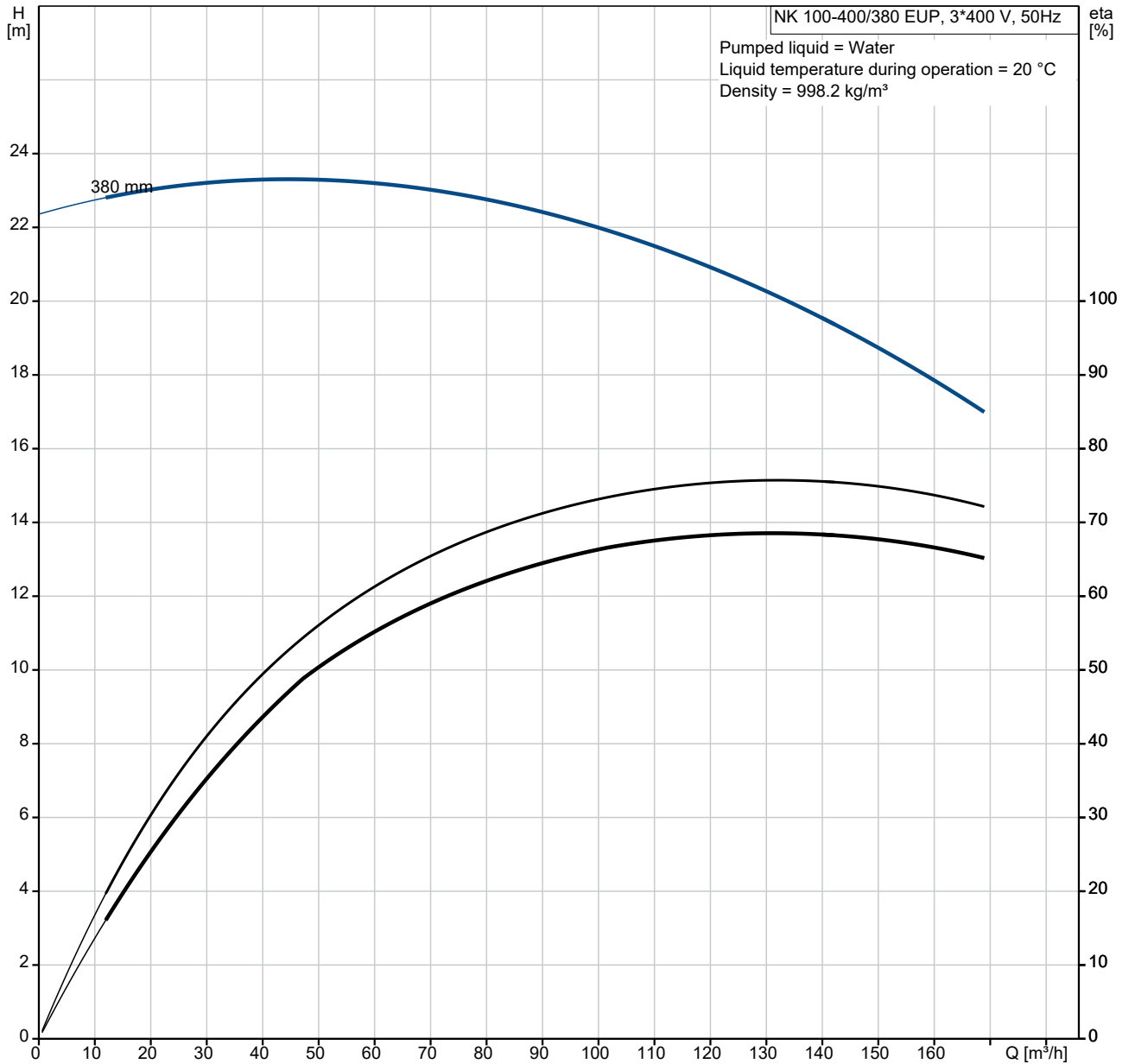


Motor

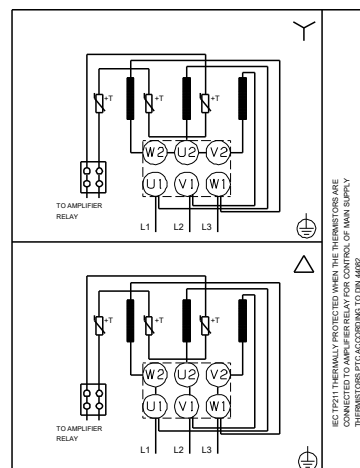
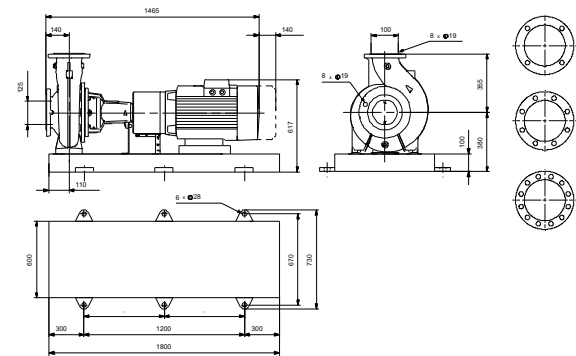
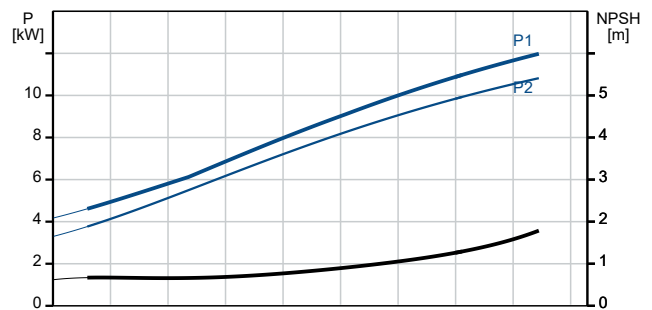
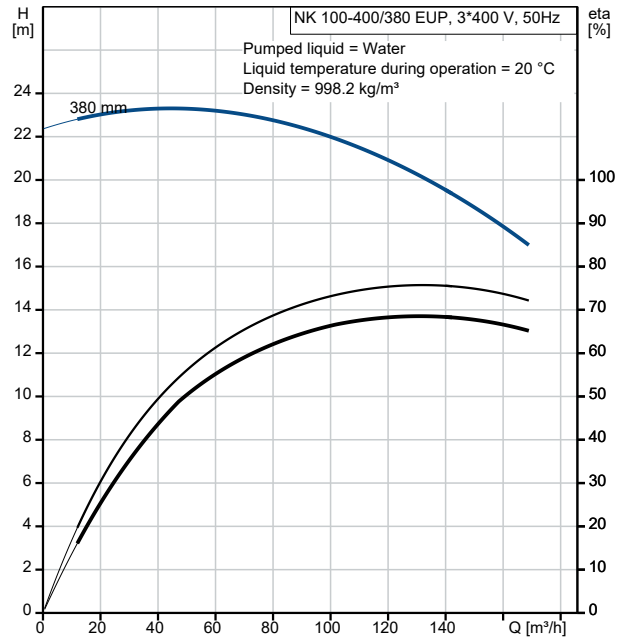
Qty.	Description
1	<p>The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p>The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p>The motor has thermistors (PTC sensors) in 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>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>The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.</p> <p>Further product details</p> <p>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>Technical data</p> <p>Controls:</p> <p>Frequency converter: NONE</p> <p>Pressure sensor: N</p> <p>Liquid:</p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: -25 .. 120 °C</p> <p>Selected liquid temperature: 20 °C</p> <p>Density: 998.2 kg/m³</p> <p>Technical:</p> <p>Pump speed on which pump data are based: 975 rpm</p> <p>Rated flow: 131.4 m³/h</p> <p>Pump with motor (Yes/No): Y</p> <p>Rated head: 20 m</p> <p>Actual impeller diameter: 380 mm</p> <p>Nominal impeller diameter: 400</p> <p>Code for shaft seal: BQQE</p> <p>Mechanical seal type: Single</p> <p>Curve tolerance: ISO9906:2012 3B</p> <p>Bearing design: Standard</p> <p>Materials:</p> <p>Pump housing: Cast iron EN-GJL-250 ASTM class 35</p> <p>Wear ring: Brass</p> <p>Impeller: Cast iron EN-GJL-200 ASTM class 30</p> <p>Internal pump house coating: CED</p> <p>Shaft: Stainless steel EN 1.4301 AISI 304</p> <p>Installation:</p> <p>t max amb: 55 °C</p> <p>Maximum operating pressure: 16 bar</p> <p>Pipe connection standard: EN 1092-2</p> <p>Type of inlet connection: DIN</p> <p>Type of outlet connection: DIN</p> <p>Size of inlet connection: DN 125</p> <p>Size of outlet connection: DN 100</p> <p>Pressure rating for connection: PN 16</p> <p>Coupling type: Flexible w/spacer</p>

Qty.	Description																																																								
1	<table border="0"> <tr> <td data-bbox="204 163 411 185">Base frame design:</td> <td data-bbox="568 163 651 185">EN/ISO</td> </tr> <tr> <td data-bbox="204 192 411 215">Grouting (Yes/No):</td> <td data-bbox="568 192 584 215">N</td> </tr> <tr> <td colspan="2" data-bbox="204 253 360 275">Electrical data:</td> </tr> <tr> <td data-bbox="204 282 325 304">Motor type:</td> <td data-bbox="568 282 676 304">SIEMENS</td> </tr> <tr> <td data-bbox="204 311 405 333">IE Efficiency class:</td> <td data-bbox="568 311 608 333">IE3</td> </tr> <tr> <td data-bbox="204 340 400 362">Rated power - P2:</td> <td data-bbox="568 340 636 362">11 kW</td> </tr> <tr> <td data-bbox="204 369 389 392">Mains frequency:</td> <td data-bbox="568 369 632 392">50 Hz</td> </tr> <tr> <td data-bbox="204 398 360 421">Rated voltage:</td> <td data-bbox="568 398 847 421">3 x 380-420D/660-725Y V</td> </tr> <tr> <td data-bbox="204 427 360 450">Rated current:</td> <td data-bbox="568 427 692 450">22.0/12.7 A</td> </tr> <tr> <td data-bbox="204 456 376 479">Starting current:</td> <td data-bbox="568 456 684 479">680-680 %</td> </tr> <tr> <td data-bbox="204 486 448 508">Cos phi - power factor:</td> <td data-bbox="568 486 616 508">0.80</td> </tr> <tr> <td data-bbox="204 515 349 537">Rated speed:</td> <td data-bbox="568 515 655 537">980 rpm</td> </tr> <tr> <td data-bbox="204 544 312 566">Efficiency:</td> <td data-bbox="568 544 679 566">IE3 90,3%</td> </tr> <tr> <td data-bbox="204 573 496 595">Motor efficiency at full load:</td> <td data-bbox="568 573 699 595">90.3-90.3 %</td> </tr> <tr> <td data-bbox="204 602 496 624">Motor efficiency at 3/4 load:</td> <td data-bbox="568 602 699 624">90.7-90.7 %</td> </tr> <tr> <td data-bbox="204 631 496 654">Motor efficiency at 1/2 load:</td> <td data-bbox="568 631 699 654">89.8-89.8 %</td> </tr> <tr> <td data-bbox="204 660 389 683">Number of poles:</td> <td data-bbox="568 660 584 683">6</td> </tr> <tr> <td data-bbox="204 689 496 712">Enclosure class (IEC 34-5):</td> <td data-bbox="568 689 616 712">IP55</td> </tr> <tr> <td data-bbox="204 719 472 741">Insulation class (IEC 85):</td> <td data-bbox="568 719 584 741">F</td> </tr> <tr> <td data-bbox="204 748 312 770">Motor No:</td> <td data-bbox="568 748 676 770">98957460</td> </tr> <tr> <td data-bbox="204 777 528 799">Bearing insulation type N-end:</td> <td data-bbox="568 777 759 799">STEEL BEARING</td> </tr> <tr> <td colspan="2" data-bbox="204 837 280 860">Others:</td> </tr> <tr> <td data-bbox="204 866 555 889">Minimum efficiency index, MEI ≥:</td> <td data-bbox="568 866 632 889">0.70</td> </tr> <tr> <td data-bbox="204 896 325 918">Net weight:</td> <td data-bbox="568 896 639 918">507 kg</td> </tr> <tr> <td data-bbox="204 925 352 947">Gross weight:</td> <td data-bbox="568 925 639 947">574 kg</td> </tr> <tr> <td data-bbox="204 954 389 976">Shipping volume:</td> <td data-bbox="568 954 647 976">1.49 m³</td> </tr> <tr> <td data-bbox="204 983 389 1005">Country of origin:</td> <td data-bbox="568 983 600 1005">HU</td> </tr> <tr> <td data-bbox="204 1012 389 1034">Custom tariff no.:</td> <td data-bbox="568 1012 676 1034">84137059</td> </tr> </table>	Base frame design:	EN/ISO	Grouting (Yes/No):	N	Electrical data:		Motor type:	SIEMENS	IE Efficiency class:	IE3	Rated power - P2:	11 kW	Mains frequency:	50 Hz	Rated voltage:	3 x 380-420D/660-725Y V	Rated current:	22.0/12.7 A	Starting current:	680-680 %	Cos phi - power factor:	0.80	Rated speed:	980 rpm	Efficiency:	IE3 90,3%	Motor efficiency at full load:	90.3-90.3 %	Motor efficiency at 3/4 load:	90.7-90.7 %	Motor efficiency at 1/2 load:	89.8-89.8 %	Number of poles:	6	Enclosure class (IEC 34-5):	IP55	Insulation class (IEC 85):	F	Motor No:	98957460	Bearing insulation type N-end:	STEEL BEARING	Others:		Minimum efficiency index, MEI ≥:	0.70	Net weight:	507 kg	Gross weight:	574 kg	Shipping volume:	1.49 m ³	Country of origin:	HU	Custom tariff no.:	84137059
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98973243 NK 100-400/380 EUP A2F2AE-SBQQE 50 Hz

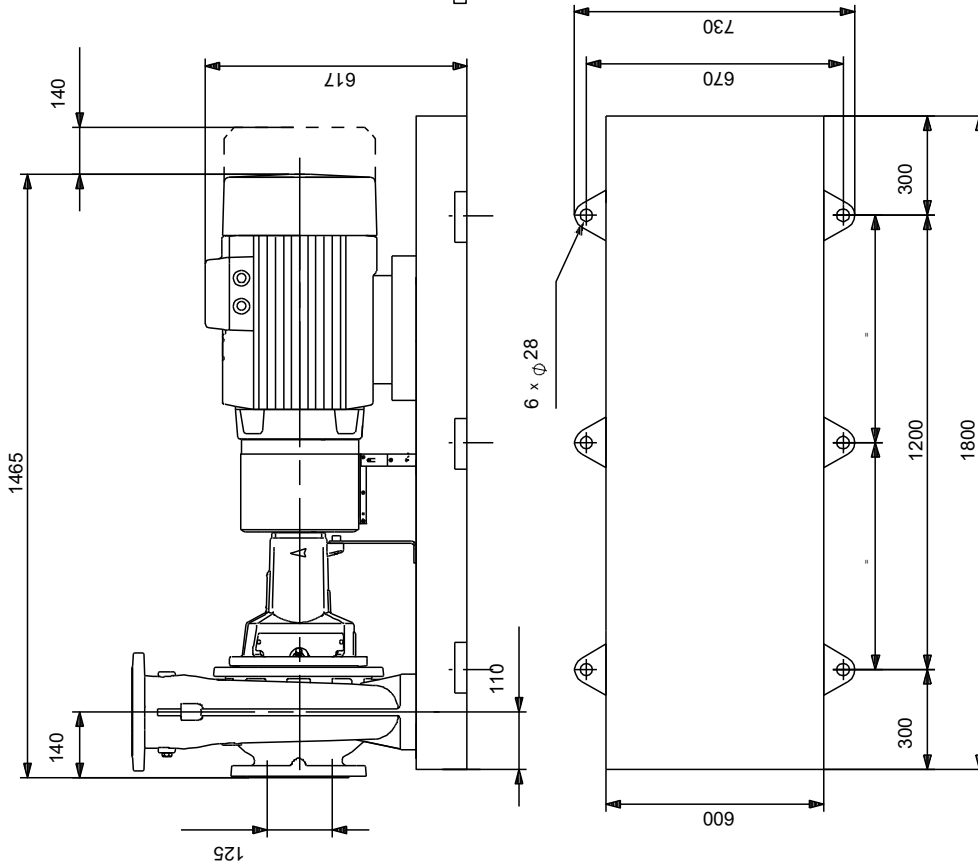
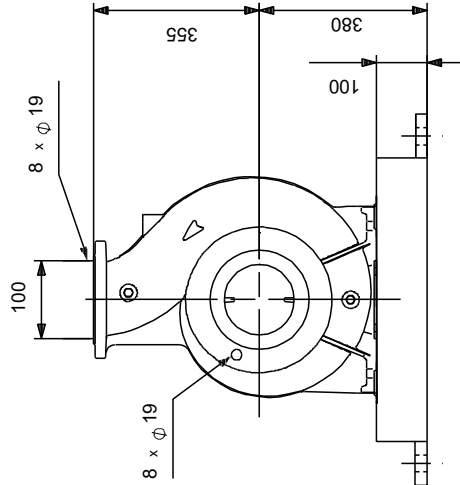
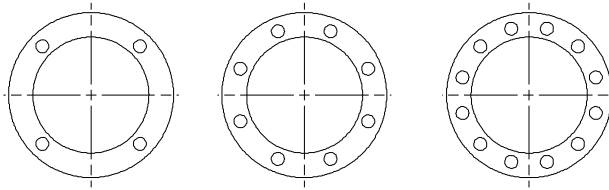


Description	Value
General information:	
Product name:	NK 100-400/380 EUP A2F2AE-SBQQE
Product No:	98973243
EAN number:	5712604501269
Technical:	
Pump speed on which pump data are based:	975 rpm
Rated flow:	131.4 m ³ /h
Pump with motor (Yes/No):	Y
Rated head:	20 m
Actual impeller diameter:	380 mm
Nominal 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 125
Size of outlet connection:	DN 100
Pressure rating for connection:	PN 16
Coupling type:	Flexible w/spacer
Base frame design:	EN/ISO
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:	11 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	22.0/12.7 A
Starting current:	680-680 %
Cos phi - power factor:	0.80
Rated speed:	980 rpm
Efficiency:	IE3 90,3%
Motor efficiency at full load:	90.3-90.3 %
Motor efficiency at 3/4 load:	90.7-90.7 %



Description	Value
Motor efficiency at 1/2 load:	89.8-89.8 %
Number of poles:	6
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	98957460
Bearing insulation type N-end:	STEEL BEARING
Controls:	
Frequency converter:	NONE
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	507 kg
Gross weight:	574 kg
Shipping volume:	1.49 m ³
Country of origin:	HU
Custom tariff no.:	84137059

98973243 NK 100-400/380 EUP A2F2AE-SBQQE 50 Hz



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

98973243 NK 100-400/380 EUP A2F2AE-SBQQE 50 Hz



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

Order Data:

Position	Your pos.	Product name	Amount	Product No	Total
		NK 100-400/380 EUP	1	98973243	Price on request