

**Qty. Description**

1 NK 125-400/392 AA2F2AESBQQEUW3



**Note! Product picture may differ from actual product**

Product No.: [98972378](#)

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.

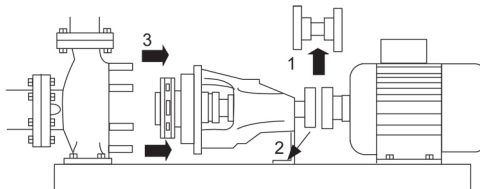
The pump is fitted with a foot-mounted, fan-cooled asynchronous motor. Pump and motor are mounted on a common base frame.

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.

{IMG Filename: GRALON\_NB-NK-G\_SHAFTSEAL\_Bxxx.gif }

Seal faces:

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

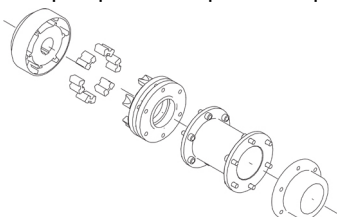
This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

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.

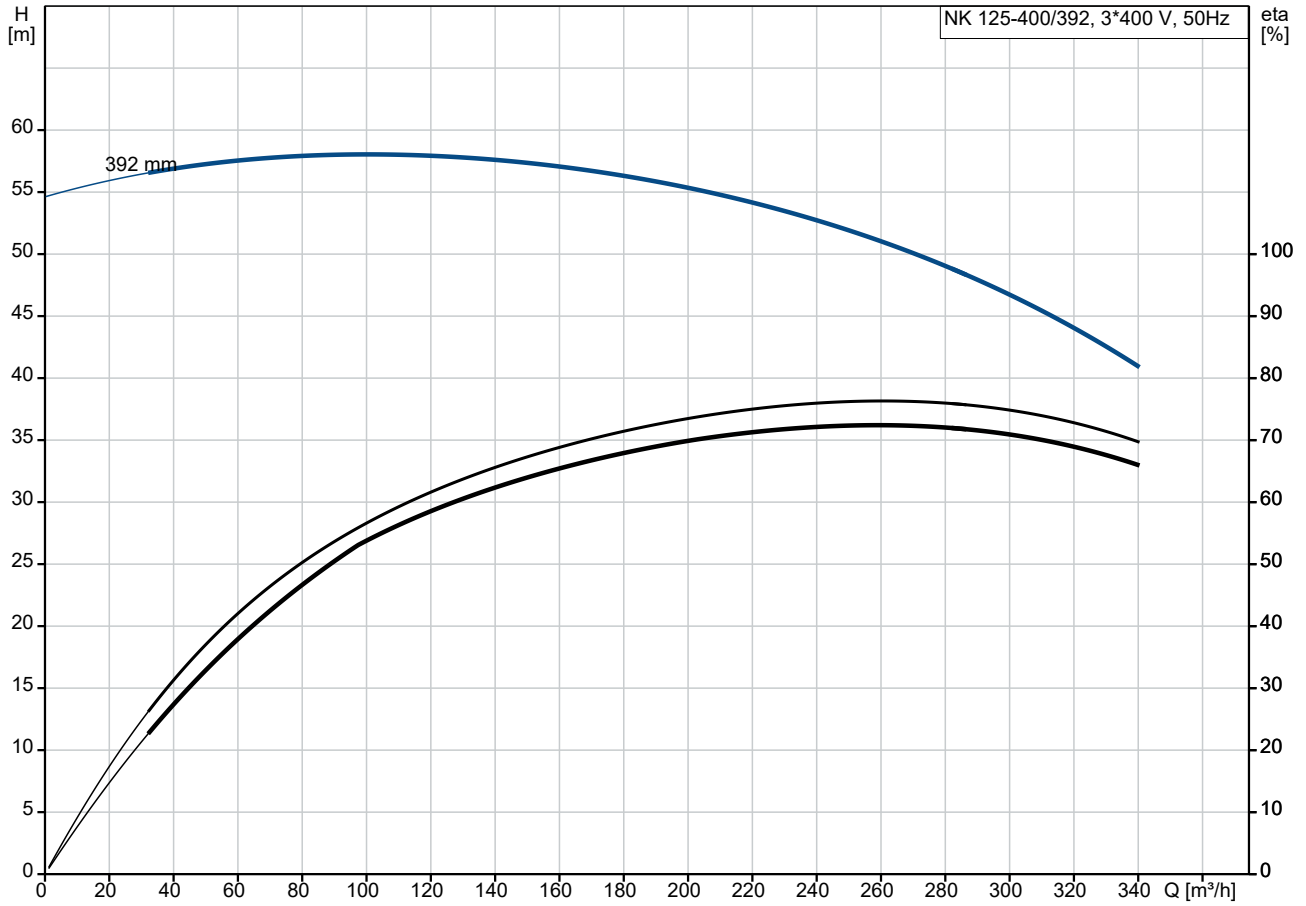


Qty.	Description																																														
1	<p data-bbox="201 338 284 371"><b>Motor</b></p> <p data-bbox="201 376 1482 427">The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p data-bbox="201 432 1016 465">The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p data-bbox="201 468 1482 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 1482 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 1482 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"><b>Further product details</b></p> <p data-bbox="201 761 1482 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"><b>Technical data</b></p> <p data-bbox="201 969 300 1003">Controls:</p> <table data-bbox="201 1003 638 1059"> <tr> <td data-bbox="201 1003 432 1037">Frequency converter:</td> <td data-bbox="564 1003 638 1037">NONE</td> </tr> <tr> <td data-bbox="201 1037 384 1059">Pressure sensor:</td> <td data-bbox="564 1037 584 1059">N</td> </tr> </table> <p data-bbox="201 1088 276 1115">Liquid:</p> <table data-bbox="201 1115 702 1238"> <tr> <td data-bbox="201 1115 363 1149">Pumped liquid:</td> <td data-bbox="564 1115 635 1149">Water</td> </tr> <tr> <td data-bbox="201 1149 480 1182">Liquid temperature range:</td> <td data-bbox="564 1149 702 1182">-25 .. 120 °C</td> </tr> <tr> <td data-bbox="201 1182 504 1216">Selected liquid temperature:</td> <td data-bbox="564 1182 628 1216">20 °C</td> </tr> <tr> <td data-bbox="201 1216 292 1238">Density:</td> <td data-bbox="564 1216 695 1238">998.2 kg/m<sup>3</sup></td> </tr> </table> <p data-bbox="201 1267 316 1294">Technical:</p> <table data-bbox="201 1294 818 1597"> <tr> <td data-bbox="201 1294 687 1328">Pump speed on which pump data are based:</td> <td data-bbox="715 1294 818 1328">1482 rpm</td> </tr> <tr> <td data-bbox="201 1328 323 1361">Rated flow:</td> <td data-bbox="564 1328 683 1361">265.7 m<sup>3</sup>/h</td> </tr> <tr> <td data-bbox="201 1361 496 1395">Pump with motor (Yes/No):</td> <td data-bbox="564 1361 584 1395">Y</td> </tr> <tr> <td data-bbox="201 1395 336 1429">Rated head:</td> <td data-bbox="564 1395 655 1429">50.25 m</td> </tr> <tr> <td data-bbox="201 1429 472 1462">Actual impeller diameter:</td> <td data-bbox="564 1429 655 1462">392 mm</td> </tr> <tr> <td data-bbox="201 1462 488 1496">Nominal impeller diameter:</td> <td data-bbox="564 1462 608 1496">400</td> </tr> <tr> <td data-bbox="201 1496 416 1529">Code for shaft seal:</td> <td data-bbox="564 1496 639 1529">BQQE</td> </tr> <tr> <td data-bbox="201 1529 435 1563">Mechanical seal type:</td> <td data-bbox="564 1529 635 1563">Single</td> </tr> <tr> <td data-bbox="201 1563 384 1597">Curve tolerance:</td> <td data-bbox="564 1563 759 1597">ISO9906:2012 3B</td> </tr> <tr> <td data-bbox="201 1597 371 1630">Bearing design:</td> <td data-bbox="564 1597 667 1630">Standard</td> </tr> </table> <p data-bbox="201 1626 308 1653">Materials:</p> <table data-bbox="201 1653 730 1977"> <tr> <td data-bbox="201 1653 363 1686">Pump housing:</td> <td data-bbox="564 1653 730 1742">Cast iron EN-GJL-250 ASTM class 35</td> </tr> <tr> <td data-bbox="201 1742 316 1776">Wear ring:</td> <td data-bbox="564 1742 628 1776">Brass</td> </tr> <tr> <td data-bbox="201 1776 292 1809">Impeller:</td> <td data-bbox="564 1776 730 1865">Cast iron EN-GJL-200 ASTM class 30</td> </tr> <tr> <td data-bbox="201 1865 512 1899">Internal pump house coating:</td> <td data-bbox="564 1865 619 1899">CED</td> </tr> <tr> <td data-bbox="201 1899 268 1933">Shaft:</td> <td data-bbox="564 1899 722 1977">Stainless steel EN 1.4301 AISI 304</td> </tr> </table> <p data-bbox="201 2007 323 2033">Installation:</p> <table data-bbox="201 2033 638 2110"> <tr> <td data-bbox="201 2033 323 2067">t max amb:</td> <td data-bbox="564 2033 628 2067">55 °C</td> </tr> <tr> <td data-bbox="201 2067 523 2110">Maximum operating pressure:</td> <td data-bbox="564 2067 638 2110">16 bar</td> </tr> </table>	Frequency converter:	NONE	Pressure sensor:	N	Pumped liquid:	Water	Liquid temperature range:	-25 .. 120 °C	Selected liquid temperature:	20 °C	Density:	998.2 kg/m <sup>3</sup>	Pump speed on which pump data are based:	1482 rpm	Rated flow:	265.7 m <sup>3</sup> /h	Pump with motor (Yes/No):	Y	Rated head:	50.25 m	Actual impeller diameter:	392 mm	Nominal impeller diameter:	400	Code for shaft seal:	BQQE	Mechanical seal type:	Single	Curve tolerance:	ISO9906:2012 3B	Bearing design:	Standard	Pump housing:	Cast iron EN-GJL-250 ASTM class 35	Wear ring:	Brass	Impeller:	Cast iron EN-GJL-200 ASTM class 30	Internal pump house coating:	CED	Shaft:	Stainless steel EN 1.4301 AISI 304	t max amb:	55 °C	Maximum operating pressure:	16 bar
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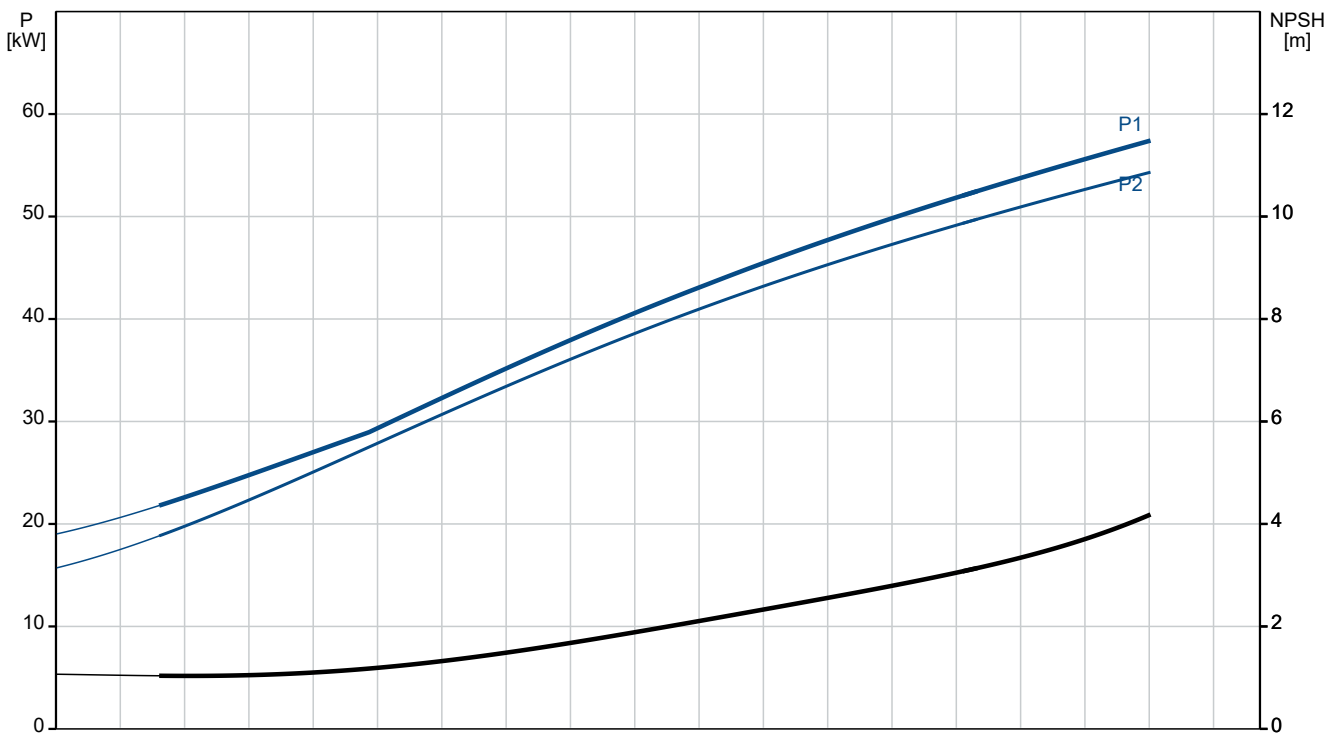
**Qty. Description**

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: 55 kW          Mains frequency: 50 Hz          Rated voltage: 3 x 380-420D/660-725Y V          Rated current: 96/56 A          Starting current: 680-680 %          Cos phi - power factor: 0.87          Rated speed: 1482 rpm          Efficiency: IE3 94,6%          Motor efficiency at full load: 94.6-94.6 %          Motor efficiency at 3/4 load: 95.1-95.1 %          Motor efficiency at 1/2 load: 95-95 %          Number of poles: 4          Enclosure class (IEC 34-5): IP55          Insulation class (IEC 85): F          Motor No: 98957823          Bearing insulation type N-end: STEEL BEARING</p> <p>Others:          Minimum efficiency index, MEI ≥: 0.50          Net weight: 864 kg          Gross weight: 955 kg          Shipping volume: 1.99 m<sup>3</sup></p>
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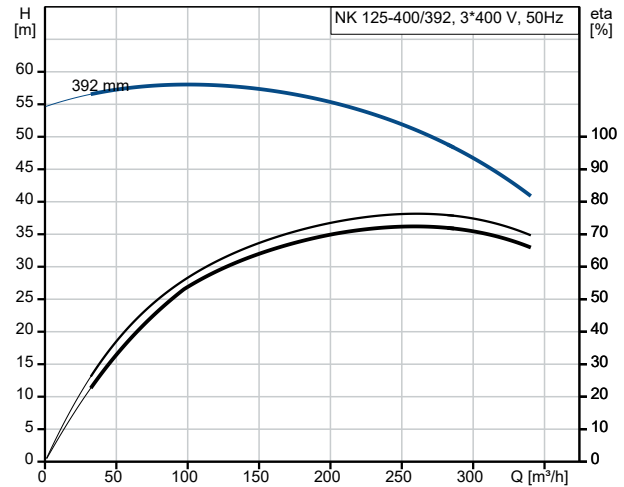
## 98972378 NK 125-400/392 AA2F2AESBQQEUW3 50 Hz



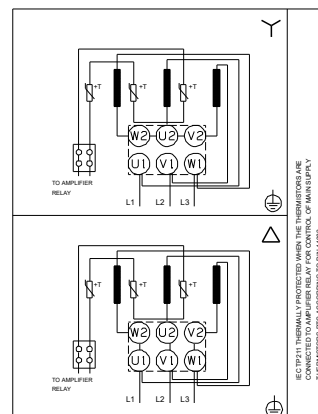
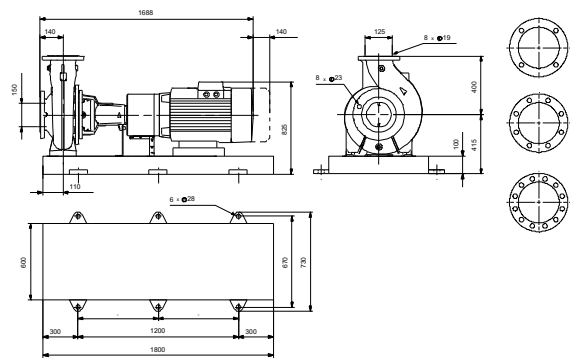
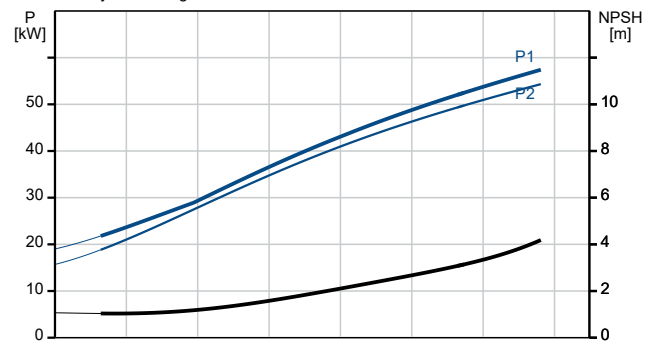
Pumped liquid = Water  
Liquid temperature during operation = 20 °C  
Density = 998.2 kg/m³



Description	Value
<b>General information:</b>	
Product name:	NK 125-400/392 AA2F2AESBQQEUW3
Product No:	98972378
EAN number:	5712604484098
<b>Technical:</b>	
Pump speed on which pump data are based:	1482 rpm
Rated flow:	265.7 m <sup>3</sup> /h
Pump with motor (Yes/No):	Y
Rated head:	50.25 m
Actual impeller diameter:	392 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
<b>Materials:</b>	
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
<b>Installation:</b>	
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
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
Motor type:	SIEMENS
IE Efficiency class:	IE3
Rated power - P2:	55 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	96/56 A



Pumped liquid = Water  
Liquid temperature during operation = 20 °C  
Density = 998.2 kg/m<sup>3</sup>





Company name:

Created by:

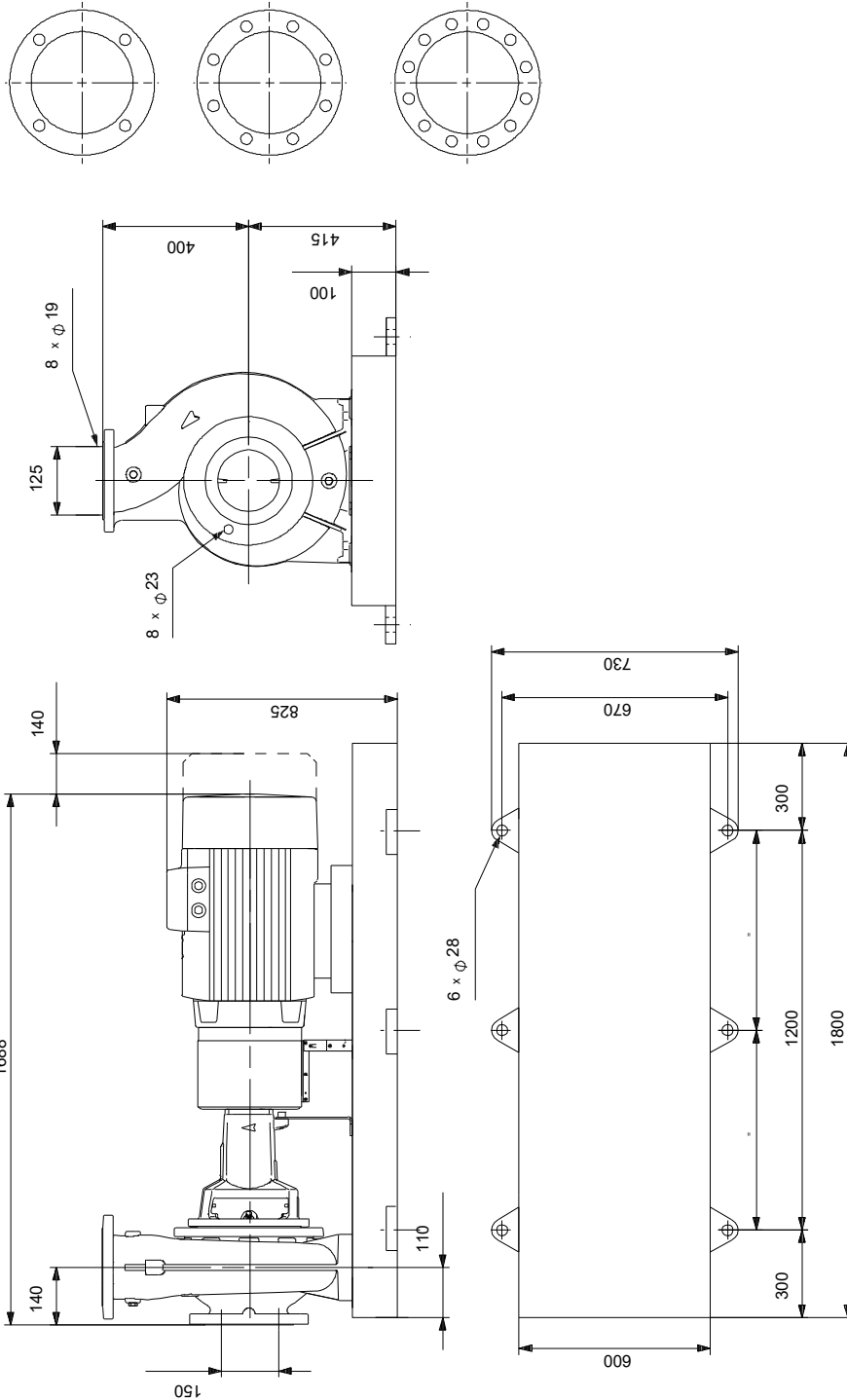
Phone:

Date:

28/12/2022

Description	Value
Starting current:	680-680 %
Cos phi - power factor:	0.87
Rated speed:	1482 rpm
Efficiency:	IE3 94,6%
Motor efficiency at full load:	94.6-94.6 %
Motor efficiency at 3/4 load:	95.1-95.1 %
Motor efficiency at 1/2 load:	95-95 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	98957823
Bearing insulation type N-end:	STEEL BEARING
<b>Controls:</b>	
Frequency converter:	NONE
Pressure sensor:	N
<b>Others:</b>	
Minimum efficiency index, MEI ≥:	0.50
Net weight:	864 kg
Gross weight:	955 kg
Shipping volume:	1.99 m <sup>3</sup>

## 98972378 NK 125-400/392 AA2F2AESBQQEUW3 50 Hz



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

## 98972378 NK 125-400/392 AA2F2AESBQQEUW3 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.



