

**Qty. Description**

1 NK 125-500/548 AA2F2AESBQQEUW5



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

Product No.: [98990845](#)

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.

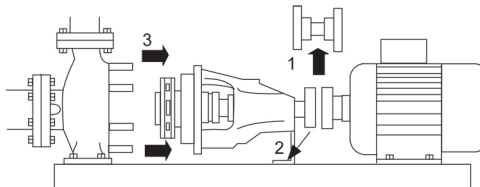
The pump is fitted with a foot-mounted, fan-cooled asynchronous motor. Pump and motor are mounted on a common base frame.

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)

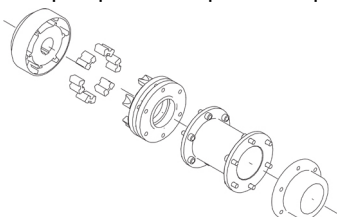
This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

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 60 mm where the coupling is mounted.

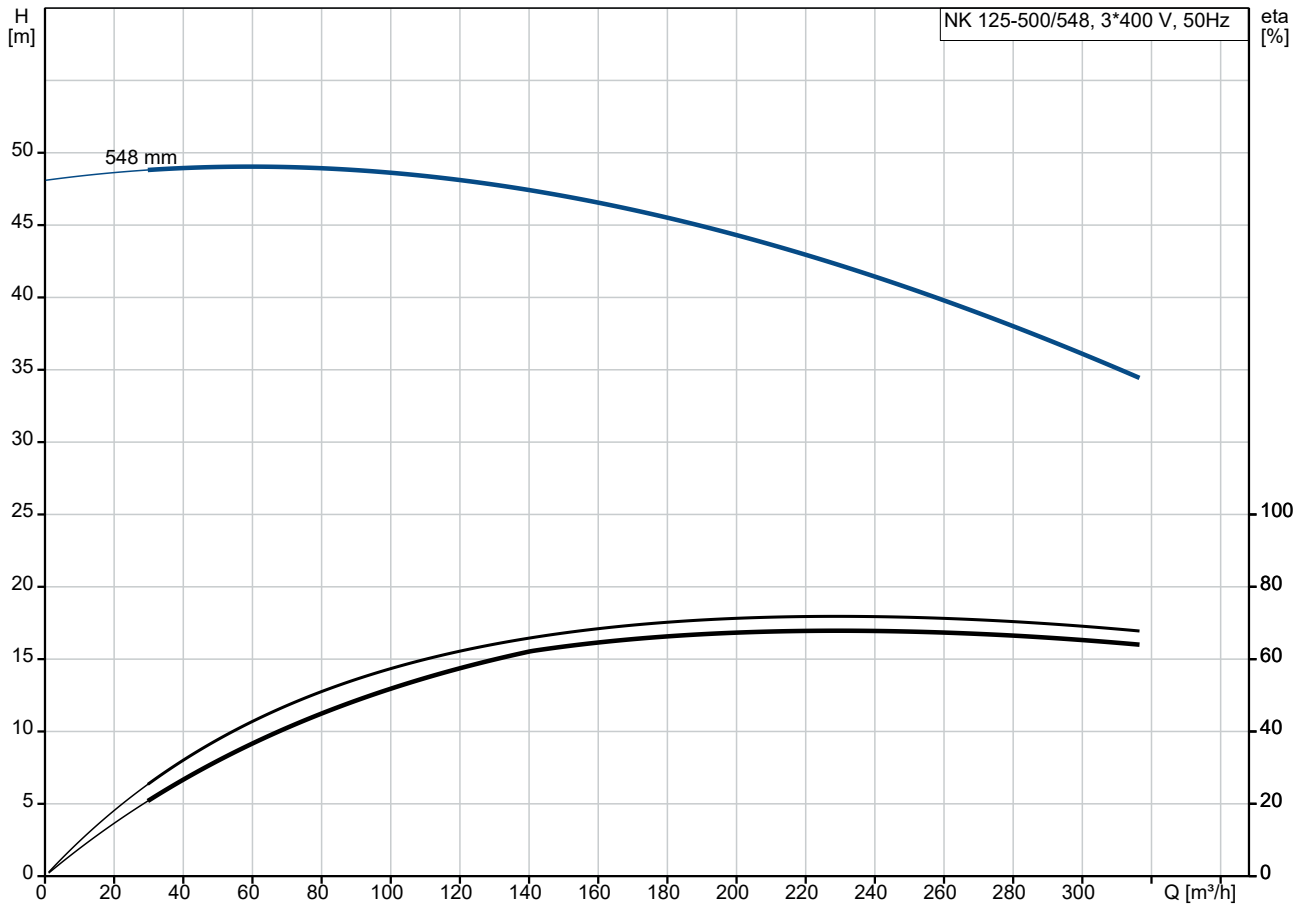
The pump uses a spacer coupling between the pump and motor shaft.



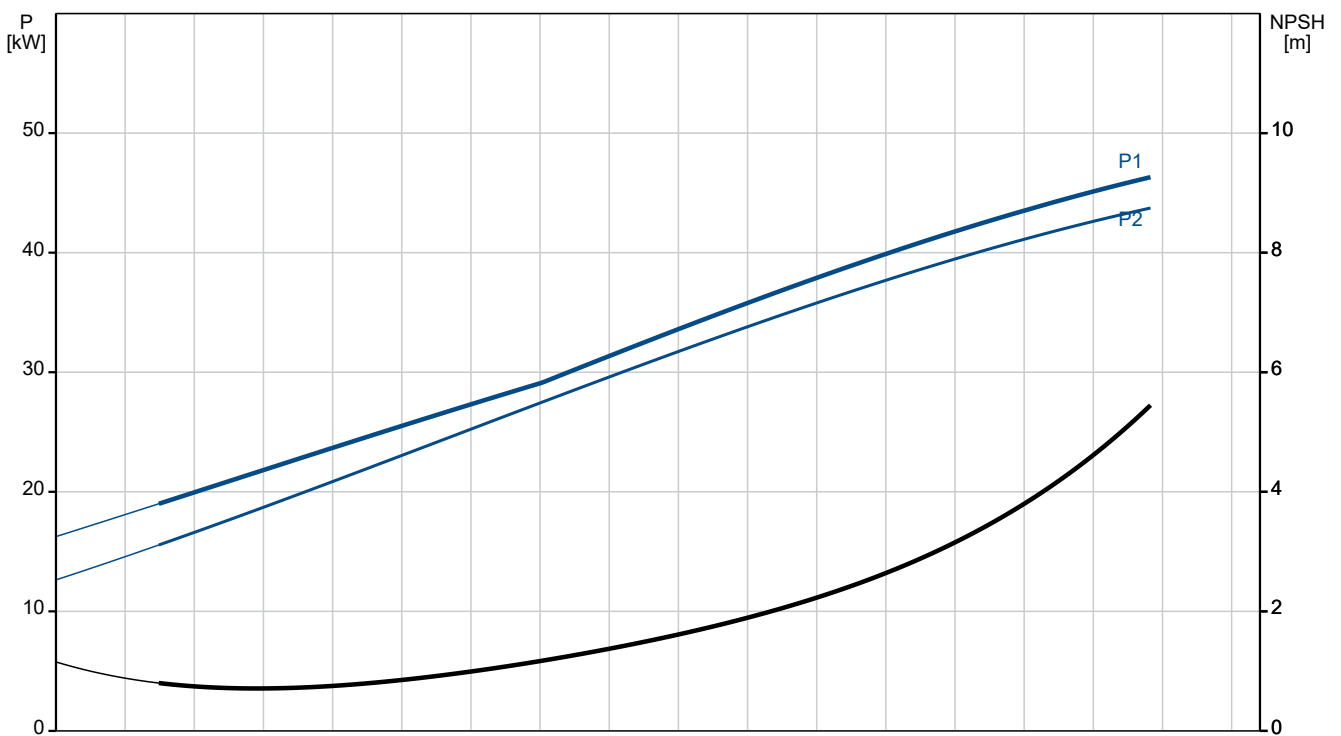
Qty.	Description
1	<p data-bbox="201 338 284 371"><b>Motor</b></p> <p data-bbox="201 376 1476 427">The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p data-bbox="201 432 1016 465">The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p data-bbox="201 468 1476 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 1476 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 1476 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 1476 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> <p data-bbox="201 1005 638 1039">Frequency converter: NONE</p> <p data-bbox="201 1041 584 1075">Pressure sensor: N</p> <p data-bbox="201 1104 276 1137">Liquid:</p> <p data-bbox="201 1140 632 1173">Pumped liquid: Water</p> <p data-bbox="201 1176 703 1209">Liquid temperature range: -25 .. 120 °C</p> <p data-bbox="201 1211 632 1245">Selected liquid temperature: 20 °C</p> <p data-bbox="201 1247 695 1281">Density: 998.2 kg/m<sup>3</sup></p> <p data-bbox="201 1310 316 1344">Technical:</p> <p data-bbox="201 1346 804 1379">Pump speed on which pump data are based: 988 rpm</p> <p data-bbox="201 1382 663 1415">Rated flow: 228 m<sup>3</sup>/h</p> <p data-bbox="201 1417 584 1451">Pump with motor (Yes/No): Y</p> <p data-bbox="201 1453 655 1487">Rated head: 41.91 m</p> <p data-bbox="201 1489 655 1523">Actual impeller diameter: 548 mm</p> <p data-bbox="201 1525 608 1559">Nominal impeller diameter: 500</p> <p data-bbox="201 1561 638 1594">Code for shaft seal: BQQE</p> <p data-bbox="201 1597 632 1630">Mechanical seal type: Single</p> <p data-bbox="201 1632 759 1666">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="201 1668 663 1702">Bearing design: Standard</p> <p data-bbox="201 1731 308 1765">Materials:</p> <p data-bbox="201 1767 730 1818">Pump housing: Cast iron EN-GJL-250 ASTM class 35</p> <p data-bbox="201 1821 730 1872">Wear ring: Brass</p> <p data-bbox="201 1874 730 1926">Impeller: Cast iron EN-GJL-200 ASTM class 30</p> <p data-bbox="201 1928 619 1962">Internal pump house coating: CED</p> <p data-bbox="201 1964 722 2016">Shaft: Stainless steel EN 1.4301 AISI 304</p> <p data-bbox="201 2045 325 2078">Installation:</p> <p data-bbox="201 2080 632 2114">t max amb: 55 °C</p> <p data-bbox="201 2116 632 2150">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: 10            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: 99.0/58.0 A            Starting current: 720-720 %            Cos phi - power factor: 0.85            Rated speed: 988 rpm            Efficiency: IE3 94,1%            Motor efficiency at full load: 94.1-94.1 %            Motor efficiency at 3/4 load: 94.5-94.5 %            Motor efficiency at 1/2 load: 94.4-94.4 %            Number of poles: 6            Enclosure class (IEC 34-5): IP55            Insulation class (IEC 85): F            Motor No: 98957469            Bearing insulation type N-end: STEEL BEARING</p> <p>Others:            Minimum efficiency index, MEI ≥: 0.46            Net weight: 1390 kg            Gross weight: 1430 kg            Shipping volume: 2.52 m<sup>3</sup></p>

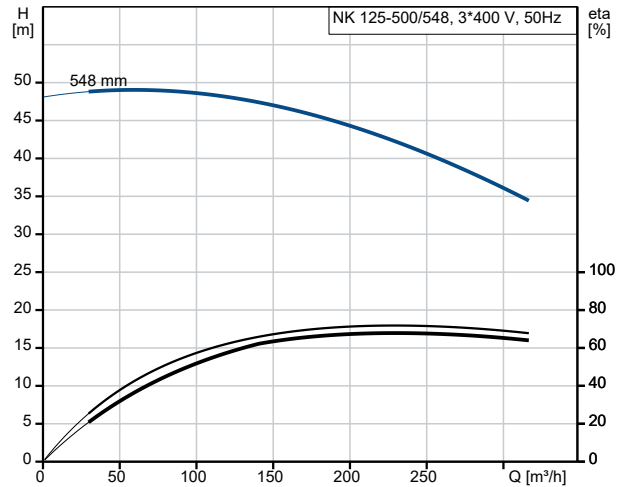
## 98990845 NK 125-500/548 AA2F2AESBQQEUW5 50 Hz



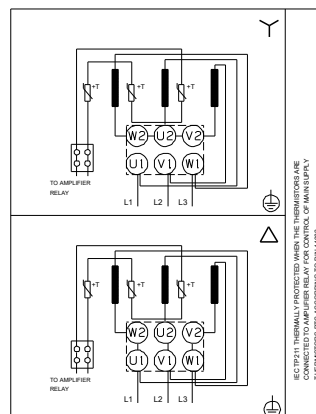
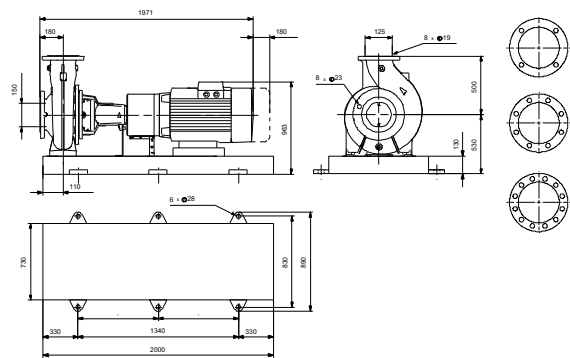
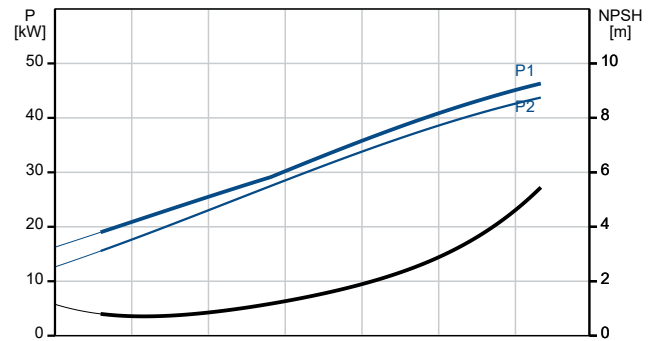
Pumped liquid = Water  
 Liquid temperature during operation = 20 °C  
 Density = 998.2 kg/m<sup>3</sup>



Description	Value
<b>General information:</b>	
Product name:	NK 125-500/548 AA2F2AESBQQEUW5
Product No:	98990845
EAN number:	5712604804513
<b>Technical:</b>	
Pump speed on which pump data are based:	988 rpm
Rated flow:	228 m <sup>3</sup> /h
Pump with motor (Yes/No):	Y
Rated head:	41.91 m
Actual impeller diameter:	548 mm
Nominal impeller diameter:	500
Shaft diameter:	60 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:	10
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:	99.0/58.0 A



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





Company name:

Created by:

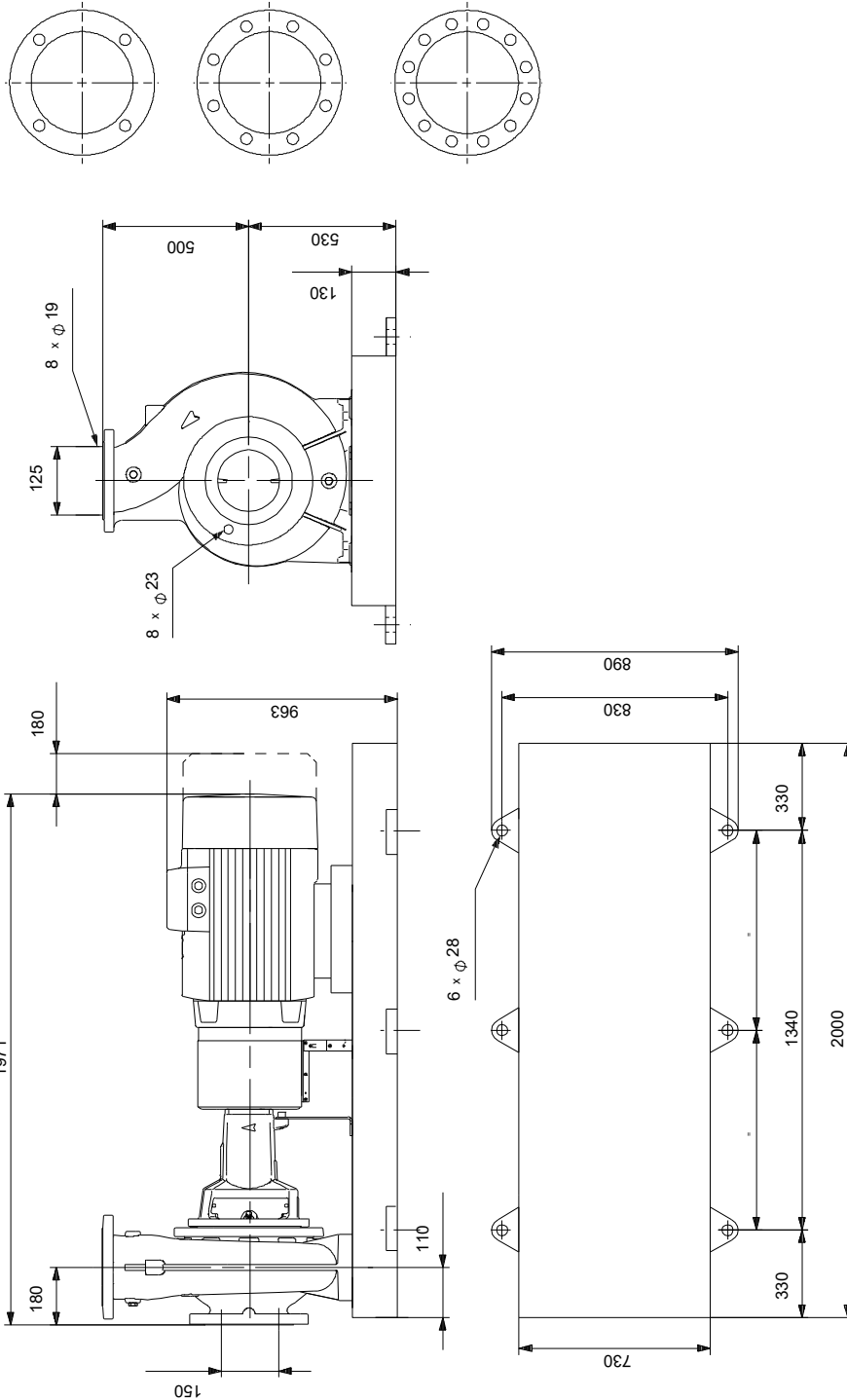
Phone:

Date:

28/12/2022

Description	Value
Starting current:	720-720 %
Cos phi - power factor:	0.85
Rated speed:	988 rpm
Efficiency:	IE3 94,1%
Motor efficiency at full load:	94.1-94.1 %
Motor efficiency at 3/4 load:	94.5-94.5 %
Motor efficiency at 1/2 load:	94.4-94.4 %
Number of poles:	6
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	98957469
Bearing insulation type N-end:	STEEL BEARING
<b>Controls:</b>	
Frequency converter:	NONE
Pressure sensor:	N
<b>Others:</b>	
Minimum efficiency index, MEI ≥:	0.46
Net weight:	1390 kg
Gross weight:	1430 kg
Shipping volume:	2.52 m <sup>3</sup>

## 98990845 NK 125-500/548 AA2F2AESBQQEUW5 50 Hz



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

## 98990845 NK 125-500/548 AA2F2AESBQQEUW5 50 Hz



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



