

28/12/2022

Qty. | Description

1

NK 125-500/493 AA2F2AESBQQERW5



Note! Product picture may differ from actual product

Product No.: 98972452

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.

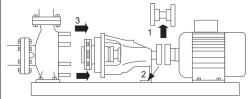
The pump is fitted with a foot-mounted, fan-cooled asynchronous motor. Pump and motor are mounted on a common base frame.

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.



28/12/2022

Qty. | Description

1 Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.

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.

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.

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.

Further product details

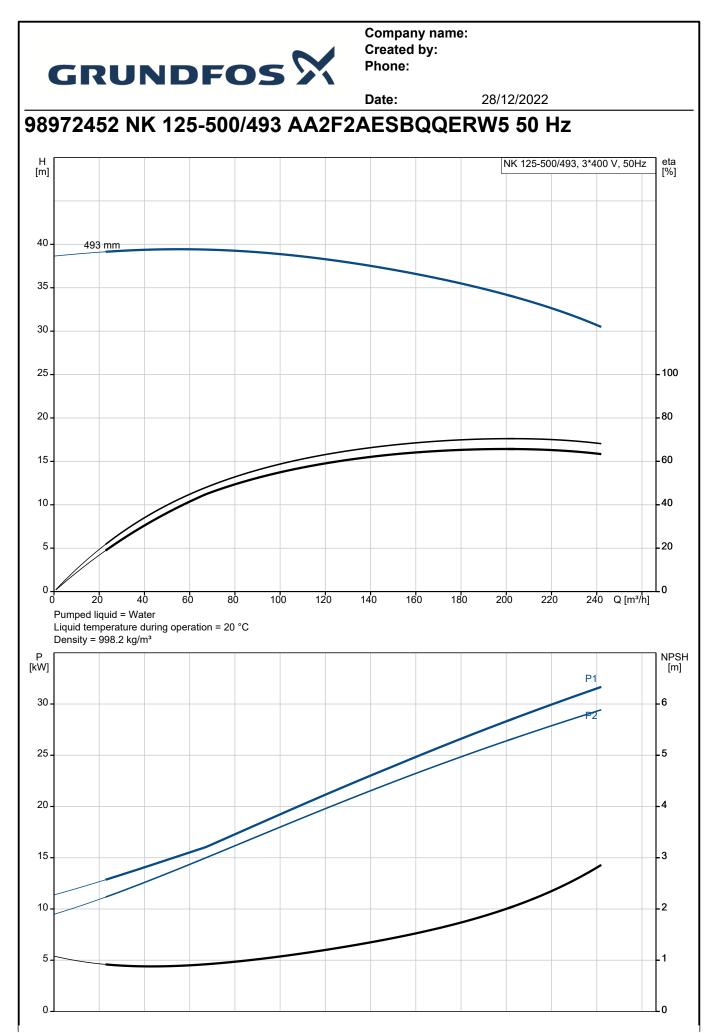
Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

Technical data

Controls: Frequency converter: Pressure sensor:	NONE N
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -25 120 °C 20 °C 998.2 kg/m³
Technical: Pump speed on which pump data Rated flow: Pump with motor (Yes/No): Rated head: Actual impeller diameter: Nominal impeller diameter: Code for shaft seal: Mechanical seal type: Curve tolerance: Bearing design:	are based: 982 rpm 205.5 m³/h Y 33.62 m 493 mm 500 BQQE Single ISO9906:2012 3B Standard
Materials: Pump housing: Wear ring: Impeller: Internal pump house coating: Shaft:	Cast iron EN-GJL-250 ASTM class 35 Brass Cast iron EN-GJL-200 ASTM class 30 CED Stainless steel EN 1.4301 AISI 304
Installation: t max amb: Maximum operating pressure:	55 °C 16 bar



Description Pipe connection standard: Type of inlet connection: Size of outlet connection: Dize of outlet conn	EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 10 N SIEMENS IE3 30 kW	
Type of inlet connection: Type of outlet connection: Size of inlet connection: Size of outlet connection: Pressure rating for connection: Coupling type: Base frame design: Code for base frame: Solde for base for ba	DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 10 N SIEMENS IE3 30 kW	
ype of outlet connection: Size of inlet connection: Pressure rating for connection: Coupling type: Sase frame design: Code for base frame: Grouting (Yes/No): Electrical data: Motor type: E Efficiency class: Rated power - P2: Mains frequency: Rated voltage:	DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 10 N SIEMENS IE3 30 kW	
Size of inlet connection: Size of outlet connection: Pressure rating for connection: Coupling type: Base frame design: Code for base frame: Srouting (Yes/No): Electrical data: Motor type: E Efficiency class: Rated power - P2: Mains frequency: Rated voltage:	DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 10 N SIEMENS IE3 30 kW	
Size of outlet connection: Pressure rating for connection: Coupling type: Base frame design: Code for base frame: Grouting (Yes/No): Electrical data: Motor type: E Efficiency class: Rated power - P2: Mains frequency: Rated voltage:	DN 125 PN 16 Flexible w/spacer EN/ISO 10 N SIEMENS IE3 30 kW	
Pressure rating for connection: Coupling type: Base frame design: Code for base frame: Grouting (Yes/No): Electrical data: Motor type: E Efficiency class: Rated power - P2: Mains frequency: Rated voltage:	PN 16 Flexible w/spacer EN/ISO 10 N SIEMENS IE3 30 kW	
Coupling type: Base frame design: Code for base frame: Grouting (Yes/No): Electrical data: Motor type: E Efficiency class: Rated power - P2: Mains frequency: Rated voltage:	Flexible w/spacer EN/ISO 10 N SIEMENS IE3 30 kW	
Base frame design: Code for base frame: Grouting (Yes/No): Electrical data: Motor type: E Efficiency class: Rated power - P2: Mains frequency: Rated voltage:	EN/ISO 10 N SIEMENS IE3 30 kW	
Base frame design: Code for base frame: Grouting (Yes/No): Electrical data: Motor type: E Efficiency class: Rated power - P2: Mains frequency: Rated voltage:	EN/ISO 10 N SIEMENS IE3 30 kW	
Code for base frame: Grouting (Yes/No): Electrical data: Motor type: E Efficiency class: Rated power - P2: Mains frequency: Rated voltage:	10 N SIEMENS IE3 30 kW	
Grouting (Yes/No): Electrical data: Motor type: E Efficiency class: Rated power - P2: Mains frequency: Rated voltage:	N SIEMENS IE3 30 kW	
lotor type: E Efficiency class: Rated power - P2: lains frequency: Rated voltage:	IE3 30 kW	
E Efficiency class: Rated power - P2: Aains frequency: Rated voltage:	IE3 30 kW	
E Efficiency class: Rated power - P2: Aains frequency: Rated voltage:	30 kW	
Rated power - P2: Aains frequency: Rated voltage:		
lains frequency: Rated voltage:		
Rated voltage:	50 Hz	
	3 x 380-420D/660-725Y V	
Rated current:	56.0/32.5 A	
Starting current:	660-660 %	
searing insulation type in-end.	STEEL DEARING	
)thers: /inimum.officionsy index_MEL>:	0.46	
	2.02	
	os phi - power factor: ated speed: fficiency: lotor efficiency at full load: lotor efficiency at 3/4 load: lotor efficiency at 1/2 load: umber of poles: nclosure class (IEC 34-5): isulation class (IEC 85): lotor No: earing insulation type N-end: thers:	os phi - power factor: 0.83 ated speed: 982 rpmfficiency:IE3 92,9%lotor efficiency at full load: $92.9-92.9$ %lotor efficiency at 3/4 load: $93.6-93.6$ %lotor efficiency at 1/2 load: $93.5-93.5$ %umber of poles:6nclosure class (IEC 34-5):IP55isulation class (IEC 85):Flotor No: 98957465 earing insulation type N-end:STEEL BEARINGthers:1100 kgross weight:1140 kg



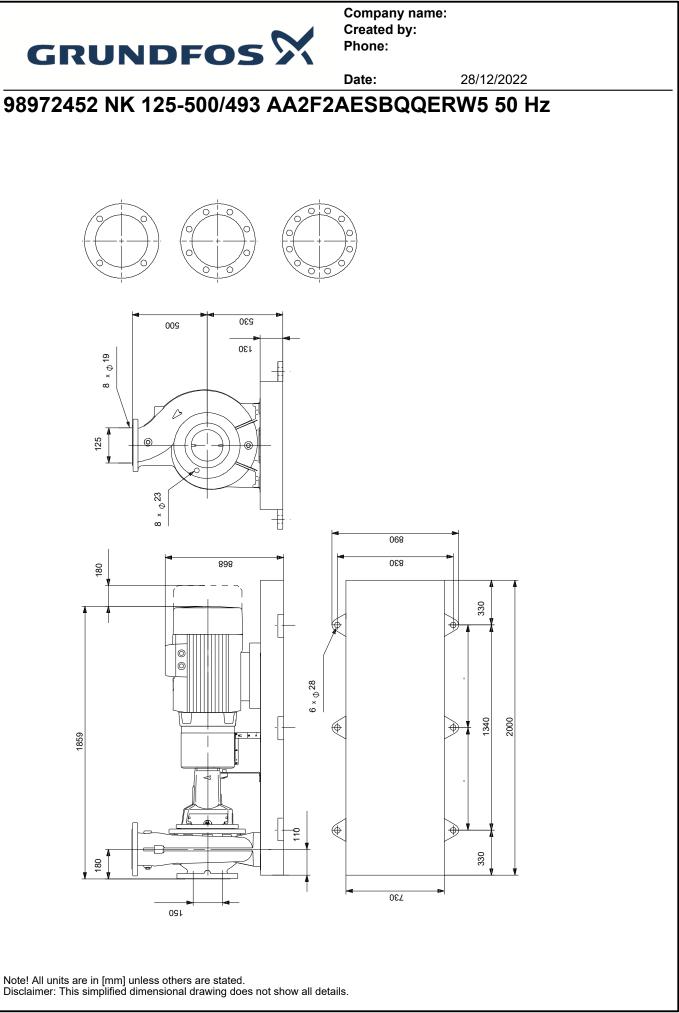


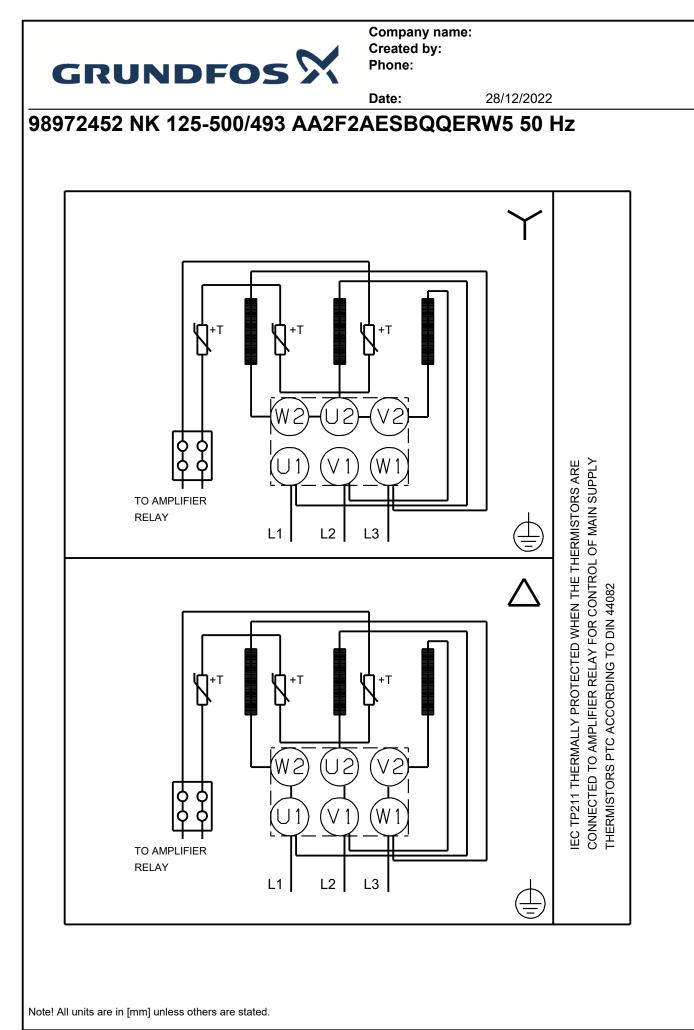
		Date:	28/12/2022
Description	Value	H [m]	NK 125-500/493, 3*400 V, 50Hz [%]
General information:			
Product name:	NK 125-500/493 AA2F2AESBQQERW5	40 - 493 mm	
Product No:	98972452	35 -	
EAN number:	5712604485576		
Technical:		30 -	
Pump speed on which pump data are based:	982 rpm	25 -	
Rated flow:	205.5 m³/h	20 -	
Pump with motor (Yes/No):	Y	15 -	60
Rated head:	33.62 m	10 -	60
		10	40
Actual impeller diameter:	493 mm		
Nominal impeller diameter:	500	5-	- 20
Shaft diameter:	60 mm	0	
Code for shaft seal:	BQQE	0 50	100 150 200 Q [m³/h]
Mechanical seal type:	Single	Pumped liquid =	
Curve tolerance:	ISO9906:2012 3B	Liquid temperatu Density = 998.2 k	re during operation = 20 °C kɑ/m³
Pump version:	A2	P	NPSH
Bearing design:	Standard	[kW]	P1 [m]
Materials:			P2
Pump housing:	Cast iron	25 -	-5
Pump housing:	EN-GJL-250		
Pump housing:	ASTM class 35	20 -	4
Wear ring:	Brass	15 -	3
Impeller:	Cast iron	- 10	
-		10	2
Impeller:	EN-GJL-200		
Impeller:	ASTM class 30	5	
Internal pump house coating:	CED		
Material code:	A		_ U
Code for rubber:	E		
Shaft:	Stainless steel		
Shaft:	EN 1.4301	180	
Shaft:	AISI 304		
Installation:			
t max amb:	55 °C	╶┼┼╎╽║╦━╦┎	
Maximum operating pressure:	16 bar	──── <u></u> ++₩ <u></u> ₩₽₽~¶ -	
Pipe connection standard:	EN 1092-2		
Type of inlet connection:	DIN	■ 110	
Type of outlet connection:	DIN	/®\	
Size of inlet connection:	DN 150		8
Size of outlet connection:	DN 125	— <u> </u>	
Pressure rating for connection:	PN 16		
Coupling type:	Flexible w/spacer	330	1340 330 -
	EN/ISO	H	
Base frame design:			
Code for base frame:	10		
Grouting (Yes/No):	N		Υ
Connect code:	F		
Liquid:		N ^{+T} N ^{+T}	¶-⊤
Pumped liquid:	Water		
Liquid temperature range:	-25 120 °C		방영구
Selected liquid temperature:	20 °C	TO AMPLIFIER	
Density:	998.2 kg/m³	RELAY L1 L2	
Electrical data:			
Motor type:	SIEMENS		
IE Efficiency class:	IE3	B+T B+T	
Rated power - P2:	30 kW		
Mains frequency:	50 Hz	— H ' I I I I I I I I I I I I I I I I I I	
Rated voltage:	3 x 380-420D/660-725Y V	TO AMPLIFIER	
-		NELAY L1 L2	
Rated current:	56.0/32.5 A	L	

Printed from Grundfos Product Centre [2022.54.006]



		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:	Ν		
Others:			
Minimum efficiency index, MEI ≥:	0.46		
Net weight:	1100 kg		
Gross weight:	1140 kg		
Shipping volume:	2.52 m³		







Your pos.

Position

Company name: Created by: Phone:

28/12/2022 Date: **Order Data:** Total **Product name** Amount **Product No** NK 125-500/493 1 98972452 Price on request

Printed from Grur	ndfos Product Centr	e [2022 54 006]		9/9