

16/06/2022

Qty. | Description

1

#### NK 32-160/170 AA2F2AESBQQEEW3



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

Product No.: 98986345

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.

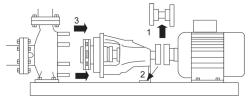
The pump is fitted with a foot-mounted, fan-cooled asynchronous motor. Pump and motor are mounted on a common base frame.

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 housing has both a priming and a drain hole closed by plugs. The impeller is a closed impeller with double-curved blades with smooth surfaces. The impeller is statically balanced according to ISO 1940-1 class G6.3 and hydraulically balanced to compensate for axial thrust.

Wear rings used in pump housing and for impeller are made of bronze/brass.

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.

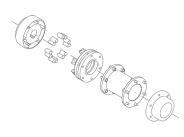
The shaft is made of stainless steel and has a diameter of 24 mm where the coupling is mounted.

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



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### 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 does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (I1/1).

### 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**

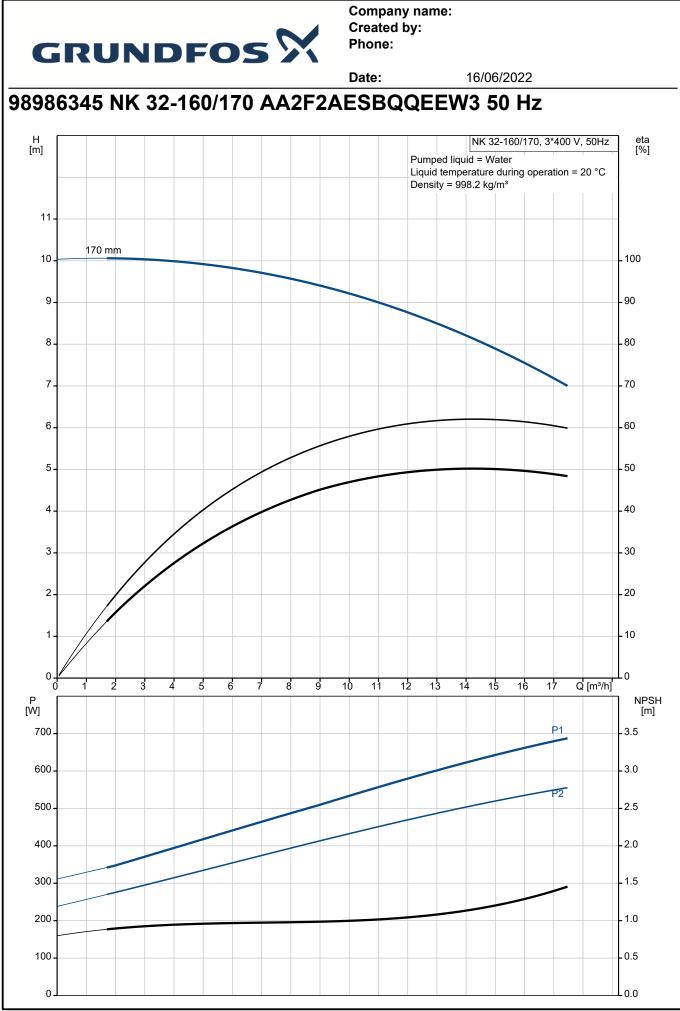
Controls: Frequency converter: Pressure sensor:	NONE N
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -25 120 °C 20 °C 998.2 kg/m³
Technical: Pump speed on which pump data Rated flow: Pump with motor (Yes/No): Rated head: Actual impeller diameter: Nominal impeller diameter: Code for shaft seal: Mechanical seal type: Curve tolerance: Bearing design:	a are based: 1440 rpm 14.7 m³/h Y 7.89 m 170 mm 160 BQQE Single ISO9906:2012 3B2 Standard
Materials: Pump housing:	Cast iron EN-GJL-250
Wear ring: Impeller:	ASTM class 35 Brass Cast iron EN-GJL-200
Internal pump house coating: Shaft:	ASTM class 30 CED Stainless steel EN 1.4301



Date:

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Qty.	Description	
		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 50
	Size of outlet connection:	DN 32
	Pressure rating for connection:	PN 16
	Coupling type:	Flexible w/spacer
	Base frame design:	EN/ISO
	Code for base frame: Grouting (Yes/No):	4 N
	Electrical data:	
	Motor type:	SIEMENS
	IE Efficiency class: Rated power - P2:	IE3 0.55 kW
	Mains frequency:	50 Hz
	Rated voltage:	3 x 220-240D/380-420Y V
	Rated current:	2.2/1.26 A
	Starting current:	590-590 %
	Cos phi - power factor:	0.78
	Rated speed:	1440 rpm
	Efficiency:	IE3 80,8%
	Motor efficiency at full load:	80.8-80.8 %
	Motor efficiency at 3/4 load:	81.1-81.1 %
	Motor efficiency at 1/2 load:	79.3-79.3 %
	Number of poles:	4
	Enclosure class (IEC 34-5):	IP55
	Insulation class (IEC 85): Motor No:	F 99901328
	Bearing insulation type N-end:	N
	Others: Minimum efficiency index, MEI ≥	: 0.60
	Net weight:	103 kg
	Gross weight:	117 kg
	Shipping volume:	0.279 m <sup>3</sup>
	Country of origin:	HU
	Custom tariff no.:	84137059



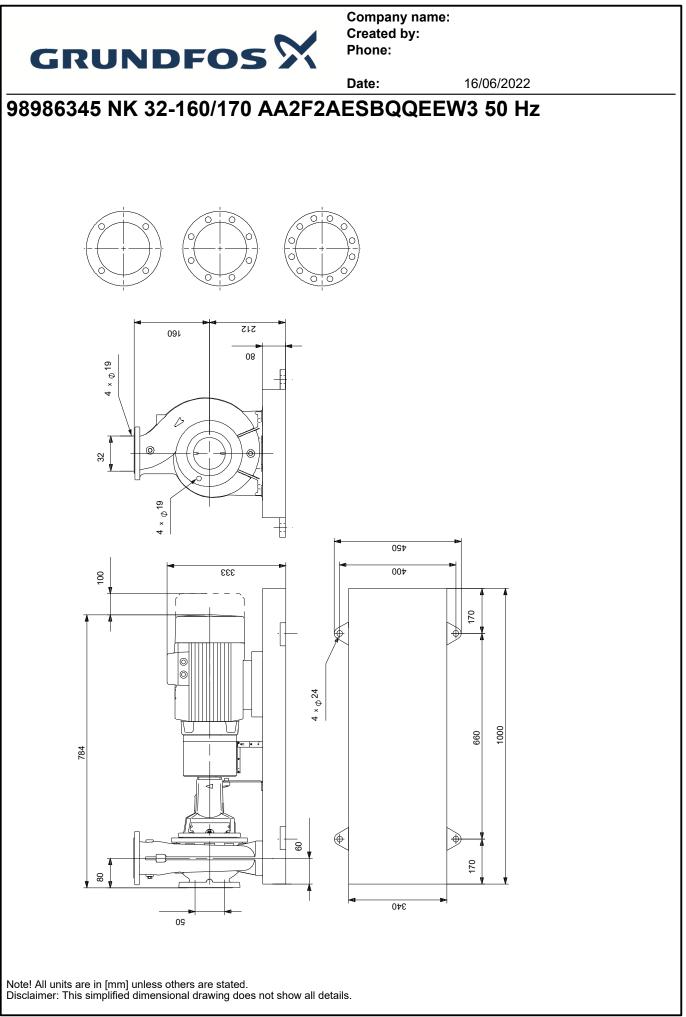


		Date: 16/06/2022
Description	Value	H [m] NK 32-160/170, 3*400 V, 50Hz eta [%]
General information:		Pumped liquid = Water Liquid temperature during operation = 20 °C
Product name:	NK 32-160/170 AA2F2AESBQQEEW3	11 - Density = 998.2 kg/m <sup>3</sup>
Product No:	98986345	10 - 100
EAN number:	5712604723173	9
Technical:		
Pump speed on which pump data are based:	1440 rpm	8- 770 -70
Rated flow:	14.7 m³/h	
Pump with motor (Yes/No):	Y	6
Rated head:	7.89 m	5 50
Actual impeller diameter:	170 mm	
Nominal impeller diameter:	160	4 - 40
Shaft diameter:	24 mm	3 30
Code for shaft seal:	BQQE	2 20
Mechanical seal type:	Single	
Curve tolerance:	ISO9906:2012 3B2	1 - 10
Pump version:	A2	
Bearing design:	Standard	0 2 4 6 8 10 12 14 Q [m³/h]
Materials:		P [W] P1 [m]
Pump housing:	Cast iron	
Pump housing:	EN-GJL-250	600 - 3.0
Pump housing:	ASTM class 35	500 2.5
Wear ring:	Brass	400 - 2.0
Impeller:	Cast iron	
Impeller:	EN-GJL-200	300 - 1.5
Impeller:	ASTM class 30	200 - 1.0
Internal pump house coating:	CED	100 - 0.5
Material code:	A	
Code for rubber:	E	
Shaft:	Stainless steel	
Shaft:	EN 1.4301	784
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 50	8 8 8
Size of outlet connection:	DN 32	
Pressure rating for connection:	PN 16	
Coupling type:	Flexible w/spacer	1000
Base frame design:	EN/ISO	
Code for base frame:	4	
Grouting (Yes/No):	Ν	LOW VOLTAGE DIRECTION OF ROTATION
Connect code:	F	
Liquid:		
Pumped liquid:	Water	
Liquid temperature range:	-25 120 °C	
Selected liquid temperature:	20 °C	
Density:	998.2 kg/m³	
Electrical data:		
Motor type:	SIEMENS	HIGH VOLTAGE DIRECTION OF ROTATION
IE Efficiency class:	IE3	
Rated power - P2:	0.55 kW	
Mains frequency:	50 Hz	
Rated voltage:	3 x 220-240D/380-420Y V	
Rated current:	2.2/1.26 A	
		<u>`</u>

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		Date:	16/06/2022
Description	Value		
Starting current:	590-590 %	-	
Cos phi - power factor:	0.78		
Rated speed:	1440 rpm		
Efficiency:	IE3 80,8%		
Motor efficiency at full load:	80.8-80.8 %		
Motor efficiency at 3/4 load:	81.1-81.1 %		
Motor efficiency at 1/2 load:	79.3-79.3 %		
Number of poles:	4		
Enclosure class (IEC 34-5):	IP55		
Insulation class (IEC 85):	F		
Built-in motor protection:	NONE		
Motor No:	99901328		
Bearing insulation type N-end:	Ν		
Controls:			
Frequency converter:	NONE		
Pressure sensor:	Ν		
Others:			
Minimum efficiency index, MEI ≥:	0.60		
Net weight:	103 kg		
Gross weight:	117 kg		
Shipping volume:	0.279 m³		
Country of origin:	HU		
Custom tariff no.:	84137059		

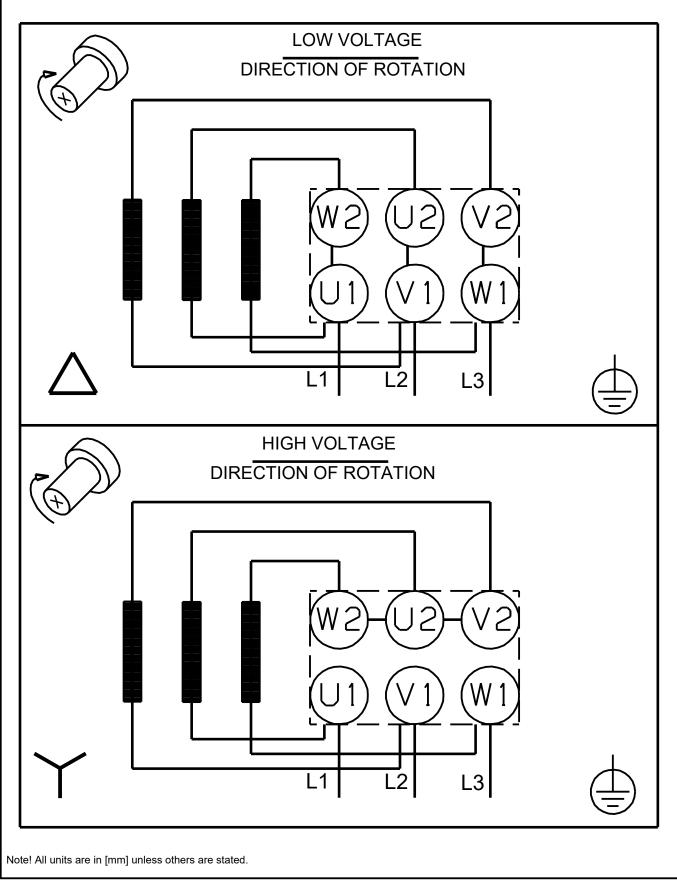




Date:

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98986345 NK 32-160/170 AA2F2AESBQQEEW3 50 Hz





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# Order Data:

Product name:NK 32-160/170Amount:1Product No:98986345

Total: Price on request