

**Date:** 16/06/2022

Qty. | Description

1 NK 32-200/219 AA2F2AESBQQENW1



Note! Product picture may differ from actual product

Product No.: 98663381

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.

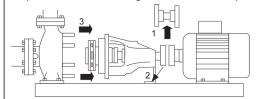
The pump is fitted with a foot-mounted, fan-cooled asynchronous motor. Pump and motor are mounted on a common base frame.

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.

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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)

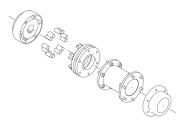
EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.

The shaft is made of stainless steel and has a diameter of 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 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.

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.

### 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: NONE Pressure sensor: N

Liquid:

Pumped liquid: Water
Liquid temperature range: -25 .. 120 °C
Selected liquid temperature: 20 °C
Density: 998.2 kg/m³

Technical:

Pump speed on which pump data are based: 2945 rpm

Rated flow: 36.15 m³/h

Pump with motor (Yes/No): Y

Rated head: 55.59 m
Actual impeller diameter: 219 mm
Nominal impeller diameter: 200
Code for shaft seal: BQQE
Mechanical seal type: Single

Curve tolerance: ISO9906:2012 3B

Bearing design: Standard

Materials:

Wear ring:

Pump housing: Cast iron

EN-GJL-250 ASTM class 35

Brass

Impeller: Cast iron EN-GJL-200



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ASTM class 30

Internal pump house coating: CED

Shaft: Stainless steel

EN 1.4301 AISI 304

Installation:

t max amb: 60 °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: 6
Grouting (Yes/No): N

Electrical data:

Motor type: 160MB
IE Efficiency class: IE3
Rated power - P2: 11 kW
Mains frequency: 50 Hz

Rated voltage: 3 x 380-415D/660-690Y V Rated current: 20,8-19,8/12,0-11,8 A

Starting current: 660-780 %
Cos phi - power factor: 0.88-0.84
Rated speed: 2940-2950 rpm
Efficiency: IE3 91,2%
Motor efficiency at full load: 91.2 %
Motor efficiency at 3/4 load: 91.8 %
Motor efficiency at 1/2 load: 91.3 %

Number of poles:

Enclosure class (IEC 34-5): 55 Dust/Jetting

Insulation class (IEC 85): F

Motor No: 87420024

Bearing insulation type N-end: STEEL BEARING

Others:

Minimum efficiency index, MEI ≥: 0.62

Net weight: 215 kg

Gross weight: 230 kg

Shipping volume: 0.466 m³

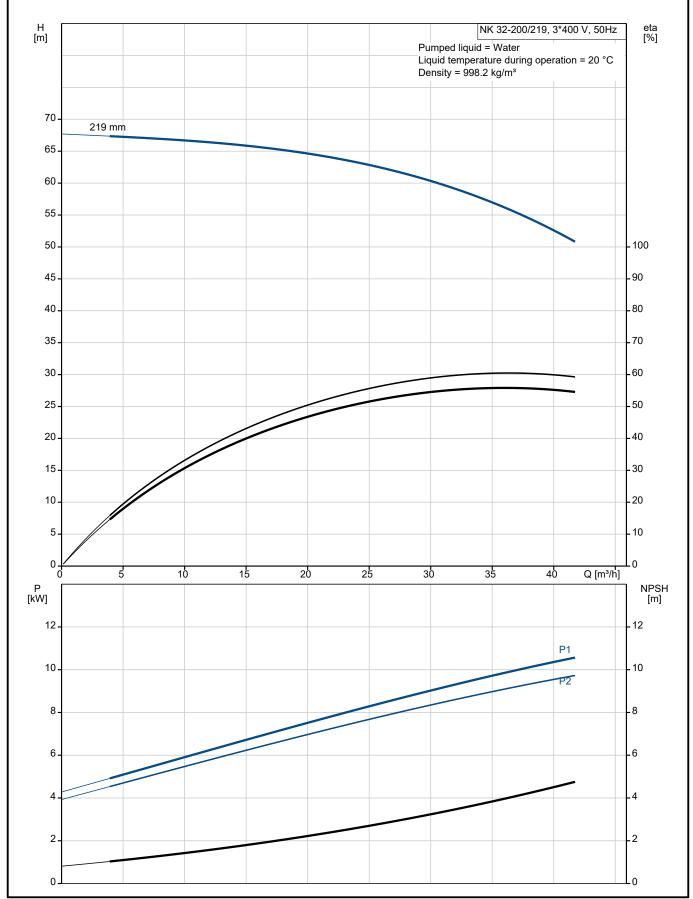
Country of origin: HU

Custom tariff no.: 84137059



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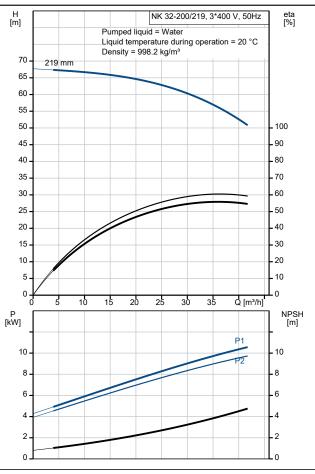
# 98663381 NK 32-200/219 AA2F2AESBQQENW1 50 Hz

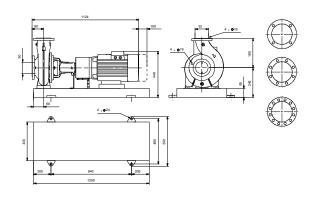


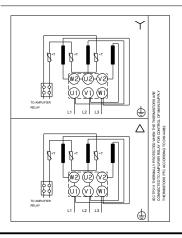


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Value
value
NK 32-200/219
AA2F2AESBQQENW1
98663381
5711499165808
2945 rpm
·
36.15 m³/h
Υ
55.59 m
219 mm
200
24 mm
BQQE
Single
ISO9906:2012 3B
A2
Standard
Cast iron
EN-GJL-250
ASTM class 35
Brass
Cast iron
EN-GJL-200
ASTM class 30
CED
Α
Е
Stainless steel
EN 1.4301
AISI 304
60 °C
16 bar
EN 1092-2
DIN
DIN
DN 50
DN 50 DN 32
DN 32
DN 32 PN 16
DN 32 PN 16 Flexible w/spacer
DN 32 PN 16 Flexible w/spacer EN/ISO
DN 32 PN 16 Flexible w/spacer EN/ISO 6
DN 32 PN 16 Flexible w/spacer EN/ISO 6 N
DN 32 PN 16 Flexible w/spacer EN/ISO 6 N
DN 32 PN 16 Flexible w/spacer EN/ISO 6 N F
DN 32 PN 16 Flexible w/spacer EN/ISO 6 N F Water -25 120 °C
DN 32 PN 16 Flexible w/spacer EN/ISO 6 N F Water -25 120 °C 20 °C
DN 32 PN 16 Flexible w/spacer EN/ISO 6 N F Water -25 120 °C
DN 32 PN 16 Flexible w/spacer EN/ISO 6 N F Water -25 120 °C 20 °C 998.2 kg/m³
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DN 32 PN 16 Flexible w/spacer EN/ISO 6 N F  Water -25 120 °C 20 °C 998.2 kg/m³  160MB IE3 11 kW 50 Hz
DN 32 PN 16 Flexible w/spacer EN/ISO 6 N F Water -25 120 °C 20 °C 998.2 kg/m³  160MB IE3 11 kW









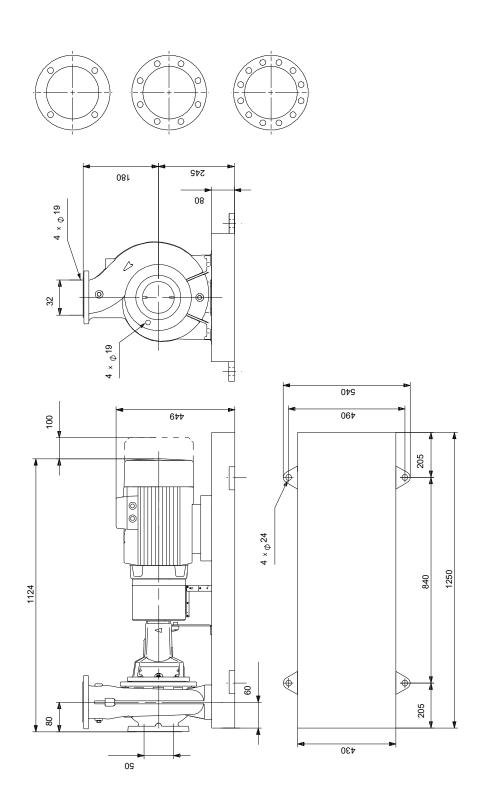
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Description	Value
Starting current:	660-780 %
Cos phi - power factor:	0.88-0.84
Rated speed:	2940-2950 rpm
Efficiency:	IE3 91,2%
Motor efficiency at full load:	91.2 %
Motor efficiency at 3/4 load:	91.8 %
Motor efficiency at 1/2 load:	91.3 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	87420024
Bearing insulation type N-end:	STEEL BEARING
Controls:	
Frequency converter:	NONE
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.62
Net weight:	215 kg
Gross weight:	230 kg
Shipping volume:	0.466 m³
Country of origin:	HU
Custom tariff no.:	84137059



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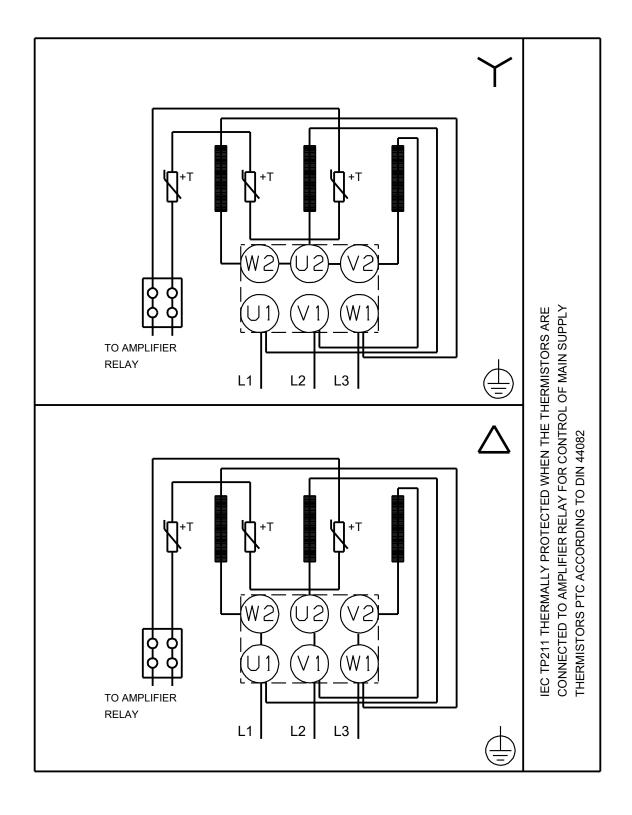


Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



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**Order Data:** 

Product name: NK 32-200/219

Amount: 1

Product No: 98663381

Total: Price on request