

**Date:** 16/06/2022

### Qty. | Description

#### 1 NKE 125-250/236 AA2F2AESBQQEOW3



Note! Product picture may differ from actual product

Product No.: On request

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.

The motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement.

An external sensor can be connected if controlled pump operation is required for flow, differential pressure or temperature control.

An operating panel on the motor terminal box enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The operating panel has indicator lights for "Operation" and "Fault".

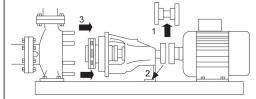
Communication with the pump is possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".

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.



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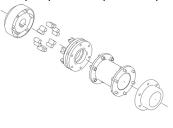
# Qty. | Description

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 32 mm where the coupling is mounted.

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



### **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 requires no external motor protection. The motor control unit incorporates protection against slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

The terminal box holds terminals for these connections:

- pump start/stop input (potential-free contact)
- remote setpoint setting via analog signal, 0-10 V, 0(4)-20 mA
- 10 V voltage supply for setpoint potentiometer, Imax = 5 mA
- one analog sensor input, 0-10 V, 0(4)-20 mA
- 24 V voltage supply for sensor, Imax = 40 mA
- one digital input
- two potential-free fault signal relays with changeover contact, reporting "Fault", "Operation" or "Ready"
- RS-485 GENIbus connection
- interface for Grundfos CIM fieldbus module.

# 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: Built-in 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: 1460 rpm

Rated flow: 237.6 m³/h

Pump with motor (Yes/No): Y

Rated head: 15.41 m
Actual impeller diameter: 236 mm
Nominal impeller diameter: 250
Code for shaft seal: BQQE
Mechanical seal type: Single

Curve tolerance: ISO9906:2012 3B2



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Qty. **Description** 

> Bearing design: Standard

Materials:

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**

Installation:

Range of ambient temperature: -20 .. 40 °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: 7 Grouting (Yes/No): Ν

Electrical data:

160LB Motor type: IE Efficiency class: IE3 Rated power - P2: 15 kW Mains frequency: 50 Hz 3 x 380-480 V Rated voltage: Rated current: 30.0-25.4 A Cos phi - power factor: 0.90-0.85 Rated speed: 240-1750 rpm Efficiency: IE3 92,1% Motor efficiency at full load: 92.1 % Number of poles: 4 Enclosure class (IEC 34-5): IP55

F

86906223

Others:

Motor No:

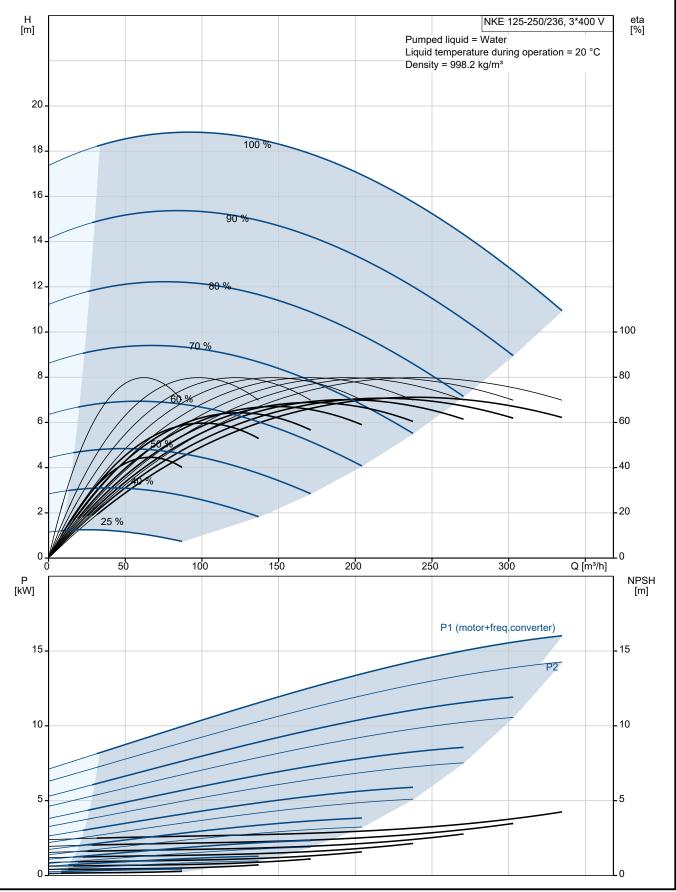
Insulation class (IEC 85):

Minimum efficiency index, MEI ≥: 0.57 Net weight: 417 kg Gross weight: 445 kg Shipping volume:  $0.841 \, m^3$ Country of origin: HU Custom tariff no .: 84137059



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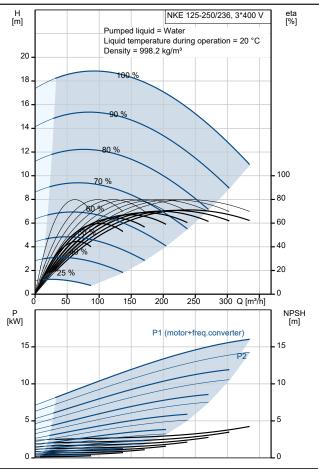
# On request NKE 125-250/236 AA2F2AESBQQEOW3 50 Hz

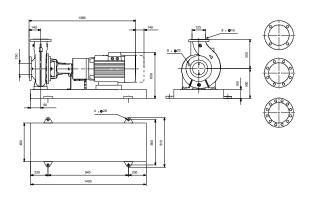


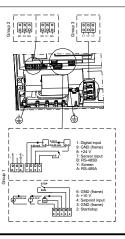


**Date:** 16/06/2022

Description	Value
General information:	
Product name:	NKE 125-250/236 AA2F2AESBQQEOW3
Product No:	On request
EAN number:	On request
Technical:	·
Pump speed on which pump data are based:	1460 rpm
Rated flow:	237.6 m³/h
Pump with motor (Yes/No):	Υ
Rated head:	15.41 m
Actual impeller diameter:	236 mm
Nominal impeller diameter:	250
Shaft diameter:	32 mm
Code for shaft seal:	BQQE
Mechanical seal type:	Single
Curve tolerance:	ISO9906:2012 3B2
Pump version:	A2
Bearing design:	Standard
Materials:	
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:	Ε
Shaft:	Stainless steel
Shaft:	EN 1.4301
Shaft:	AISI 304
Installation:	20 40 °C
Range of ambient temperature:	-20 40 °C
Range of ambient temperature:  Maximum operating pressure:	16 bar
Range of ambient temperature:  Maximum operating pressure:  Pipe connection standard:	16 bar EN 1092-2
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: Type of inlet connection:	16 bar EN 1092-2 DIN
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: Type of inlet connection: Type of outlet connection:	16 bar EN 1092-2 DIN
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: Type of inlet connection: Type of outlet connection: Size of inlet connection:	16 bar EN 1092-2 DIN DIN DN 150
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: Type of inlet connection: Type of outlet connection: Size of inlet connection: Size of outlet connection:	16 bar EN 1092-2 DIN DIN DN 150 DN 125
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: Type of inlet connection: Type of outlet connection: Size of inlet connection: Size of outlet connection: Pressure rating for connection:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: Type of inlet connection: Type of outlet connection: Size of inlet connection: Size of outlet connection: Pressure rating for connection: Coupling type:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: 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:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO
Range of ambient temperature:  Maximum operating pressure: Pipe connection standard: 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:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: Type of inlet connection: Type of outlet connection: Size of inlet connection: Size of outlet connection: Coupling type: Base frame design: Code for base frame: Grouting (Yes/No):	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: Type of inlet connection: Type of outlet connection: Size of inlet connection: Size of outlet connection: Coupling type: Base frame design: Code for base frame: Grouting (Yes/No): Connect code:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: 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: Grouting (Yes/No): Connect code: Liquid:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: Type of inlet connection: Type of outlet connection: Size of inlet connection: Size of outlet connection: Coupling type: Base frame design: Code for base frame: Grouting (Yes/No): Connect code:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7 N F
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: 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: Grouting (Yes/No): Connect code: Liquid: Pumped liquid:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7 N F
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: 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: Grouting (Yes/No): Connect code: Liquid: Pumped liquid: Liquid temperature range:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7 N F
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: 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: Grouting (Yes/No): Connect code: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7 N F  Water -25 120 °C 20 °C
Range of ambient temperature: Maximum operating pressure: Pipe connection standard: 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: Grouting (Yes/No): Connect code: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7 N F  Water -25 120 °C 20 °C
Range of ambient temperature:  Maximum operating pressure: Pipe connection standard: 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: Grouting (Yes/No): Connect code: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data:	16 bar EN 1092-2 DIN DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7 N F  Water -25 120 °C 20 °C 998.2 kg/m³
Range of ambient temperature:  Maximum operating pressure: Pipe connection standard: 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: Grouting (Yes/No): Connect code: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Motor type:	16 bar EN 1092-2 DIN DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7 N F  Water -25 120 °C 20 °C 998.2 kg/m³
Range of ambient temperature:  Maximum operating pressure: Pipe connection standard: 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: Grouting (Yes/No): Connect code: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Motor type: IE Efficiency class:	16 bar EN 1092-2 DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7 N F  Water -25 120 °C 20 °C 998.2 kg/m³
Range of ambient temperature:  Maximum operating pressure: Pipe connection standard: 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: Grouting (Yes/No): Connect code: Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density: Electrical data: Motor type: IE Efficiency class: Rated power - P2:	16 bar EN 1092-2 DIN DIN DIN DN 150 DN 125 PN 16 Flexible w/spacer EN/ISO 7 N F  Water -25 120 °C 20 °C 998.2 kg/m³









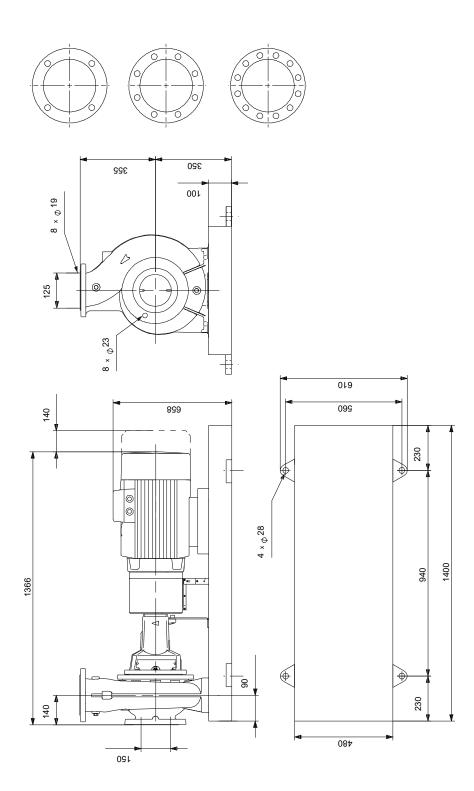
**Date:** 16/06/2022

Description	Value
Cos phi - power factor:	0.90-0.85
Rated speed:	240-1750 rpm
Efficiency:	IE3 92,1%
Motor efficiency at full load:	92.1 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	YES
Motor No:	86906223
Controls:	
Control panel:	Standard
Function Module:	PUMP I/O
Frequency converter:	Built-in
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.57
Net weight:	417 kg
Gross weight:	445 kg
Shipping volume:	0.841 m³
Country of origin:	HU
Custom tariff no.:	84137059



16/06/2022 Date:

# On request NKE 125-250/236 AA2F2AESBQQEOW3 50 Hz

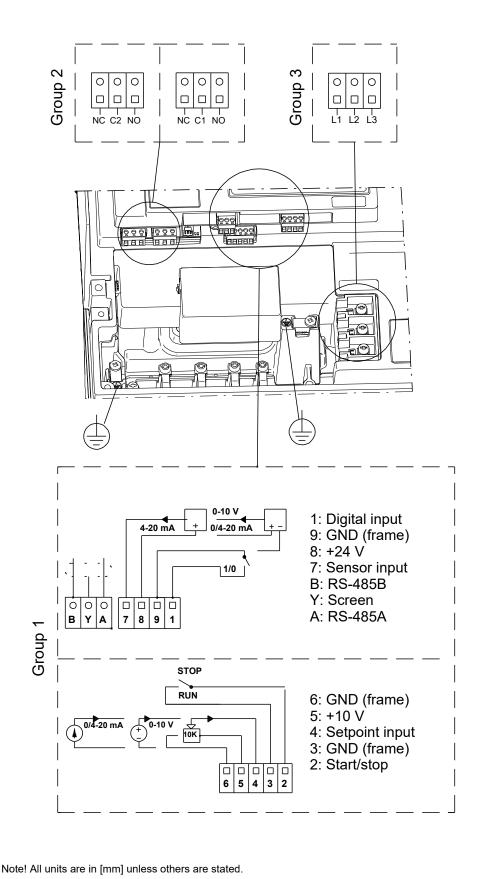


Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



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# On request NKE 125-250/236 AA2F2AESBQQEOW3 50 Hz





**Date:** 16/06/2022

Order Data:

Product name: NKE 125-250/236

Amount: 1

Product No: On request

Total: Price on request