

**Qty. Description**

1 NB 100-250/245 A-F-A-BAQE

**Note! Product picture may differ from actual product**Product No.: [98079773](#)

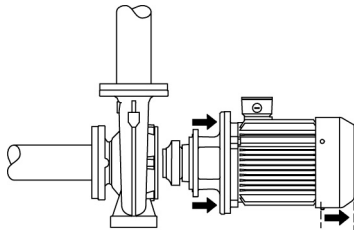
Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to EN 733 (10 bar).

Flanges are PN 16 with dimensions according to EN 1092-2. The pump has an axial suction port, radial discharge port, horizontal shaft and a back pull-out design enabling removal of the motor, motor stool, cover and impeller without disturbing the pump housing or pipework.

The unbalanced rubber bellows seal is according to DIN EN 12756.

The pump is close-coupled to a fan-cooled asynchronous motor.

The back pull-out design means that the pump can be serviced by a single person without disturbing the pump housing or pipes.



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.

## 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 or cast iron.

Motor stool and pump cover are made of cast iron (EN-GJL-250). Coupling guards are fitted to the motor stool. The pump cover is provided with a manual air vent screw for venting of the pump housing and the shaft seal chamber.

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.

Primary seal:

- Rotating seal ring material: carbon graphite, metal-impregnated
- Stationary seat material: silicon carbide (SiC)

This material pairing has a very good corrosion resistance and is especially suitable for water up to 120 °C. However, seal life will be reduced at temperatures above 90 °C. The material pairing is not recommended for liquids containing particles as this will result in heavy wear on the SiC face.

Secondary seal material: EPDM (ethylene-propylene rubber)

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

## 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 IE2 in accordance with IEC 60034-30.

Qty.	Description
	<p>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.</p> <p>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.</p> <p><b>Further product details</b></p> <p><b>Technical data</b></p> <p>Liquid:</p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: 0 .. 120 °C</p> <p>Selected liquid temperature: 20 °C</p> <p>Density at selected liquid temperature: 998.2 kg/m<sup>3</sup></p> <p><b>Technical:</b></p> <p>Pump speed on which pump data are based: 1460 rpm</p> <p>Rated flow: 148 m<sup>3</sup>/h</p> <p>Rated head: 18.1 m</p> <p>Actual impeller diameter: 245 mm</p> <p>Shaft seal arrangement: Single</p> <p>Code for shaft seal: BAQE</p> <p>Secondary shaft seal: NONE</p> <p>Curve tolerance: ISO 9906:1999 Annex A</p> <p>Bearing design: Standard</p> <p><b>Materials:</b></p> <p>Pump housing: Cast iron EN-GJL-250 A48-40 B</p> <p>Impeller: Cast iron EN-GJL-200 A48-30 B</p> <p><b>Installation:</b></p> <p>Maximum ambient temperature: 40 °C</p> <p>Pipe connection standard: EN 1092-2</p> <p>Size of inlet connection: DN 125</p> <p>Size of outlet connection: DN 100</p> <p>Pressure rating for pipe connection: PN 16</p> <p>Support block: NO</p> <p><b>Electrical data:</b></p> <p>Motor type: SIEMENS</p> <p>IE Efficiency class: IE2</p> <p>Rated power - P2: 11 kW</p> <p>Mains frequency: 50 Hz</p> <p>Rated voltage: 3 x 380-415D/660-690Y V</p> <p>Rated current: 20.4/11.8 A</p> <p>Starting current: 690-690 %</p> <p>Cos phi - power factor: 0.85</p> <p>Rated speed: 1460 rpm</p> <p>Number of poles: 4</p> <p>Enclosure class (IEC 34-5): 55 (Protect. water jets/dust)</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 83B15424</p>



Company name:

Created by:

Phone:

Date:

06/11/2019

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**Others:**

Minimum efficiency index, MEI : 0.42

Net weight: 180 kg

Gross weight: 201 kg

Shipping volume: 0.725 m<sup>3</sup>

Pipe connection standard: EN 1092-2