

Qty. Description

1 NB 40-125/105 AF2BBQQE

Product No.: [99803687](#)

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 product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013.

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: 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 pump housing has feet.

Motor

Qty.	Description
	<p>The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p>The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p>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).</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>Further product details</p> <p>Technical data</p> <p>Controls:</p> <p>Frequency converter: NONE</p> <p>Liquid:</p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: -25 .. 120 °C</p> <p>Selected liquid temperature: 20 °C</p> <p>Density: 998.2 kg/m³</p> <p>Technical:</p> <p>Pump speed on which pump data are based: 2860 rpm</p> <p>Rated flow: 36.69 m³/h</p> <p>Rated head: 9.726 m</p> <p>Actual impeller diameter: 105 mm</p> <p>Nominal impeller diameter: 125</p> <p>Shaft seal arrangement: Single</p> <p>Code for shaft seal: BQQE</p> <p>Curve tolerance: ISO9906:2012 3B2</p> <p>Bearing design: Standard</p> <p>Materials:</p> <p>Pump housing: Cast iron EN-GJL-250 ASTM class 35</p> <p>Wear ring: Brass</p> <p>Impeller: Bronze CuSn10-C</p> <p>Shaft: Stainless steel EN 1.4301 AISI 304</p> <p>Internal pump house coating: CED</p> <p>Installation:</p> <p>Maximum ambient temperature: 40 °C</p> <p>Maximum operating pressure: 16 bar</p> <p>Pipe connection standard: EN 1092-2</p> <p>Size of inlet connection: DN 65</p> <p>Size of outlet connection: DN 40</p> <p>Pipe connection standard: EN 1092-2</p> <p>Pressure rating for connection: PN 16</p> <p>Pump housing with feet: Yes</p> <p>Support block: N</p> <p>Electrical data:</p> <p>Motor type: WEG</p> <p>IE Efficiency class: IE3</p>



Company name:

Created by:

Phone:

Date:

23/04/2021

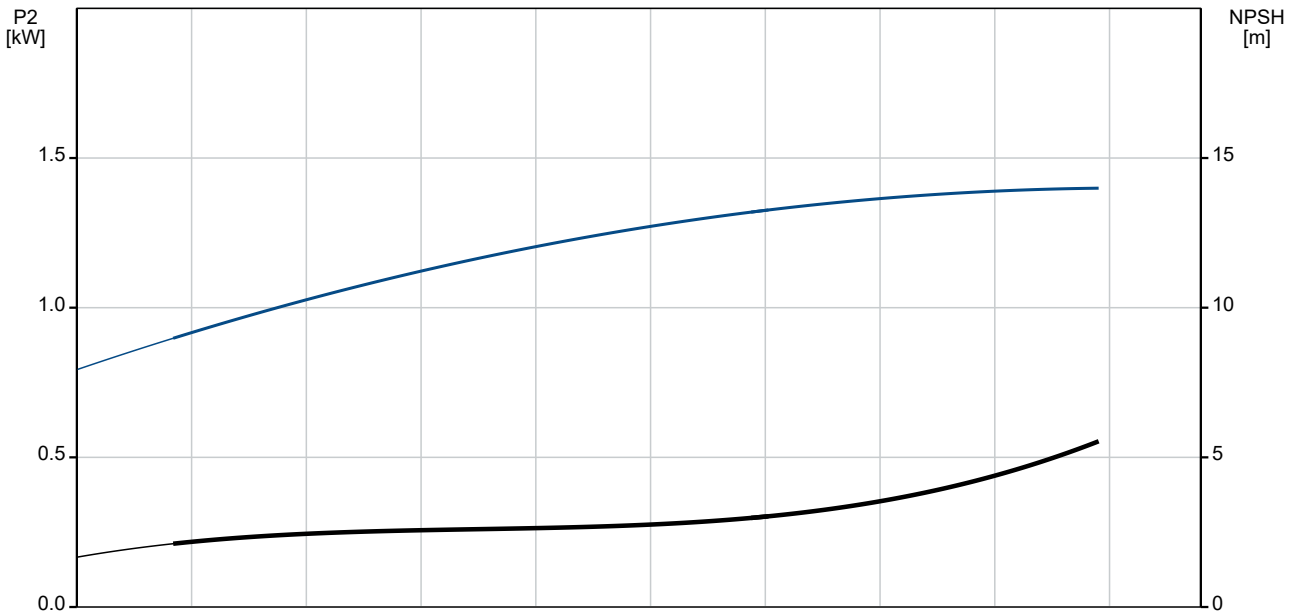
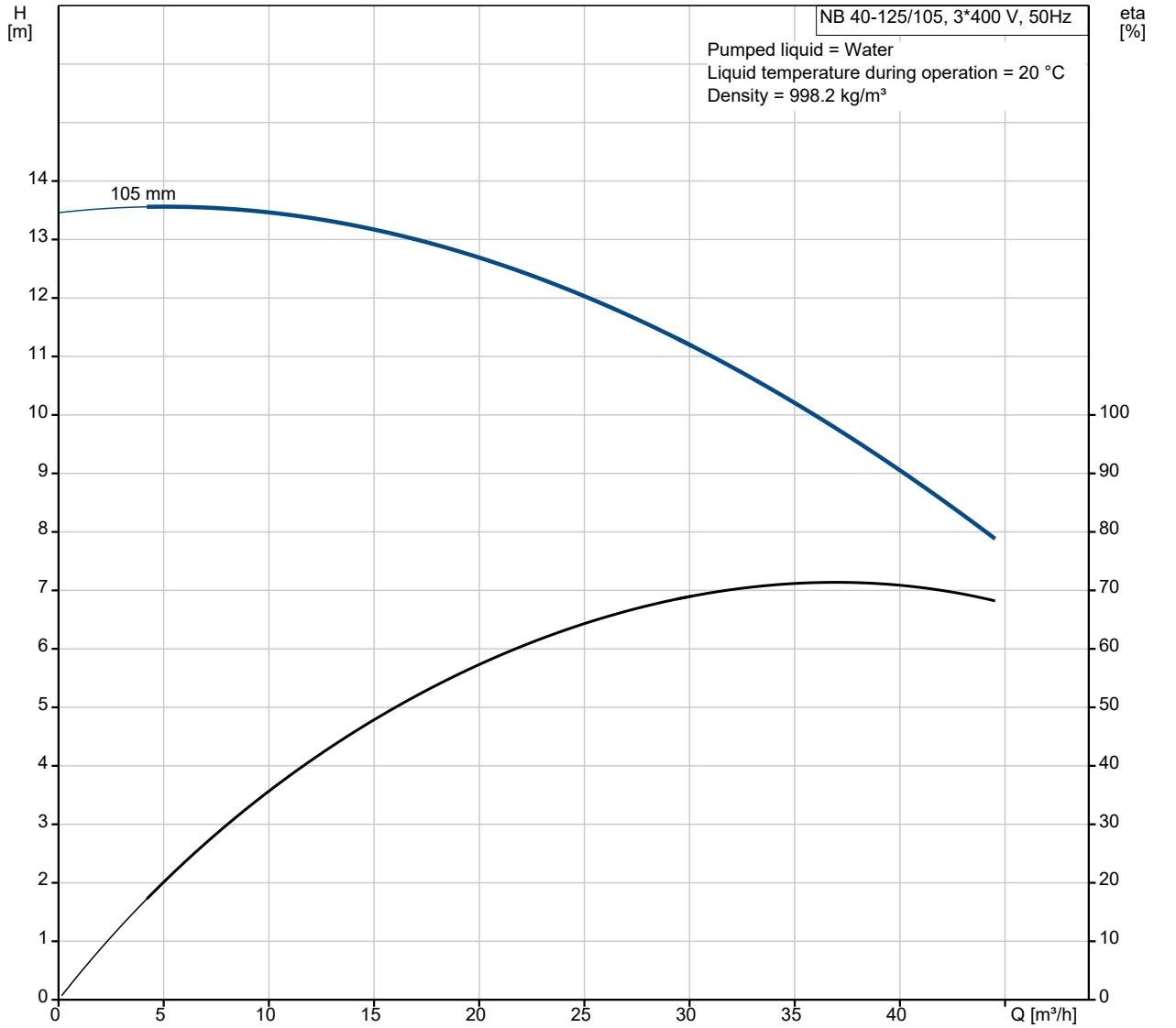
Qty.	Description
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Rated power - P2:	1.5 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240/380-415 V
Rated current:	5,49-3,18/5,29-3,06 A
Cos phi - power factor:	0.85
Rated speed:	2860 rpm
Efficiency:	IE3 84,4%
Motor efficiency at full load:	84.4-85.2 %
Motor efficiency at 3/4 load:	85-84.8 %
Number of poles:	2
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor No:	99737174

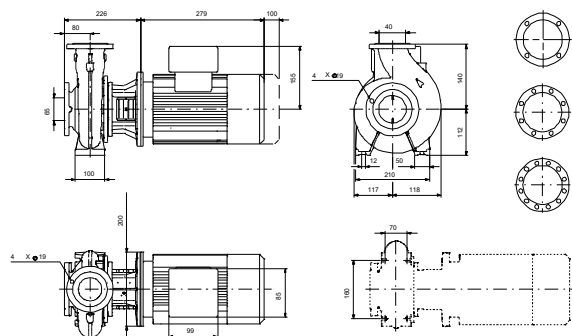
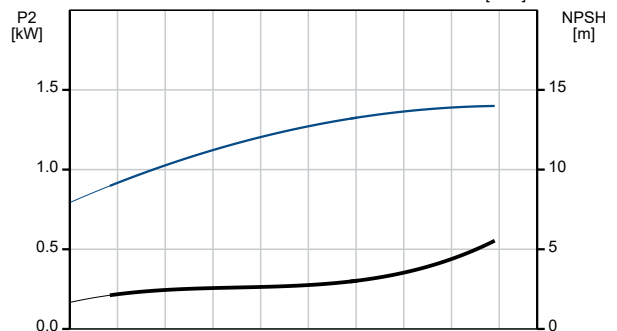
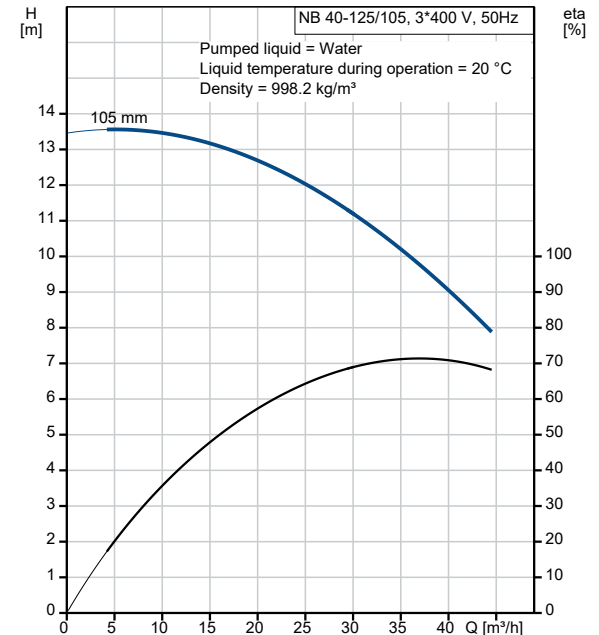
Others:

Minimum efficiency index, MEI \geq :	0.70
Net weight:	47 kg
Gross weight:	57 kg
Shipping volume:	0.134 m ³
Country of origin:	CN
Custom tariff no.:	8413709062

99803687 NB 40-125/105 AF2BBQQE 50 Hz



Description	Value
General information:	
Product name:	NB 40-125/105 AF2BBQQE
Product No:	99803687
EAN number:	5713834527821
Price:	
Technical:	
Pump speed on which pump data are based:	2860 rpm
Rated flow:	36.69 m ³ /h
Rated head:	9.726 m
Maximum head:	13.5 m
Actual impeller diameter:	105 mm
Nominal impeller diameter:	125
Shaft seal arrangement:	Single
Shaft diameter:	24 mm
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B2
Pump version:	A
Bearing design:	Standard
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM class 35
Wear ring:	Brass
Impeller:	Bronze
Impeller:	CuSn10-C
Shaft:	Stainless steel
Shaft:	EN 1.4301
Shaft:	AISI 304
Internal pump house coating:	CED
Material code:	B
Code for rubber:	E
Installation:	
Maximum ambient temperature:	40 °C
Maximum operating pressure:	16 bar
Pipe connection standard:	EN 1092-2
Size of inlet connection:	DN 65
Size of outlet connection:	DN 40
Pipe connection standard:	EN 1092-2
Pressure rating for connection:	PN 16
Pump housing with feet:	Yes
Support block:	N
Connect code:	F2
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m ³
Electrical data:	
Motor type:	WEG
IE Efficiency class:	IE3
Rated power - P2:	1.5 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240/380-415 V
Rated current:	5,49-3,18/5,29-3,06 A
Cos phi - power factor:	0.85
Rated speed:	2860 rpm
Efficiency:	IE3 84,4%





Company name:

Created by:

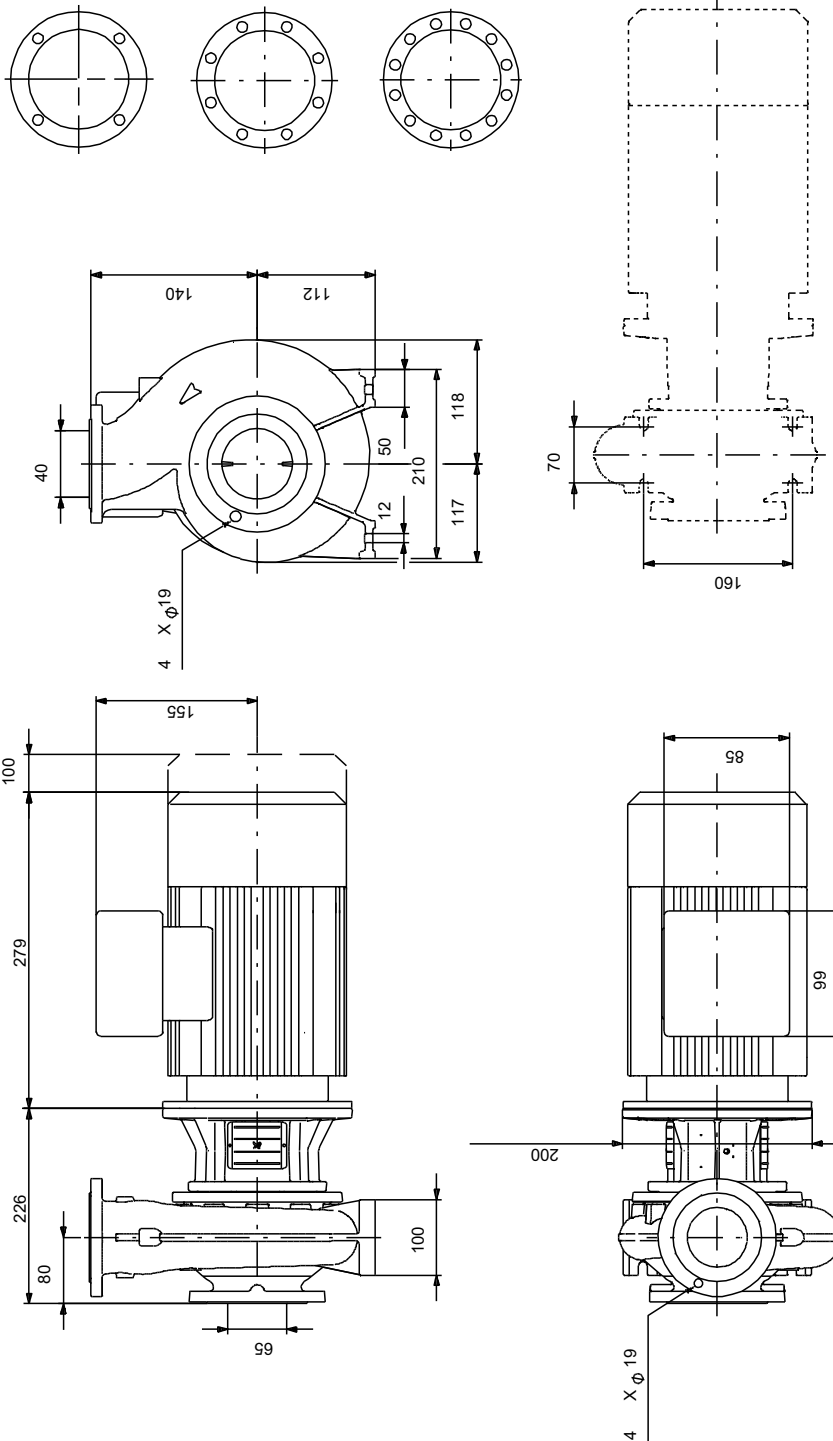
Phone:

Date:

23/04/2021

Description	Value
Motor efficiency at full load:	84.4-85.2 %
Motor efficiency at 3/4 load:	85-84.8 %
Number of poles:	2
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protec:	NONE
Motor No:	99737174
Mount. design. acc. IEC 34-7:	IM B5
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	47 kg
Gross weight:	57 kg
Shipping volume:	0.134 m ³
Country of origin:	CN
Custom tariff no.:	8413709062

99803687 NB 40-125/105 AF2BBQQE 50 Hz



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



Company name:

Created by:

Phone:

Date:

23/04/2021

Order Data:

Product name: NB 40-125/105

Amount: 1

Product No: 99803687

Price:

Total: Price on request
