

NBE125-315/275 AS-F2-A-BQQE

Grundfos pump 99042637



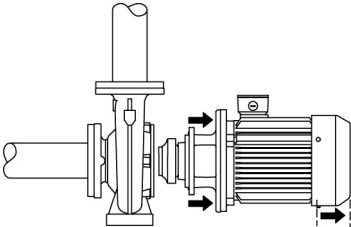
Thank you for your interest in our products. Please contact us for more information, or visit our website

<https://www.lenntech.com/grundfos/NBE00/99042637/NBE-125-315-275-AS-F2-A-E-BQQE.html>

info@lenntech.com

tel. +31 152 610 900

fax. +31 152 616 289

Position	Qty.	Description
	1	NBE 125-315/275 AS-F2-A-E-BQQE  Product No.: On request 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 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. Further product details 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". The back pull-out design means that the pump can be serviced by a single person without disturbing the pump housing or pipe work.  The pump is to be secured to the foundation with bolts through the pump housing feet and motor feet. The pump is delivered with steel support blocks to be fitted under the motor feet during installation, thus enabling horizontal alignment of the pump and ensuring a minimum clearance of 5 mm between the motor stool/motor flange and the foundation. 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. An integral part of the process is a pretreatment. The entire process consists of these elements: 1) Alkaline-based cleaning. 2) Zinc phosphating. 3) Cathodic electro-deposition. 4) Curing to a dry film thickness 18-22 my m. The colour code for the finished product is NCS 9000/RAL 9005. 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.

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.

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, I_{max} = 5 mA
- one analog sensor input, 0-10 V, 0(4)-20 mA
- 24 V voltage supply for sensor, I_{max} = 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.

Technical data

Liquid:

Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m ³

Technical:

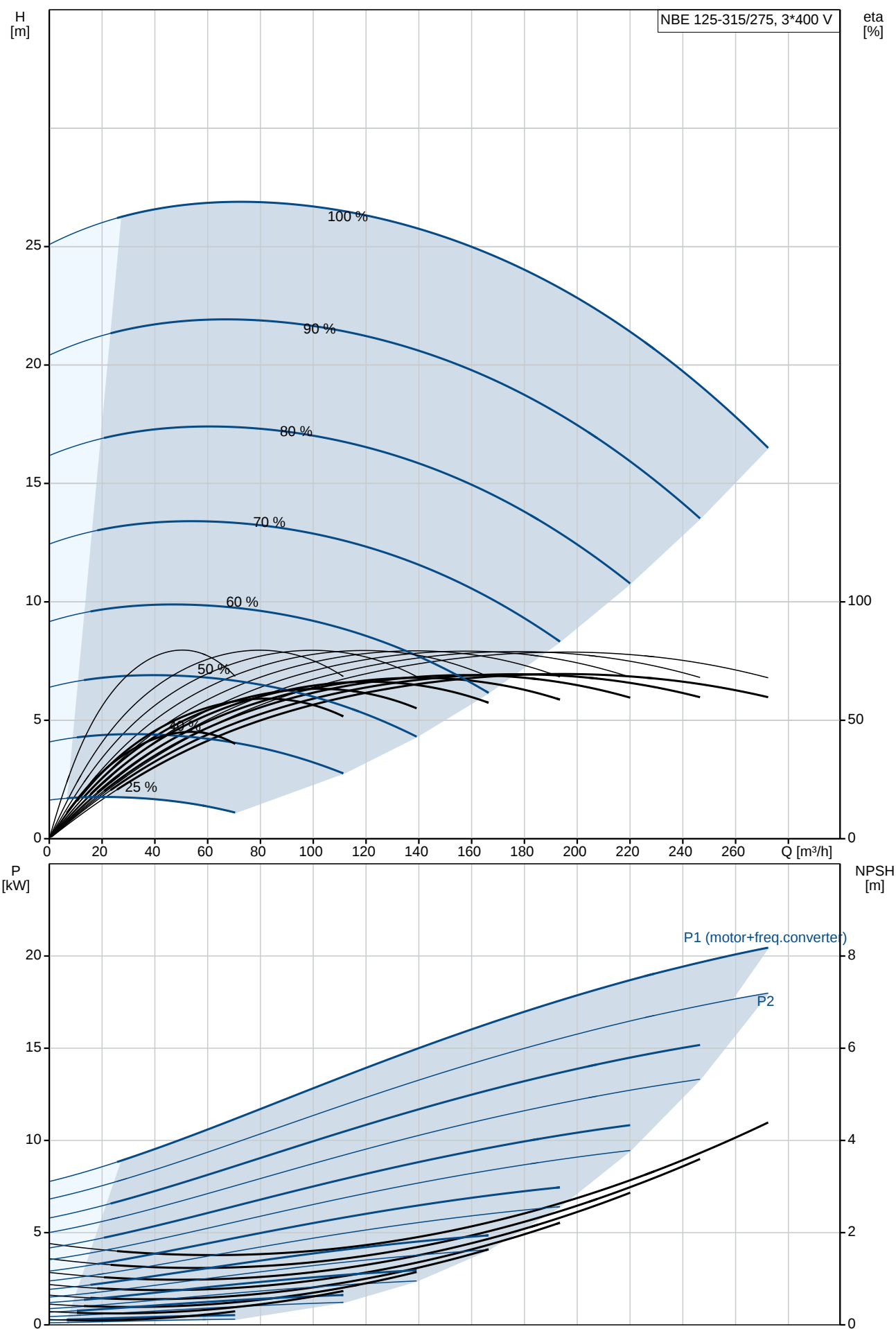
Rated flow:	196 m ³ /h
Rated head:	22.5 m
Actual impeller diameter:	275 mm
Impeller nom:	315 mm
Primary shaft seal:	BQQE
Secondary shaft seal:	NONE
Curve tolerance:	ISO9906:2012 3B

Materials:

Pump housing:	Cast iron EN-GJL-250 ASTM A48-40 B
Impeller:	Cast iron EN-GJL-200 ASTM A48-30 B
Shaft:	Stainless steel 1.4301 304
Rubber:	EPDM
Wear ring mat.:	High alloy brass(CuZn34Mn3Al2

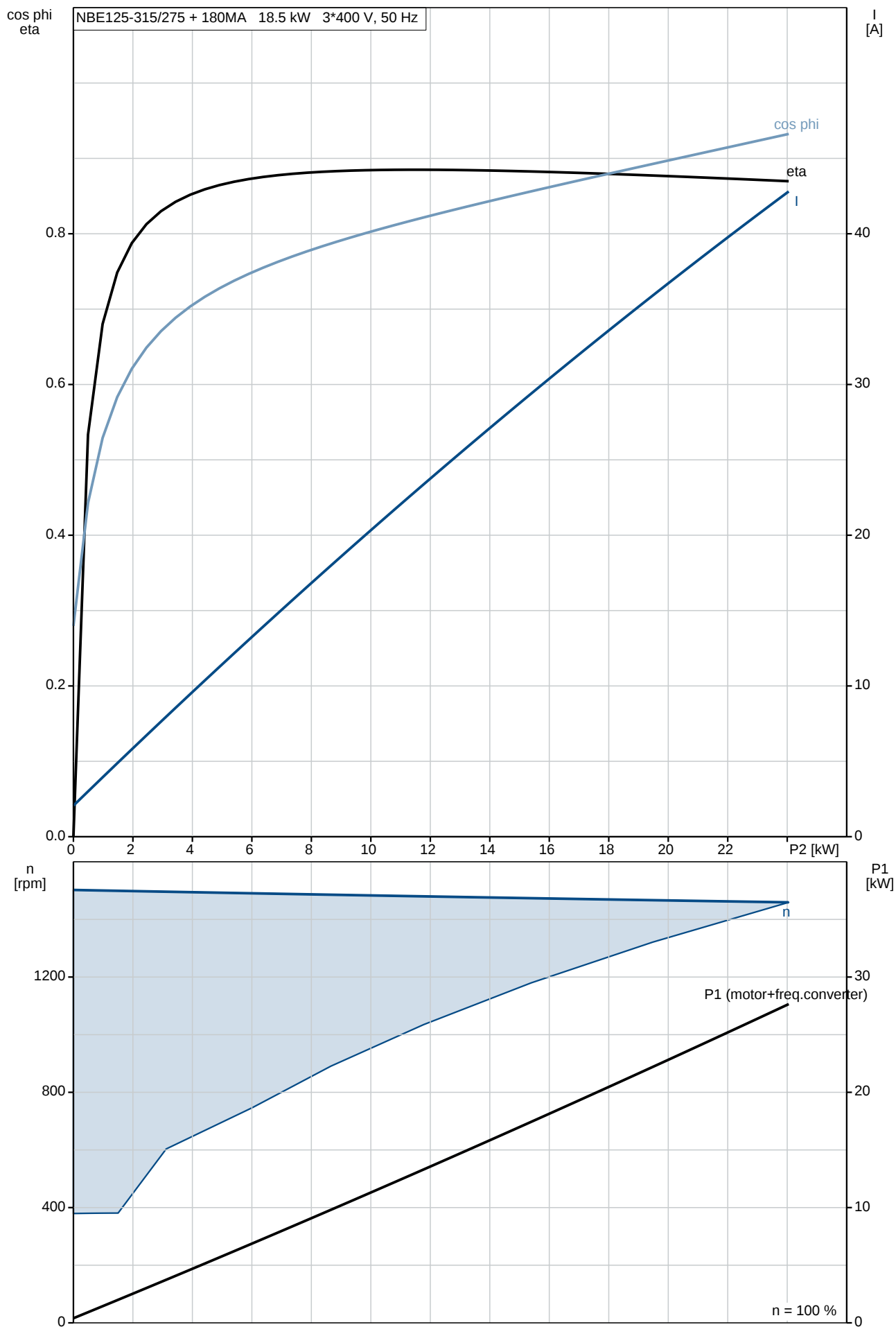
Position	Qty.	Description
		Installation: Maximum ambient temperature: 40 °C Maximum operating pressure: 16 bar Flange standard: EN 1092-2 Pump inlet: DN 150 Pump outlet: DN 125 Pressure rating: PN 16 Electrical data: Motor type: 180MA IE Efficiency class: IE2 Rated power - P2: 18.5 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-480 V Rated current: 37.0-30.0 A Cos phi - power factor: 0.91-0.88 Rated speed: 240-1750 rpm Efficiency: IE2 91,2% Number of poles: 4 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Lubricant type: Grease Others: Minimum efficiency index, MEI ≥: 0.68 ErP status: EuP Standalone/Prod. Net weight: 339 kg Gross weight: 371 kg Shipping volume: 0.951 m³

On request NBE 125-315/275 AS-F2-A-E-BQQE 50 Hz

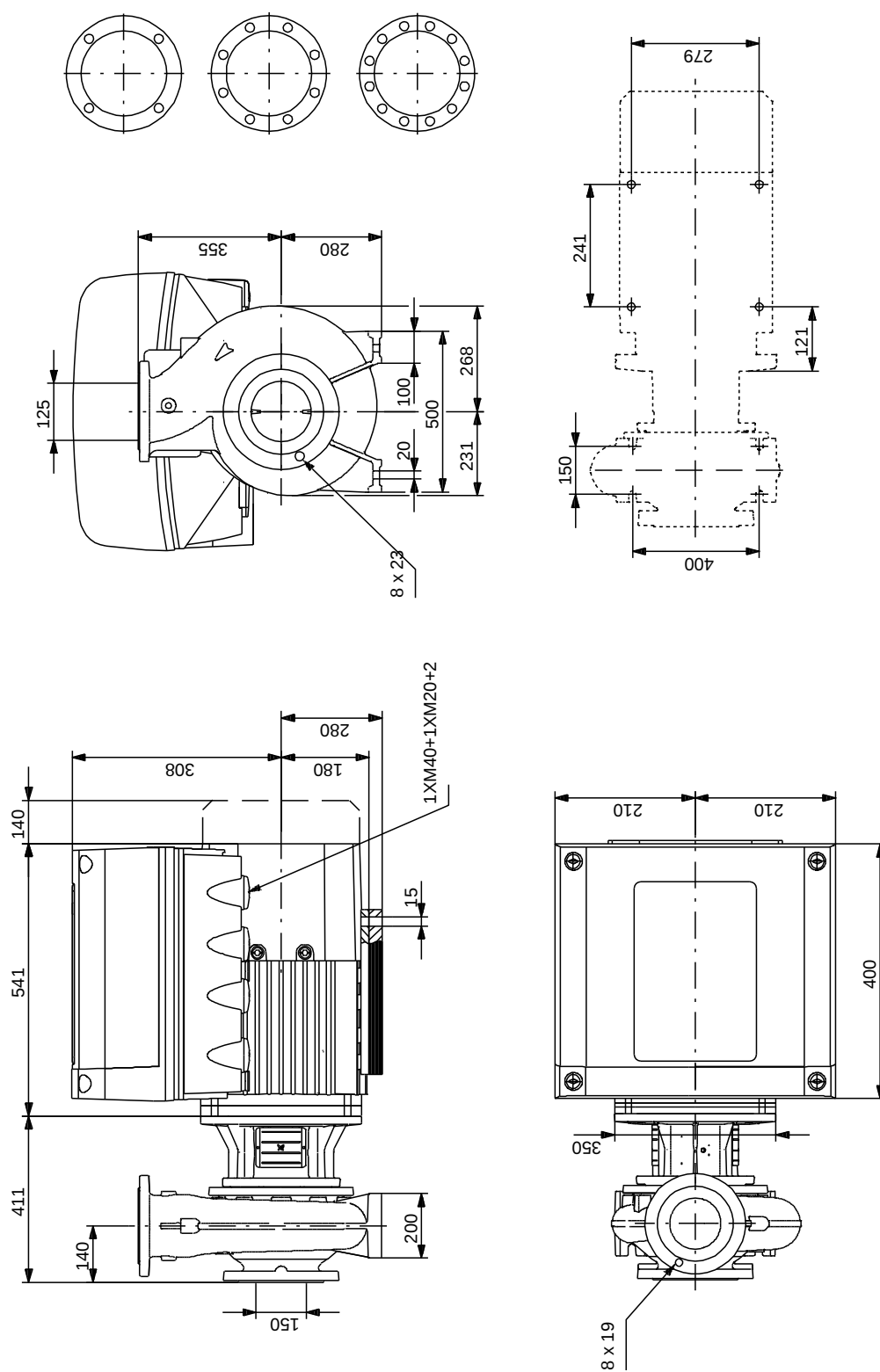


Description	Value
Others:	
Minimum efficiency index, MEI ≥:	0.68
ErP status:	EuP Standalone/Prod.
Net weight:	339 kg
Gross weight:	371 kg
Shipping volume:	0.951 m ³
Config. file no:	95139421

On request NBE 125-315/275 AS-F2-A-E-BQQE 50 Hz



On request NBE 125-315/275 AS-F2-A-E-BQQE 50 Hz



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

Exploded view



Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

Exploded view (TM057026 for MGE model H/I)



Parts list NBE 125-315/275, Product No. On request
Valid from 1.3.2010 (1009)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
+	Motor				1	pcs
-	Nut				1	pcs
66	Washer				1	
66a	Spring lock washer				1	
67	Nut		Thread: M25		1	
-	Motor stool cpl.				1	pcs
1a	Motor stool				1	
7	Coupling guard				2	
77a	Pan head screw				4	
-	Pump housing cpl.				1	pcs
6	Pump housing				1	
66a	Nut		Thread: M12		14	
-	Shaft cpl.				1	pcs
9	Socket set screw		Length (mm): 6 Thread: M8		2	
11	Key				1	
51	Stub shaft				1	
49	Impeller		Outer diameter: 275		1	pcs
72.a	O-ring		Diameter: 329,79 Material type: EPDM Thickness: 3,53		1	pcs
-	77 Cover				1	pcs
66a	Nut		Thread: M12		10	
77	Cover				1	
105	Shaft seal				1	pcs

Disclaimer: The information about the Grundfos pump in this document may be outdated.

Data may be subject to alterations without further notice.

Please contact us to verify the data above is still accurate/up-to-date.

All information is copyright Grundfos.



info@lenntech.com

<https://www.lenntech.com>

tel. +31 152 610 900

fax. +31 152 616 289