

Submittal Data

PROJECT:	UNIT TAG:	QUANTITY:
REPRESENTATIVE: _____	TYPE OF SERVICE:	DATE: _____
ENGINEER:	SUBMITTED BY:	DATE:
CONTRACTOR:	APPROVED BY:	DATE:
	ORDER NO.:	DATE:

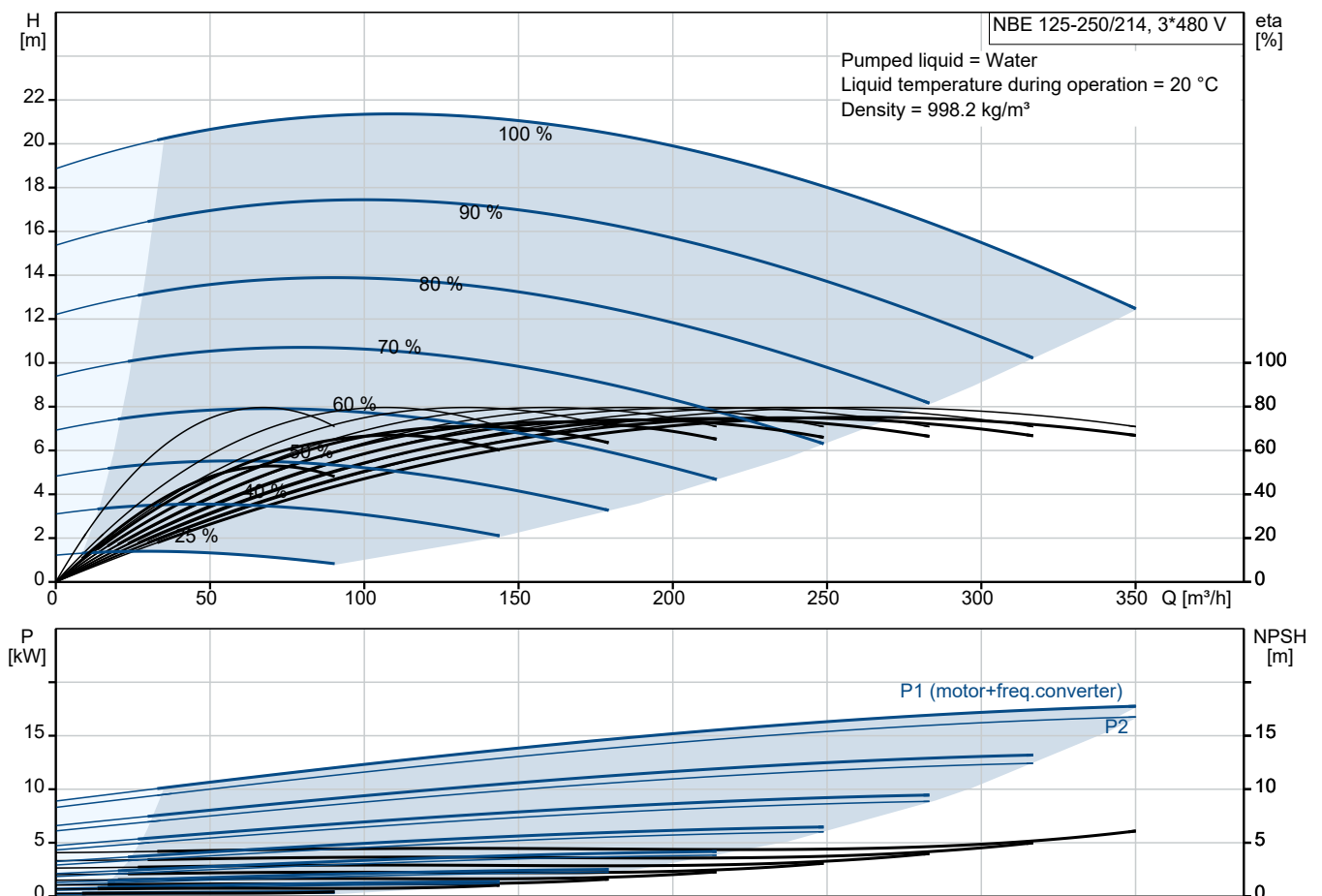
NBE 125-250/214 AAF2LESBQQEPWA

End-suction close-coupled pumps according to EN733 with frequency-controlled motors.

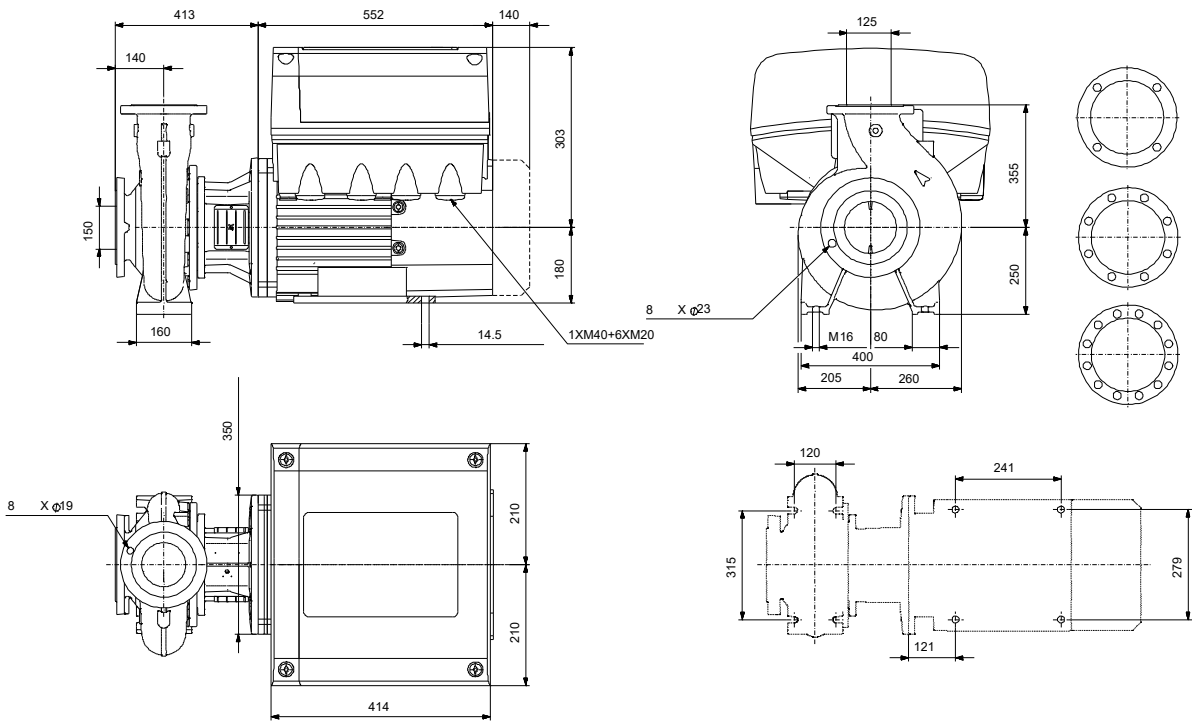


Note! Product picture may differ from actual product

Conditions of Service		Pump Data		Motor Data	
Liquid:	Water	Liquid temperature range:	-25 .. 120 °C	Rated voltage:	380-480 V
Temperature:	20 °C	Maximum ambient temperature:	50 °C	Mains frequency:	60 Hz
Specific Gravity:	1.000	Shaft seal:	BQQE	Enclosure class:	IP55
		Product number:	On request	Insulation class:	F
				Motor protection:	ELEC
				Eta 1/1:	93.2 %



Submittal Data



Materials:

Pump housing: Stainless steel
Pump housing: ASTM CD4MCuN
Impeller: Stainless steel
Impeller: ASTM CD4MCuN
Impeller: EN 1.4517
Material code: L
Code for rubber: E

Qty. Description

1 NBE 125-250/214 AAF2LESBQQEPWA



Note! Product picture may differ from actual product

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 1092-1. 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, permanent-magnet synchronous 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. An external sensor can be connected if controlled pump operation is required for flow, differential pressure or temperature control.

The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.

The display gives an intuitive and user-friendly interface to all functions.

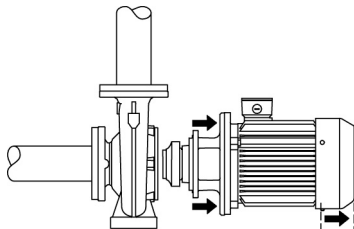
The push-buttons are used to navigate through the menu structure to access pump and performance data on site and enable setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop".

The Grundfos Eye indicator on the operating panel provides visual indication of pump status:

- "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights)
- "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)
- "Alarm": Motor has stopped (flashing red indicator lights).

Communication with the pump is also 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 pipes.



Pump

The motor stool is made of cast iron (EN-GJL-250) and the pump cover is made of stainless steel (EN 1.4517). Coupling guards are fitted to the motor stool.

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.

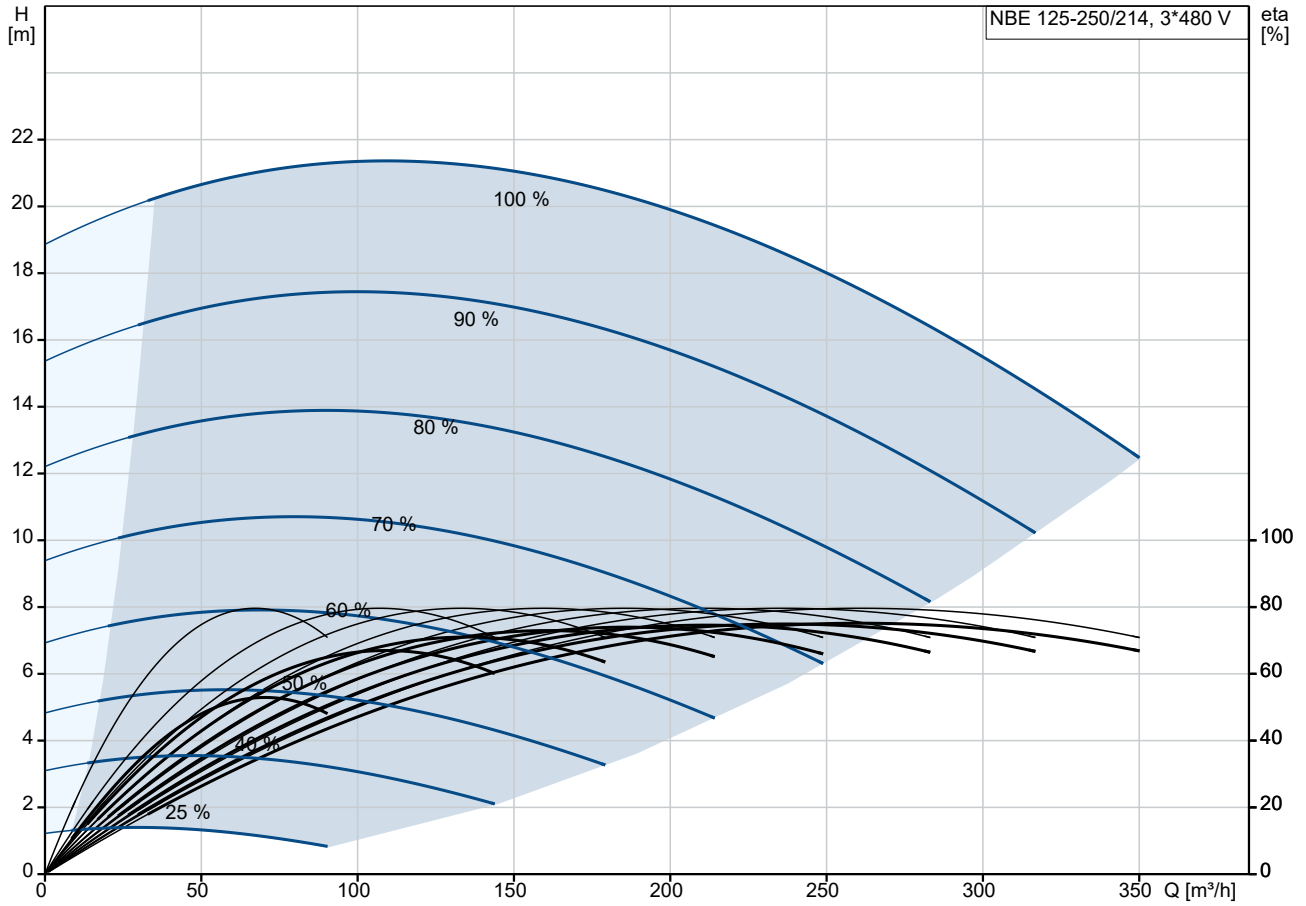
Seal faces:

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

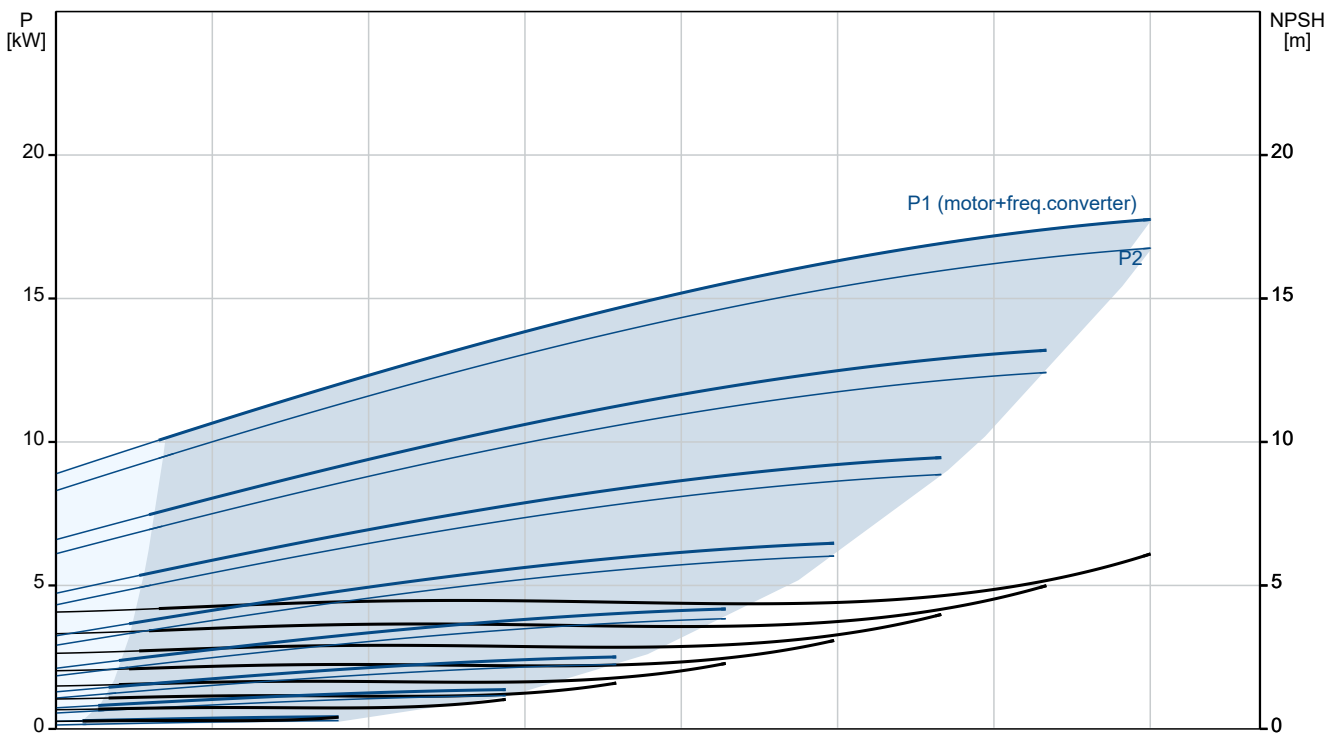
Qty.	Description																																		
1	<p>This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.</p> <p>Secondary seal material: EPDM (ethylene-propylene rubber) EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils. The pump housing has feet. The pump has loose flanges. The loose flanges are made of cast iron (EN-GJS-500-7/ASTM 70-50-05). The language on the pump nameplate is English.</p> <p>Motor</p> <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 IE5 in accordance with IEC 60034-30-2.</p> <p>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.</p> <p>The terminal box holds terminals for these connections:</p> <ul style="list-style-type: none"> • one dedicated digital input • two analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V • 5 V voltage supply to potentiometer and sensor • one configurable digital input or open-collector output • Grundfos Digital Sensor input and output • 24 V voltage supply for sensors • two signal-relay outputs (potential-free contacts) • GENibus connection • interface for Grundfos CIM fieldbus module. <p>Further product details</p> <p>Technical data</p> <p>Controls:</p> <table data-bbox="201 1332 638 1400"> <tr> <td>Frequency converter:</td> <td>Built-in</td> </tr> <tr> <td>Pressure sensor:</td> <td>N</td> </tr> </table> <p>Liquid:</p> <table data-bbox="201 1444 702 1579"> <tr> <td>Pumped liquid:</td> <td>Water</td> </tr> <tr> <td>Liquid temperature range:</td> <td>-25 .. 120 °C</td> </tr> <tr> <td>Selected liquid temperature:</td> <td>20 °C</td> </tr> <tr> <td>Density:</td> <td>998.2 kg/m³</td> </tr> </table> <p>Technical:</p> <table data-bbox="201 1635 813 1915"> <tr> <td>Pump speed on which pump data are based:</td> <td>1737 rpm</td> </tr> <tr> <td>Rated flow:</td> <td>266 m³/h</td> </tr> <tr> <td>Rated head:</td> <td>17.04 m</td> </tr> <tr> <td>Actual impeller diameter:</td> <td>214 mm</td> </tr> <tr> <td>Nominal impeller diameter:</td> <td>250</td> </tr> <tr> <td>Shaft seal arrangement:</td> <td>Single</td> </tr> <tr> <td>Code for shaft seal:</td> <td>BQQE</td> </tr> <tr> <td>Curve tolerance:</td> <td>ISO9906:2012 3B</td> </tr> <tr> <td>Bearing design:</td> <td>Standard</td> </tr> </table> <p>Materials:</p> <table data-bbox="201 1971 758 2094"> <tr> <td>Pump housing:</td> <td>Stainless steel EN 1.4517 ASTM CD4MCuN</td> </tr> <tr> <td>Wear ring:</td> <td>Stainless steel</td> </tr> </table>	Frequency converter:	Built-in	Pressure sensor:	N	Pumped liquid:	Water	Liquid temperature range:	-25 .. 120 °C	Selected liquid temperature:	20 °C	Density:	998.2 kg/m ³	Pump speed on which pump data are based:	1737 rpm	Rated flow:	266 m ³ /h	Rated head:	17.04 m	Actual impeller diameter:	214 mm	Nominal impeller diameter:	250	Shaft seal arrangement:	Single	Code for shaft seal:	BQQE	Curve tolerance:	ISO9906:2012 3B	Bearing design:	Standard	Pump housing:	Stainless steel EN 1.4517 ASTM CD4MCuN	Wear ring:	Stainless steel
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Wear ring:	Stainless steel																																		

Qty.	Description
1	<p> Flange: Cast iron EN-GJS-500-7 ASTM 70-50-05 </p> <p> Impeller: Stainless steel EN 1.4517 ASTM CD4MCuN </p> <p> Internal pump house coating: No coating </p> <p> Shaft: Stainless steel EN 1.4462 SAF 2205 </p> <p> Installation: Range of ambient temperature: -20 .. 50 °C Maximum operating pressure: 16 bar Pipe connection standard: EN 1092-1 Size of inlet connection: DN 150 Size of outlet connection: DN 125 Pressure rating for connection: PN 16 Bearing lubrication: Grease Pump housing with feet: Yes Support block (Yes/No): N </p> <p> Electrical data: Rated power - P2: 18.5 kW Mains frequency: 60 Hz Rated voltage: 3 x 380-480 V Rated current: 33.2-26.9 A Cos phi - power factor: 0.94-0.93 Rated speed: 180-2200 rpm IE Efficiency class: IE5 Motor efficiency at full load: 93.2 % Number of poles: 4 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 92875538 Bearing insulation type N-end: Steel Bearing </p> <p> Others: Minimum efficiency index, MEI ≥: 0.62 DOE Pump Energy Index VL: 0.61 Net weight: 258 kg Gross weight: 290 kg Shipping volume: 0.951 m³ Country of origin: HU Custom tariff no.: 84137051 Language on pump nameplate: GB </p>

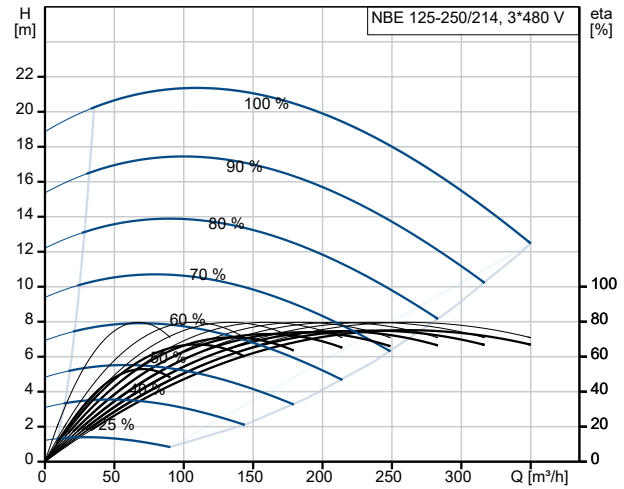
On request NBE 125-250/214 AAF2LESBQQEPA 60 Hz



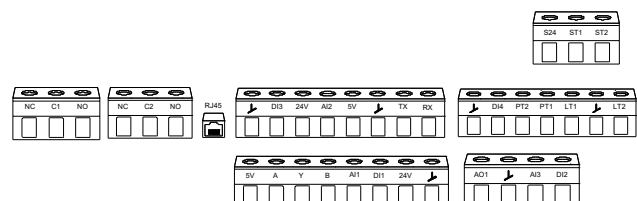
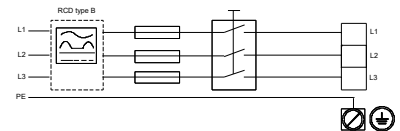
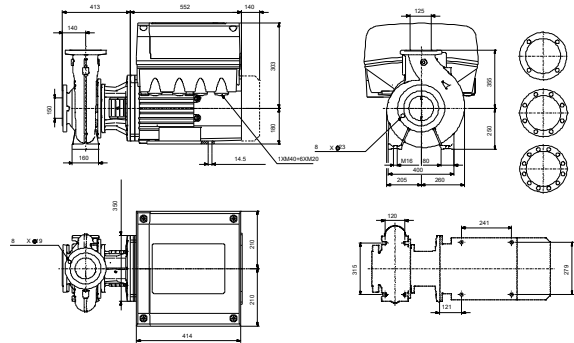
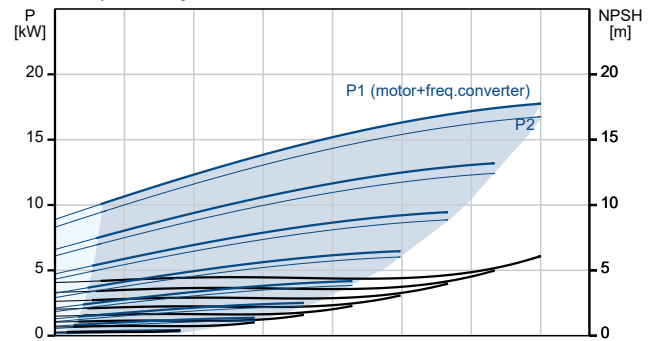
Pumped liquid = Water
 Liquid temperature during operation = 20 °C
 Density = 998.2 kg/m³



Description	Value
General information:	
Product name:	NBE 125-250/214 AAF2LESBQQEPWA
Product No:	On request
EAN number:	On request
Technical:	
Pump speed on which pump data are based:	1737 rpm
Rated flow:	266 m ³ /h
Rated head:	17.04 m
Actual impeller diameter:	214 mm
Nominal impeller diameter:	250
Shaft seal arrangement:	Single
Shaft diameter:	32 mm
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Bearing design:	Standard
Materials:	
Pump housing:	Stainless steel
Pump housing:	EN 1.4517
Pump housing:	ASTM CD4MCuN
Wear ring:	Stainless steel
Flange:	Cast iron
Flange:	EN-GJS-500-7
Flange:	ASTM 70-50-05
Impeller:	Stainless steel
Impeller:	EN 1.4517
Impeller:	ASTM CD4MCuN
Internal pump house coating:	No coating
Material code:	L
Code for rubber:	E
Shaft:	Stainless steel
Shaft:	EN 1.4462
Shaft:	SAF 2205
Installation:	
Range of ambient temperature:	-20 .. 50 °C
Maximum operating pressure:	16 bar
Pipe connection standard:	EN 1092-1
Size of inlet connection:	DN 150
Size of outlet connection:	DN 125
Pressure rating for connection:	PN 16
Bearing lubrication:	Grease
Pump housing with feet:	Yes
Support block (Yes/No):	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:	
Rated power - P2:	18.5 kW
Mains frequency:	60 Hz
Rated voltage:	3 x 380-480 V
Rated current:	33.2-26.9 A
Cos phi - power factor:	0.94-0.93
Rated speed:	180-2200 rpm



Pumped liquid = Water
Liquid temperature during operation = 20 °C
Density = 998.2 kg/m³





Company name:

Created by:

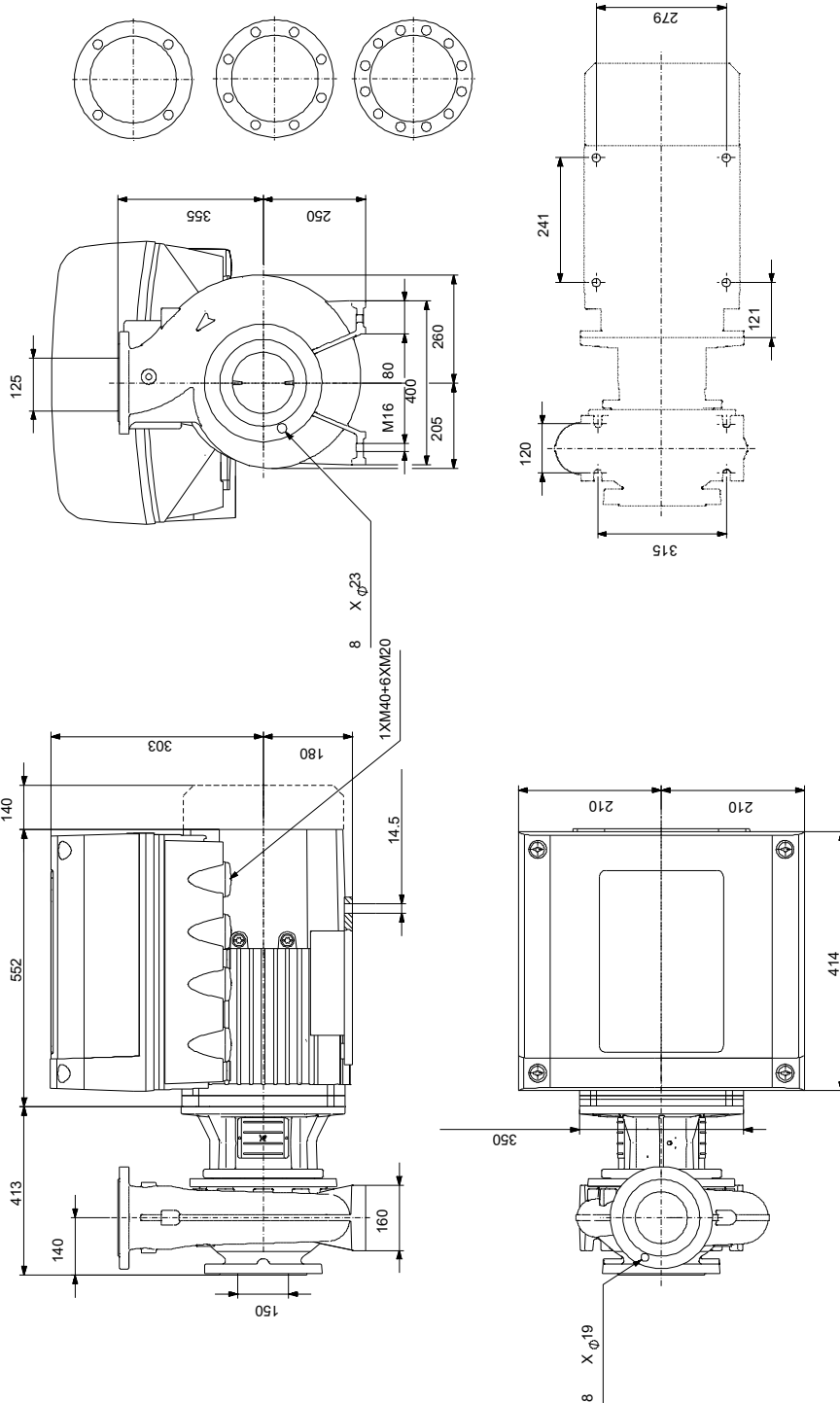
Phone:

Date:

22/10/2024

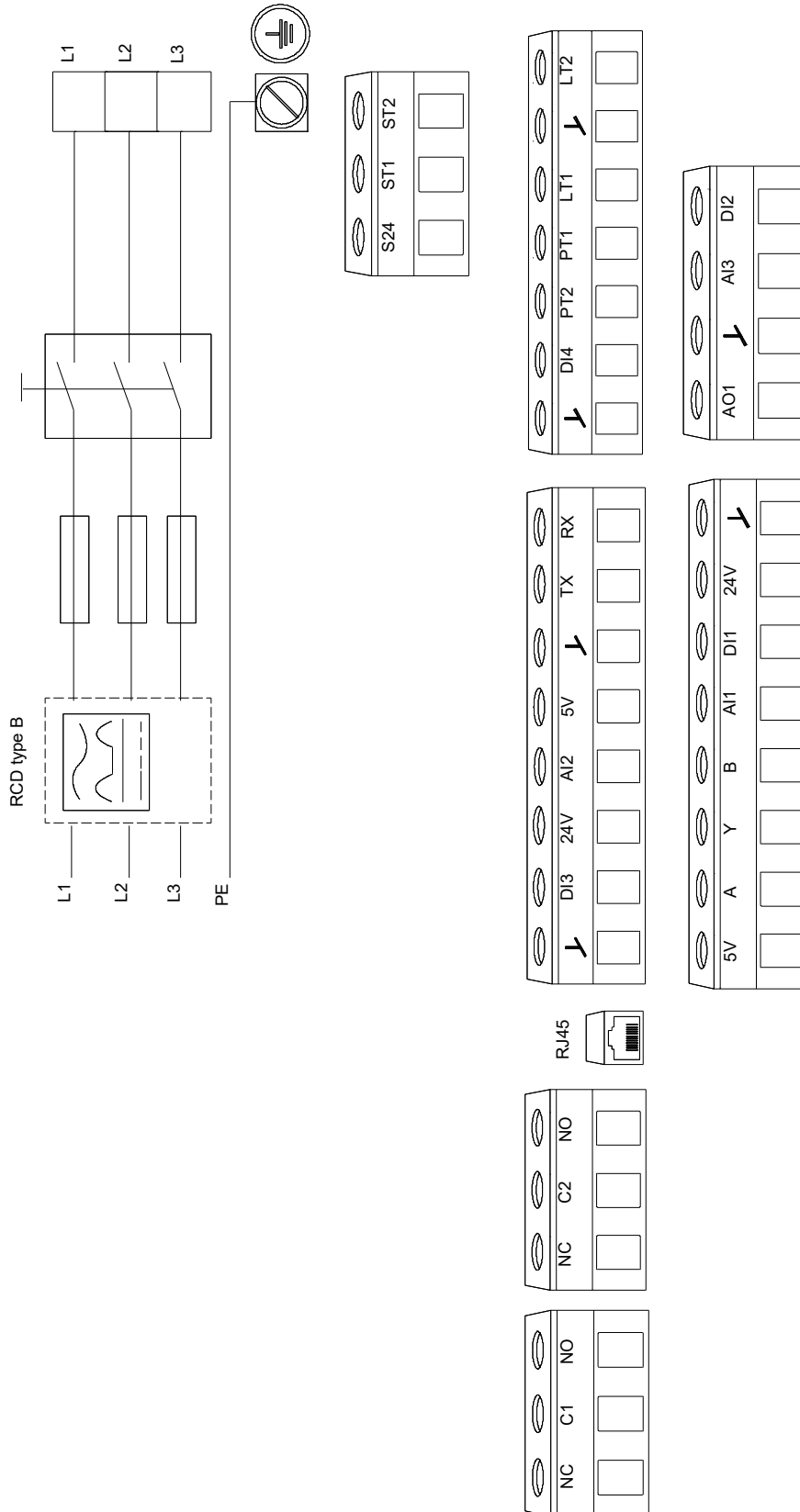
Description	Value
IE Efficiency class:	IE5
Motor efficiency at full load:	93.2 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	ELEC
Motor No:	92875538
Mount. design. acc. IEC 34-7:	IM B35
Bearing insulation type N-end:	Steel Bearing
Controls:	
Control panel:	HMI300 - Advanced
Function Module:	FM310 - Advanced
Frequency converter:	Built-in
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI \geq :	0.62
DOE Pump Energy Index VL:	0.61
Net weight:	258 kg
Gross weight:	290 kg
Shipping volume:	0.951 m ³
Country of origin:	HU
Custom tariff no.:	84137051
Language on pump nameplate:	GB

On request NBE 125-250/214 AAF2LESBQQEPWA 60 Hz



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

On request NBE 125-250/214 AAF2LESBQQEPA 60 Hz



Note! All units are in [mm] unless others are stated.

