

22/12/2022

Qty. | Description

1

NB 250-500/437 AASF1AESBQQEUW5



Note! Product picture may differ from actual product

Product No.: 98976272

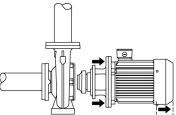
Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to EN 733 (10 bar).

Flanges are PN 10 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

Motor stool and pump cover are made of cast iron (EN-GJL-250). 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)

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.

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. The support blocks provide horizontal alignment of the pump and ensure clearance between the motor stool/motor flange and the foundation.

## 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.

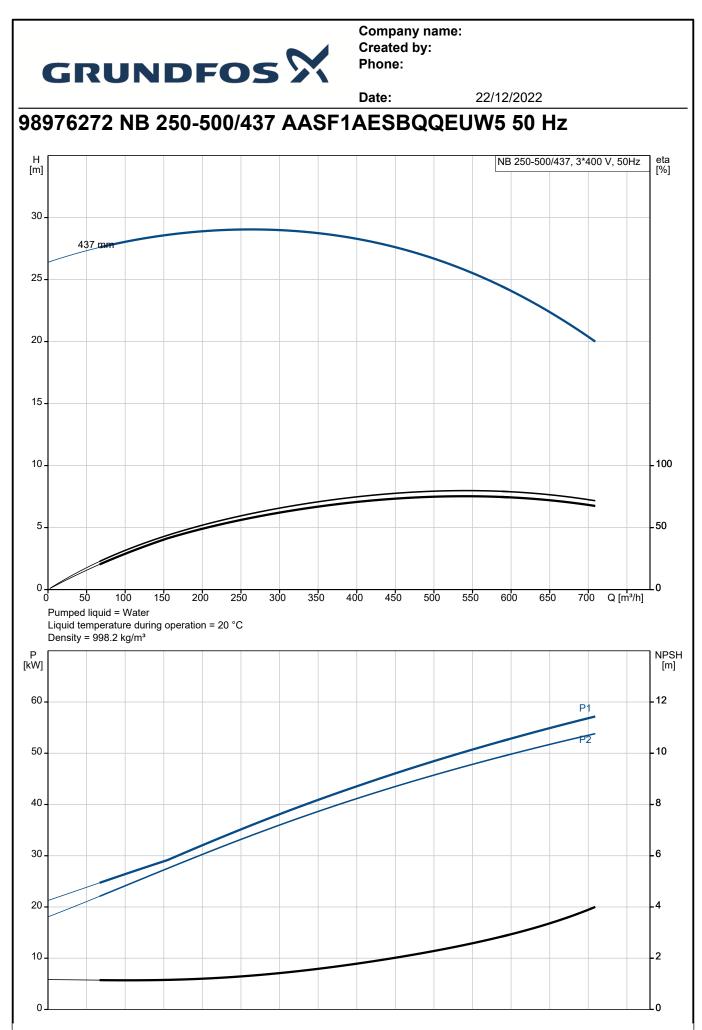
The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.



				Date:	22/12/2022			
ty.	Description							
	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.							
	A variable speed drive makes adjustment of pump performance to any duty point possible. If the motor is to be connected to a variable speed drive, the pump must be ordered with an electrically insulated motor bearing.							
	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 a thin, well-controlled layer on the surface.							
	Technical data							
	Controls:							
	Frequency converter:	NONE						
	Pressure sensor:	Ν						
	Liquid:							
	Pumped liquid:	Water						
	Liquid temperature range:	-25 120 °C						
	Selected liquid temperature: Density:	20 °C 998.2 kg/m³						
		000.2 Ng/III						
	Technical:							
	Pump speed on which pump da Rated flow:	$545.2 \text{ m}^3/\text{h}$	988 rpm					
	Rated head:	25.52 m						
	Actual impeller diameter:	437 mm						
	Nominal impeller diameter:	500						
	Shaft seal arrangement:	Single						
	Code for shaft seal:	BQQE						
	Curve tolerance:	ISO9906:201	2 3B					
	Bearing design:	Standard						
	Materials:							
	Pump housing:	Cast iron						
		EN-GJL-250	05					
	Woor ring:	ASTM class 3	55					
	Wear ring: Impeller:	Brass Cast iron						
		EN-GJL-200						
		ASTM class 3	30					
	Internal pump house coating:	CED						
	Shaft:	Stainless stee	el					
		EN 1.4301 AISI 304						
	Installation:	55 °C						
	Max. ambient temperature: Maximum operating pressure:	10 bar						
	Pipe connection standard:	EN 1092-2						
	Size of inlet connection:	DN 300						
	Size of outlet connection:	DN 250						
	Pressure rating for connection:	PN 10						
	Bearing lubrication:	Grease						
	Pump housing with feet:	Yes						
	Support block (Yes/No):	Y						



	Description			
-	Description			
	Electrical data:			
	Motor type:	SIEMENS		
	IE Efficiency class:	IE3		
	Rated power - P2:	55 kW		
	Mains frequency: Rated voltage:	50 Hz 3 x 380-420D/660-725Y V		
	Rated current:	99.0/58.0 A		
	Starting current:	720-720 %		
	Cos phi - power factor:	0.85		
	Rated speed:	988 rpm		
	Efficiency:	IE3 94,1%		
	Motor efficiency at full load:	94.1-94.1 %		
	Motor efficiency at 3/4 load:	94.5-94.5 %		
	Motor efficiency at 1/2 load:	94.4-94.4 %		
	Number of poles:	6		
	Enclosure class (IEC 34-5):	IP55		
	Insulation class (IEC 85):	F		
	Motor No:	83W15438		
	Bearing insulation type N-end:	STEEL BEARING		
	Others:			
	Minimum efficiency index, MEI ≥:	0.48		
	Net weight:	1220 kg		
	Gross weight:	1270 kg		
	Shipping volume:	1.92 m <sup>3</sup>		
	Danish VVS No.:	386069503		
	Country of origin:	HU		
	Custom tariff no.:	84137051		
1				





		Date:	22/12/2022
Description	Value	H [m]	NB 250-500/437, 3*400 V, 50Hz
General information:			
Product name:	NB 250-500/437 AASF1AESBQQEUW5	30 - 437 mm	
Product No:	98976272	25 -	
EAN number:	5712604558904	—	
echnical:	37 1200+330304	20	
Pump speed on which pump data	000		
are based:	988 rpm	15	
Rated flow:	545.2 m³/h		
Rated head:	25.52 m	10 -	
Actual impeller diameter:	437 mm		
vominal impeller diameter:	500		
Shaft seal arrangement:	Single	5-	
Shaft diameter:	60 mm		
Code for shaft seal:	BQQE	0 100	200 300 400 500 600 Q [m³/h]
Curve tolerance:	ISO9906:2012 3B		
Surve tolerance: Pump version:	AS	Pumped liquid Liquid tempera	l = Water ature during operation = 20 °C
•		Density = 998.	
Bearing design:	Standard	P [kW]	
Materials:		[[( 1 ]	P1
Pump housing:	Cast iron		
Pump housing:	EN-GJL-250	50 -	P2
Pump housing:	ASTM class 35	40 -	
Near ring:	Brass	40 -	
mpeller:	Cast iron	30 -	
mpeller:	EN-GJL-200		
mpeller:	ASTM class 30	20-	
nternal pump house coating:	CED	10 -	
Material code:	A		
Code for rubber:	E	0	
Shaft:	Stainless steel	*	
Shaft:	EN 1.4301		
Shaft:	AISI 304	544	
nstallation:		170	
Max. ambient temperature:	55 °C		
Maximum operating pressure:	10 bar	s the second sec	
Pipe connection standard:	EN 1092-2	tu,,,⊯	
Size of inlet connection:	DN 300	200	
Size of outlet connection:	DN 250		
Pressure rating for connection:	PN 10		§
Bearing lubrication:	Grease		
Pump housing with feet:	Yes	Min	
Support block (Yes/No):	Y	<u>12 X @23</u>	
Connect code:	F1		
Liquid:			· • •
Pumped liquid:	Water		
_iquid temperature range:	-25 120 °C		
Selected liquid temperature:	-25 120 °C		Y
Density:	998.2 kg/m³	\$ <sup>++</sup> \$	<sup>,7</sup> <b>\$</b>
Electrical data:			
Notor type:	SIEMENS		
E Efficiency class:	IE3	TO AMPLIFIER	
Rated power - P2:	55 kW	RELAY L1	
Mains frequency:	50 Hz		
Rated voltage:	3 x 380-420D/660-725Y V		TO DRMA
Rated current:	99.0/58.0 A	\$+T \$	
Starting current:	720-720 %		
Cos phi - power factor:	0.85		
Rated speed:	988 rpm	TO AMPLIFIER	
Efficiency:	IE3 94,1%	RELAY L1	

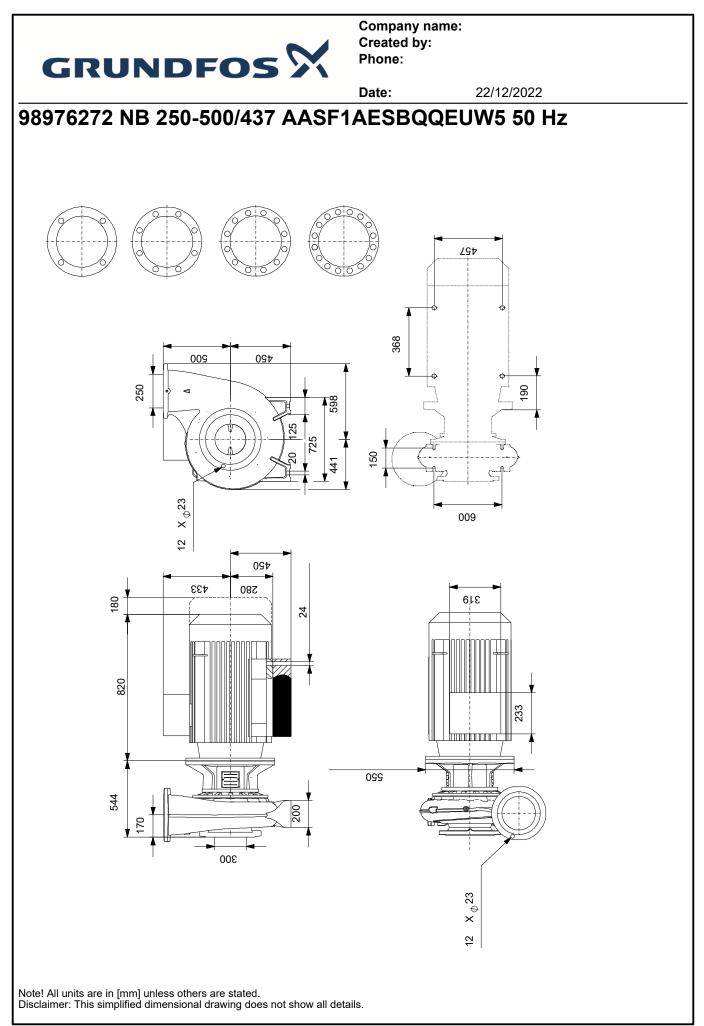
Printed from Grundfos Product Centre [2022.54.006]

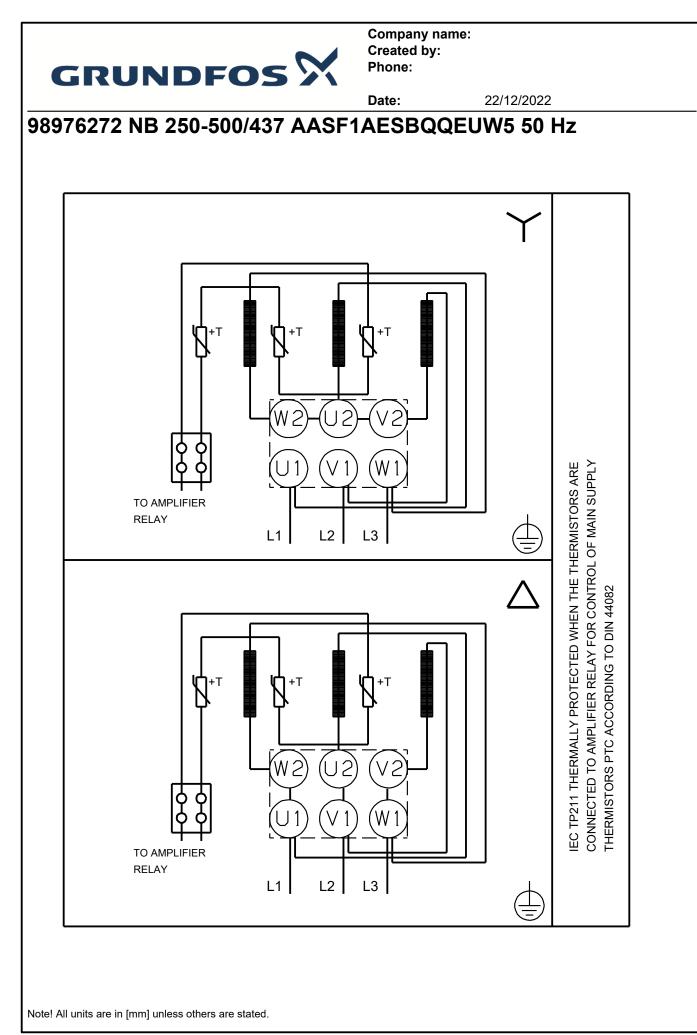


Date:

22/12/2022

Description	Value
Motor efficiency at full load:	94.1-94.1 %
Motor efficiency at 3/4 load:	94.5-94.5 %
Motor efficiency at 1/2 load:	94.4-94.4 %
Number of poles:	6
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	83W15438
Mount. design. acc. IEC 34-7:	IM B35
Bearing insulation type N-end:	STEEL BEARING
Controls:	
Frequency converter:	NONE
Pressure sensor:	Ν
Others:	
Minimum efficiency index, MEI ≥:	0.48
Net weight:	1220 kg
Gross weight:	1270 kg
Shipping volume:	1.92 m <sup>3</sup>
Danish VVS No.:	386069503
Country of origin:	HU
Custom tariff no.:	84137051







Your pos.

Position

Company name: Created by: Phone:

22/12/2022 Date: **Order Data:** Product No **Product name** Total Amount NB 250-500/437 1 98976272 Price on request

Printed from Grundfos Product Centre [2022 54 006]	9/9