

15/08/2022

Qty. | Description

1

NB 80-315/305 AASF2AESBQQEOW3



Note! Product picture may differ from actual product

Product No.: 98976220

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

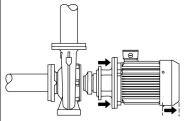
Flanges are PN 16 with dimensions according to EN 1092-2. The pump has an axial suction port, radial discharge port, horizontal shaft and a back pull-out design enabling removal of the motor, motor stool, cover and impeller without disturbing the pump housing or pipework.

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.

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.

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.



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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.

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.

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.

Further product details

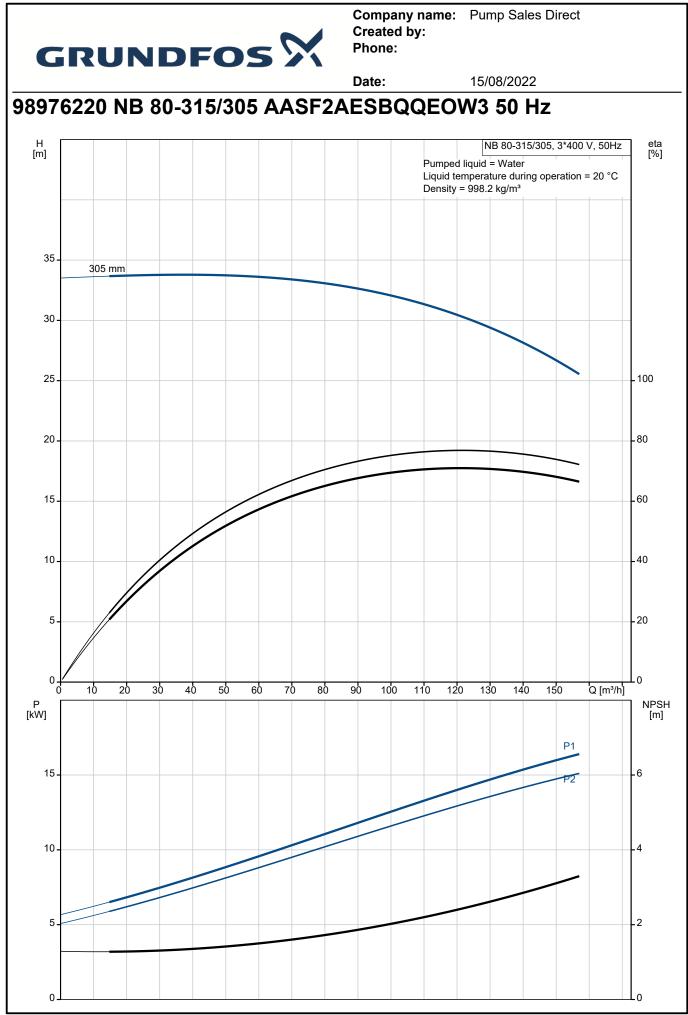
Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

Technical data

Controls: Frequency converter: Pressure sensor:	NONE N
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -25 120 °C 20 °C 998.2 kg/m³
Technical: Pump speed on which pump data Rated flow: Rated head: Actual impeller diameter: Nominal impeller diameter: Shaft seal arrangement: Code for shaft seal: Curve tolerance: Bearing design:	are based: 1475 rpm 126.2 m³/h 29.6 m 305 mm 315 Single BQQE ISO9906:2012 3B Standard
Materials: Pump housing: Wear ring: Impeller:	Cast iron EN-GJL-250 ASTM class 35 Brass Cast iron EN-GJL-200
Internal pump house coating: Shaft:	ASTM class 30 CED Stainless steel EN 1.4301 AISI 304



			Date:	15/08/2022
Qty.	Description			
1	Installation:			
	t max amb:	55 °C		
	Maximum operating pressure:	16 bar		
	Pipe connection standard:	EN 1092-2		
	Size of inlet connection:	DN 100		
	Size of outlet connection:	DN 80		
	Pressure rating for connection:	PN 16		
	Bearing lubrication:	Grease		
	Pump housing with feet:	Yes		
	Support block (Yes/No):	Y		
	Electrical data:			
	Motor type:	SIEMENS		
	IE Efficiency class:	IE3		
	Rated power - P2:	15 kW		
	Mains frequency:	50 Hz		
	Rated voltage:	3 x 380-420D/660-72	5Y V	
	Rated current:	28.5/16.6 A		
	Starting current:	850-850 %		
	Cos phi - power factor:	0.82		
	Rated speed:	1475 rpm		
	Efficiency:	IE3 92,1%		
	Motor efficiency at full load:	92.1-92.1 %		
	Motor efficiency at 3/4 load:	92.3-92.3 %		
	Motor efficiency at 1/2 load:	91.5-91.5 %		
	Number of poles:	4		
	Enclosure class (IEC 34-5):	4 IP55		
		F		
	Insulation class (IEC 85): Motor No:	г 99032190		
		99032190 N		
	Bearing insulation type N-end:	IN		
	Others: Minimum efficiency index, MEI ≥:	0.70		
	Net weight:	234 kg		
	Gross weight:	266 kg		
	Shipping volume:	0.951 m ³		
	Danish VVS No.:	386064319		
	Country of origin:	HU		
	Custom tariff no.:	84137051		





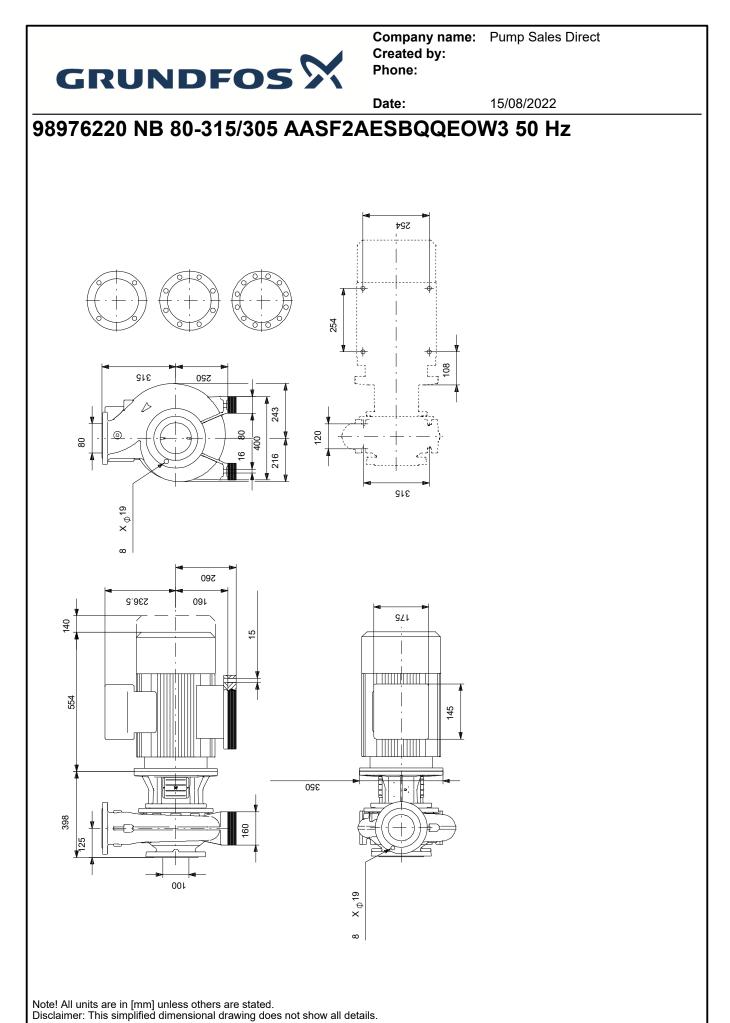
		Date:	15/08/2022	
Description	Value	H [m]	NB 80-315/305, 3*400 V, 50Hz	eta [%]
General information:	10100		Pumped liquid = Water	r1
Product name:	NB 80-315/305		Liquid temperature during operation = 20 °C Density = 998.2 kg/m ³	
	AASF2AESBQQEOW3	35 - 305 m		
Product No:	98976220	35 - 305 mi	m	
EAN number:	5712604558546	30 -		
Technical:				
Pump speed on which pump data are based:	1475 rpm	25 -		- 100
Rated flow:	126.2 m³/h			
Rated head:	29.6 m	20 -		- 80
Actual impeller diameter:	305 mm			
Nominal impeller diameter:	315	15	-	- 60
Shaft seal arrangement:	Single			
Shaft diameter:	32 mm	10 -		- 40
Code for shaft seal:	BQQE			
Curve tolerance:	ISO9906:2012 3B			- 20
Pump version:	AS	5-		- 20
Bearing design:	Standard	— /		
Materials:	Standard	0 <u>/</u> 0 20	40 60 80 100 120 140 Q [m³/h]	0
Pump housing:	Cast iron	P [kW]		NPSH
Pump housing:	EN-GJL-250	[KW]	P1	[m]
Pump housing:	ASTM class 35	15		- 6
Wear ring:	Brass		P2	
Impeller:	Cast iron			
		10 -		- 4
Impeller:	EN-GJL-200			
Impeller:	ASTM class 30	5		-2
Internal pump house coating:	CED			-
Material code:	A			
Code for rubber:	E	0		0
Shaft:	Stainless steel			
Shaft:	EN 1.4301	125		
Shaft:	AISI 304	141		
Installation:				
t max amb:	55 °C	°+ K, I, III		
Maximum operating pressure:	16 bar	160		
Pipe connection standard:	EN 1092-2			
Size of inlet connection:	DN 100		Sg	
Size of outlet connection:	DN 80	8 X 0 19 F7 1 7-2		
Pressure rating for connection:	PN 16			
Bearing lubrication:	Grease			N
Pump housing with feet:	Yes	- V		
Support block (Yes/No):	Y			
Connect code:	F2			
Liquid:				
Pumped liquid:	Water			
Liquid temperature range:	-25 120 °C		~	
Selected liquid temperature:	20 °C	_	Y	
Density:	998.2 kg/m ³			
Electrical data:	····	β [,] ∎ β [,]		
Motor type:	SIEMENS	— ∐ L⊮a		
IE Efficiency class:	IE3			
Rated power - P2:	15 kW	TO AMPLIFIER RELAY		
Mains frequency:	50 Hz		[준 러	
Rated voltage:	3 x 380-420D/660-725Y V			
Rated current:	28.5/16.6 A			
Starting current:	850-850 %			
Cos phi - power factor:	0.82			
Rated speed:	1475 rpm	RELAY L1		
Efficiency:	IE3 92,1%	1		

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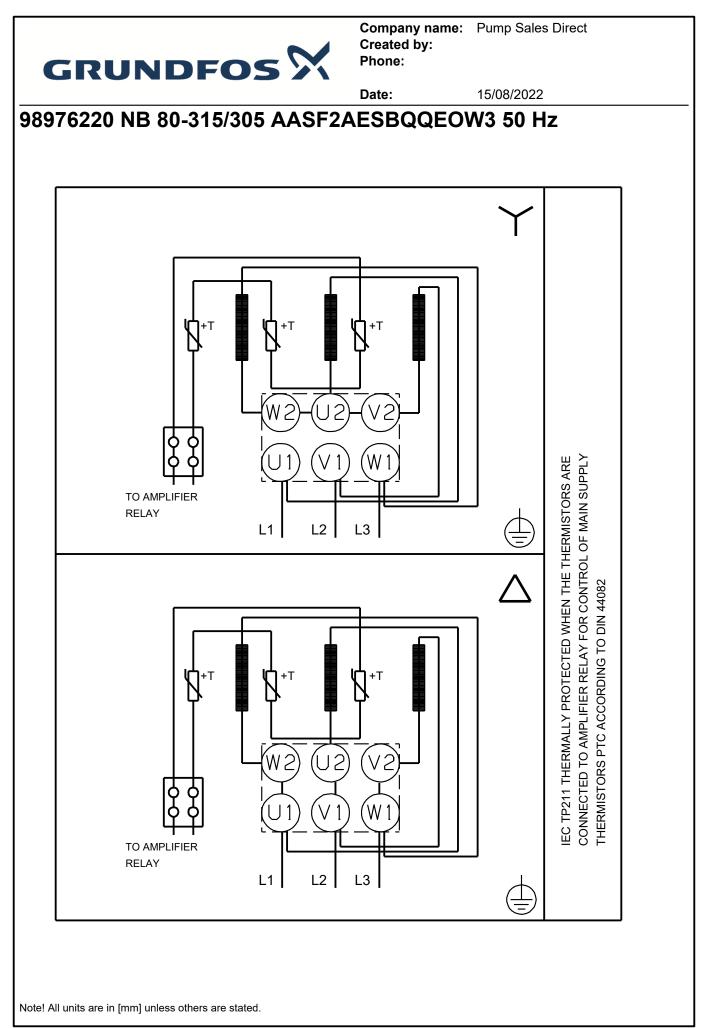


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		Date:
Description	Value	
Motor efficiency at full load:	92.1-92.1 %	
Motor efficiency at 3/4 load:	92.3-92.3 %	
Motor efficiency at 1/2 load:	91.5-91.5 %	
Number of poles:	4	
Enclosure class (IEC 34-5):	IP55	
Insulation class (IEC 85):	F	
Built-in motor protection:	PTC	
Motor No:	99032190	
Mount. design. acc. IEC 34-7:	IM B35	
Bearing insulation type N-end:	Ν	
Controls:		
Frequency converter:	NONE	
Pressure sensor:	Ν	
Others:		
Minimum efficiency index, MEI ≥:	0.70	
Net weight:	234 kg	
Gross weight:	266 kg	
Shipping volume:	0.951 m³	
Danish VVS No.:	386064319	
Country of origin:	HU	
Custom tariff no.:	84137051	



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	Date: 15/08/2022					
Order Data:						
Position	Your pos.	Product name	Amount	Product No	Total	
		NB 80-315/305	1	98976220	Price on request	