

Date:

## Qty. | Description

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## NB 150-315/291 ASF1ABQQE



Product No.: 98854510

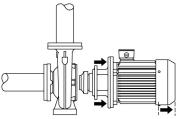
Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to EN 733 (10 bar).

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

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.

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.

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



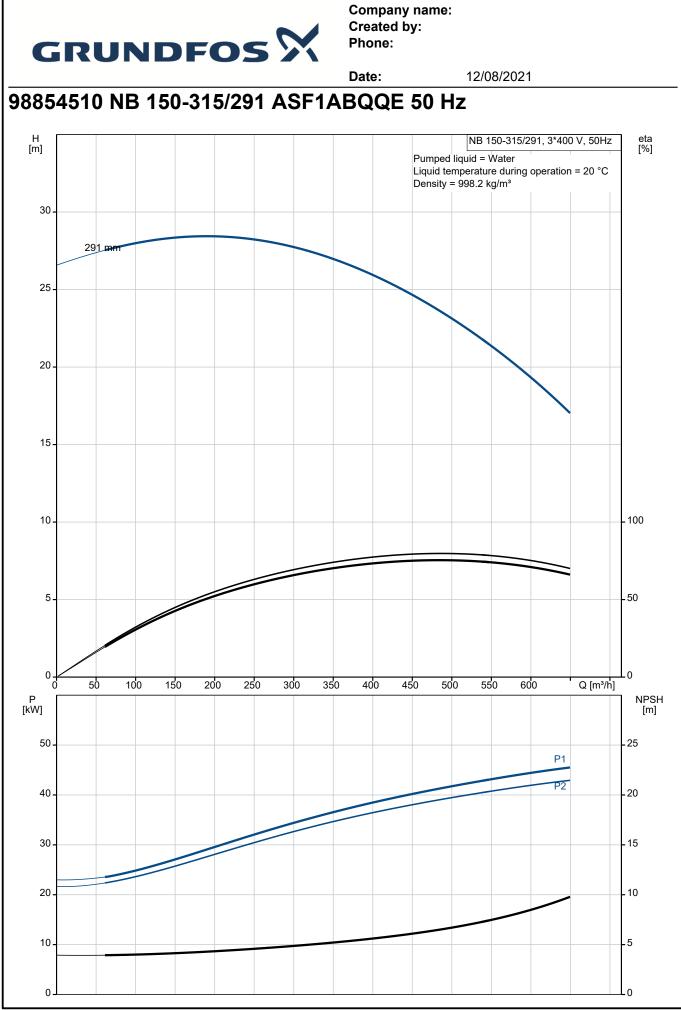
	GRUNDFO	フシン	i none.				
			Date:	12/08/2021			
<i>(</i> .	Description						
	The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.						
	The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.						
	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.						
	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						
	Technical data						
	Controls:						
	Frequency converter:	NONE					
	Pressure sensor:	Ν					
	Liquid:						
	Pumped liquid:	Water					
	Liquid temperature range:	-25 120 °C					
	Selected liquid temperature:	20 °C					
	Density:	998.2 kg/m³					
	Technical:						
	Pump speed on which pump data are based: 1480 rpm						
	Rated flow:	488.2 m³/h	·				
	Rated head:	23.44 m					
	Actual impeller diameter:	291 mm					
	Nominal impeller diameter:	315					
	Shaft seal arrangement:	Single					
	Code for shaft seal:	BQQE					
	Curve tolerance:	ISO9906:2012 3	3				
	Bearing design:	Standard					
	Materials:						
	Pump housing:	Cast iron					
		EN-GJL-250					
		ASTM class 35					
	Wear ring:	Brass					
	Impeller:	Cast iron					
		EN-GJL-200					
		ASTM class 30					
	Shaft:	Stainless steel					
		EN 1.4301					
	Internal pump house coating:	AISI 304 CED					
	memai pump nouse coaling.						
	Installation:						
	Maximum ambient temperature:						
	Maximum operating pressure:	10 bar					
	Pipe connection standard:	EN 1092-2					
	Size of inlet connection	DN 200					

DN 200

Size of inlet connection:



		12/08/2021
Description		
Size of outlet connection:	DN 150	
Pressure rating for connection:	PN 10	
Bearing lubrication:	Grease	
Pump housing with feet:	Yes	
Support block:	Y	
Electrical data:		
Notor type:	SIEMENS	
E Efficiency class:	IE3	
Rated power - P2:	45 kW	
lains frequency:	50 Hz	
Rated voltage:	3 x 380-420D/660-725Y V	
Rated current:	83,0-77,0/48,0-44,5 A	
Starting current:	640-640 %	
Cos phi - power factor:	0.9	
Rated speed:	1480 rpm	
Efficiency:	IE3 94,2%	
lotor efficiency at full load:	94.2-94.2 %	
lotor efficiency at 3/4 load:	94.9-94.9 %	
Notor efficiency at 1/2 load:	95.1-95.1 %	
lumber of poles:	4	
Enclosure class (IEC 34-5):	IP55	
nsulation class (IEC 85):	F	
Notor No:	99032214	
N/I		
Others:		
linimum efficiency index, MEI		
let weight:	577 kg	
Gross weight:	603 kg	
Shipping volume:	0.816 m <sup>3</sup>	
Country of origin:	HU	
Custom tariff no.:	84137051	





		Date: 12/08/2	.021	
Description	Value	[m]	B 150-315/291, 3*400 V, 50Hz	eta [%]
General information:		Pumped liquid	= Water ature during operation = 20 °C	
Product name:	NB 150-315/291 ASF1ABQQE	30 - Density = 998.		
Product No:	98854510			
EAN number:	5712602429923	25 -		
Fechnical:				
Pump speed on which pump data are based:	1480 rpm	20 -		
Rated flow:	488.2 m³/h			
Rated head:	23.44 m	15 _		
Actual impeller diameter:	291 mm			
Nominal impeller diameter:	315			
Shaft seal arrangement:	Single	10		_ 100
Shaft diameter:	42 mm			
Code for shaft seal:	BQQE			
Curve tolerance:	ISO9906:2012 3B	5		- 50
Pump version:	AS			
Bearing design:	Standard			Lo
Materials:		0 100 200 300	400 500 Q [m³/h]	
Pump housing:	Cast iron	P [kW]		NPSH [m]
Pump housing:	EN-GJL-250	50 -		_25
Pump housing:	ASTM class 35		P1	
Wear ring:	Brass	40 -	P2	- 20
Impeller:	Cast iron	30 -		<b>-</b> 15
Impeller:	EN-GJL-200	30		- 15
Impeller:	ASTM class 30	20		- 10
Shaft:	Stainless steel			
Shaft:	EN 1.4301	10 -		- 5
Shaft:	AISI 304	0		Lo
Internal pump house coating:	CED	0		-0
Material code:	A	461 708		
Code for rubber:	E			D D
Installation:	<b>_</b>			9
Maximum ambient temperature:	55 °C	╡ <del></del>	ר ((C)) ו (C+)	\$
Maximum operating pressure:	10 bar			9
Pipe connection standard:	EN 1092-2	200 19		à
Size of inlet connection:	DN 200	~		8
Size of outlet connection:	DN 150	45		
Pressure rating for connection:	PN 10		┥	
Bearing lubrication:	Grease			·· · 8
Pump housing with feet:	Yes			·
Support block:	Y			
Connect code:	F1			
Liquid:	•••			
Pumped liquid:	Water			
Liquid temperature range:	-25 120 °C			
Selected liquid temperature:	-23 120 °C	Ý		
Density:	998.2 kg/m <sup>3</sup>			
Electrical data:	Ng/III			
Motor type:	SIEMENS			
IE Efficiency class:	IE3			
Rated power - P2:	45 kW			
Mains frequency:	43 KW 50 Hz		~	
Rated voltage:	3 x 380-420D/660-725Y V		avs to pixed	
Rated current:	83,0-77,0/48,0-44,5 A		C ACCOR	
Starting current:	640-640 %		TORS PTC	
Cos phi - power factor:	0.9		LHE RMS	
Rated speed:	1480 rpm	TO AMPLIPIER NELAY L1 L2 L3		
Nateu speeu.	1400 IPIII			

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		Date:	12/08/2021
Description	Value		
Efficiency:	IE3 94,2%		
Motor efficiency at full load:	94.2-94.2 %		
Motor efficiency at 3/4 load:	94.9-94.9 %		
Motor efficiency at 1/2 load:	95.1-95.1 %		
Number of poles:	4		
Enclosure class (IEC 34-5):	IP55		
Insulation class (IEC 85):	F		
Motor protec:	PTC		
Motor No:	99032214		
Mount. design. acc. IEC 34-7:	IM B35		
Controls:			
Frequency converter:	NONE		
Pressure sensor:	Ν		
Others:			
Minimum efficiency index, MEI ≥:	0.54		
Net weight:	577 kg		
Gross weight:	603 kg		
Shipping volume:	0.816 m³		
Country of origin:	HU		
Custom tariff no.:	84137051		

