GRUNDFOS	

Date:

12/0

12/08/2021

Qty. Description

1 NB 150-200/218-208 ASF1ABQQE



Product No.: 98769189

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

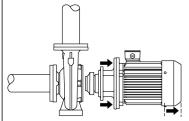
Flanges are PN 10 with dimensions according to EN 1092-2. The pump has an axial suction port, radial discharge port, horizontal shaft and a back pull-out design enabling removal of the motor, motor stool, cover and impeller without disturbing the pump housing or pipework.

The unbalanced rubber bellows seal is according to DIN EN 12756.

The pump is close-coupled to a fan-cooled asynchronous motor.

The 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.

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.



12/08/2021

Qty. | Description

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.

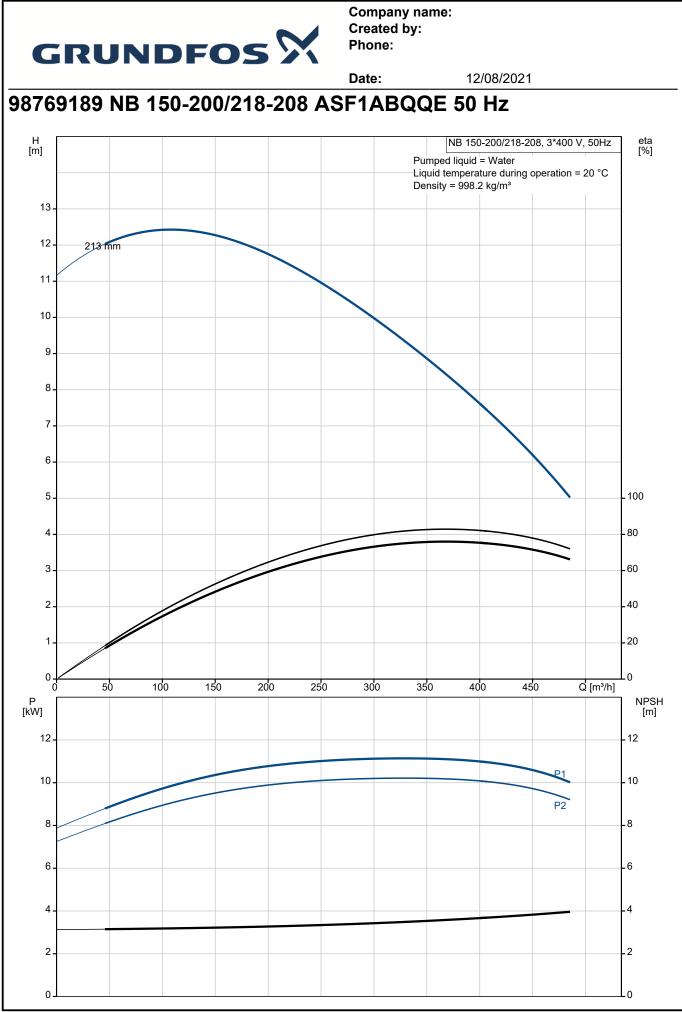
Further product details

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:	a are based: 1475 rpm 383.9 m³/h 8.589 m 213 mm 200 Single BQQE ISO9906:2012 3B Standard
Materials: Pump housing:	Cast iron EN-GJL-250
Wear ring: Impeller:	ASTM class 35 Brass Cast iron EN-GJL-200 ASTM class 30
Shaft: Internal pump house coating:	Stainless steel EN 1.4301 AISI 304 CED
Installation: Maximum ambient temperature: Maximum operating pressure: Pipe connection standard:	55 °C 10 bar EN 1092-2



			Date:	12/08/2021	
у.	Description				
	Size of inlet connection:	DN 200			
	Size of outlet connection:	DN 150			
	Pressure rating for connection:	PN 10			
	Bearing lubrication:	Grease			
	Pump housing with feet:	Yes			
	Support block:	Y			
	Support block.	ř			
	Electrical data:				
	Motor type:	SIEMENS			
	IE Efficiency class:	IE3			
	Rated power - P2:	11 kW			
	Mains frequency:	50 Hz			
	Rated voltage:	3 x 380-420D/660-	725Y V		
	Rated current:	21,53-19,5/12,4-11			
			,2 A		
	Starting current:	680-680 %			
	Cos phi - power factor:	0.84			
	Rated speed:	1475 rpm			
	Efficiency:	IE3 91,4%			
	Motor efficiency at full load:	91.4-91.4 %			
	Motor efficiency at 3/4 load:	91.9-91.9 %			
	Motor efficiency at 1/2 load:	91.4-91.4 %			
	Number of poles:	4			
	Enclosure class (IEC 34-5):	IP55			
	Insulation class (IEC 85):	F			
	Motor No:	99032187			
		99032107			
	Others:				
	Minimum efficiency index, MEI ≥	0.70			
	Net weight:	290 kg			
	Gross weight:	322 kg			
	Shipping volume:	0.951 m ³			
	Country of origin:	HU			
	Custom tariff no.:	84137051			
		04137031			





		Date:	12/08/2021	eta
Description	Value	[m]	NB 150-200/218-208, 3*400 V, 50Hz	[%]
General information:			Pumped liquid = Water Liquid temperature during operation = 20 °C	
Product name:	NB 150-200/218-208 ASF1ABQQE	13 - 12 - 213 mr	Density = 998.2 kg/m ³	
Product No:	98769189	11		
EAN number:	5712601129824			
Price:	GBP 5534	10 -		
Technical:		9 -		
Pump speed on which pump data are based:	1475 rpm	8 -		
Rated flow:	383.9 m³/h	7 -		
Rated head:	8.589 m	6 _		
Actual impeller diameter:	213 mm	5 -		100
Nominal impeller diameter:	200	-		
Shaft seal arrangement:	Single	4 -		- 80
Shaft diameter:	32 mm	3 -		- 60
Code for shaft seal:	BQQE	2		- 40
Curve tolerance:	ISO9906:2012 3B	1		- 20
Pump version:	AS	/		
Bearing design:	Standard	0	100 200 300 400 Q [m³/h]	LO
Materials:	Standard	P [kW]		NPSH
Pump housing:	Cast iron			[m]
Pump housing:	EN-GJL-250		P1	10
Pump housing:	ASTM class 35	10 -	P2	- 10
Wear ring:	Brass	8-	P2	- 8
Impeller:	Cast iron	6		_6
	EN-GJL-200	0-		F ⁰
Impeller:	ASTM class 30	4 -		-4
Impeller: Shaft:		2 -		_2
	Stainless steel			
Shaft:	EN 1.4301	0		Lo
Shaft:	AISI 304			
Internal pump house coating:	CED	160		R
Material code:	A			J)
Code for rubber:	E			2
Installation:				J.
Maximum ambient temperature:	55 °C	200		B
Maximum operating pressure:	10 bar			Ð
Pipe connection standard:	EN 1092-2			
Size of inlet connection:	DN 200	<u>* ×●23</u> \n 无】】h		
Size of outlet connection:	DN 150			
Pressure rating for connection:	PN 10			اللي
Bearing lubrication:	Grease		' ee -=	
Pump housing with feet:	Yes			
Support block:	Y			
Connect code:	F1			
Liquid:				
Pumped liquid:	Water		Υ	
Liquid temperature range:	-25 120 °C			
Selected liquid temperature:	20 °C	N ^{+T} N ^{+T}		
Density:	998.2 kg/m³	_ Ĭ ¶,Ľ		
Electrical data:				
Motor type:	SIEMENS	TO AMPLIFIER		
IE Efficiency class:	IE3	RELAY L1		
Rated power - P2:	11 kW			
Mains frequency:	50 Hz			
Rated voltage:	3 x 380-420D/660-725Y V	₿+™ ■ ₿+™	T A P A P A P A P A P A P A P A P A P A	
Rated current:	21,53-19,5/12,4-11,2 A			
Starting current:	680-680 %			
Cos phi - power factor:	0.84	TO AMPLIFIER RELAY		
Rated speed:	1475 rpm	— ¹¹		

Printed from Grundfos Product Centre [2021.19.003]



		Date:	12/08/2021
Description	Value		
Efficiency:	IE3 91,4%		
Motor efficiency at full load:	91.4-91.4 %		
Motor efficiency at 3/4 load:	91.9-91.9 %		
Motor efficiency at 1/2 load:	91.4-91.4 %		
Number of poles:	4		
Enclosure class (IEC 34-5):	IP55		
Insulation class (IEC 85):	F		
Motor protec:	PTC		
Motor No:	99032187		
Mount. design. acc. IEC 34-7:	IM B35		
Controls:			
Frequency converter:	NONE		
Pressure sensor:	Ν		
Others:			
Minimum efficiency index, MEI ≥:	0.70		
Net weight:	290 kg		
Gross weight:	322 kg		
Shipping volume:	0.951 m³		
Country of origin:	HU		
Custom tariff no.:	84137051		

