C	GRUNDFOS	Company n Created by: Phone:				
		Date:	4/21/2020			
ount	Description					
1	CRN 10-4 A-FGJ-A-V-HQQV					
	Product No.: 96522967					
	Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in high-grade stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via combined DIN-ANSI-JIS flanges.					
	The pump is fitted with a 1-phase, fan-cooled asynchronous motor.					
	Further product details Steel, cast iron and aluminium components have an epoxy-based coating made in a cathodic electro-depositio (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensure deposition of paint particles as a thin, well-controlled layer on the surface. An integral part of the process is a pretreatment. The entire process consists of these elements:					
	 Alkaline-based cleaning. Zinc phosphating. Cathodic electro-deposition. Curing to a dry film thickness 18-22 my for the colour code for the finished product is 					
	Pump A standard split coupling connects the pum means of two coupling guards.	np and motor shaft. It is o	enclosed in the pump head/motor stool by			
	Cana lo o o o o o o o o o o o o o o o o o o					
	The pump head and flange for motor mounting is made in one piece (cast iron). The pump head cover is a separate component (stainless steel). The pump head has a combined 1/2" priming plug and vent screw.					
	The pump is fitted with a balanced O-ring s assembled in a cartridge unit which makes suitable for high-pressure applications. The wear from a dynamic O-ring between pump	replacement safe and e cartridge construction	asy. Due to the balancing, this seal type is			

Primary seal:

• Rotating seal ring material: silicon carbide (SiC)



Count	Description
-------	-------------

4/21/2020

• 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.

Date:

Secondary seal material: FKM (fluorocarbon rubber)

FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.



The shaft seal is screwed into the pump head.

The pump has a special air-cooled shaft-seal chamber generating the same insulation effect as that of a vacuum flask. No external cooling is necessary; the ambient temperature is sufficient. An automatic vent vents the pump seal chamber.

The chambers and impellers are made of stainless-steel sheet. The chambers are provided with a PTFE neck ring offering improved sealing and high efficiency. The impellers have smooth surfaces, and the shape of the blades ensure a high efficiency.

The pump has a stainless steel base mounted on a separate base plate. This base and base plate are kept in position by the tension of the staybolts which hold the pump together. The outlet side of the base has a combined drain plug and bypass valve. The pump is secured to the foundation by four bolts through the base plate. The flanges and base are cast in one piece and prepared for connection by means of DIN, ANSI or JIS.

Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with tapped-hole flange (FT).

Motor-mounting designation in accordance with IEC 60034-7: IM B 14 (Code I) / IM 3601 (Code II). Electrical tolerances comply with IEC 60034.

The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (I1/1).

The motor has built-in thermal protection (PTO current and temperature sensors) in accordance with IEC 60034-11 and requires no further motor protection. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

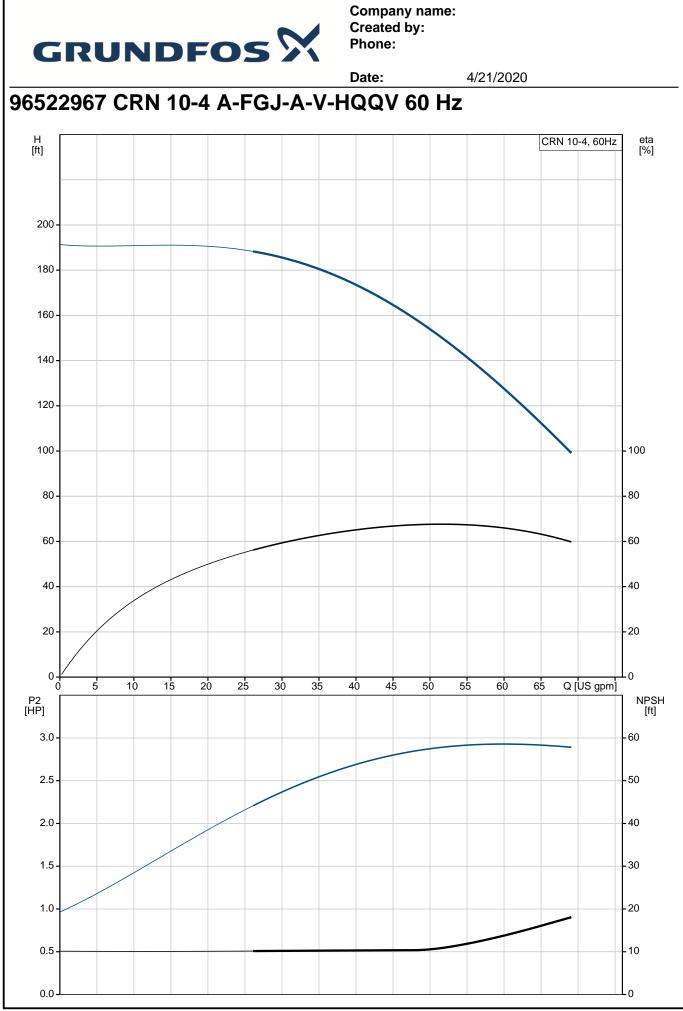
As the thermal protection incorporates automatic reset, the motor must be connected in a way which ensures that the automatic reset cannot cause accidents.

Technical data

Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -4 194 °F 68 °F 62.29 lb/ft³
Technical: Rated pump speed: Rated flow: Rated head: Actual impeller diameter: Pump orientation: Shaft seal arrangement:	3457 rpm 53.3 US gpm 146 ft 3.66 in Vertical Single



Description		
	1100)/	
Code for shaft seal:	HQQV	
Approvals on nameplate:	CURUS	
Curve tolerance:	ISO9906:2012 3B	
Materials:		
Base:	Stainless steel	
	EN 1.4408	
	AISI 316	
Impeller:	Stainless steel	
	EN 1.4401	
	AISI 316	
Bearing:	SIC	
In stall stick.		
Installation: Maximum ambient temperature	· 104 °E	
Maximum operating pressure:	362.59 psi	
Max pressure at stated temper		
max pressure at stated temper	363 psi / -4 °F	
Turne of compactions	DIN / ANSI / JIS	
Type of connection: Size of inlet connection:		
	DN 50	
Size of outlet connection:	DN 50	
Pressure rating for connection:		
Flange rating inlet:	300 lb	
Flange size for motor:	182TC	
Electrical data:		
Motor standard:	NEMA	
Motor type:	BALDOR	
Rated power - P2:	3 HP	
Power (P2) required by pump:	3 HP	
Main frequency:	60 Hz	
Rated voltage:	1 x 115/208-230 V	
Service factor:	1.15	
Rated current:	29/16-14,5 A	
Rated speed:	3450 rpm	
Number of poles:	2	
Insulation class (IEC 85):	F	
Motor Number:	84Z04014	
Controls:		
Frequency converter:	NONE	
011		
Others:	0.07	
DOE Pump Energy Index CL:	0.87	
Net weight:	154 lb	
Gross weight:	172 lb	
Shipping volume:	8.26 ft ³	
Country of origin:	US	
Custom tariff no .:	8413.70.2040	



Printed from Grundfos Product Center [2020.04.000]

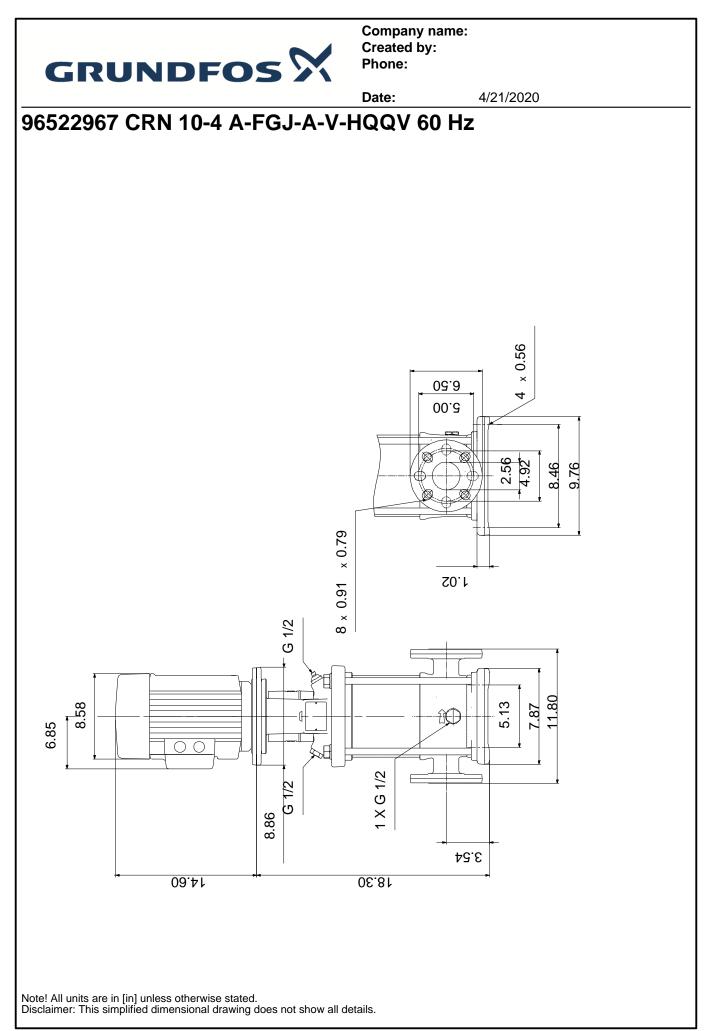


		Date:	4/2	1/2020		
Description	Value	H [ft]			CRN 10-4, 60Hz	eta [%]
General information:						
Product name:	CRN 10-4 A-FGJ-A-V-HQQV	200 -				
Product No.:	96522967	180 -				
EAN:	5700396897516					
	5700396897516	160 -				
Technical:		140 -				
Rated pump speed:	3457 rpm					
Rated flow:	53.3 US gpm	120 -				
Rated head:	146 ft	100 -				- 100
Maximum head:	191.3 ft					
Actual impeller diameter:	3.66 in	80 -				- 80
Stages:	4	60 -				- 60
Impellers:	4	00 -				- 00
Number of reduced-diameter impellers:	0	40 -				- 40
Low NPSH:	Ν	20 -				- 20
Pump orientation:	Vertical	o				Lo
Shaft seal arrangement:	Single	0	10 20 3	0 40 5	0 Q [US gpm]	_
Code for shaft seal:	HQQV	P2 [HP]				NPSH [ft]
Approvals on nameplate:	CURUS	`` +				† ``
Curve tolerance:	ISO9906:2012 3B	2.5 -				- 50
Pump version:	Α					40
Model:	А	2.0 -				- 40
Cooling:	TEFC	1.5 -				- 30
Materials:		1.0 -				- 20
Base:	Stainless steel					
	EN 1.4408 AISI 316	0.5				10 0
Impeller:	Stainless steel	••••				-0
	EN 1.4401		6.85			
	AISI 316		8.58			
Material code:	A	I				
Code for rubber:	V	4.60				
Bearing:	SIC		H			
Installation:	0.0					
Maximum ambient temperature:	104 °F		G 1/2 G 1/2			
Maximum operating pressure:	362.59 psi	30		0.91 × 0.79		
Max pressure at stated temperature:	363 psi / 194 °F	18.30	1 X G 1/2		1	
	363 psi / -4 °F				0.0	
Type of connection:	DIN / ANSI / JIS	3.54	┝─╞╏╪╪╪╡╗╢			
Size of inlet connection:	DN 50		5.13	2.56 4.92	4 × 0.56	
Size of outlet connection:	DN 50		11:80	8.46 9.76	<u> </u>	
Pressure rating for connection:	PN 25					
Flange rating inlet:	300 lb					
Flange size for motor:	182TC	LN	i ÷			
Connect code:	FGJ	М				
Liquid:		Ψ				
Pumped liquid:	Water					
Liquid temperature range:	-4 194 °F					
Selected liquid temperature:	68 °F		i			
Density:	62.29 lb/ft ³					
Electrical data:						
Motor standard:	NEMA		i			
Motor type:	BALDOR		!			
Rated power - P2:	3 HP					
Power (P2) required by pump:	3 HP	$ \rightarrow $				
Main frequency:	60 Hz	— (M))			
Rated voltage:	1 x 115/208-230 V	<u> </u>	/			

Printed from Grundfos Product Center [2020.04.000]



		Date:	4/21/2020
Description	Value		
Service factor:	1.15		
Rated current:	29/16-14,5 A		
Load current:	31,8/18-16,9 A		
Rated speed:	3450 rpm		
Number of poles:	2		
Insulation class (IEC 85):	F		
Motor protection:	NONE		
Motor Number:	84Z04014		
Controls:			
Frequency converter:	NONE		
Others:			
DOE Pump Energy Index CL:	0.87		
Net weight:	154 lb		
Gross weight:	172 lb		
Shipping volume:	8.26 ft ³		
Country of origin:	US		
Custom tariff no.:	8413.70.2040		





4/21/2020

96522967 CRN 10-4 A-FGJ-A-V-HQQV 60 Hz

