

**Date:** 15/02/2020

Qty. | Description

1 CRI 1-23 A-FGJ-A-V-HQQV



Product No.: 96533348

Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in 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**

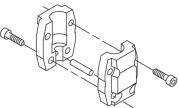
Steel, cast iron and aluminium components have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface. An integral part of the process is a pretreatment. The entire process consists of these elements:

- 1) Alkaline-based cleaning.
- 2) Zinc phosphating.
- 3) Cathodic electro-deposition.
- 4) Curing to a dry film thickness 18-22 my m.

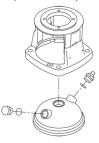
The colour code for the finished product is NCS 9000/RAL 9005.

# **Pump**

A standard split coupling connects the pump and motor shaft. It is enclosed in the pump head/motor stool by means of two coupling guards.



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 seal unit with a rigid torque-transmission system. This seal type is assembled in a cartridge unit which makes replacement safe and easy. Due to the balancing, this seal type is suitable for high-pressure applications. The cartridge construction also protects the pump shaft from possible wear from a dynamic O-ring between pump shaft and shaft seal.

Primary seal:

• Rotating seal ring material: silicon carbide (SiC)



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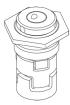
## Qty. Description

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: 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 seperate 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 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: Water
Liquid temperature range: -20 .. 90 °C
Selected liquid temperature: 20 °C
Density: 998.2 kg/m³

### Technical:

Pump speed on which pump data are based: 2789 rpm

Rated flow:

Rated head:

Pump orientation:

Shaft seal arrangement:

Code for shaft seal:

Approvals on nameplate:

1.8 m³/h

99.7 m

Vertical

Single

HQQV

CE, EAC

Curve tolerance: ISO9906:2012 3B



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Materials:

Base: Stainless steel

EN 1.4408

**AISI 316** 

Impeller: Stainless steel

EN 1.4301 AISI 304

Bearing: SIC

Installation:

Maximum ambient temperature: 40 °C
Maximum operating pressure: 25 bar

Max pressure at stated temp: 25 bar / 90 °C

25 bar / -20 °C

Type of connection: DIN / ANSI / JIS

Size of inlet connection: DN 25/32
Size of outlet connection: DN 25/32
Pressure rating for pipe connection: PN 25
Flange rating inlet: 300 lb

Flange rating inlet: 300 lb Flange size for motor: FT115

**Electrical data:** 

Motor standard: IEC
Motor type: 90SB
Rated power - P2: 1.1 kW
Power (P2) required by pump: 1.1 kW
Mains frequency: 50 Hz

Rated voltage: 1 x 220-230/240 V Rated current: 7.40/6.70 A

Starting current: 7.40/6.70 %
Cos phi - power factor: 0.98/0.99
Rated speed: 2770 rpm
Motor efficiency at full load: 73-71 %

Number of poles: 2

Enclosure class (IEC 34-5): 55 Dust/Jetting

Insulation class (IEC 85): F

Motor No: 85215705

**Controls:** 

Frequency converter: NONE

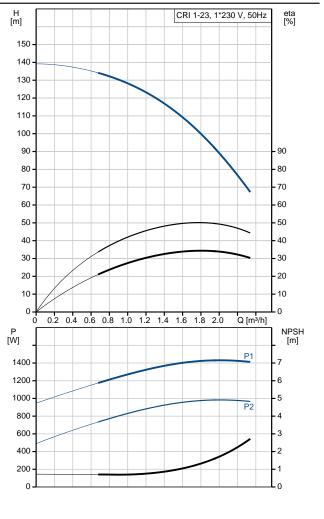
Others:

Minimum efficiency index, MEI ≥: 0.70
Net weight: 41.5 kg
Gross weight: 44.4 kg
Shipping volume: 0.13 m³
Country of origin: GB
Custom tariff no.: 84137075



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Description	Value
General information:	
Product name:	CRI 1-23 A-FGJ-A-V-HQQV
Product No:	96533348
EAN number:	5700397451205
	5700397451205
Technical:	
Pump speed on which pump data are based:	2789 rpm
Rated flow:	1.8 m³/h
Rated head:	99.7 m
Maximum head:	138.7 m
Stages:	23
Impellers:	23
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals on nameplate:	CE, EAC
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Base:	Stainless steel
	EN 1.4408
	AISI 316
Impeller:	Stainless steel
	EN 1.4301
	AISI 304
Material code:	A
Code for rubber:	V
Bearing:	SIC
Installation:	
Maximum ambient temperature:	40 °C
Maximum operating pressure:	25 bar
Max pressure at stated temp:	25 bar / 90 °C
	25 bar / -20 °C
Type of connection:	DIN / ANSI / JIS
Size of inlet connection:	DN 25/32
Size of outlet connection:	DN 25/32
Pressure rating for pipe connection:	PN 25
Flange rating inlet:	300 lb
Flange size for motor:	FT115
Connect code:	FGJ
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-20 90 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m³
Electrical data:	<u> </u>
Motor standard:	IEC
Motor type:	90SB
Rated power - P2:	1.1 kW
Power (P2) required by pump:	1.1 kW
Mains frequency:	50 Hz
Rated voltage:	1 x 220-230/240 V
Rated current:	7.40/6.70 A
Starting current:	390 %
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Description	Value
Cos phi - power factor:	0.98/0.99
Rated speed:	2770 rpm
Motor efficiency at full load:	73-71 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protec:	PTO
Motor No:	85215705
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	41.5 kg
Gross weight:	44.4 kg
Shipping volume:	0.13 m³
Sales region:	GB
Country of origin:	GB
Custom tariff no.:	84137075