

Date: 08/10/2020

Qty. | Description

1 CRI 20-2 A-FGJ-A-V-HQQV



Product No.: 96500437

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 3-phase, fan-cooled asynchronous motor.

Further product details

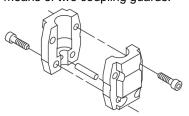
Steel, cast iron and aluminium components have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface. An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

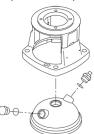
The colour code for the finished product is NCS 9000/RAL 9005.

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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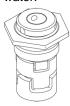
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• Stationary seat material: silicon carbide (SiC)

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 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 efficiency is classified as IE3 in accordance with IEC 60034-30-1.

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 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.

Technical data

Liquid:

Pumped liquid: Water
Liquid temperature range: -4 .. 194 °F
Selected liquid temperature: 68 °F
Density: 62.29 lb/ft³

Technical:

Pump speed on which pump data are based: 2899 rpm

Rated flow: 92.5 US GPM
Rated head: 72.18 ft
Pump orientation: Vertical
Shaft seal arrangement: Single
Code for shaft seal: HQQV
Approvals on nameplate: CE, EAC

Curve tolerance: ISO9906:2012 3B

Materials:

Impeller:

Base: Stainless steel

EN 1.4408 AISI 316 Stainless steel

EN 1.4301



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AISI 304

Bearing: SIC

Installation:

Maximum ambient temperature: 140 °F
Maximum operating pressure: 232.06 psi
Max pressure at stated temp: 232 psi / 194 °F

232 psi / -4 °F

Type of connection: DIN / ANSI / JIS

Size of inlet connection:

Size of outlet connection:

Pressure rating for connection:

Flange rating inlet:

Size of inlet connection:

DN 50

PN 25

Size of outlet connection:

PN 25

Flange rating inlet:

FT115

Electrical data:

Motor standard: IEC
Motor type: 90LE
IE Efficiency class: IE3
Rated power - P2: 3 HP
Power (P2) required by pump: 3 HP
Mains frequency: 50 Hz

Rated voltage: 3 x 220-240D/380-415Y V

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Rated current: 8.00/4.60 A Starting current: 840-920 % Cos phi - power factor: 0.86-0.80 Rated speed: 2890-2910 rpm Efficiency: IE3 85,9% Motor efficiency at full load: 85.9-85.9 % Motor efficiency at 3/4 load: 88.2 % Motor efficiency at 1/2 load: 88.0 %

Number of poles:

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

Insulation class (IEC 85): F

Motor No: 85U01908

Controls:

Frequency converter: NONE

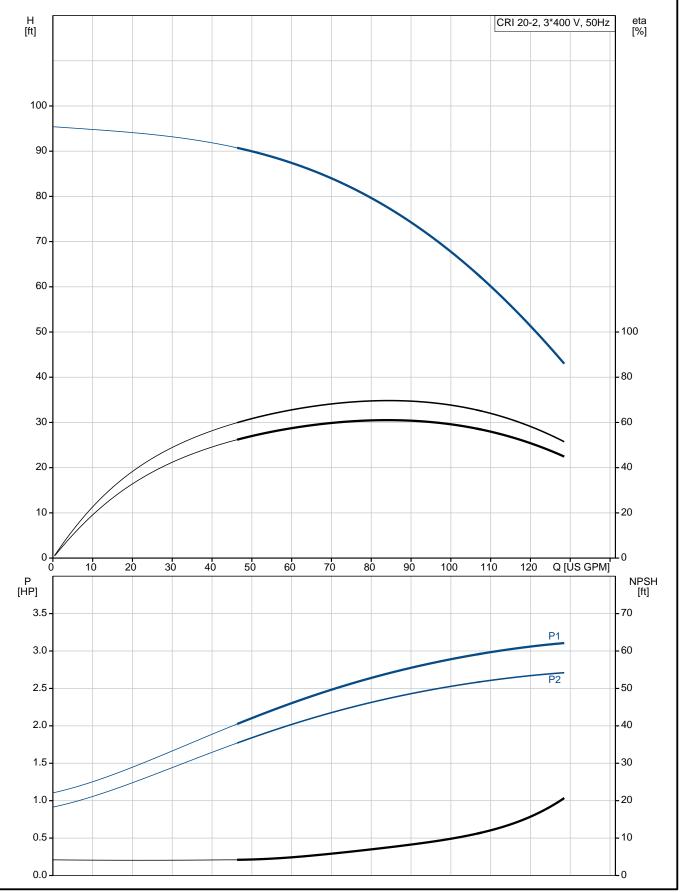
Others:

Minimum efficiency index, MEI ≥: 0.70
Net weight: 110 lb
Gross weight: 137 lb
Shipping volume: 6.11 ft³
Country of origin: GB
Custom tariff no.: 84137075



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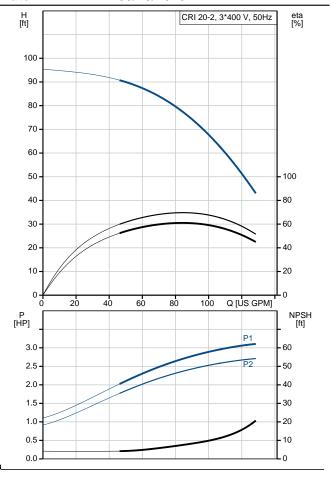
96500437 CRI 20-2 A-FGJ-A-V-HQQV 50 Hz

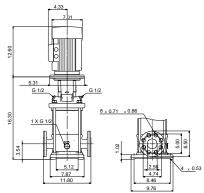


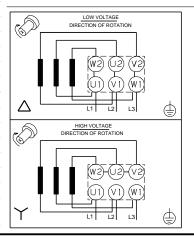


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Description	Value
General information:	
Product name:	CRI 20-2 A-FGJ-A-V-HQQV
Product No:	96500437
EAN number:	5700396201801
Price:	GBP 1755
Technical:	
Pump speed on which pump data are	
based:	2899 rpm
Rated flow:	92.5 US GPM
Rated head:	72.18 ft
Maximum head:	94.82 ft
Stages:	2
Impellers:	2
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
Base:	EN 1.4408
Base:	AISI 316
Impeller:	Stainless steel
<u> </u>	EN 1.4301
Impeller:	AISI 304
Impeller:	
Material code:	A
Code for rubber:	V
Bearing:	SIC
Installation:	440.05
Maximum ambient temperature:	140 °F
Maximum operating pressure:	232.06 psi
Max pressure at stated temp:	232 psi / 194 °F
Max pressure at stated temp:	232 psi / -4 °F
Type of connection:	DIN / ANSI / JIS
Size of inlet connection:	DN 50
Size of outlet connection:	DN 50
Pressure rating for connection:	PN 25
Flange rating inlet:	300 lb
Flange size for motor:	FT115
Connect code:	FGJ
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-4 194 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft³
Electrical data:	J=.E0 10/10
Motor standard:	IEC
Motor type:	90LE
* *	
IE Efficiency class:	IE3
Rated power - P2:	3 HP
Power (P2) required by pump:	3 HP
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240D/380-415Y V
=	v









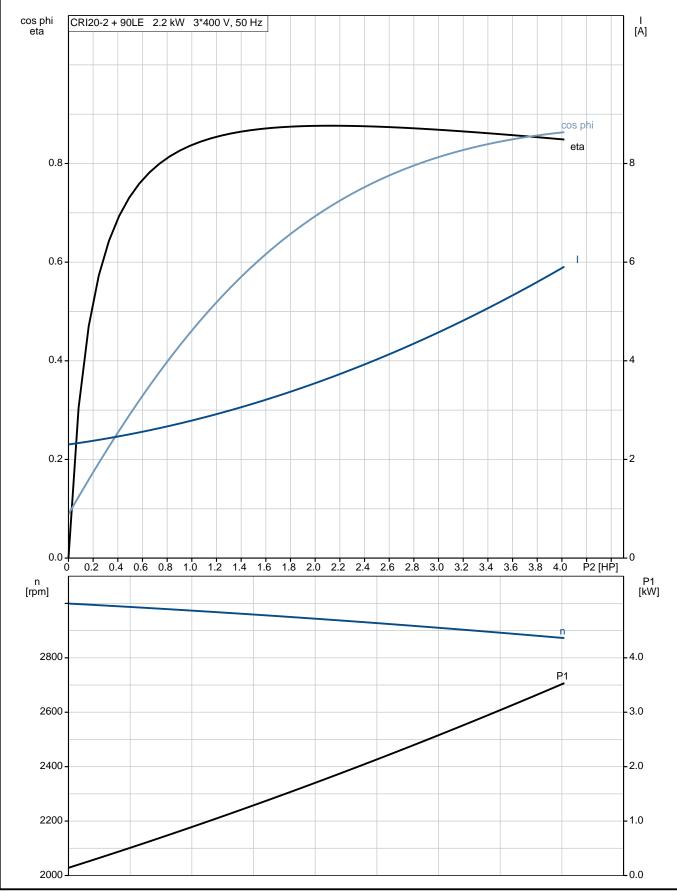
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Description	Value
Rated current:	8.00/4.60 A
Starting current:	840-920 %
Cos phi - power factor:	0.86-0.80
Rated speed:	2890-2910 rpm
Efficiency:	IE3 85,9%
Motor efficiency at full load:	85.9-85.9 %
Motor efficiency at 3/4 load:	88.2 %
Motor efficiency at 1/2 load:	88.0 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protec:	NONE
Motor No:	85U01908
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	110 lb
Gross weight:	137 lb
Shipping volume:	6.11 ft ³
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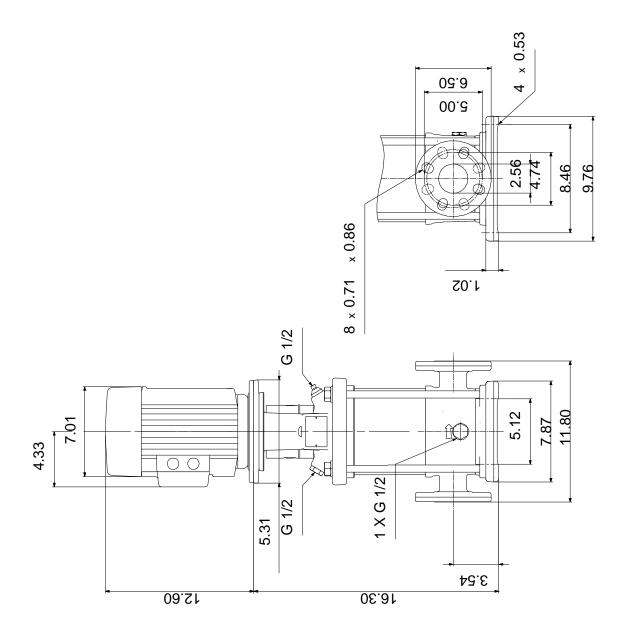
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Note! All units are in [in] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



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