

### **Submittal Data**

UNIT TAG:	QUANTITY:
TYPE OF SERVICE:	
SUBMITTED BY:	DATE:
APPROVED BY:	DATE:
ORDER NO.:	DATE:
	TYPE OF SERVICE: SUBMITTED BY: APPROVED BY:



### CRN 15-1 A-FGJ-A-V-HQQV

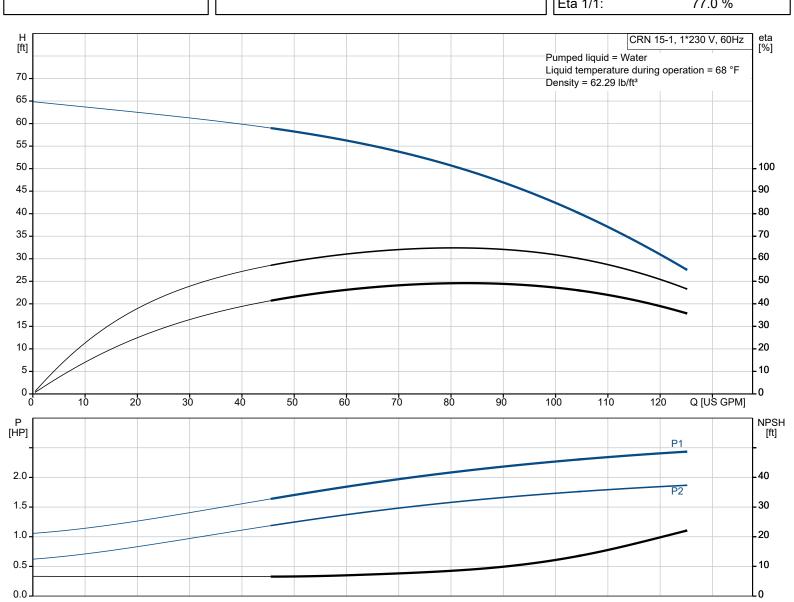
Vertical, multistage centrifugal pump with suction and discharge ports on the same level. Pump materials in contact with the liquid are in high-grade stainless steel (EN 1.4401)

Note! Product picture may differ from actual product

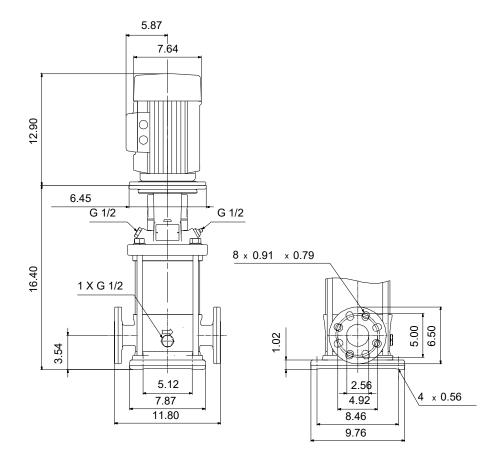
Conditions	of Service
Liquid:	Water
Temperature:	68 °F
Specific Gravity:	1.000

Pump Data	
Max pressure at stated temp:	363 psi / 194 °F
Liquid temperature range:	-4 194 °F
Maximum ambient temperature:	104 °F
Shaft seal:	HQQV
Product number:	99917602

Motor	Data
Rated power - P2:	2 HP
Rated voltage:	115/208-230 V
Mains frequency:	60 Hz
Enclosure class:	IP55
Insulation class:	F
Motor protection:	PTO
Motor type:	WEG
Eta 1/1:	77 N %







### Materials:

Base yes/no: Stainless steel
Base yes/no: EN 1.4408
Base yes/no: AISI 316
Impeller: Stainless steel
Impeller: AISI 316
Impeller: EN 1.4401

Material code: A Code for rubber: V



**Date:** 11/11/2022

Qty. | Description

CRN 15-1 A-FGJ-A-V-HQQV



Product No.: 99917602

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-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.

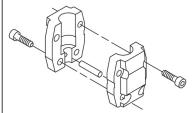
The entire process consists of these elements:

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

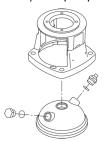
The colour code for the finished product is NCS 9000/RAL 9005.

#### **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.

#### Seal faces:

- 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: FKM (fluorocarbon rubber)

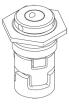
FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.



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Qty. | Description

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

Technical:

Pump speed on which pump data are based: 3499 rpm

Rated flow: 79.3 US GPM Rated head: 51.84 ft

Actual impeller diameter: 4.13 in
Pump orientation: Vertical
Shaft seal arrangement: Single
Code for shaft seal: HQQV
Approvals and markings: CURUS

Curve tolerance: ISO9906:2012 3B

Materials:

Base yes/no: Stainless steel

EN 1.4408 AISI 316

Impeller: Stainless steel

EN 1.4401 AISI 316

Bearing arrangement: SIC

Installation:

t max amb: 104 °F

Maximum operating pressure: 362.59 psi

Max pressure at stated temp: 363 psi / 194 °F

363 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



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 $\textbf{Qty.} \mid \textbf{Description}$ 

Flange size for motor: 56C

Electrical data:

Motor standard: NEMA
Motor type: WEG
Rated power - P2: 2 HP
Power (P2) required by pump: 2 HP
Mains frequency: 60 Hz

Rated voltage: 1 x 115/208-230 V

Service factor: 1.15

Rated current: 17,5/9,62-8,73 A

Starting current: 780-780 %

Cos phi - power factor: 0.97
Rated speed: 3495 rpm
Efficiency: 77.0%
Motor efficiency at full load: 77.0 %
Motor efficiency at 3/4 load: 75.0 %
Motor efficiency at 1/2 load: 70.0 %

Number of poles: 2
Enclosure class (IEC 34-5): IP55
Insulation class (IEC 85): F

Motor No: 99883320

Controls:

Frequency converter: NONE

Others:

DOE Pump Energy Index CL: 0.91

Net weight: 112 lb

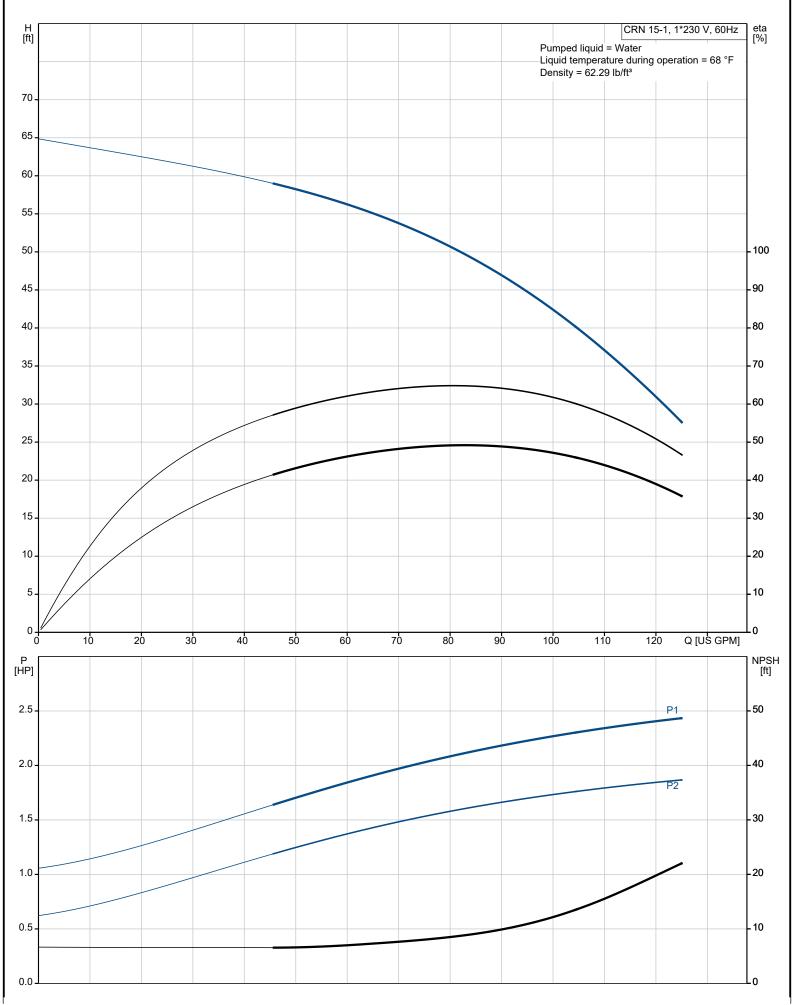
Gross weight: 130 lb

Shipping volume: 6.11 ft³



**Date:** 11/11/2022

## 99917602 CRN 15-1 A-FGJ-A-V-HQQV 60 Hz





Date:	11/11/2022

Description	Value
Seneral information:	
Product name:	CRN 15-1 A-FGJ-A-V-HQQV
Product No:	99917602
EAN number:	5715114124225
Technical:	
Pump speed on which pump data are based:	3499 rpm
Rated flow:	79.3 US GPM
Rated head:	51.84 ft
Maximum head:	64.31 ft
Actual impeller diameter:	4.13 in
Number of stages:	2
Impellers:	1
Number of reduced-diameter impellers:	0
_ow NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals and markings:	CURUS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
The first model is called A which is followed by model B, C etc.:	A
Cooling according to IEC 34-6:	IC 411
Materials:	.=
Base yes/no:	Stainless steel
Base yes/no:	EN 1.4408
Base yes/no:	AISI 316
mpeller:	Stainless steel
mpeller:	EN 1.4401
mpeller:	AISI 316
mpeller. Material code:	A A A A A A A A A A A A A A A A A A A
vialerial code. Code for rubber:	V
Searing arrangement:	V SIC
searing arrangement:	310
	104 °⊏
t max amb:	104 °F
Maximum operating pressure:	362.59 psi
Max pressure at stated temp:	363 psi / 194 °F
Max pressure at stated temp:	363 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:	56C
Connect code:	FGJ
Liquid:	
Pumped liquid:	Water
iquid temperature range:	-4 194 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft <sup>3</sup>
•	
Electrical data:	NEMA
Electrical data: Motor standard:	NEMA WEG
Electrical data: Motor standard: Motor type: Rated power - P2:	
Electrical data: Motor standard: Motor type:	WEG

1 x 115/208-230 V

17,5/9,62-8,73 A

780-780 %

20.1/8.73 A

3495 rpm 77.0%

77.0 %

1.15

0.97

Rated voltage:

Service factor:

Rated current:

Rated speed:

Efficiency:

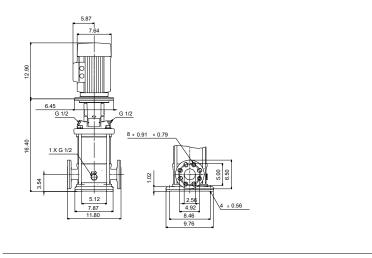
Starting current:

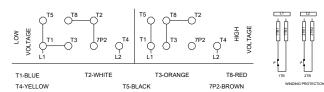
Full load SF current:

Cos phi - power factor:

Motor efficiency at full load:

1 1/ 1 1/2	.022			
		CRN 15-	1, 1*230 V, 60Hz	eta [%]
	Pumped li		· · · · · · · · · · · · · · · · · · ·	[%]
	Liquid tem	Liquid temperature during operation = 68 °F  Density = 62.29 lb/ft³		
				100
				-90
				- 80
				70
				-60
			/,	- 50
				-40
				-30
				-20
				10
				L <sub>o</sub>
40	80 80	100	Q [US GPM]	
				NPSF [ft]
			P1	- 50
				40
			P2	
				- 30
				-20
				- 10
		Liquid tem Density =	Pumped liquid = Water Liquid temperature during of Density = 62.29 lb/ft³	Pumped liquid = Water Liquid temperature during operation = 68 °F Density = 62.29 lb/ft³  40 60 80 100 Q [US GPM]







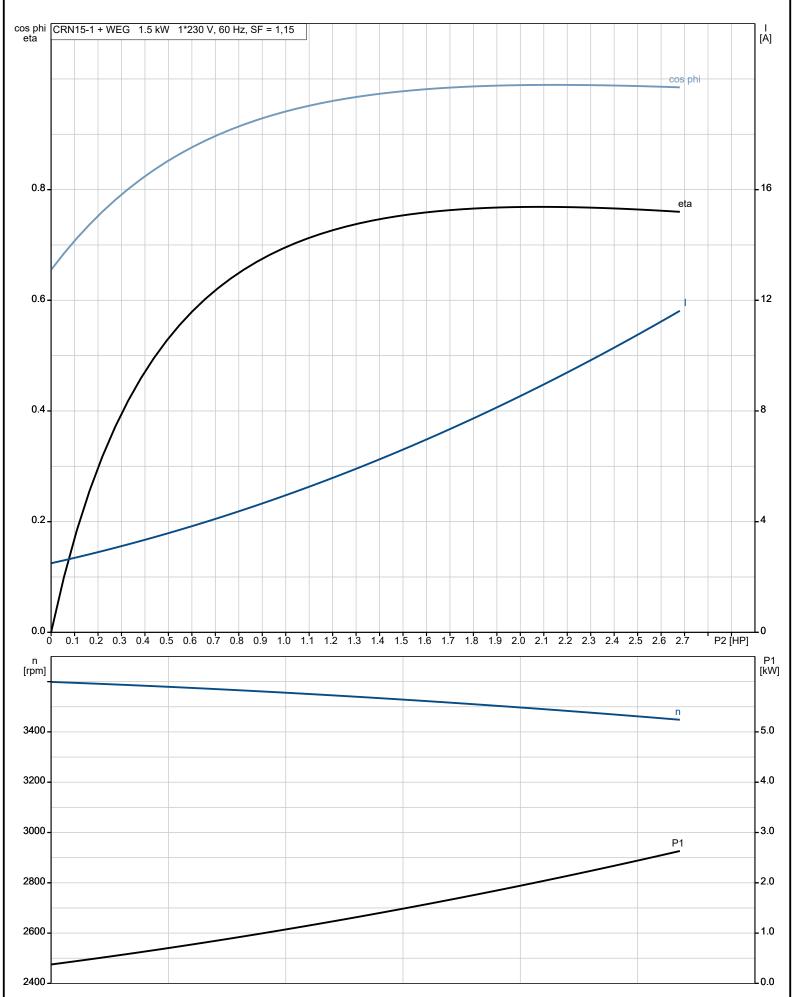
**Date:** 11/11/2022

Description	Value
Motor efficiency at 3/4 load:	75.0 %
Motor efficiency at 1/2 load:	70.0 %
Number of poles:	2
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTO
Motor No:	99883320
Controls:	
Frequency converter:	NONE
Others:	
DOE Pump Energy Index CL:	0.91
Net weight:	112 lb
Gross weight:	130 lb
Shipping volume:	6.11 ft³



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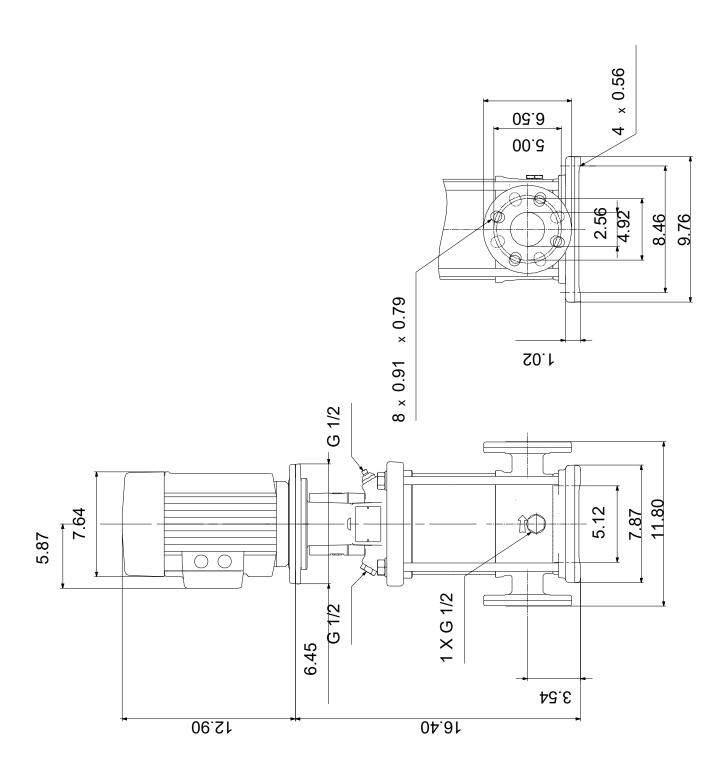
## 99917602 CRN 15-1 A-FGJ-A-V-HQQV 60 Hz





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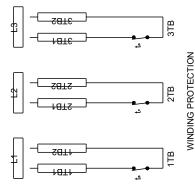
## 99917602 CRN 15-1 A-FGJ-A-V-HQQV 60 Hz

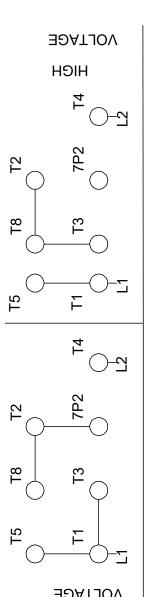




11/11/2022 Date:

# 99917602 CRN 15-1 A-FGJ-A-V-HQQV 60 Hz





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**Date:** 11/11/2022

Order Data:

<b>_</b>	1.37	Order Data:			
Position	Your pos.	Product name		Product No	Total
		CRN 15-1	1	99917602	Price on request
					- 1-300
	I	<u> </u>	I	<u> </u>	