

## **Submittal Data**

PROJECT:	UNIT TAG: QUANTITY:	
	TYPE OF SERVICE:	
REPRESENTATIVE:	SUBMITTED BY:	DATE:
ENGINEER:	APPROVED BY:	DATE:
CONTRACTOR:	ORDER NO.:	DATE:



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

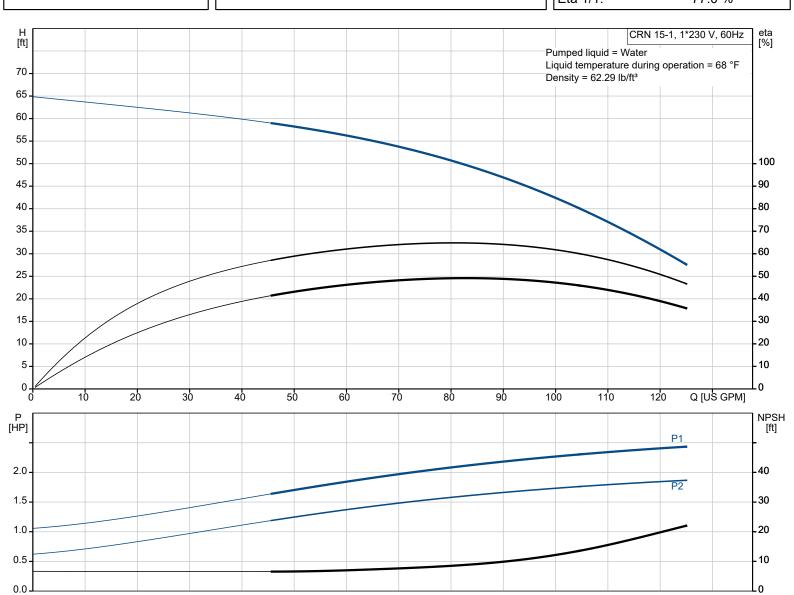
Vertical, multistage centrifugal pump with suction and discharge ports on the same level. Pump materials in contact with the liquid are in high-grade stainless steel (EN 1.4401)

Note! Product picture may differ from actual product

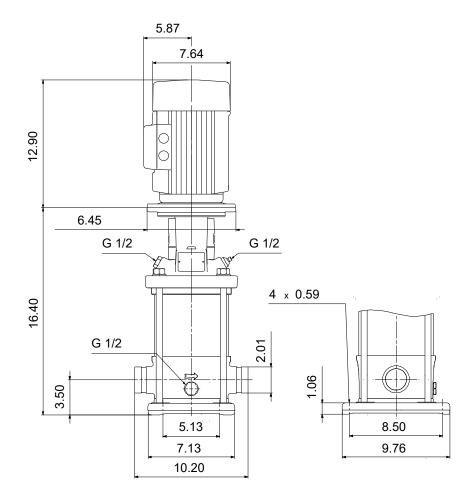
Conditions	of Service
Liquid:	Water
Temperature:	68 °F
Specific Gravity:	1.000

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:	99917592

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:	77.0 %		







### Materials:

Base: Stainless steel
Base: EN 1.4408
Base: AISI 316
Impeller: Stainless steel
Impeller: AISI 316
Impeller: EN 1.4401

Material code: A Code for rubber: V



**Date:** 22/11/2022

Qty. | Description

CRN 15-1 A-P-A-V-HQQV



Product No.: 99917592

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 PJE (Victaulic®) couplings.

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.

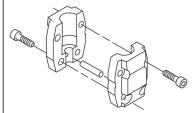
The entire process consists of these elements:

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

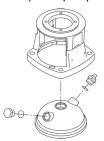
The colour code for the finished product is NCS 9000/RAL 9005.

#### **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.



**Date:** 22/11/2022

Qty. | Description

1



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.

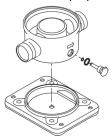
The pump has a stainless-steel base mounted on a separate base plate.

The 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 drain plug.

The pump is secured to the foundation by four bolts through the base plate.

The base is prepared for connection by means of PJE (Victualic®) couplings.



#### 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: 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



**Date:** 22/11/2022

Qty. | Description

1 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: PJE
Size of inlet connection: DN 50
Size of outlet connection: DN 50
Pressure rating for connection: PN 50
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

MOIOT 140.

Controls:

Frequency converter: NONE

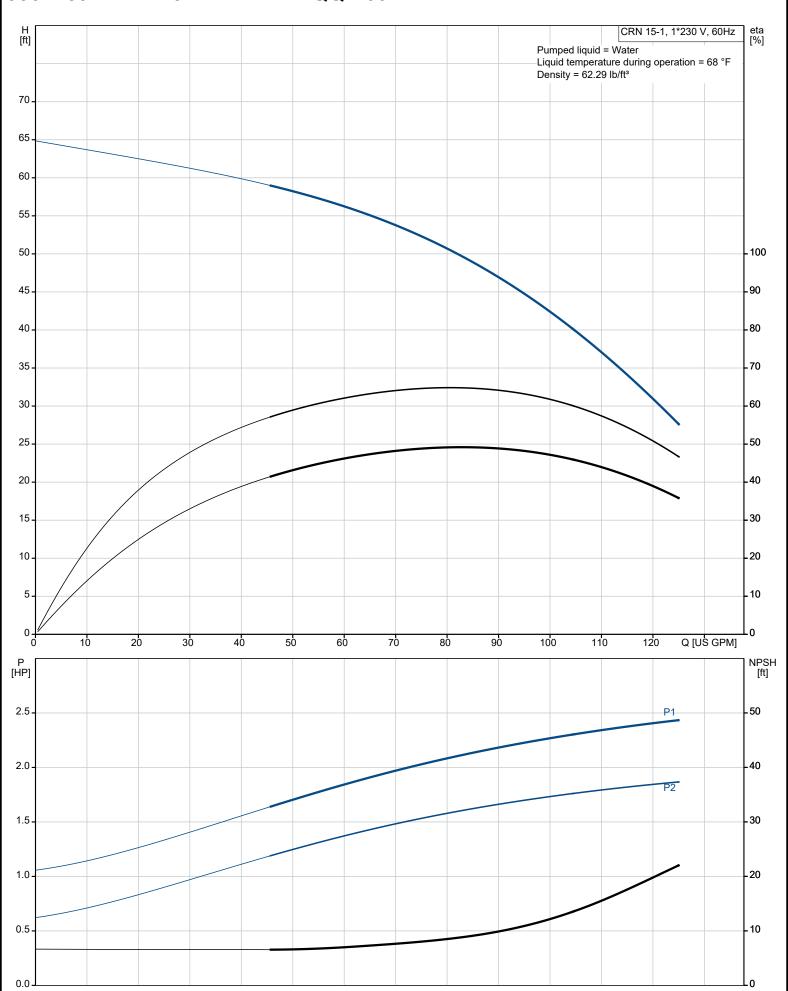
Others:

DOE Pump Energy Index CL: 0.91
Net weight: 101 lb
Gross weight: 119 lb
Shipping volume: 6.11 ft³



**Date:** 22/11/2022

## 99917592 CRN 15-1 A-P-A-V-HQQV 60 Hz





0.5

0.0

Description	Value
General information:	
Product name:	CRN 15-1 A-P-A-V-HQQ\
Product No:	99917592
EAN number:	5715114124126
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
Stages:	2
Impellers:	1
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals:	CURUS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Coolina:	IC 411
Materials:	IO TII
Base:	Stainless steel
Base:	EN 1.4408
Base:	AISI 316
	Stainless steel
Impeller:	
Impeller:	EN 1.4401 AISI 316
Impeller:	
Material code:	A
Code for rubber:	V
Bearing:	SIC
Installation:	40.4.05
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:	PJE
Size of inlet connection:	DN 50
Size of outlet connection:	DN 50
Pressure rating for connection:	PN 50
Flange size for motor:	56C
Connect code:	Р
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-4 194 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft³
Electrical data:	
Motor standard:	NEMA
Motor type:	WEG
Rated power - P2:	2 HP

2 HP

1.15

0.97

60 Hz

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 %

75.0 %

70.0 %

Power (P2) required by pump:

Mains frequency:

Rated voltage:

Service factor:

Rated current:

Rated speed:

Efficiency:

Starting current:

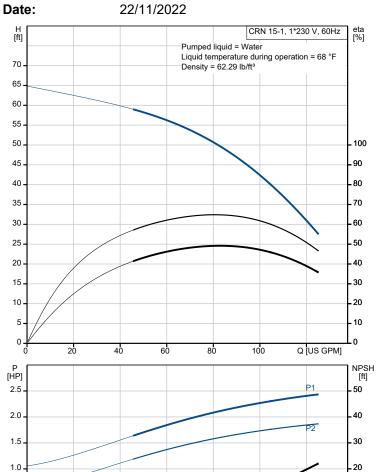
Full load SF current:

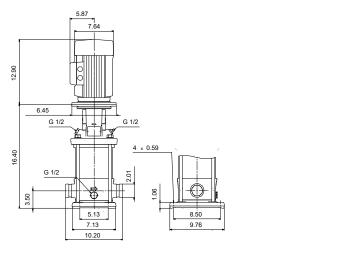
Cos phi - power factor:

Motor efficiency at full load:

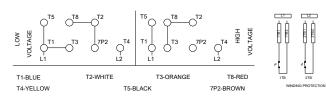
Motor efficiency at 3/4 load:

Motor efficiency at 1/2 load:





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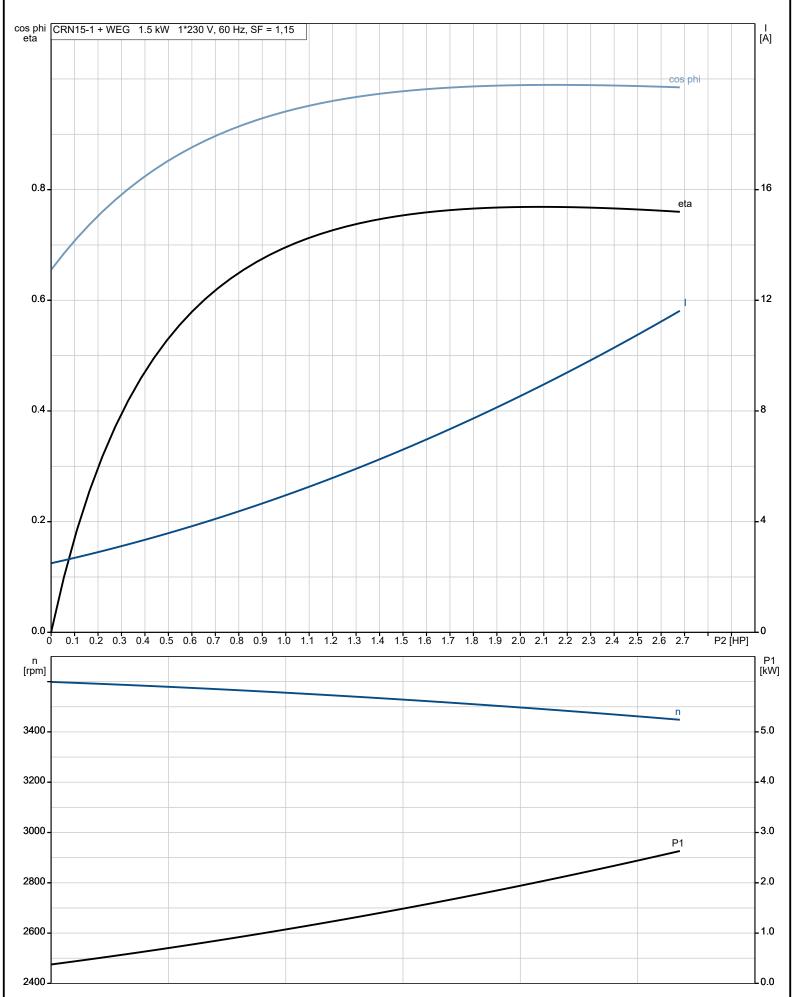
**Date:** 22/11/2022

Description	Value
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:	101 lb
Gross weight:	119 lb
Shipping volume:	6.11 ft³



**Date:** 22/11/2022

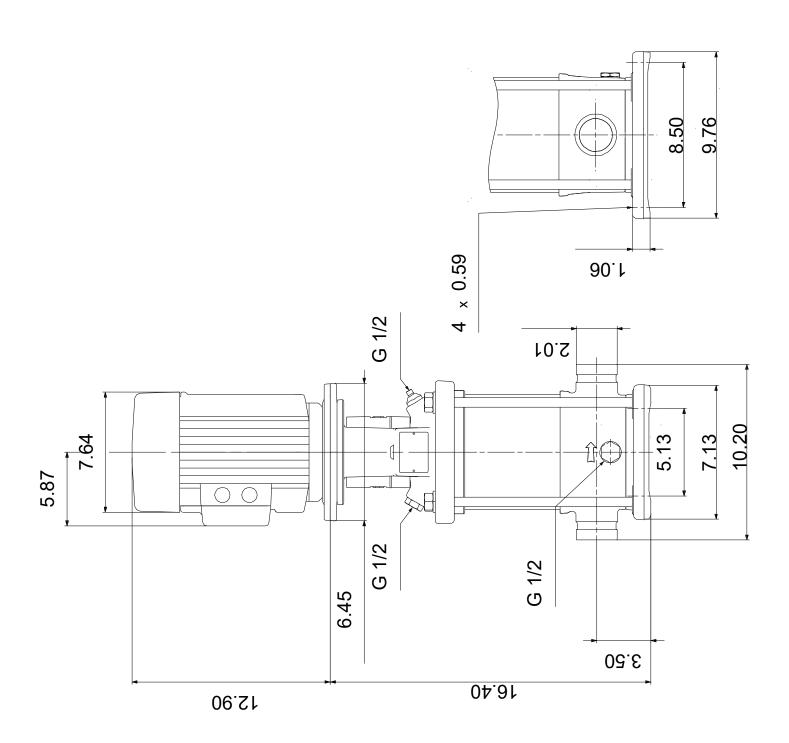
## 99917592 CRN 15-1 A-P-A-V-HQQV 60 Hz





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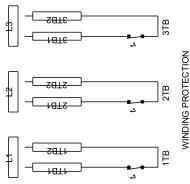
# 99917592 CRN 15-1 A-P-A-V-HQQV 60 Hz

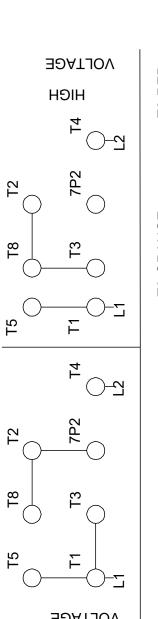




22/11/2022 Date:

# 99917592 CRN 15-1 A-P-A-V-HQQV 60 Hz





T8-RED 7P2-BROWN T3-ORANGE T2-WHITE T4-YELLOW T1-BLUE **JOLTAGE** 

ГОМ



**Date:** 22/11/2022

**Order Data:** 

Booities.	Voir noo	Order Data:	Amarina	Droduct No. 1	Total
Position	Your pos.	Product name CRN 15-1	Amount 1		Total
		GIAN 10-1	'	99911392	Price on request
	1	I	i	1	