

## **Submittal Data**

PROJECT:	UNIT TAG:		QUANTITY:	
	TYPE OF SERVICE:			
	THE OF CERTICE.			
REPRESENTATIVE:	SUBMITTED BY:		DATE:	
INCI NEOLIVIATIVE.	 OODIVIITIED DT.		DATE.	
ENGINEER:	APPROVED BY:	<u> </u>	DATE:	
LINGINLLIN.	AFFROVED DT.		DATE.	
CONTRACTOR:	ORDER NO.:		DATE:	
CONTRACTOR.	ONDER NO		DATE.	



#### Product photo could vary from the actual product

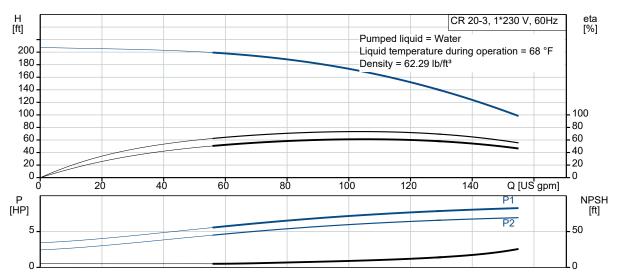
## CR 20-3 A-GJ-A-E-HQQE

Vertical, multistage centrifugal pump with suction and discharge ports on the same level. The pump head and base are in cast iron. All other wetted parts are in stainless steel (EN 1.4301)(AISI 304)

Conditions		
Efficiency:		Max pressure at s
Liquid:	Water	Liquid temperatur
Temperature:	68 °F	Maximum ambier
NPSH required:	ft	Shaft seal:
Specific Gravity:	1.000	Product number:

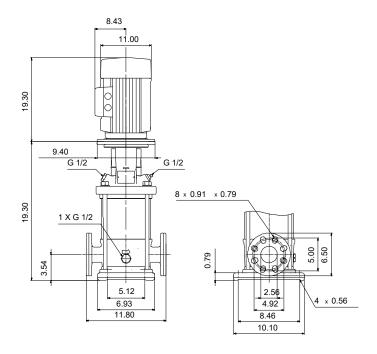
Pump Data				
Max pressure at stated temperature:	232 psi / 250 °F			
Liquid temperature range:	-4 248 °F			
Maximum ambient temperature:	104 °F			
Shaft seal:	HQQE			
Product number:	99917728			

Motor Data				
Rated power - P2:	7.5 HP			
Rated voltage:	208-230 V			
Main frequency:	60 Hz			
Enclosure class:	IP55			
Insulation class:	F			
Motor protection:	NONE			
Motor type:	WEG			
Eff. 1/1:	84.0 %			





# **Submittal Data**



### Materials:

Base: Cast iron

Base: EN 1561 EN-GJL-200
Base: ASTM A48-25B
Impeller: Stainless steel

Impeller: AISI 304 Impeller: EN 1.4301

Material code: A Code for rubber: E



**Date:** 11/8/2021

Count | Description

CR 20-3 A-GJ-A-E-HQQE



Product No.: 99917728

Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts 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 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.

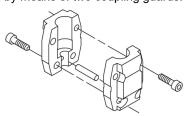
The entire process consists of these elements:

- 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**

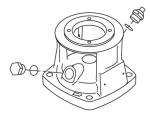
A standard split coupling connects the pump and motor shaft. It is enclosed in the pump head/motor stool by means of two coupling guards.



The pump head, pump head cover and flange for motor mounting is made in one piece. The pump head has a combined 1/2" priming plug and vent screw.



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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)
- 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: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.



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 base is made of cast iron. The flanges and base are cast in one piece. The outlet side of the base has a drain plug. The pump is secured to the foundation by four bolts through the base plate.



#### Motor

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

Motor-mounting designation in accordance with IEC 60034-7: IM B 5 (Code I) / IM 3001 (Code II). Electrical tolerances comply with IEC 60034.



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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:

Liquid temperature range: -4 .. 248 °F

Selected liquid temperature: 68 °F

Technical:

Materials:

Installation:

t max amb: 104 °F Maximum operating pressure: 232.06 psi

Max pressure at stated temperature: 232 psi / 250 °F

232 psi / -4 °F

Electrical data:

Power (P2) required by pump: 7.5 HP Starting current: 710-710 %

Controls:

Frequency converter: NONE

Others:

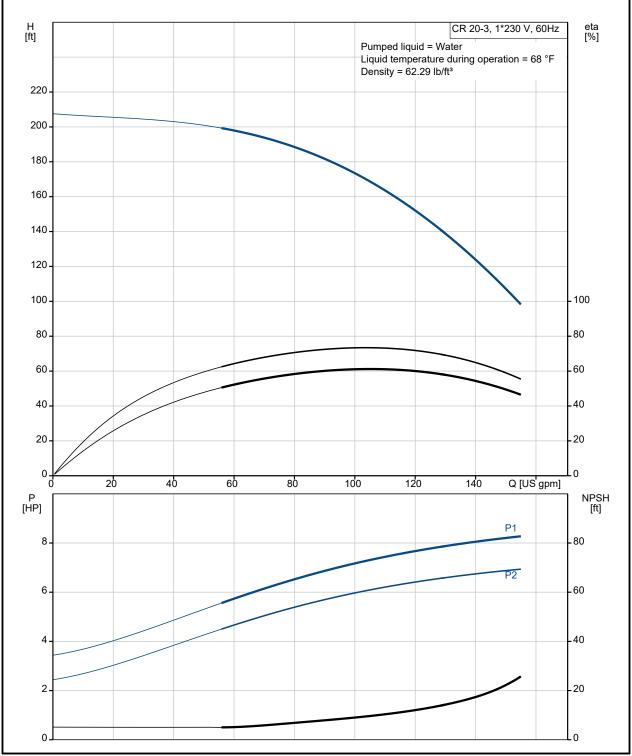
Country of origin: US

Custom tariff no.: 8413.70.2040



**Date:** 11/8/2021

### 99917728 CR 20-3 A-GJ-A-E-HQQE 60 Hz

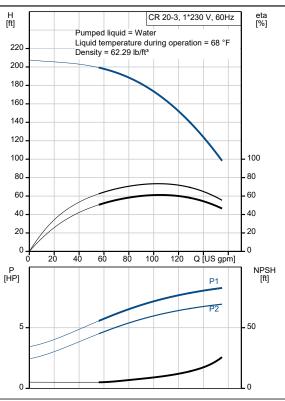


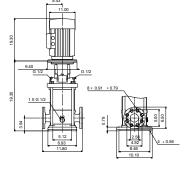


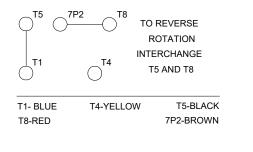
Date:

11/8/2021

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Description	Value	
General information:		_
Product name:	CR 20-3 A-GJ-A-E-HQQE	
Product No.:	99917728	
EAN:	5715114125505	
Technical:		
Rated pump speed:	3508 rpm	
Rated flow:	111 US gpm	
Rated head:	159.1 ft	
Maximum head:	206 ft	
Actual impeller diameter:	4.13 in	
Stages:	3	
Impellers:	3	
Number of reduced-diameter impellers:	0	
Low NPSH:	N	
Pump orientation:	Vertical	
Shaft seal arrangement:	Single	
Code for shaft seal:	HQQE	
Approvals:	CURUS	
Approvals for drinking water:	NSF/ANSI 61	
Curve tolerance:	ISO9906:2012 3B	
Pump version:	Α	
Model:	Α	_
Cooling:	IC 411	
Materials:		
Base:	Cast iron	
Base:	EN 1561 EN-GJL-200	
Base:	ASTM A48-25B	
Impeller:	Stainless steel	
Impeller:	EN 1.4301	
Impeller:	AISI 304	
Material code:	Α	
Code for rubber:	E	
Bearing:	SIC	
Installation:		
t max amb:	104 °F	
Maximum operating pressure:	232.06 psi	_
Max pressure at stated temperature:	232 psi / 250 °F	
Max pressure at stated temperature:	232 psi / -4 °F	
Type of connection:	ANSI / JIS	
Size of inlet connection:	DN 50	
Size of outlet connection:	DN 50	
Pressure rating for connection:	PN 25	
Flange rating inlet:	250 lb	
Flange size for motor:	213TC	
Connect code:	GJ	









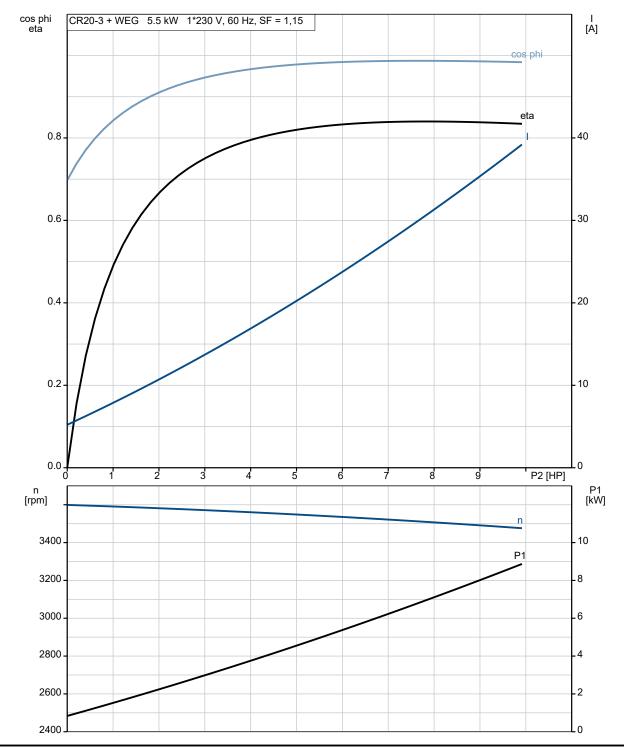
**Date:** 11/8/2021

Description	Value	
Liquid:		
Pumped liquid:	Water	
Liquid temperature range:	-4 248 °F	
Selected liquid temperature:	68 °F	
Density:	62.29 lb/ft³	
Electrical data:		
Motor standard:	NEMA	
Motor type:	WEG	
Rated power - P2:	7.5 HP	
Power (P2) required by pump:	7.5 HP	
Main frequency:	60 Hz	
Rated voltage:	1 x 208-230 V	
Service factor:	1.15	
Rated current:	31.7-38.8 A	
Starting current:	710-710 %	
Full load SF current:	31.7/44.6 A	
Cos phi - power factor:	0.99	
Rated speed:	3515 rpm	
IE efficiency:	84.0%	
Motor efficiency at full load:	84.0 %	
Motor efficiency at 3/4 load:	82.5 %	
Motor efficiency at 1/2 load:	78.5 %	
Number of poles:	2	
Enclosure class (IEC 34-5):	IP55	
Insulation class (IEC 85):	F	
Built-in motor protection:	NONE	
Motor Number:	99883305	
Controls:		
Frequency converter:	NONE	
Others:		
DOE Pump Energy Index CL:	0.91	
Net weight:	249 lb	
Gross weight:	335 lb	
Shipping volume:	13.1 ft³	
Country of origin:	US	
Custom tariff no.:	8413.70.2040	



**Date:** 11/8/2021

### 99917728 CR 20-3 A-GJ-A-E-HQQE 60 Hz

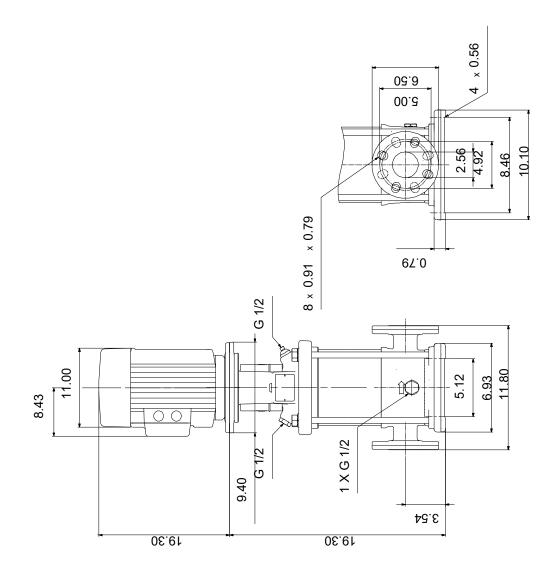




Date:

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## 99917728 CR 20-3 A-GJ-A-E-HQQE 60 Hz



Note! All units are in [in] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.



Date:

11/8/2021

# 99917728 CR 20-3 A-GJ-A-E-HQQE 60 Hz

T5 AND T8

ROTATION

INTERCHANGE

**7P2** 

T5-BLACK

T8-RED

All units are [in] unless otherwise presented.