

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 20-5 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)

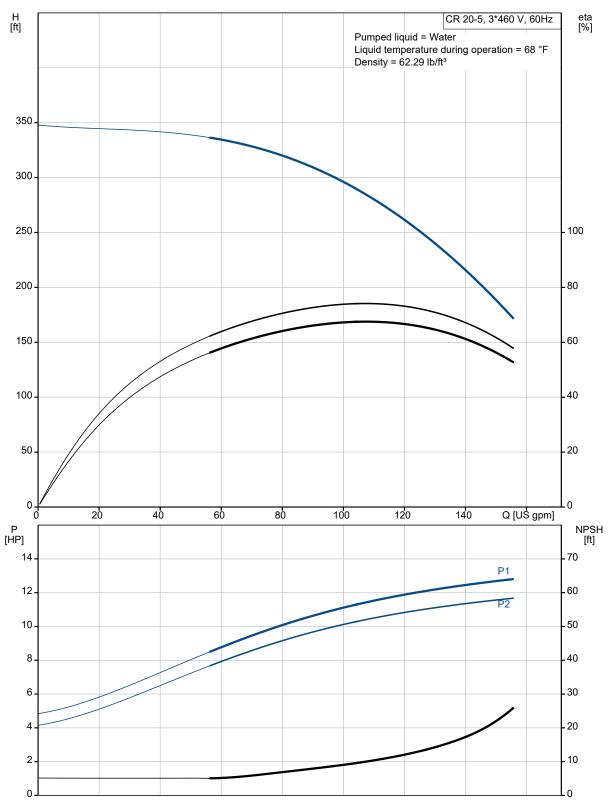
Conditions of Service			
Efficiency:			Max pressure at
Liquid:	Water		Liquid temperato
Temperature:	68 °F		Maximum ambie
NPSH required:	ft		Shaft seal:
Specific Gravity:	1.000		Product number

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:	99917748			

Motor Data			
Rated power - P2:	15 HP		
Rated voltage:	208-230/460 V		
Main frequency:	60 Hz		
Enclosure class:	IP55		
Insulation class:	F		
Motor protection:	NONE		
Motor type:	WEG		
Eff. 1/1:	91 %		

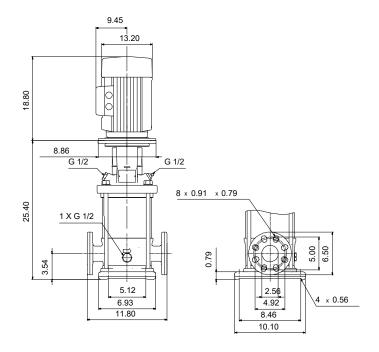


Submittal Data





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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



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CR 20-5 A-GJ-A-E-HQQE



Product No.: 99917748

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 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.

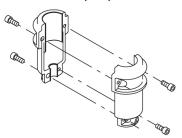
The entire process consists of these elements:

- 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

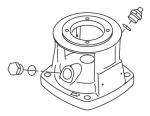
A long split coupling connects the pump and motor shaft. It is enclosed in the motor stool by means of two coupling guards. The long coupling makes it possible to replace the shaft seal without removing the motor from the pump.



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.

The motor efficiency is classified as premium efficiency in accordance with EISA2007.



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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 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:

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: 15 HP Starting current: 680-680 %

Controls:

Frequency converter: NONE

Others:

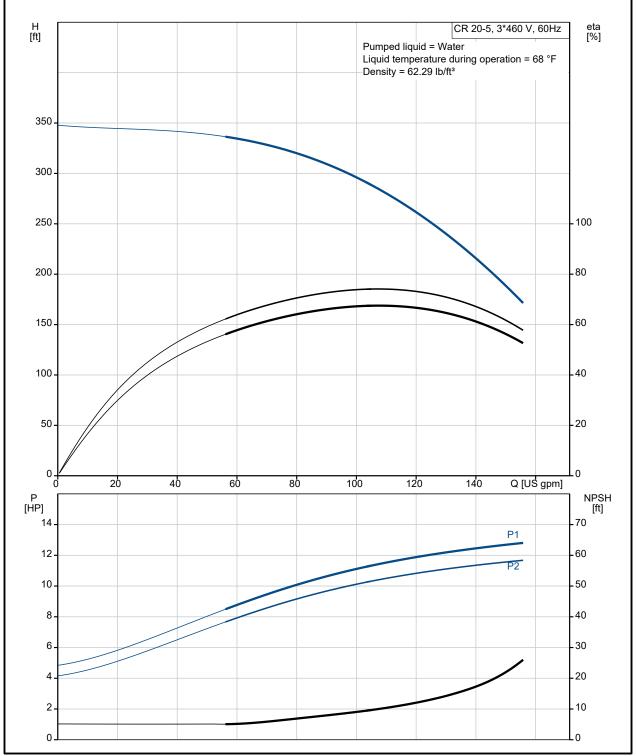
Country of origin: US

Custom tariff no.: 8413.70.2040



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99917748 CR 20-5 A-GJ-A-E-HQQE 60 Hz

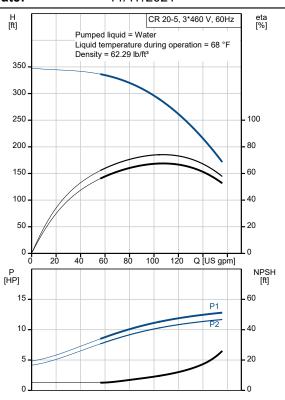


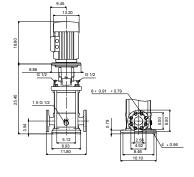


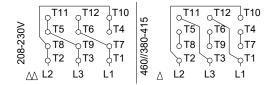
Date:

11/17/2021

Description General information:	Value
	00.00.5
Product name:	CR 20-5 A-GJ-A-E-HQQE
Product No.:	99917748
EAN:	5715114125819
Technical:	
Rated pump speed:	3444 rpm
Rated flow:	111 US gpm
Rated head:	268.7 ft
Maximum head:	344.5 ft
Actual impeller diameter:	4.13 in
Stages:	5
Impellers:	5
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:	A
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:	A
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:	254TC
Connect code:	GJ









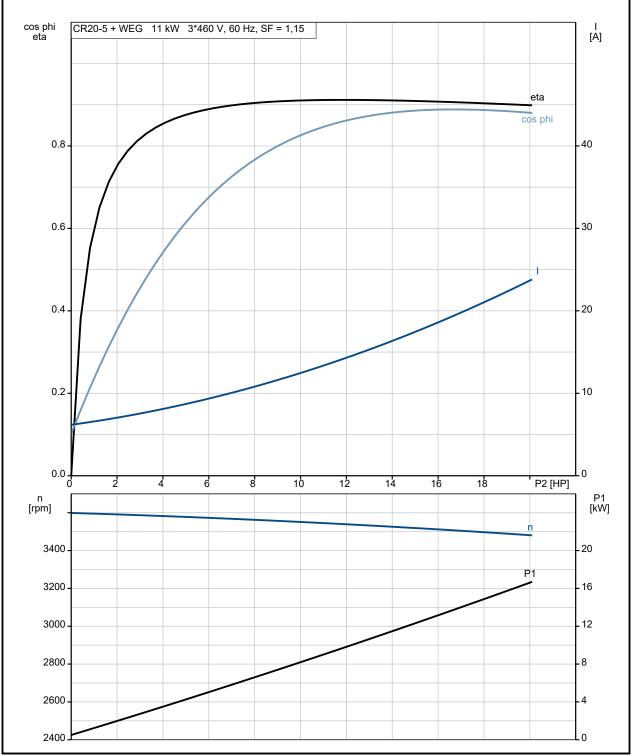
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Description	Value	
Liquid:	1 4.140	
Pumped liquid:	Water	
Liquid temperature range:	-4 248 °F	
Selected liquid temperature:	68 °F	
Density:	62.29 lb/ft³	
Electrical data:		
Motor standard:	NEMA	
Motor type:	WEG	
IE Efficiency class:	IE3 / NEMA Premium	
Rated power - P2:	15 HP	
Power (P2) required by pump:	15 HP	
Main frequency:	60 Hz	
Rated voltage:	3 x 208-230/460 V	
Service factor:	1.15	
Rated current:	38,5-34,8/17,4 A	
Starting current:	680-680 %	
Full load SF current:	40/20 A	
Cos phi - power factor:	0.87	
Rated speed:	3525 rpm	
IE efficiency:	IE3 91%	
Motor efficiency at full load:	91 %	
Motor efficiency at 3/4 load:	91 %	
Motor efficiency at 1/2 load:	89.5 %	
Number of poles:	2	
Enclosure class (IEC 34-5):	IP55	
Insulation class (IEC 85):	F	
Built-in motor protection:	NONE	
Motor Number:	99883247	
Controls:		
Frequency converter:	NONE	
Others:		
DOE Pump Energy Index CL:	0.91	
Net weight:	298 lb	
Gross weight:	384 lb	
Shipping volume:	13.1 ft³	
Country of origin:	US	
Custom tariff no.:	8413.70.2040	



Date: 11/17/2021

99917748 CR 20-5 A-GJ-A-E-HQQE 60 Hz

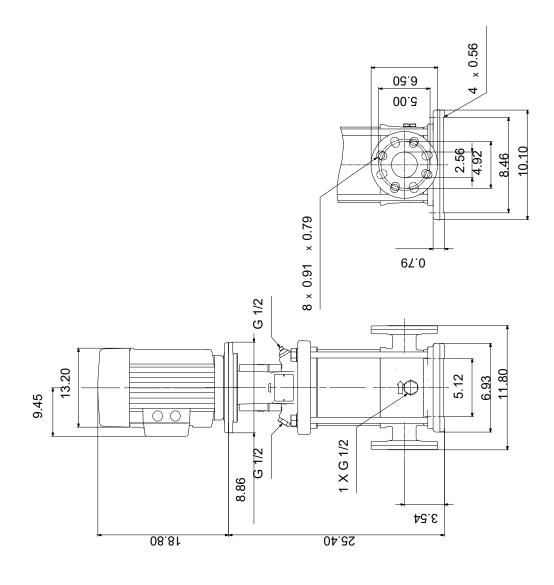




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99917748 CR 20-5 A-GJ-A-E-HQQE 60 Hz



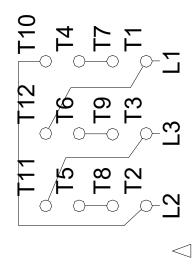
Note! All units are in [in] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.



Date:

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99917748 CR 20-5 A-GJ-A-E-HQQE 60 Hz



914-088//094

208-230V

All units are [in] unless otherwise presented.