

Submittal Data

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



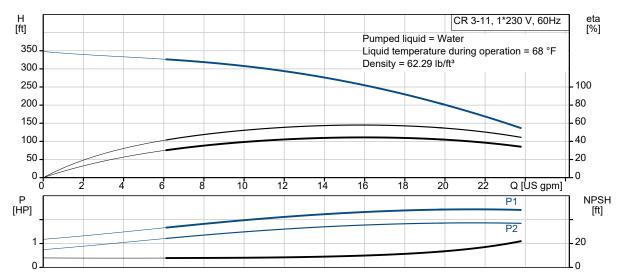
Product photo could vary from the actual product

CR 3-11 A-FGJ-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)

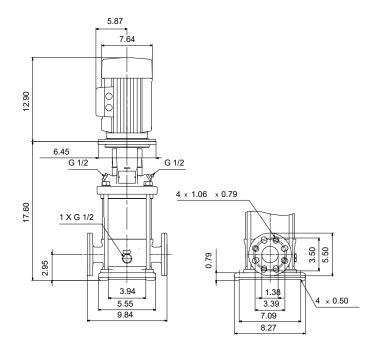
Conditions of Service		Pump Data
Efficiency:		Max pressure at stated temperature:
Liquid:	Water	Liquid temperature range:
Temperature:	68 °F	Maximum ambient temperature:
NPSH required:	ft	Approvals:
Specific Gravity:	1.000	Shaft seal:
		Product number:

	Motor Data	
363 psi / 250 °F	Rated power - P2:	2 HP
-4 248 °F	Rated voltage:	115/208-230 V
104 °F	Main frequency:	60 Hz
CURUS,NSF61	Enclosure class:	IP55
HQQE	Insulation class:	F
99916283	Motor protection:	PTO
	Motor type:	WEG
	Eff. 1/1:	77.0 %





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: 3/8/2021

Count | Description

CR 3-11 A-FGJ-A-E-HQQE



Product No.: 99916283

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 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.

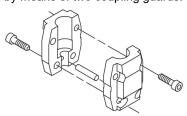
The entire process consists of these elements:

- 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

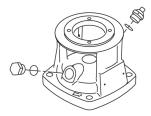
A standard split coupling connects the pump and motor shaft. It is enclosed in the pump head/motor stool by means of two coupling guards.



The pump head, 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.



Date: 3/8/2021



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 combined drain plug and bypass valve. 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 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.



Date: 3/8/2021

Count | Description

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 .. 248 °F
Selected liquid temperature: 68 °F
Density: 62.29 lb/ft³

Technical:

Rated pump speed: 3499 rpm
Rated flow: 15.4 US gpm
Rated head: 251.7 ft
Pump orientation: Vertical
Shaft seal arrangement: Single
Code for shaft seal: HQQE

Approvals on nameplate: CURUS,NSF61 Curve tolerance: ISO9906:2012 3B

Materials:

Base: Cast iron

EN 1561 EN-GJL-200

ASTM A48-25B

Impeller: Stainless steel

EN 1.4301 AISI 304

Bearing: SIC

SIC

Installation:

Maximum ambient temperature: 104 °F
Maximum operating pressure: 362.59 psi

Max pressure at stated temperature: 363 psi / 250 °F

363 psi / -4 °F

Type of connection: DIN / ANSI / JIS

Size of inlet connection: DN 25/32
Size of outlet connection: DN 25/32
Pressure rating for connection: PN 25
Flange rating inlet: 250 lb
Flange size for motor: 56C

Electrical data:

Motor standard: NEMA
Motor type: WEG
Rated power - P2: 2 HP



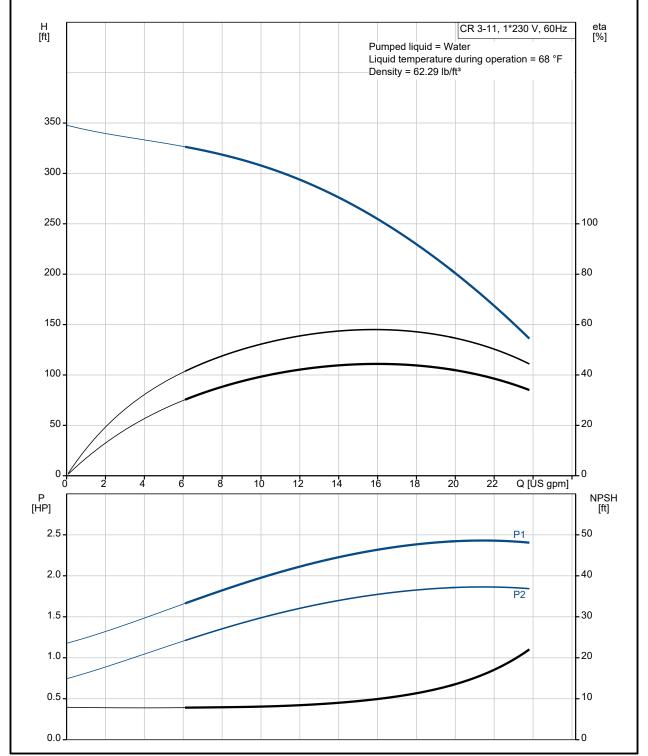
Date: 3/8/2021

		Date.	 0/0/2021	
Count	Description			
	Power (P2) required by pump:	2 HP		
	Main 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		
	IE 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 Number:	99883320		
	Controls:			
	Frequency converter:	NONE		
	Others:	00.4.11		
	Net weight:	82.4 lb		
	Gross weight:	96.9 lb		
	Shipping volume:	8.26 ft ³		
	Country of origin: Custom tariff no.:	US		
	Custom tann no	8413.70.2040		



Date: 3/8/2021

99916283 CR 3-11 A-FGJ-A-E-HQQE 60 Hz

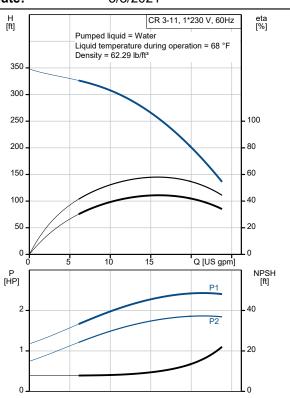


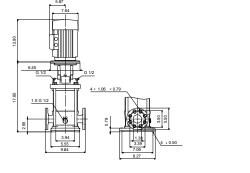


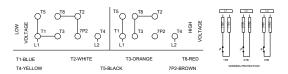
Date:

3/8/2021

Description	Value
General information:	
Product name:	CR 3-11 A-FGJ-A-E-HQQE
Product No.:	99916283
EAN:	5715114110303
Price:	\$ 2884
Technical:	
Rated pump speed:	3499 rpm
Rated flow:	15.4 US gpm
Rated head:	251.7 ft
Maximum head:	342.9 ft
Stages:	11
Impellers:	11
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals on nameplate:	CURUS,NSF61
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
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
Bearing:	SIC
Installation:	
Maximum ambient temperature:	104 °F
Maximum operating pressure:	362.59 psi –
Max pressure at stated temperature:	363 psi / 250 °F
Max pressure at stated temperature:	363 psi / -4 °F
Type of connection:	DIN / ANSI / JIS
Size of inlet connection:	DN 25/32
Size of outlet connection:	DN 25/32
Pressure rating for connection:	PN 25
Flange rating inlet:	250 lb
Flange size for motor:	56C
Connect code:	ECI







FGJ

Connect code:



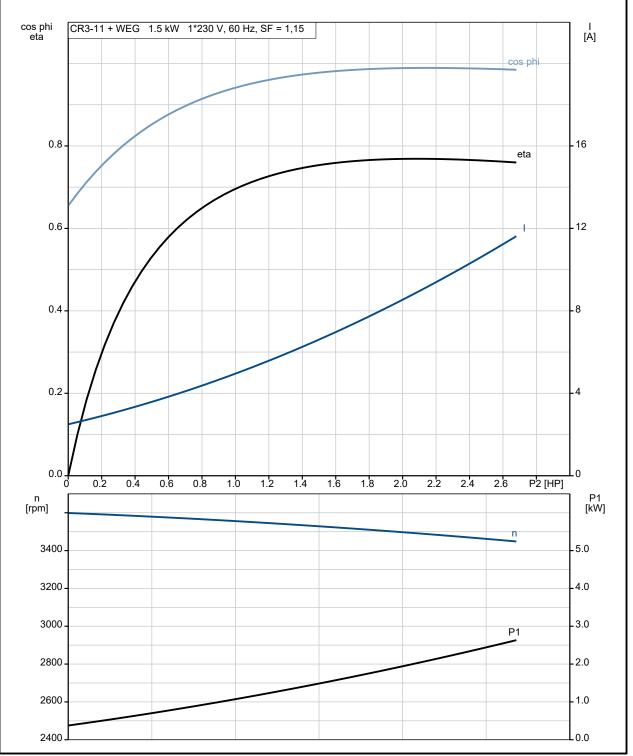
Date: 3/8/2021

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:	2 HP		
Power (P2) required by pump:	2 HP		
Main 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 %		
Load current:	20.1/8.73 A		
Cos phi - power factor:	0.97		
Rated speed:	3495 rpm		
IE 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 protection:	PTO		
Motor Number:	99883320		
Controls:			
Frequency converter:	NONE		
Others:			
Net weight:	82.4 lb		
Gross weight:	96.9 lb		
Shipping volume:	8.26 ft ³		
Country of origin:	US		
Custom tariff no.:	8413.70.2040		



Date: 3/8/2021

99916283 CR 3-11 A-FGJ-A-E-HQQE 60 Hz

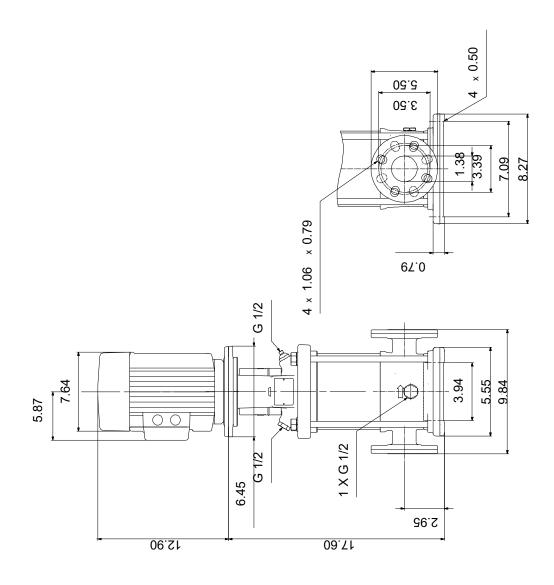




Date:

3/8/2021

99916283 CR 3-11 A-FGJ-A-E-HQQE 60 Hz



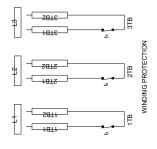
Note! All units are in [in] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.

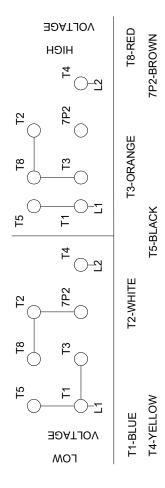


Date:

3/8/2021

99916283 CR 3-11 A-FGJ-A-E-HQQE 60 Hz





All units are [in] unless otherwise presented.