.....

Date:

9/26/2019

Count | Description

1 CRI 1S-11 A-CA-A-E-HQQE



Product No.: 96081229

Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in stainless steel. Power transmission is via a rigid split coupling. Pipe connection is via FlexiClamps.

The pump is fitted with a 3-phase, fan-cooled asynchronous motor. 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:

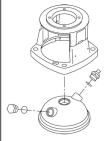
1) Alkaline-based cleaning.

- 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

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.

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.



Date:

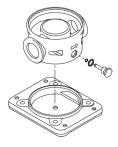
9/26/2019



The shaft seal is screwed into the pump head.

The pump has a special air-cooled shaft-seal chamber generating the same insulation effect as that of a vacuum flask. No external cooling is necessary; the ambient temperature is sufficient. An automatic vent vents the pump seal chamber.

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 combined drain plug and bypass valve. The pump is secured to the foundation by four bolts through the base plate. The base is prepared for connection by means of FlexiClamp 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.

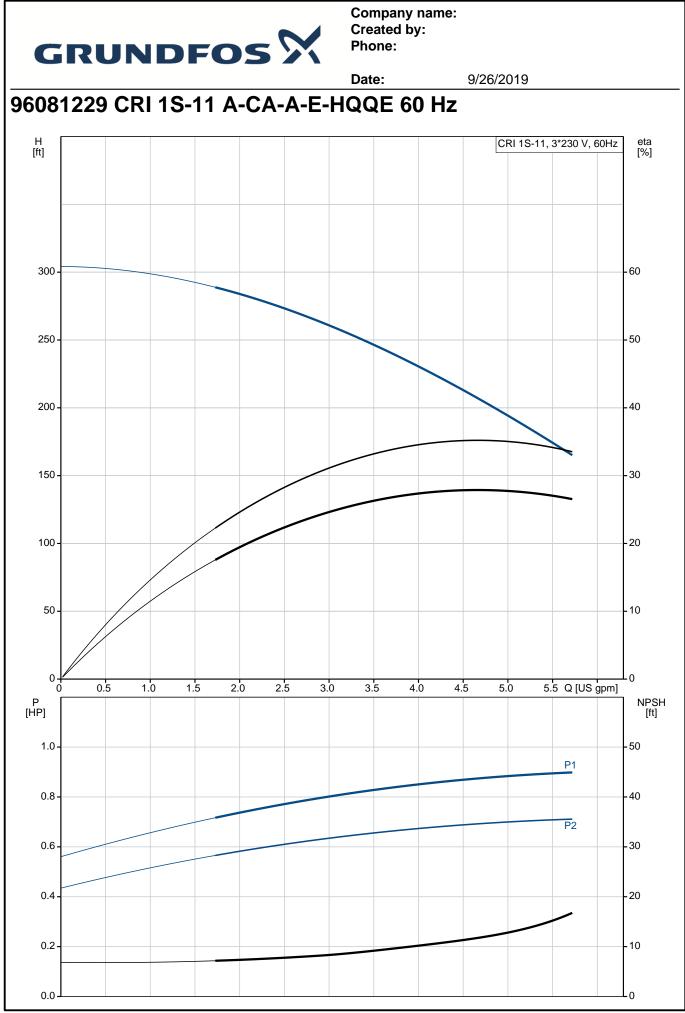
The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (I1/1).

Technical data

Controls: Frequency converter:	NONE
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -4 248 °F 68 °F 62.29 lb/ft ³
Technical: Rated pump speed: Rated flow: Rated head: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals on nameplate: Curve tolerance:	3439 rpm 4.84 US gpm 200.5 ft Vertical Single HQQE CURUS,NSF61 ISO9906:2012 3B
Materials:	



Description Base: Impeller: Bearing: Installation: Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Impeller: Bearing: Installation: Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	EN 1.4408 AISI 316 Stainless steel EN 1.4301 AISI 304 SIC 104 °F 362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Bearing: Installation: Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	AISI 316 Stainless steel EN 1.4301 AISI 304 SIC 104 °F 362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Bearing: Installation: Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	Stainless steel EN 1.4301 AISI 304 SIC 104 °F 362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Bearing: Installation: Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	EN 1.4301 AISI 304 SIC 104 °F 362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Bearing: Installation: Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	EN 1.4301 AISI 304 SIC 104 °F 362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Installation: Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	AISI 304 SIC 104 °F 362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Installation: Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	SIC 104 °F 362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Installation: Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	104 °F 362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Maximum operating pressure: Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	362.59 psi ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Max pressure at stated temperat Type of connection: Size of inlet connection: Size of outlet connection:	ure: 363 psi / 250 °F 363 psi / -4 °F FlexiClamp	
Type of connection: Size of inlet connection: Size of outlet connection:	363 psi / -4 °F FlexiClamp	
Size of inlet connection: Size of outlet connection:	FlexiClamp	
Size of inlet connection: Size of outlet connection:		
Size of outlet connection:	DN 32	
	DN 32	
Dressure reting for since connect		
Pressure rating for pipe connecti		
Flange size for motor:	56C	
Electrical data:		
Motor standard:	NEMA	
Motor type:	71BA	
	0.75 HP	
	0.75 HP	
Main frequency:	60 Hz	
Rated voltage:	3 x 208-230YY/460Y V	
Service factor:	1.25	
Rated current:	2,40-2,30/1,20 A	
Starting current:	590-650 %	
Cos phi - power factor:	0.84-0.78	
Rated speed:	3430-3460 rpm	
Motor efficiency at full load:	79.0-80.0 %	
Number of poles:	2	
Enclosure class (IEC 34-5):	55 Dust/Jetting	
Insulation class (IEC 85):	F	
Motor Number:	85900702	
	00000102	
Others:		
Net weight:	49.5 lb	
Gross weight:	60.5 lb	
Shipping volume:	4.94 ft ³	
Country of origin:	US	
Custom tariff no.:	8413.70.2040	
	0+10.70.20+0	



Printed from Grundfos Product Center [2019.06.001]

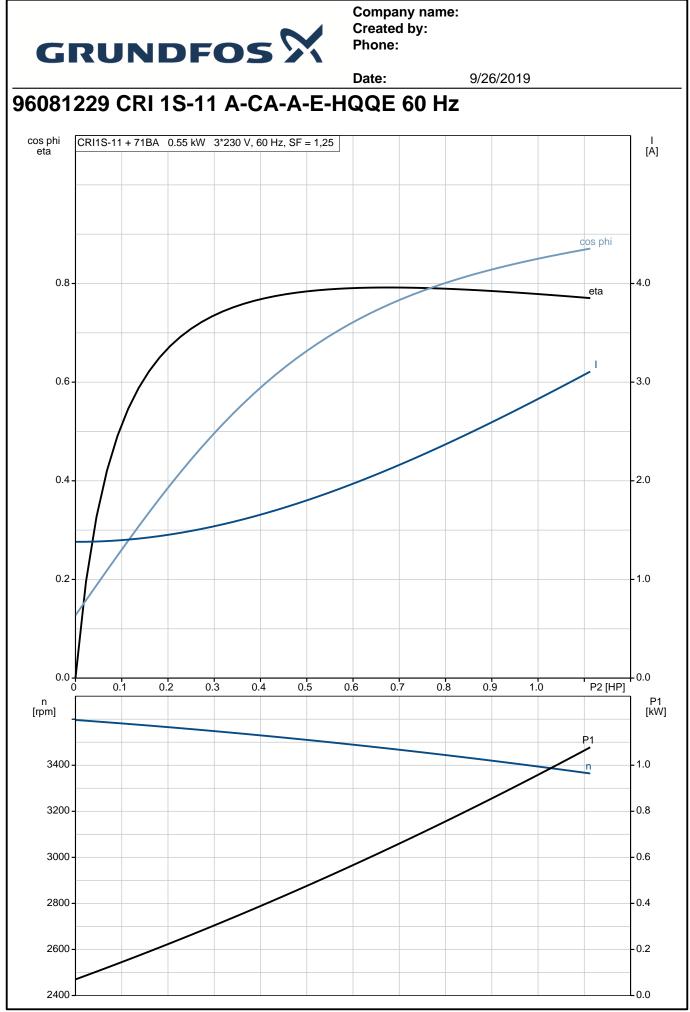


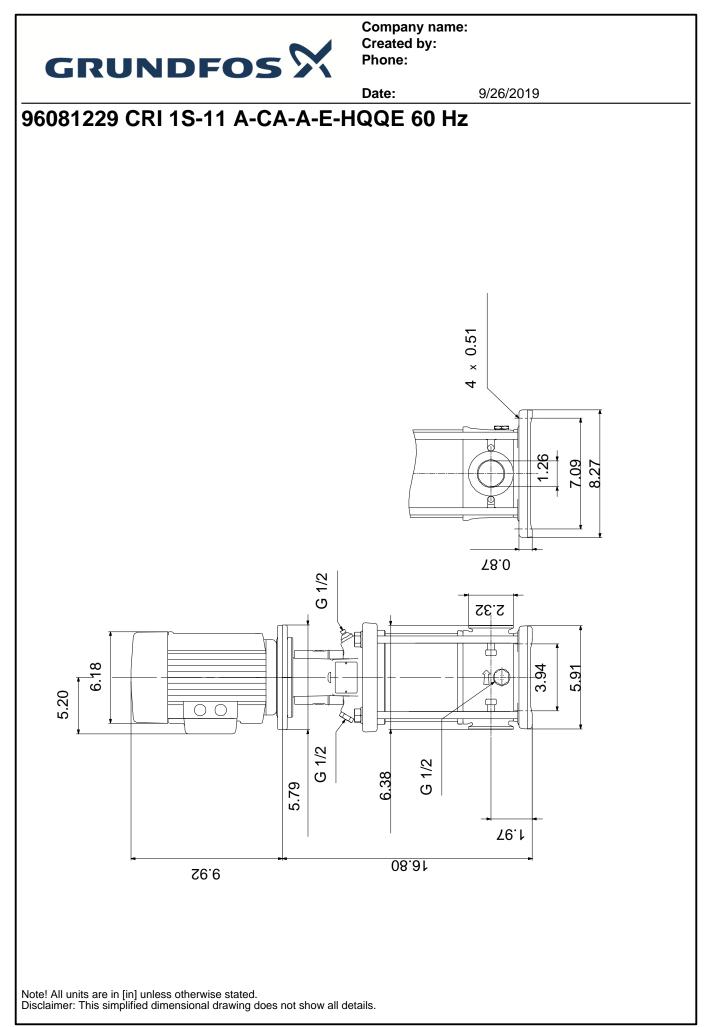
		Date: 9		2019		
Description General information:	Value	H [ft]		CRI 1S-11	, 3*230 V, 60Hz	eta [%]
Product name:	CRI 1S-11 A-CA-A-E-HQQE					
Product No.:	96081229	300 -				- 60
EAN:	5700395156737	—				
	5700395156737	—				
Technical:		250 -				- 50
Rated pump speed:	3439 rpm					
Rated flow:	4.84 US gpm	200 -				- 40
Rated head:	200.5 ft					
Head max:	303.2 ft	150 -				- 30
Stages:	11					- 00
Impellers:	11					
Number of reduced-diameter impellers:	0	100 -				- 20
Low NPSH:	Ν	50 -				- 10
Pump orientation:	Vertical	- ~ ~ //				
Shaft seal arrangement:	Single	_ //				
Code for shaft seal:	HQQE		1.0 1.5 2.0 2.5 3	3.0 3.5 4.0 4.5	Q [US gpm]	L ₀
Approvals on nameplate:	CURUS,NSF61	Р				NPSH
Curve tolerance:	ISO9906:2012 3B	[HP] 1.0 -				[ft] - 50
Pump version:	A				P1	
Model:	A	0.8 -				- 40
Cooling:	TEFC				P2	
Materials:	IEFC	0.6				- 30
	Stainless steel	0.4				- 20
Base:	EN 1.4408					20
	AISI 316	0.2 -				- 10
Impollori	Stainless steel					
Impeller:	EN 1.4301	0.0				L ₀
	AISI 304		5.20			
Material code:			6.18			
	A					
Code for rubber:						
Bearing:	SIC	9.92				
Installation:	104 °F					
Maximum ambient temperature:	-	5.79				
Maximum operating pressure:	362.59 psi	<u>G</u>	1/2 G 1/2			
Max pressure at stated temperature:	363 psi / 250 °F		──┧╂═╤╤═╂┠┍			
	363 psi / -4 °F	08:92 1/	/2			
Type of connection:	FlexiClamp				× 0.51	
Size of inlet connection:	DN 32	1.97				
Size of outlet connection:	DN 32		3.94	1.26 7.09		
Pressure rating for pipe connection:	PN 25		b 3.81	8.27		
Flange size for motor: Connect code:	56C CA					
Liquid:	Motor					
Pumped liquid:	Water		WARNING	-		
Liquid temperature range:	-4 248 °F	WITH THE NATION	GROUNDED IN ACCORDANCE			
Selected liquid temperature:	68 °F	PREVENT SERIOU	TRAINED PERSONNEL TO IS ELECTRICAL SHOCKS.			
Density:	62.29 lb/ft ³	SOURCE FROM MC	OR, DISCONNECT POWER DTOR AND ANY ACCESSORY OW MOTOR TO COME TO A			
Electrical data:		COMPLETE STANE	D STILL.	_		
Motor standard:	NEMA	LOW VOLTAGI 60Hz. 208-230\ 6 5	E 60H7: 460V			
Motor type:	71BA	9 9 8 9	-● 6● 5● 4● 7● 1			
Rated power - P2:	0.75 HP	3● 2●	1 ● 8 ● 7 ● 1 ● 3 ● 2 ● 1 ●	x		
Power (P2) required by pump:	0.75 HP	L3 L2	L1 L3 L2 L1	600 DB		
Main frequency:	60 Hz		INTERCHANGE ANY TWO LINE WEES TO BEVERSE BOTATION THERMOSTAT LEADS			
Rated voltage:	3 x 208-230YY/460Y V		(WHEN PROVIDED)			
Service factor:	1.25					
Rated current:	2,40-2,30/1,20 A					

Printed from Grundfos Product Center [2019.06.001]



		Date:	9/26/2019
Description	Value		
Starting current:	590-650 %		
Load current:	2,9-2,75/1,4 A		
Cos phi - power factor:	0.84-0.78		
Rated speed:	3430-3460 rpm		
Motor efficiency at full load:	79.0-80.0 %		
Number of poles:	2		
Enclosure class (IEC 34-5):	55 Dust/Jetting		
Insulation class (IEC 85):	F		
Motor protection:	NONE		
Motor Number:	85900702		
Controls:			
Frequency converter:	NONE		
Others:			
Net weight:	49.5 lb		
Gross weight:	60.5 lb		
Shipping volume:	4.94 ft ³		
Country of origin:	US		
Custom tariff no.:	8413.70.2040		







Date: 9/26/2019 96081229 CRI 1S-11 A-CA-A-E-HQQE 60 Hz WARNING \triangle MOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES BY TRAINED PERSONNEL TO PREVENT SERIOUS ELECTRICAL SHOCKS. TO SERVICE MOTOR, DISCONNECT POWER SOURCE FROM MOTOR AND ANY ACCESSORY DEVICES AND ALLOW MOTOR TO COME TO A COMPLETE STAND STILL. HIGH VOLTAGE LOW VOLTAGE 60Hz: 460V 60Hz. 208-230V 50Hz: 400V 5 6 4 5⊜ 6⊜ 4⊜ 9 8⊜ 7⊜ 9 7 8 2 3⊜ 1⊜ 3⊜ 2⊜ 1⊜ 96553852 L1 L2 L3 L3 L2 L1 INTERCHANGE ANY TWO LINE WIRES TO REVERSE ROTATION THERMOSTAT LEADS 🖨 J 🌒 J (WHEN PROVIDED)

All units are [in] unless otherwise presented.