

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

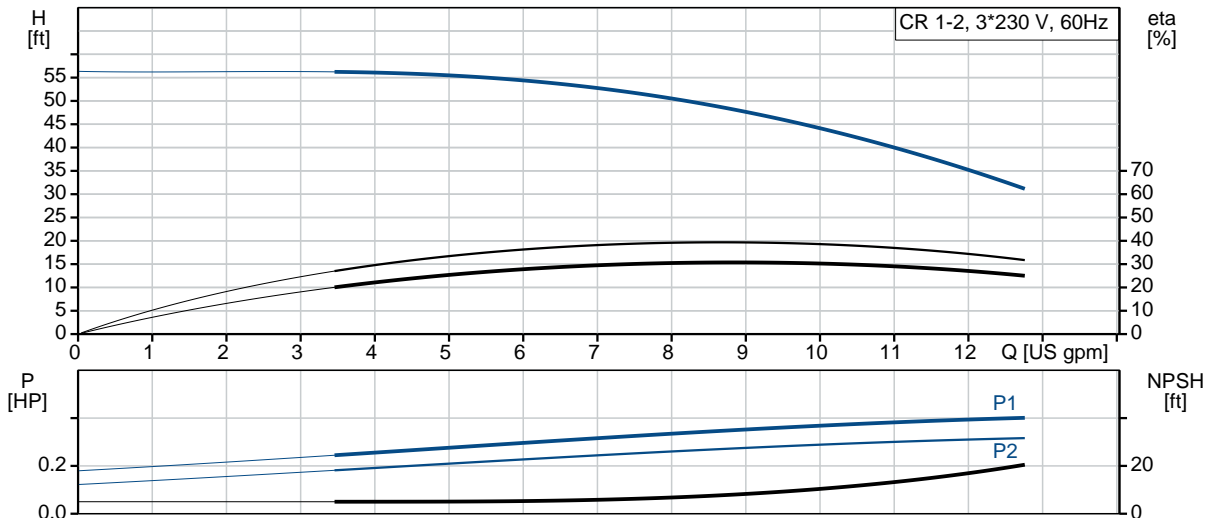


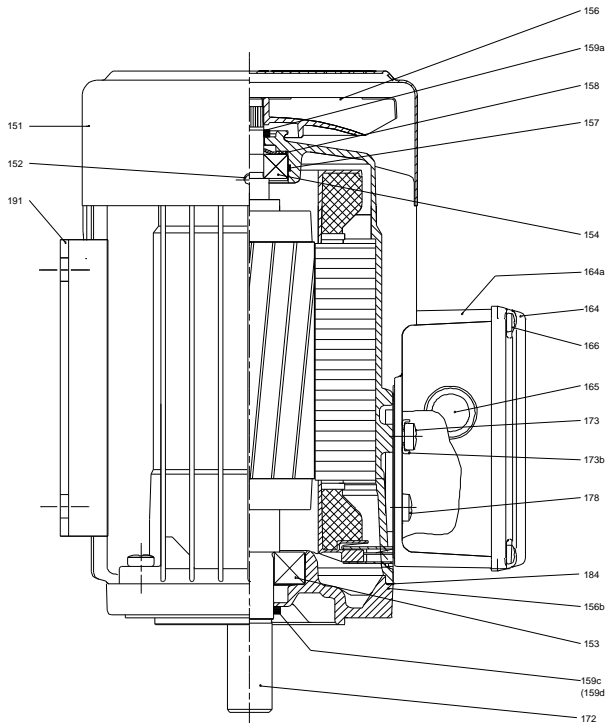
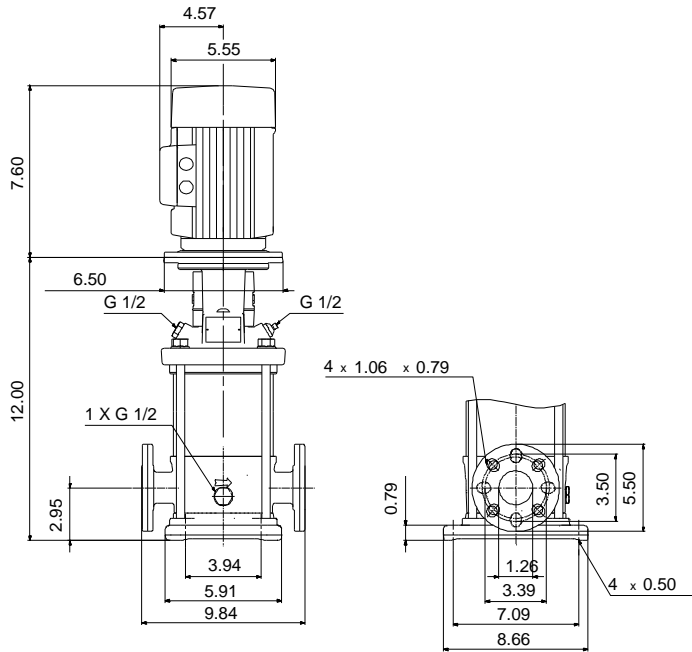
CR 1-2 A-FGJ-A-E-HQQE

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)

Product photo could vary from the actual product


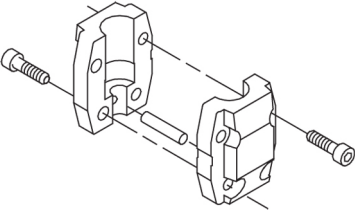
Conditions of Service	Pump Data	Motor Data
Flow: _____	Max pressure at stated temperature: 363 psi / 250 °F	Rated power - P2: 0.33 HP
Head: _____	Liquid temperature range: -4 .. 248 °F	Rated voltage: 208-230YY/460Y V
Efficiency: _____	Maximum ambient temperature: 104 °F	Main frequency: 60 Hz
Liquid: Water	Approvals: CURUS, NSF61	Enclosure class: 55 Dust/Jetting
Temperature: 68 °F	Shaft seal: HQQE	Insulation class: F
NPSH required: ft	Product number: 96082111	Motor protection: NONE
Viscosity: _____		Motor type: 71AA
Specific Gravity: 1.000		Motor_efficiency: 77.4 %

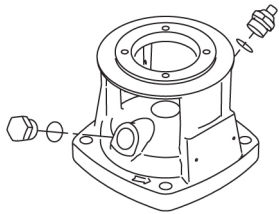




Materials:

- Base: Cast iron
EN 1561 EN-GJL-200
ASTM A48-25B
- Impeller: Stainless steel
AISI 304
EN 1.4301
- Material code: A
- Code for rubber: E

Count	Description
1	<p data-bbox="297 411 589 441">CR 1-2 A-FGJ-A-E-HQQE</p>  <p data-bbox="297 732 558 762">Product No.: 96082111</p> <p data-bbox="297 793 1396 894">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.</p> <p data-bbox="297 934 1024 963">The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="297 993 613 1022">Further product details</p> <p data-bbox="297 1031 1396 1152">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:</p> <ol data-bbox="297 1140 787 1260" style="list-style-type: none">1) Alkaline-based cleaning.2) Zinc phosphating.3) Cathodic electro-deposition.4) Curing to a dry film thickness 18-22 my m. <p data-bbox="297 1262 1000 1291">The colour code for the finished product is NCS 9000/RAL 9005.</p> <p data-bbox="297 1320 380 1350">Pump</p> <p data-bbox="297 1358 1385 1409">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.</p>  <p data-bbox="297 1654 1369 1705">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.</p>



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.

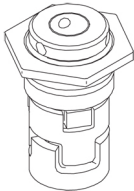
Primary seal:

- 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.

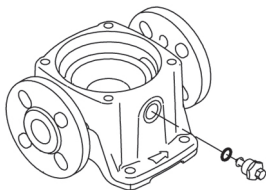


The shaft seal is screwed into the pump head.

The 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 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



Company name:

Created by:

Phone:

Date:

4/15/2020

Count	Description
	<p>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).</p> <p>Motor-mounting designation in accordance with IEC 60034-7: IM B 14 (Code I) / IM 3601 (Code II). Electrical tolerances comply with IEC 60034.</p> <p>The motor efficiency is classified as premium efficiency in accordance with EISA2007.</p> <p>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).</p> <p>Technical data</p> <p>Liquid: Pumped liquid: Water Liquid temperature range: -4 .. 248 °F Selected liquid temperature: 68 °F Density: 62.29 lb/ft³</p> <p>Technical: Rated pump speed: 3425 rpm Rated flow: 9.69 US gpm Rated head: 45.28 ft Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQE Approvals on nameplate: CURUS,NSF61 Curve tolerance: ISO9906:2012 3B</p> <p>Materials: Base: Cast iron EN 1561 EN-GJL-200 ASTM A48-25B Impeller: Stainless steel EN 1.4301 AISI 304 Bearing: SIC</p> <p>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</p> <p>Electrical data: Motor standard: NEMA</p>



Company name:

Created by:

Phone:

Date:

4/15/2020

Count	Description
	Motor type: 71AA
	IE Efficiency class: NEMA Premium / IE3 60Hz
	Rated power - P2: 0.33 HP
	Power (P2) required by pump: 0.33 HP
	Main frequency: 60 Hz
	Rated voltage: 3 x 208-230YY/460Y V
	Service factor: 1.35
	Rated current: 1,12-1,10/0,55 A
	Starting current: 630-700 %
	Cos phi - power factor: 0.81-0.75
	Rated speed: 3450-3480 rpm
	Motor efficiency at full load: 77.4 %
	Motor efficiency at 3/4 load: 77.7 %
	Motor efficiency at 1/2 load: 73.3 %
	Number of poles: 2
	Enclosure class (IEC 34-5): 55 Dust/Jetting
	Insulation class (IEC 85): F
	Motor Number: 85900700
	Controls:
	Frequency converter: NONE
	Others:
	Net weight: 55.7 lb
	Gross weight: 66.7 lb
	Shipping volume: 4.94 ft ³
	Country of origin: US
	Custom tariff no.: 8413.70.2040



Company name:

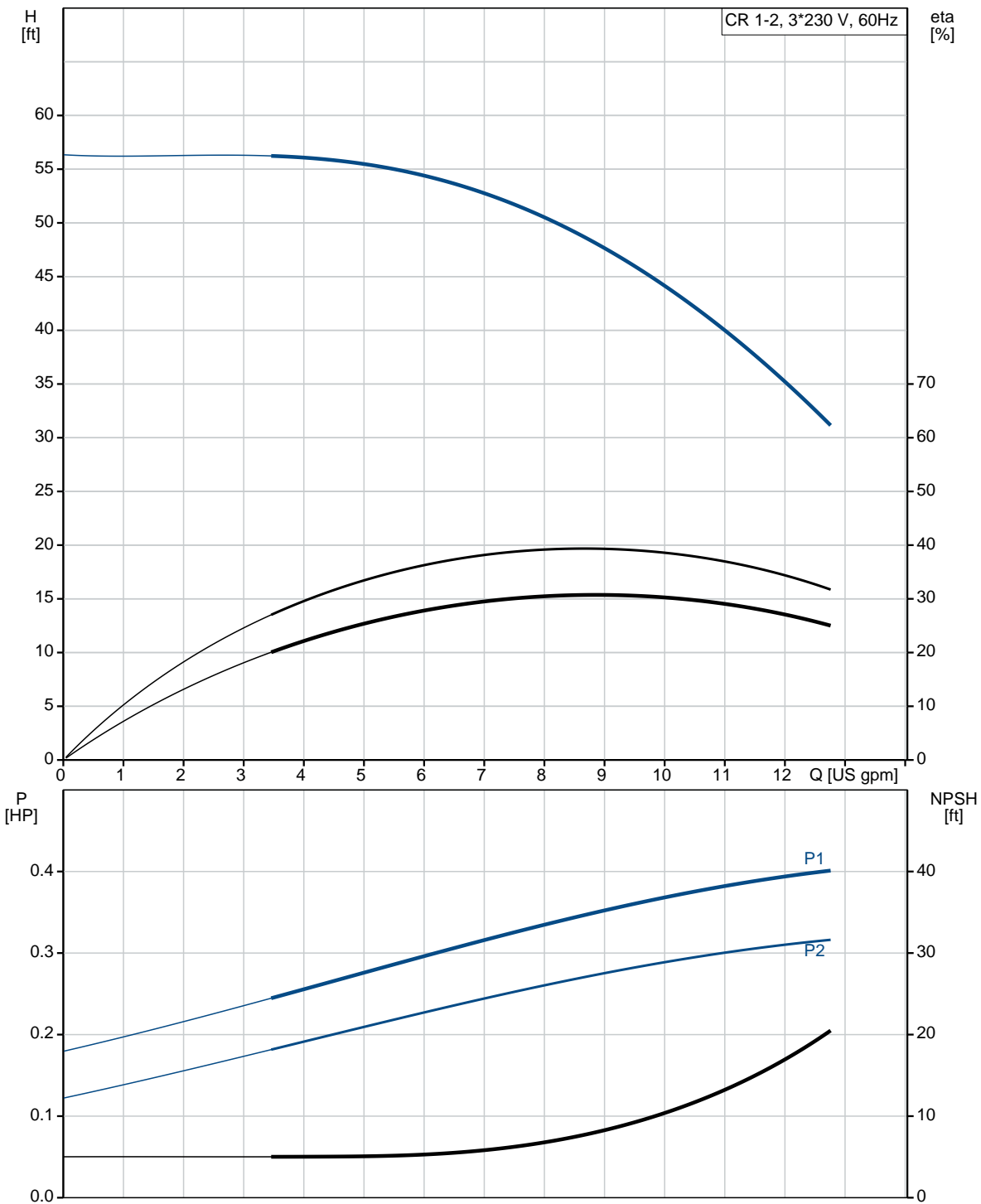
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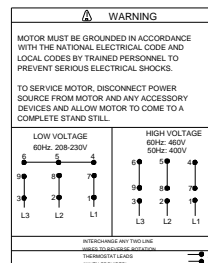
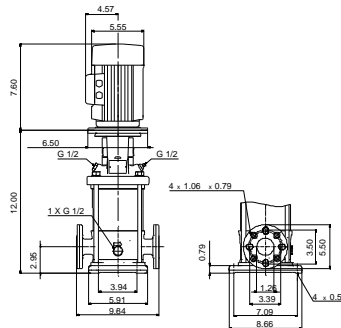
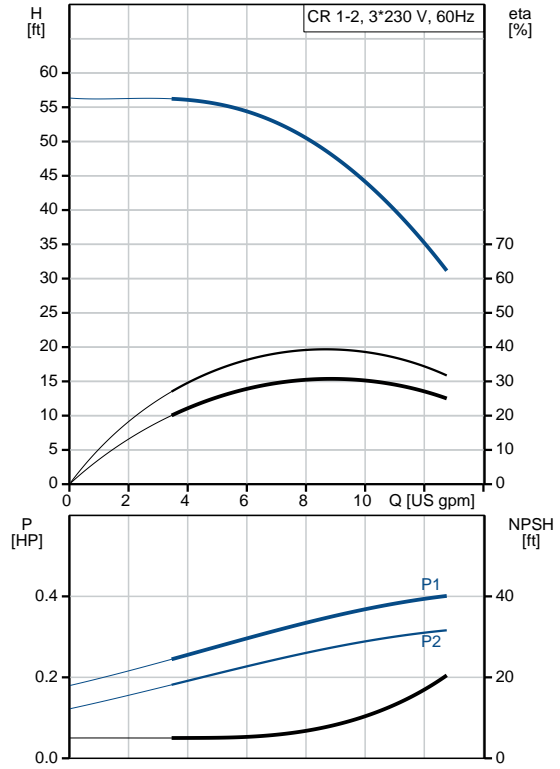
Date:

4/15/2020

96082111 CR 1-2 A-FGJ-A-E-HQQE 60 Hz



Description	Value
General information:	
Product name:	CR 1-2 A-FGJ-A-E-HQQE
Product No.:	96082111
EAN:	5700395168495 5700395168495
Technical:	
Rated pump speed:	3425 rpm
Rated flow:	9.69 US gpm
Rated head:	45.28 ft
Maximum head:	59.39 ft
Stages:	3
Impellers:	2
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:	TEFC
Materials:	
Base:	Cast iron EN 1561 EN-GJL-200 ASTM A48-25B
Impeller:	Stainless steel EN 1.4301 AISI 304
Material code:	A
Code for rubber:	E
Bearing:	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
Connect code:	FGJ
Liquid:	
Pumped liquid:	Water





Company name:

Created by:

Phone:

Date:

4/15/2020

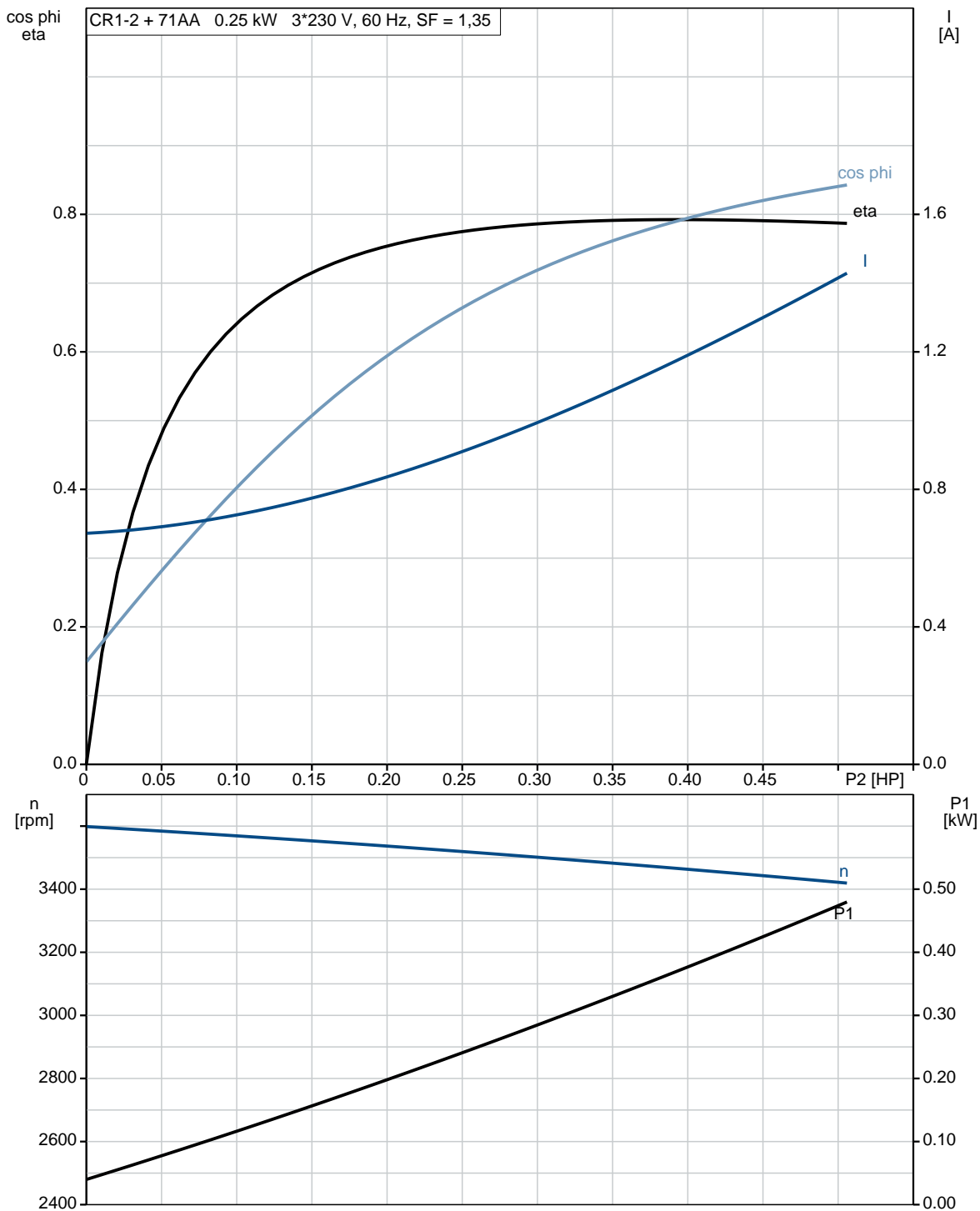
Description	Value
Liquid temperature range:	-4 .. 248 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft ³
Electrical data:	
Motor standard:	NEMA
Motor type:	71AA
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	0.33 HP
Power (P2) required by pump:	0.33 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1.35
Rated current:	1,12-1,10/0,55 A
Starting current:	630-700 %
Load current:	1,5-1,45/0,75 A
Cos phi - power factor:	0.81-0.75
Rated speed:	3450-3480 rpm
Motor efficiency at full load:	77.4 %
Motor efficiency at 3/4 load:	77.7 %
Motor efficiency at 1/2 load:	73.3 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	NONE
Motor Number:	85900700
Controls:	
Frequency converter:	NONE
Others:	
Net weight:	55.7 lb
Gross weight:	66.7 lb
Shipping volume:	4.94 ft ³
Country of origin:	US
Custom tariff no.:	8413.70.2040



Company name:
Created by:
Phone:

Date: 4/15/2020

96082111 CR 1-2 A-FGJ-A-E-HQQE 60 Hz

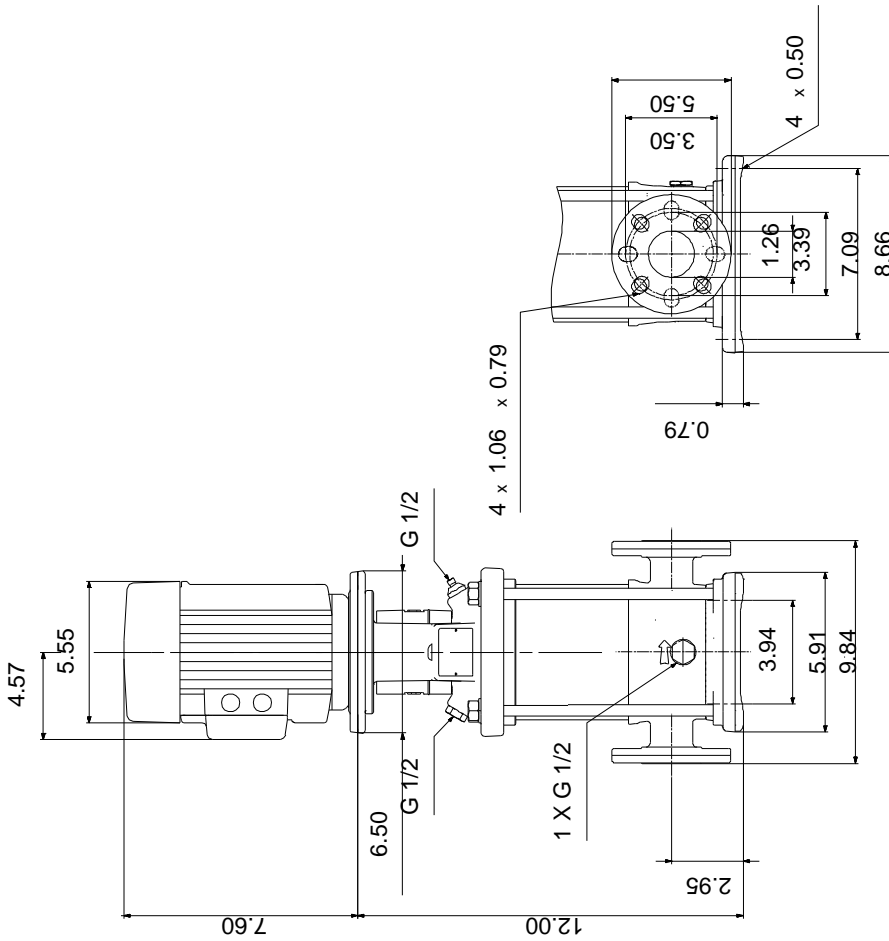




Company name:
Created by:
Phone:

Date: 4/15/2020

96082111 CR 1-2 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.



Company name:
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96082111 CR 1-2 A-FGJ-A-E-HQQE 60 Hz

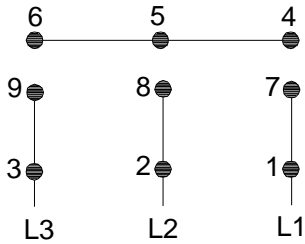


WARNING

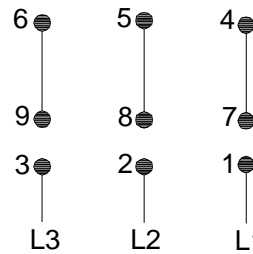
MOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES BY TRAINED PERSONNEL TO PREVENT SERIOUS ELECTRICAL SHOCKS.

TO SERVICE MOTOR, DISCONNECT POWER SOURCE FROM MOTOR AND ANY ACCESSORY DEVICES AND ALLOW MOTOR TO COME TO A COMPLETE STAND STILL.

LOW VOLTAGE
60Hz. 208-230V



HIGH VOLTAGE
60Hz: 460V
50Hz: 400V



96553852

INTERCHANGE ANY TWO LINE
WIRES TO REVERSE ROTATION
THERMOSTAT LEADS
(WHEN PROVIDED)



All units are [in] unless otherwise presented.