

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

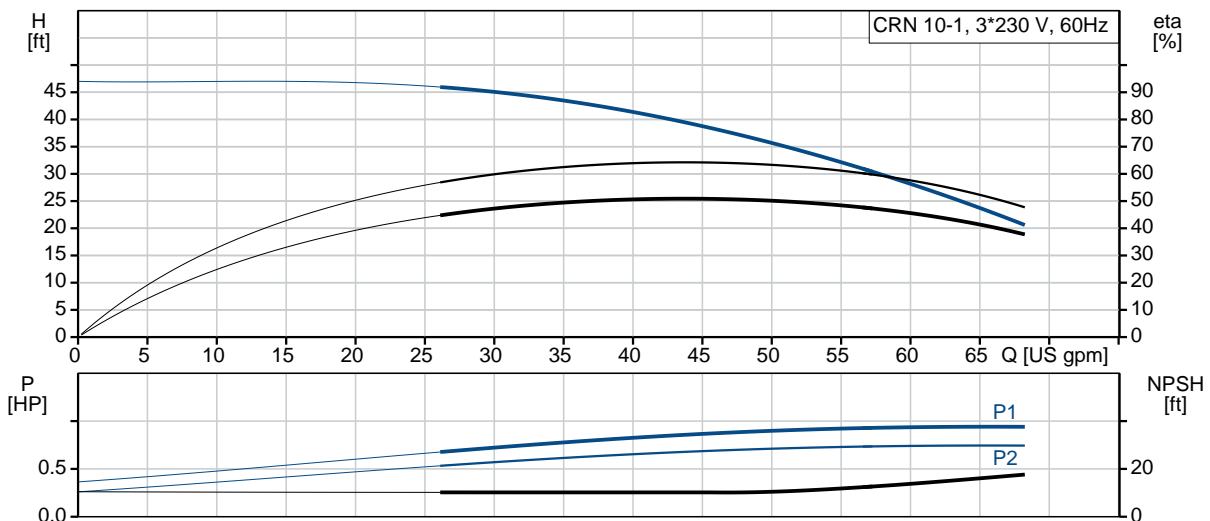


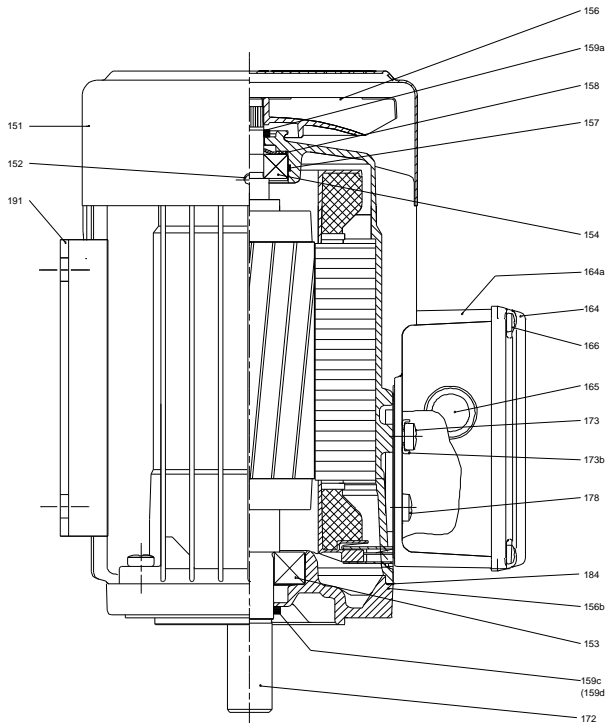
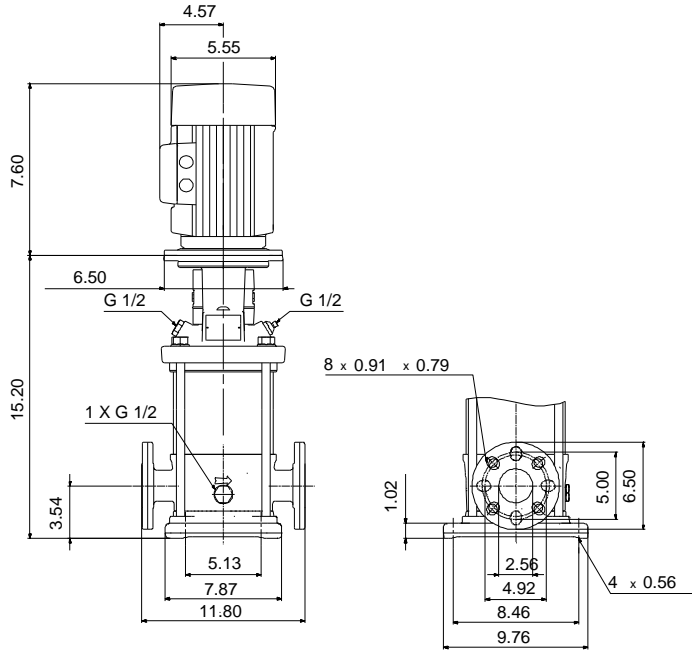
Product photo could vary from the actual product

### CRN 10-1 A-FGJ-A-E-HQQE

Vertical, multistage centrifugal pump with suction and discharge ports on same the level. Pump materials in contact with the liquid are in high-grade stainless steel (EN 1.4401) (AISI 316)


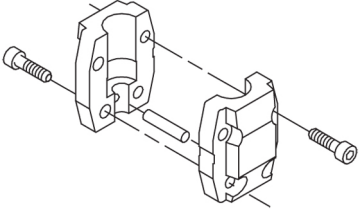
Conditions of Service	Pump Data	Motor Data
Flow: _____	Max pressure at stated temperature: 363 psi / 250 °F	Rated power - P2: 0.75 HP
Head: _____	Liquid temperature range: -4 .. 248 °F	Rated voltage: 208-230YY/460Y V
Efficiency: _____	Maximum ambient temperature: 104 °F	Main frequency: 60 Hz
Liquid: Water	Approvals: CURUS	Enclosure class: 55 Dust/Jetting
Temperature: 68 °F	Shaft seal: HQQE	Insulation class: F
NPSH required: ft	Product number: 96523117	Motor protection: NONE
Viscosity: _____		Motor type: 71BA
Specific Gravity: 1.000		Motor_efficiency: 80.6-81.6 %

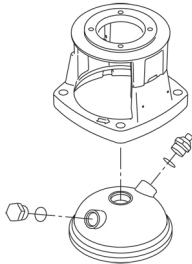




**Materials:**

- Base: Stainless steel  
EN 1.4408
- Impeller: Stainless steel  
AISI 316  
EN 1.4401
- Material code: A
- Code for rubber: E

Count	Description
1	<p data-bbox="297 411 621 441"><b>CRN 10-1 A-FGJ-A-E-HQQE</b></p>  <p data-bbox="297 730 565 760">Product No.: <a href="#">96523117</a></p> <p data-bbox="297 787 1421 892">Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in high-grade 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 1031 963">The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="297 991 617 1020"><b>Further product details</b></p> <p data-bbox="297 1029 1421 1134">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 1142 787 1260" style="list-style-type: none"><li>1) Alkaline-based cleaning.</li><li>2) Zinc phosphating.</li><li>3) Cathodic electro-deposition.</li><li>4) Curing to a dry film thickness 18-22 my m.</li></ol> <p data-bbox="297 1260 998 1289">The colour code for the finished product is NCS 9000/RAL 9005.</p> <p data-bbox="297 1316 381 1346"><b>Pump</b></p> <p data-bbox="297 1354 1421 1407">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 1648 1421 1732">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.</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.

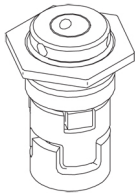
**Primary seal:**

- 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 pump has a stainless steel base mounted on a separate base plate. This 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 flanges and base are cast in one piece and prepared for connection by means of DIN, ANSI or JIS.

**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).



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4/17/2020

Count	Description
	<p>Electrical tolerances comply with IEC 60034. The motor efficiency is classified as premium efficiency in accordance with EISA2007. 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><b>Technical data</b></p> <p>Liquid: Pumped liquid: Water Liquid temperature range: -4 .. 248 °F Selected liquid temperature: 68 °F Density: 62.29 lb/ft<sup>3</sup></p> <p><b>Technical:</b> Rated pump speed: 3439 rpm Rated flow: 53.3 US gpm Rated head: 32.81 ft Actual impeller diameter: 3.66 in Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQE Approvals on nameplate: CURUS Curve tolerance: ISO9906:2012 3B</p> <p><b>Materials:</b> Base: Stainless steel EN 1.4408 AISI 316 Impeller: Stainless steel EN 1.4401 AISI 316 Bearing: SIC</p> <p><b>Installation:</b> 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 50 Size of outlet connection: DN 50 Pressure rating for connection: PN 25 Flange rating inlet: 300 lb Flange size for motor: 56C</p> <p><b>Electrical data:</b> Motor standard: NEMA Motor type: 71BA IE Efficiency class: NEMA Premium / IE3 60Hz</p>



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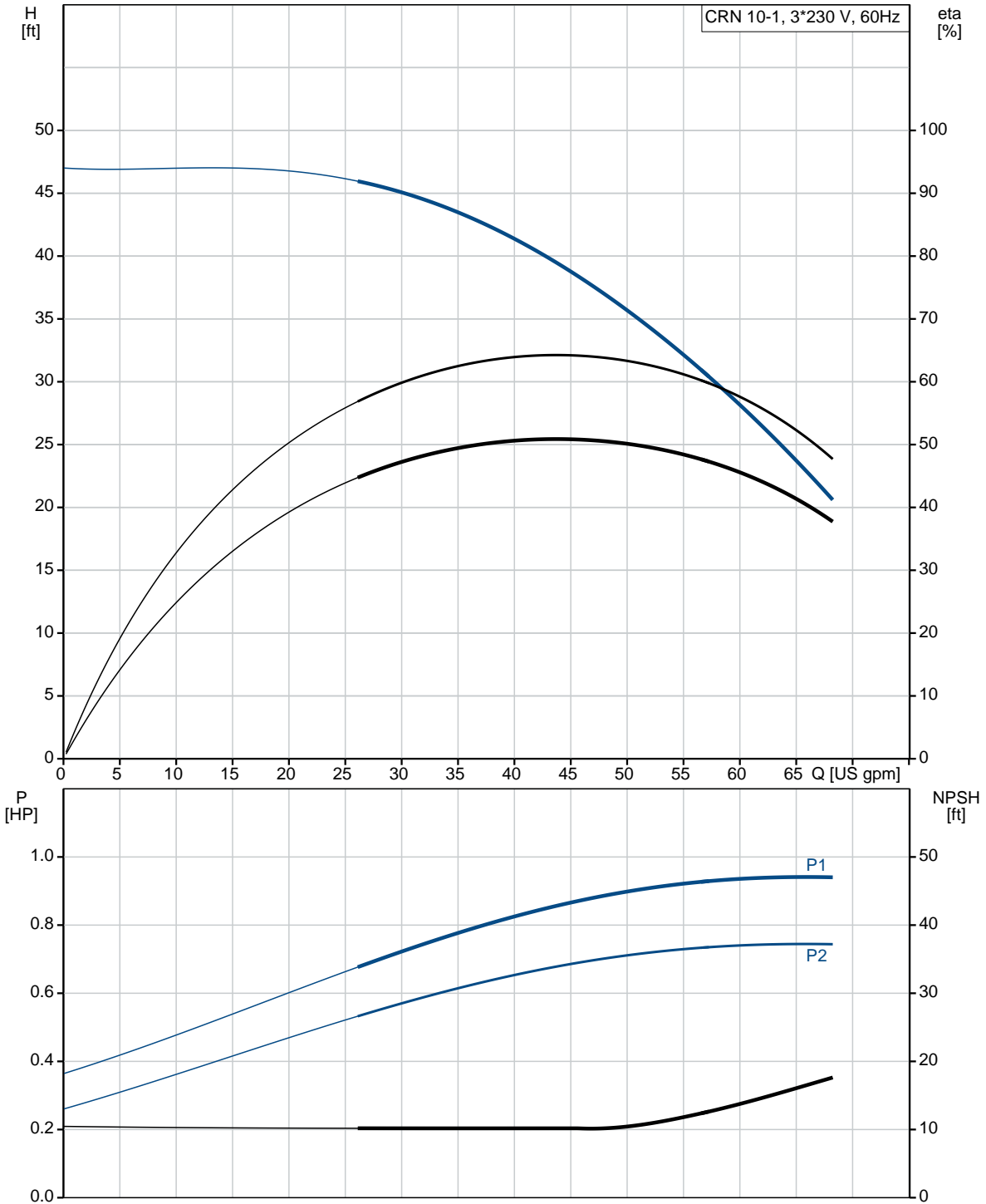
Count	Description
	Rated power - P2: 0.75 HP
	Power (P2) required by pump: 0.75 HP
	Main frequency: 60 Hz
	Rated voltage: 3 x 208-230YY/460Y V
	Service factor: 1.25
	Rated current: 2,40-2,30/1,20 A
	Starting current: 590-650 %
	Cos phi - power factor: 0.84-0.78
	Rated speed: 3430-3460 rpm
	Motor efficiency at full load: 80.6-81.6 %
	Motor efficiency at 3/4 load: 78.6 %
	Motor efficiency at 1/2 load: 75.7 %
	Number of poles: 2
	Enclosure class (IEC 34-5): 55 Dust/Jetting
	Insulation class (IEC 85): F
	Motor Number: 85900702
	<b>Controls:</b>
	Frequency converter: NONE
	<b>Others:</b>
	DOE Pump Energy Index CL: 0.87
	Net weight: 81.6 lb
	Gross weight: 97 lb
	Shipping volume: 4.94 ft <sup>3</sup>
	Country of origin: US
	Custom tariff no.: 8413.70.2040



Company name:  
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### 96523117 CRN 10-1 A-FGJ-A-E-HQQE 60 Hz

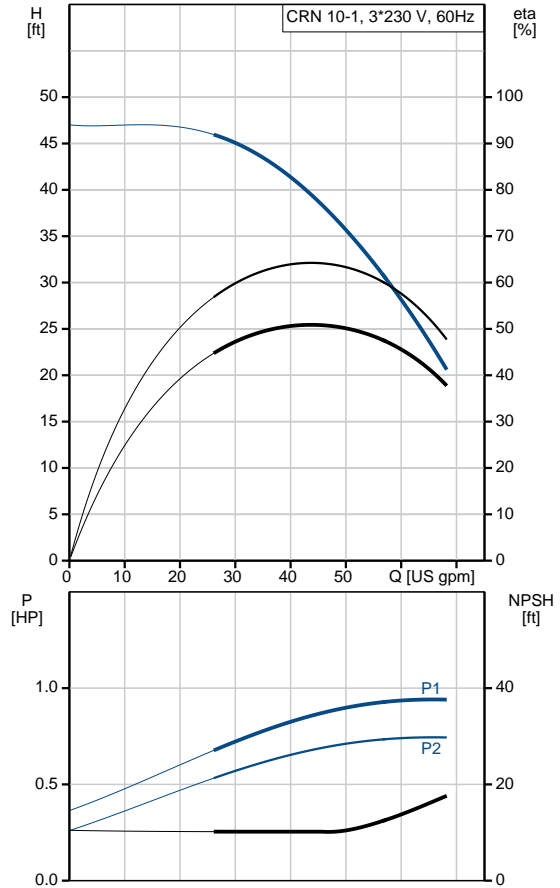




Company name:  
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Date: 4/17/2020

Description	Value
<b>General information:</b>	
Product name:	CRN 10-1 A-FGJ-A-E-HQQE
Product No.:	96523117
EAN:	5700396898926 5700396898926
<b>Technical:</b>	
Rated pump speed:	3439 rpm
Rated flow:	53.3 US gpm
Rated head:	32.81 ft
Maximum head:	46.92 ft
Actual impeller diameter:	3.66 in
Stages:	2
Impellers:	1
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
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Cooling:	TEFC
<b>Materials:</b>	
Base:	Stainless steel EN 1.4408 AISI 316
Impeller:	Stainless steel EN 1.4401 AISI 316
Material code:	A
Code for rubber:	E
Bearing:	SIC
<b>Installation:</b>	
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 50
Size of outlet connection:	DN 50
Pressure rating for connection:	PN 25
Flange rating inlet:	300 lb
Flange size for motor:	56C
Connect code:	FGJ
<b>Liquid:</b>	







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Date:

4/17/2020

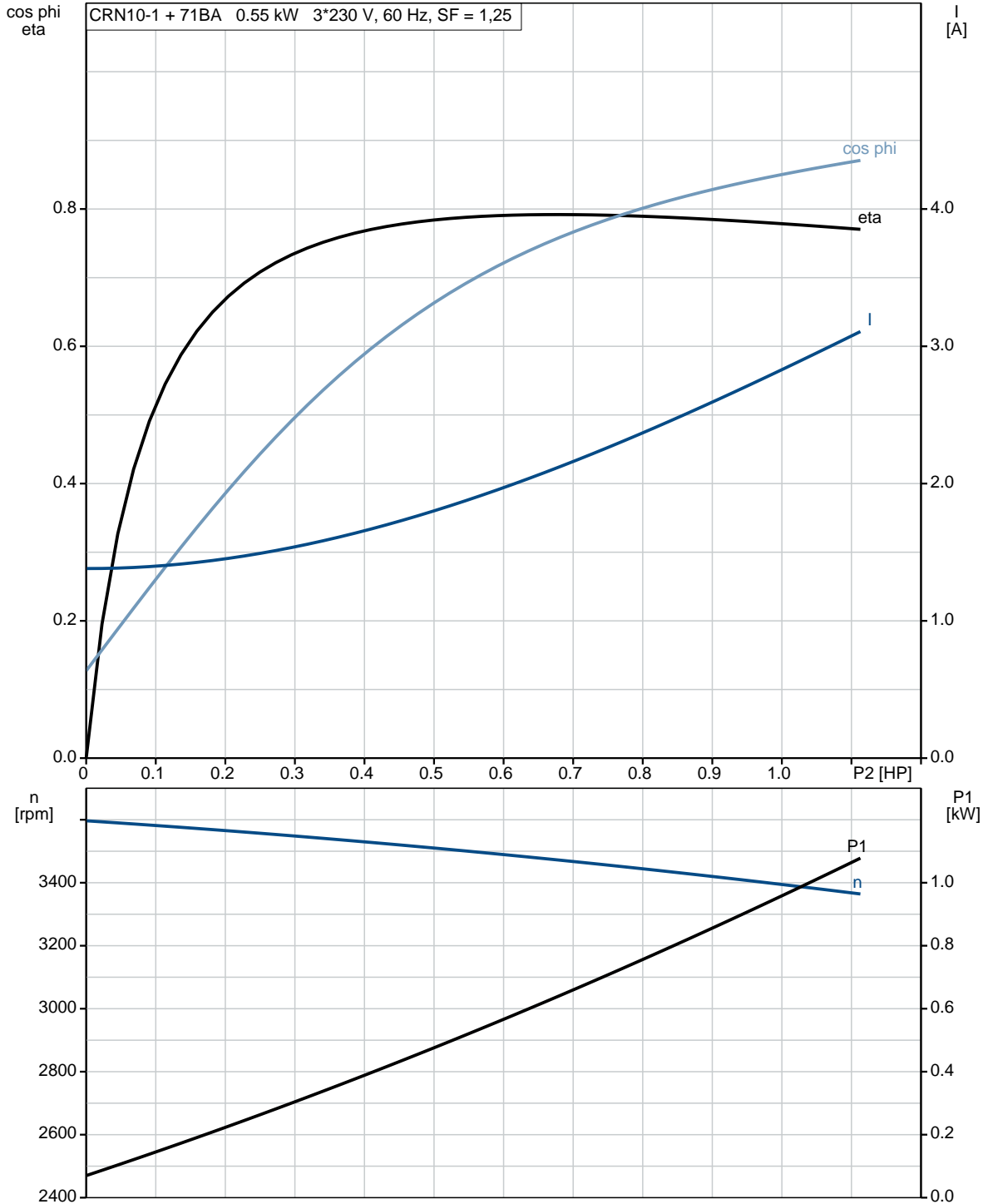
Description	Value
Pumped liquid:	Water
Liquid temperature range:	-4 .. 248 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft <sup>3</sup>
<b>Electrical data:</b>	
Motor standard:	NEMA
Motor type:	71BA
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	0.75 HP
Power (P2) required by pump:	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 %
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:	80.6-81.6 %
Motor efficiency at 3/4 load:	78.6 %
Motor efficiency at 1/2 load:	75.7 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	NONE
Motor Number:	85900702
<b>Controls:</b>	
Frequency converter:	NONE
<b>Others:</b>	
DOE Pump Energy Index CL:	0.87
Net weight:	81.6 lb
Gross weight:	97 lb
Shipping volume:	4.94 ft <sup>3</sup>
Country of origin:	US
Custom tariff no.:	8413.70.2040



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### 96523117 CRN 10-1 A-FGJ-A-E-HQQE 60 Hz

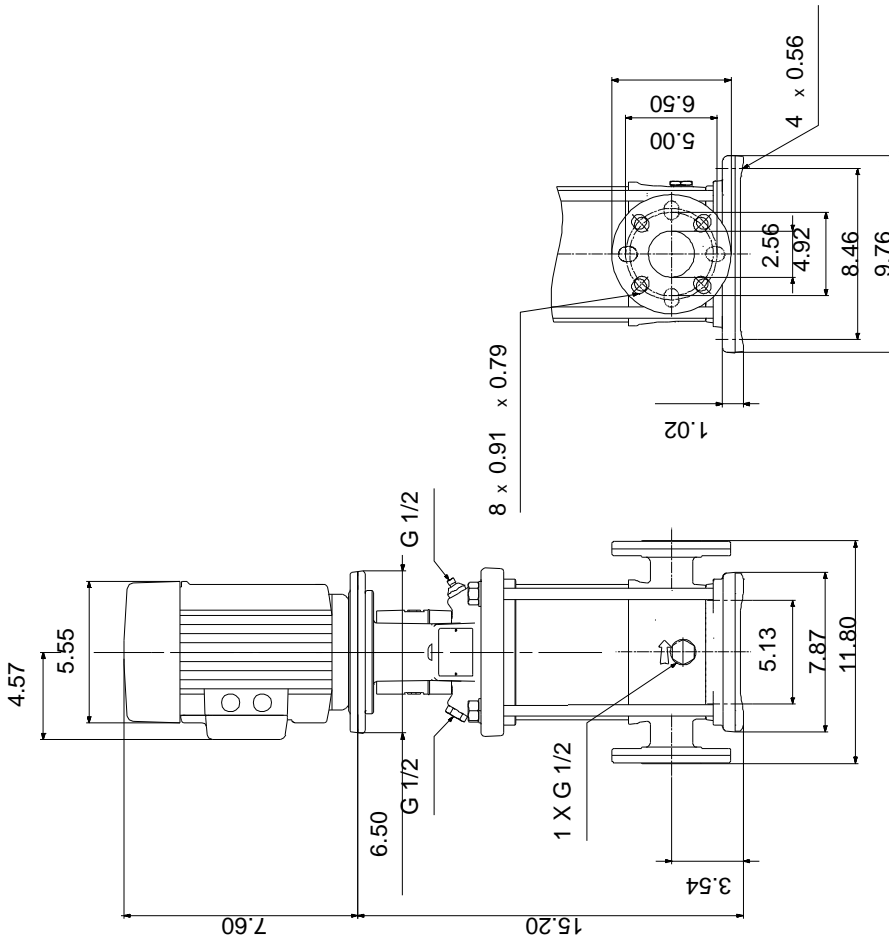




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# 96523117 CRN 10-1 A-FGJ-A-E-HQQE 60 Hz



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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## 96523117 CRN 10-1 A-FGJ-A-E-HQQE 60 Hz

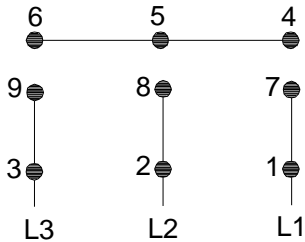


### WARNING

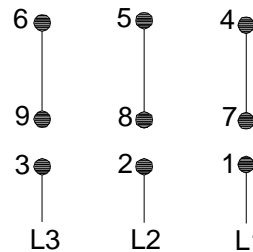
MOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES BY TRAINED PERSONNEL TO PREVENT SERIOUS ELECTRICAL SHOCKS.

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.