

Qty.	Description
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1	CRI 20-1 A-FGJ-A-V-HQQV
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Product No.: [96500436](#)

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. 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 3-phase, fan-cooled asynchronous motor.

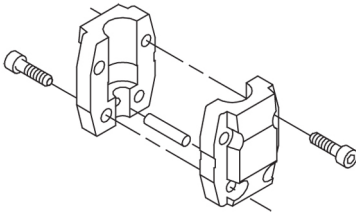
Further product details

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:

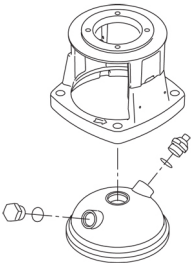
- 1) Alkaline-based cleaning.
 - 2) Zinc phosphating.
 - 3) Cathodic electro-deposition.
 - 4) Curing to a dry film thickness 18-22 my m.
- The colour code for the finished product is NCS 9000/RAL 9005.

Pump

A 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 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.

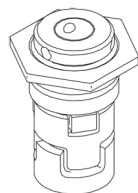
Primary seal:

- 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: FKM (fluorocarbon rubber)

FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.



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 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).

Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.

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

Liquid:

Pumped liquid:	Water
Liquid temperature range:	-4 .. 194 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft ³

Technical:

Pump speed on which pump data are based:	2853 rpm
Rated flow:	92.5 US GPM
Rated head:	32.48 ft
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals on nameplate:	CE, EAC
Curve tolerance:	ISO9906:2012 3B

Materials:

Base:	Stainless steel EN 1.4408 AISI 316
Impeller:	Stainless steel EN 1.4301 AISI 304
Bearing:	SIC

Installation:

Maximum ambient temperature:	140 °F
Maximum operating pressure:	232.06 psi
Max pressure at stated temp:	232 psi / 194 °F 232 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:	FT100

Electrical data:

Motor standard:	IEC
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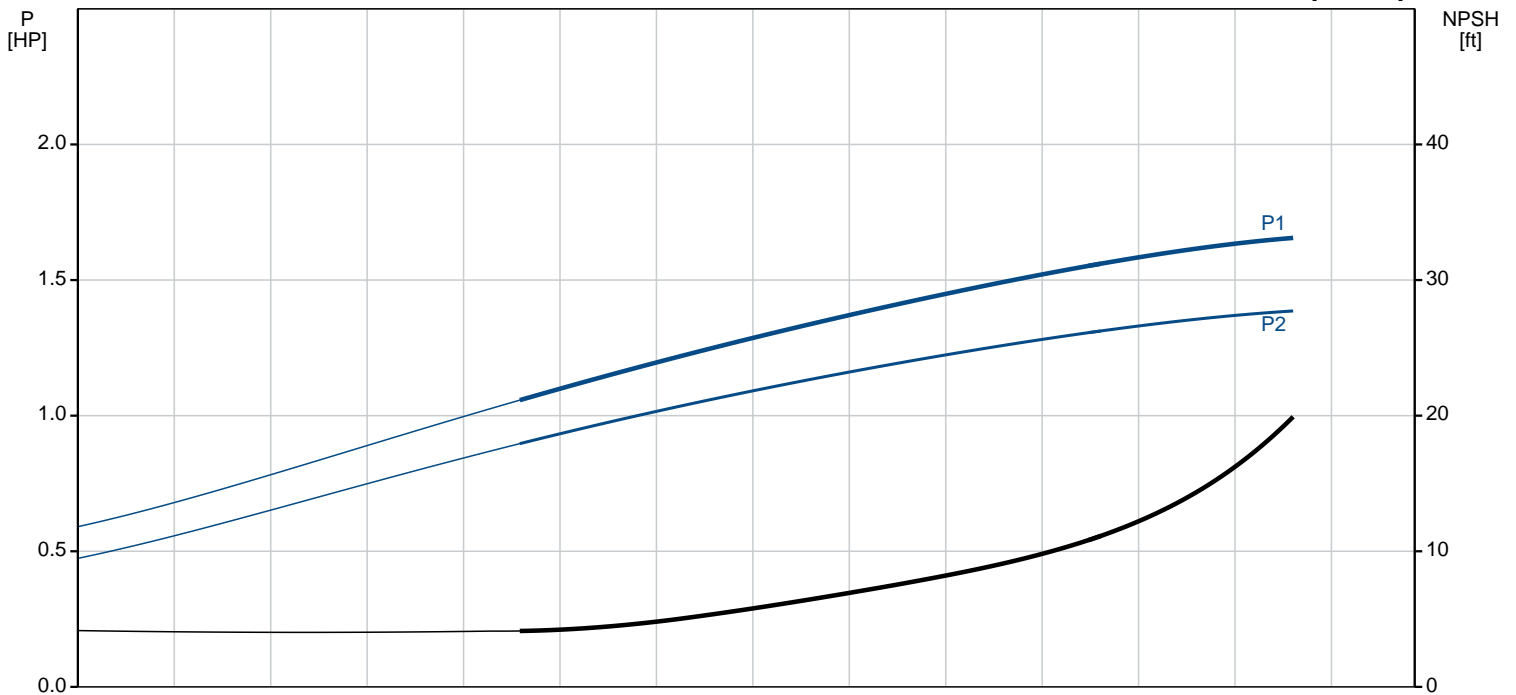
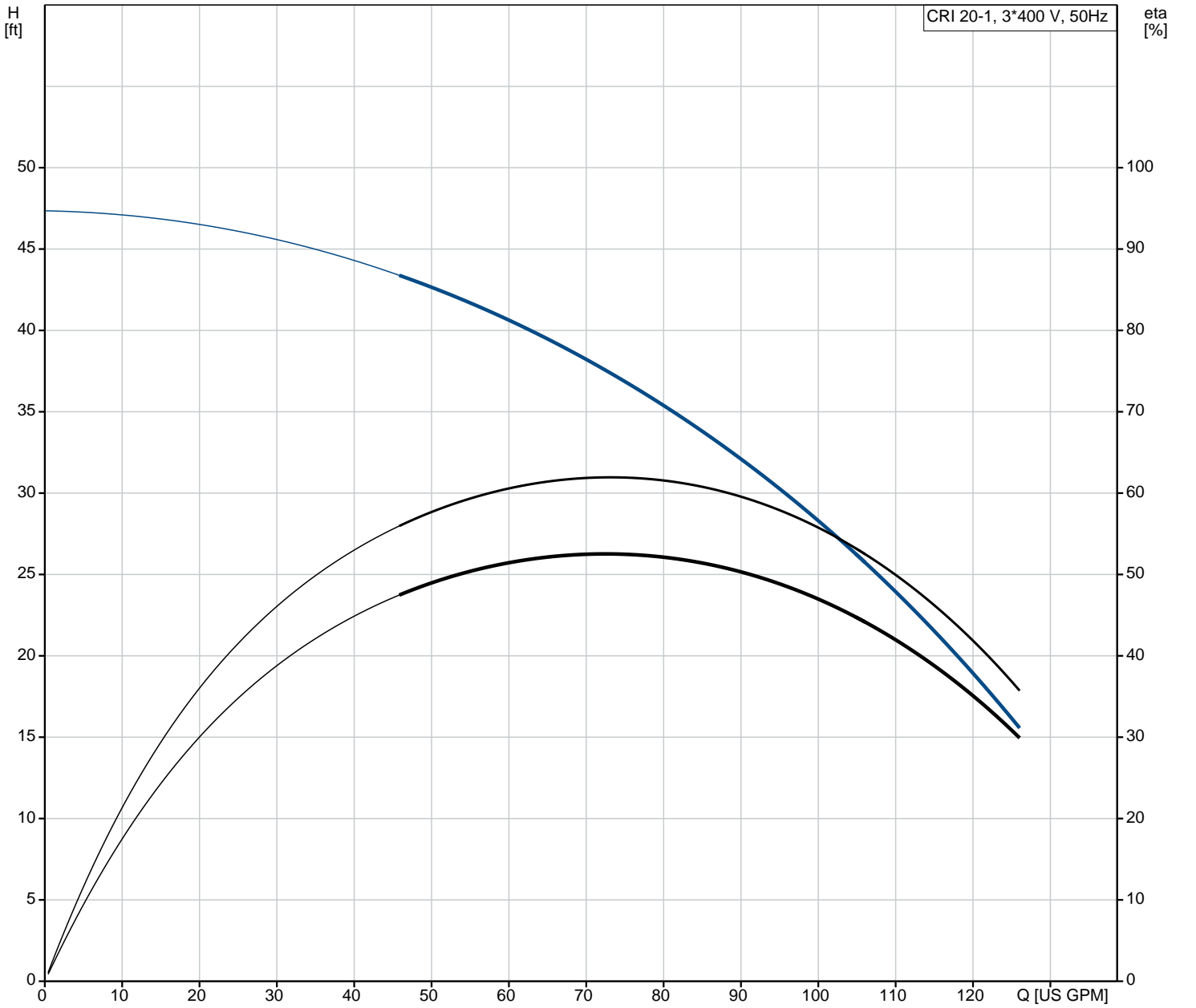
Qty.	Description
	<p>Motor type: 80C</p> <p>IE Efficiency class: IE3</p> <p>Rated power - P2: 1.5 HP</p> <p>Power (P2) required by pump: 1.5 HP</p> <p>Mains frequency: 50 Hz</p> <p>Rated voltage: 3 x 220-240D/380-415Y V</p> <p>Rated current: 4.35/2.50 A</p> <p>Starting current: 450-500 %</p> <p>Cos phi - power factor: 0.83-0.76</p> <p>Rated speed: 2840-2870 rpm</p> <p>Efficiency: IE3 82,7%</p> <p>Motor efficiency at full load: 82.7 %</p> <p>Motor efficiency at 3/4 load: 84.6 %</p> <p>Motor efficiency at 1/2 load: 85.4 %</p> <p>Number of poles: 2</p> <p>Enclosure class (IEC 34-5): 55 Dust/Jetting</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 85U05105</p> <p>Controls:</p> <p>Frequency converter: NONE</p> <p>Others:</p> <p>Minimum efficiency index, MEI η_{min}: 0.70</p> <p>Net weight: 86 lb</p> <p>Gross weight: 115 lb</p> <p>Shipping volume: 6.11 ft³</p> <p>Country of origin: GB</p> <p>Custom tariff no.: 84137075</p>



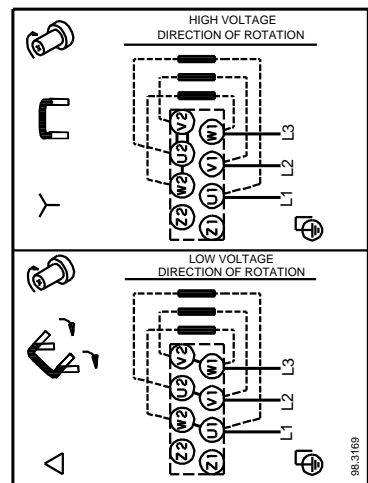
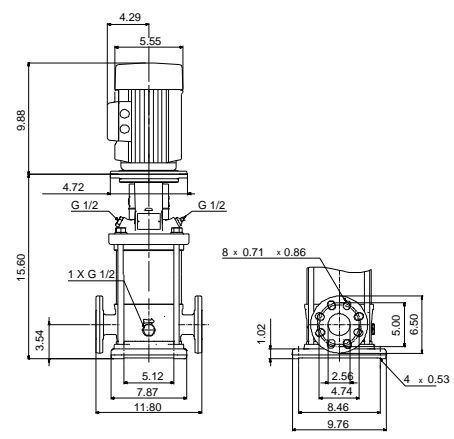
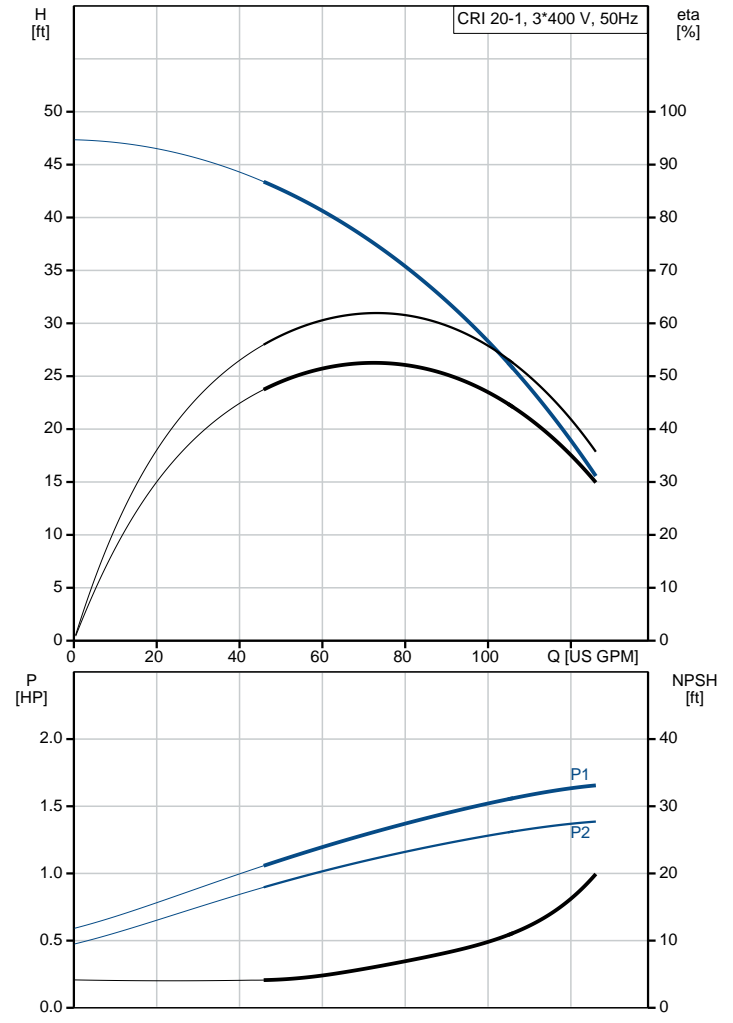
Company name:
Created by:
Phone:

Date: 08/10/2020

96500436 CRI 20-1 A-FGJ-A-V-HQQV 50 Hz



Description	Value
General information:	
Product name:	CRI 20-1 A-FGJ-A-V-HQQV
Product No:	96500436
EAN number:	5700396201788
Price:	GBP 1442
Technical:	
Pump speed on which pump data are based:	2853 rpm
Rated flow:	92.5 US GPM
Rated head:	32.48 ft
Maximum head:	45.93 ft
Stages:	2
Impellers:	1
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals on nameplate:	CE, EAC
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Base:	Stainless steel
Base:	EN 1.4408
Base:	AISI 316
Impeller:	Stainless steel
Impeller:	EN 1.4301
Impeller:	AISI 304
Material code:	A
Code for rubber:	V
Bearing:	SIC
Installation:	
Maximum ambient temperature:	140 °F
Maximum operating pressure:	232.06 psi
Max pressure at stated temp:	232 psi / 194 °F
Max pressure at stated temp:	232 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:	FT100
Connect code:	FGJ
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-4 .. 194 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft³
Electrical data:	
Motor standard:	IEC
Motor type:	80C
IE Efficiency class:	IE3
Rated power - P2:	1.5 HP
Power (P2) required by pump:	1.5 HP
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240D/380-415Y V
Rated current:	4.35/2.50 A
Starting current:	450-500 %
Cos phi - power factor:	0.83-0.76
Rated speed:	2840-2870 rpm
Efficiency:	IE3 82,7%
Motor efficiency at full load:	82.7 %
Motor efficiency at 3/4 load:	84.6 %
Motor efficiency at 1/2 load:	85.4 %
Number of poles:	2





Company name:

Created by:

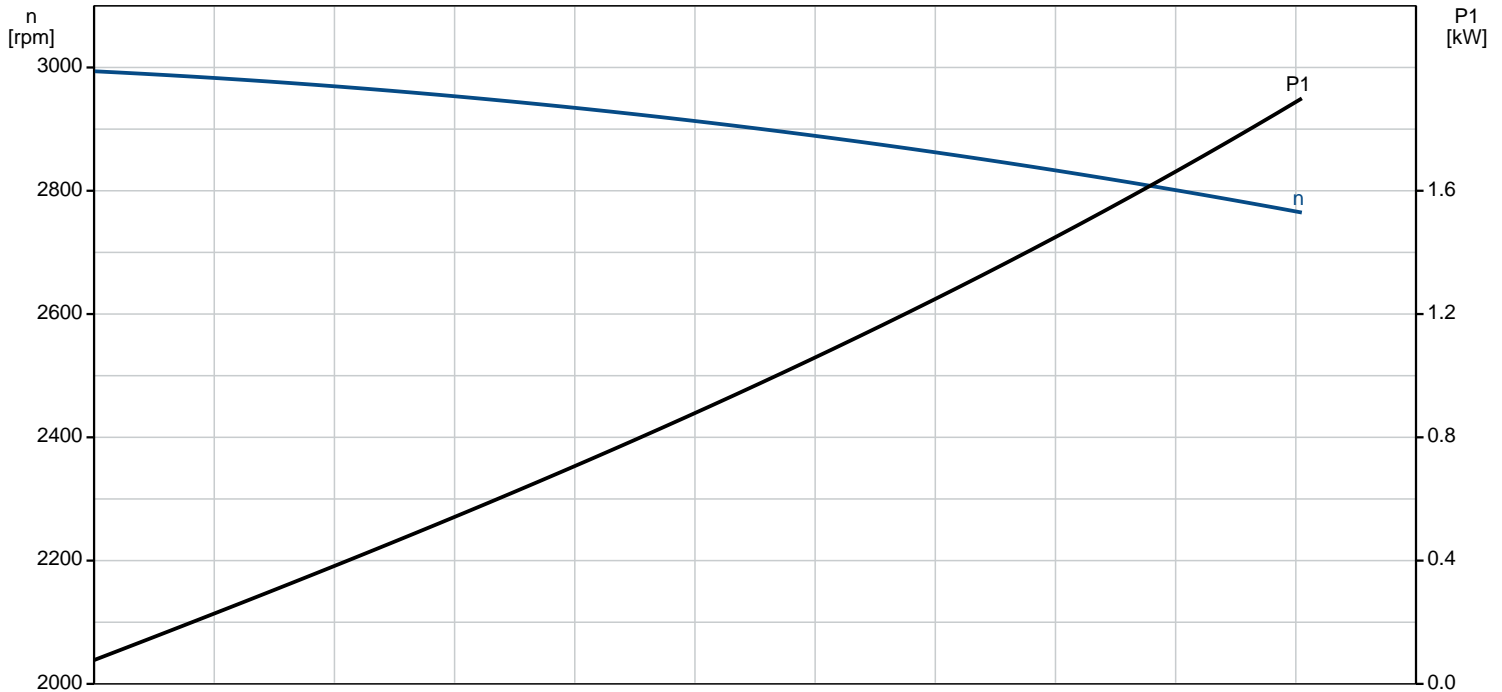
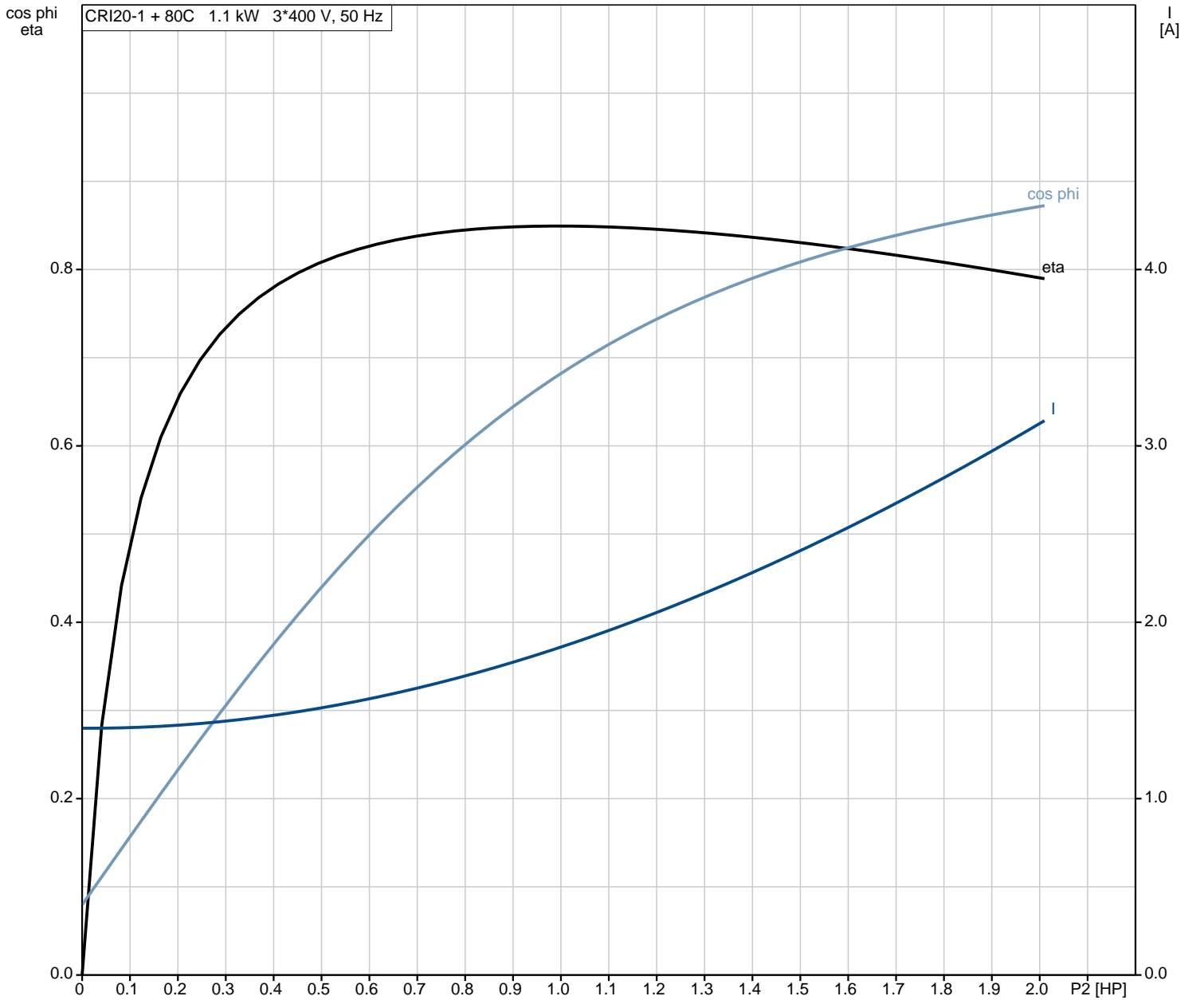
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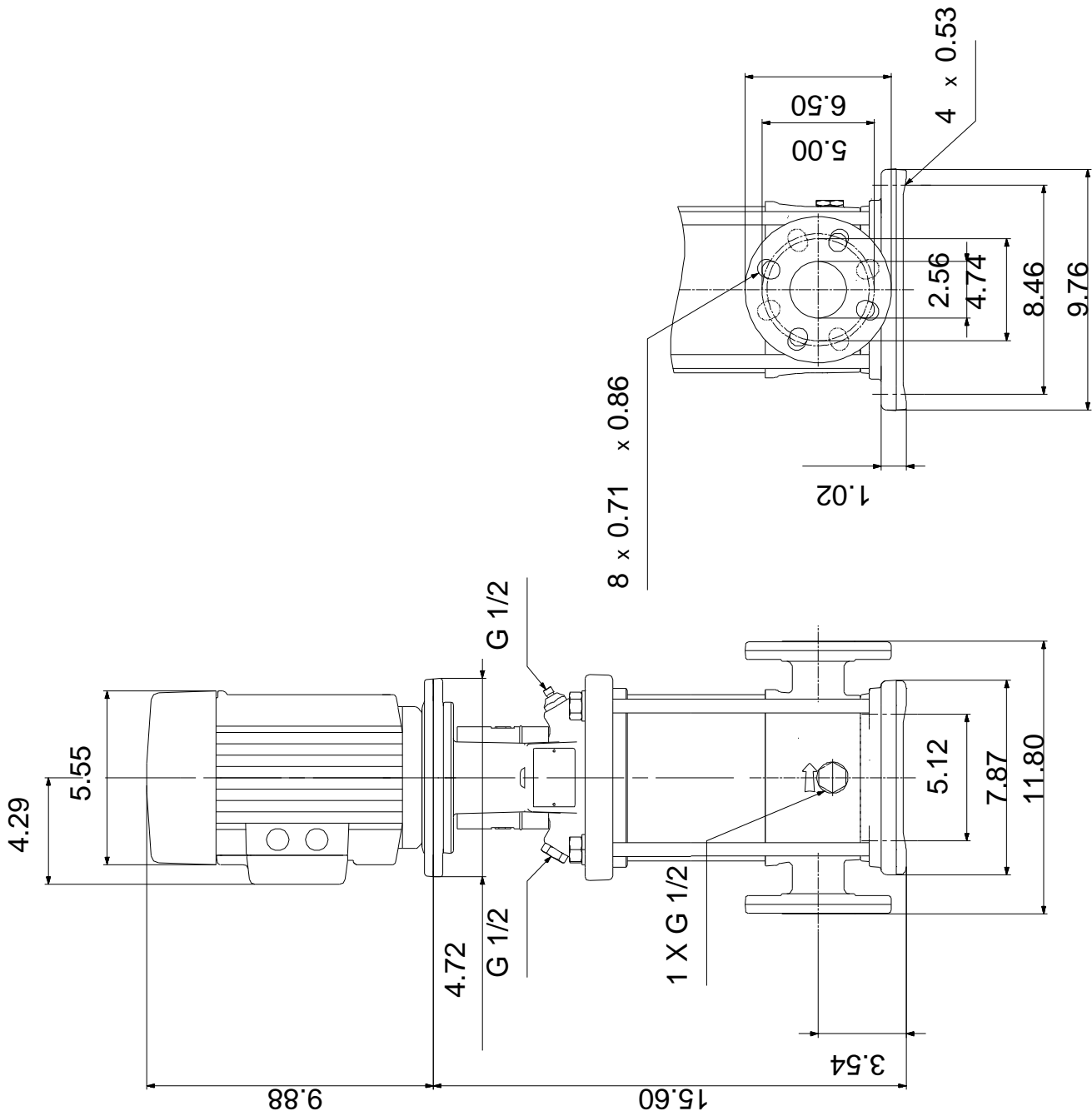
08/10/2020

Description	Value
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protec:	NONE
Motor No:	85U05105
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI %:	0.70
Net weight:	86 lb
Gross weight:	115 lb
Shipping volume:	6.11 ft ³
Country of origin:	GB
Custom tariff no.:	84137075

96500436 CRI 20-1 A-FGJ-A-V-HQQV 50 Hz



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

96500436 CRI 20-1 A-FGJ-A-V-HQQV 50 Hz

