
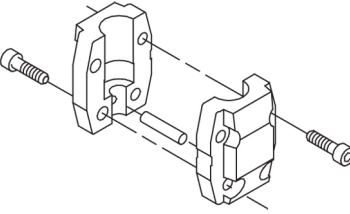
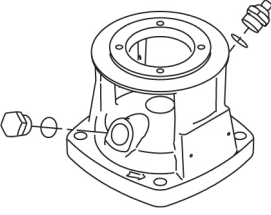
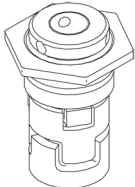
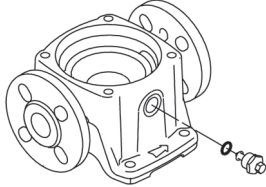


Count	Description
1	<p><b>CR 1-17 A-FGJ-A-V-HQQV</b></p>  <p>Product No.: <a href="#">96082232</a></p> <p>Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in stainless steel. A cartridge 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>The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p><b>Further product details</b></p> <p>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 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>The colour code for the finished product is NCS 9000/RAL 9005.</p> <p><b>Pump</b></p> <p>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>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>  <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.</p> <p>Primary seal:</p> <ul style="list-style-type: none"> <li>• Rotating seal ring material: silicon carbide (SiC)</li> <li>• Stationary seat material: silicon carbide (SiC)</li> </ul>

Count	Description
	<p>This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.</p> <p>Secondary seal material: FKM (fluorocarbon rubber)</p> <p>FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.</p>  <p>The shaft seal is screwed into the pump head.</p> <p>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.</p> <p>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.</p> <p>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.</p>  <p><b>Motor</b></p> <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).</p> <p>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 (I<sub>1</sub>/1).</p> <p>The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.</p> <p><b>Technical data</b></p> <p>Liquid:</p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: -4 .. 194 °F</p> <p>Selected liquid temperature: 68 °F</p> <p>Density: 62.29 lb/ft³</p> <p><b>Technical:</b></p> <p>Rated pump speed: 3452 rpm</p>



Company name:

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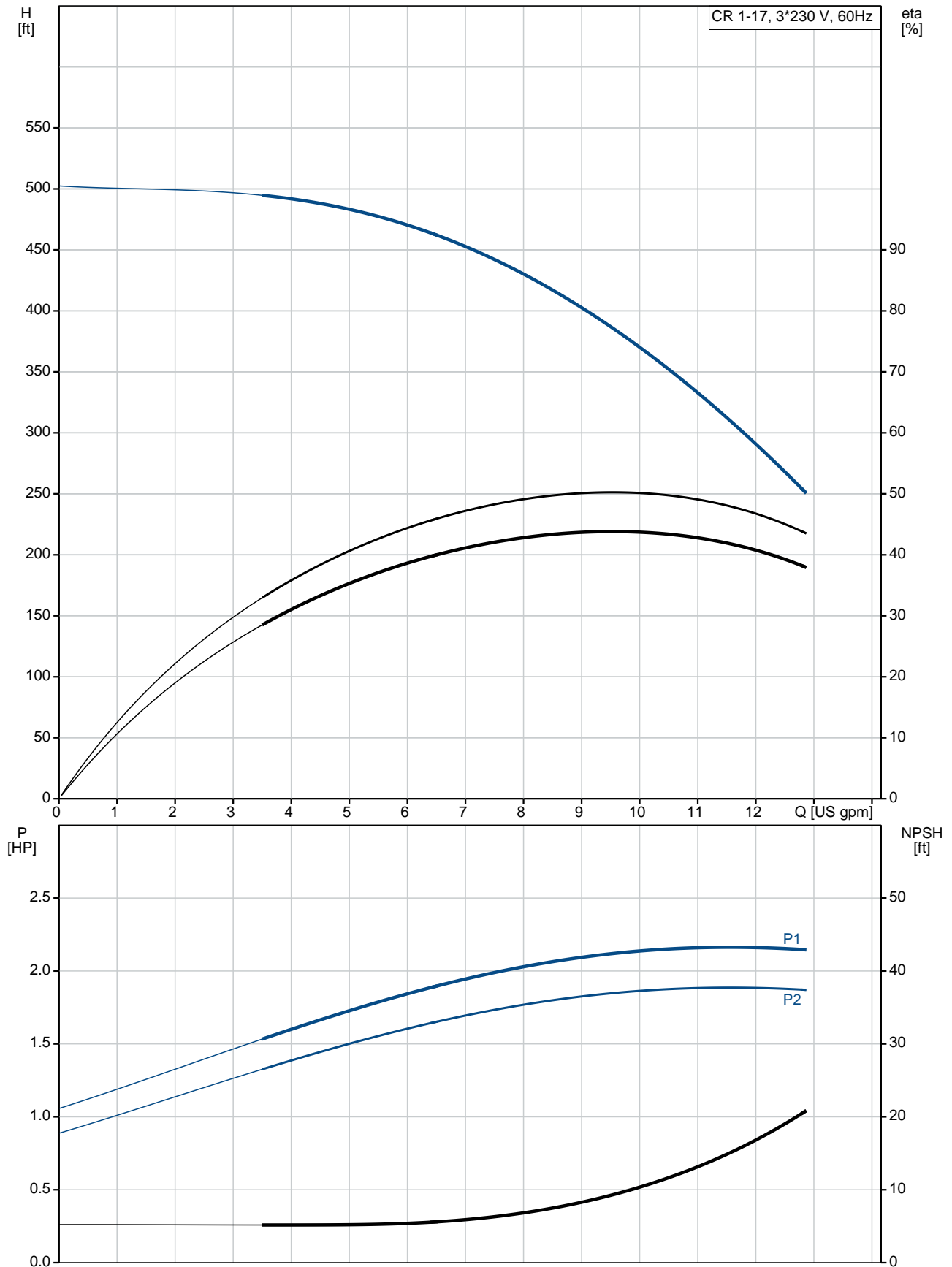
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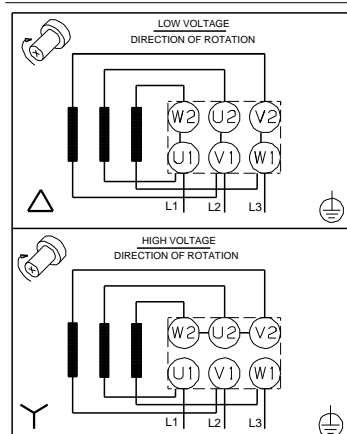
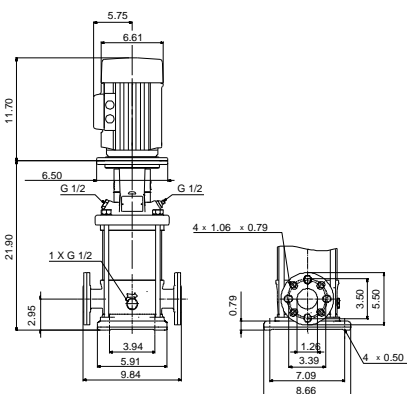
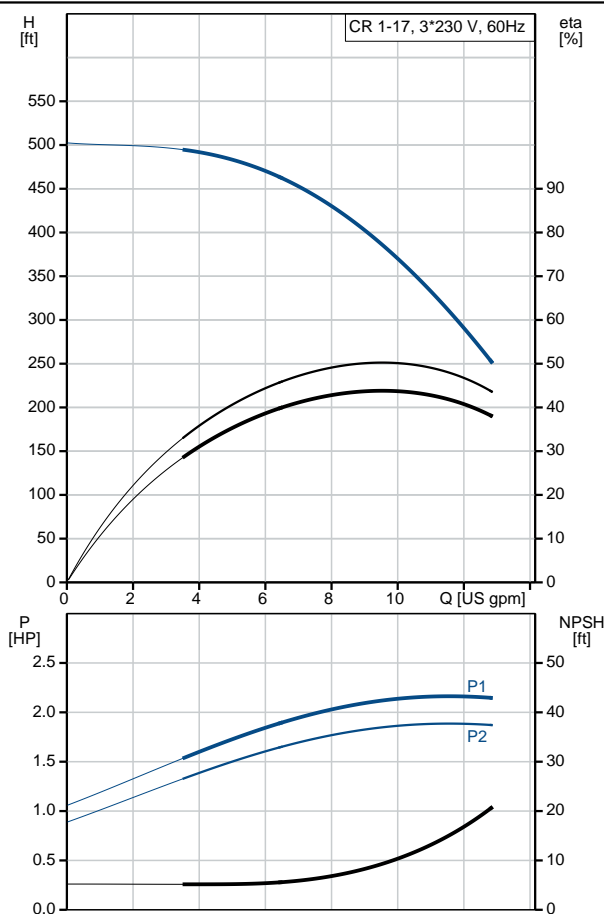
Count	Description
	<p>Rated flow: 9.69 US gpm Rated head: 362.9 ft Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQV Approvals on nameplate: CURUS Curve tolerance: ISO9906:2012 3B</p> <p><b>Materials:</b> Base: Cast iron EN 1561 EN-GJL-200 ASTM A48-25B Impeller: Stainless steel EN 1.4301 AISI 304 Bearing: SIC</p> <p><b>Installation:</b> Maximum ambient temperature: 140 °F Maximum operating pressure: 362.59 psi Max pressure at stated temperature: 363 psi / 194 °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><b>Electrical data:</b> Motor standard: NEMA Motor type: 90GB IE Efficiency class: NEMA Premium / IE3 60Hz Rated power - P2: 2 HP Power (P2) required by pump: 2 HP Main frequency: 60 Hz Rated voltage: 3 x 208-230YY/460Y V Service factor: 1.15 Rated current: 6,00-5,80/2,90 A Starting current: 800-910 % Cos phi - power factor: 0.81-0.78 Rated speed: 3500-3520 rpm IE efficiency: IE3 85,5% Motor efficiency at full load: 85.5 % Motor efficiency at 3/4 load: 86.2 % Motor efficiency at 1/2 load: 84.9 % Number of poles: 2 Enclosure class (IEC 34-5): 55 Dust/Jetting Insulation class (IEC 85): F Motor Number: 99540185</p> <p><b>Controls:</b> Frequency converter: NONE</p> <p><b>Others:</b> Net weight: 87.7 lb Gross weight: 102 lb Shipping volume: 8.26 ft³ Country of origin: US</p>

4/16/2020

## 96082232 CR 1-17 A-FGJ-A-V-HQQV 60 Hz



Description	Value
<b>General information:</b>	
Product name:	CR 1-17 A-FGJ-A-V-HQQV
Product No.:	96082232
EAN:	5700395169706 5700395169706
<b>Technical:</b>	
Rated pump speed:	3452 rpm
Rated flow:	9.69 US gpm
Rated head:	362.9 ft
Maximum head:	493.8 ft
Stages:	17
Impellers:	17
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals on nameplate:	CURUS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Cooling:	TEFC
<b>Materials:</b>	
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:	V
Bearing:	SIC
<b>Installation:</b>	
Maximum ambient temperature:	140 °F
Maximum operating pressure:	362.59 psi
Max pressure at stated temperature:	363 psi / 194 °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
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	-4 .. 194 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft³
<b>Electrical data:</b>	
Motor standard:	NEMA
Motor type:	90GB
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	2 HP
Power (P2) required by pump:	2 HP
Main frequency:	60 Hz





Company name:

Created by:

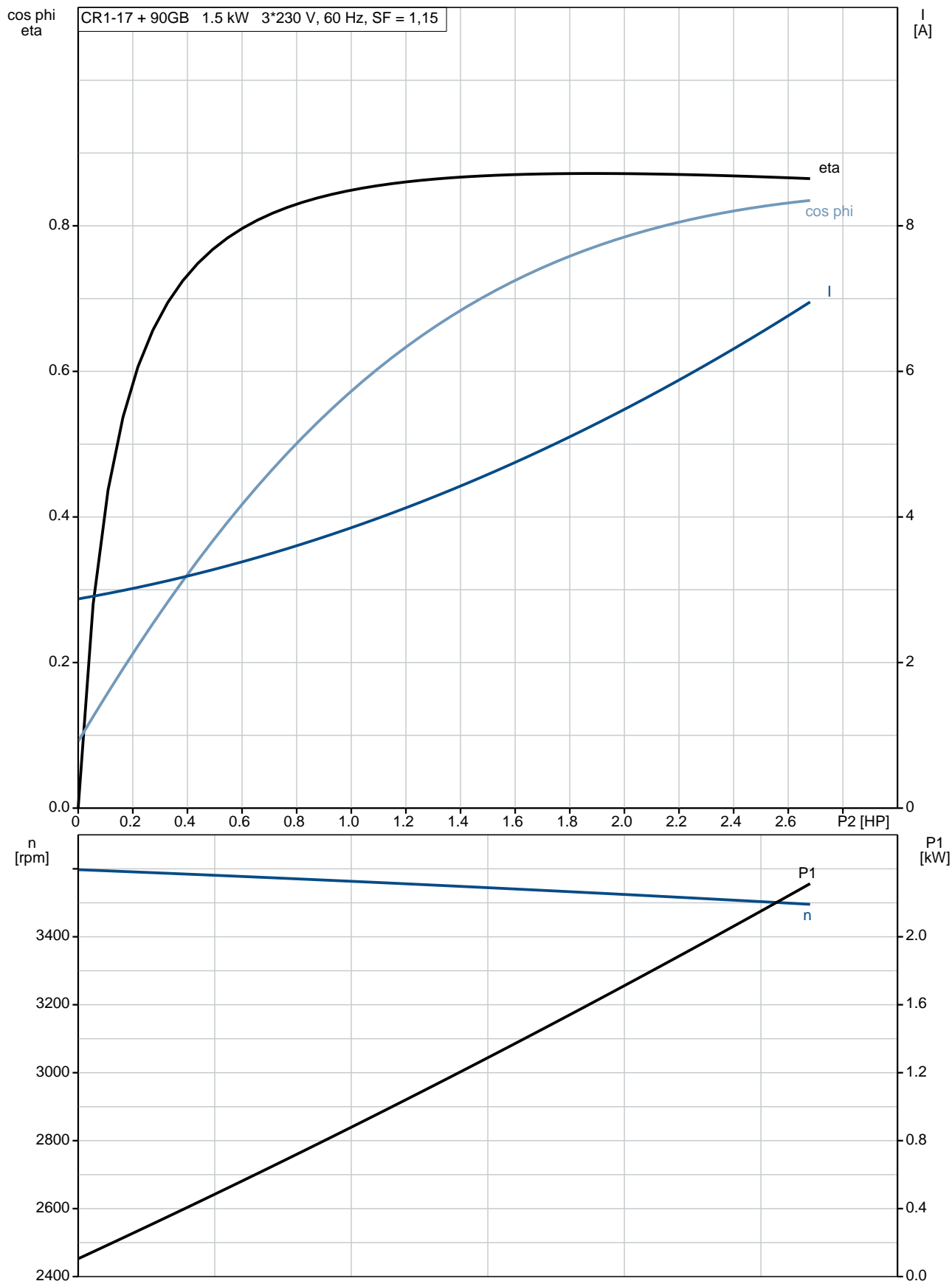
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Date:

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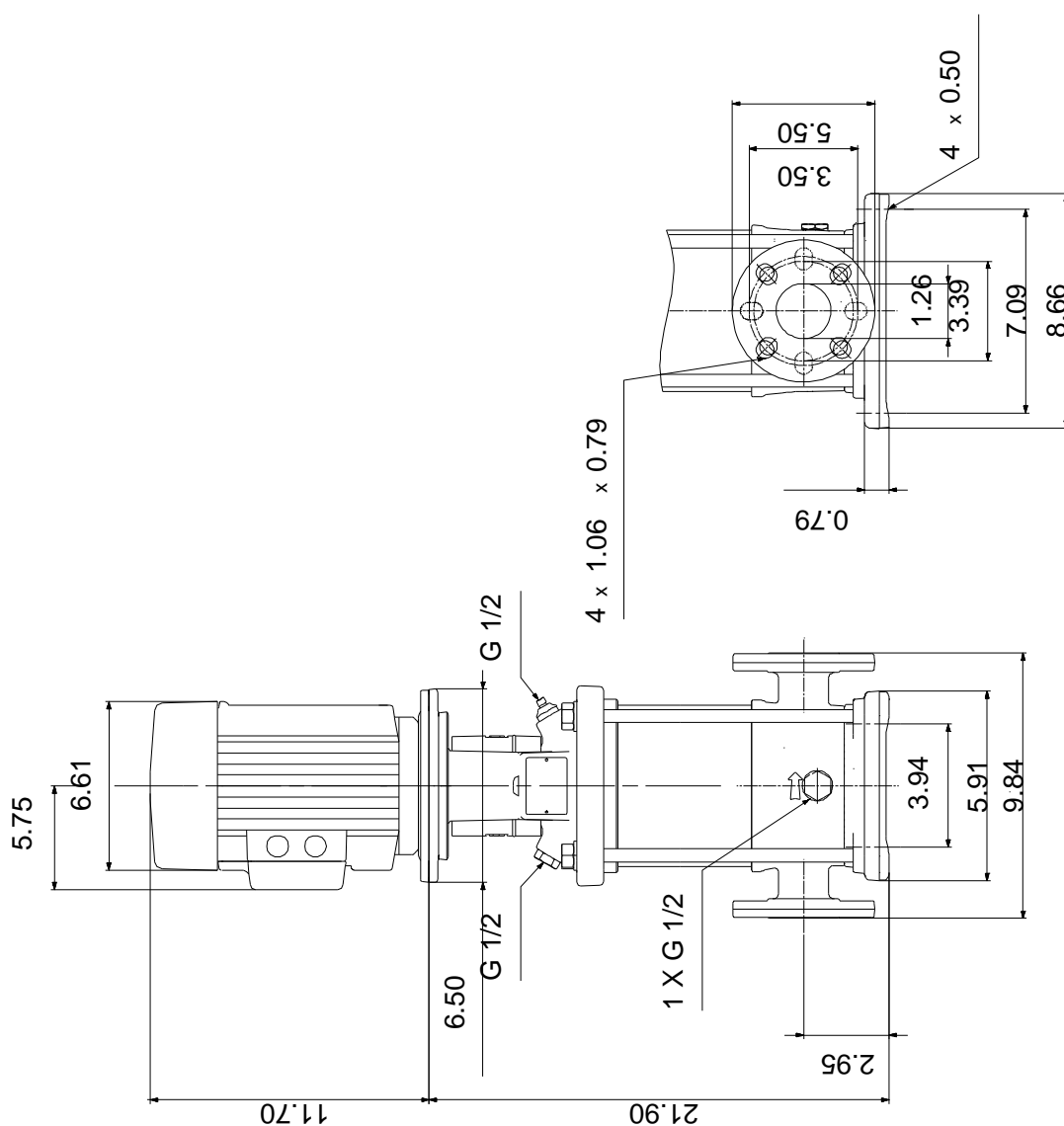
Description	Value
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1.15
Rated current:	6,00-5,80/2,90 A
Starting current:	800-910 %
Load current:	6,80-6,60/3,30 A
Cos phi - power factor:	0.81-0.78
Rated speed:	3500-3520 rpm
IE efficiency:	IE3 85,5%
Motor efficiency at full load:	85.5 %
Motor efficiency at 3/4 load:	86.2 %
Motor efficiency at 1/2 load:	84.9 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	NONE
Motor Number:	99540185
<b>Controls:</b>	
Frequency converter:	NONE
<b>Others:</b>	
Net weight:	87.7 lb
Gross weight:	102 lb
Shipping volume:	8.26 ft³
Country of origin:	US
Custom tariff no.:	8413.70.2040

## 96082232 CR 1-17 A-FGJ-A-V-HQQV 60 Hz





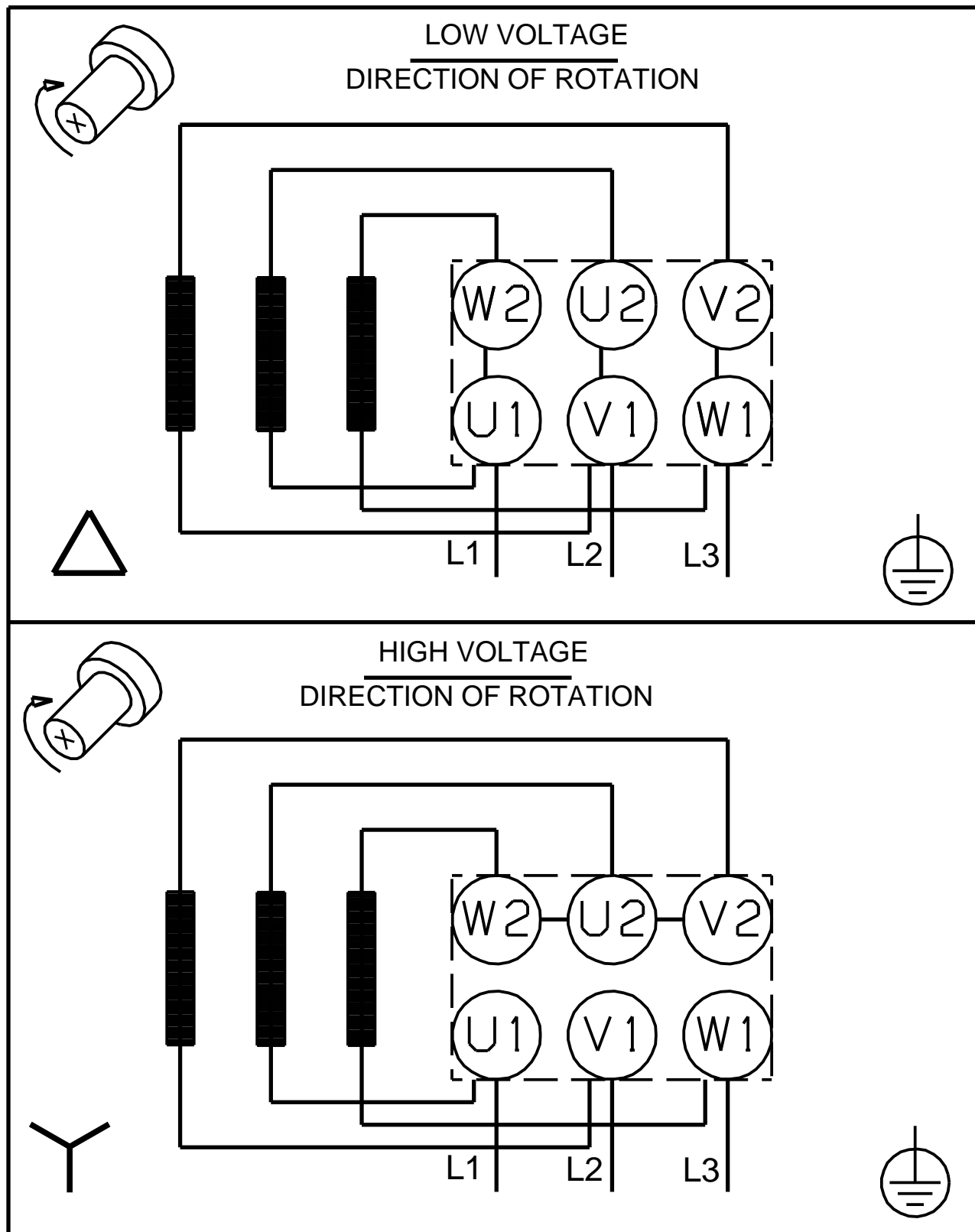
## 96082232 CR 1-17 A-FGJ-A-V-HQQV 60 Hz



Note! All units are in [in] unless otherwise stated.

Disclaimer: This simplified dimensional drawing does not show all details.

## 96082232 CR 1-17 A-FGJ-A-V-HQQV 60 Hz



All units are [in] unless otherwise presented.