
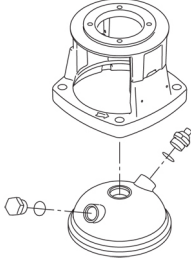
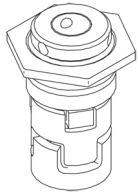


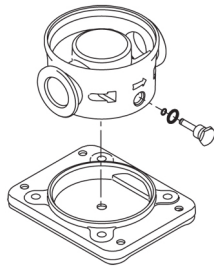
Count	Description
1	<p data-bbox="225 338 544 367">CRI 1S-17 A-CA-A-V-HQQV</p>  <p data-bbox="225 663 491 692">Product No.: 96081332</p> <p data-bbox="225 721 1430 797">Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in stainless steel. Power transmission is via a rigid split coupling. Pipe connection is via FlexiClamps.</p> <p data-bbox="225 835 959 864">The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="225 866 959 896">The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="225 925 544 954">Further product details</p> <p data-bbox="225 960 1453 1061">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="225 1072 719 1193" 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="225 1196 932 1225">The colour code for the finished product is NCS 9000/RAL 9005.</p> <p data-bbox="225 1254 309 1283">Pump</p> <p data-bbox="225 1290 1390 1341">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>  <p data-bbox="225 1639 1422 1740">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 data-bbox="225 1751 373 1780">Primary seal:</p> <ul data-bbox="264 1783 823 1839" style="list-style-type: none"> • Rotating seal ring material: silicon carbide (SiC) • Stationary seat material: silicon carbide (SiC) <p data-bbox="225 1841 1422 1892">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 data-bbox="225 1899 799 1928">Secondary seal material: FKM (fluorocarbon rubber)</p> <p data-bbox="225 1930 1422 1982">FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.</p>



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 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).

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.

Technical data

Controls:

Frequency converter: NONE

Liquid:

Pumped liquid: Water

Liquid temperature range: -4 .. 194 °F

Selected liquid temperature: 68 °F

Density: 62.29 lb/ft³

Technical:

Rated pump speed: 3466 rpm

Rated flow: 4.84 US gpm

Rated head: 318.9 ft

Pump orientation: Vertical

Shaft seal arrangement: Single



Company name:

Created by:

Phone:

Date:

9/30/2019

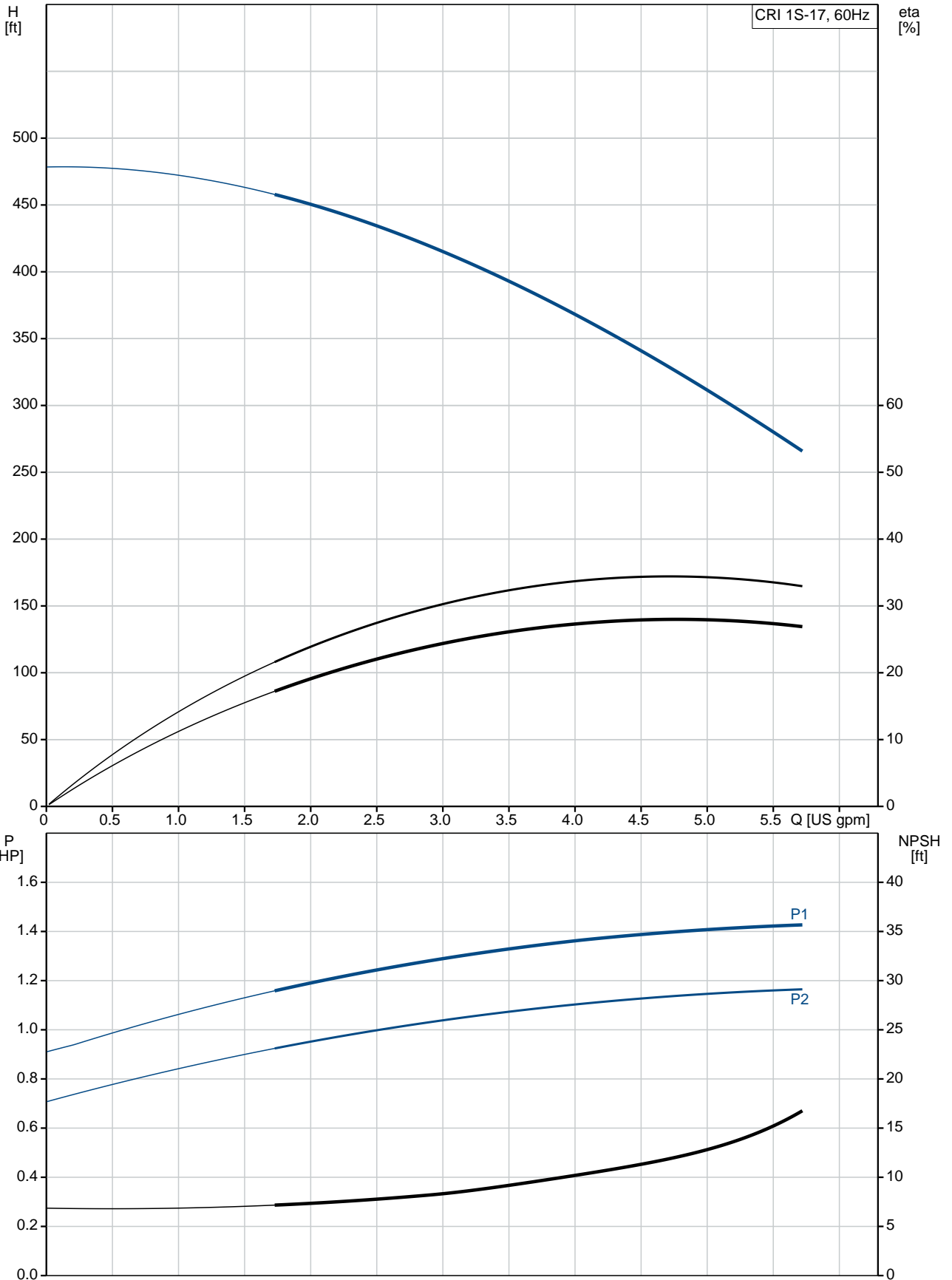
Count	Description
	Code for shaft seal: HQQV
	Approvals on nameplate: CURUS
	Curve tolerance: ISO9906:2012 3B
	Materials:
	Base: Stainless steel
	EN 1.4408
	AISI 316
	Impeller: Stainless steel
	EN 1.4301
	AISI 304
	Bearing: SIC
	Installation:
	Maximum ambient temperature: 140 °F
	Maximum operating pressure: 362.59 psi
	Max pressure at stated temperature: 363 psi / 194 °F
	363 psi / -4 °F
	Type of connection: FlexiClamp
	Size of inlet connection: DN 32
	Size of outlet connection: DN 32
	Pressure rating for pipe connection: PN 25
	Flange size for motor: 56C
	Electrical data:
	Motor standard: NEMA
	Motor type: 80CA
	IE Efficiency class: NEMA Premium / IE3 60Hz
	Rated power - P2: 1.5 HP
	Power (P2) required by pump: 1.5 HP
	Main frequency: 60 Hz
	Rated voltage: 3 x 208-230YY/460Y V
	Service factor: 1.15
	Rated current: 4,45-4,3/2,16 A
	Starting current: 720 %
	Cos phi - power factor: 0.84-0.78
	Rated speed: 3440-3480 rpm
	IE efficiency: IE3 84,1%
	Motor efficiency at full load: 84.9 %
	Motor efficiency at 3/4 load: 81.0 %
	Motor efficiency at 1/2 load: 78.5 %
	Number of poles: 2
	Enclosure class (IEC 34-5): 55 Dust/Jetting
	Insulation class (IEC 85): F
	Motor Number: 98976607
	Others:
	Net weight: 55.4 lb
	Gross weight: 69.9 lb
	Shipping volume: 8.26 ft ³
	Country of origin: US
	Custom tariff no.: 8413.70.2040



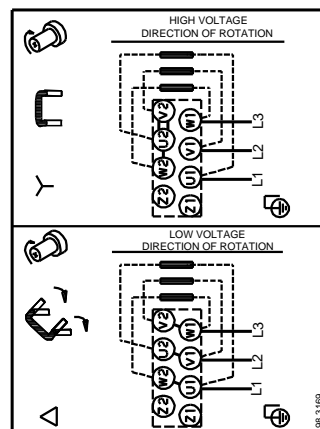
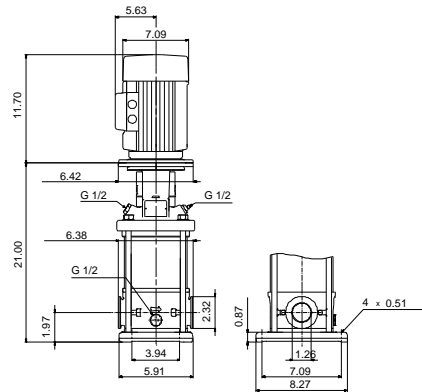
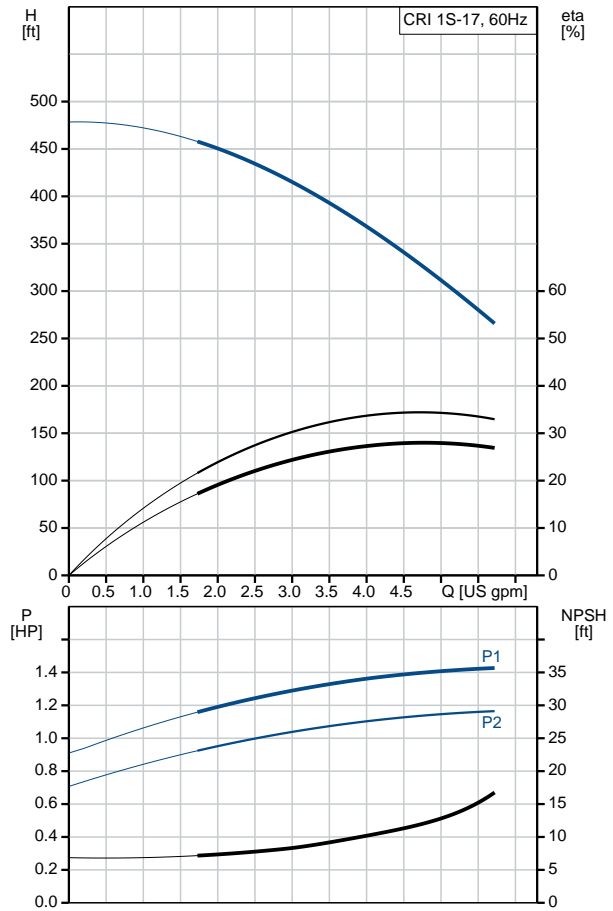
Company name:
Created by:
Phone:

Date: 9/30/2019

96081332 CRI 1S-17 A-CA-A-V-HQQV 60 Hz



Description	Value
General information:	
Product name:	CRI 1S-17 A-CA-A-V-HQQV
Product No.:	96081332
EAN:	5700395157468 5700395157468
Technical:	
Rated pump speed:	3466 rpm
Rated flow:	4.84 US gpm
Rated head:	318.9 ft
Head max:	478.7 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
Materials:	
Base:	Stainless steel EN 1.4408 AISI 316
Impeller:	Stainless steel EN 1.4301 AISI 304
Material code:	A
Code for rubber:	V
Bearing:	SIC
Installation:	
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:	FlexiClamp
Size of inlet connection:	DN 32
Size of outlet connection:	DN 32
Pressure rating for pipe connection:	PN 25
Flange size for motor:	56C
Connect code:	CA
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-4 .. 194 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft ³
Electrical data:	
Motor standard:	NEMA
Motor type:	80CA
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	1.5 HP
Power (P2) required by pump:	1.5 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V





Company name:

Created by:

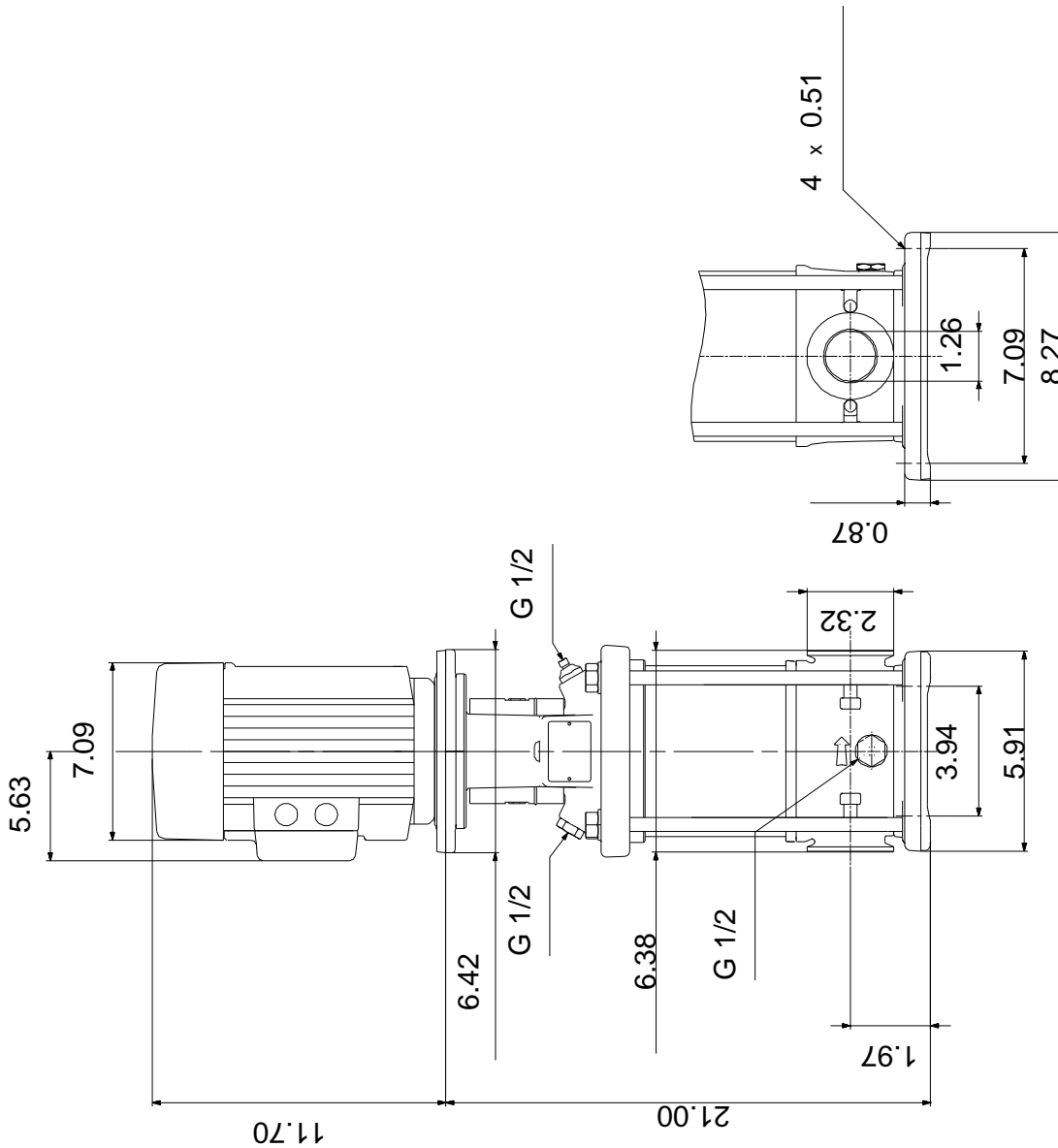
Phone:

Date:

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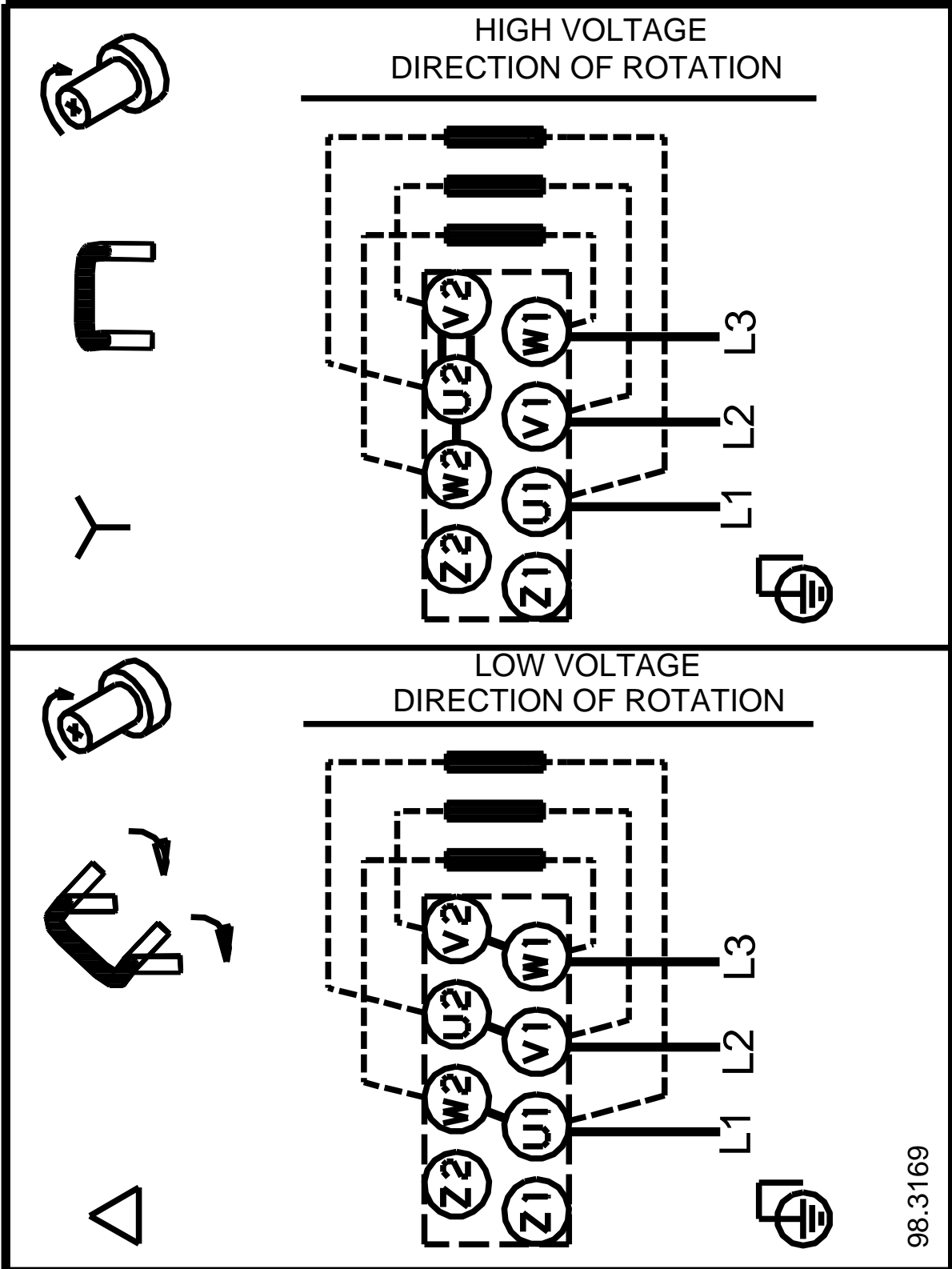
Description	Value
Service factor:	1.15
Rated current:	4,45-4,3/2,16 A
Starting current:	720 %
Load current:	5,1-4,95/2,48 A
Cos phi - power factor:	0.84-0.78
Rated speed:	3440-3480 rpm
IE efficiency:	IE3 84,1%
Motor efficiency at full load:	84.9 %
Motor efficiency at 3/4 load:	81.0 %
Motor efficiency at 1/2 load:	78.5 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	NONE
Motor Number:	98976607
Controls:	
Frequency converter:	NONE
Others:	
Net weight:	55.4 lb
Gross weight:	69.9 lb
Shipping volume:	8.26 ft ³
Country of origin:	US
Custom tariff no.:	8413.70.2040

96081332 CRI 1S-17 A-CA-A-V-HQQV 60 Hz



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

96081332 CRI 1S-17 A-CA-A-V-HQQV 60 Hz



98.3169

All units are [in] unless otherwise presented.