

Qty. Description

1 CM 5-4 X-R-A-E-AVBE F-A-A-N

Product No.: [99447171](#)

Compact, reliable, horizontal, multistage, end-suction centrifugal pump with axial suction port and radial discharge port. The shaft, impellers and chambers are made of stainless steel. The inlet and discharge parts are made of cast iron. The mechanical shaft seal is a special designed, unbalanced O-ring seal. Pipework connection is via internal Whitworth pipe threads, Rp (ISO 7/1).

The pump is fitted with a 3-phase, foot-mounted, fan-cooled asynchronous motor.
The terminal box position is 3 o'clock seen from motor fan side.

Further product details

Pump and motor are integrated in a compact and user-friendly design. The pump is fitted to a low base plate, making it ideal for installation in systems where compactness is important.

The state-of-the-art design and materials of the shaft seal ensure high wear resistance, improved sticking and dry-running capabilities and long operating life.

Servicing the pump requires no special service tools. Service parts are in stock for quick delivery and are available as kits, single parts or bulk. Service videos are available on www.youtube.com.

Pump

A combination of a stop ring and a Nord-lock® washer secures a tight and reliable fixation of the impeller spacing pipes to the splined pump shaft. It is possible to remove and fit the hydraulic parts from the pump side. The inlet part, chambers and discharge part are hold together by four staybolts.

The pump is fitted with an unbalanced O-ring seal with a rigid torque-transmission system. It has a fixed seal driver ensuring a reliable rotation of all parts. The dynamic secondary seal is an O-ring.

Seal faces:

- Rotating seal ring material: aluminium oxide (alumina)
- Stationary seat material: carbon graphite, resin-impregnated

Carbon graphite against alumina is a good all-round seal for not too demanding applications. The corrosion resistance is often limited in water to a range between pH 5 and pH 10. Usage in liquids above 90 °C is not recommended. The seal can handle dry-running conditions for short periods.

Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.



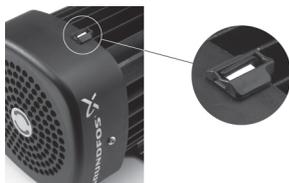
The pump shaft is connected to the motor shaft through a left thread and tight fit. The shaft cannot be dismantled.

Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to EN 50347. Electrical tolerances comply with EN 60034.

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

An installation indicator is fitted to the motor fan cover. Based on the motor cooling air, it indicates the direction of rotation of the motor. The motor is fitted with a directional sticker.



Technical data

Qty.	Description
1	<p>Controls:</p> <p>Frequency converter: None</p> <p>Liquid:</p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: -20 .. 90 °C</p> <p>Selected liquid temperature: 20 °C</p> <p>Density: 998.2 kg/m³</p> <p>Technical:</p> <p>Pump speed on which pump data are based: 2900 rpm</p> <p>Rated flow: 4.7 m³/h</p> <p>Rated head: 30.69 m</p> <p>Code for shaft seal: AVBE</p> <p>Approvals: CE,EAC,UKCA</p> <p>Approvals for drinking water: ACS</p> <p>Curve tolerance: ISO9906:2012 3B</p> <p>Materials:</p> <p>Pump housing: Cast iron EN-GJL-200 ASTM A48-25A</p> <p>Impeller: Stainless steel EN 1.4301 AISI 304</p> <p>Installation:</p> <p>Range of ambient temperature: -20 .. 55 °C</p> <p>Maximum operating pressure: 10 bar</p> <p>Max pressure at stated temp: 10 bar / 40 °C 6 bar / 90 °C</p> <p>Type of connection: Rp</p> <p>Size of inlet connection: 1 1/4 inch</p> <p>Size of outlet connection: 1 inch</p> <p>Electrical data:</p> <p>Motor standard: IEC</p> <p>Frame size: 80C</p> <p>IE efficiency class: IE3</p> <p>Rated power - P2: 1.1 kW</p> <p>Mains frequency: 50 Hz</p> <p>Suitable for 50/60 Hz: N</p> <p>Rated voltage: 3 x 220-240D/380-415Y V</p> <p>Service factor: 1.00</p> <p>Rated current: 4,4-4,5/2,55-2,6 A</p> <p>Starting current: 720-780 %</p> <p>Rated speed: 2830-2860 rpm</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Built-in motor protection: NONE</p> <p>Cable included (Yes/No): N</p> <p>Others:</p> <p>Terminal box position: 3</p> <p>Minimum efficiency index, MEI ≥: 0.7</p> <p>Net weight: 15.3 kg</p> <p>Gross weight: 17.8 kg</p>



Company name:

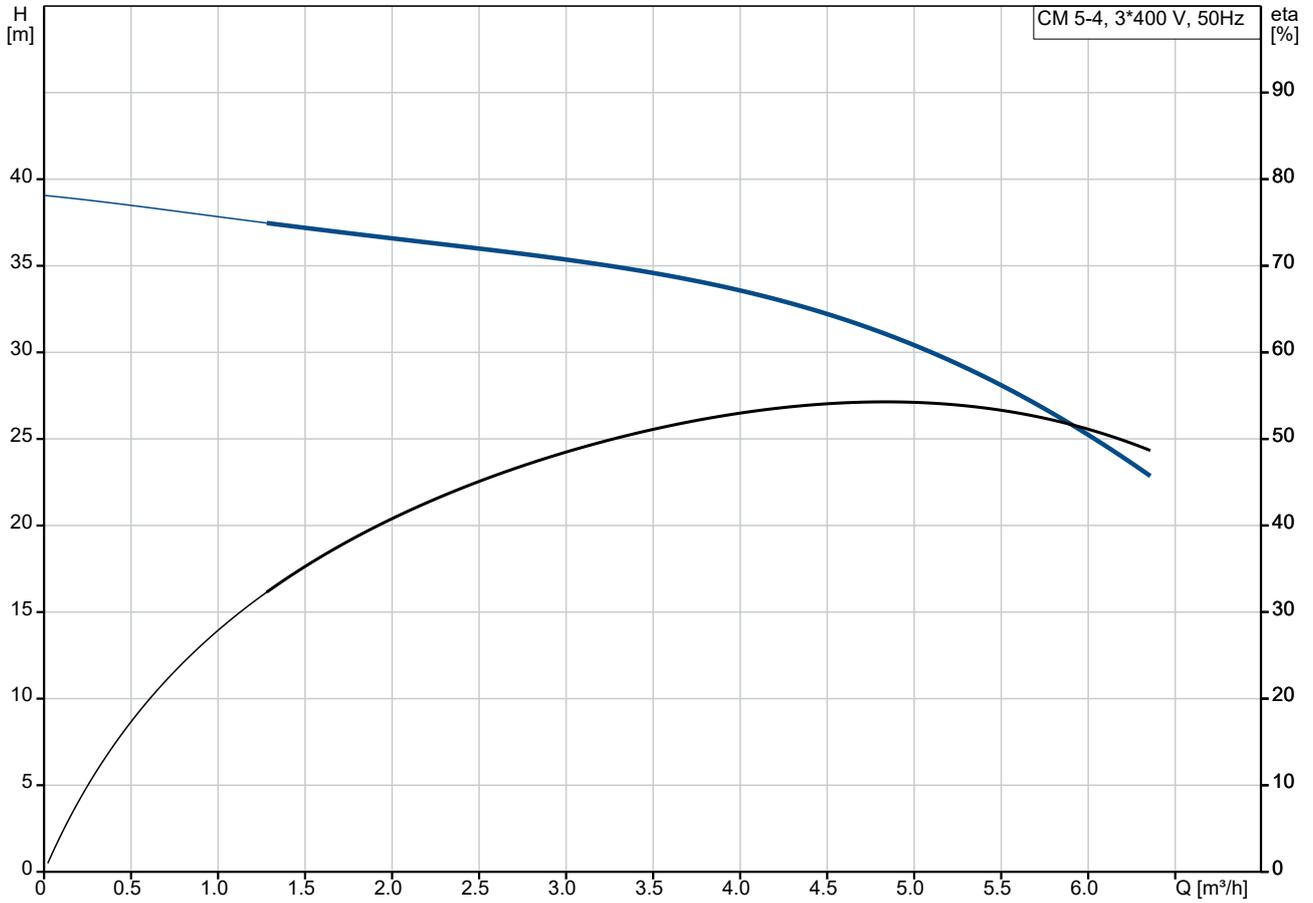
Created by:

Phone:

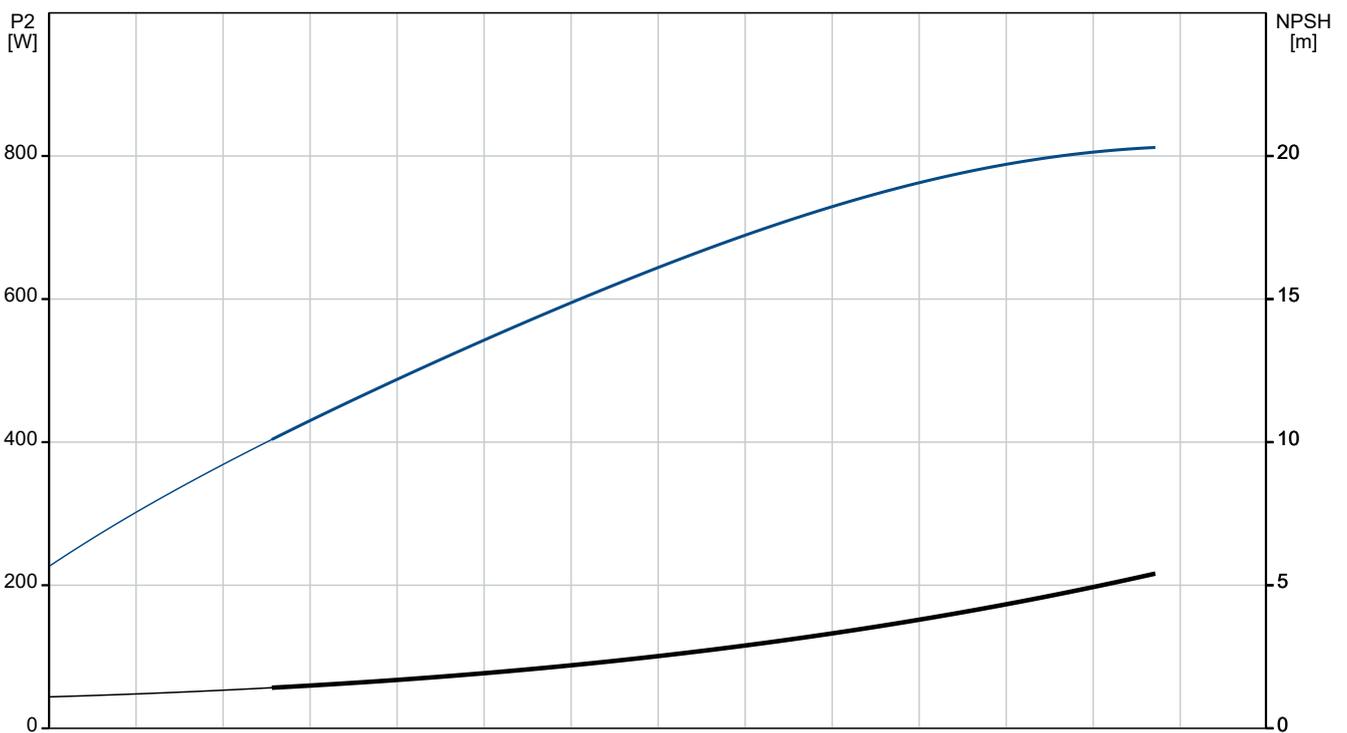
Date:

15/07/2024

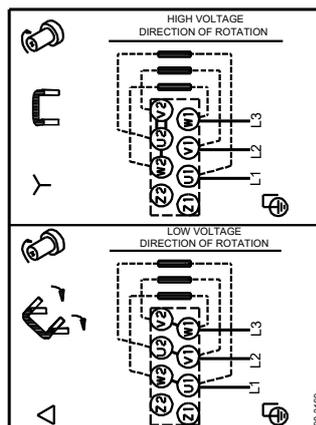
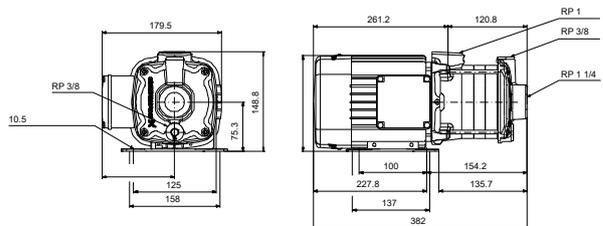
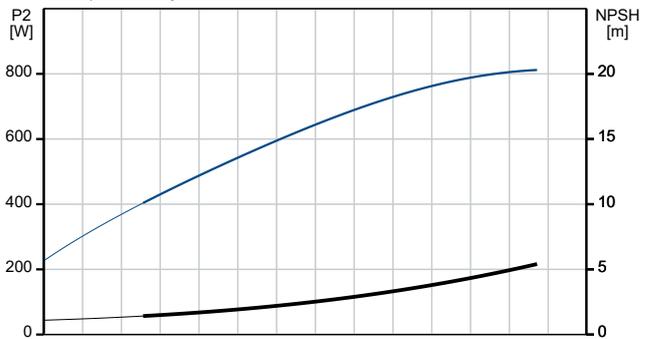
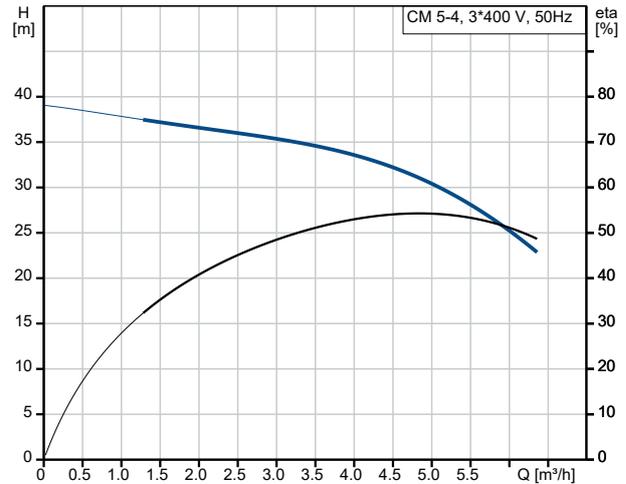
99447171 CM 5-4 X-R-A-E-AVBE F-A-A-N 50 Hz



Pumped liquid = Water
Liquid temperature during operation = 20 °C
Density = 998.2 kg/m³



Description	Value
General information:	
Product name:	CM 5-4 X-R-A-E-AVBE F-A-A-N
Product No:	99447171
EAN number:	5713829271234
Technical:	
Pump speed on which pump data are based:	2900 rpm
Rated flow:	4.7 m ³ /h
Rated head:	30.69 m
Impellers:	4
Code for shaft seal:	AVBE
Approvals:	CE,EAC,UKCA
Approvals for drinking water:	ACS
Curve tolerance:	ISO9906:2012 3B
Pump version:	X
Model:	A
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-GJL-200
Pump housing:	ASTM A48-25A
Impeller:	Stainless steel
Impeller:	EN 1.4301
Impeller:	AISI 304
Material code:	A
Code for rubber:	E
Installation:	
Range of ambient temperature:	-20 .. 55 °C
Maximum operating pressure:	10 bar
Max pressure at stated temp:	10 bar / 40 °C
Max pressure at stated temp:	6 bar / 90 °C
Type of connection:	Rp
Size of inlet connection:	1 1/4 inch
Size of outlet connection:	1 inch
Connect code:	R
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-20 .. 90 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m ³
Electrical data:	
Motor standard:	IEC
Frame size:	80C
IE efficiency class:	IE3
Rated power - P2:	1.1 kW
Mains frequency:	50 Hz
Suitable for 50/60 Hz:	N
Rated voltage:	3 x 220-240D/380-415Y V
Service factor:	1.00
Rated current:	4,4-4,5/2,55-2,6 A
Starting current:	720-780 %
Rated speed:	2830-2860 rpm
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	NONE
Cable included (Yes/No):	N
Controls:	
Frequency converter:	None





Company name:

Created by:

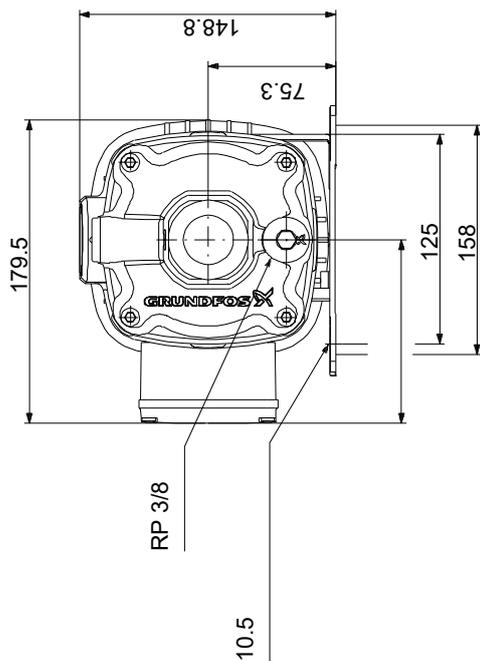
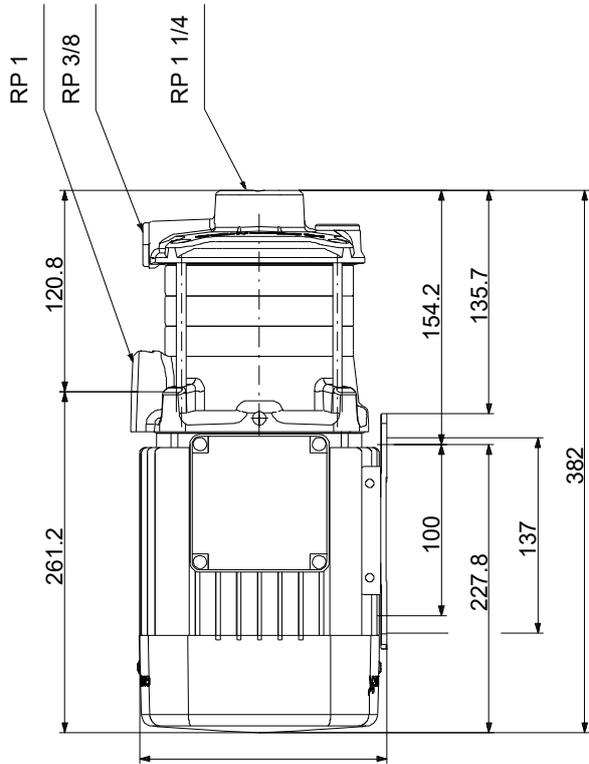
Phone:

Date:

15/07/2024

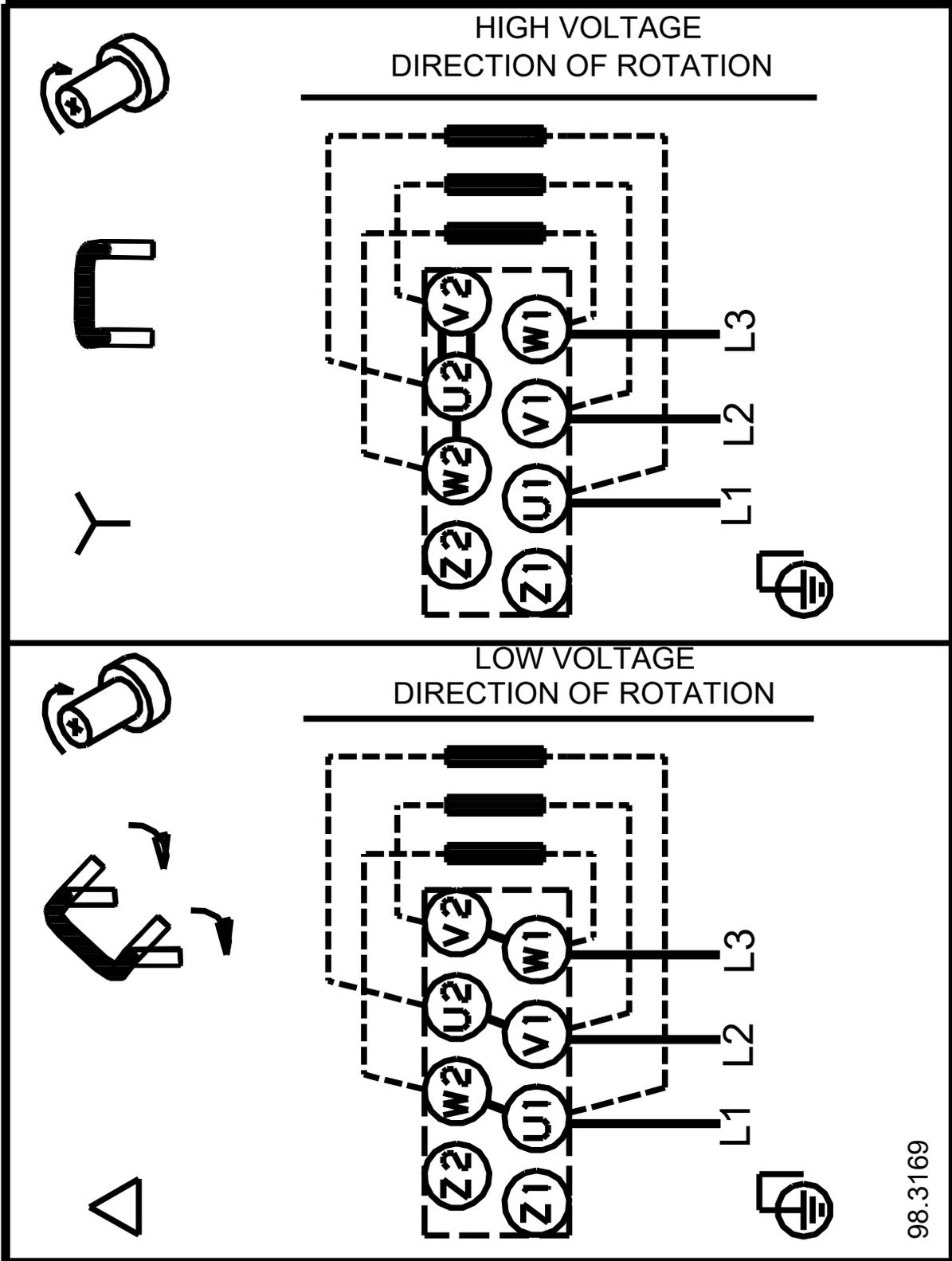
Description	Value
Others:	
Terminal box position:	3
Minimum efficiency index, MEI ≥:	0.7
Net weight:	15.3 kg
Gross weight:	17.8 kg

99447171 CM 5-4 X-R-A-E-AVBE F-A-A-N 50 Hz



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

99447171 CM 5-4 X-R-A-E-AVBE F-A-A-N 50 Hz



Note! All units are in [mm] unless others are stated.