Company name:
Created by:
Phone:

Date: 09/09/2021

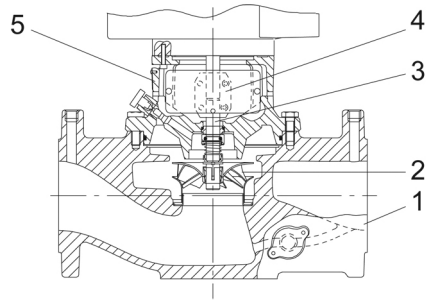
Qty.	Description
1	**TP 50-60/2 A-F-A-BUBE**

Note! Product picture may differ from actual product

Product No.: 96402083

Single-stage, close-coupled, volute pump with in-line suction and discharge ports of identical diameter.
The pump is of the top-pull-out design, i.e. the power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework.
The pump is fitted with an unbalanced rubber bellows seal.
The shaft seal is according to EN 12756. Pipework connection is via PN 6/10 DIN flanges (EN 1092-2 and ISO 7005-2).
The pump is fitted with a fan-cooled asynchronous motor.
Cast-iron parts 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.

Pump



1: Pump housing
2: Impeller
3: Shaft
4: Coupling
5: Pump head
The pump housing is provided with a replaceable stainless steel/PTFE neck ring to reduce the amount of liquid running from the discharge side of the impeller to the suction side.
The impeller is secured with a split cone with nut.
The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.
Primary seal:

- Rotating seal ring material: tungsten carbide (WC)
- Stationary seat material: carbon graphite, resin-impregnated

This is a widely used material pairing.
If the pumped liquid contains particles, wear on the seal faces must be expected.
Due to the favourable lubricating properties of carbon graphite, the seal is suitable for use even under poor lubricating conditions, such as hot water.
However, under such conditions, wear on the carbon graphite face reduces seal life.
Secondary seal material: EPDM (ethylene-propylene rubber)

Qty.	Description

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

A circulation of liquid through the duct of the air vent screw ensures lubrication and cooling of the shaft seal.

The flanges have tappings for mounting of pressure gauges.

The motor stool forms connection between the pump housing and the motor, and is equipped with a manual air vent screw for venting of the pump housing and the shaft seal chamber. The sealing between motor stool and pump housing is an O-ring.

The central part of the motor stool is provided with guards for protection against the shaft and coupling. Motor and pump shaft are connected via a shell coupling.

Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.

The motor is flange-mounted with tapped-hole flange (FT).

Motor-mounting designation in accordance with IEC 60034-7: IM B 14, IM V 18 (Code I) / IM 3601, IM 3611 (Code II).

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).

Further product details

Technical data

Liquid:	
Pumped liquid:	Water
Liquid temperature range:	0 .. 140 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m³
Technical:	
Pump speed on which pump data are based:	2870 rpm
Rated flow:	16.2 m³/h
Rated head:	4.4 m
Actual impeller diameter:	74 mm
Code for shaft seal:	BUBE
Curve tolerance:	ISO9906:2012 3B
Materials:	
Pump housing:	Cast iron EN-JL1040 A48-40 B
Impeller:	Stainless steel 1.4301 304
Installation:	
Maximum ambient temperature:	40 °C
Maximum operating pressure:	10 bar
Type of connection:	DIN
Size of connection:	DN 50
Pressure rating for connection:	PN 6/10
Port-to-port length:	280 mm
Electrical data:	
Motor type:	71A
IE Efficiency class:	IE3
Rated power - P2:	0.37 kW
Mains frequency:	50 Hz

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Date: 09/09/2021

Qty.	Description	
	Rated voltage:	3 x 220-240D/380-415Y V
	Rated current:	1.74/1.00 A
	Starting current:	490-530 %
	Cos phi - power factor:	0.80-0.70
	Rated speed:	2850-2880 rpm
	Efficiency:	IE3 73,8%
	Motor efficiency at full load:	73.8 %
	Motor efficiency at 3/4 load:	79.0 %
	Motor efficiency at 1/2 load:	75.5 %
	Number of poles:	2
	Enclosure class (IEC 34-5):	55 Dust/Jetting
	Insulation class (IEC 85):	F
	Motor No:	85805102
	Others:	
	Minimum efficiency index, MEI ≥:	0.60
	Net weight:	25.4 kg
	Gross weight:	29 kg
	Shipping volume:	0.06 m³

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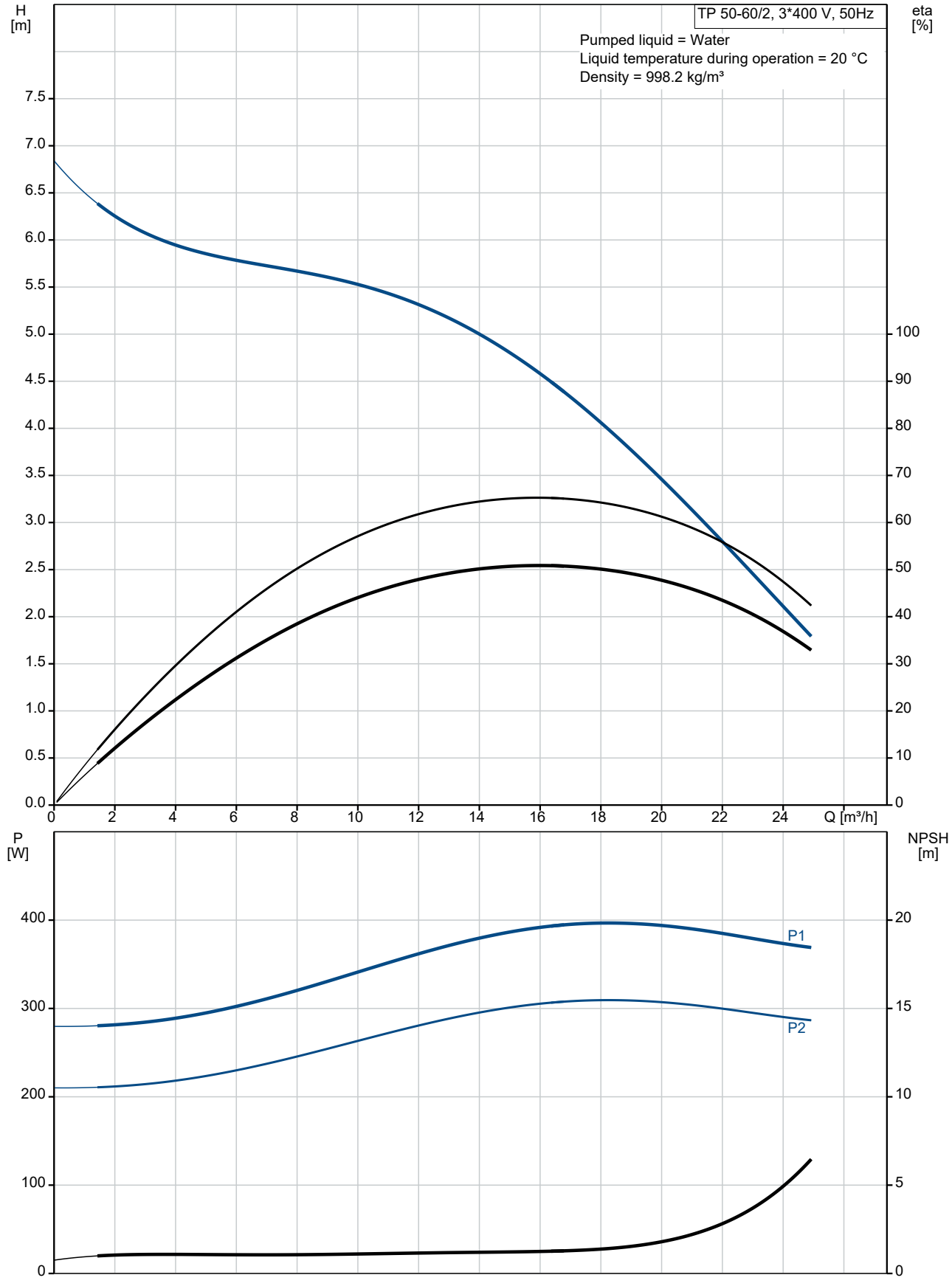
Date: 09/09/2021

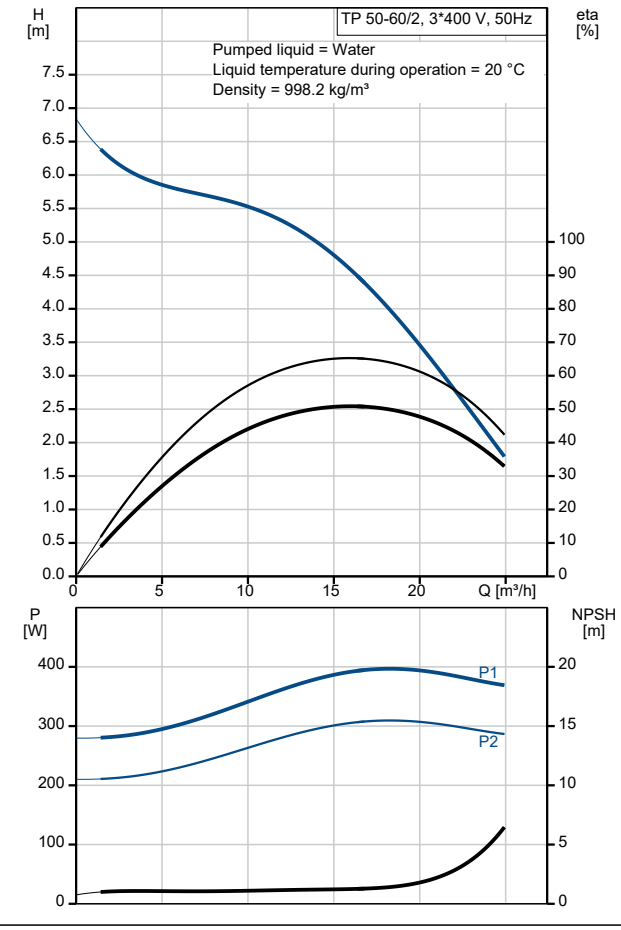
96402083 TP 50-60/2 A-F-A-BUBE 50 Hz

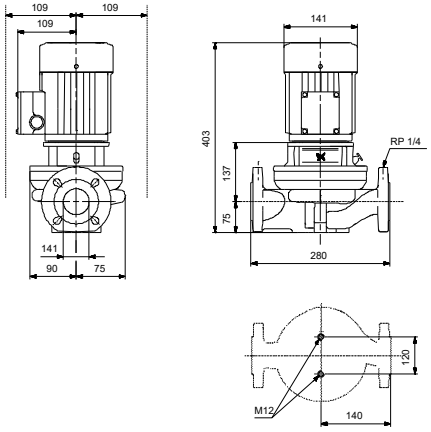


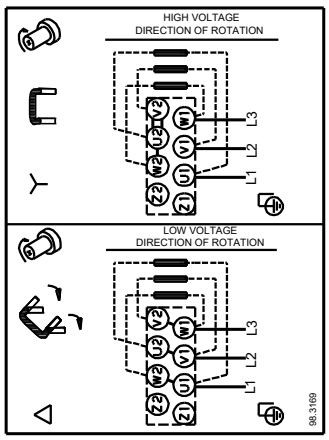
Company name:
Created by:
Phone:

Date: 09/09/2021

Description	Value
General information:	
Product name:	TP 50-60/2 A-F-A-BUBE
Product No:	96402083
EAN number:	5700390659066
Technical:	
Pump speed on which pump data are based:	2870 rpm
Rated flow:	16.2 m³/h
Rated head:	4.4 m
Maximum head:	60 dm
Actual impeller diameter:	74 mm
Code for shaft seal:	BUBE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-JL1040
Pump housing:	A48-40 B
Impeller:	Stainless steel
Impeller:	1.4301
Impeller:	304
Material code:	A
Installation:	
Maximum ambient temperature:	40 °C
Maximum operating pressure:	10 bar
Type of connection:	DIN
Size of connection:	DN 50
Pressure rating for connection:	PN 6/10
Port-to-port length:	280 mm
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	0 .. 140 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m³
Electrical data:	
Motor type:	71A
IE Efficiency class:	IE3
Rated power - P2:	0.37 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240D/380-415Y V
Rated current:	1.74/1.00 A
Starting current:	490-530 %
Cos phi - power factor:	0.80-0.70
Rated speed:	2850-2880 rpm
Efficiency:	IE3 73,8%
Motor efficiency at full load:	73.8 %
Motor efficiency at 3/4 load:	79.0 %
Motor efficiency at 1/2 load:	75.5 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Built-in motor protection:	NONE
Motor No:	85805102
Others:	
Minimum efficiency index, MEI ≥:	0.60
Net weight:	25.4 kg







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Company name:
Created by:
Phone:

Date: 09/09/2021

Description	Value
Gross weight:	29 kg
Shipping volume:	0.06 m³
Sales region:	GB

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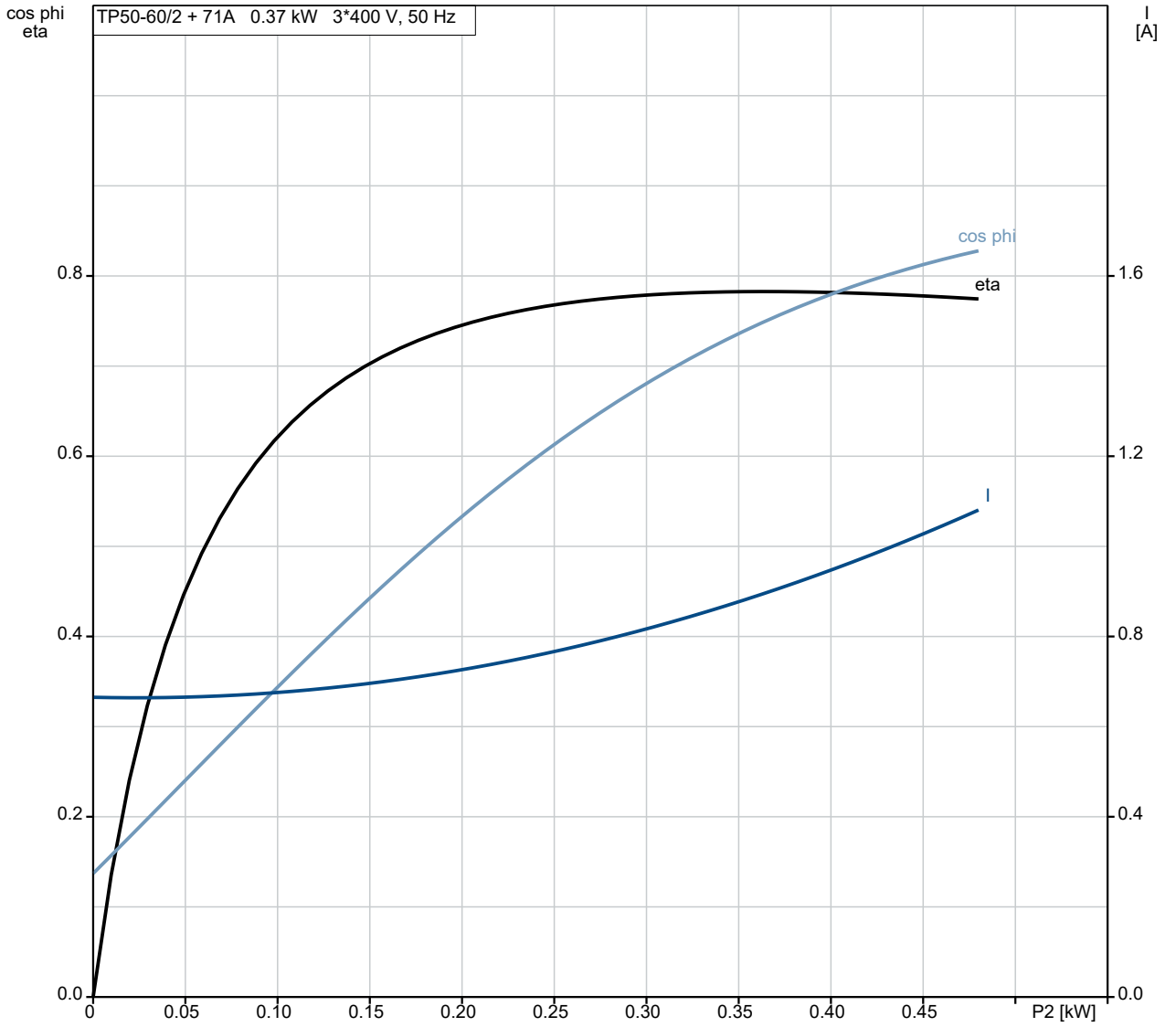
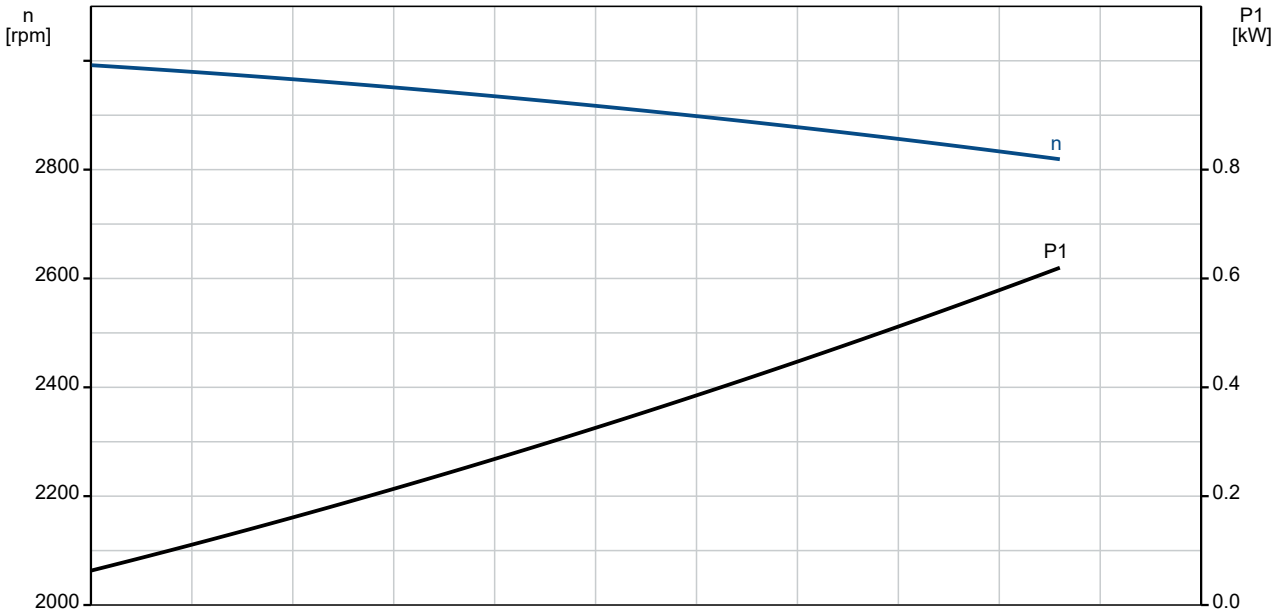
Company name:
Created by:
Phone:

Date: 09/09/2021

96402083 TP 50-60/2 A-F-A-BUBE 50 Hz

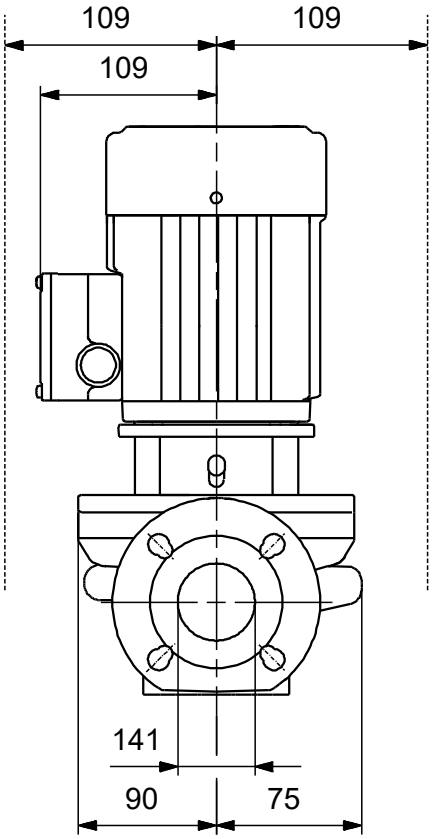


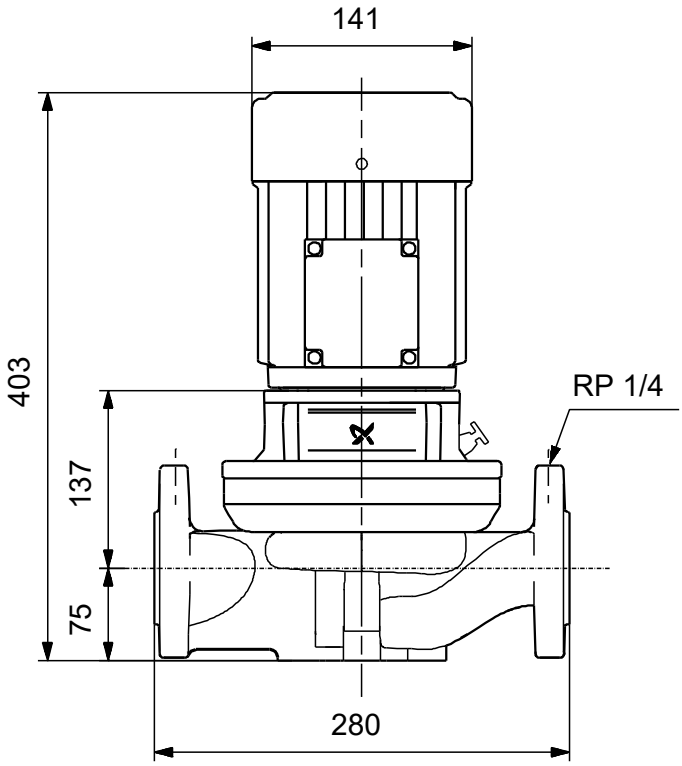


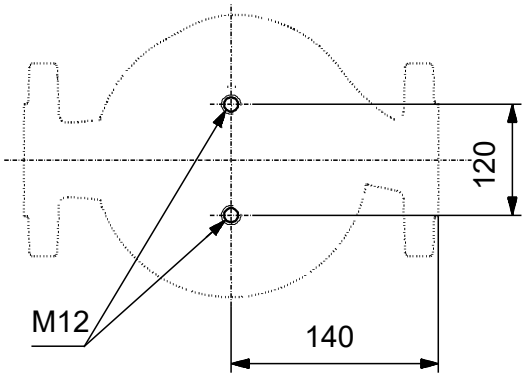
Company name:
Created by:
Phone:

Date: 09/09/2021

96402083 TP 50-60/2 A-F-A-BUBE 50 Hz







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

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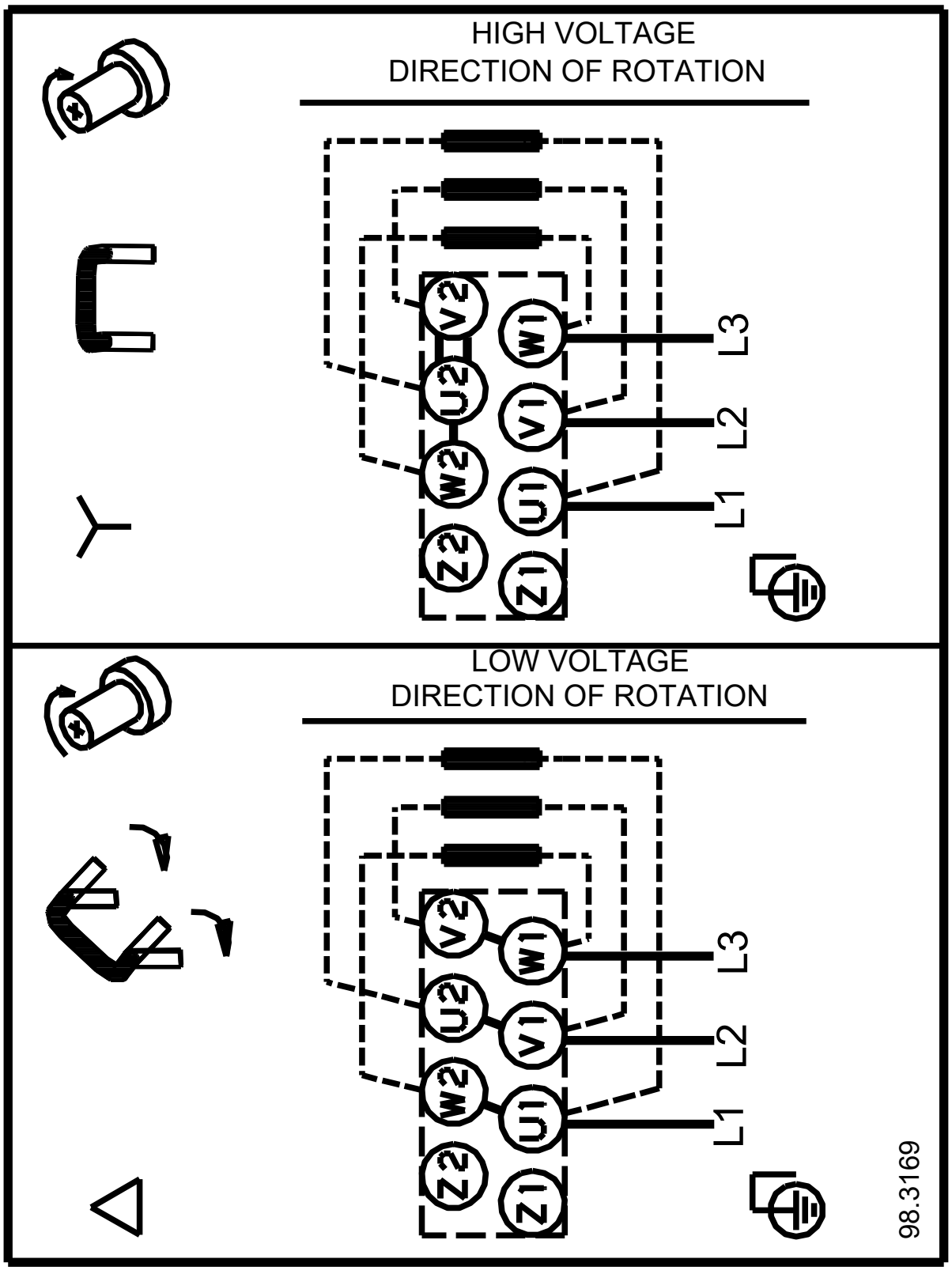
Company name:
Created by:
Phone:

Date: 09/09/2021

96402083 TP 50-60/2 A-F-A-BUBE 50 Hz



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