

Heating

Air-conditioning / Refrigeration

Service water



Valid from 04/2020 - EX

High efficiency Circulation Pumps

More than pumps



Biral – With all our heart



Biral Vision

Four core thoughts determine the way we think and act:

We are the leading supplier of innovative and efficient pump solutions.

Technical competence, proximity to the customer and flexibility in solving special customer concerns create perceptible customer benefits.

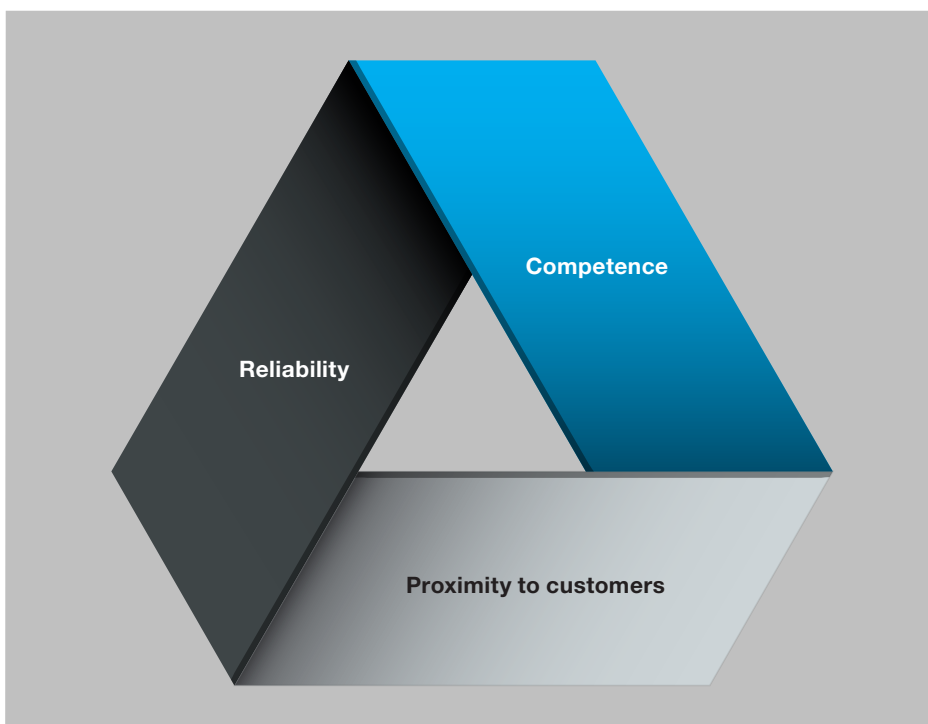
We constantly maintain a respectful and trustworthy partnership with our customers and partners to achieve this.

Our work fills us with pride and is the incentive to consistently pursue this level of reliability and durability.

We build upon competent employees, who put all their energy and passion into Biral.



Biral – your leading partner for innovative and efficient pump solutions



More than pumps

Where vision, values and responsibility become palpable to you.

Competence

- Competent consultation as required
- Biral campus – the new Swiss pump competence centre

Reliability

- Innovative products of the highest quality
- A full range for all areas of use
- Logistics that respond without delay

Proximity to customers

- Virtual planning support
- User-friendly documentation and data sources

General information

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Premium high efficiency service water pumps

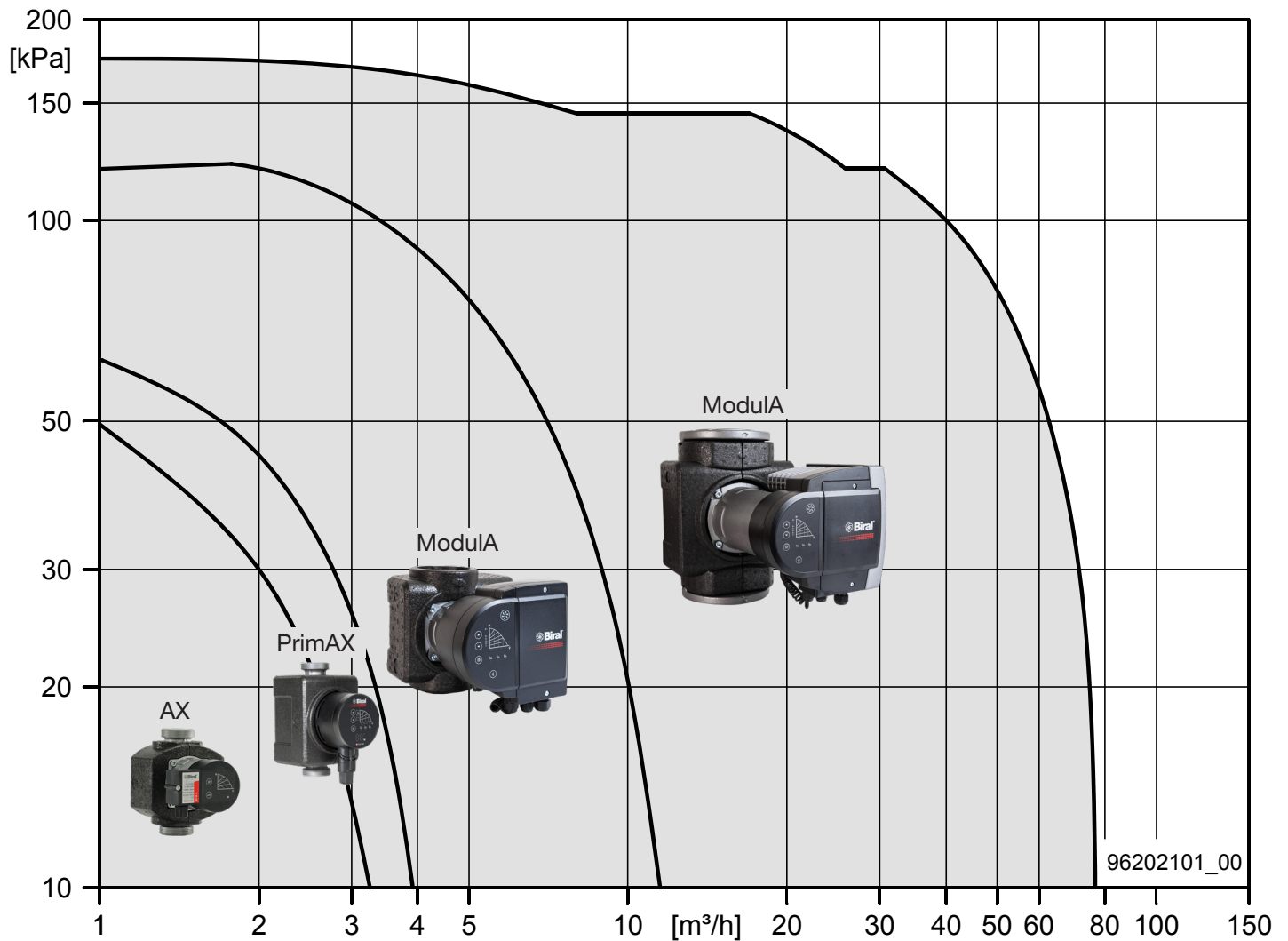
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General information

Overview of characteristics for heating circulation pumps



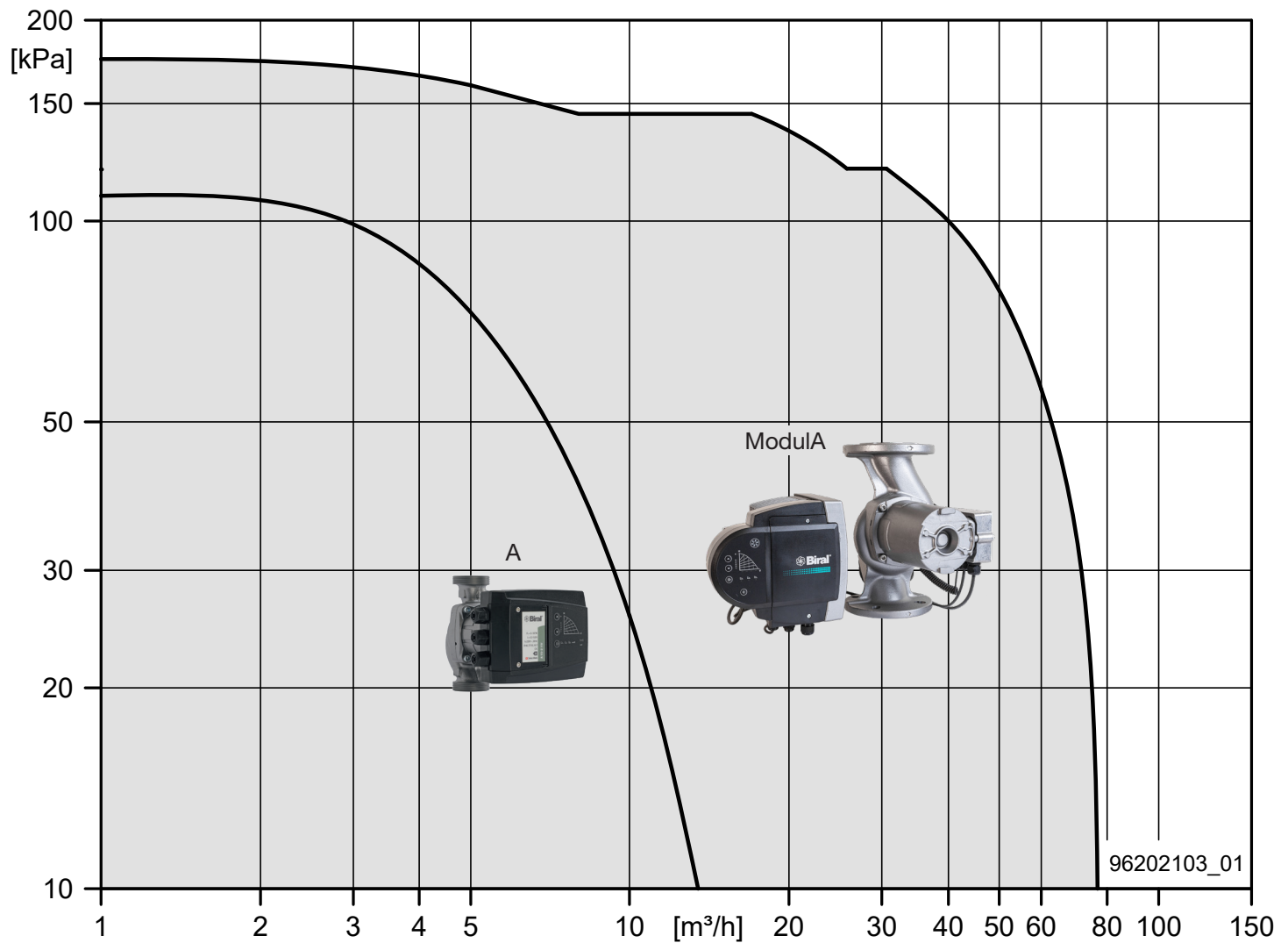
RED

Heating / ventilation

Functions	AX... RED	PrimAX... RED	A	ModuA... RED
Fluid temperature	15 – 110°C	2 – 110°C	15 - 95°C	15 – 110°C
Fault message/Operational message (switchable between)	–	–	✓	✓
External OFF or external ON (switchable between)	–	–	–	✓
Power Limit (activatable)	–	–	–	✓
Button lock	–	✓	–	✓
Flow rate indicator	–	✓	–	✓
Bluetooth Connect	–	–	–	✓
Power limiting (deactivatable)	–	–	✓	✓
Automatic night-time reduction (activatable)	✓	–	–	–
BIM Biral Interface Modules	–	–	✓	✓

General information

Overview of characteristics for cold water circulation pumps



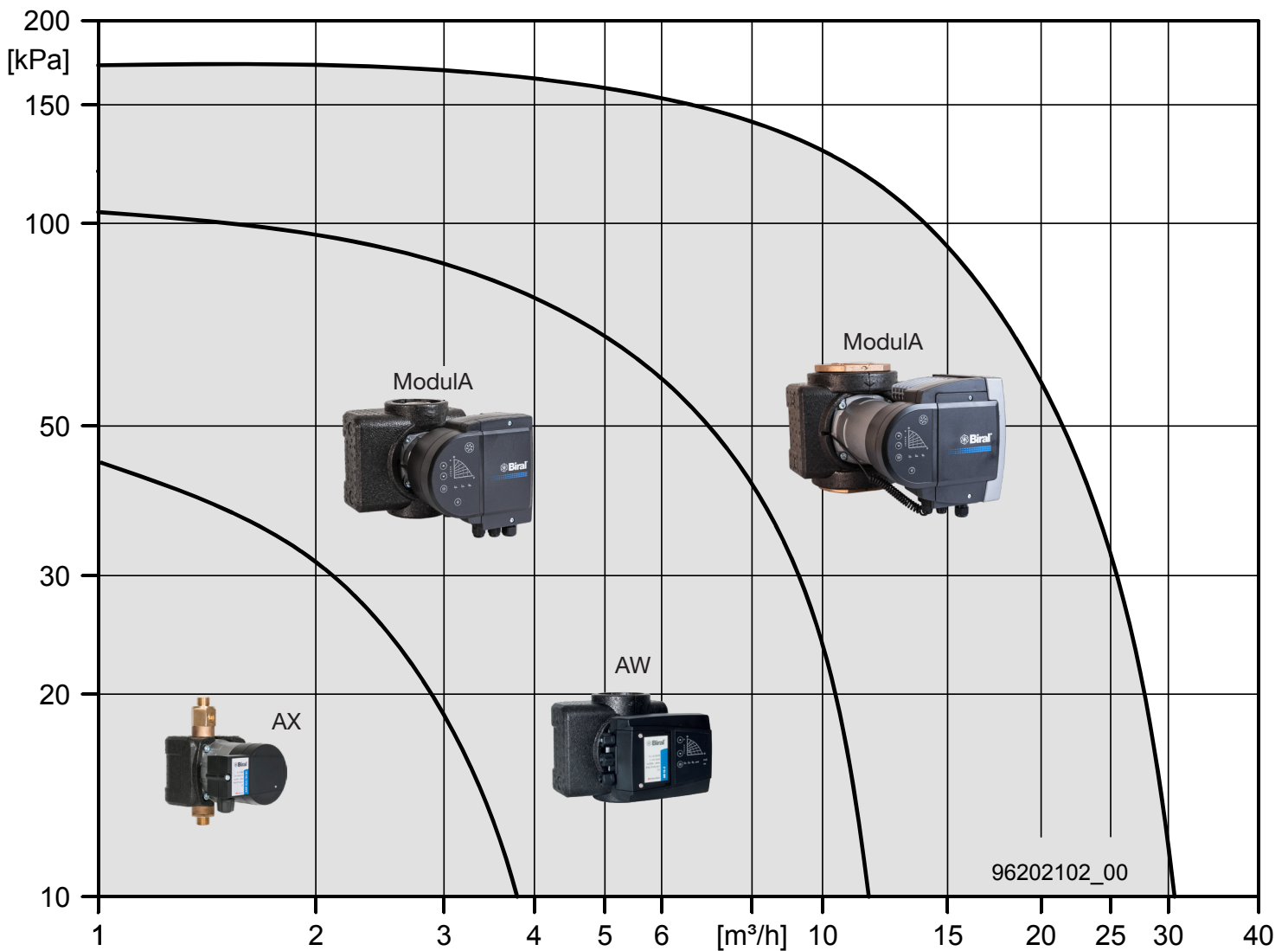
GREEN

Air conditioning/refrigeration

Functions	A... KW	ModuA... GREEN
Fluid temperature	-10 – 95°C	-10 – 110°C
Fault message/Operational message (switchable between)	✓	✓
External OFF or external ON (switchable between)	–	✓
Power Limit (activatable)	–	✓
Button lock	–	✓
Flow rate indicator	–	✓
Discrete installation of electronics	–	✓
Bluetooth Connect	–	✓
Power limiting (deactivatable)	✓	–
Automatic night-time reduction (activatable)	✓	–
BIM Biral Interface Modules	✓	✓

General information

Overview of characteristics for service water pumps



BLUE



Service water

Functions	AX... BLUE	AW	ModuA... BLUE
Fluid temperature	15 – 85°C	15 – 85°C	15 – 85°C
Fault message/Operational message (switchable between)	–	✓	✓
External OFF or external ON (switchable between)	–	–	✓
Power limit (activatable)	–	–	✓
Button lock	–	–	✓
Flow rate indicator	–	–	✓
Bluetooth Connect	–	–	✓
Power limit (deactivatable)	–	✓	–
Automatic night-time reduction (activatable)	✓	✓	–
BIM Biral Interface Modules	–	✓	✓

General information

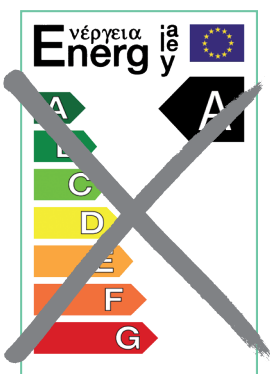
Biral ECO Design

The old energy label with the ratings from «A» to «G» have been replaced by a new energy efficiency index (EEI) as of 1 January 2013.

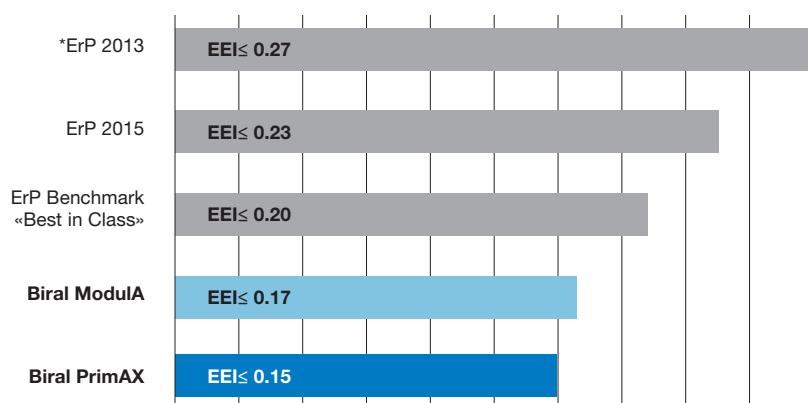
The new Biral ECO Design label

The new ECO Design label from Biral shows you at a glance that your pump belongs to the top of the class in energy efficiency. A Biral product labelled with the «ECO Design» saves up to 80% energy.

Exchanging older pumps with a new ModulA from Biral already pays off in significantly lower energy costs even after just a short time.



Efficiency as an obligation



* ErP: Energy-related Product Directive

The highly efficient mini-energy circulation pumps from Biral are extremely energy-efficient and meet the requirements of the ECO Design guidelines (EC Regulation no. 641/2009), that have been informed since 1 January 2013. Even the more stringent EEI values as of August 2015 are surpassed.

Reference value

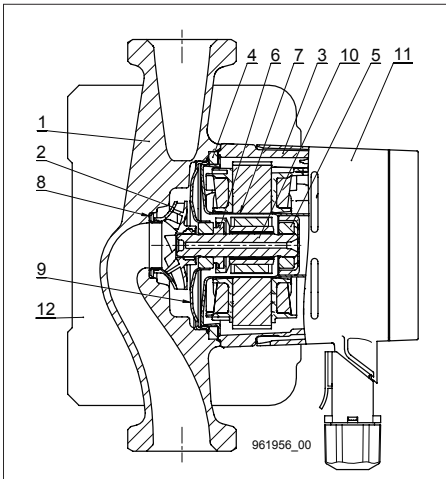
for the most efficient circulation pumps:
EEI ≤ 0,20

Drinking water circulation pumps do not come under the ECO Design guidelines. Nevertheless, Biral has highly efficient, energy-saving pumps in its product range here as well.

Product information

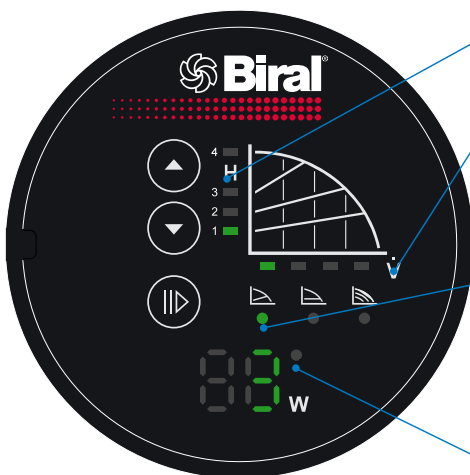
PrimAX

Summary of materials



Pos.	Component	PrimAX material
1	Pump casing	Grey cast iron
2	Impeller	PES
3	Stator casing	Aluminium
4	Seal	EPDM
5	Slide bearing	Ceramic
6	Axial bearing	Synthetic carbons and EPDM
7	Can	Stainless steel
8	Split ring	Stainless steel
9	Bearing cover	Stainless steel
10	Shaft	Ceramic
11	Frequency converter	PC GF10
12	Heat insulation shells	EPP, fire protection class B2 DIN 4102

Operation



- Control characteristics**
4 stages can be set
- Flow indicator**
The flow indicator displays the approximate flow and helps when commissioning the pumps.
- Setting the control type**
 - Proportional pressure (pp)
 - Constant pressure (cp)
 - Constant speed (cs)
- Status and watt display**



+2°C to 110°C



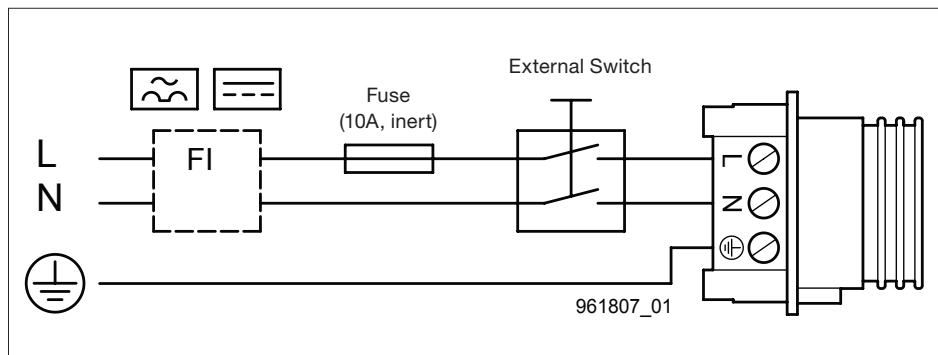
Functions

- Deblocking system**
The powerful start-up process makes the pump vibrate, to release any dirt deposits after longer periods of inactivity.
- Magnetic-resistant**
The magnetic-resistant ceramic shaft and bearing reduce the risk of blocking by iron or other magnetic particles.
- Installation depth**
With an installation depth of 103.3 mm, the pump is more compact than any other pump and is suitable for installation in extremely tight spaces.
- Biral connector**
The Biral connector with screw clamps guarantees quick and easy installation.
- Angle plug**
The angle plug is ideal for use in restricted spaces and is included as standard.
- Key lock**
The key lock gives protection from unwanted switching of the pump after commissioning.

Product information

PrimAX

Electrical connection



Example of a typical mains connection, 1 x 230 V \pm 10%, 50 / 60 Hz

Electrical connection may only be carried out by an electrical specialist in accordance with the local regulations and provisions.

- The pump must be secured on-site and connected to an external mains switch.

- The pump must be earthed sufficiently.
- The pump does not require any external motor protection.
- The pump has integrated excess temperature protection, which offers sufficient protection against the occurrence of over loads and blocking.

Cable

- All cables must be heat-resistant up to a minimum of + 85° C.
- All cables are to be connected in accordance with EN 60204-1 and EN 50174-2:2000.

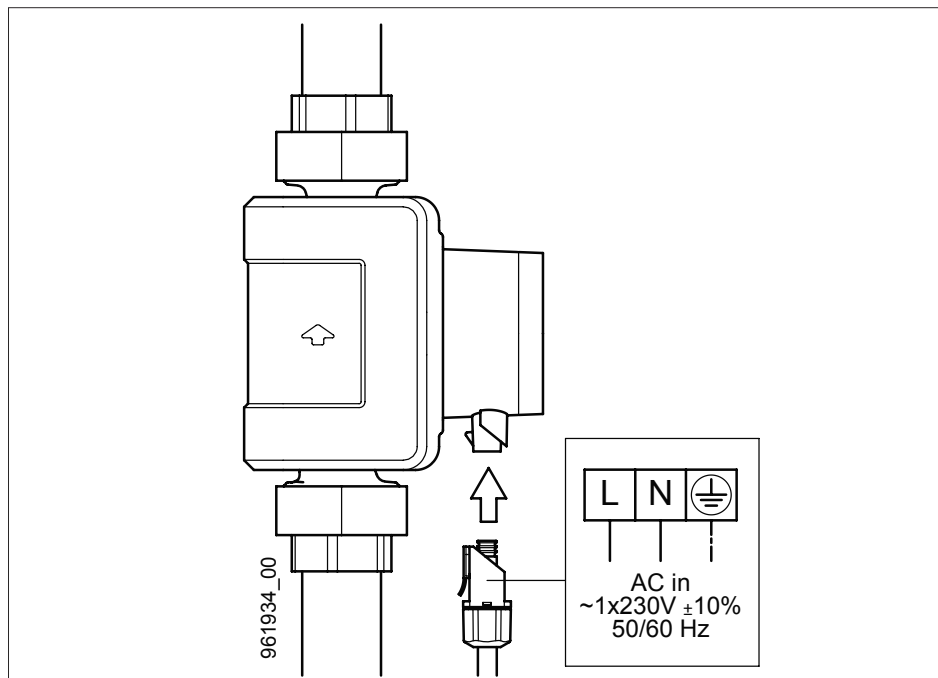
Additional protection

If the pump is connected to an electrical installation, which has a ground fault circuit interrupter for additional protection, the ground fault circuit interrupter must trigger pulsing DC components if earth fault currents occur.

The fault current protection switch must be marked with the first symbol or with both the following signals:



Connection scheme



Mains connection:

~1x230V +/- 10%, 50/60Hz

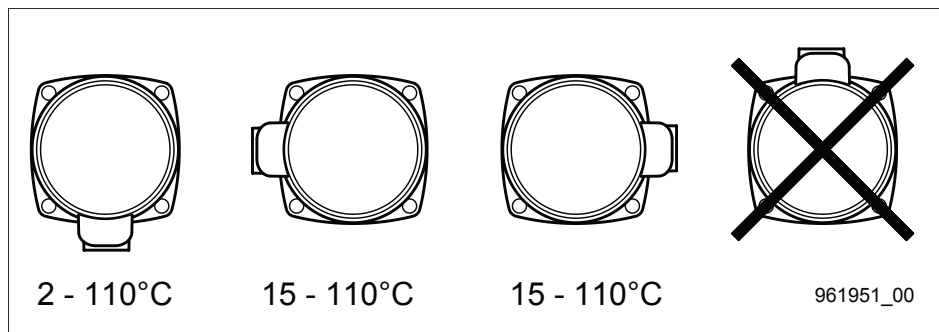
Terminals:

L, N, PE Mains connection

Product information

PrimAX

Temperature limits



Installation position in heating systems.

In heating systems with a medium temperature of +15 to +110°C, the pump head can be set at positions 3 o'clock, 6 o'clock or 9 o'clock.

Installation position in air-conditioning systems and cold water systems.

In air-conditioning and cold water systems, the pump head must be set in such a way that the connector points downwards (6 o'clock).

Ambient temperature °C	Media temperature	
	Min. °C	Max. °C
0	2	110
15	15	110
30	30	110
35	35	90
40	40	70

Information

To avoid condensation water in the terminal box and in the stator, the medium temperature must always be higher than the ambient temperature.

If the medium temperature is below the ambient temperature, the pump head and connector must be set at the 6 o'clock position.

Product information

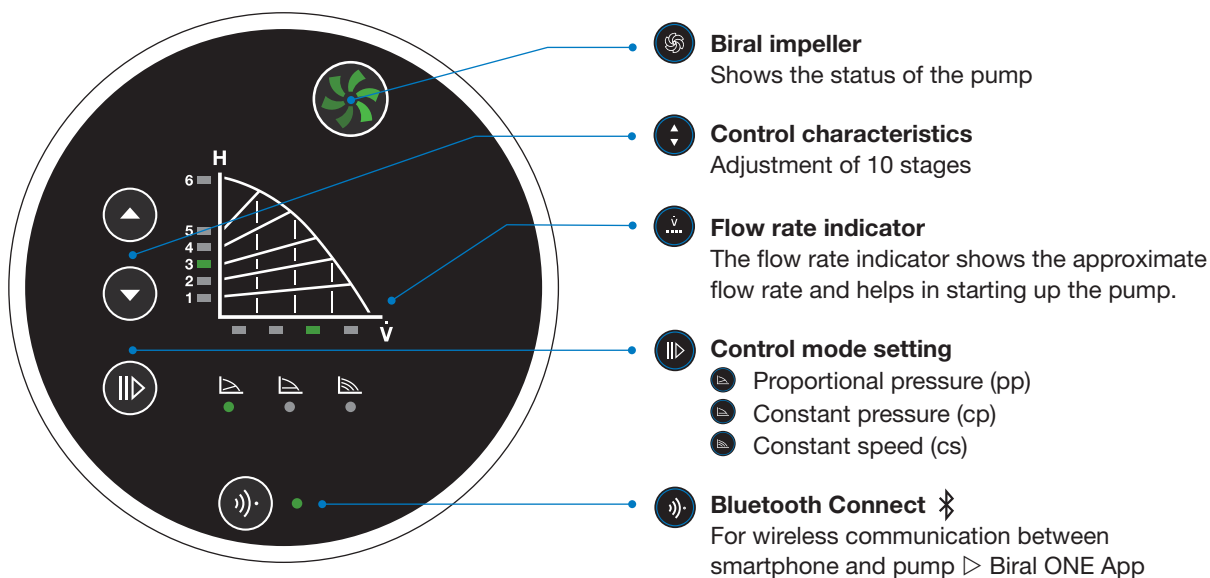
ModulA, ModulA-D

The new Biral ModulA with Bluetooth

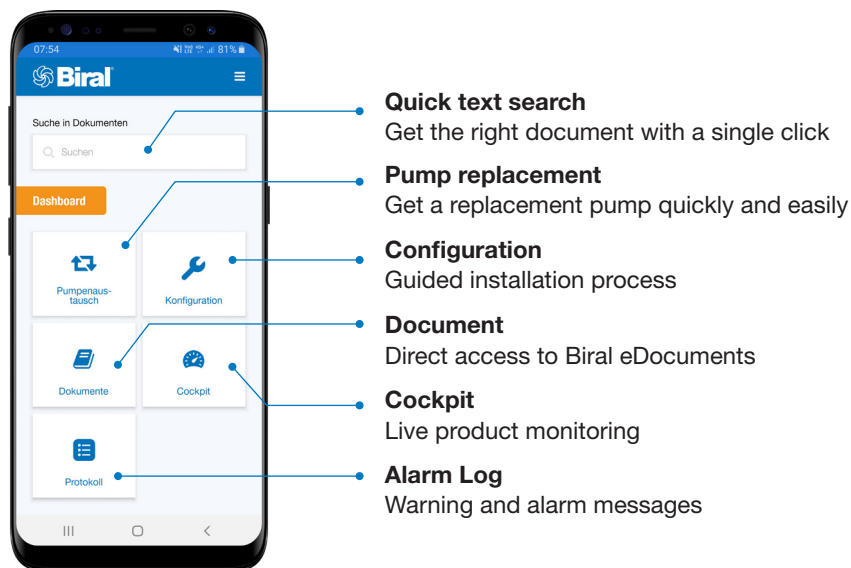
From the beginning, Biral's ModulA wet-running circulation pump has been a champion in terms of saving energy and economic efficiency. With the new Bluetooth interface via the Biral ONE app, the operating and information possibilities have multiplied.



Biral operating philosophy



The Biral ONE app




ONE. Download One App for all your Biral product needs.





Product information


ModulA, ModulA-D


Functions


- 

Biral Interface Module
With the Biral Interface Module, the ModulA can be easily integrated into any building services control system as required.
- 

External ON or External OFF
The digital input can be used for turning the pump ON or OFF externally (switch-able).
- 

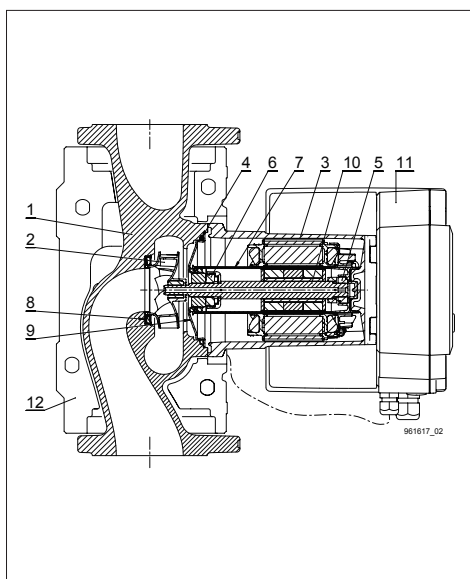
Keylock
The keylock protects against unwanted alteration of pump settings after the installation.
- 

Fault or operating message
The pump has a signal relay for an external fault or operating message (switch-able).
- 

Power limit
Optimum limitation of volume flow rate and the reduction of circulation noises offer major advantages.
- 

Remote installation
Biral is the only manufacturer to offer remote installation to increase operational life and safety.

Material overview

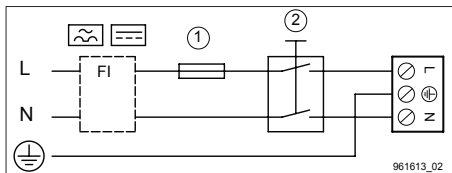


Pos.	Component	Material ...RED/...GREEN/...BLUE
1	Pump housing	grey cast iron / grey cast iron with special colour coating / bronze
2	Impeller	PES
3	Stator housing	aluminium
4	Seal	EPDM
5	Friction bearings	aluminium oxide
6	Axial bearings	aluminium oxide, synthetic carbon
7	Can	PPS
8	Gap seal	stainless steel
9	Storage cover	stainless steel
10	Shaft	stainless steel (version with clamp connector)
10	Shaft	ceramic (version with Biral connector)
11	Frequency inverter	PC-ABS (UL94 V-0)
12	Thermal insulation shell	EPP, fire protection class B2 DIN 4102 (...RED, ...BLUE)

Product information

ModulA, ModulA-D

Electrical connection



Example of a typical electrical connection:
1x230V +/- 10%, 50/60Hz

- 1) Fuse
- 2) External Switch

The electrical connection may only be done by an electrician in compliance with the local regulations and provisions.

- The pump is to be secured on site and an external electrical switch connected to it.
- The pump must be sufficiently earthed.
- The pump does not need an external motor protection.

- The pump has an integrated overheat protection which provides sufficient protection against progressive overheating and keeps it from blocking.
- If the pump is directly connected to the power supply, it takes 5 seconds before it begins to run

Note: For direct power connection, the pump may not be turned on and off current side more than four times per hour.

Cables

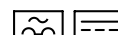
Shielded cables should be used for the external ON/OFF switch, the digital input and the target value signal.

- All cables must be heat resistant up to at least +85°C.
- All cables must be connected in compliance with EN 60204-1 and EN 50174-2:2000.

Additional fuse protection

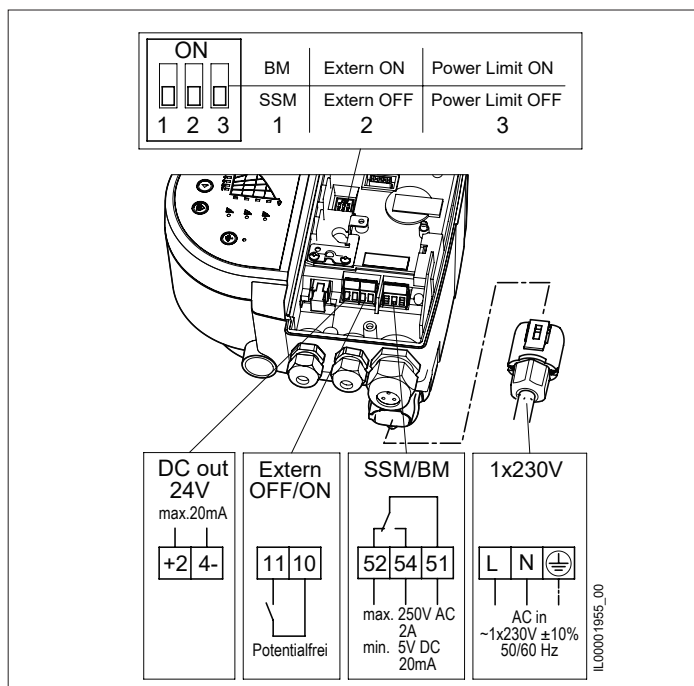
If the pump is connected to an electrical installation which has a ground fault circuit interrupter as an additional safeguard, the GFCI must be triggered with pulsing direct current if an earth surge occurs.

The surge circuit interrupter must be identified with the first symbol or with both of the following symbols:



Symbol	Description
	Highly sensitive residual current circuit breaker type A in accordance with IEC 605
	Highly sensitive residual current circuit breaker type B in accordance with IEC 605

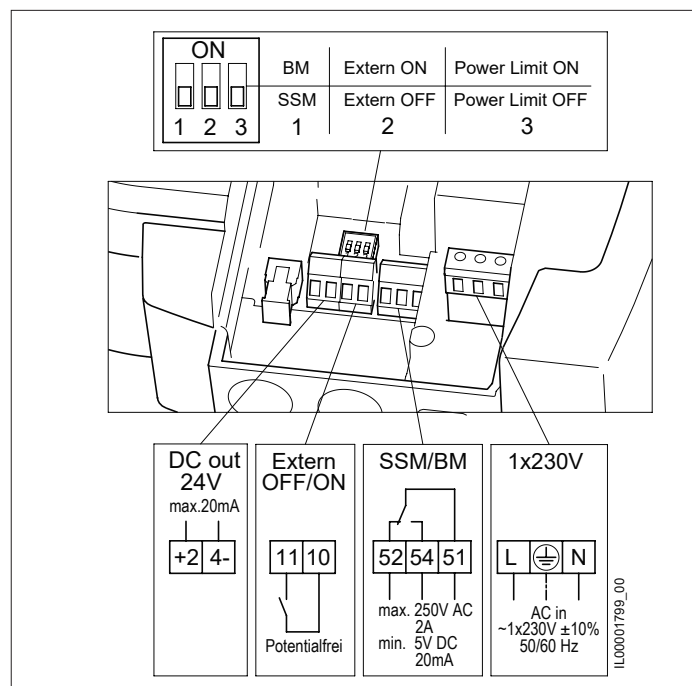
Connection diagram



ModulA...S with Biral connector

Clamps:

- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Fault message or operating message
- L, N, PE** Electrical connection



ModulA... M/L with clamp connector

Switch (Bold lettering = as delivered)

- 1 Fault message (SSM)** or operating message (BM)
- 2 External OFF** or external ON
- 3 Power limit OFF**

Product information

ModulA, ModulA-D

Switch 1 Fault message or operating message (switchable)

		Connection	Status	Connection	Status
Fault message (SSM)	Switch 1 OFF		impeller green		impeller green
			Fault message inactive		Fault message inactive
			impeller red		impeller red
			Fault message active		Fault message active
Operating message (BM)	Switch 1 ON		impeller rotating		impeller rotating
			Operating message active		Operating message active
			impeller standing		impeller standing
			Operating message inactive		Operating message inactive

961865_01

961827_00

Fault or operating message

The pump has a message relay with a potential-free changeover contact for external fault messages. The message relay can be changed to an operating message using Switch 1.

Switch 2 External OFF or external ON (switchable)

		Connection	Status	Connection	Status
External OFF	Switch 2 OFF		Mode ON		Mode OFF
			Mode OFF		Mode ON
External ON	Switch 2 ON		Mode OFF		Mode ON
			Mode ON		Mode OFF

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External ON or External OFF

The digital input can be used for the external ON/OFF pump switch. It is possible to switch over from External OFF to External ON using Switch 2.

Note: If no external ON/OFF switch is connected, the pump runs when the Switch 2 is in the OFF position and no jumper is at clamps 11, 10. This is the factory setting.

Switch 3 Power limit (activatable)

Power limit OFF	Switch 3 OFF	
Power limit ON	Switch 3 ON	

961865_01

Power limit

The Power limit (flow rate limiting \dot{V}) can be activated in the pump. The predefined maximum flow rate \dot{V} is at the end of the regulation characteristic 3 (proportional pressure). The flow rate limiting \dot{V} of 25... 90% can be set.

Product information

ModulA, ModulA-D

Operation mode for twin pumps

The twin pump function on the Biral interface module BIM B3 control module enable regulation of two parallel, individual pumps and of twin pumps

without the need for an external control, and is designed for alternate operation or reserve operation in installations with increased safety requirements. The pump

switch-over occurs depending on the time or when one pump outages.

Alternating operation (24/24 hrs) or reserve operation (22/2 hrs)

Biral Interface Modul BIM B3 (for controlled pumps)

Operating mode: Reserve mode



Switch 2	Master (main pump)	22h
ON	Slave (reserve pump)	2h

Operating mode: Alternating mode



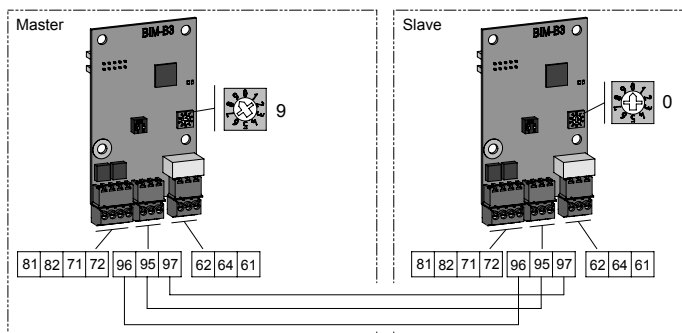
Switch 2	Master (main pump)	24h
OFF	Slave (reserve pump)	24h

The pump that has completed fewer hours of duty starts first after Power ON.

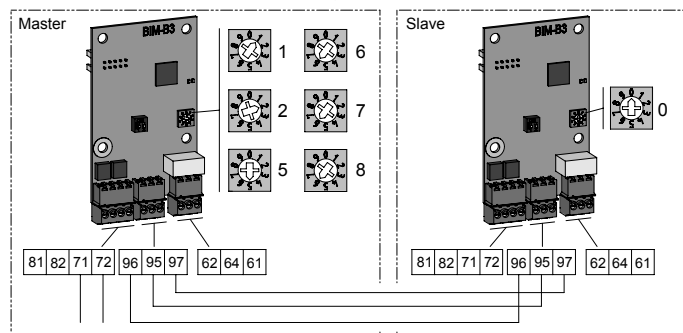
The pump that has completed fewer hours of duty starts first after Power ON.

Electrical connection:

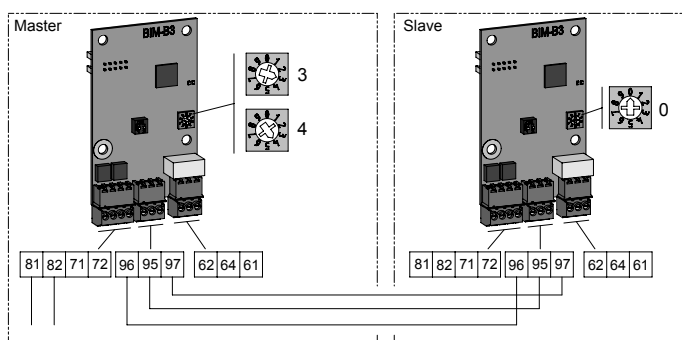
Double pump mode for self-regulating pumps



Double pump mode via analogue input 71, 72



Double pump mode via digital input 81, 82



Parallel operation

with constant speed (cs)

For twin pumps, parallel operation (pump 1 + pump 2) at the same speed is possible. In this operating mode, no Biral interface modules are needed.

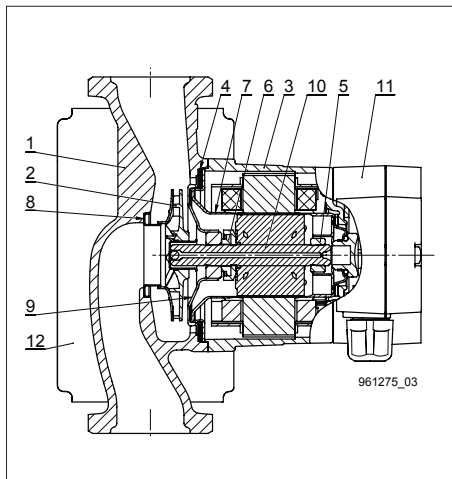
with external speed specification (BIM B3)

Parallel operation with external speed specification over the BIM B3 control module (2x) with the same speed specification is possible for twin pumps.

Product information

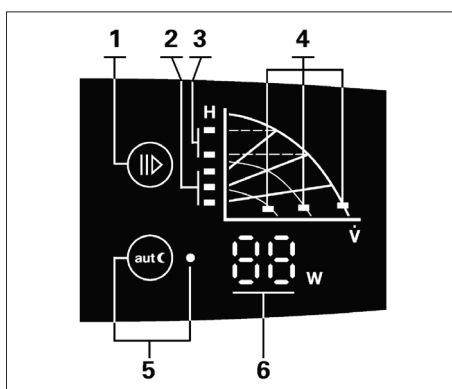
AX

Materials overview



Pos.	Component	Material AX... RED / AX... BLUE
1	Pump housing	grey cast iron / bronze
2	Impeller	PP or PES
3	Stator housing	aluminium
4	Seal	EPDM
5	Friction bearings	ceramic
6	Axial bearings	synthetic carbon, EPDM
7	Can	stainless steel
8	Gap seal	stainless steel
9	Storage cover	stainless steel
10	Shaft	ceramic
11	Frequency inverter	PPO
12	Thermal insulation shell	EPP, fire protection class B2 DIN 4102

Operation



- 1 control key
- 2 proportional pressure (pp)
- 3 constant pressure (cp)
- 4 constant speed (cs)
- 5 automatic night reduction
- 6 The indicator shows the current power consumption for the pump in switched on mode. A fault in pump functioning is indicated by «- -» .

Operation

The regulated circulation pumps can be operated in three different modes and have a so-called automatic night reduction in some cases.

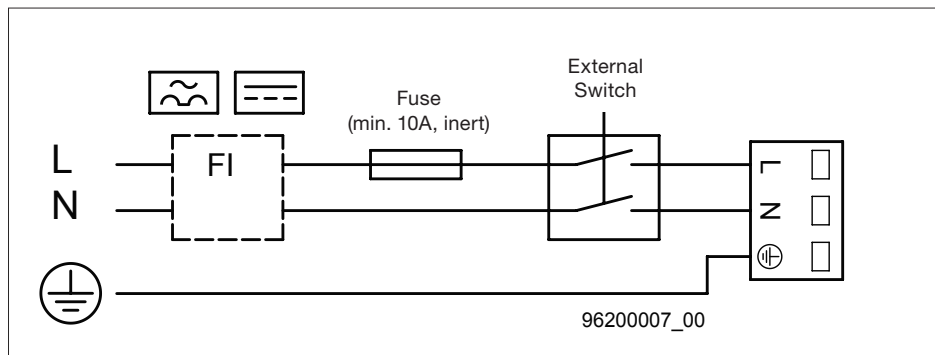
Functions

- Automatic night reduction (activatable)

Product information

AX

Electrical connection



Example of a typical electrical connection: 1x230V +/- 10%, 50/60Hz

The electrical connection may only be done by an electrician in compliance with the local regulations and provisions.

- The pump is to be secured on site and an external electrical switch connected to it.

- The pump must be sufficiently earthed.
- The pump does not need an external motor protection.
- The pump has an integrated overheat protection which provides sufficient protection against progressive overheating and keeps it from blocking.

Cables

- All cables must be heat resistant up to at least +85° C.
- All cables must be connected in compliance with EN 60204-1 and EN 50174-2:2000.

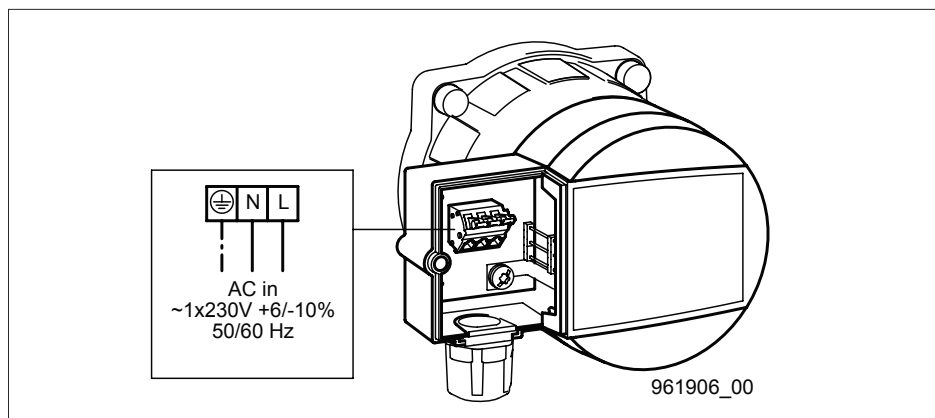
Additional fuse protection

If the pump is connected to an electrical installation which has a ground fault circuit interrupter as an additional safeguard, the GFCI must be triggered with pulsing direct current if an earth surge occurs.

The surge circuit interrupter must be identified with the first symbol or with both of the following symbols:



Wiring diagram



Power connection

1x 230 V +/-10%, 50/60 Hz, PE
Fuse 10A

Clamps

L, N, PE Electrical connection

Temperature limits

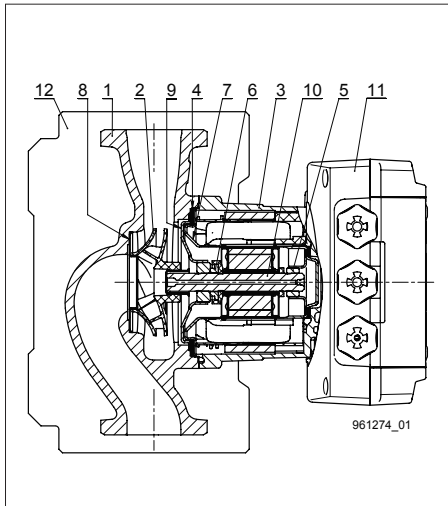
Ambient temperature °C	Media temperature	
	min. °C	max. °C
15	15	110
30	30	110
35	35	90
40	40	70

To avoid condensation build up, the media temperature must always be higher than the ambient temperature.

Product information

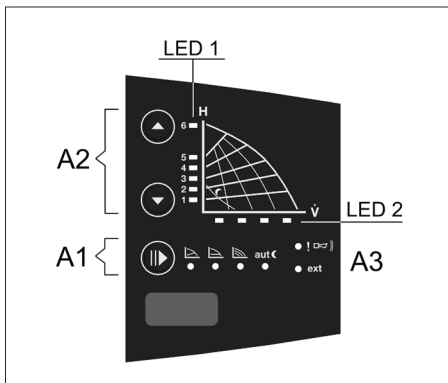
A, AD, A... KW, AW

Materials overview



Pos.	Component	Material for A / A...KW / AW
1	Pump housing	grey cast iron / grey cast iron with special colour coating / bronze
2	Impeller	plastic
3	Stator housing	aluminium
4	Seal	EPDM
5	Friction bearings	ceramic
6	Axial bearings	synthetic carbon, EPDM
7	Can	chrome-nickel steel
8	Gap seal	stainless steel
9	Storage cover	stainless steel
10	Shaft	ceramic
11	Frequency inverter	PPO
12	Thermal insulation shell	EPP, fire protection class B2 DIN 4102

Operation



Pos.	Component
A1	Type of control
A2	Regulation characteristics 1 ... 5 6 max. pump characteristics
A3	Light symbol for technical problems, ext. Operation
	Proportional pressure
	Constant pressure
	Constant speed
Aut. C	with and without automatic night reduction
LED 1	Indication of regulation characteristic set
LED 2	Indication of current rate of flow $V \dot{v}$ (25 ... 100%)

Operation

The regulated circulation pumps can be operated in three different modes and have a so-called automatic night reduction in some cases.

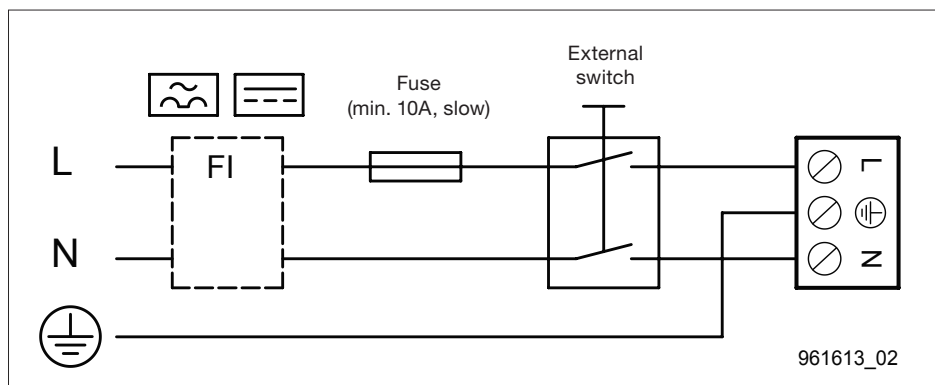
Functions

- Fault message and operating message (switchable)
- Power limiting (deactivatable)
- Automatic night reduction (activatable)

Product information

A, AD, A... KW, AW

Electrical connection



Example of a typical electrical connection: 1x230V, 50/60Hz

The electrical connection may only be done by an electrician in compliance with the local regulations and provisions.

- The pump is to be secured on site and an external electrical switch connected to it.
- The pump must be sufficiently earthed.

- The pump does not need an external motor protection.
- The pump has an integrated overheat protection which provides sufficient protection against progressive overheating and keeps it from blocking.
- If the pump is directly connected to the power supply, it takes 5 seconds before it begins to run

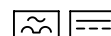
Cables

- All cables must be heat resistant up to at least +85°C.
- All cables must be connected in compliance with EN 60204-1 and EN 50174-2:2000.

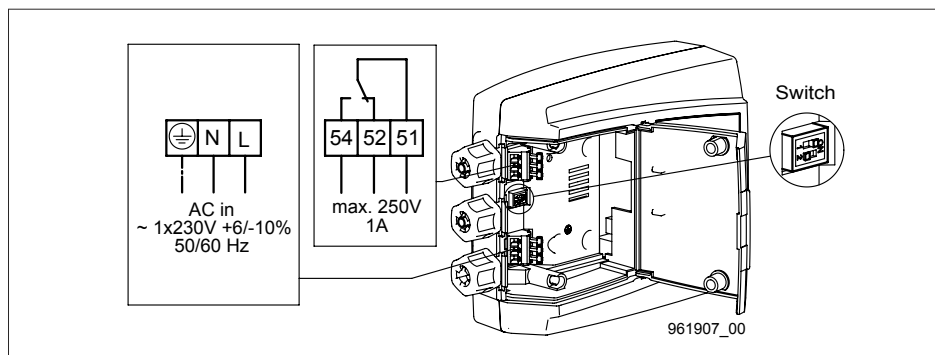
Additional fuse protection

If the pump is connected to an electrical installation which has a ground fault circuit interrupter as an additional safeguard, the GFCI must be triggered with pulsing direct current if an earth surge occurs.

The surge circuit interrupter must be identified with the first symbol or with both of the following symbols:



Connection diagram



Electrical connection

1x230V +6/-10%, 50/60Hz

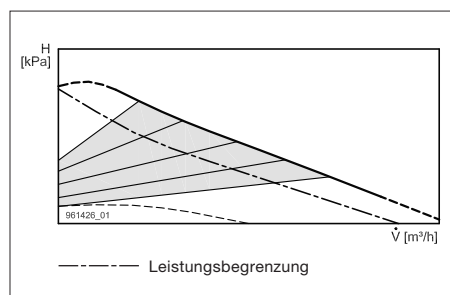
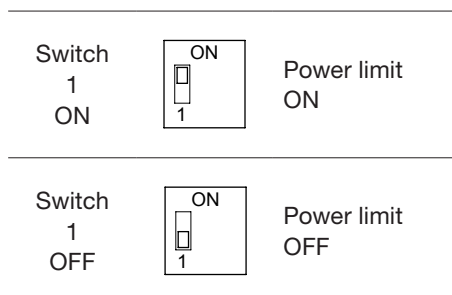
Clamps

L, N, PE Electrical connection
54, 52, 51 Fault message or operating message

Switch

- 1 Power limiting (deactivatable)
- 2 Fault message or operating message (switchable)

Switch 1 Power limiting (deactivatable)



All A pumps are delivered with a pre-defined power limiting. This characteristic is sufficient owing to the power reserve in the design. The limiting also saves energy and avoids flow noise owing to over-sized pumps. If the full power is required, the pump can be changed over in the terminal box.

Product information

A, AD, A... KW, AW

Switch 2 Fault message or operating message (switchable)

		Connection	Status	Connection	Status
Fault message	Switch 2 OFF 		Fault message not illuminated Fault message inactive		Fault message not illuminated Fault message inactive
			Fault message illuminated/blinking red Fault message active		Fault message illuminated/blinking red Fault message active
Operating message	Switch 2 ON 		pump rotating operating message active		pump rotating operating message active
			pump standing operating message inactive		pump standing operating message inactive

The pump has a message relay with a potential-free changeover contact for external fault messages. The message relay can be changed to an operating message using Switch 2.

961904_00

Temperature limits

Ambient temperature	Media temperature	
°C	min. °C	max. °C
15	15	95/110*
30	30	95/110*
35	35	90
40	40	70

* short term (30 min.)

To avoid condensation build up, the media temperature must always be higher than the ambient temperature.

Twin pumps AD14, AD15 and AD401

Alternating operation (22 hrs/22 hrs) or reserve operation (22 hrs/2 hrs)

The pumps are designed for individual operation in installations with increased safety requirements (pump 1 or pump2). The pump changeover occurs depending on the time or when a pump fails. The BIM A signal module (2x) is needed for this.

Parallel operation with constant speed (cs)

(Pump 1 + pump 2) is only allowed at constant speed (cs), however, it is not possible with proportional pressure (pp) or constant pressure (cp). In this operating mode, no Biral interface module is needed.

Parallel operation with external speed specification

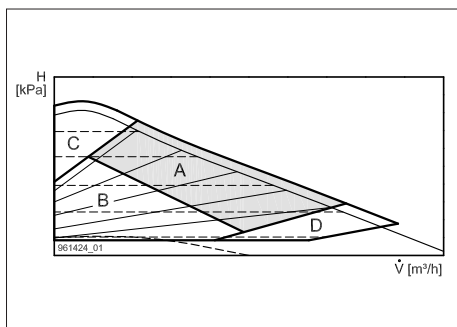
(0–10 V/0–20 mA/PWM) can be operated over the BIM B2 control module (2x).

Accessories

- BIM A Signal module (2x)
- BIM B Control module (2x)

Notes for project planning and installation

Selection of circulating pump



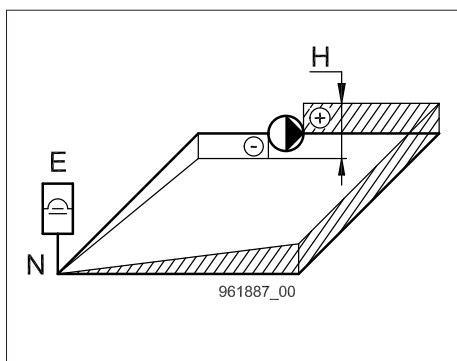
- A** = Optimum control range
– Range with the best degree of overall effectiveness
- B** = Limited control range
– If possible select a smaller pump
- C** = Limited control range
– The pump works but has limited control
- D** = Outside the control range
– If possible avoid

Recommendation for regulated circulating pumps

Regulated circulating pumps continually adjust the flowrate along a pre-defined characteristic with changing pipe characteristics.

Nevertheless it is also worthwhile here to make a careful choice of the right pump size.

Required operating pressure at circulating pump



If the operating pressure is too low, adequate lubrication of the pump sliding bearings (water lubrication) is not ensured and therefore their service life is reduced. The values specified should therefore be observed without fail. The required operating pressure depends on the type of pump, the maximum temperature of the medium and the static pressure. If the position of the expansion vessel is not ideal, the operating pressure at the pump inlet when operating the pump can be

reduced further. This can lead to penetration of air and inadequate bearing lubrication. In this case the static operating pressure must be raised accordingly.

Pressure distribution

- + = Overpressure range
– = Underpressure range
E = Expansion vessel
N = Neutral point
H = Delivery head of pump

Wahl der Regelungsart

Regulated pumps can be operated in three different control types:



Regulation with proportional operating pressure (PP)

The internal regulation increases the differential pressure of the system with increasing flowrates.

This desired regulation curve can be preset. This regulation is particularly suitable for the following systems:

- Two-pipe heating systems with thermostatic valves and
 - long pipe sections
 - valves with wide working range
 - high pressure losses
- Floor heating systems with thermostatic valves and high pressure losses
- Systems with primary circuit pumps with high pressure loss.



Regulation with constant operating pressure (CP)

The internal regulation keeps the differential pressure of the system constant if the flowrate changes. This pressure can be preset. This regulation is particularly suitable for the following systems:

- Two-pipe systems with thermostatic valves and
 - delivery head larger than 2 m
 - natural circulation (low pressure loss, large pipe dimensions)
- Floor heating systems with thermostatic valves
- Single-pipe heating systems with thermostatic valves and regulating valves
- Systems with primary circuit pumps with low pressure loss

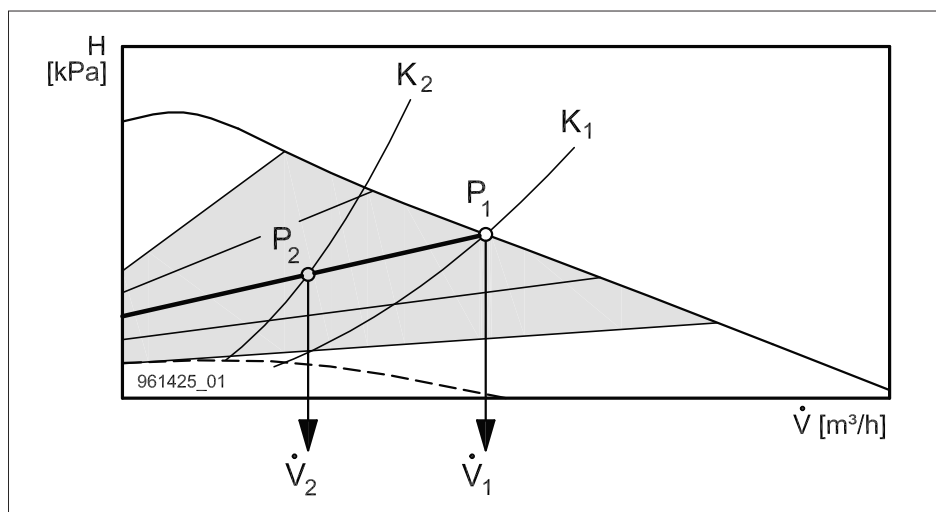


Regulation with constant speed (CS)

With this form of regulation the internal pressure regulation is switched off. The speed of the pump can be adjusted to a constant value manually or by an external signal (auxiliary module 0–10 V). This form of regulation is particularly suitable for systems with constant pressure conditions (heat exchangers, boiler feed pumps, etc.) or for external system regulation.

Notes for project planning and installation

Choice of regulation characteristic



Continuous variation of pump speed in regulated pumps.

With changing pipeline resistance ($K_1 \rightarrow K_2$) regulated circulating pumps continuously adjust the flowrate along a pre-defined characteristic curve.

The required regulation characteristic can be set by means of the rotary switch or the keys.

Requirements of medium

Water treatment

The guidelines of SWKI BT102-01 and VDI 2035 «Water treatment for heating, steam and air-conditioning systems» should be observed.

Overall hardness

7 to 14 °fH (4-8 °dH)

pH value

8.3 to 9.5
(8.3 to max. 9 for systems with aluminium or non-ferrous metal components)

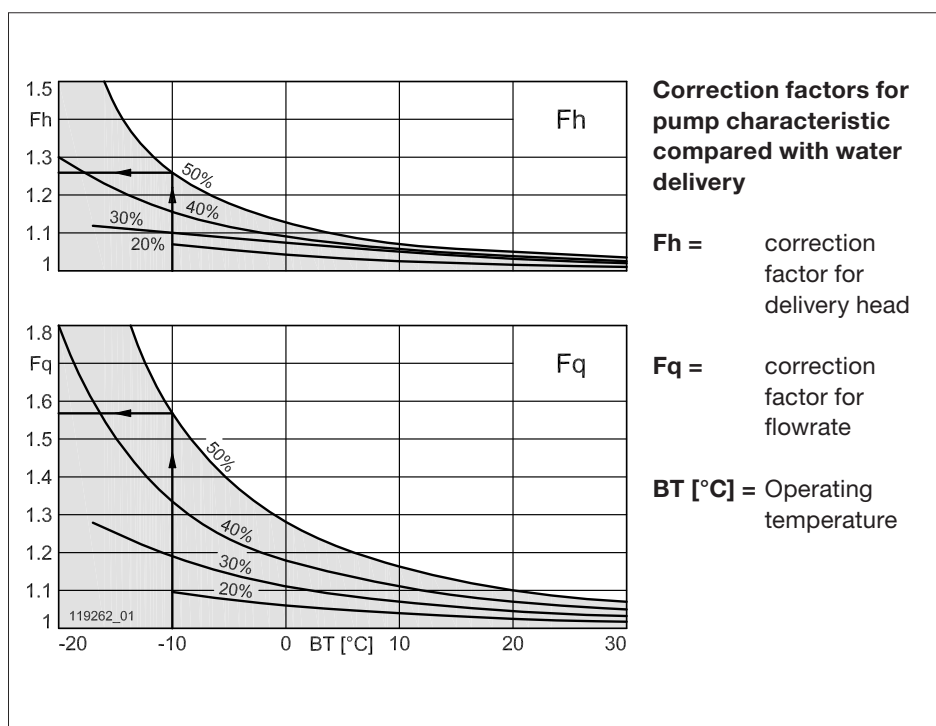
Oxygen

<0,1 mg/dm³

The systems must be thoroughly flushed before filling.

Anti-frost mixture

Water/glycol mixture with up to 50% glycol is permitted. From 10% glycol proportion the delivery data of the pumps must be corrected according to fig. 3.



Correction factors for pump characteristic compared with water delivery

Fh = correction factor for delivery head

Fq = correction factor for flowrate

BT [°C] = Operating temperature

Example

$$H_{\text{Gemisch}} = 30 \text{ kPa}$$

$$Q_{\text{Gemisch}} = 7 \text{ m}^3/\text{h}$$

Medium:

50% glycol mixture at -10 °C operating temperature

Factors according to fig.:

$$F_h = 1,26$$

$$F_q = 1,57$$

Conversion of required pump operating point for water heat transfer

$$H_{\text{water}} = H_{\text{mixture}} \times F_h$$

$$= 30 \times 1,26 = 37,8 \text{ kPa}$$

$$Q_{\text{water}} = Q_{\text{mixture}} \times F_q$$

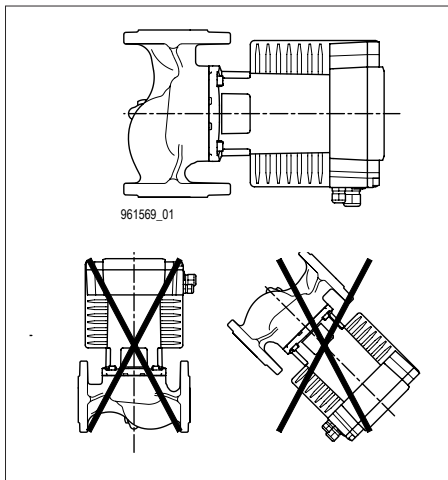
$$= 7 \times 1,57 = 11 \text{ m}^3/\text{h}$$

Circulating pump complying with operating point

$Q_{\text{water}}/H_{\text{water}}$: Modula 40-10 220 GREEN

Notes for project planning and installation

Pipeline connection and pump installation



Fitting pump

- Always fit pump between two shut-off devices
- Fit pump so that the motor shaft is horizontal, regardless of the position of the pump casing
- The arrow on the pump casing shows the flow direction
- Fit pump in pipeline free from stress
- When the pump is fitted do not work too closely with a welding flame
- The fitting of heating pumps on the inlet side reduces the danger of contamination. They should preferably be fitted on the return side
- if the temperature of the medium is very high.








Premium heating circulation pumps

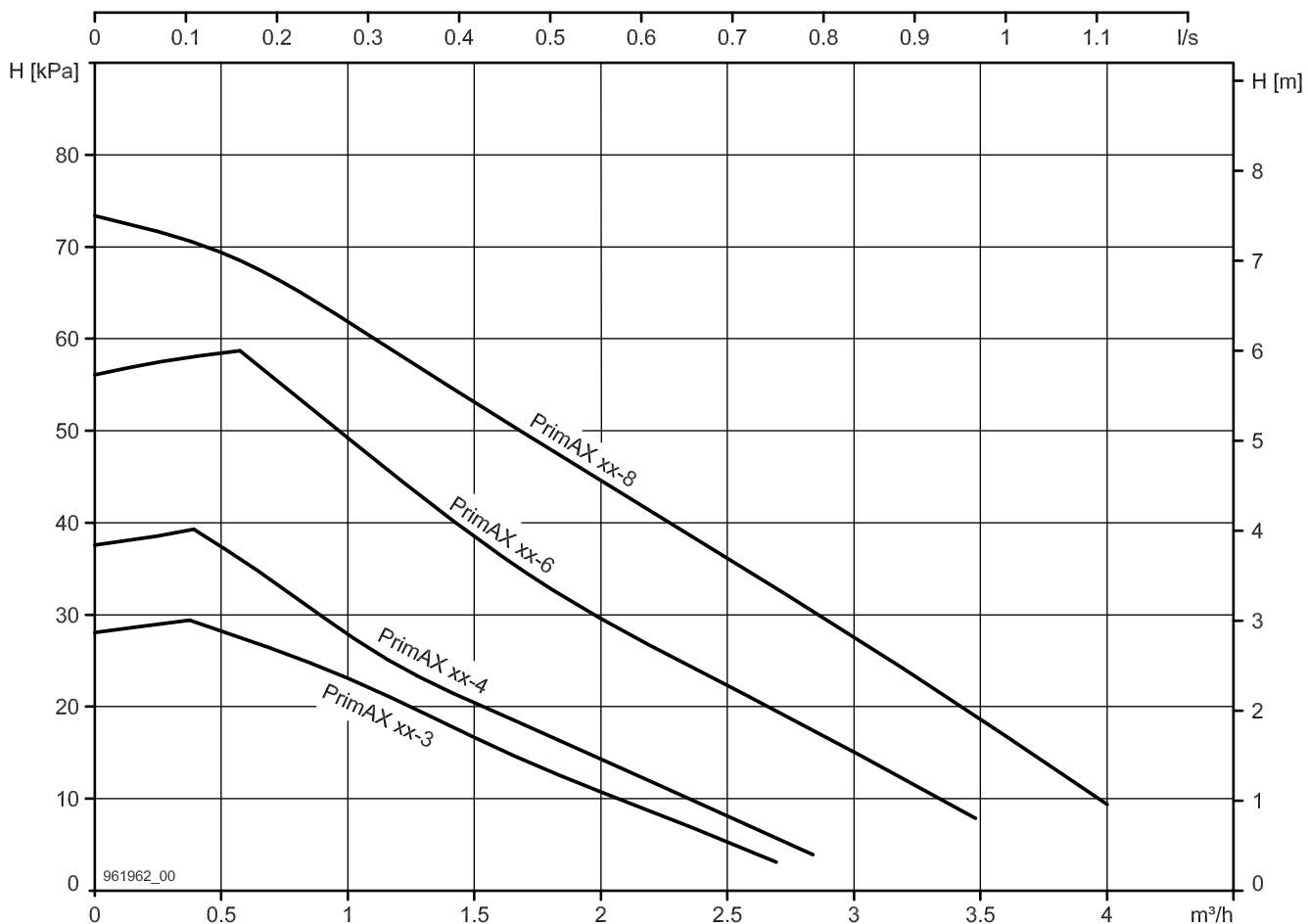
PrimAX... RED

Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar	EEI value
PrimAX 25-3 180 RED	2205360150	25	3	180	G 1 1/2"	10	≤0.15
PrimAX 25-4 180 RED	2205370150	25	4	180	G 1 1/2"	10	≤0.16
PrimAX 25-6 180 RED	2205380150	25	6	180	G 1 1/2"	10	≤0.17
PrimAX 25-8 180 RED	2205390150	25	7.5	180	G 1 1/2"	10	≤0.18
PrimAX 32-3 180 RED	2205440150	32	3	180	G 2"	10	≤0.15
PrimAX 32-4 180 RED	2205450150	32	4	180	G 2"	10	≤0.16
PrimAX 32-6 180 RED	2205460150	32	6	180	G 2"	10	≤0.17
PrimAX 32-8 180 RED	2205470150	32	7.5	180	G 2"	10	≤0.18
PrimAX 32-3 170 RED	2205400150	32	3	170	G 2"	10	≤0.15
PrimAX 32-4 170 RED	2205410150	32	4	170	G 2"	10	≤0.16
PrimAX 32-6 170 RED	2205420150	32	6	170	G 2"	10	≤0.17
PrimAX 32-8 170 RED	2205430150	32	7.5	170	G 2"	10	≤0.18
PrimAX 15-3 130 RED	2205280150	15	3	130	G 1"	10	≤0.15
PrimAX 15-4 130 RED	2205290150	15	4	130	G 1"	10	≤0.16
PrimAX 15-6 130 RED	2205300150	15	6	130	G 1"	10	≤0.17
PrimAX 15-8 130 RED	2205310150	15	7.5	130	G 1"	10	≤0.18
PrimAX 25-3 130 RED	2205320150	25	3	130	G 1 1/2"	10	≤0.15
PrimAX 25-4 130 RED	2205330150	25	4	130	G 1 1/2"	10	≤0.16
PrimAX 25-6 130 RED	2205340150	25	6	130	G 1 1/2"	10	≤0.17
PrimAX 25-8 130 RED	2205350150	25	7.5	130	G 1 1/2"	10	≤0.18

Order reference

	PrimAX 32 -6 180 RED
Series	
Nominal diameter (DN) [mm]	
Max. discharge height [m]	
Installation height [mm]	
Field of application: heating (RED)	



PrimAX 25-3 180 RED
PrimAX 32-3 180 RED
PrimAX 32-3 170 RED
PrimAX 15-3 130 RED
PrimAX 25-3 130 RED

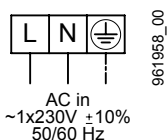
Nominal width	DN 32 DN 15 DN 25
Max. flow head H	3 m
Overall length	180 170 130 mm
Threaded connection	G 2" G 1" G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+ 2°C
Max. media temperature	+110°C
Ambient temperature	0°C bis 40°C
Net weight	1.8 kg
Gross weight	2.0 kg

Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	2-15 W
Nominal current	0.03-0.12 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 90 °C	0.28 bar
at a water temp. of 110 °C	1.08 bar
for every ±100 m of altitude	0.01 bar

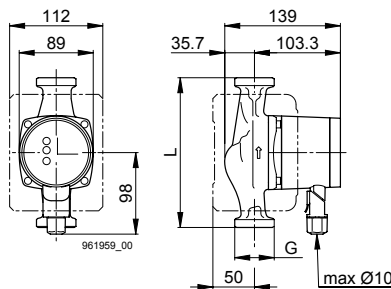
Connection diagram


L, N, PE Power supply

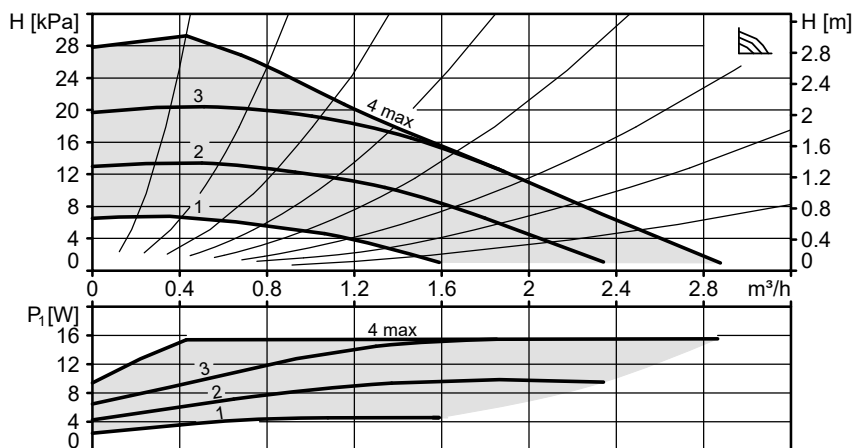
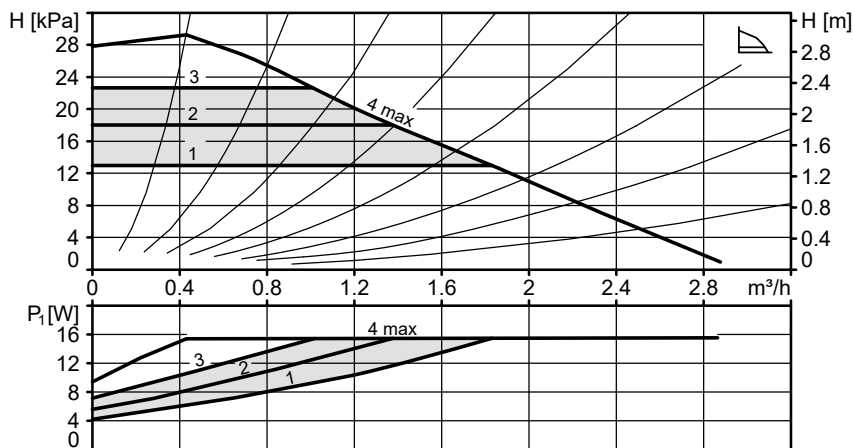
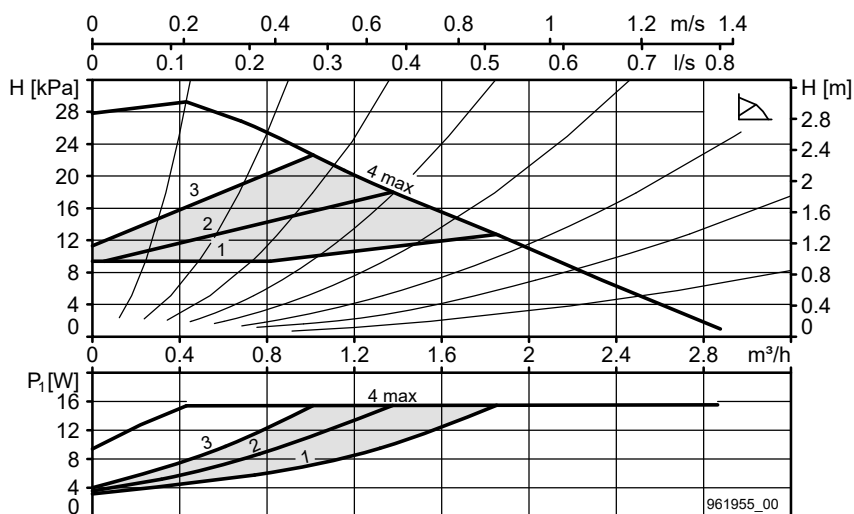
Included in the scope of delivery

- Heat insulation shell
- Biral Connector and angled connector
- AFM seal

Type	Art. no.
PrimAX 25-3 180 RED	2205360150
PrimAX 32-3 180 RED	2205440150
PrimAX 32-3 170 RED	2205400150
PrimAX 15-3 130 RED	2205280150
PrimAX 25-3 130 RED	2205320150



PrimAX 25-3 180 RED	PrimAX 32-3 180 RED
DN 25	DN 32
L = 180 mm	L = 180 mm
G = 1 1/2"	G = 2"
PrimAX 32-3 170 RED	PrimAX 15-3 130 RED
DN 32	DN 15
L = 170 mm	L = 130 mm
G = 2"	G = 1"
PrimAX 25-3 130 RED	
DN 25	
L = 130 mm	
G = 1 1/2"	



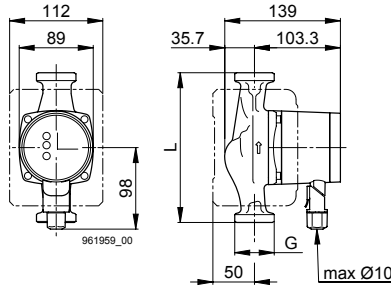
PrimAX 25-4 180 RED

PrimAX 32-4 180 RED

PrimAX 32-4 170 RED

PrimAX 15-4 130 RED

PrimAX 25-4 130 RED



PrimAX 25-4 180 RED	PrimAX 32-4 180 RED
DN 25	DN 32
L = 180 mm	L = 180 mm
G = 1 1/2"	G = 2"
PrimAX 32-4 170 RED	PrimAX 15-4 130 RED
DN 32	DN 15
L = 170 mm	L = 130 mm
G = 2"	G = 1"
PrimAX 25-4 130 RED	
DN 25	
L = 130 mm	
G = 1 1/2"	

Nominal width	DN 32 DN 15 DN 25
Max. flow head H	4 m
Overall length	180 170 130 mm
Threaded connection	G 2" G 1" G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+ 2°C
Max. media temperature	+110°C
Ambient temperature	0°C bis 40°C
Net weight	1.8 kg
Gross weight	2.0 kg

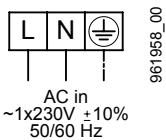
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	3-18 W
Nominal current	0.03-0.15 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 90 °C	0.28 bar
at a water temp. of 110 °C	1.08 bar
for every ±100 m of altitude	0.01 bar

Connection diagram

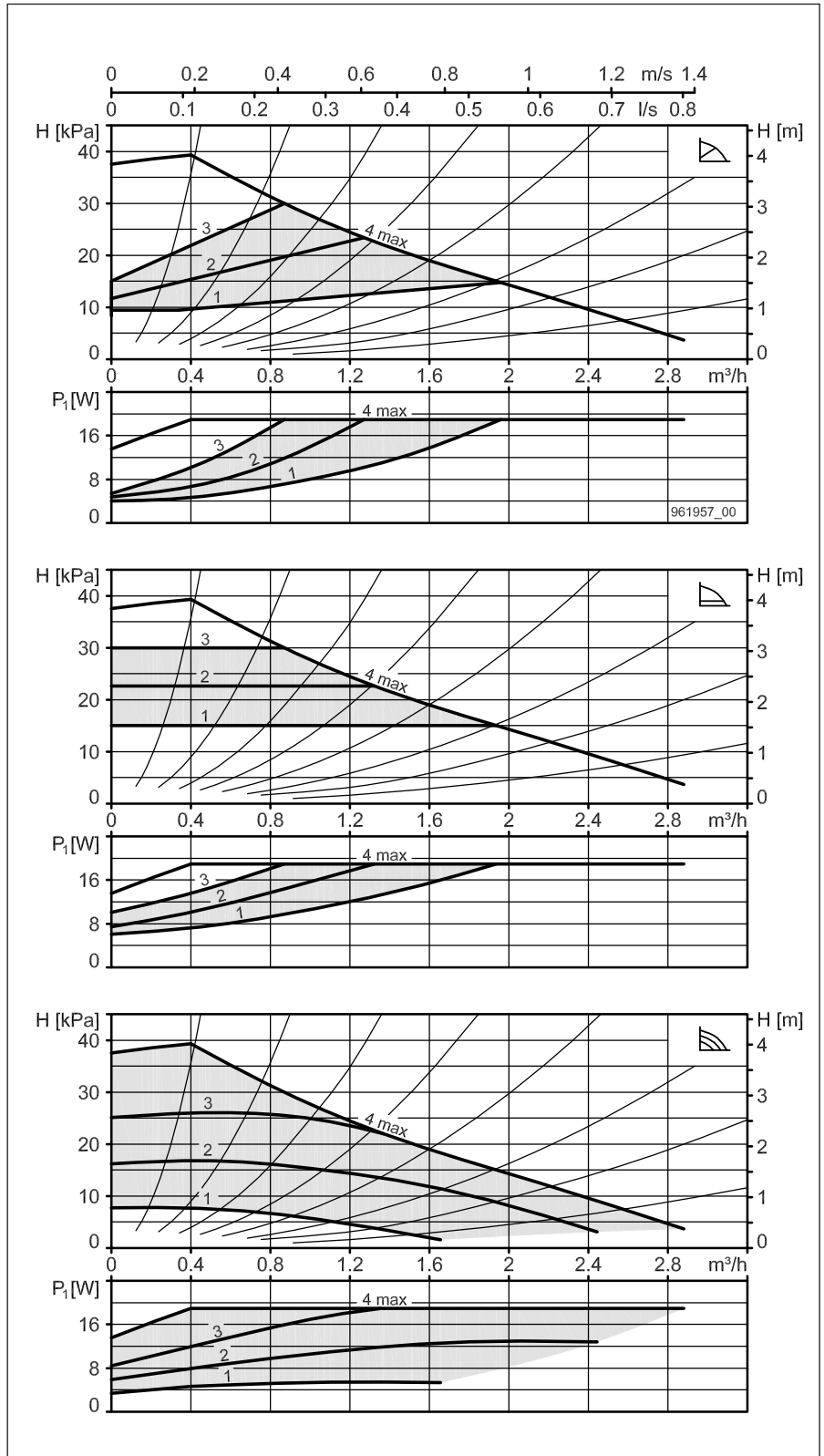


L, N, PE Power supply

Included in the scope of delivery

- Heat insulation shell
- Biral Connector and angled connector
- AFM seal

Type	Art. no.
PrimAX 25-4 180 RED	2205370150
PrimAX 32-4 180 RED	2205450150
PrimAX 32-4 170 RED	2205410150
PrimAX 15-4 130 RED	2205290150
PrimAX 25-4 130 RED	2205330150



Heating

PrimAX 25-6 180 RED

PrimAX 32-6 180 RED

PrimAX 32-6 170 RED

PrimAX 15-6 130 RED

PrimAX 25-6 130 RED

Nominal width	DN 32 DN 15 DN 25
Max. flow head H	6 m
Overall length	180 170 130 mm
Threaded connection	G 2" G 1" G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+ 2°C
Max. media temperature	+110°C
Ambient temperature	0°C bis 40°C
Net weight	1.8 kg
Gross weight	2.0 kg

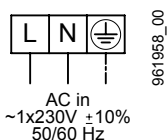
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	3-34 W
Nominal current	0.03-0.27 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 90 °C	0.28 bar
at a water temp. of 110 °C	1.08 bar
for every ±100 m of altitude	0.01 bar

Connection diagram

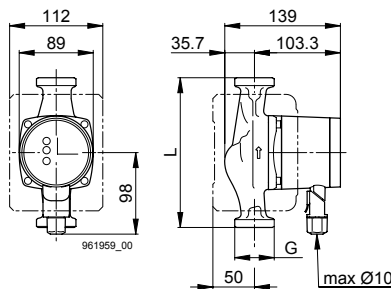


L, N, PE Power supply

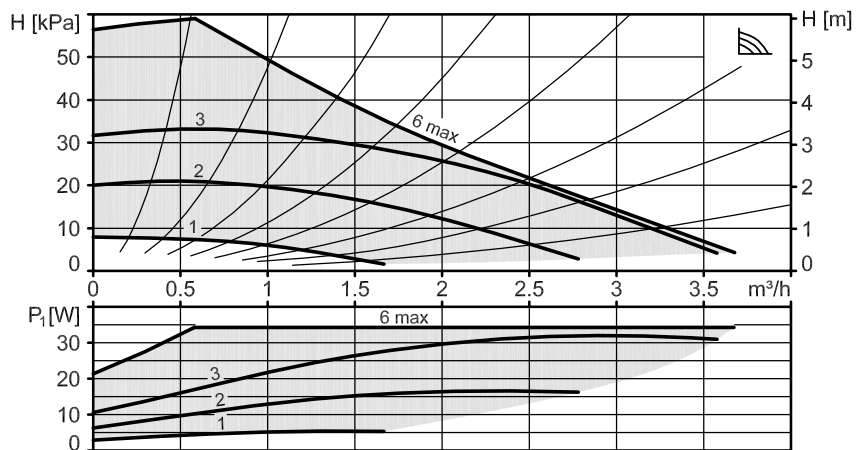
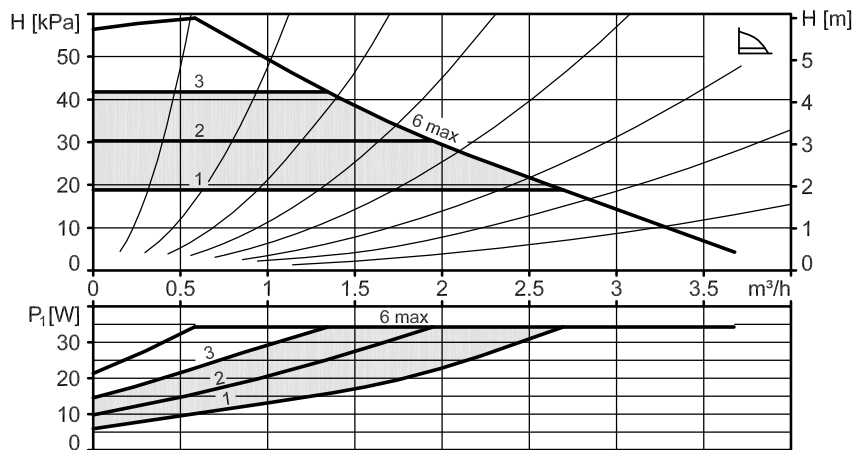
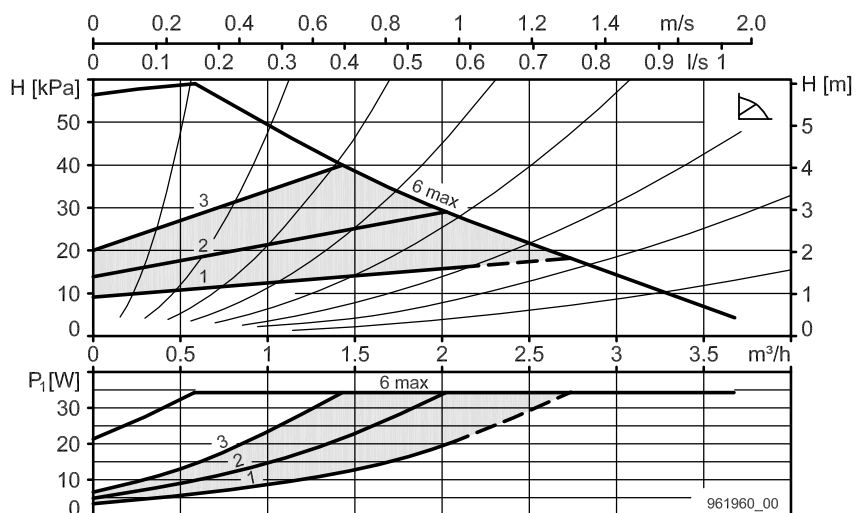
Included in the scope of delivery

- Heat insulation shell
- Biral Connector and angled connector
- AFM seal

Type	Art. no.
PrimAX 25-6 180 RED	2205380150
PrimAX 32-6 180 RED	2205460150
PrimAX 32-6 170 RED	2205420150
PrimAX 15-6 130 RED	2205300150
PrimAX 25-6 130 RED	2205340150



PrimAX 25-6 180 RED	PrimAX 32-6 180 RED
DN 25	DN 32
L = 180 mm	L = 180 mm
G = 1 1/2"	G = 2"
PrimAX 32-6 170 RED	PrimAX 15-6 130 RED
DN 32	DN 15
L = 170 mm	L = 130 mm
G = 2"	G = 1"
PrimAX 25-6 130 RED	
DN 25	
L = 130 mm	
G = 1 1/2"	



PrimAX 25-8 180 RED

PrimAX 32-8 180 RED

PrimAX 32-8 170 RED

PrimAX 15-8 130 RED

PrimAX 25-8 130 RED

Nominal width	DN 32 DN 15 DN 25
Max. flow head H	7.5 m
Overall length	180 170 130 mm
Threaded connection	G 2" G 1" G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+ 2°C
Max. media temperature	+110°C
Ambient temperature	0°C bis 40°C
Net weight	1.8 kg
Gross weight	2.0 kg

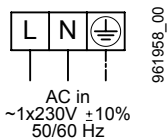
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	3-50 W
Nominal current	0.03-0.41 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 90 °C	0.28 bar
at a water temp. of 110 °C	1.08 bar
for every ±100 m of altitude	0.01 bar

Connection diagram

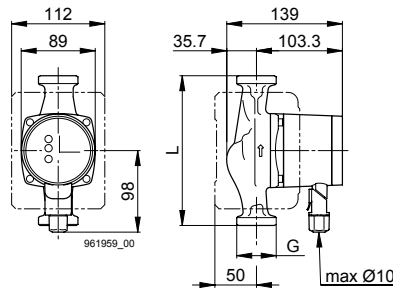


L, N, PE Power supply

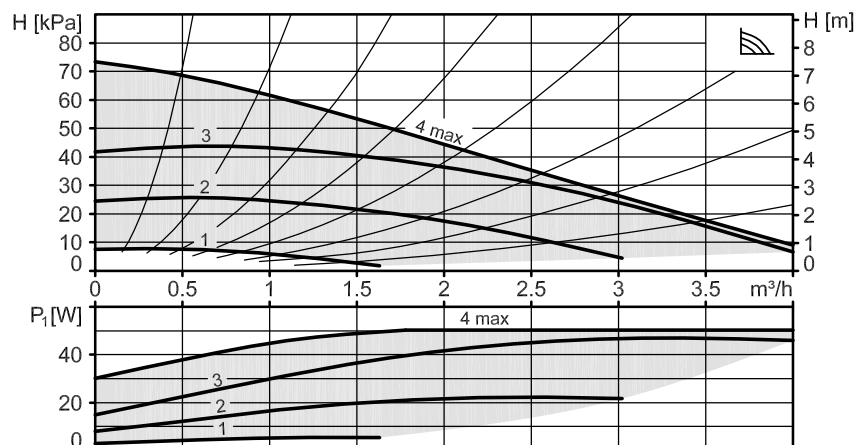
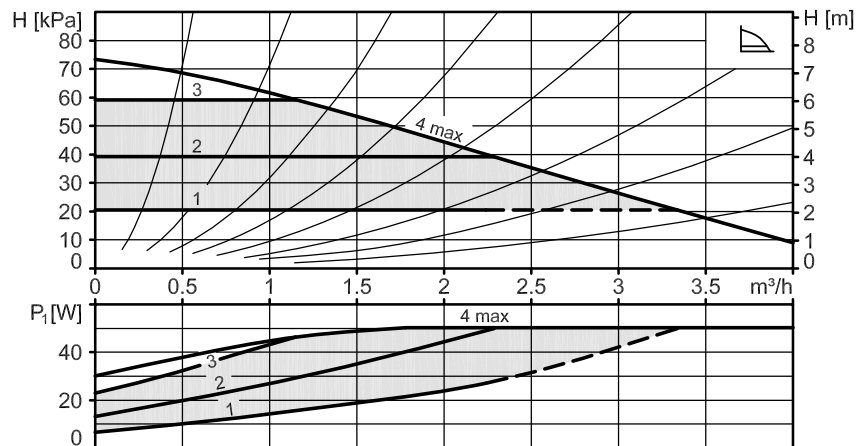
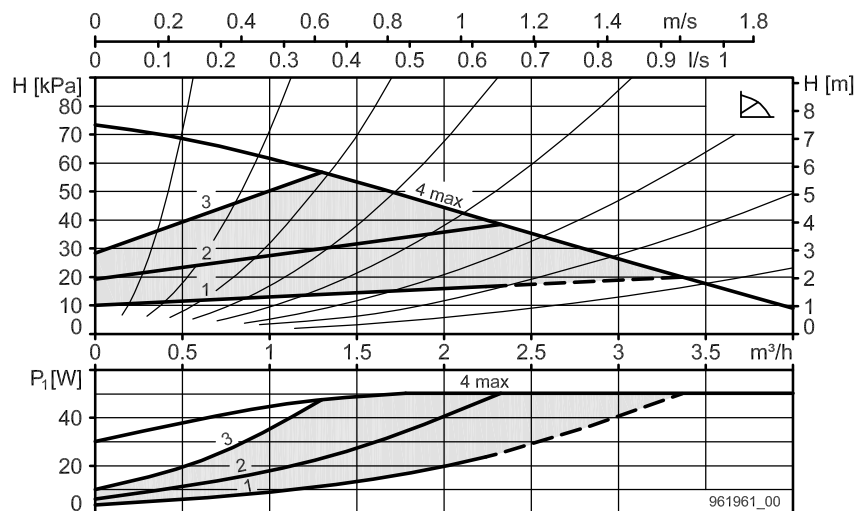
Included in the scope of delivery

- Heat insulation shell
- Biral Connector and angled connector
- AFM seal

Type	Art. no.
PrimAX 25-8 180 RED	2205390150
PrimAX 32-8 180 RED	2205470150
PrimAX 32-8 170 RED	2205430150
PrimAX 15-8 130 RED	2205310150
PrimAX 25-8 130 RED	2205350150



PrimAX 25-8 180 RED	PrimAX 32-8 180 RED
DN 25	DN 32
L = 180 mm	L = 180 mm
G = 1 1/2"	G = 2"
PrimAX 32-8 170 RED	PrimAX 15-8 130 RED
DN 32	DN 15
L = 170 mm	L = 130 mm
G = 2"	G = 1"
PrimAX 25-8 130 RED	
DN 25	
L = 130 mm	
G = 1 1/2"	



Premium heating circulation pumps

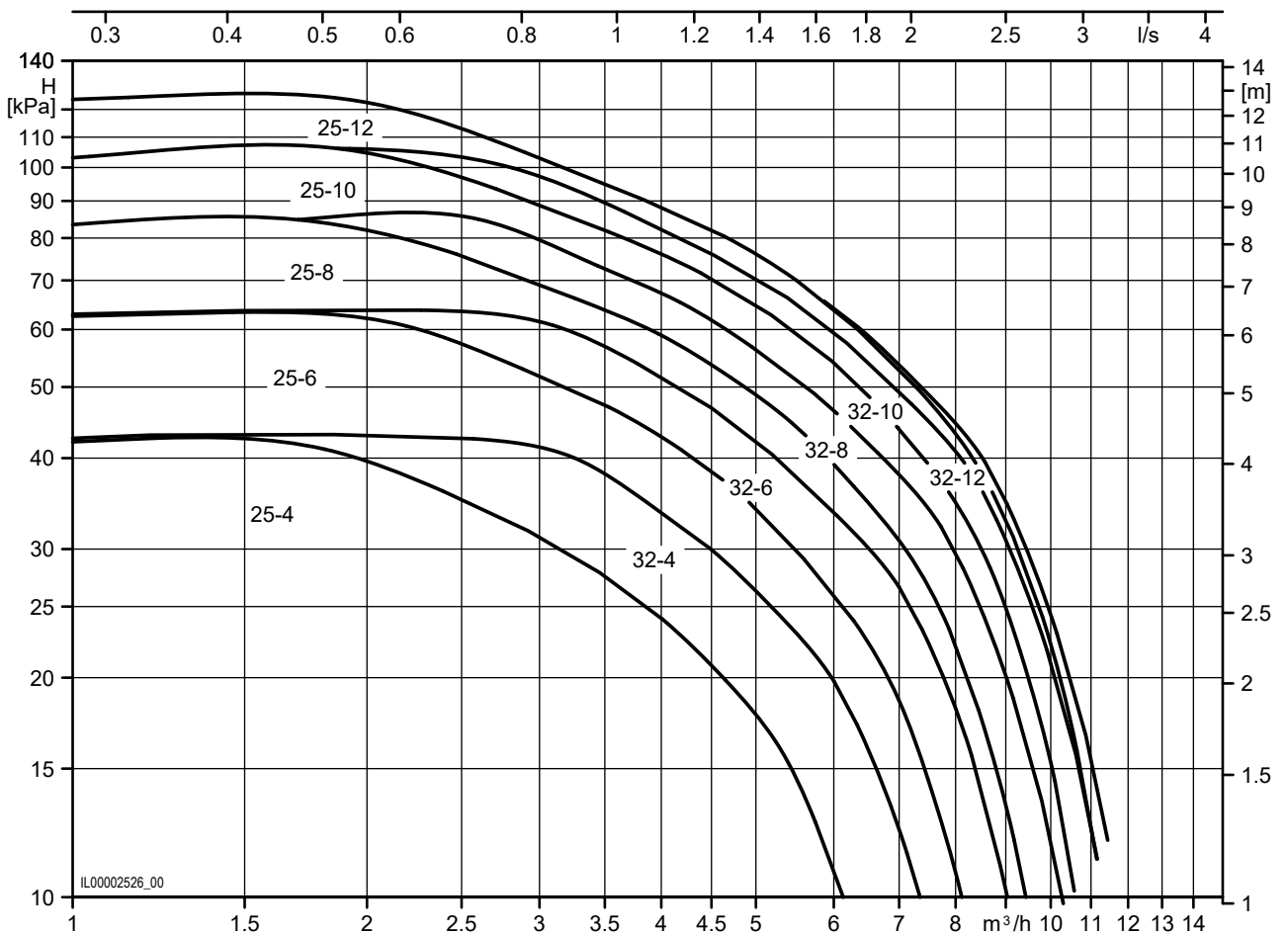
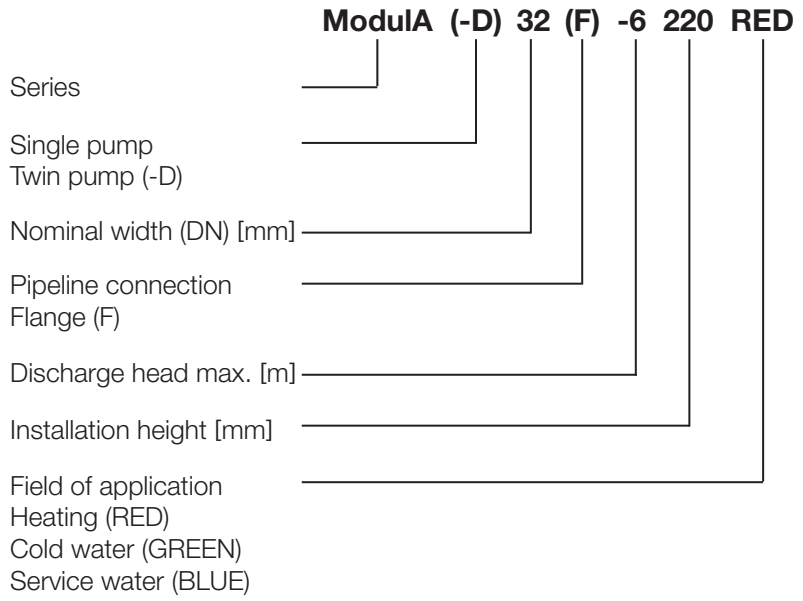
ModulA... RED T2 with threaded connection



Summary

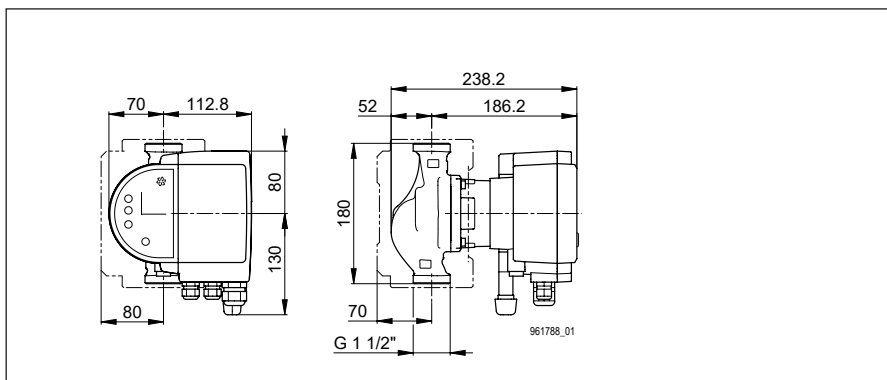
Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar	EEI value EEI
ModulA 25-4 180 RED	7000000057	25	4	180	G 1½"	10	≤0.18
ModulA 25-6 180 RED	7000000058	25	6	180	G 1½"	10	≤0.18
ModulA 25-8 180 RED	7000000059	25	8	180	G 1½"	10	≤0.18
ModulA 25-10 180 RED	7000000060	25	10	180	G 1½"	10	≤0.18
ModulA 25-12 180 RED	7000000061	25	12	180	G 1½"	10	≤0.18
ModulA 32-4 180 RED	7000000067	32	4	180	G 2"	10	≤0.18
ModulA 32-6 180 RED	7000000068	32	6	180	G 2"	10	≤0.18
ModulA 32-8 180 RED	7000000069	32	8	180	G 2"	10	≤0.18
ModulA 32-10 180 RED	7000000070	32	10	180	G 2"	10	≤0.18
ModulA 32-12 180 RED	7000000071	32	12	180	G 2"	10	≤0.18
ModulA 32-4 170 RED	7000000062	32	4	170	G 2"	10	≤0.18
ModulA 32-6 170 RED	7000000063	32	6	170	G 2"	10	≤0.18
ModulA 32-8 170 RED	7000000064	32	8	170	G 2"	10	≤0.18
ModulA 32-10 170 RED	7000000065	32	10	170	G 2"	10	≤0.18
ModulA 32-12 170 RED	7000000066	32	12	170	G 2"	10	≤0.18

Order reference



ModuA 25-4 180 RED

Version	T2 S
Nominal width	DN 25
Max. flow head H	4 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	4.5 kg



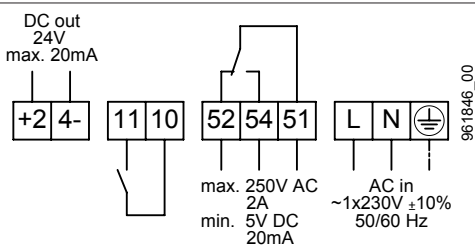
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-49 W
Nominal current	0.08-0.37 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

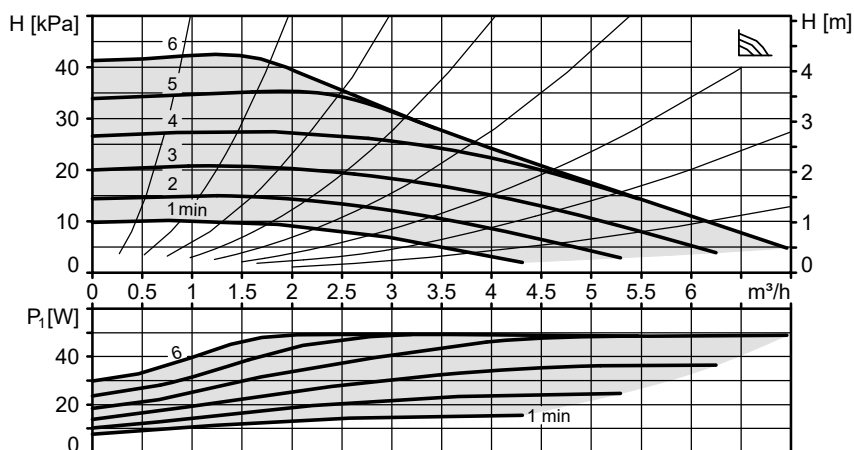
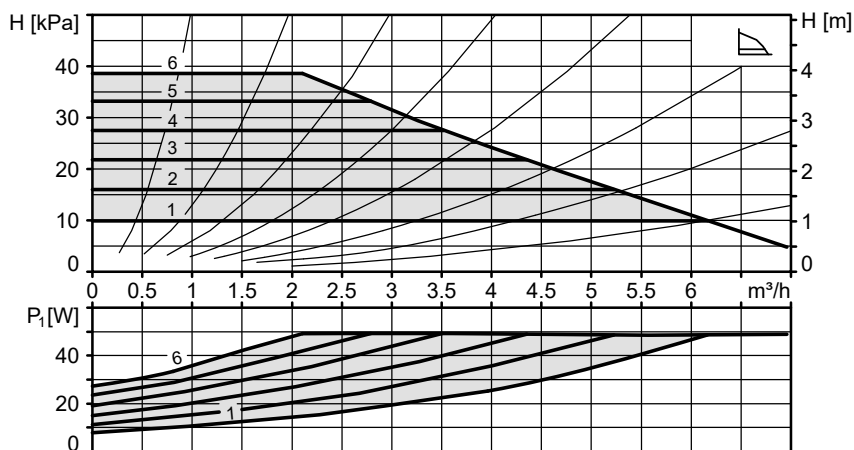
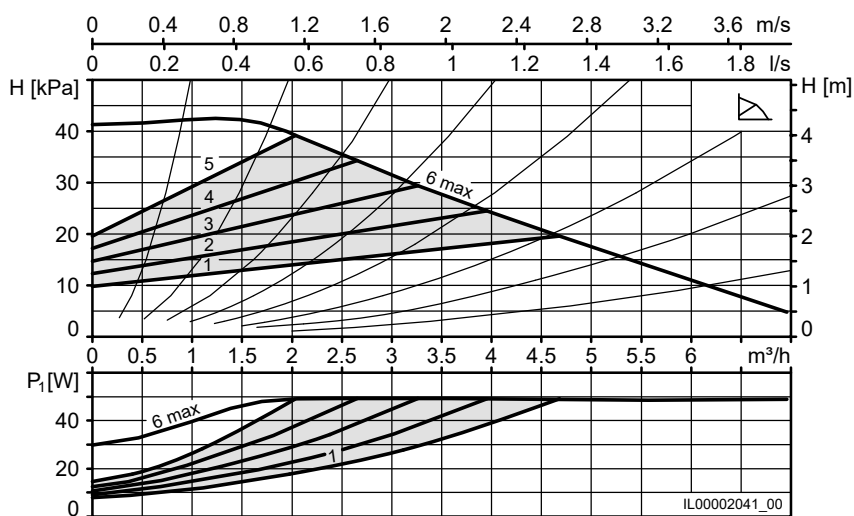
Included in the scope of delivery

- Heat insulation shell

Accessories

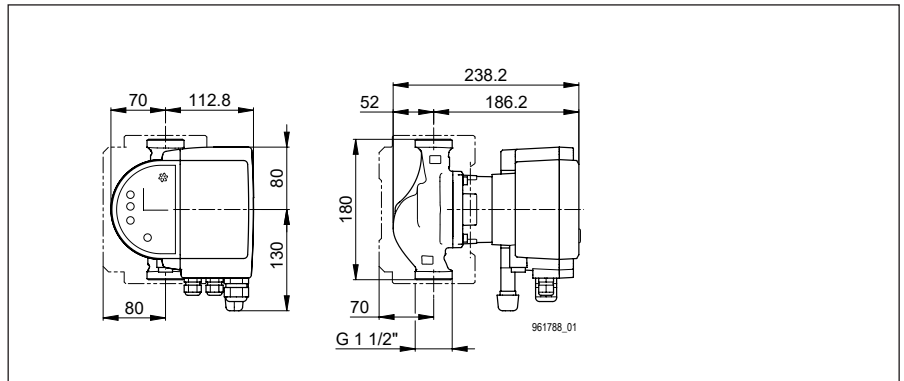
- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModuA 25-4 180 RED	7000000057



ModuA 25-6 180 RED

Version	T2 S
Nominal width	DN 25
Max. flow head H	6 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	4.5 kg



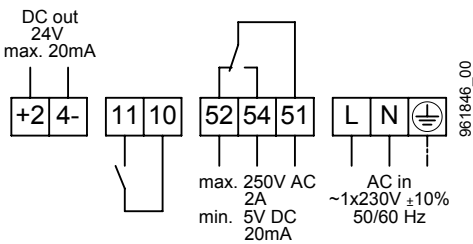
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-83 W
Nominal current	0.08-0.62 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

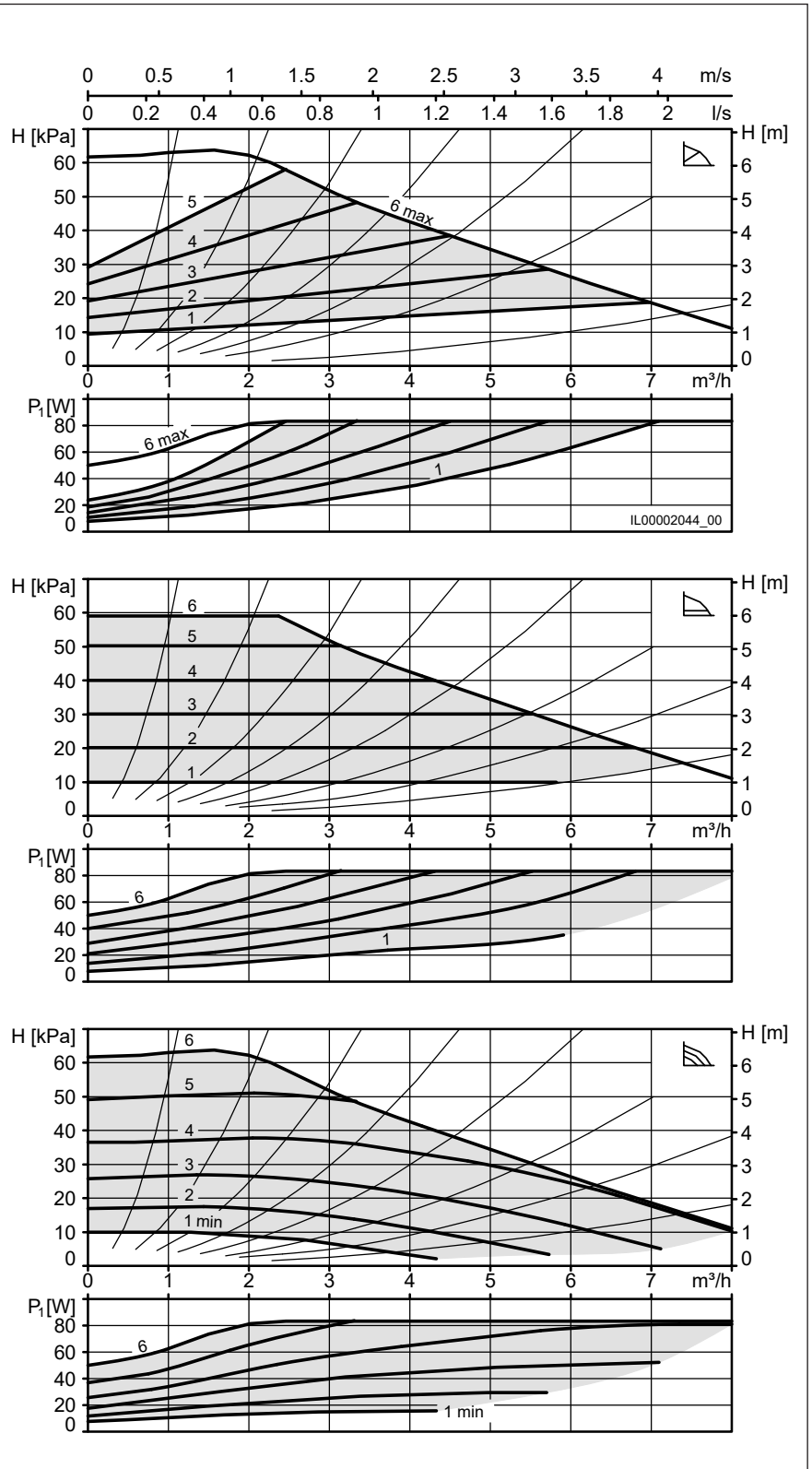
Included in the scope of delivery

- Heat insulation shell

Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModuA 25-6 180 RED	7000000058

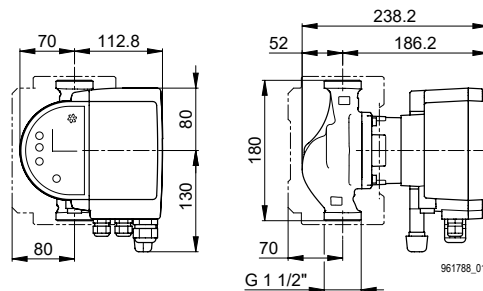


Heating



ModuA 25-8 180 RED

Version	T2 S
Nominal width	DN 25
Max. flow head H	8 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	4.5 kg



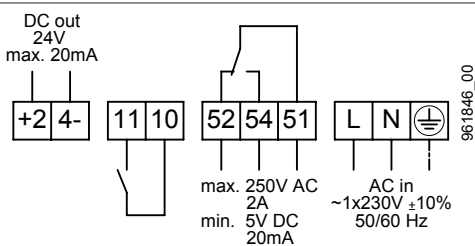
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	7-115 W
Nominal current	0.08-0.85 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ± 100 m of altitude	± 0.01 bar

Connection diagram



+2-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

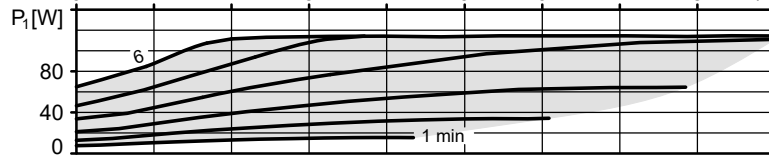
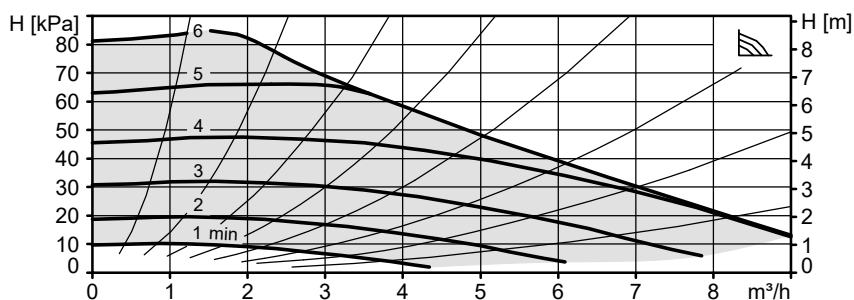
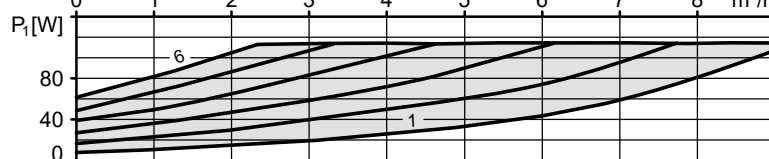
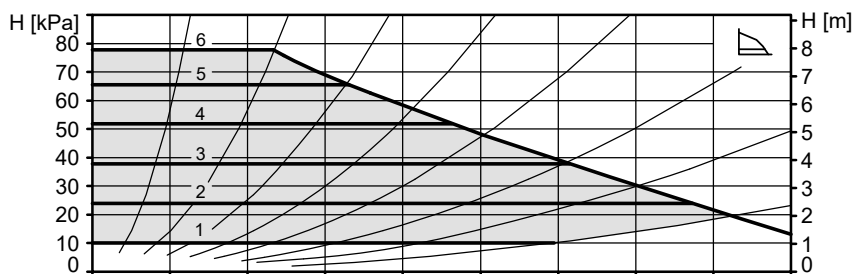
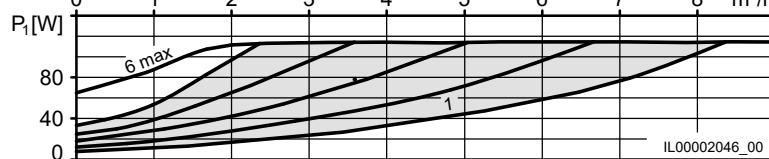
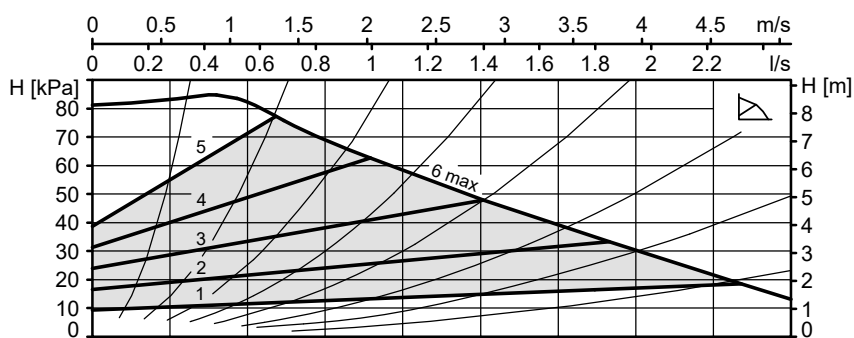
Included in the scope of delivery

- Heat insulation shell

Accessories

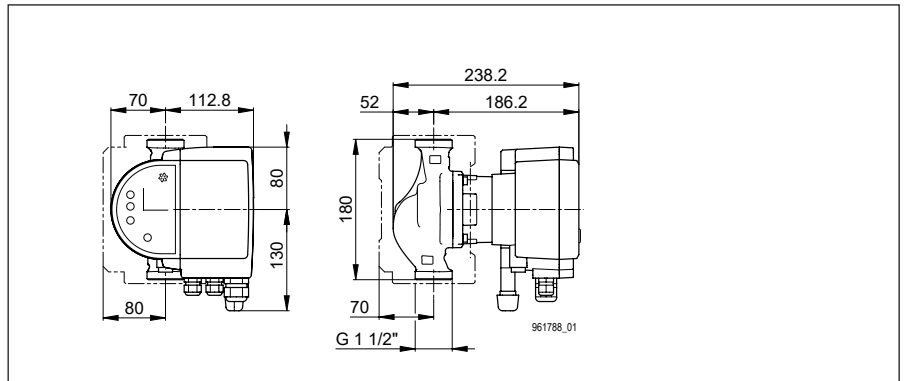
- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModuA 25-8 180 RED	7000000059



ModuA 25-10 180 RED

Version	T2 S
Nominal width	DN 25
Max. flow head H	10 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	4.5 kg



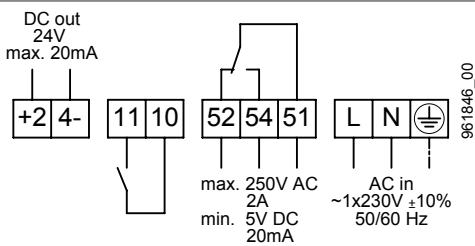
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-153 W
Nominal current	0.08-1.15 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +2-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

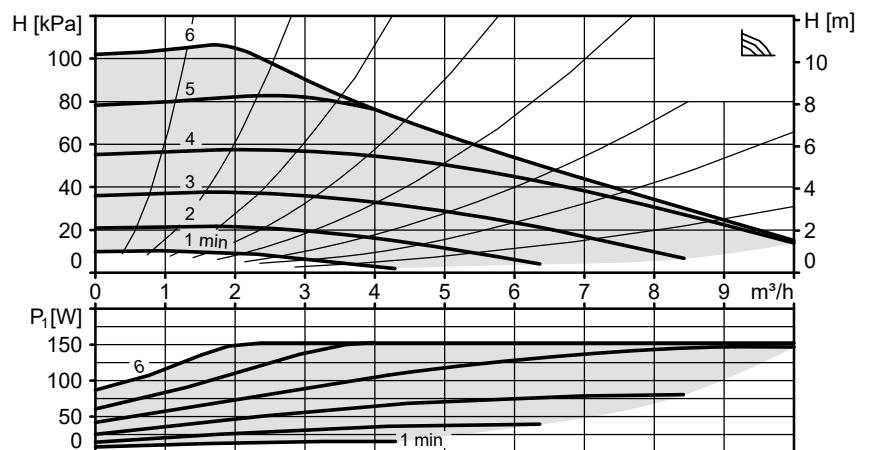
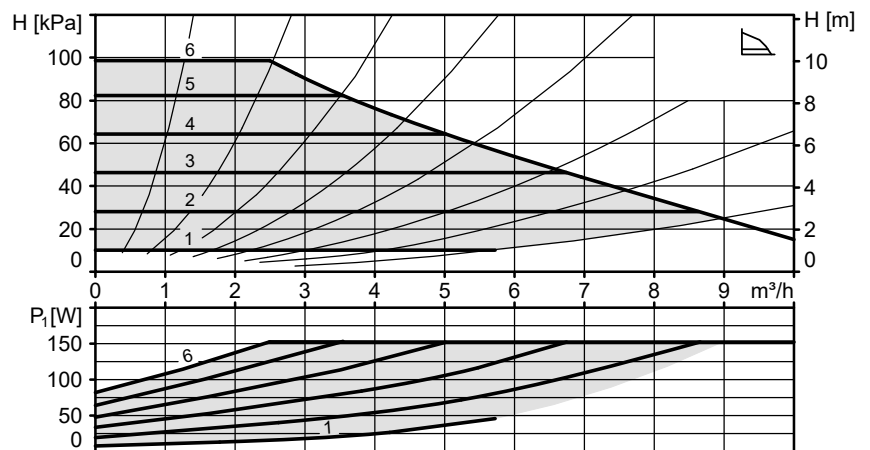
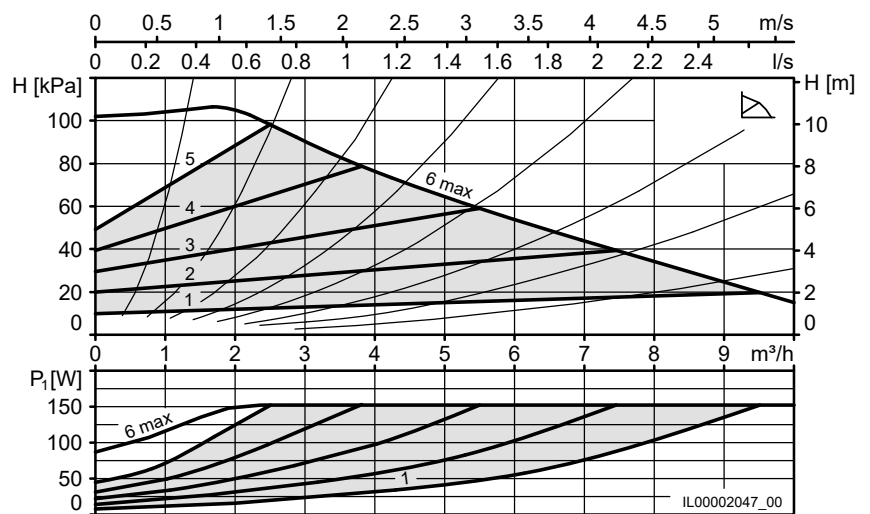
Included in the scope of delivery

- Heat insulation shell

Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModuA 25-10 180 RED	7000000060

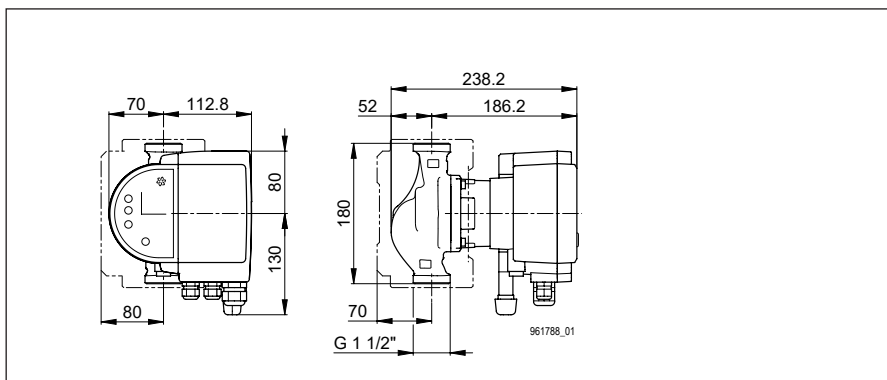


Heating



ModuA 25-12 180 RED

Version	T2 S
Nominal width	DN 25
Max. flow head H	12 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	4.5 kg



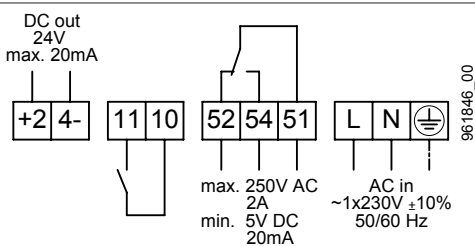
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-181 W
Nominal current	0.08-1.36 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

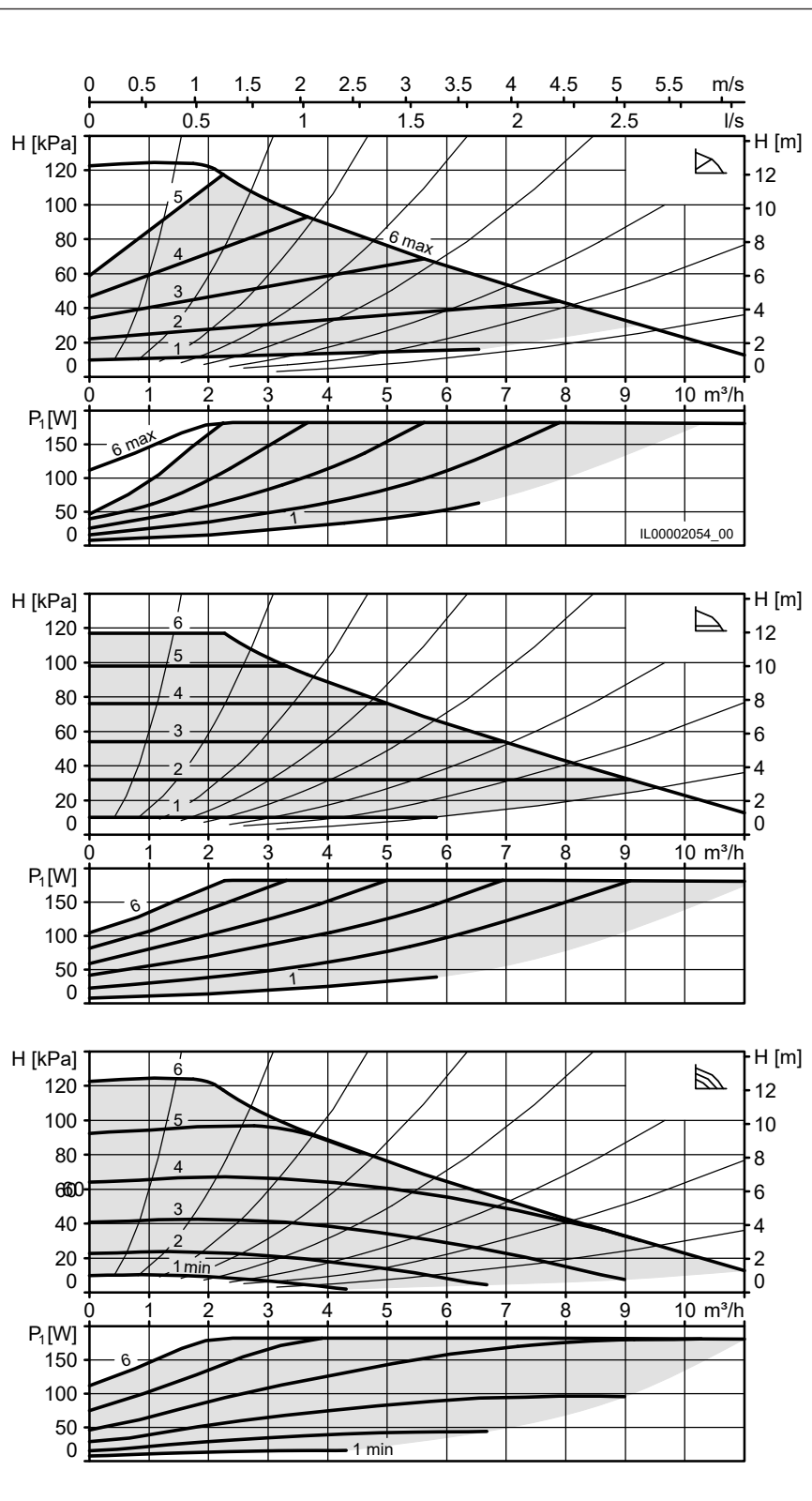
Included in the scope of delivery

- Heat insulation shell

Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModuA 25-12 180 RED	7000000061



ModulA 32-4 180 RED

ModulA 32-4 170 RED

Version	T2 S
Nominal width	DN 32
Max. flow head H	4 m
Overall length	180 170 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	4.7 kg

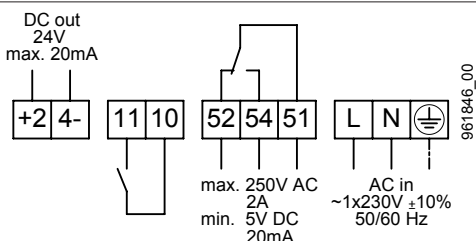
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	7-66 W
Nominal current	0.08-0.48 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

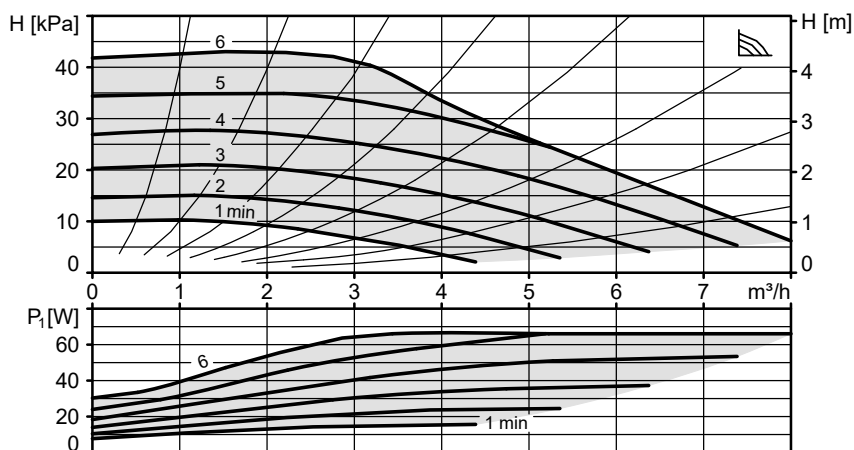
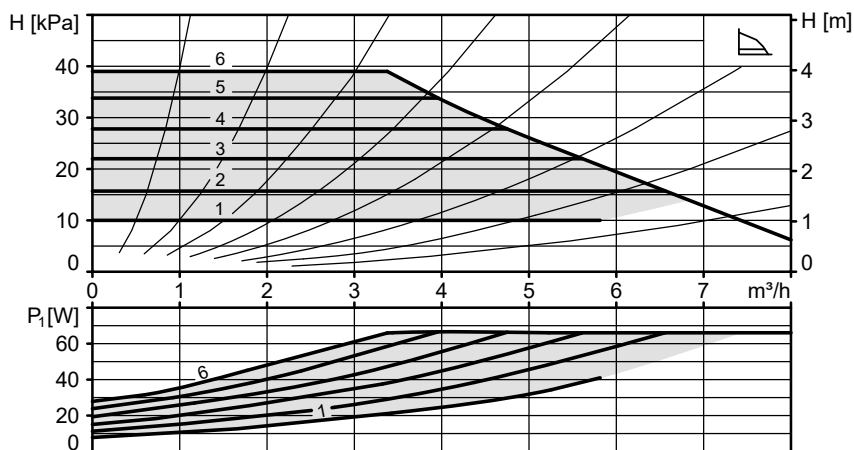
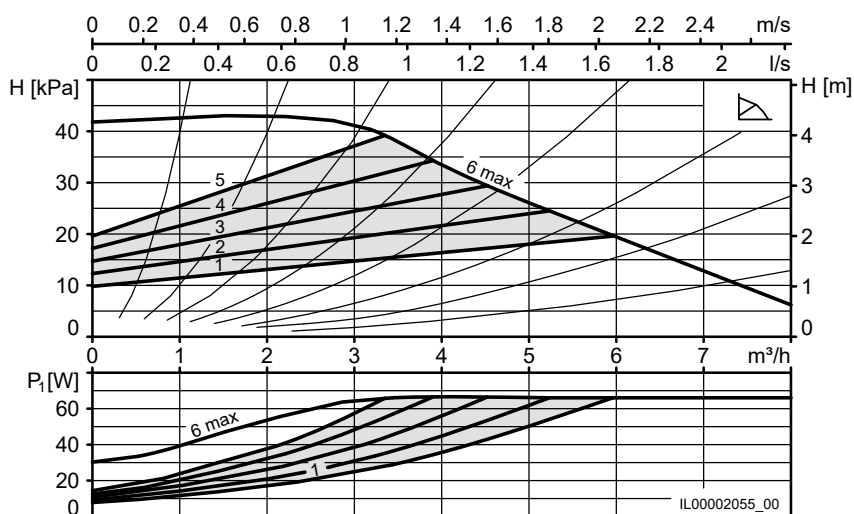
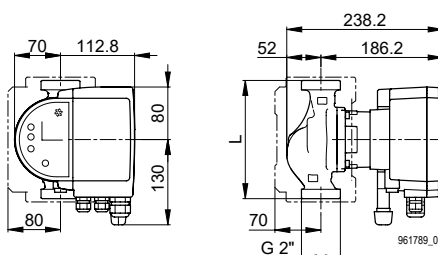
Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModulA 32-4 180 RED	7000000067
ModulA 32-4 170 RED	7000000062

ModulA 32-4 180 RED
DN 32
L = 180 mm

ModulA 32-4 170 RED
DN 32
L = 170 mm



ModulA 32-6 180 RED

ModulA 32-6 170 RED

Version	T2 S
Nominal width	DN 32
Max. flow head H	6 m
Overall length	180 170 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	4.7 kg

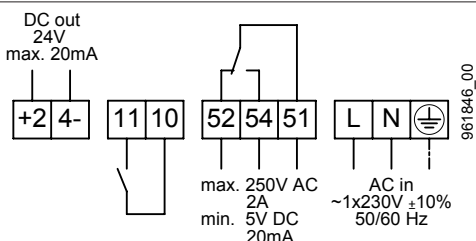
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-102 W
Nominal current	0.08-0.73 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

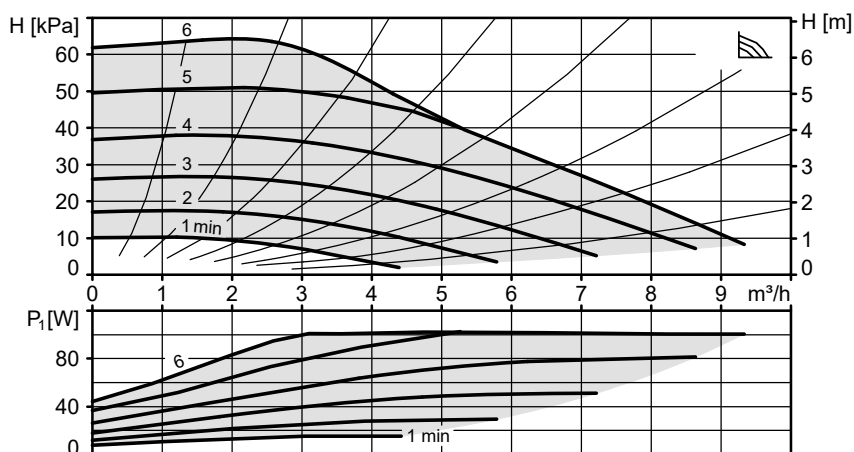
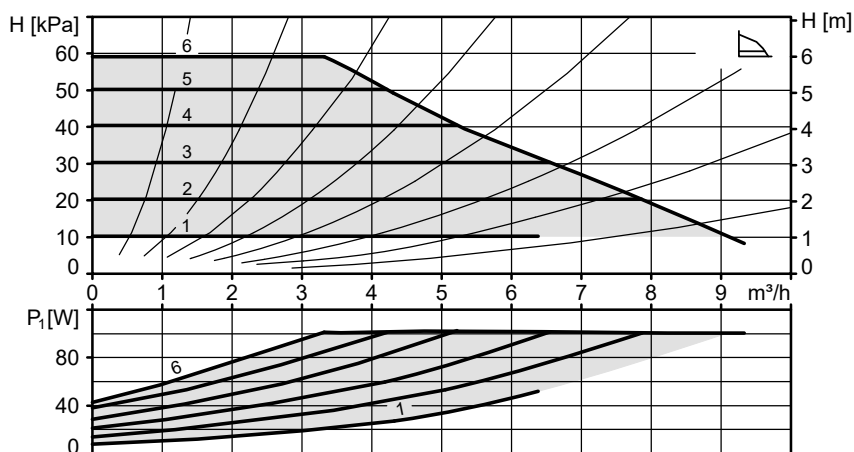
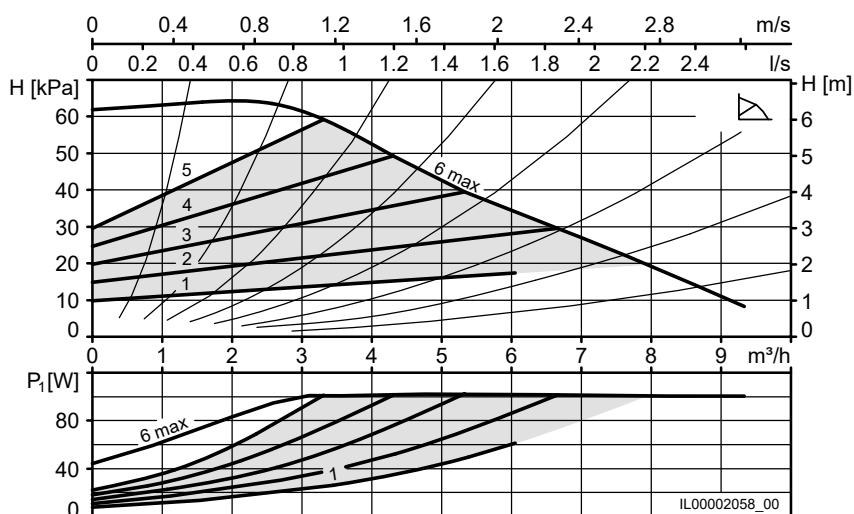
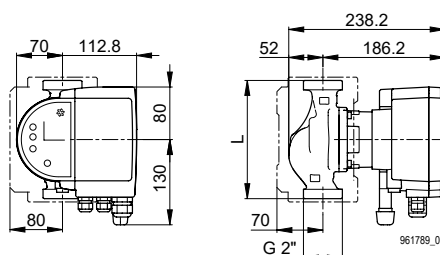
Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModulA 32-6 180 RED	7000000068
ModulA 32-6 170 RED	7000000063

ModulA 32-6 180 RED
DN 32
L = 180 mm

ModulA 32-6 170 RED
DN 32
L = 170 mm



ModulA 32-8 180 RED

ModulA 32-8 170 RED

Version	T2 S
Nominal width	DN 32
Max. flow head H	8 m
Overall length	180 170 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	4.7 kg

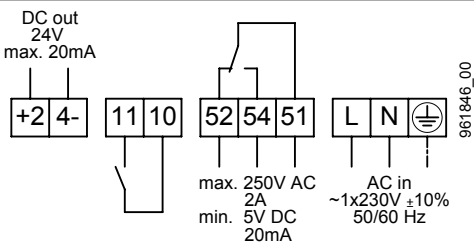
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	7-134 W
Nominal current	0.08-0.97 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

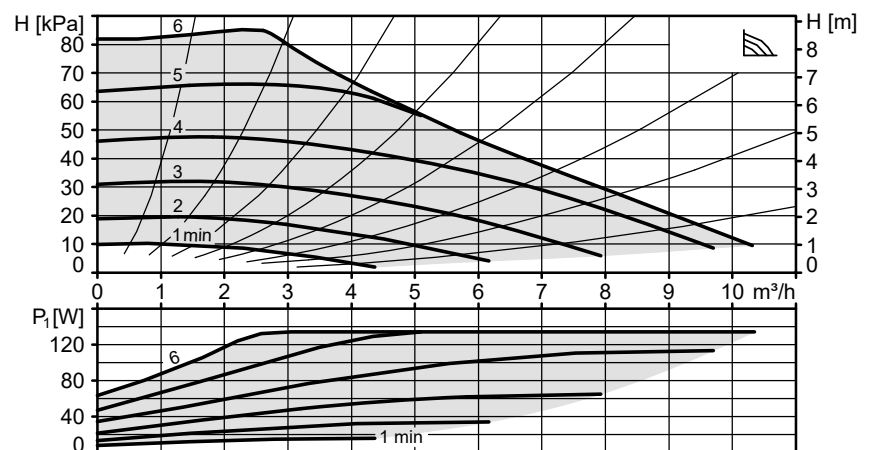
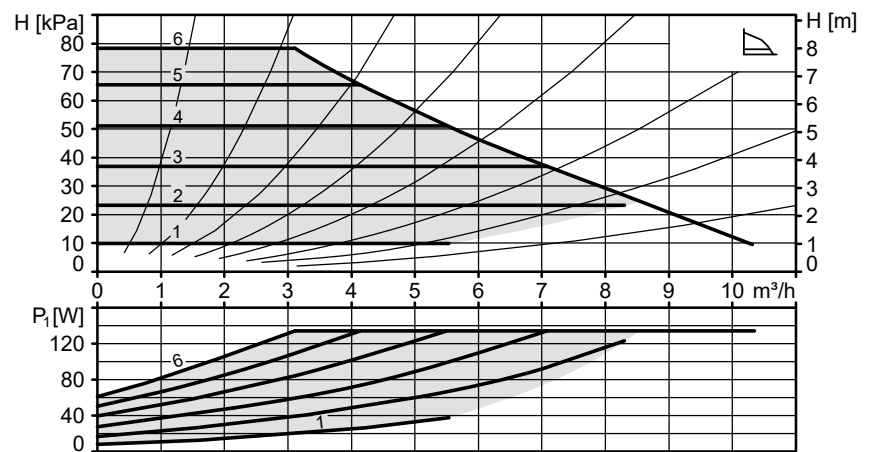
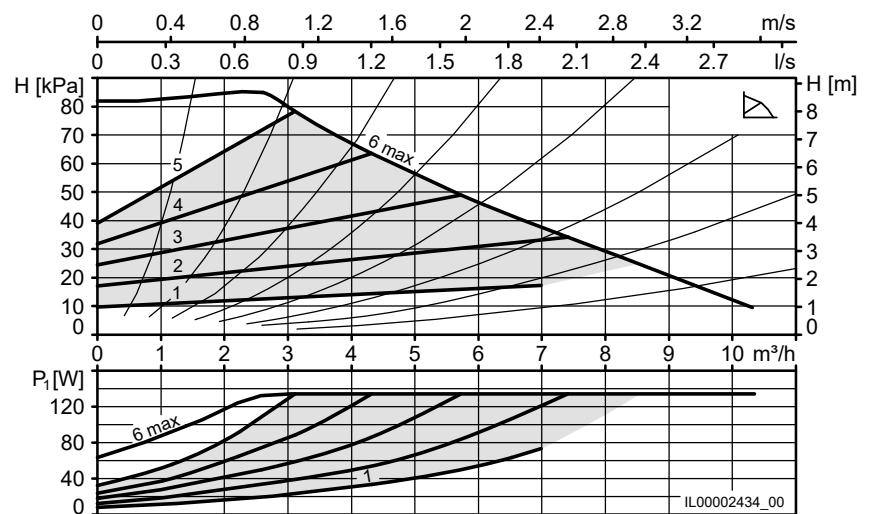
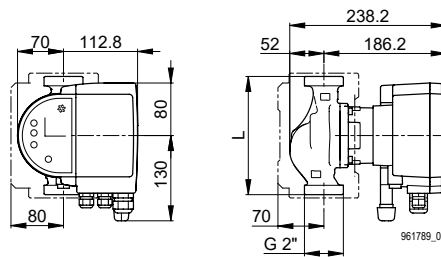
Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModulA 32-8 180 RED	7000000069
ModulA 32-8 170 RED	7000000064

ModulA 32-8 180 RED
DN 32
L = 180 mm

ModulA 32-8 170 RED
DN 32
L = 170 mm



ModuA 32-10 180 RED

ModuA 32-10 170 RED

Version	T2 S
Nominal width	DN 32
Max. flow head H	10 m
Overall length	180 170 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	4.7 kg

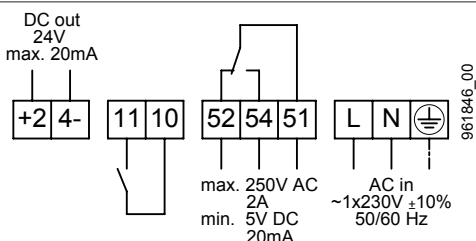
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	7-169 W
Nominal current	0.08-1.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



+2-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

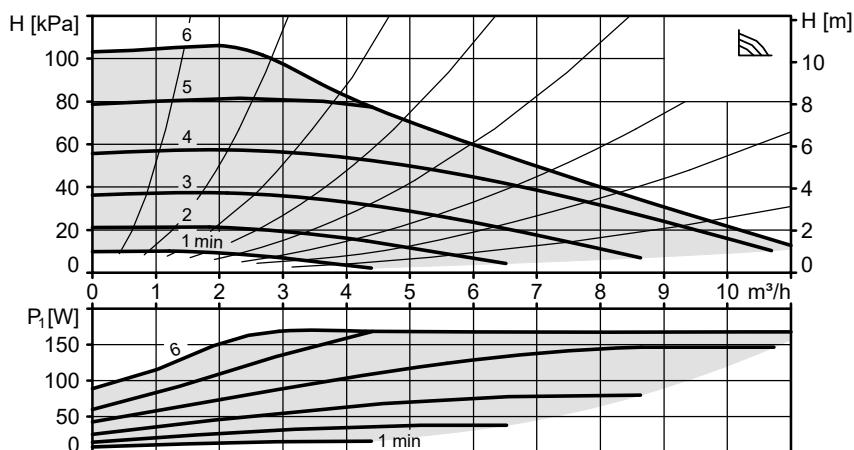
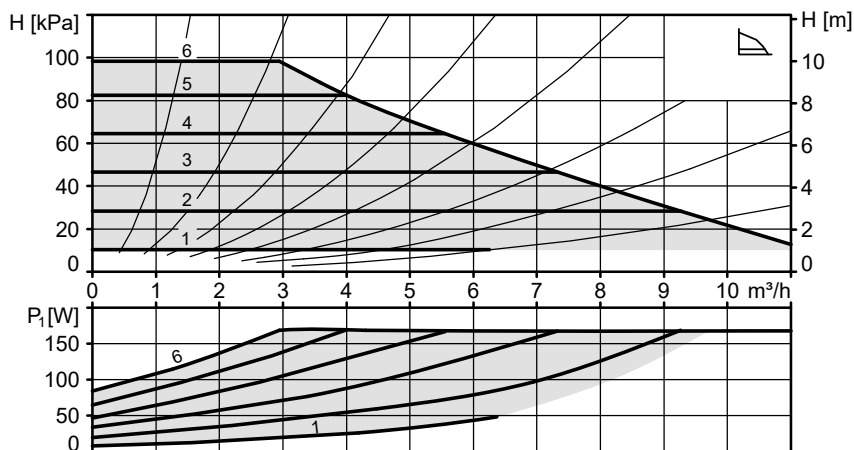
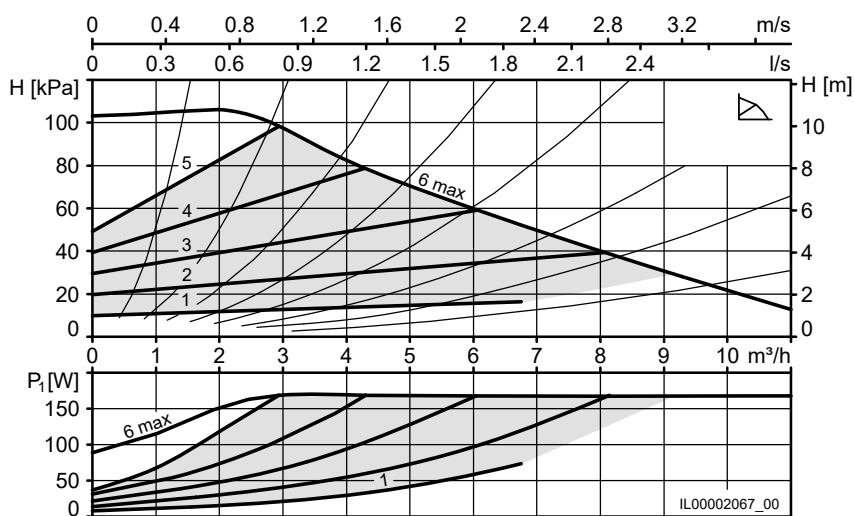
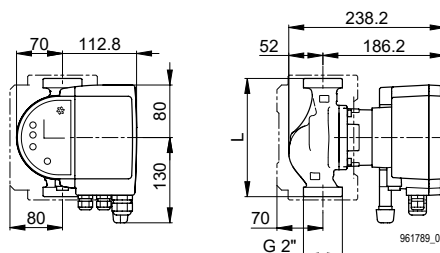
Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModuA 32-10 180 RED	7000000070
ModuA 32-10 170 RED	7000000065

ModuA 32-10 180 RED DN 32
L = 180 mm

ModuA 32-10 170 RED DN 32
L = 170 mm



ModulA 32-12 180 RED

ModulA 32-12 170 RED

Version	T2 S
Nominal width	DN 32
Max. flow head H	12 m
Overall length	180 170 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	4.7 kg

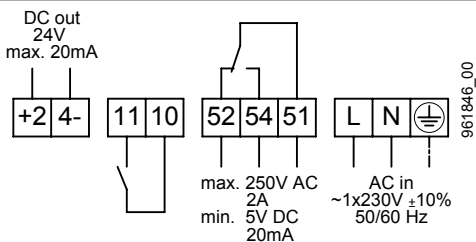
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	7-182 W
Nominal current	0.08-1.36 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

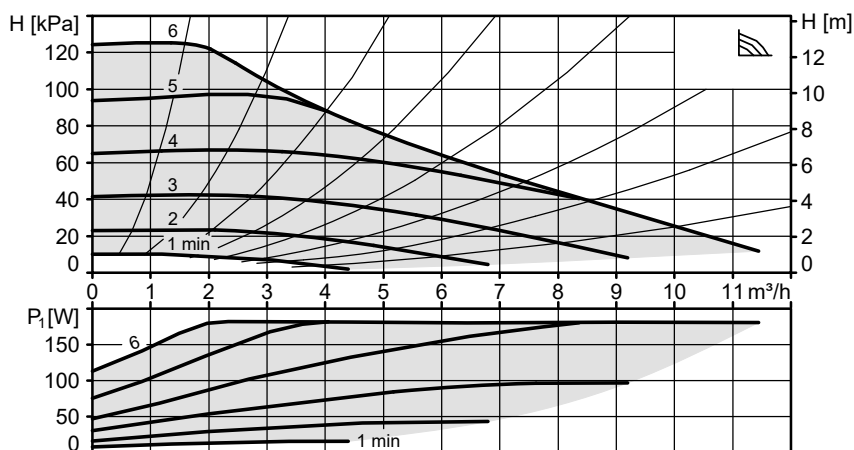
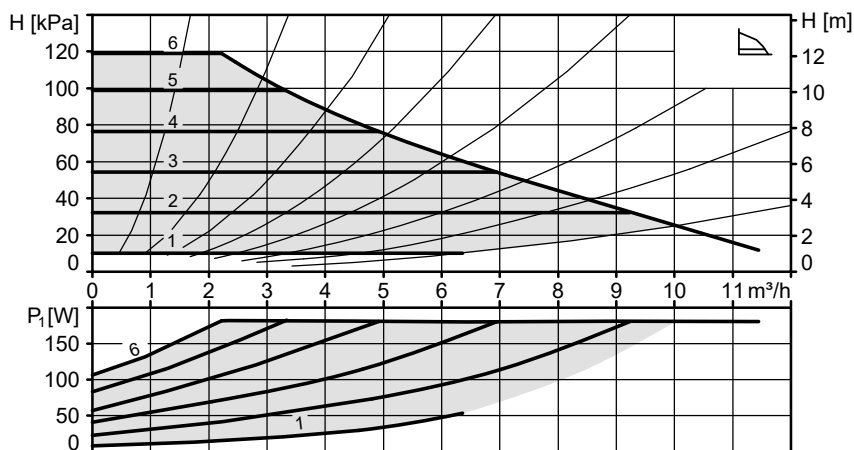
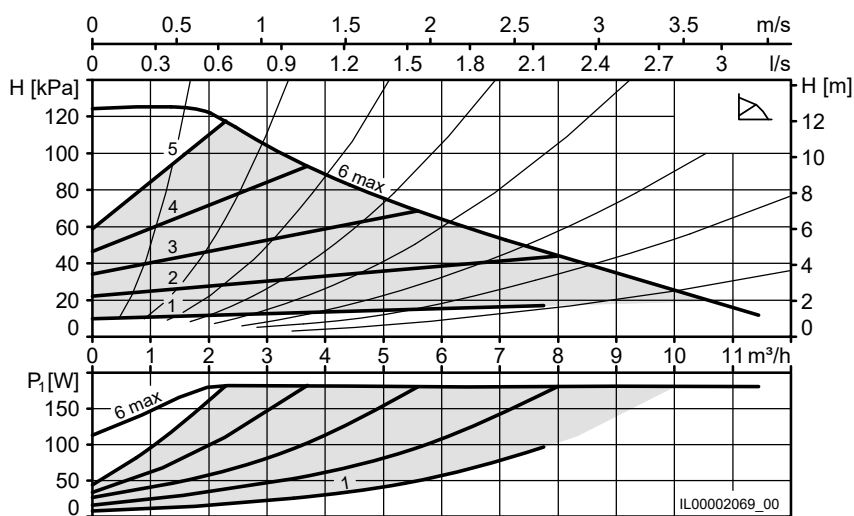
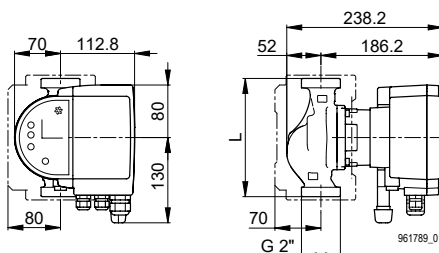
Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModulA 32-12 180 RED	7000000071
ModulA 32-12 170 RED	7000000066

ModulA 32-12 180 RED
DN 32
L = 180 mm

ModulA 32-12 170 RED
DN 32
L = 170 mm



Premium heating circulation pumps

ModulA... RED T2 with flanged connection



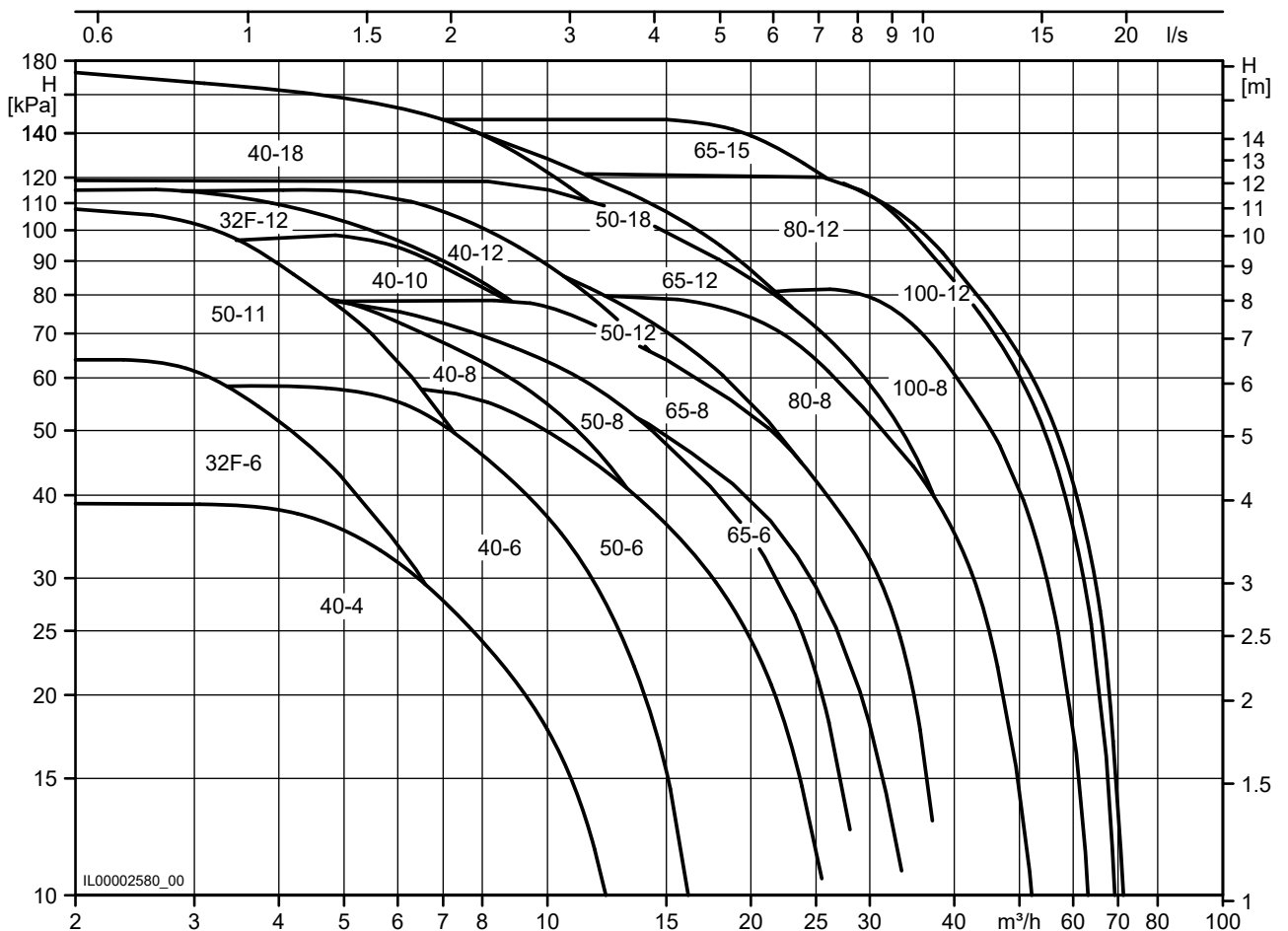
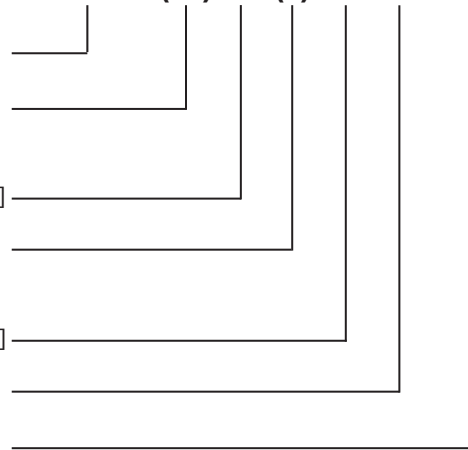
Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Flanged connection	Max. operating pressure bar	EEl value
ModulA 32F-6 220 RED	7000000072	32	6	220	PN 6	6	≤0.18
ModulA 32F-12 220 RED	7000000076	32	12	220	PN 6-16	16	≤0.20
ModulA 40-4 220 RED	7000000073	40	4	220	PN 6-16	16	≤0.18
ModulA 40-6 220 RED	7000000074	40	6	220	PN 6-16	16	≤0.19
ModulA 40-8 220 RED	7000000077	40	8	220	PN 6-16	16	≤0.20
ModulA 40-10 220 RED	7000000078	40	10	220	PN 6-16	16	≤0.20
ModulA 40-12 250 RED	7000000079	40	12	250	PN 6-16	16	≤0.18
ModulA 40-18 250 RED	7000000080	40	18	250	PN 6-16	16	≤0.18
ModulA 50-6 240 RED	7000000081	50	6	240	PN 6-16	16	≤0.19
ModulA 50-8 240 RED	7000000083	50	8	240	PN 6-16	16	≤0.19
ModulA 50-11 220 RED	7000000075	50	11	220	PN 6-16	16	≤0.18
ModulA 50-12 270 RED	7000000084	50	12	270	PN 6-16	16	≤0.18
ModulA 50-18 270 RED	7000000085	50	18	270	PN 6-16	16	≤0.17
ModulA 65-6 270 RED	7000000086	65	6	270	PN 6-16	16	≤0.18
ModulA 65-8 270 RED	7000000087	65	8	270	PN 6-16	16	≤0.18
ModulA 65-12 340 RED	7000000089	65	12	340	PN 6-16	16	≤0.17
ModulA 65-15 340 RED	7000000054	65	15	340	PN 6-16	16	≤0.18
ModulA 80-8 360 RED PN6	7000000090	80	8	360	PN 6	6	≤0.17
ModulA 80-8 360 RED PN10/16	7000000091	80	8	360	PN 10/16	16	≤0.17
ModulA 80-12 360 RED PN6	7000000092	80	12	360	PN 6	6	≤0.17
ModulA 80-12 360 RED PN10/16	7000000093	80	12	360	PN 10/16	16	≤0.17
ModulA 100-8 450 RED PN6	7000000094	100	8	450	PN 6	6	≤0.18
ModulA 100-8 450 RED PN10/16	7000000095	100	8	450	PN 10/16	16	≤0.18
ModulA 100-12 450 RED PN6	7000000096	100	12	450	PN 6	6	≤0.18
ModulA 100-12 450 RED PN10/16	7000000097	100	12	450	PN 10/16	16	≤0.18

Order reference

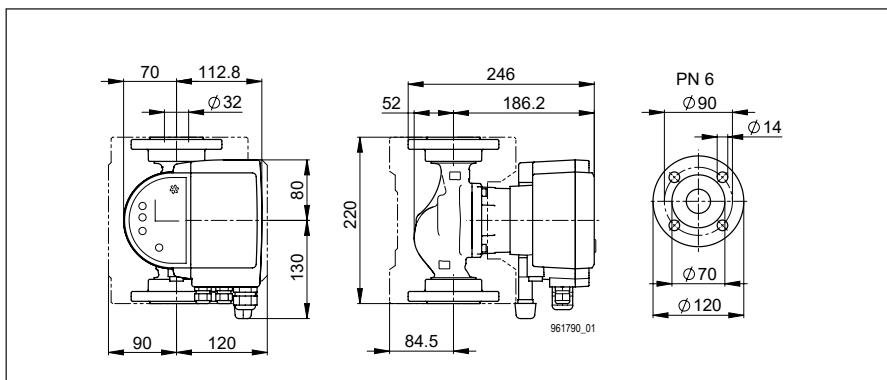
Modula (-D) 32 (F) -6 220 RED

- Series
- Single pump
- Twin pump (-D)
- Nominal width (DN) [mm]
- Pipeline connection
- Flange (F)
- Discharge head max. [m]
- Installation height [mm]
- Field of application
- Heating (RED)
- Cold water (GREEN)
- Service water (BLUE)



ModulA 32F-6 220 RED

Version	T2 S
Nominal width	DN 32
Max. flow head H	6 m
Overall length	220 mm
Flanged connection	PN 6
Max. operating pressure	6 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	7.0 kg



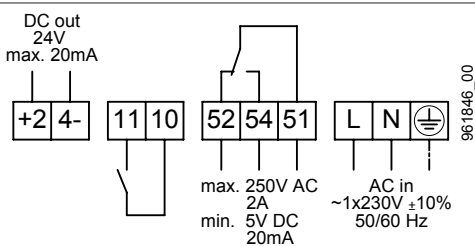
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-102 W
Nominal current	0.08-0.73 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

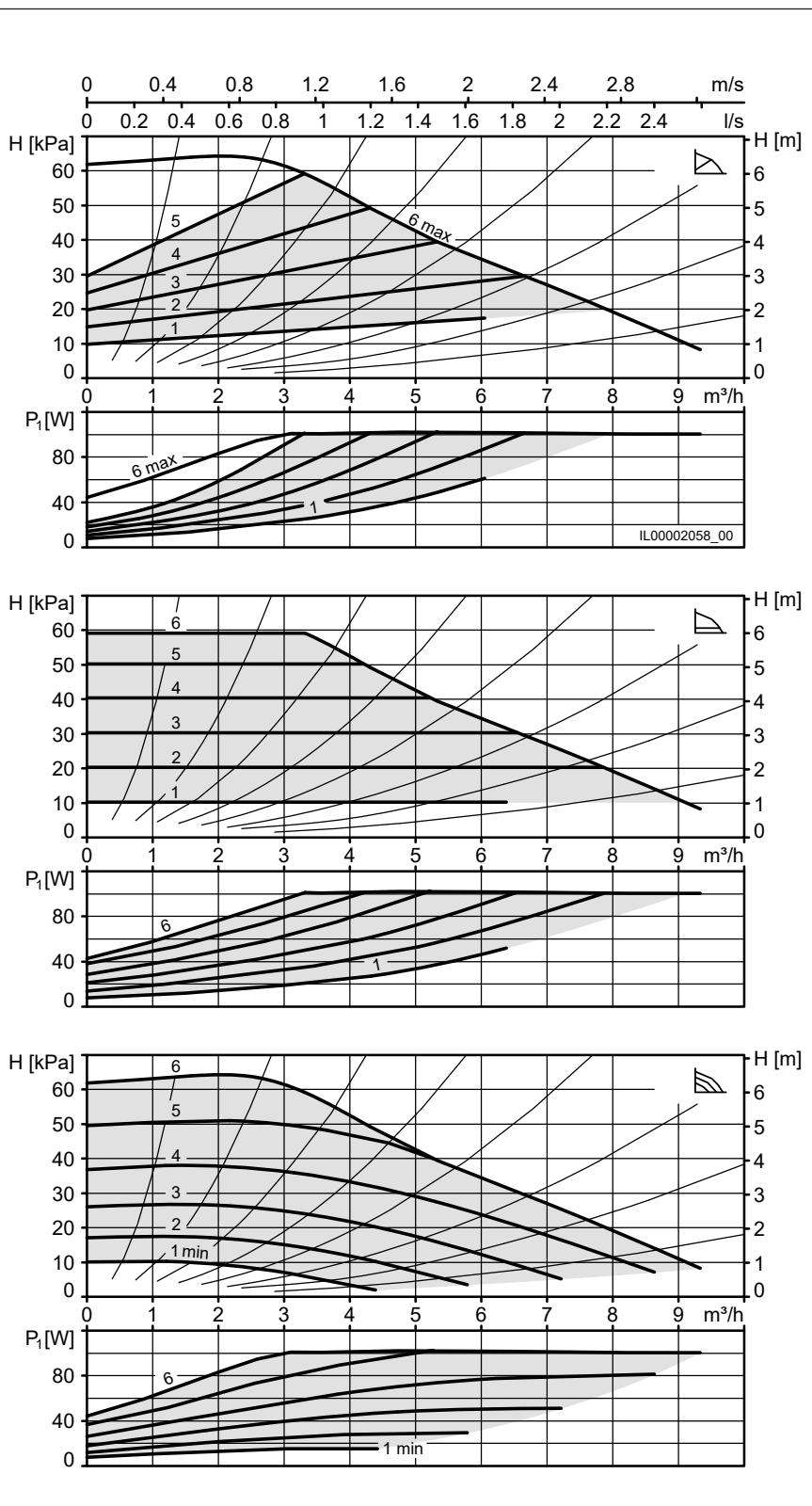
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

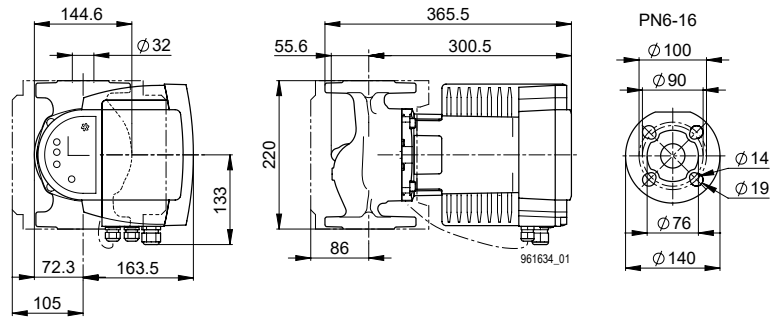
- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModulA 32F-6 220 RED	7000000072



ModulA 32F-12 220 RED

Version	T2 M
Nominal width	DN 32
Max. flow head H	12 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	15.3 kg



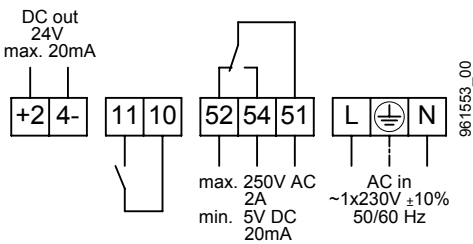
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	15-329 W
Nominal current	0.17-1.51 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

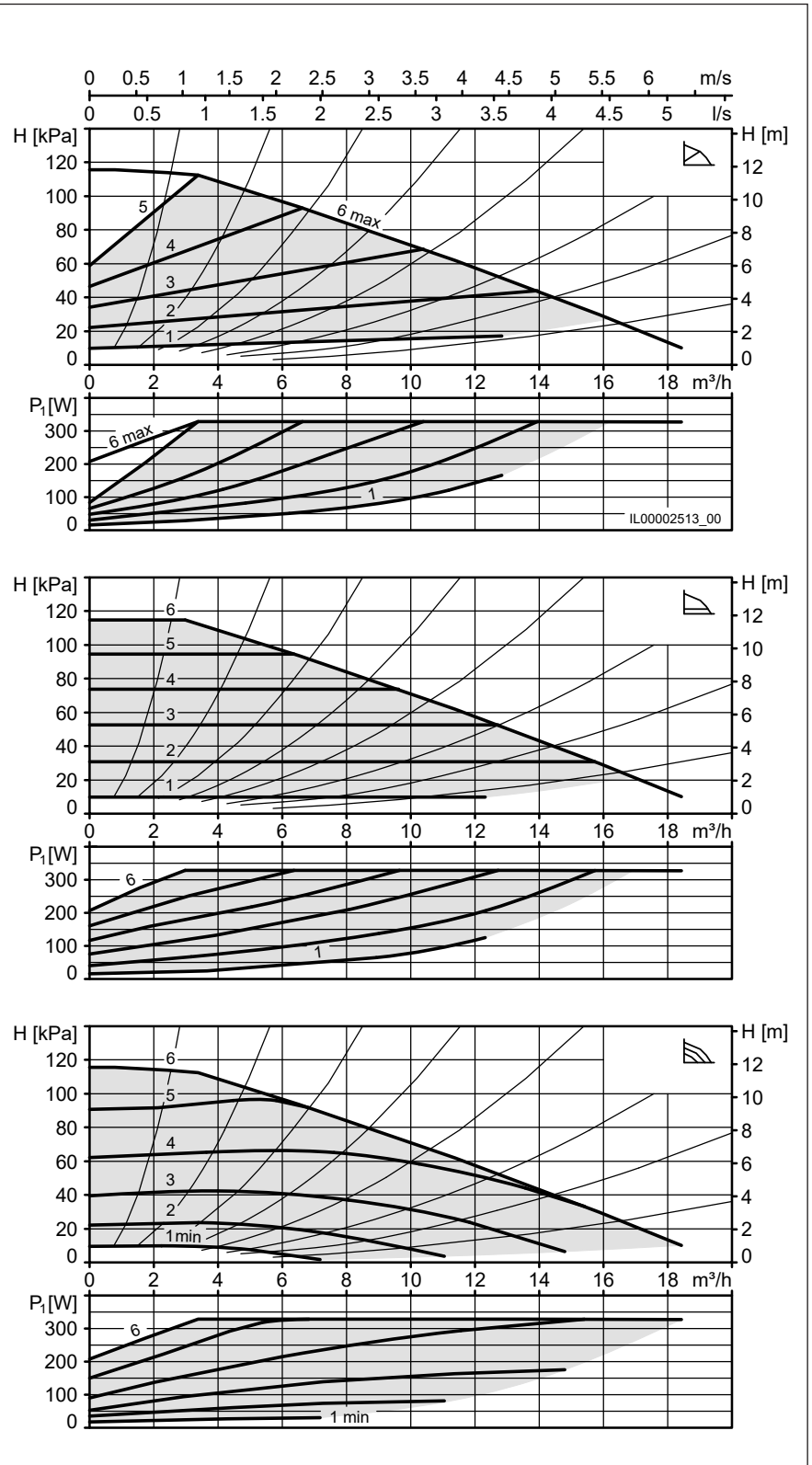
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModulA 32F-12 220 RED	7000000076



Heating



ModulA 40-4 220 RED

Version	T2 S
Nominal width	DN 40
Max. flow head H	4 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	9.2 kg

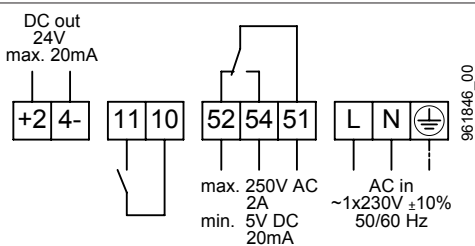
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	11-97 W
Nominal current	0.11-0.74 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

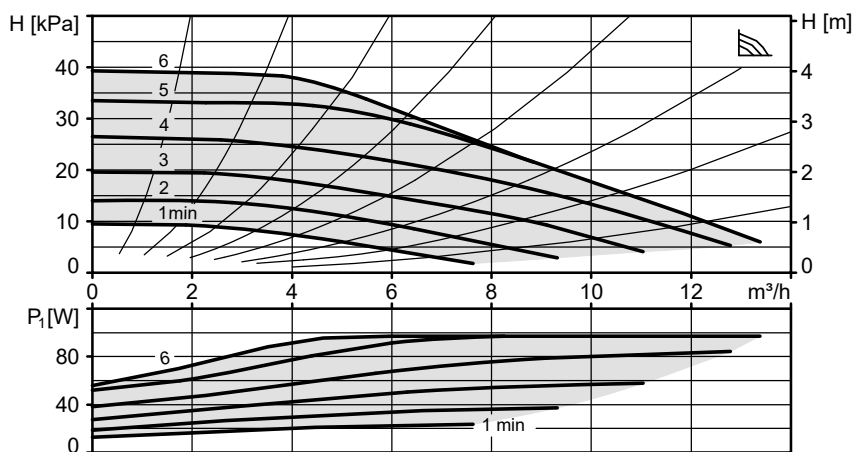
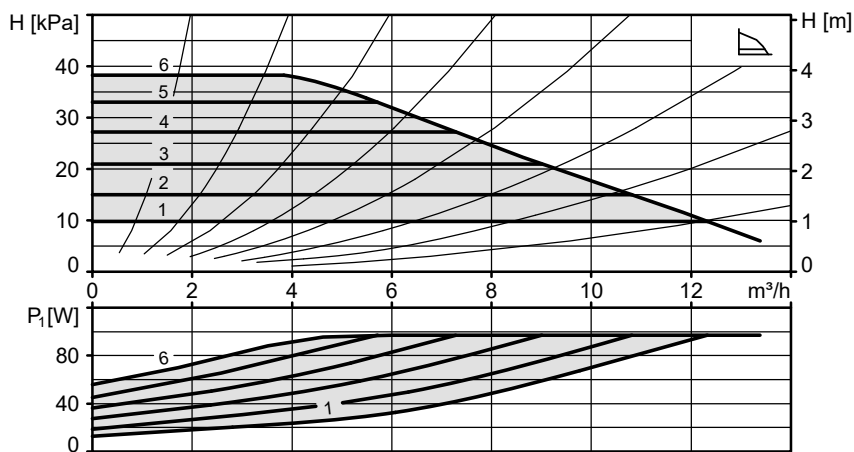
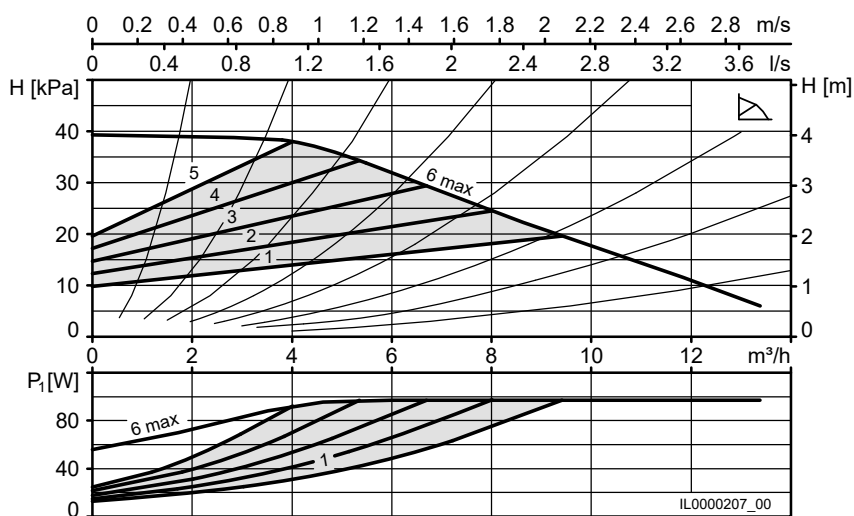
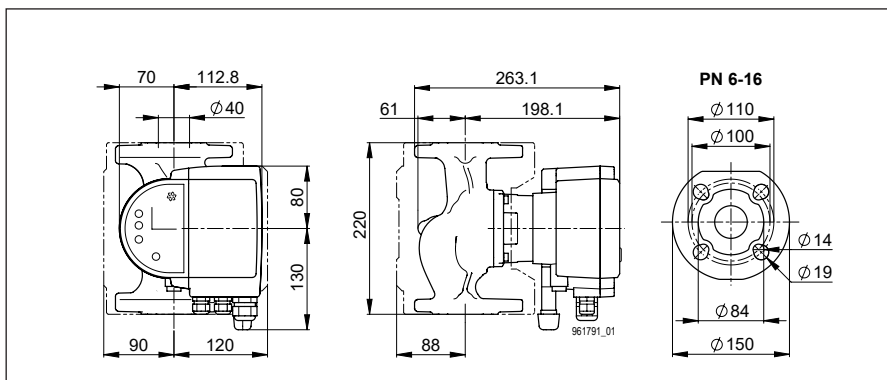
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModulA 40-4 220 RED	7000000073



ModulA 40-6 220 RED

Version	T2 S
Nominal width	DN 40
Max. flow head H	6 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	9.2 kg

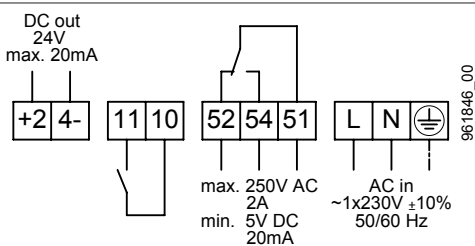
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	11-185 W
Nominal current	0.11-1.47 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

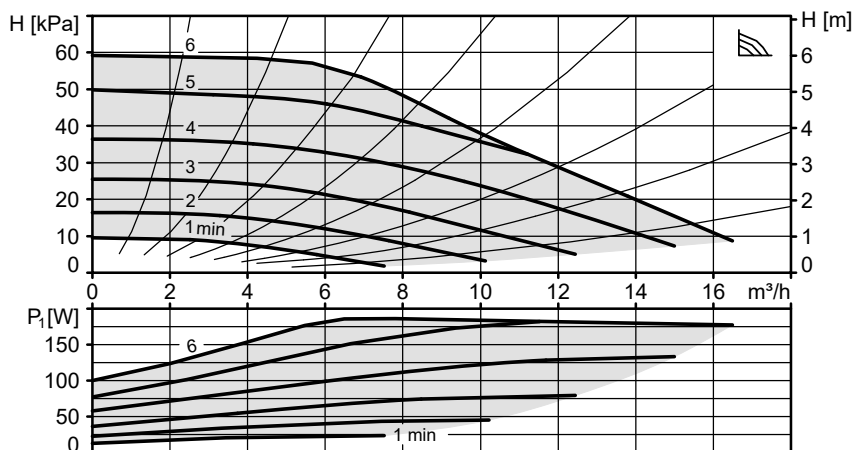
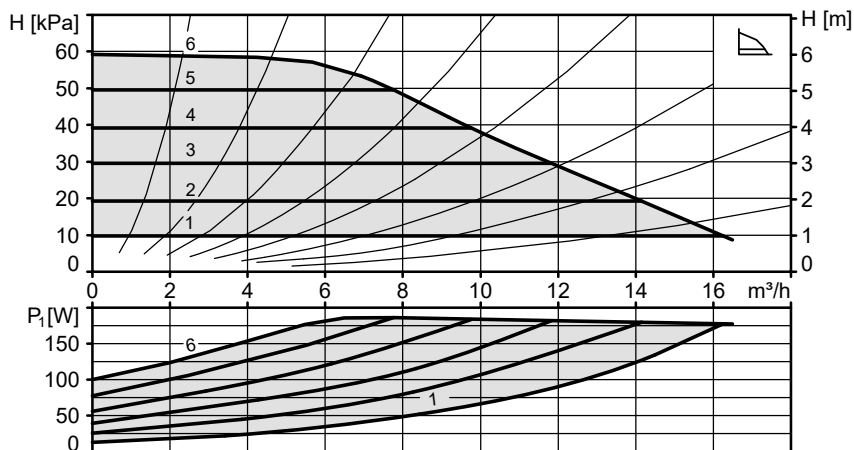
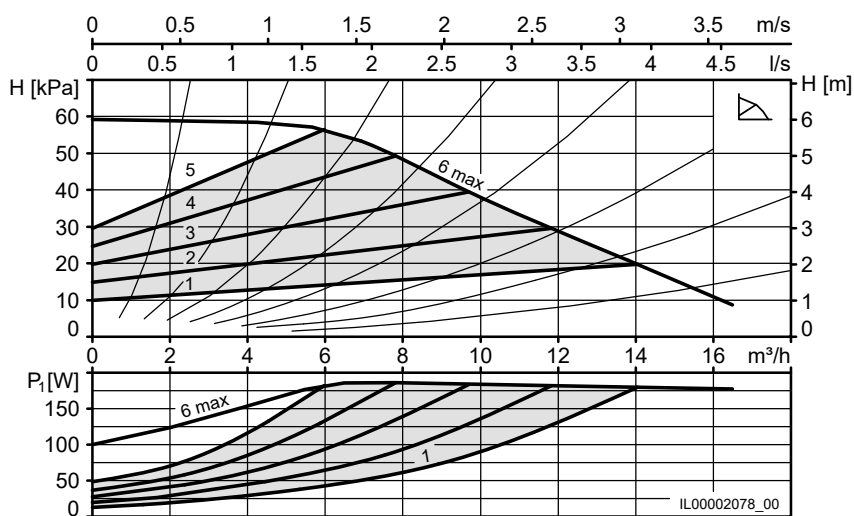
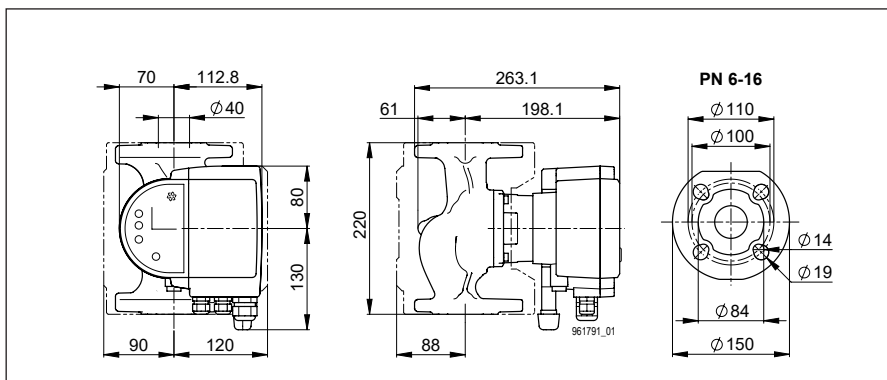
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

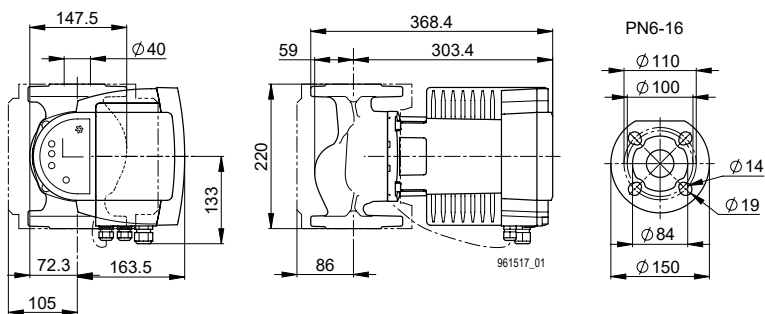
- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModulA 40-6 220 RED	7000000074



ModulA 40-8 220 RED

Version	T2 M
Nominal width	DN 40
Max. flow head H	8 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	16.3 kg



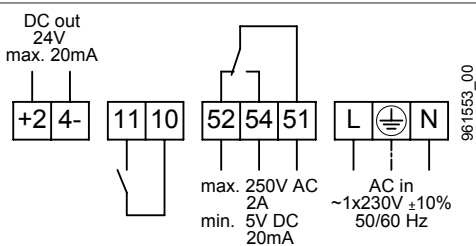
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	18-264 W
Nominal current	0.19-1.23 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

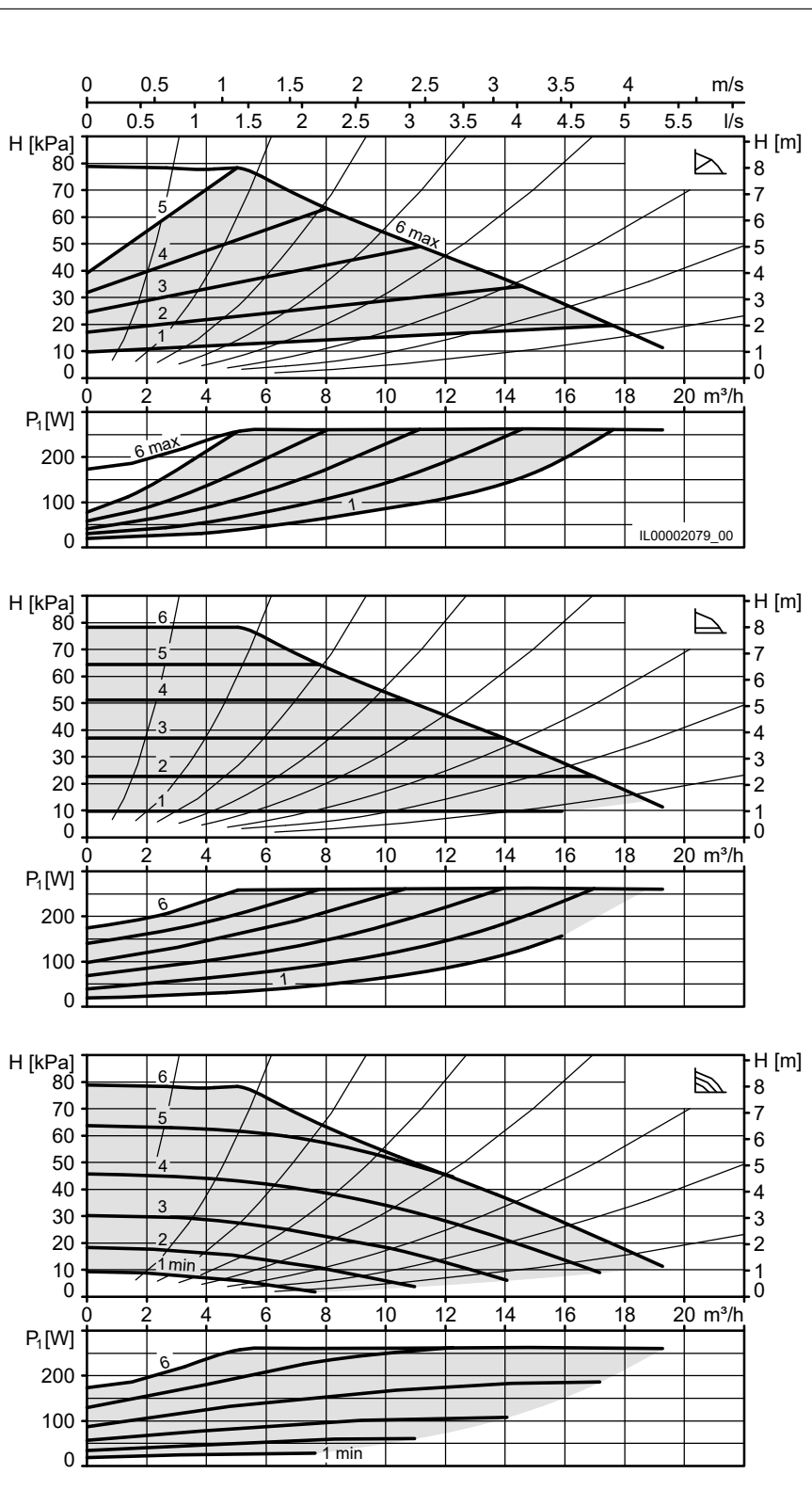
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

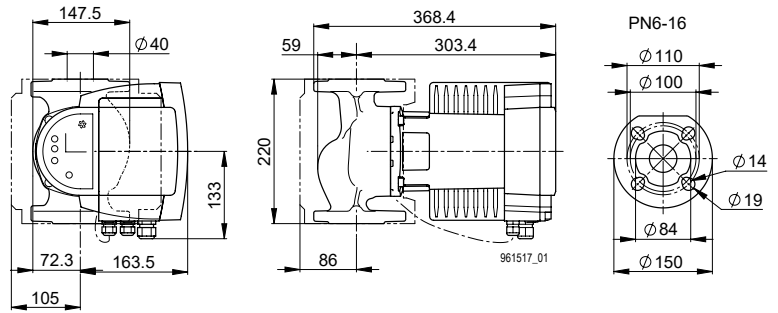
- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModulA 40-8 220 RED	7000000077



ModuA 40-10 220 RED

Version	T2 M
Nominal width	DN 40
Max. flow head H	10 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	16.3 kg



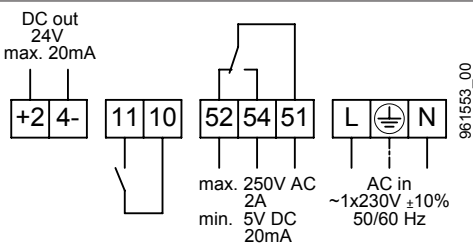
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	18-352 W
Nominal current	0.18-1.60 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

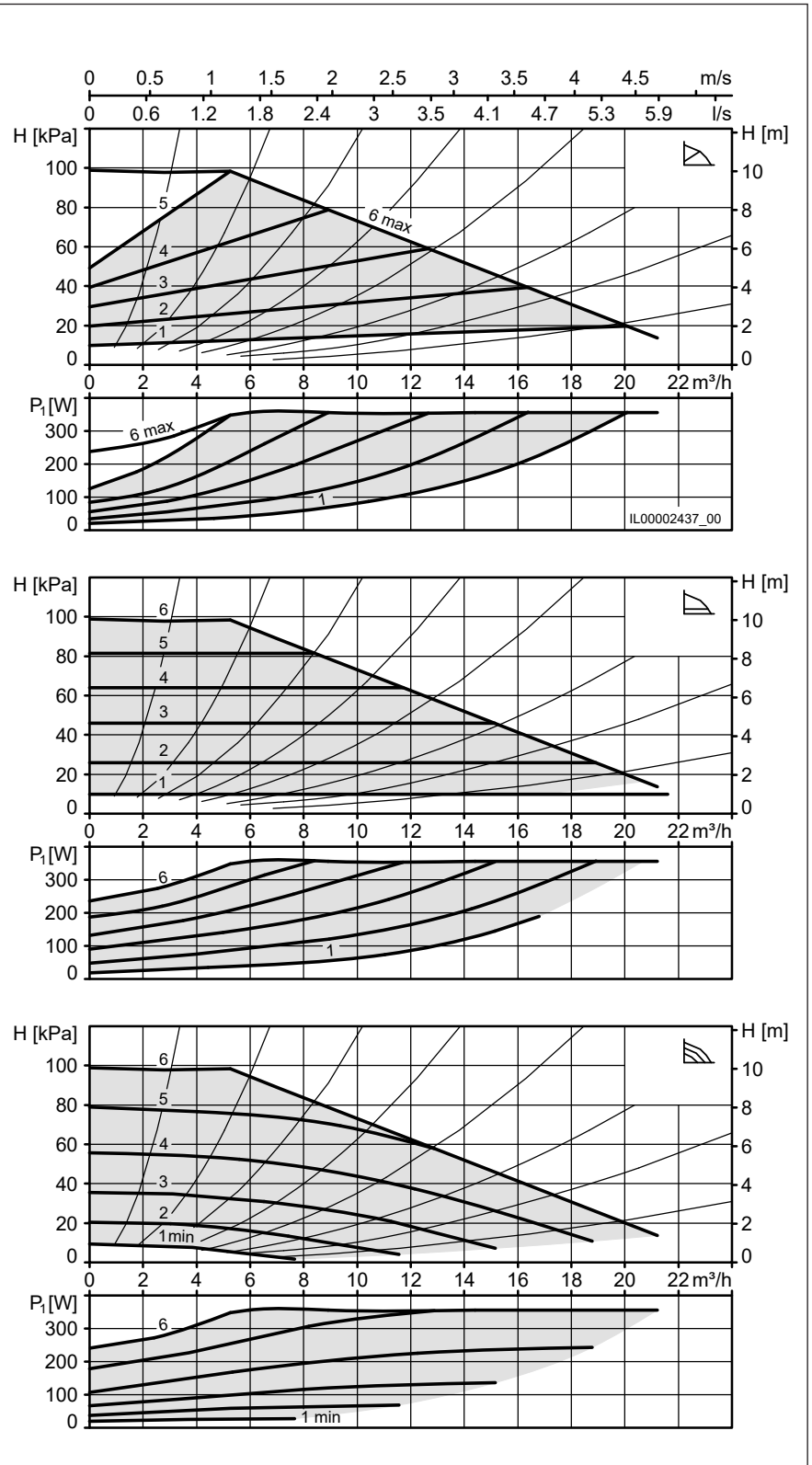
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 40-10 220 RED	7000000078

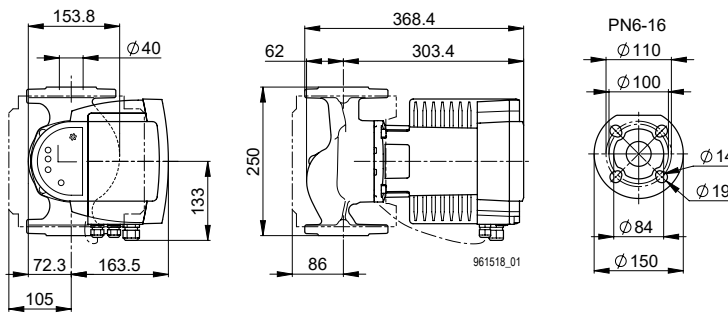


Heating



ModuA 40-12 250 RED

Version	T2 M
Nominal width	DN 40
Max. flow head H	12 m
Overall length	250 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	16.1 kg



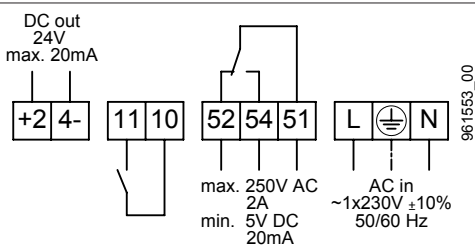
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	16-423 W
Nominal current	0.17-1.93 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

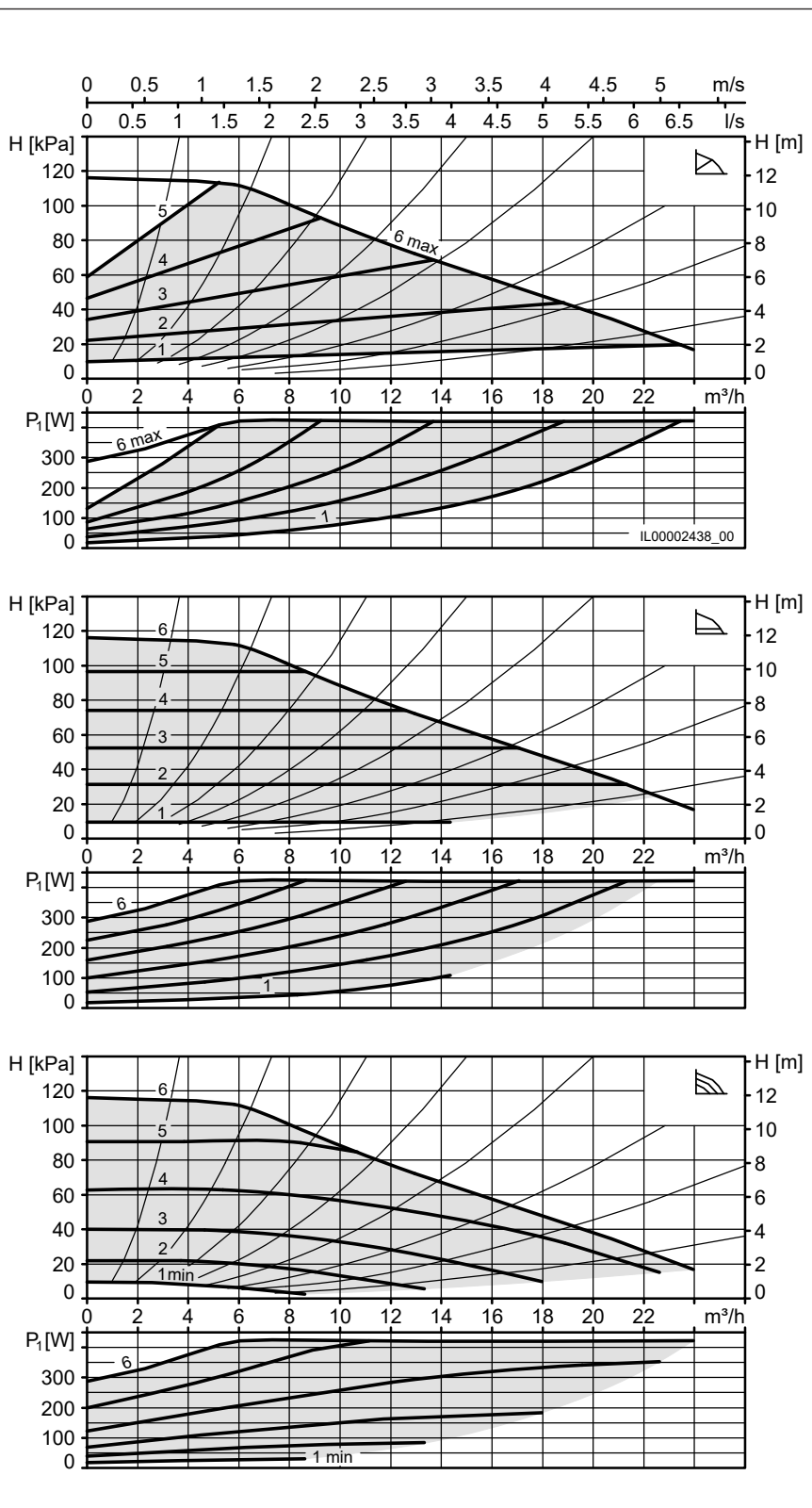
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

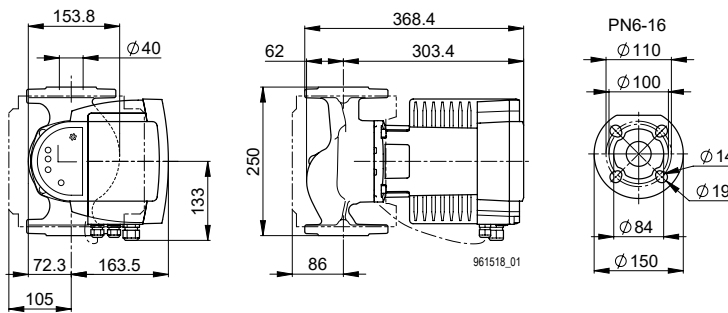
Type	Art. no.
ModuA 40-12 250 RED	7000000079



Heating

ModulA 40-18 250 RED

Version	T2 M
Nominal width	DN 40
Max. flow head H	18 m
Overall length	250 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	16.1 kg



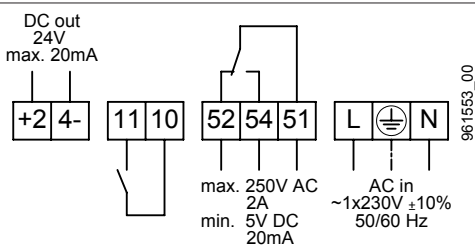
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	16-600 W
Nominal current	0.17-2.70 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

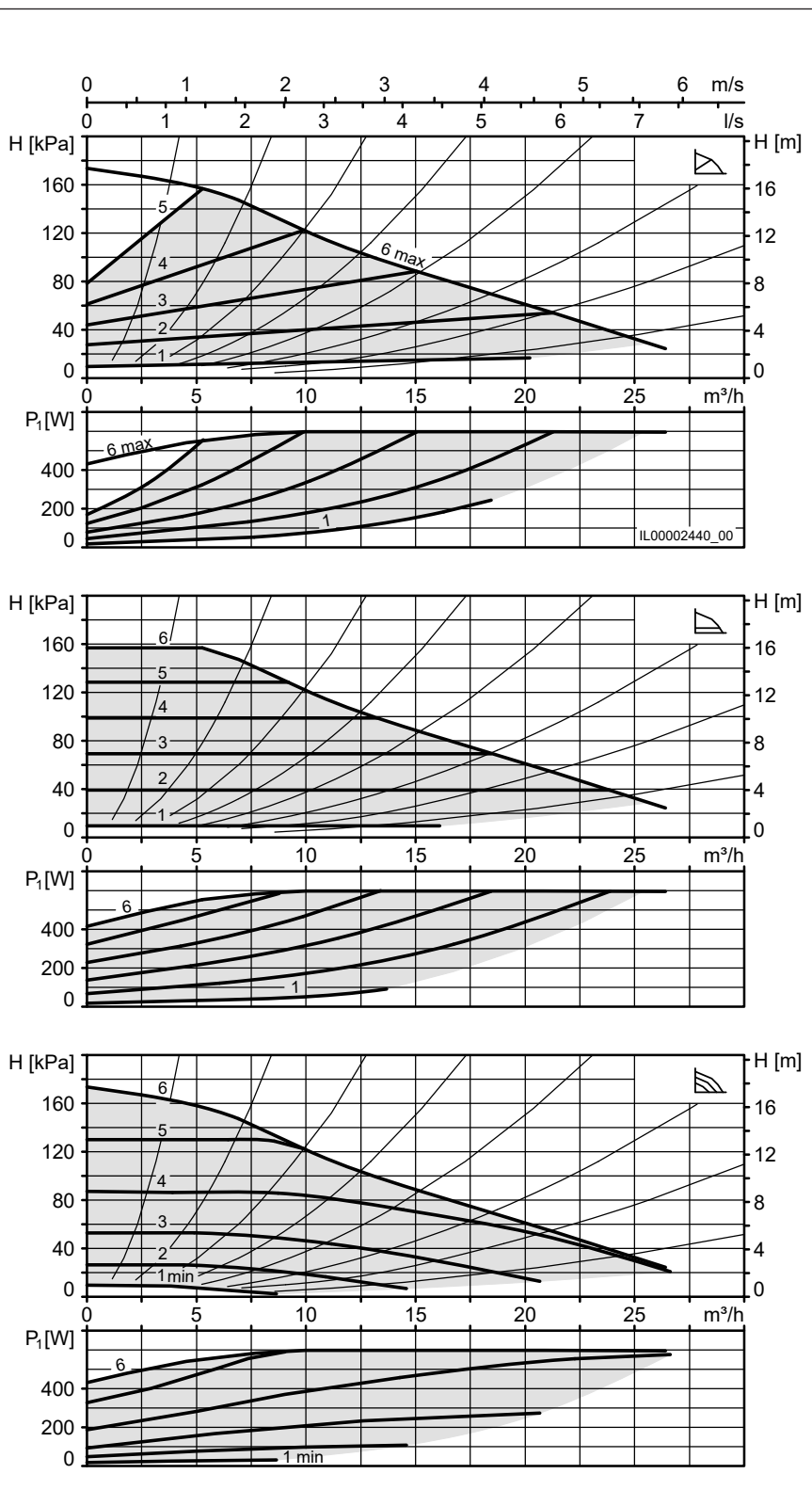
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModulA 40-18 250 RED	7000000080



ModuA 50-6 240 RED

Version	T2 M
Nominal width	DN 50
Max. flow head H	6 m
Overall length	240 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	17.6 kg

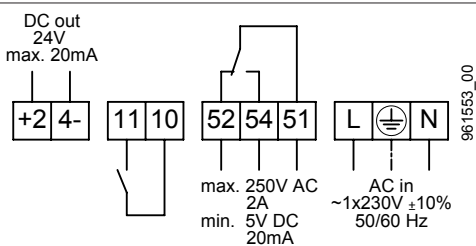
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	21-249 W
Nominal current	0.20-1.15 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.40 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

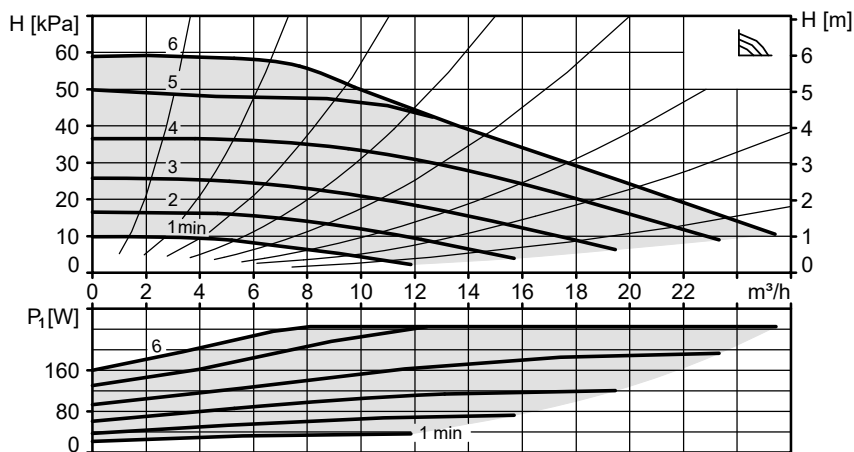
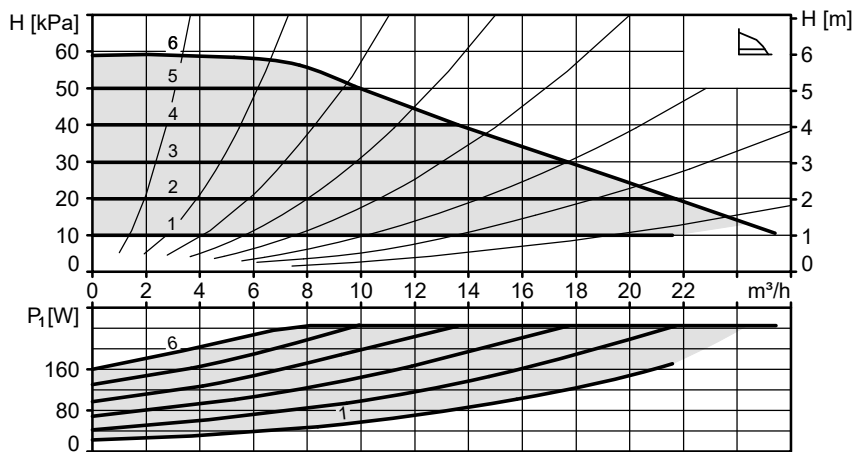
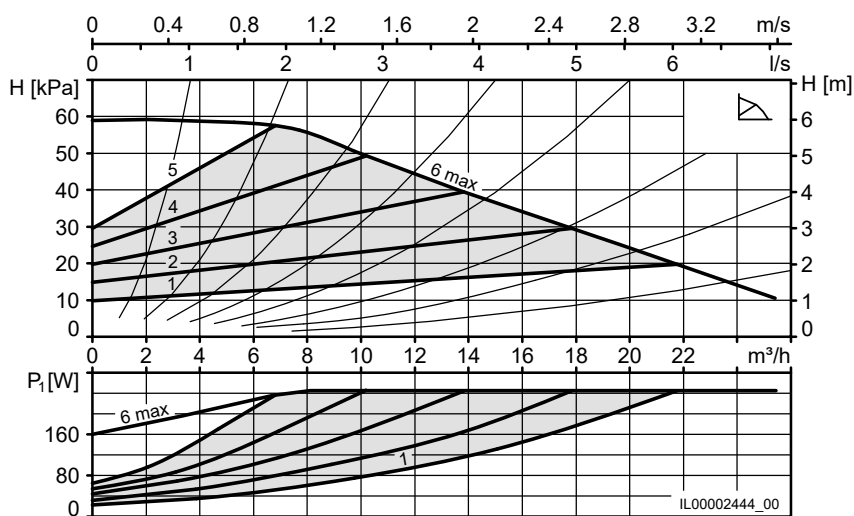
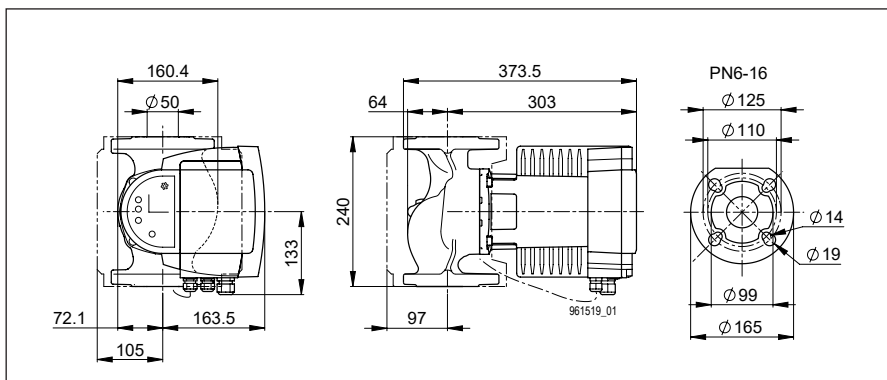
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

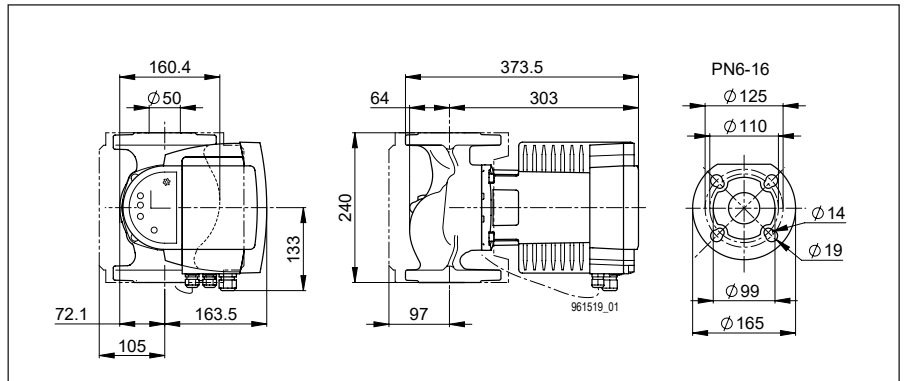
Type	ModuA 50-6 240 RED	Art. no.	7000000081
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Heating

ModulA 50-8 240 RED

Version	T2 M
Nominal width	DN 50
Max. flow head H	8 m
Overall length	240 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	17.6 kg



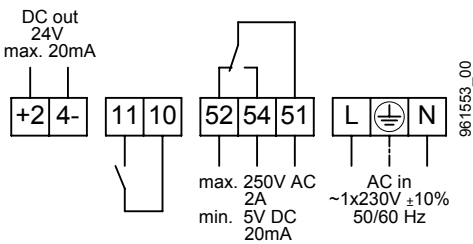
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	21-326 W
Nominal current	0.20-1.49 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.40 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

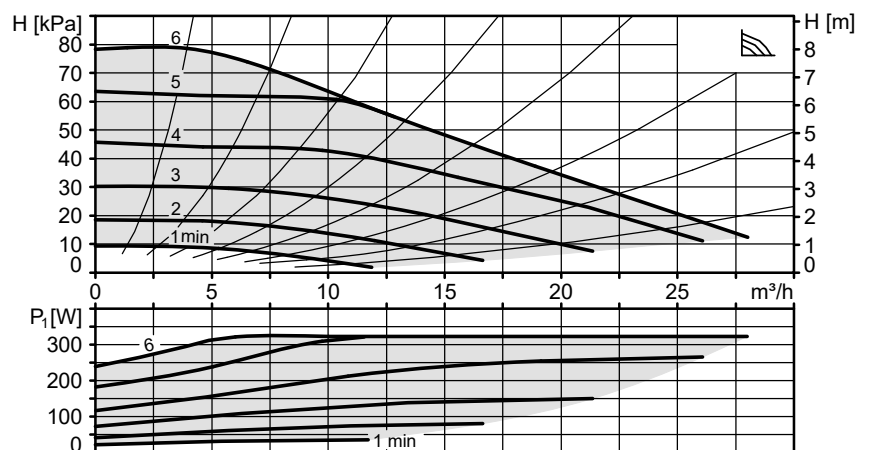
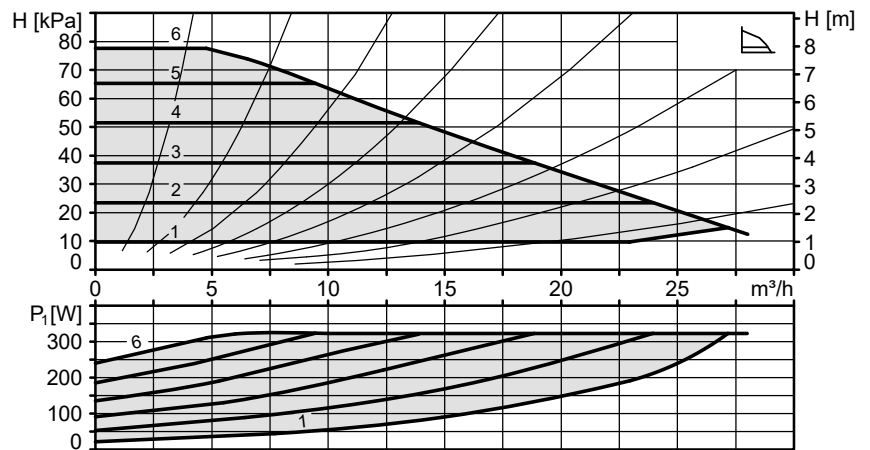
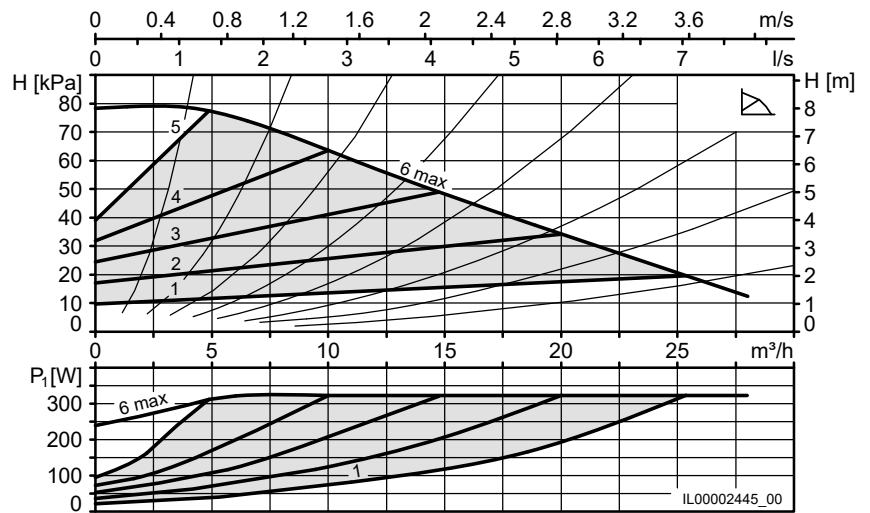
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModulA 50-8 240 RED	7000000083



Heating



ModuA 50-11 220 RED

Version	T2 S
Nominal width	DN 50
Max. flow head H	11 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	8.8 kg

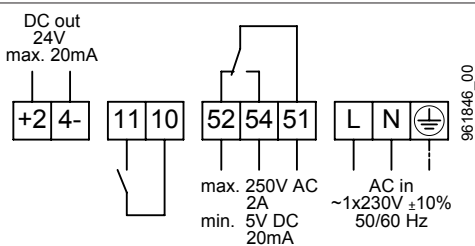
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-182 W
Nominal current	0.08-1.39 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

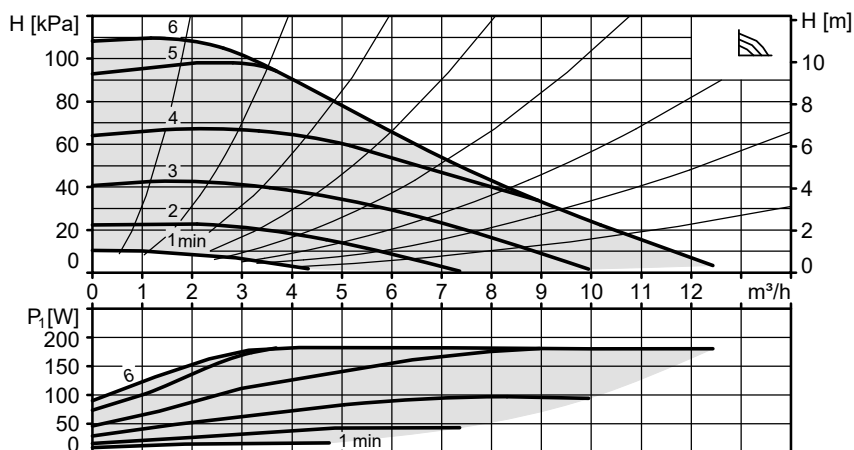
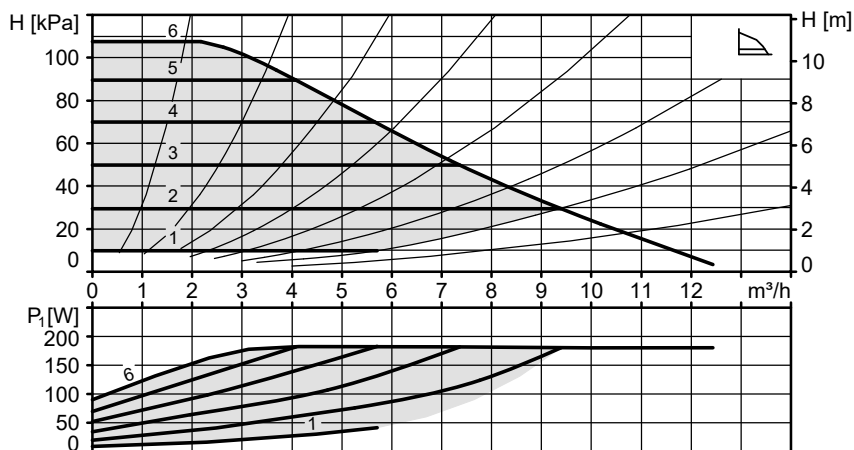
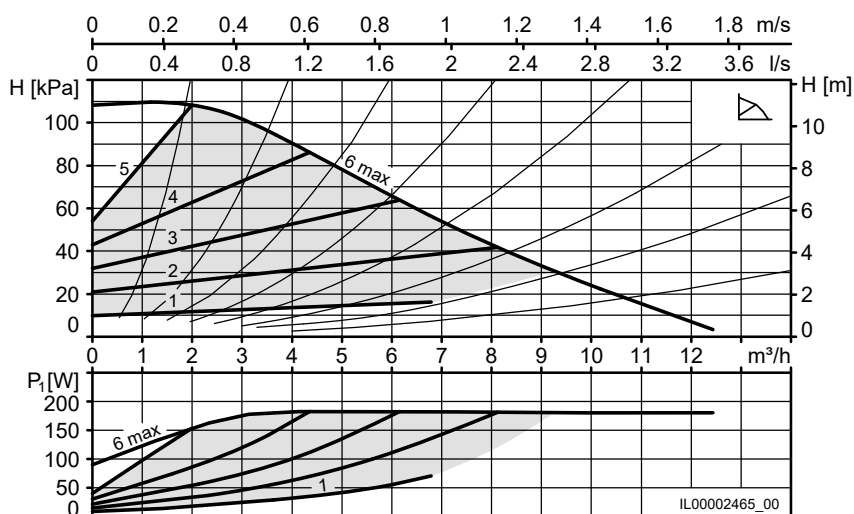
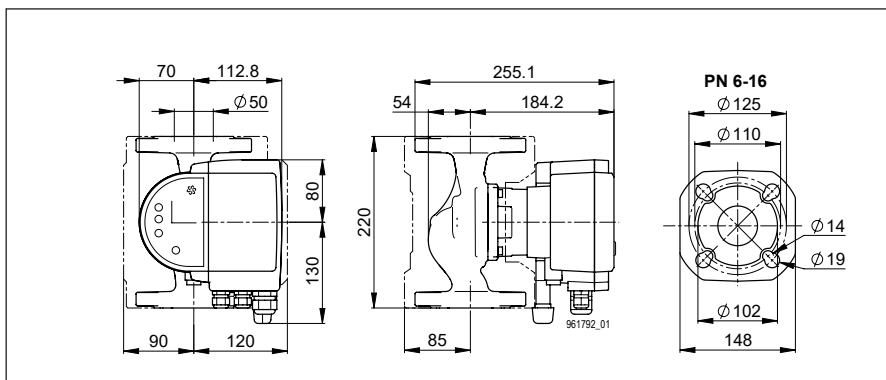
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

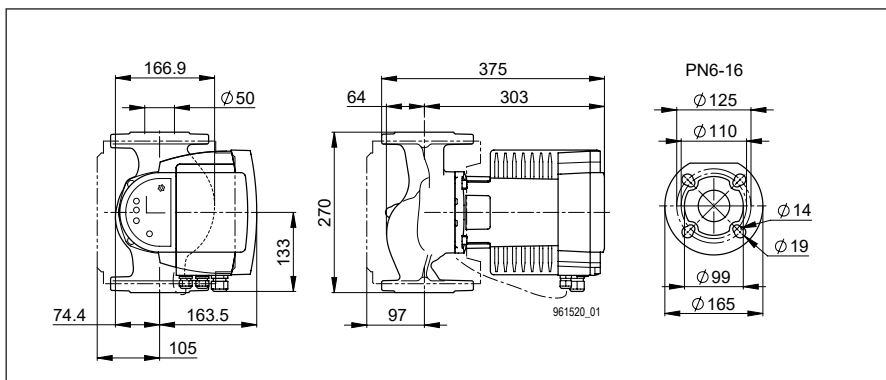
- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 50-11 220 RED	7000000075



ModuA 50-12 270 RED

Version	T2 M
Nominal width	DN 50
Max. flow head H	12 m
Overall length	270 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	18.1 kg



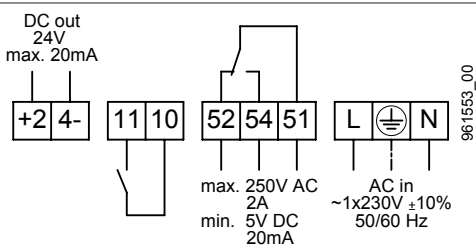
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	21-488 W
Nominal current	0.20-2.23 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

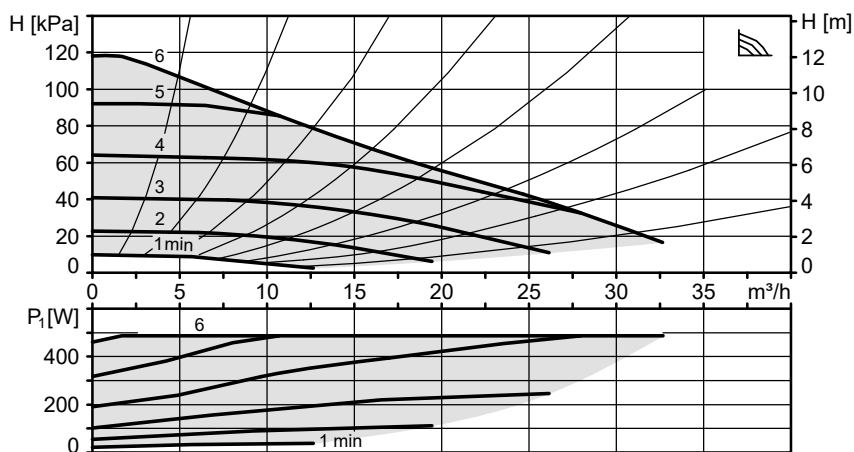
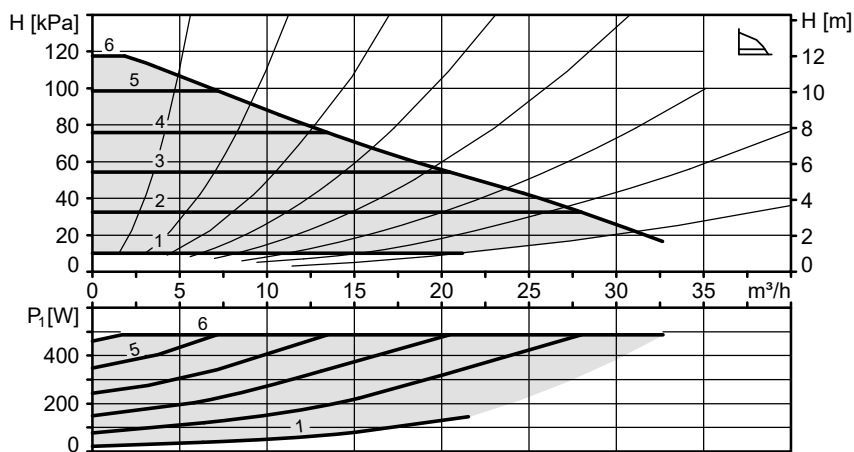
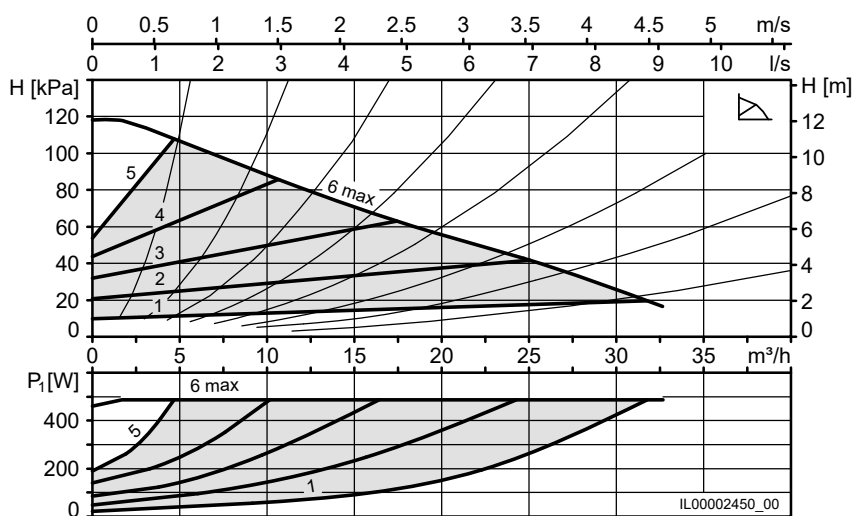
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 50-12 270 RED	7000000084



ModulA 50-18 270 RED

Version	T2 M
Nominal width	DN 50
Max. flow head H	18 m
Overall length	270 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	18.8 kg

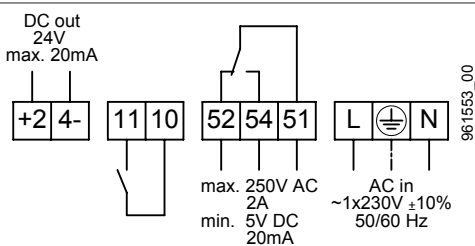
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	21-767 W
Nominal current	0.24-3.44 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

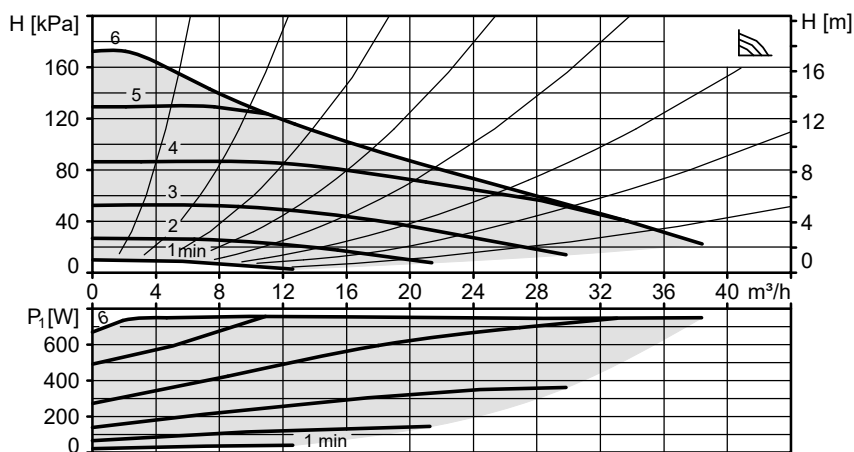
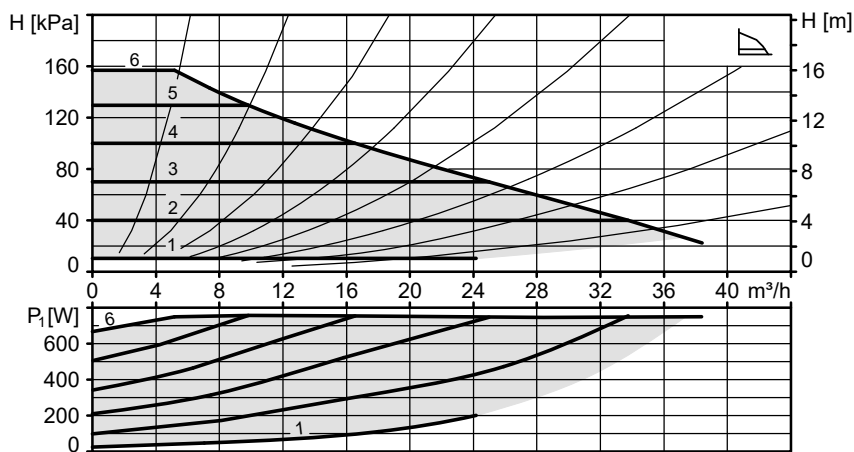
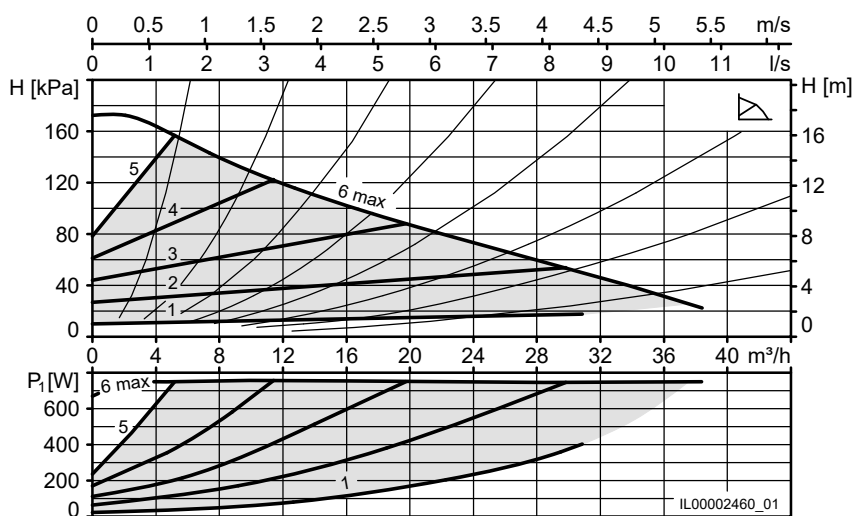
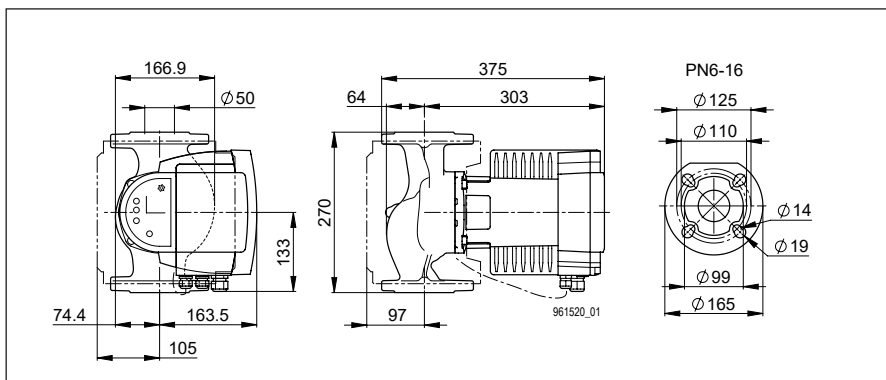
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

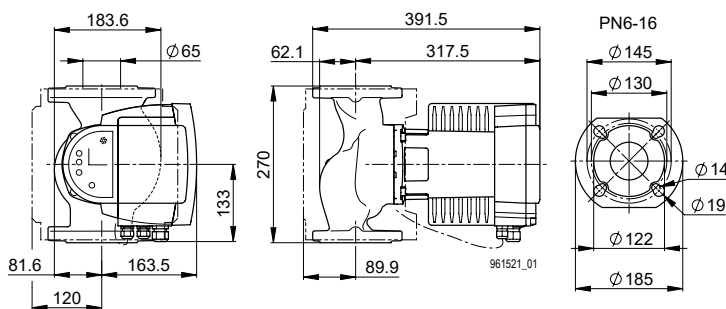
- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModulA 50-18 270 RED	7000000085



ModulA 65-6 270 RED

Version	T2 M
Nominal width	DN 65
Max. flow head H	6 m
Overall length	270 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	20.6 kg



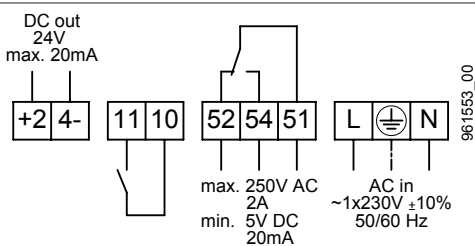
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	23-355 W
Nominal current	0.22-1.58 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

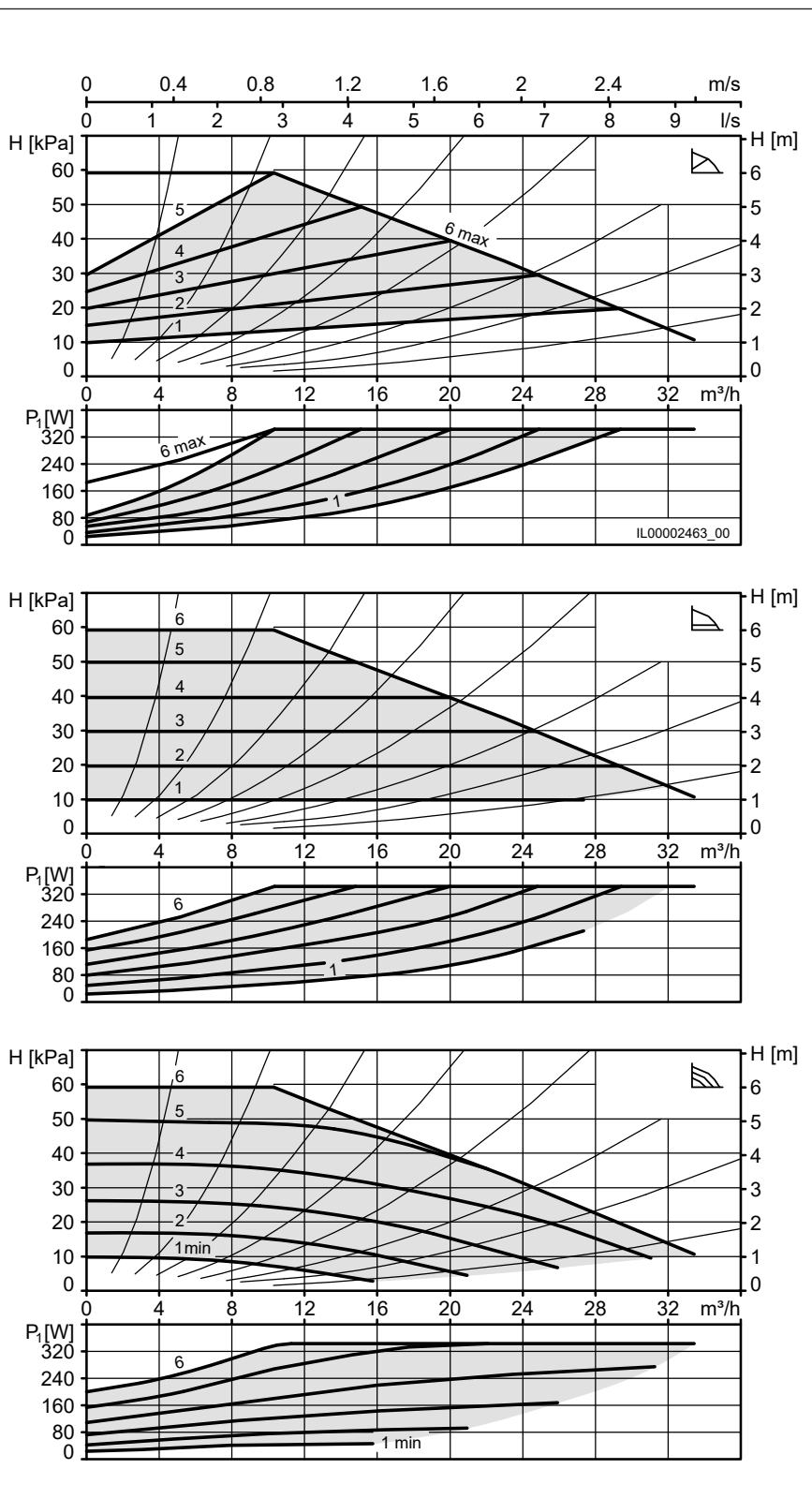
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModulA 65-6 270 RED	7000000086

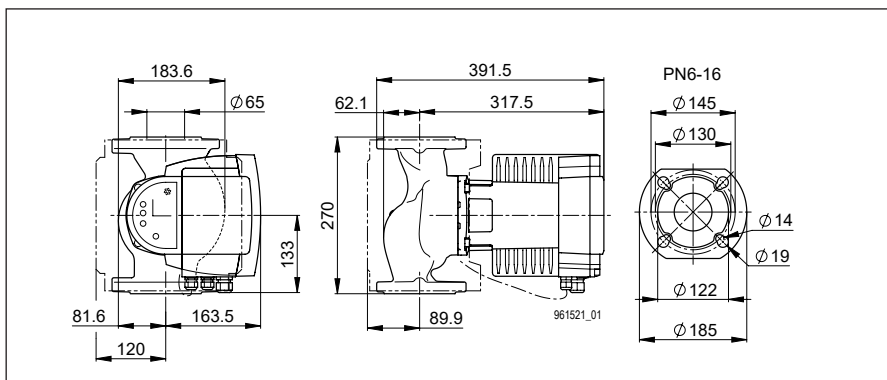


Heating



ModulA 65-8 270 RED

Version	T2 M
Nominal width	DN 65
Max. flow head H	8 m
Overall length	270 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	20.6 kg



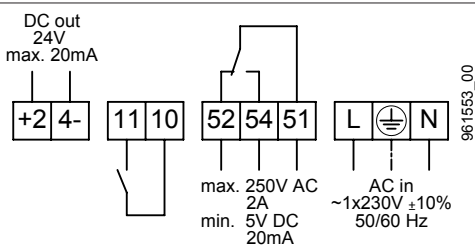
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	24-450 W
Nominal current	0.23-2.05 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+2-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

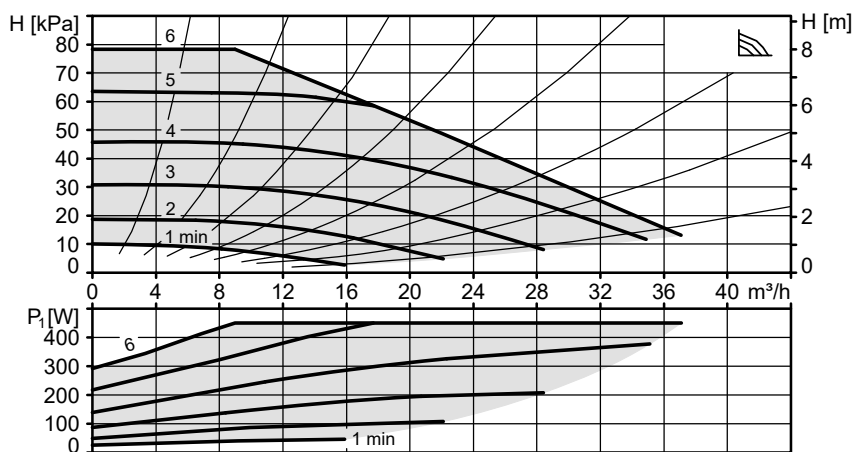
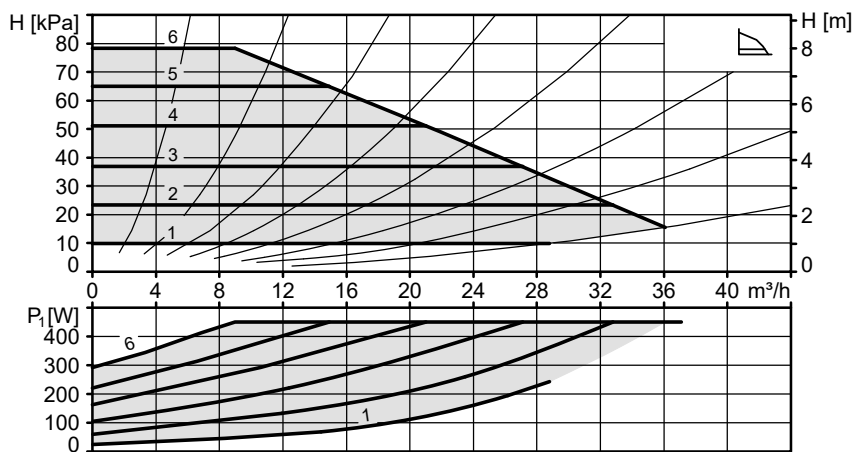
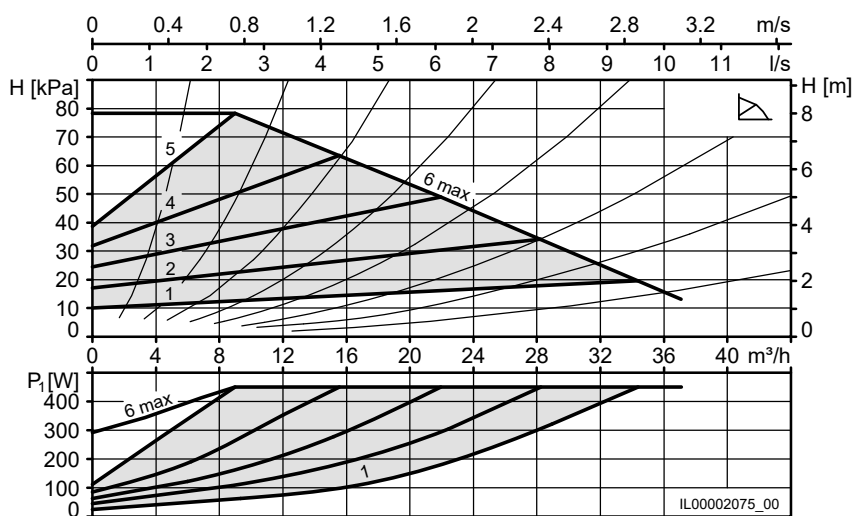
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

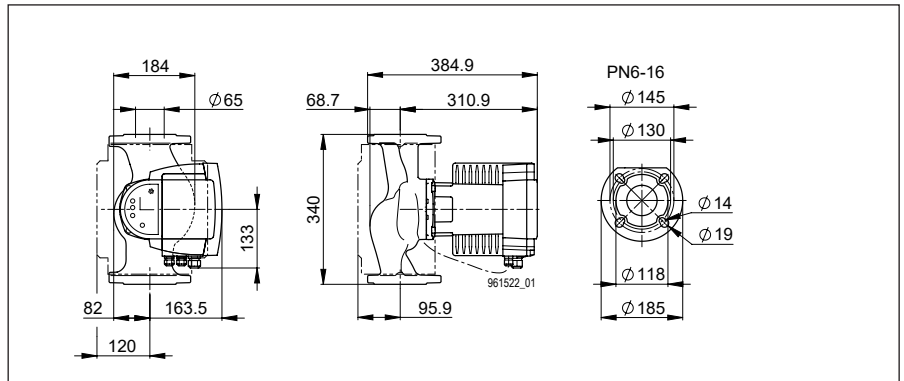
- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModulA 65-8 270 RED	7000000087



ModuA 65-12 340 RED

Version	T2 M
Nominal width	DN 65
Max. flow head H	12 m
Overall length	340 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	21.5 kg



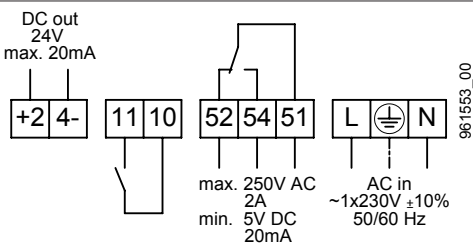
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	25-759 W
Nominal current	0.23-3.36 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

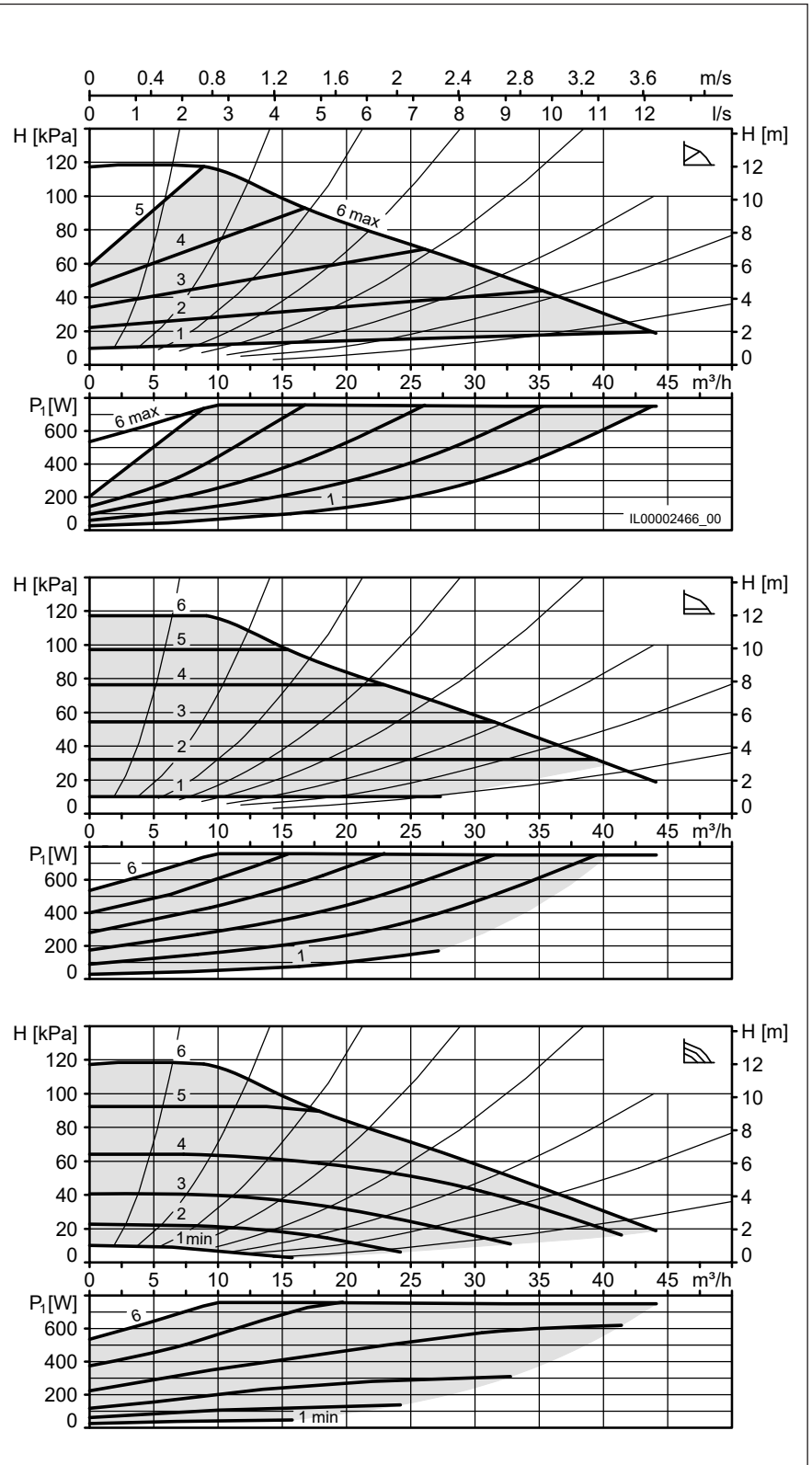
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 65-12 340 RED	7000000089

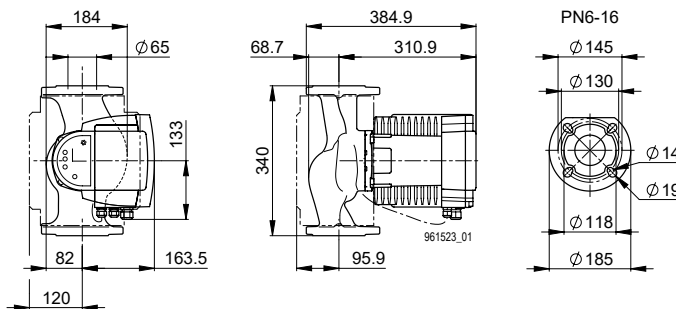


Heating



ModuA 65-15 340 RED

Version	T2 L
Nominal width	DN 65
Max. flow head H	15 m
Overall length	340 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	24.0 kg



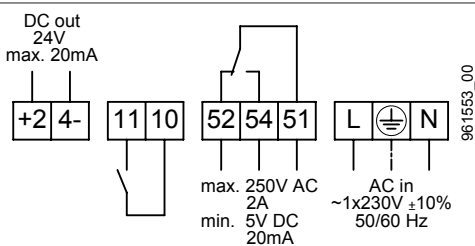
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	30-1343 W
Nominal current	0.27-6.08 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

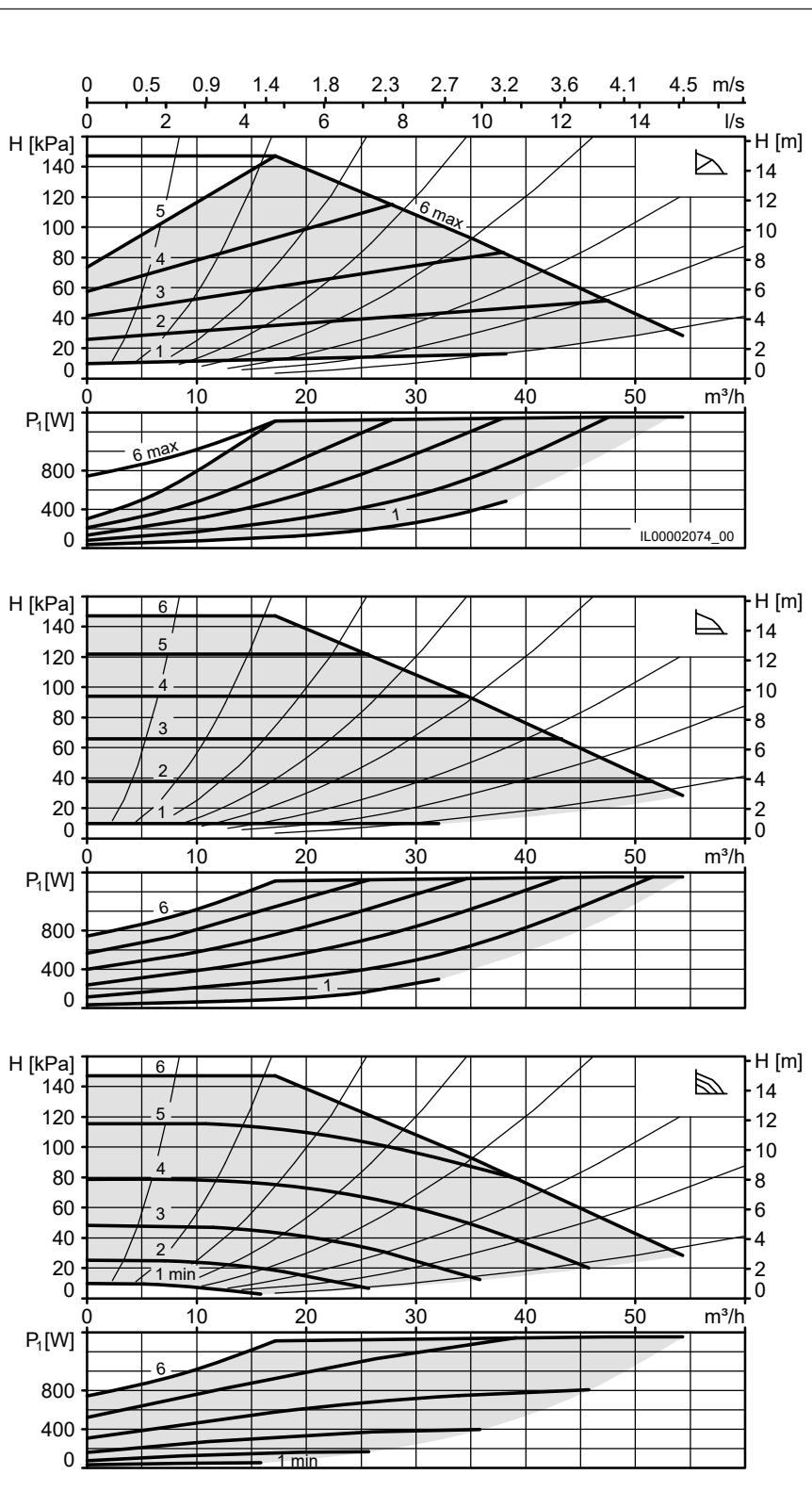
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 65-15 340 RED	7000000054



Heating

ModulA 80-8 360 RED PN6

ModulA 80-8 360 RED PN10/16

Version	T2 M
Nominal width	DN 80
Max. flow head H	8 m
Overall length	360 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	29.1 kg

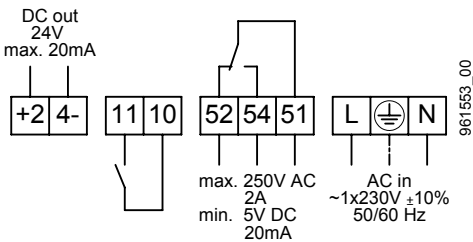
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	25-685 W
Nominal current	0.24-3.09 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.50 bar
at a water temp. of 95 °C	1.00 bar
at a water temp. of 110 °C	1.50 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

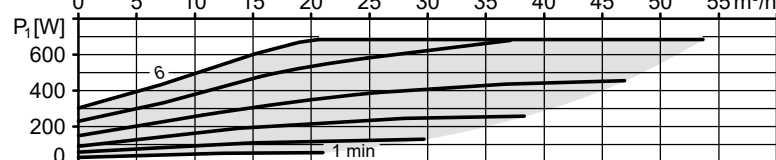
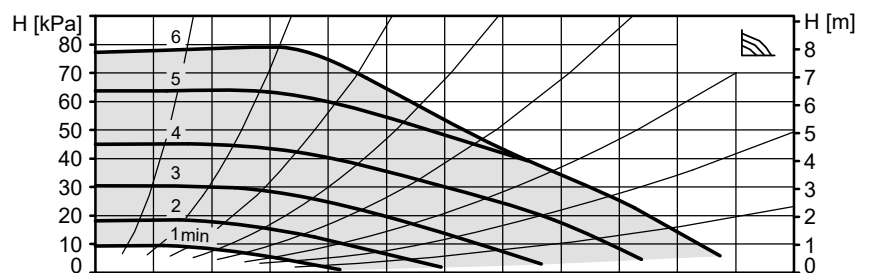
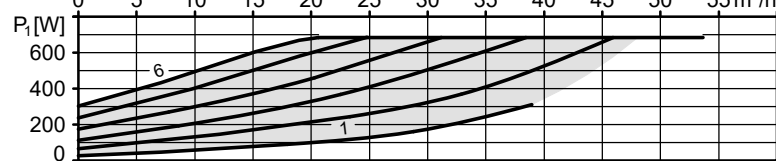
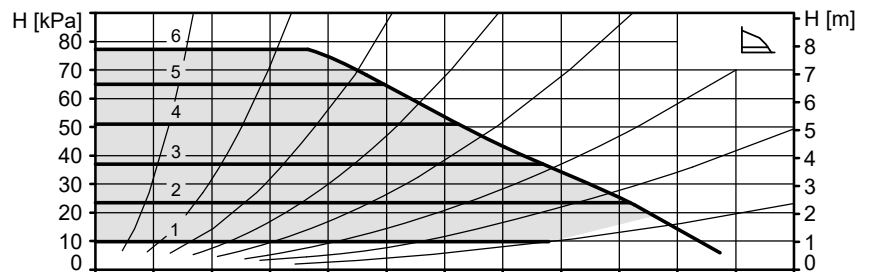
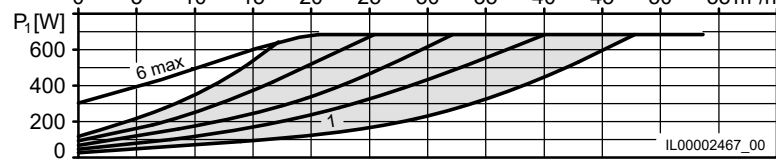
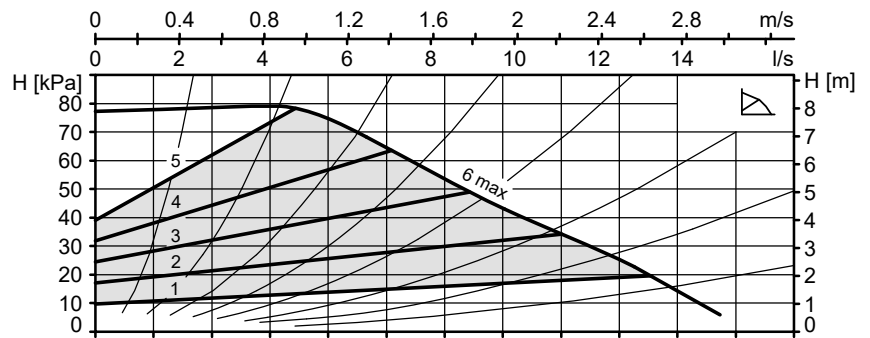
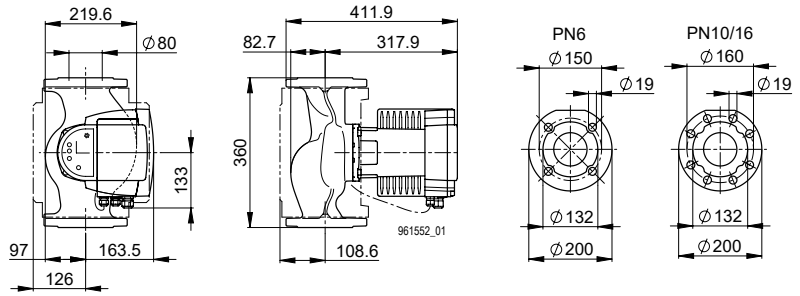
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6 or PN 10/16

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik

Type	Art. no.
ModulA 80-8 360 RED PN6	7000000090
ModulA 80-8 360 RED PN10/16	7000000091



ModulA 80-12 360 RED PN6

ModulA 80-12 360 RED PN10/16

Version	T2 L
Nominal width	DN 80
Max. flow head H	12 m
Overall length	360 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	29.1 kg

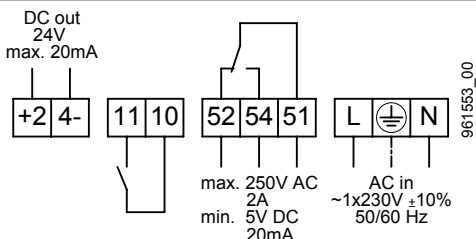
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	30-1476 W
Nominal current	0.27-6.63 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.50 bar
at a water temp. of 95 °C	1.00 bar
at a water temp. of 110 °C	1.50 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

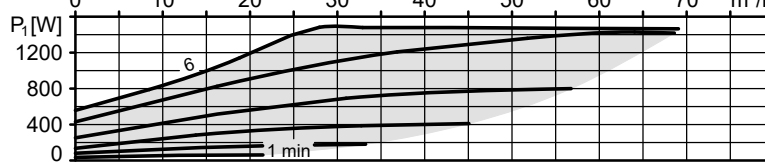
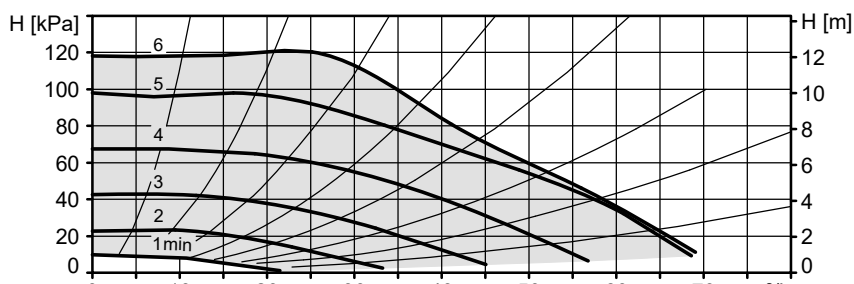
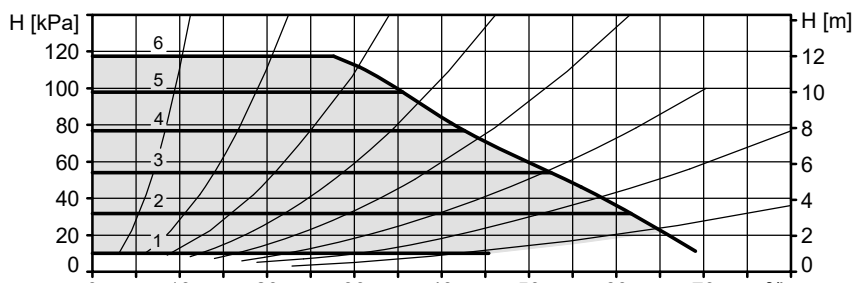
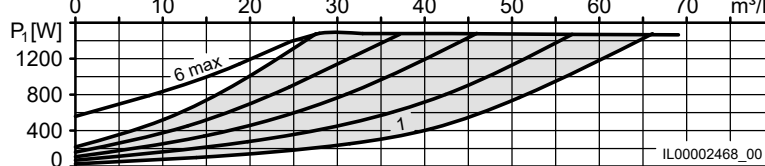
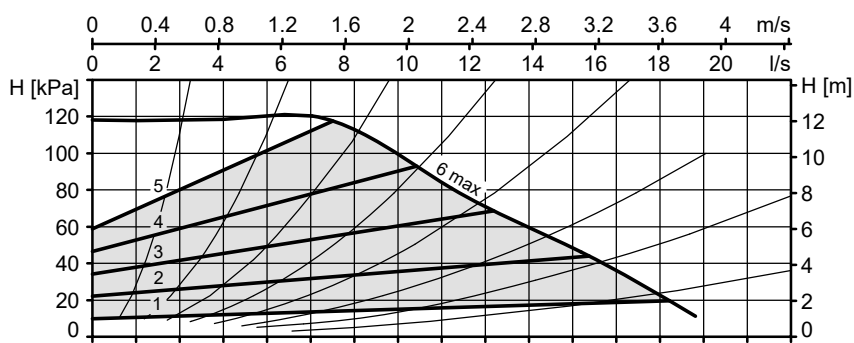
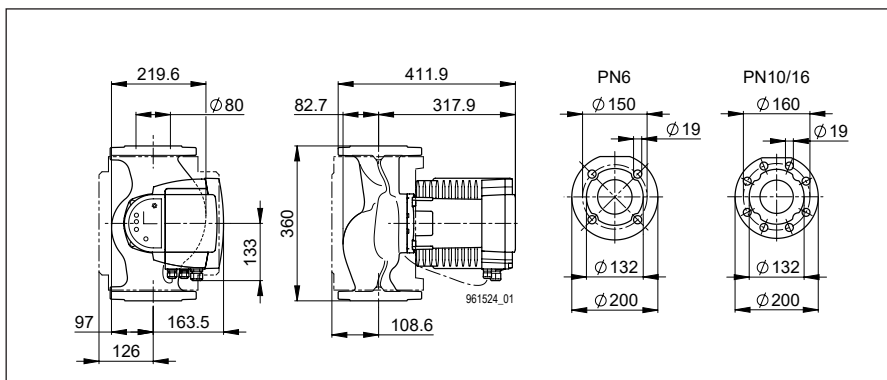
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6 or PN 10/16

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik

Type	Art. no.
ModulA 80-12 360 RED PN6	7000000092
ModulA 80-12 360 RED PN10/16	7000000093



ModulA 100-8 450 RED PN6

ModulA 100-8 450 RED PN10/16

Version	T2 L
Nominal width	DN 100
Max. flow head H	8 m
Overall length	450 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	34.0 kg

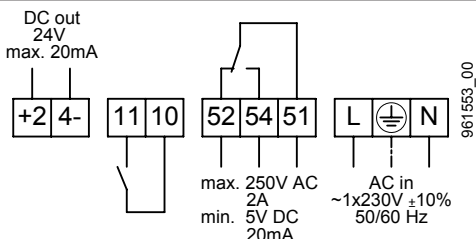
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	30-1082 W
Nominal current	0.28-4.85 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

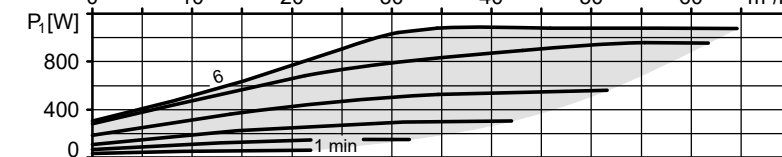
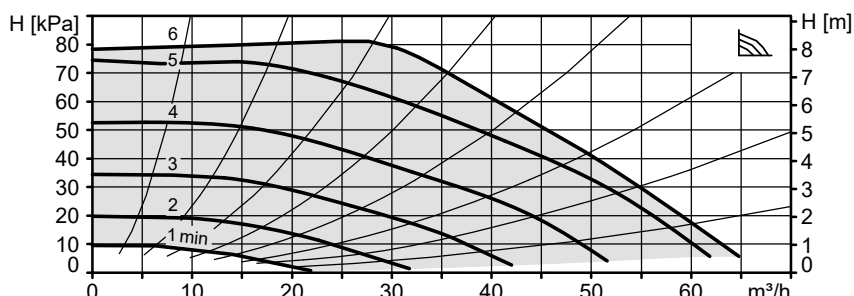
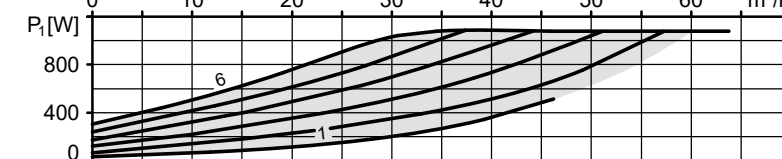
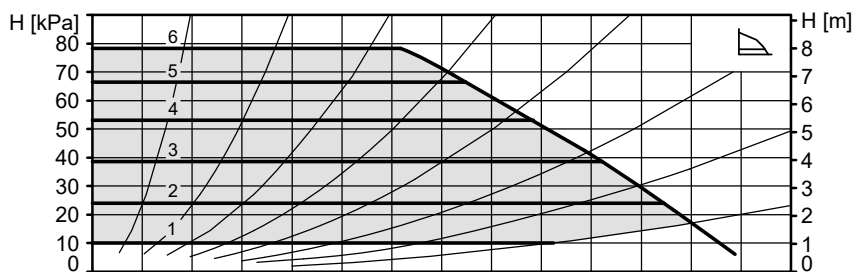
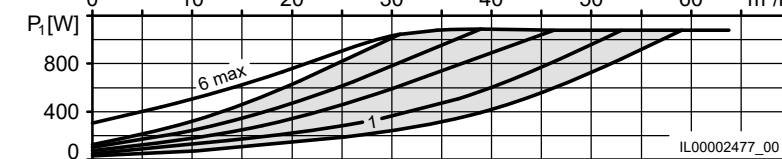
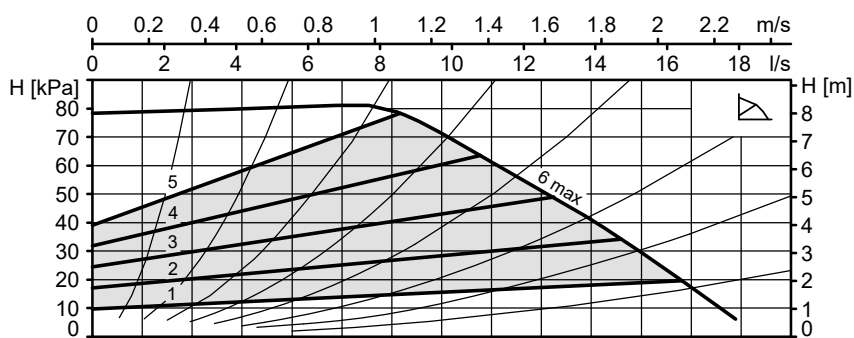
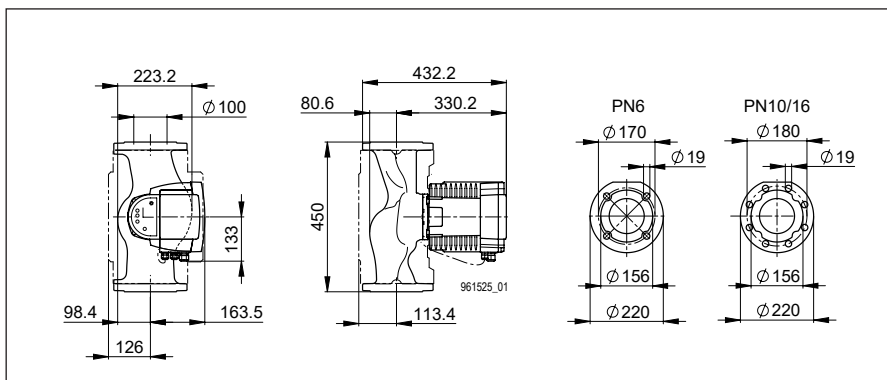
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6 or PN 10/16

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik

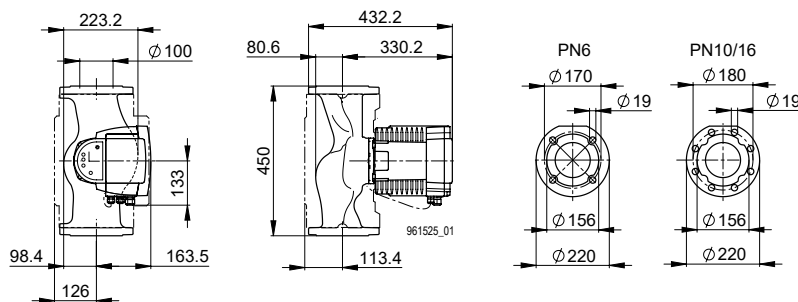
Type	Art. no.
ModulA 100-8 450 RED PN6	7000000094
ModulA 100-8 450 RED PN10/16	7000000095



ModulA 100-12 450 RED PN6

ModulA 100-12 450 RED PN10/16

Version	T2 L
Nominal width	DN 100
Max. flow head H	12 m
Overall length	450 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	34.0 kg



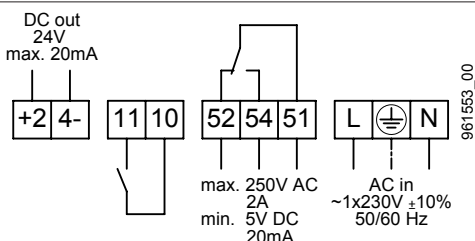
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	30-1551 W
Nominal current	0.28-6.81 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

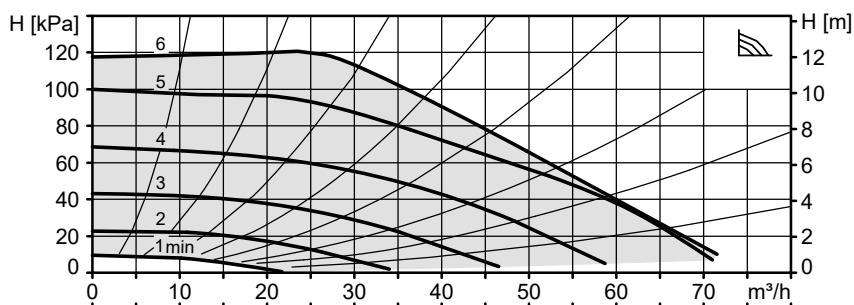
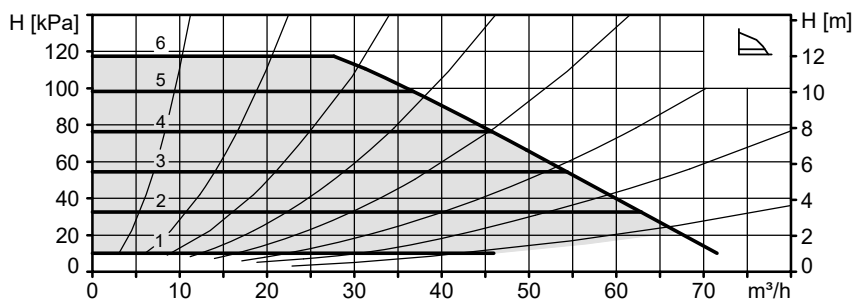
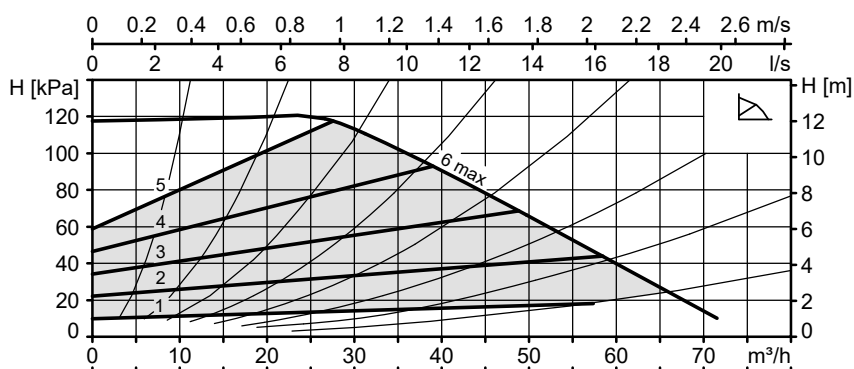
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6 or PN 10/16

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik

Type	Art. no.
ModulA 100-12 450 RED PN6	7000000096
ModulA 100-12 450 RED PN10/16	7000000097



Premium heating circulation pumps

ModulA-D... RED T2 with threaded connection



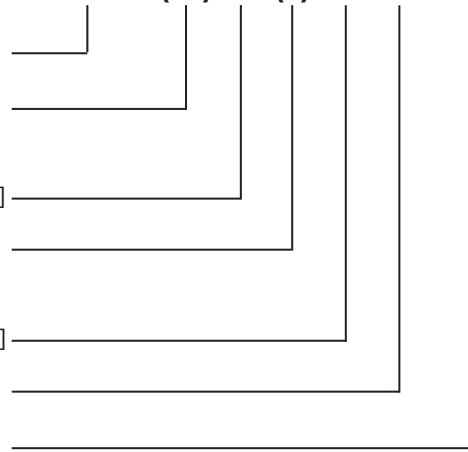
Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar	EEI value
ModulA-D 32-6 180 RED	7000000098	32	6	180	G 2"	10	≤0.18
ModulA-D 32-8 180 RED	7000000099	32	8	180	G 2"	10	≤0.18
ModulA-D 32-12 180 RED	7000000100	32	12	180	G 2"	10	≤0.18

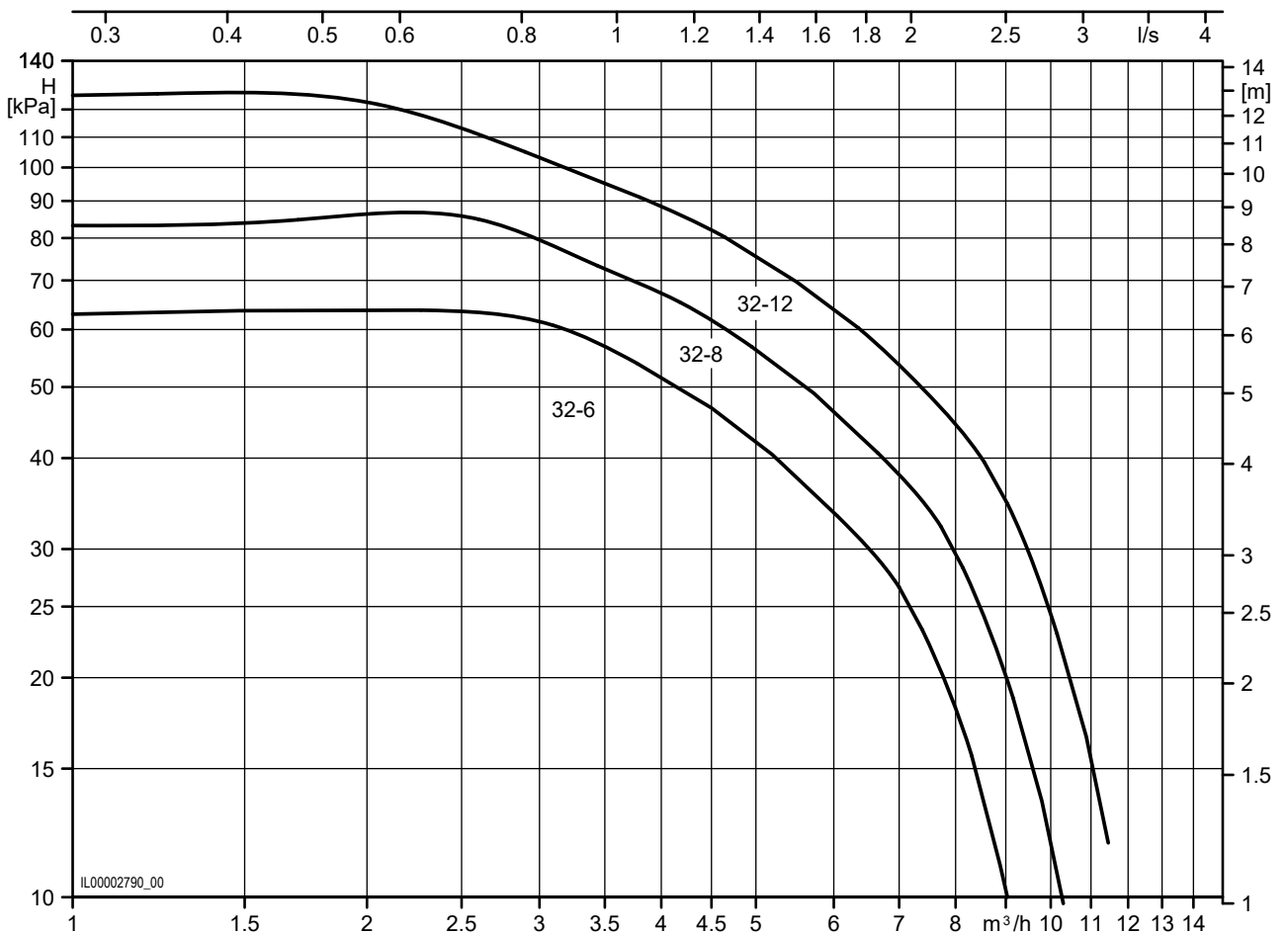
Order reference

Modula (-D) 32 (F) -6 220 RED

- Series
- Single pump
- Twin pump (-D)
- Nominal width (DN) [mm]
- Pipeline connection
- Flange (F)
- Discharge head max. [m]
- Installation height [mm]
- Field of application
- Heating (RED)
- Cold water (GREEN)
- Service water (BLUE)



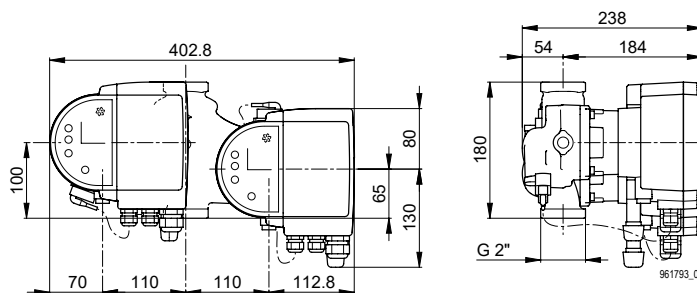
Heating



IL00002790_00

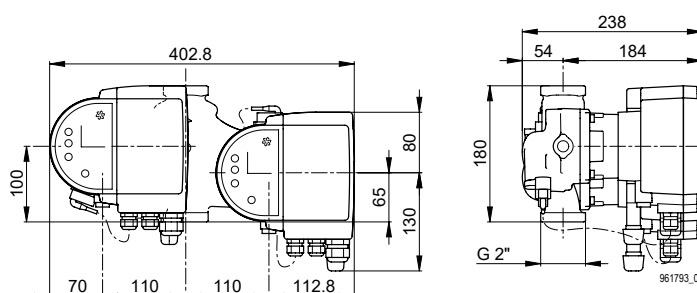
Modula-D 32-6 180 RED

Art. no.	7000000098
Version	T2 S
Nominal width	DN 32
Max. flow head H	6 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	11.1 kg
Characteristic curve	see single pump



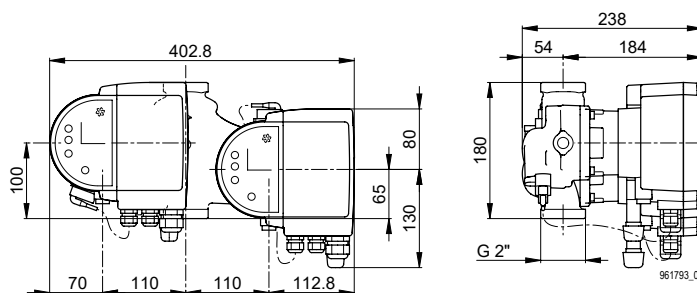
Modula-D 32-8 180 RED

Art. no.	7000000099
Version	T2 S
Nominal width	DN 32
Max. flow head H	8 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	11.1 kg
Characteristic curve	see single pump



Modula-D 32-12 180 RED

Art. no.	7000000100
Version	T2 S
Nominal width	DN 32
Max. flow head H	12 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	11.1 kg
Characteristic curve	see single pump



Premium heating circulation pumps

ModulA-D... RED T2 with flanged connection



Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Flanged connection	Max. operating pressure bar	EEl value
ModulA-D 32F-6 220 RED	7000000716	32	6	220	PN 6	6	≤0.18
ModulA-D 32F-12 220 RED	7000000802	32	12	220	PN 6-16	16	≤0.20
ModulA-D 40-6 220 RED	7000000101	40	6	220	PN 6-16	16	≤0.19
ModulA-D 40-8 220 RED	7000000102	40	8	220	PN 6-16	16	≤0.20
ModulA-D 40-10 220 RED	7000000103	40	10	220	PN 6-16	16	≤0.20
ModulA-D 40-12 250 RED	7000000104	40	12	250	PN 6-16	16	≤0.18
ModulA-D 40-18 250 RED	7000000105	40	18	250	PN 6-16	16	≤0.18
ModulA-D 50-6 240 RED	7000000106	50	6	240	PN 6-16	16	≤0.19
ModulA-D 50-8 240 RED	7000000107	50	8	240	PN 6-16	16	≤0.19
ModulA-D 50-12 270 RED	7000000108	50	12	270	PN 6-16	16	≤0.18
ModulA-D 50-18 270 RED	7000000109	50	18	270	PN 6-16	16	≤0.17
ModulA-D 65-8 340 RED	7000000110	65	8	340	PN 6-16	16	≤0.18
ModulA-D 65-12 340 RED	7000000111	65	12	340	PN 6-16	16	≤0.17
ModulA-D 65-15 340 RED	7000000112	65	15	340	PN 6-16	16	≤0.18
ModulA-D 80-8 360 RED PN6	7000000113	80	8	360	PN 6	6	≤0.17
ModulA-D 80-8 360 RED PN10/16	7000000114	80	8	360	PN 10/16	16	≤0.17
ModulA-D 80-12 360 RED PN6	7000000115	80	12	360	PN 6	6	≤0.17
ModulA-D 80-12 360 RED PN10/16	7000000116	80	12	360	PN 10/16	16	≤0.17
ModulA-D 100-8 450 RED PN6	7000000117	100	8	450	PN 6	6	≤0.18
ModulA-D 100-8 450 RED PN10/16	7000000118	100	8	450	PN 10/16	16	≤0.18
ModulA-D 100-12 450 RED PN6	7000000119	100	12	450	PN 6	6	≤0.18
ModulA-D 100-12 450 RED PN10/16	7000000120	100	12	450	PN 10/16	16	≤0.18

Order reference

Modula (-D) 32 (F) -6 220 RED

Series

Single pump
Twin pump (-D)

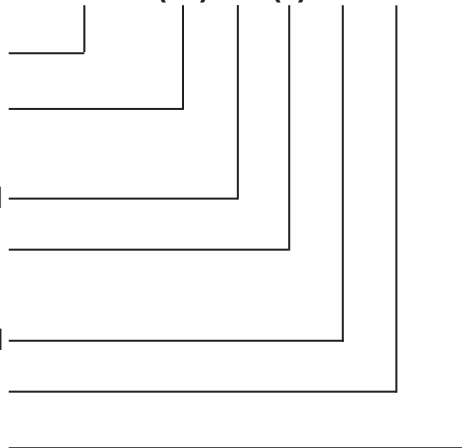
Nominal width (DN) [mm]

Pipeline connection
Flange (F)

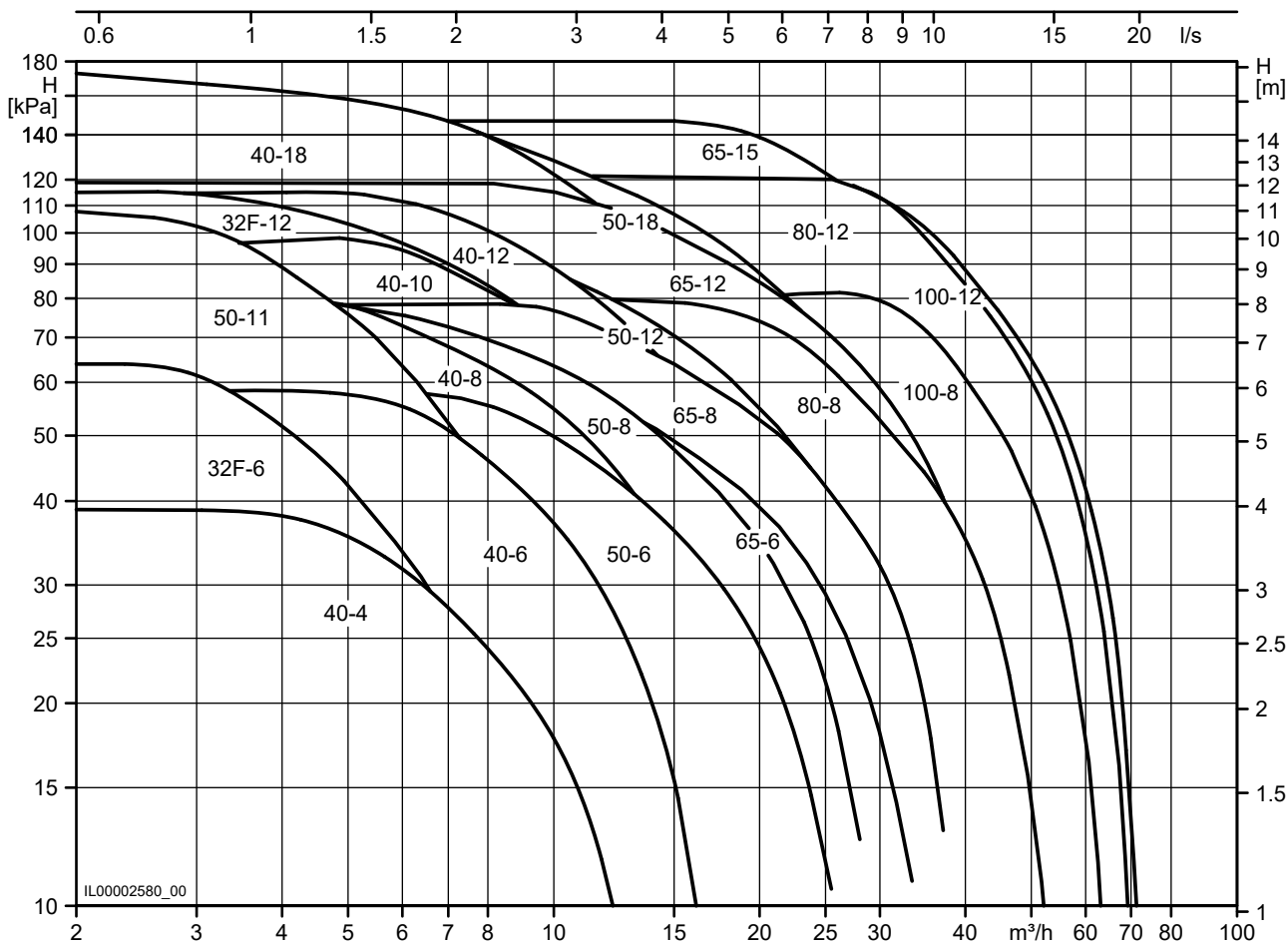
Discharge head max. [m]

Installation height [mm]

Field of application
Heating (RED)
Cold water (GREEN)
Service water (BLUE)

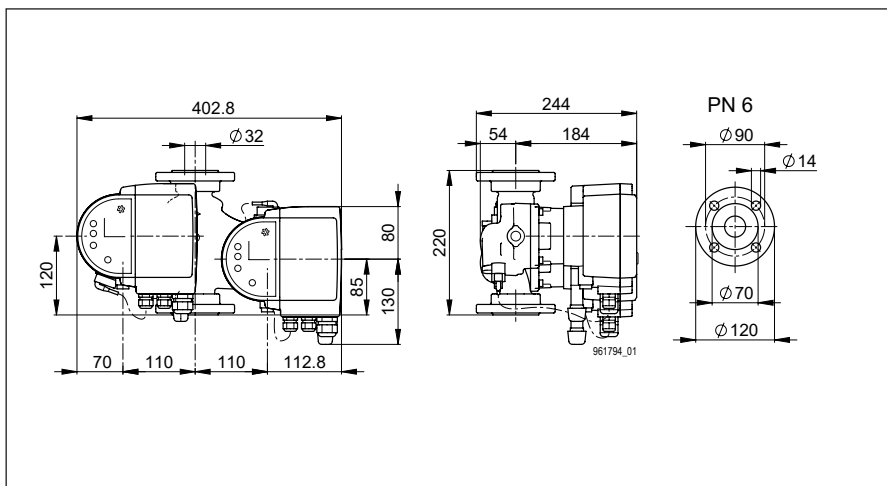


Heating



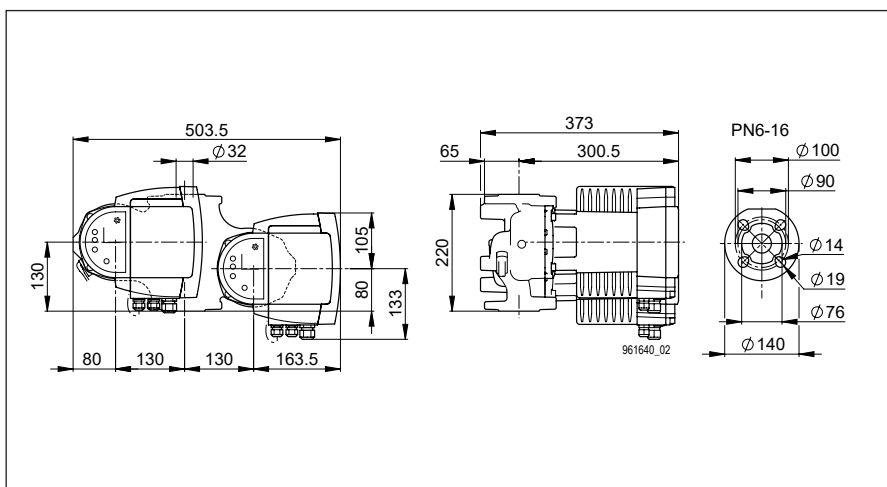
Modula-D 32F-6 220 RED

Art. no.	7000000716
Version	T2 S
Nominal width	DN 32
Max. flow head H	6 m
Overall length	220 mm
Flanged connection	PN 6
Max. operating pressure	6 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	13.4 kg
Characteristic curve	see single pump



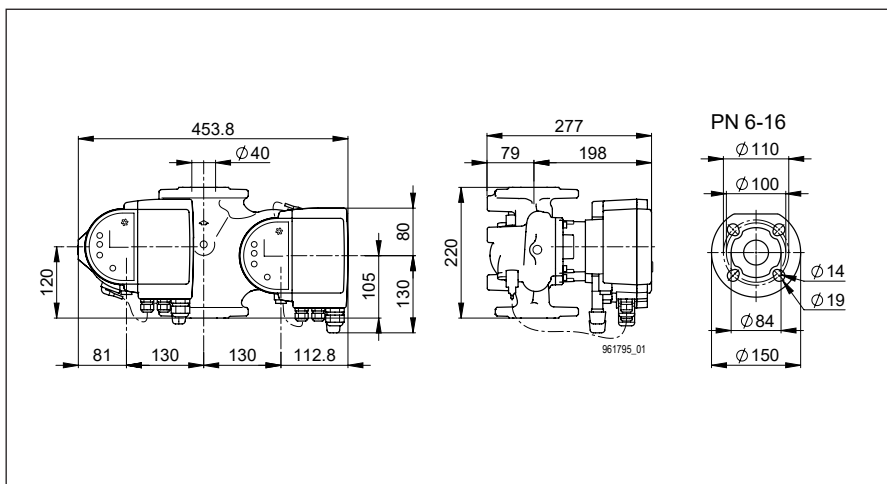
Modula-D 32F-12 220 RED

Art. no.	7000000802
Version	T2 M
Nominal width	DN 32
Max. flow head H	12 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	30.6 kg
Characteristic curve	see single pump



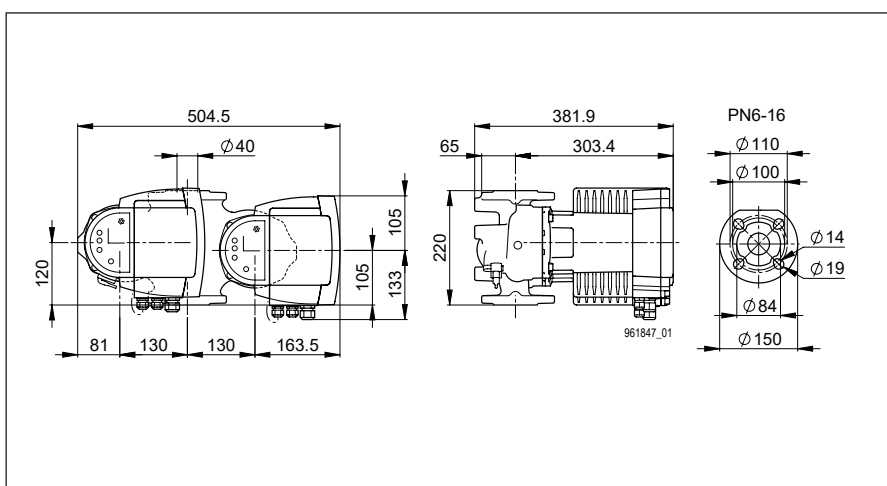
Modula-D 40-6 220 RED

Art. no.	7000000101
Version	T2 S
Nominal width	DN 40
Max. flow head H	6 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	18.7 kg
Characteristic curve	see single pump



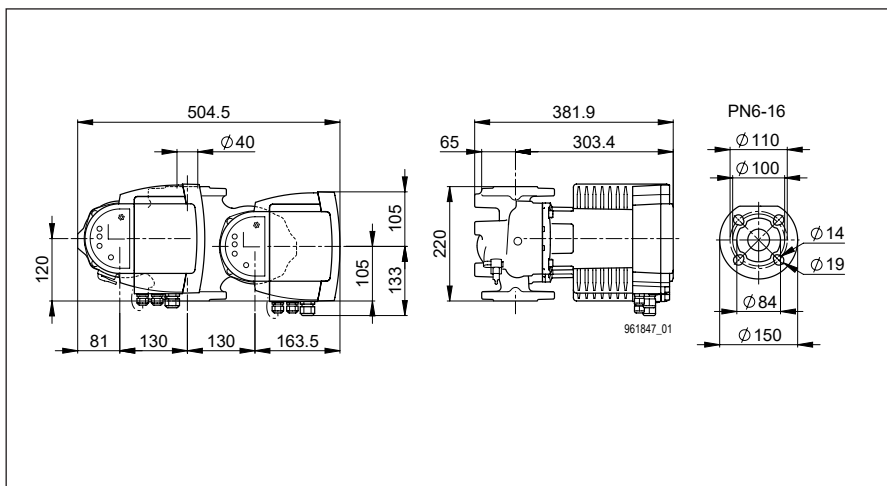
Modula-D 40-8 220 RED

Art. no.	7000000102
Version	T2 M
Nominal width	DN 40
Max. flow head H	8 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	31.0 kg
Characteristic curve	see single pump



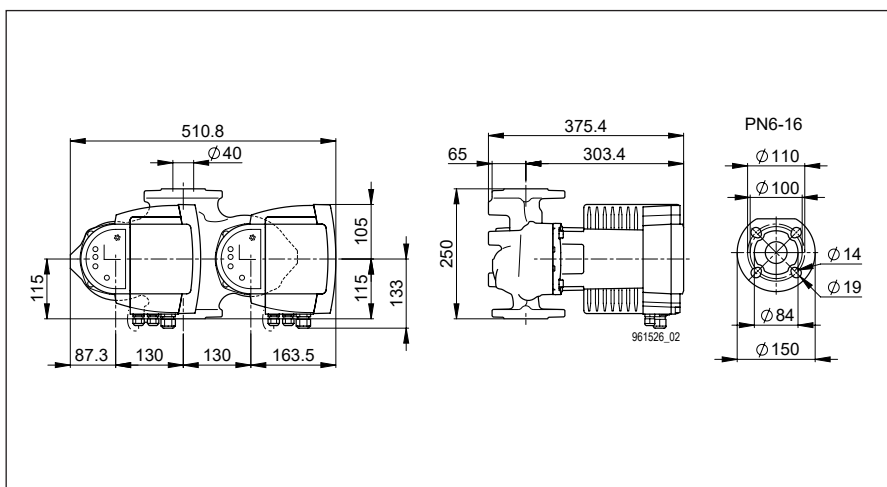
Modula-D 40-10 220 RED

Art. no.	7000000103
Version	T2 M
Nominal width	DN 40
Max. flow head H	10 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	31.0 kg
Characteristic curve	see single pump



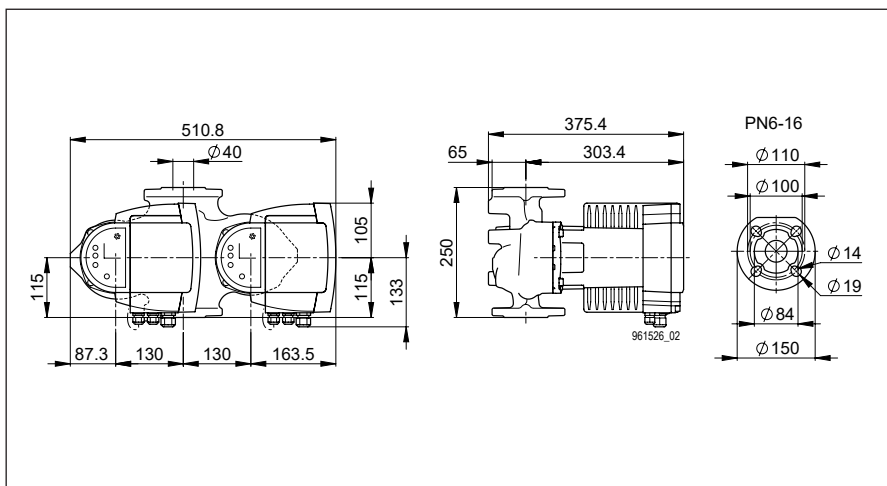
Modula-D 40-12 250 RED

Art. no.	7000000104
Version	T2 M
Nominal width	DN 40
Max. flow head H	12 m
Overall length	250 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	32.0 kg
Characteristic curve	see single pump



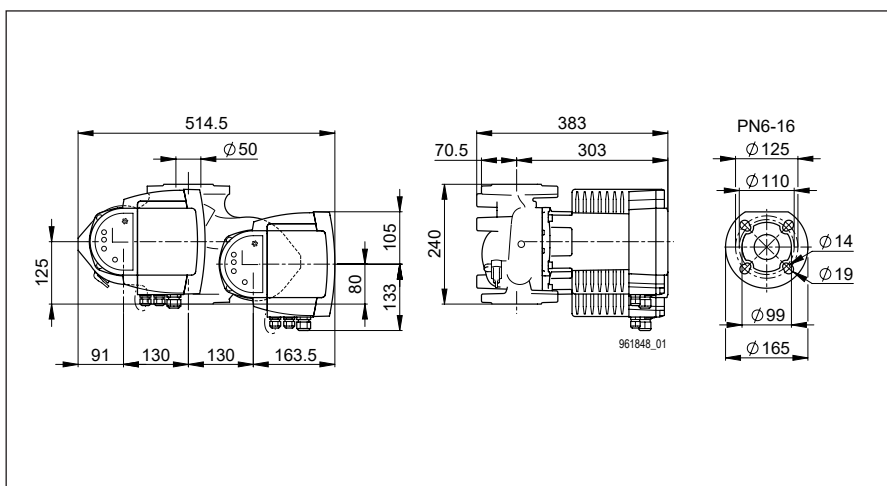
Modula-D 40-18 250 RED

Art. no.	7000000105
Version	T2 M
Nominal width	DN 40
Max. flow head H	18 m
Overall length	250 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	32.0 kg
Characteristic curve	see single pump



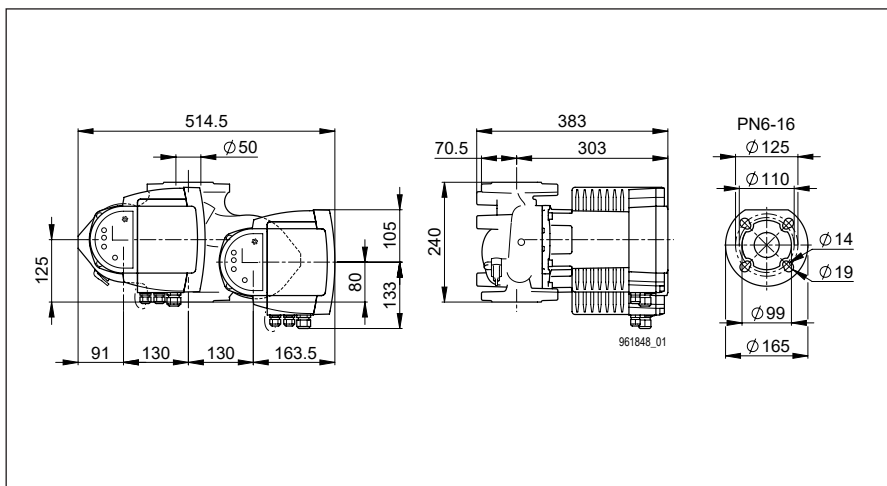
Modula-D 50-6 240 RED

Art. no.	7000000106
Version	T2 M
Nominal width	DN 50
Max. flow head H	6 m
Overall length	240 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	35.0 kg
Characteristic curve	see single pump



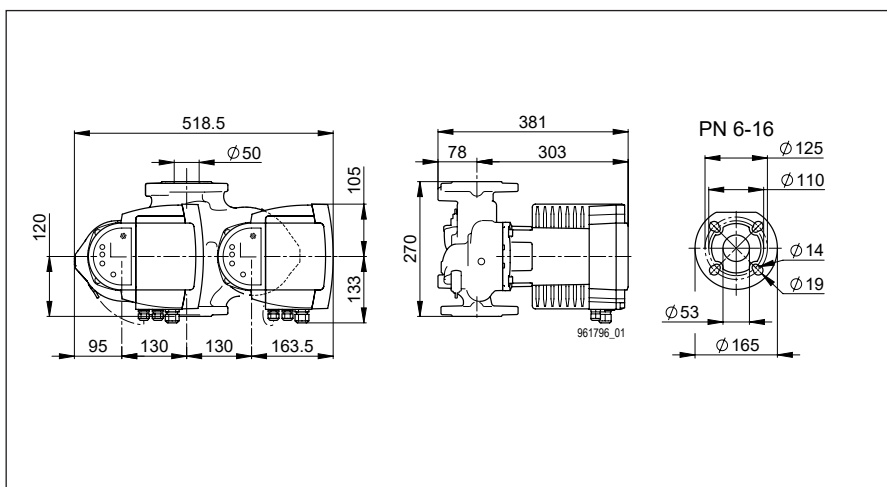
Modula-D 50-8 240 RED

Art. no.	7000000107
Version	T2 M
Nominal width	DN 50
Max. flow head H	8 m
Overall length	240 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	35.0 kg
Characteristic curve	see single pump



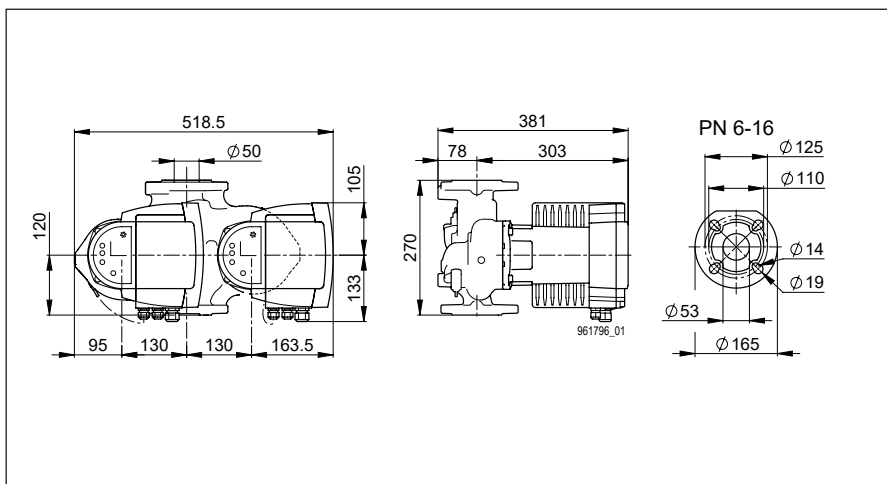
Modula-D 50-12 270 RED

Art. no.	7000000108
Version	T2 M
Nominal width	DN 50
Max. flow head H	12 m
Overall length	270 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	36.0 kg
Characteristic curve	see single pump



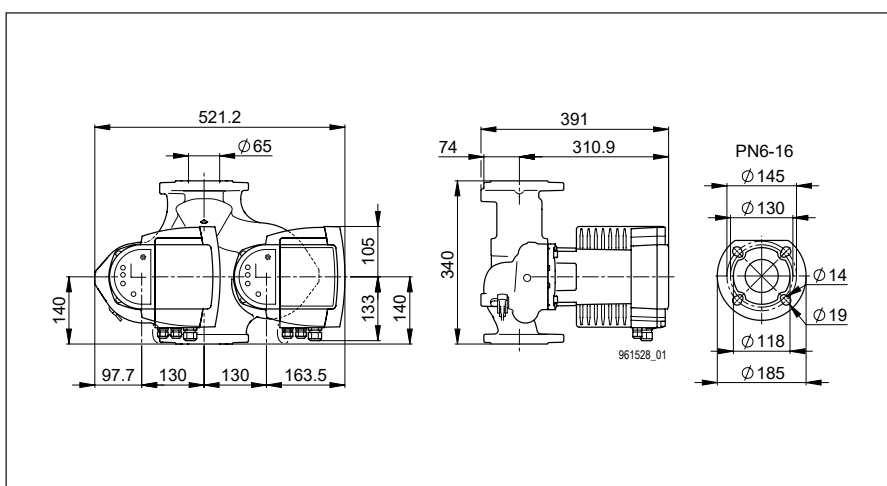
Modula-D 50-18 270 RED

Art. no.	7000000109
Version	T2 M
Nominal width	DN 50
Max. flow head H	18 m
Overall length	270 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	36.0 kg
Characteristic curve	see single pump



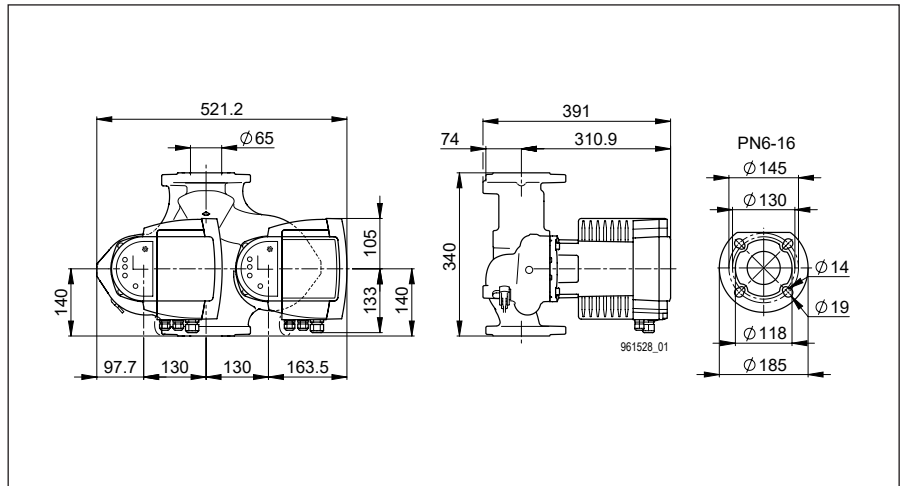
Modula-D 65-8 340 RED

Art. no.	7000000110
Version	T2 M
Nominal width	DN 65
Max. flow head H	8 m
Overall length	340 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	42.0 kg
Characteristic curve	see single pump



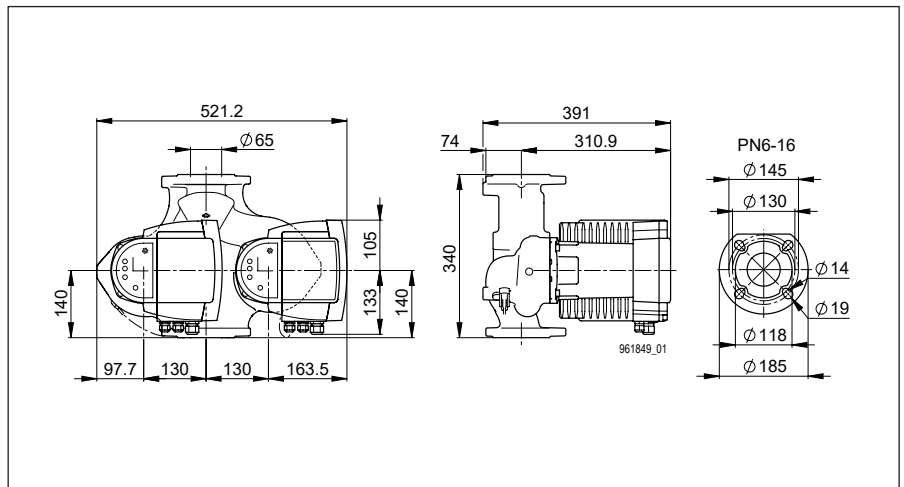
ModuA-D 65-12 340 RED

Art. no.	7000000111
Version	T2 M
Nominal width	DN 65
Max. flow head H	12 m
Overall length	340 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	42.0 kg
Characteristic curve	see single pump



ModuA-D 65-15 340 RED

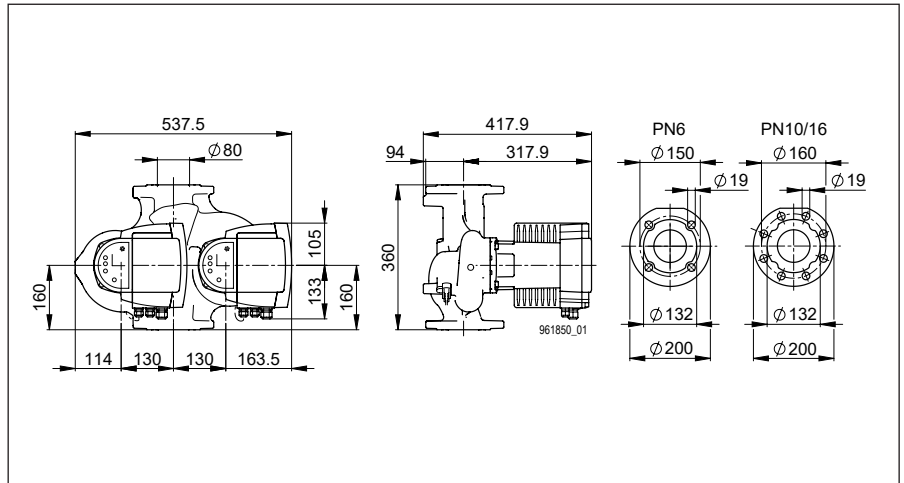
Art. no.	7000000112
Version	T2 L
Nominal width	DN 65
Max. flow head H	15 m
Overall length	340 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	48.0 kg
Characteristic curve	see single pump



ModuA-D 80-8 360 RED PN6

ModuA-D 80-8 360 RED PN10/16

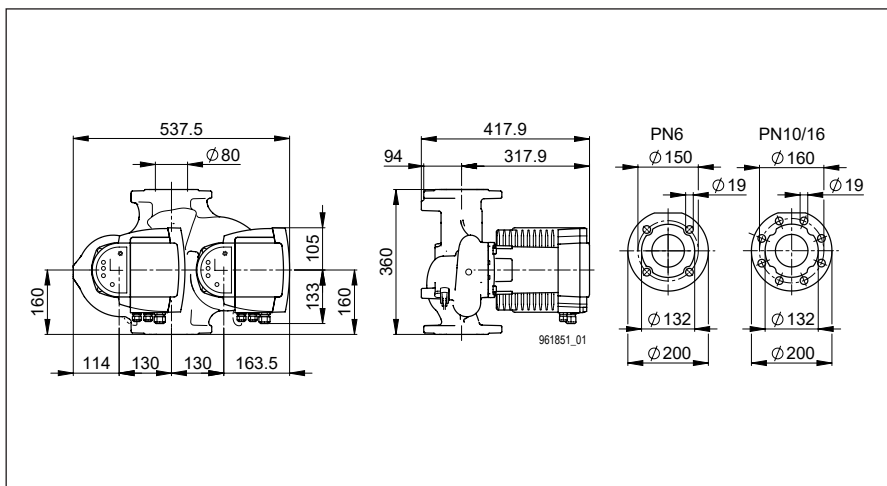
Art. no.	7000000113
Art. no.	7000000114
Version	T2 M
Nominal width	DN 80
Max. flow head H	8 m
Overall length	360 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	58.0 kg
Characteristic curve	see single pump



ModuIA-D 80-12 360 RED PN6

ModuIA-D 80-12 360 RED PN10/16

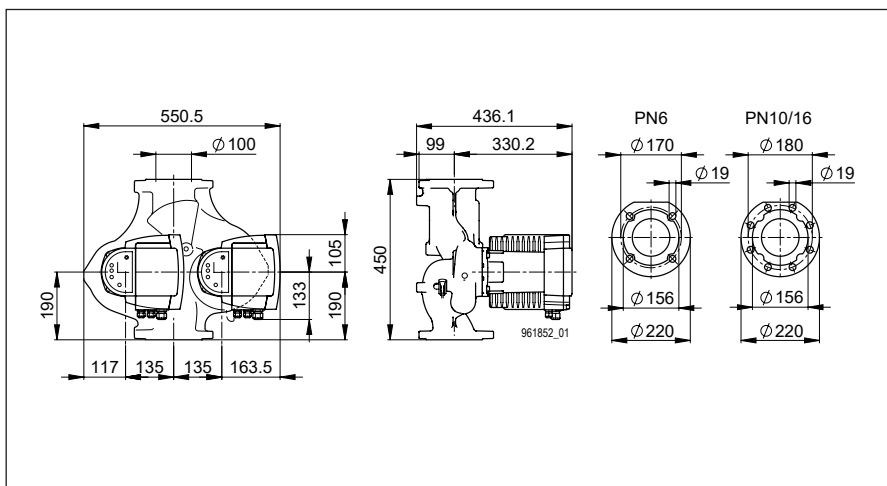
Art. no.	7000000115
Art. no.	7000000116
Version	T2 L
Nominal width	DN 80
Max. flow head H	12 m
Overall length	360 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	58.0 kg
Characteristic curve	see single pump



ModuIA-D 100-8 450 RED PN6

ModuIA-D 100-8 450 RED PN10/16

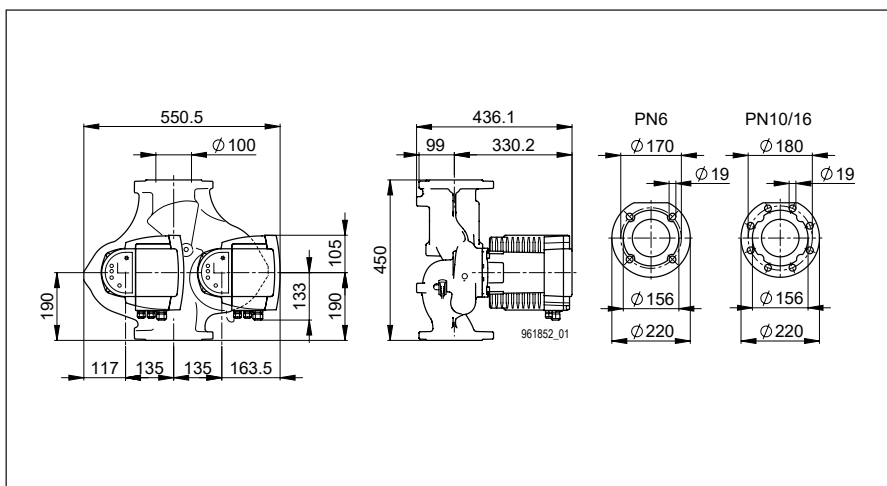
Art. no.	7000000117
Art. no.	7000000118
Version	T2 L
Nominal width	DN 100
Max. flow head H	8 m
Overall length	450 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	68.0 kg
Characteristic curve	see single pump



ModuIA-D 100-12 450 RED PN6

ModuIA-D 100-12 450 RED PN10/16

Art. no.	7000000119
Art. no.	7000000120
Version	T2 L
Nominal width	DN 100
Max. flow head H	12 m
Overall length	450 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	68.0 kg
Characteristic curve	see single pump





Heating circulation pumps

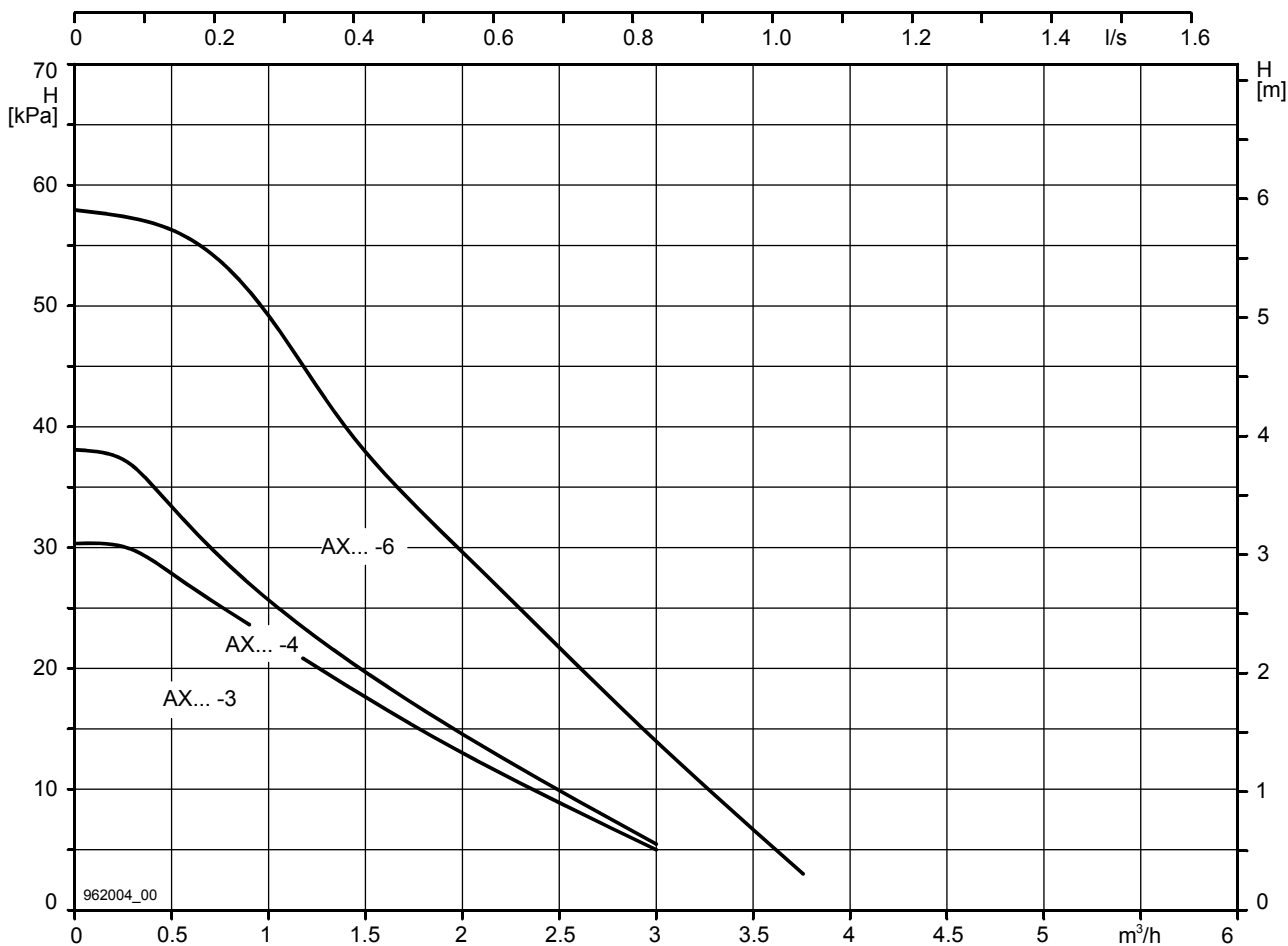
AX... RED

Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar	EEl value
AX 25-3 180 RED	2206390150	25	3	180	G 1½"	10	≤0.19
AX 25-4 180 RED	2206400150	25	4	180	G 1½"	10	≤0.20
AX 25-6 180 RED	2206410150	25	6	180	G 1½"	10	≤0.23
AX 32-4 180 RED	2206450150	32	4	180	G 2"	10	≤0.20
AX 32-6 180 RED	2206460150	32	6	180	G 2"	10	≤0.23
AX 32-3 170 RED	2206420150	32	3	170	G 2"	10	≤0.19
AX 32-4 170 RED	2206430150	32	4	170	G 2"	10	≤0.20
AX 32-6 170 RED	2206440150	32	6	170	G 2"	10	≤0.23
AX 15-4 130 RED	2206350150	15	4	130	G 1"	10	≤0.20
AX 15-6 130 RED	2206360150	15	6	130	G 1"	10	≤0.23
AX 25-4 130 RED	2206370150	25	4	130	G 1½"	10	≤0.20
AX 25-6 130 RED	2206380150	25	6	130	G 1½"	10	≤0.23

Ordering reference

	AX	25	-4	180	RED
Series					
Nominal width (DN) [mm]					
Discharge head max. [m]					
Installation height [mm]					
Field of application					
Heating (RED)					
Service water (BLUE)					



AX 25-3 180 RED

AX 32-3 170 RED

Nominal width	DN 25 DN 32
Max. flow head H	3 m
Overall length	180 170 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Net weight	2.3 kg

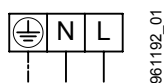
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	4-21 W
Nominal current	0.05-0.18 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 90 °C	0.30 bar
at a water temp. of 110 °C	1.10 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



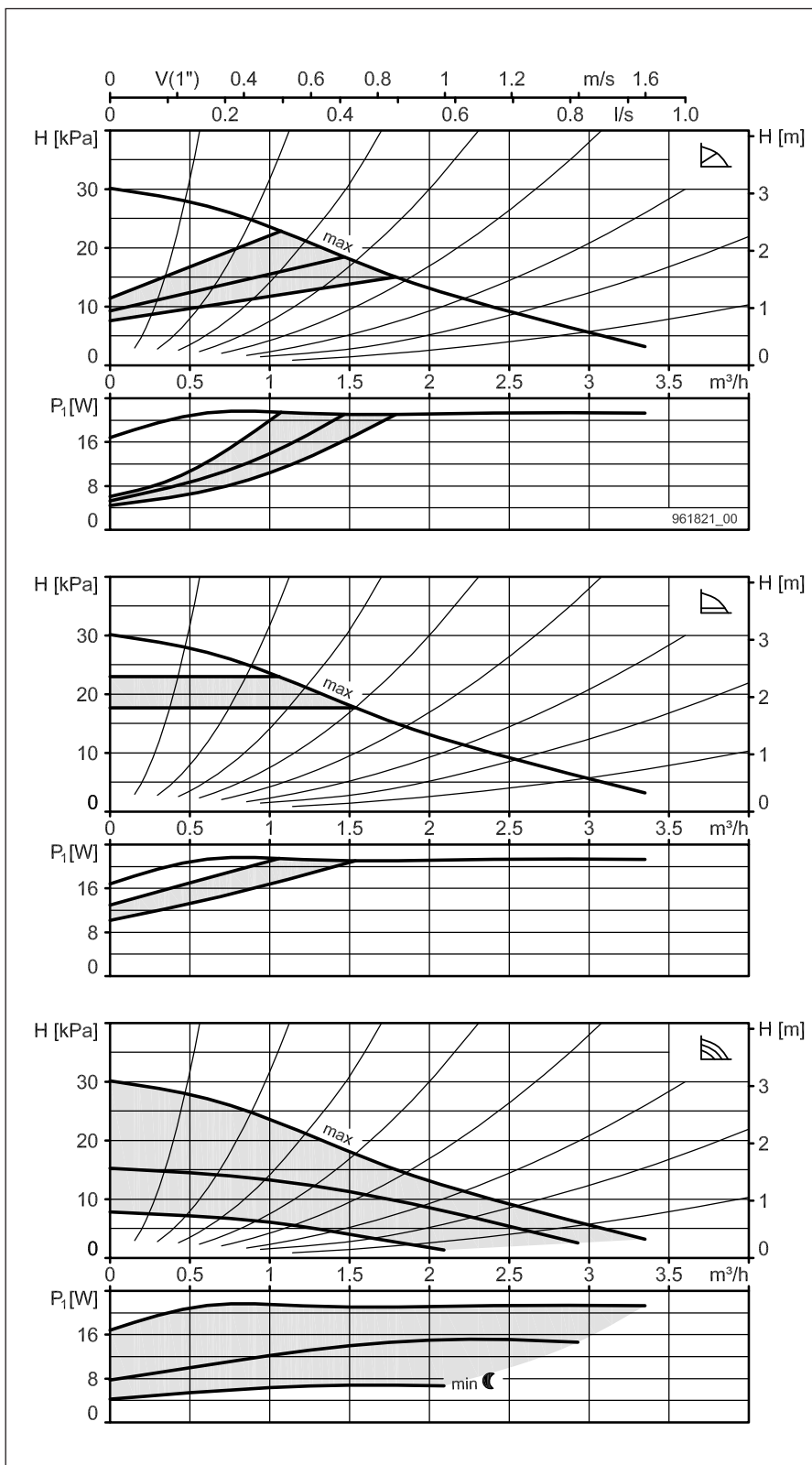
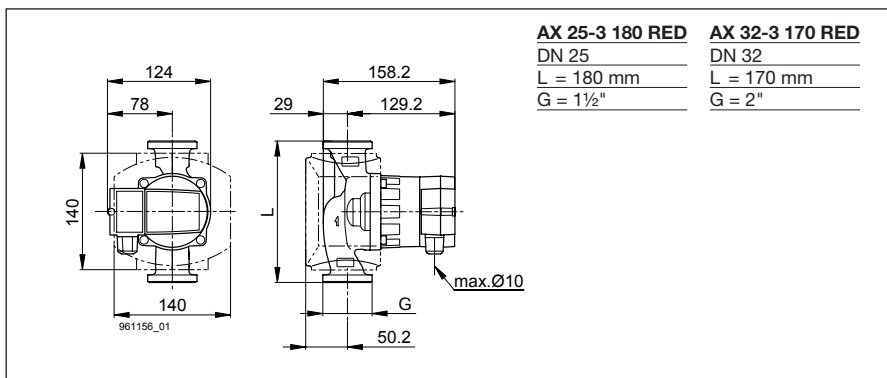
AC in
~1x230V +6/-10%
50/60 Hz

L, N, PE Power supply

Included in the scope of delivery

- Heat insulation shell

Type	Art. no.
AX 25-3 180 RED	2206390150
AX 32-3 170 RED	2206420150



AX 25-4 180 RED
AX 32-4 180 RED
AX 32-4 170 RED
AX 15-4 130 RED
AX 25-4 130 RED

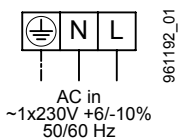
Nominal width	DN 32 DN 15 DN 25
Max. flow head H	4 m
Overall length	180 170 130 mm
Threaded connection	G 2" G 1" G 1½"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Net weight	2.3 kg

Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	5-22 W
Nominal current	0.05-0.19 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 90 °C	0.30 bar
at a water temp. of 110 °C	1.10 bar
for every ±100 m of altitude	±0.01 bar

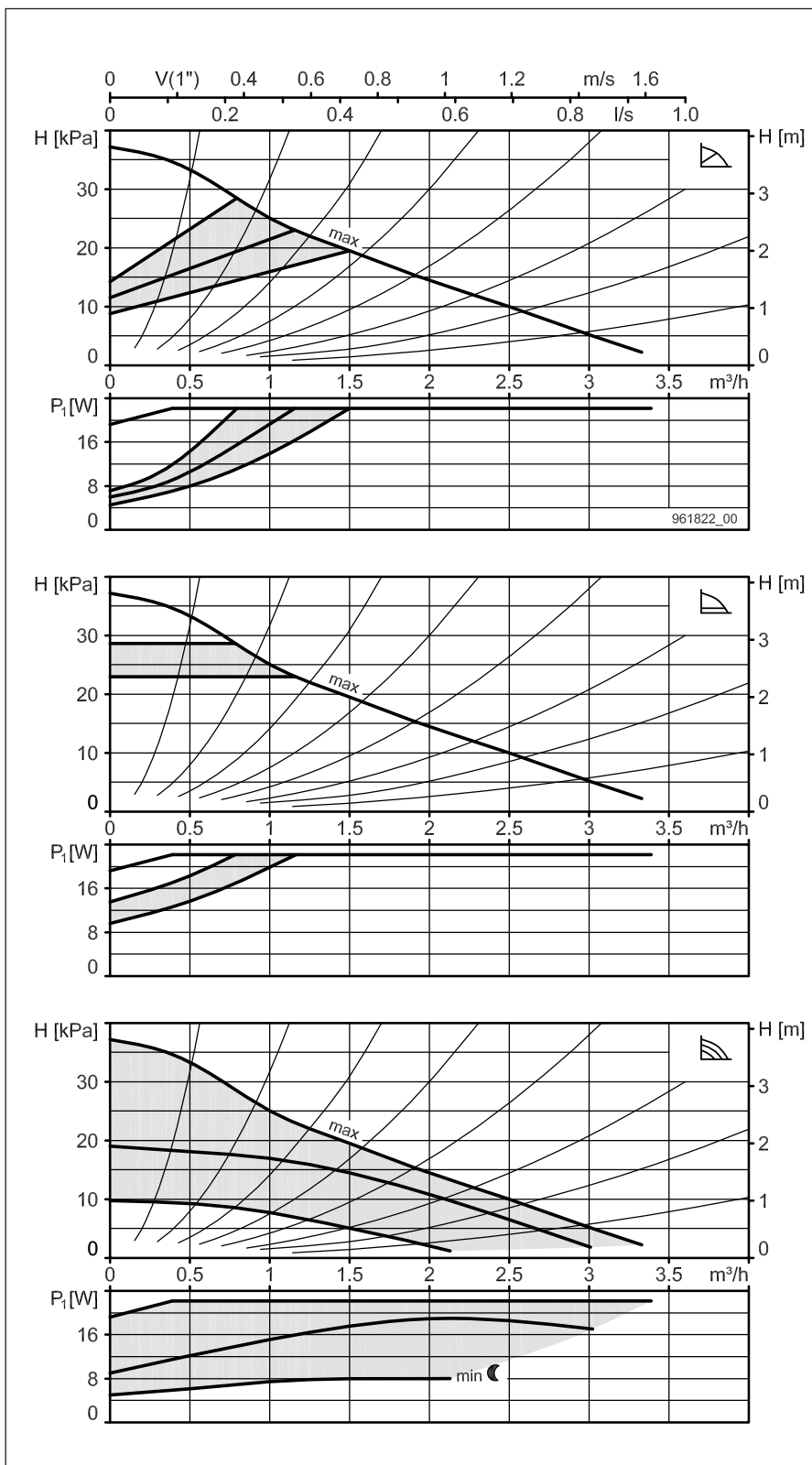
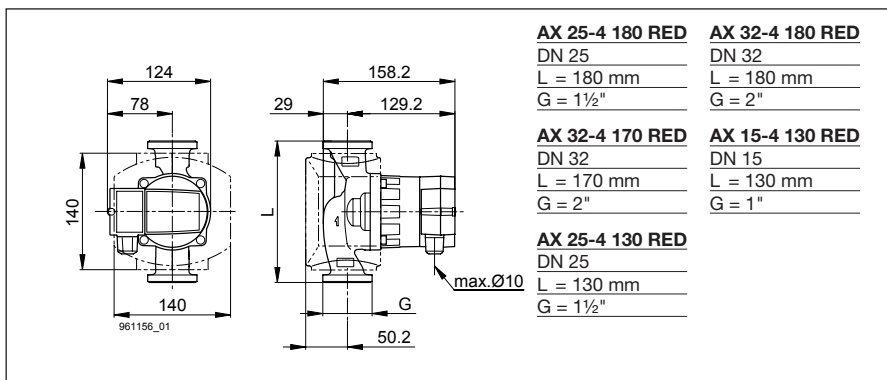
Connction diagram


L, N, PE Power supply

Included in the scope of delivery

- Heat insulation shell

Type	Art. no.
AX 25-4 180 RED	2206400150
AX 32-4 180 RED	2206450150
AX 32-4 170 RED	2206430150
AX 15-4 130 RED	2206350150
AX 25-4 130 RED	2206370150



Heating

AX 25-6 180 RED
AX 32-6 180 RED
AX 32-6 170 RED
AX 15-6 130 RED
AX 25-6 130 RED

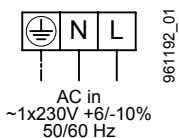
Nominal width	DN 32 DN 15 DN 25
Max. flow head H	6 m
Overall length	180 170 130 mm
Threaded connection	G 2" G 1" G 1½"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+110°C
Net weight	2.3 kg

Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	5-45 W
Nominal current	0.05-0.38 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 90 °C	0.30 bar
at a water temp. of 110 °C	1.10 bar
for every ±100 m of altitude	±0.01 bar

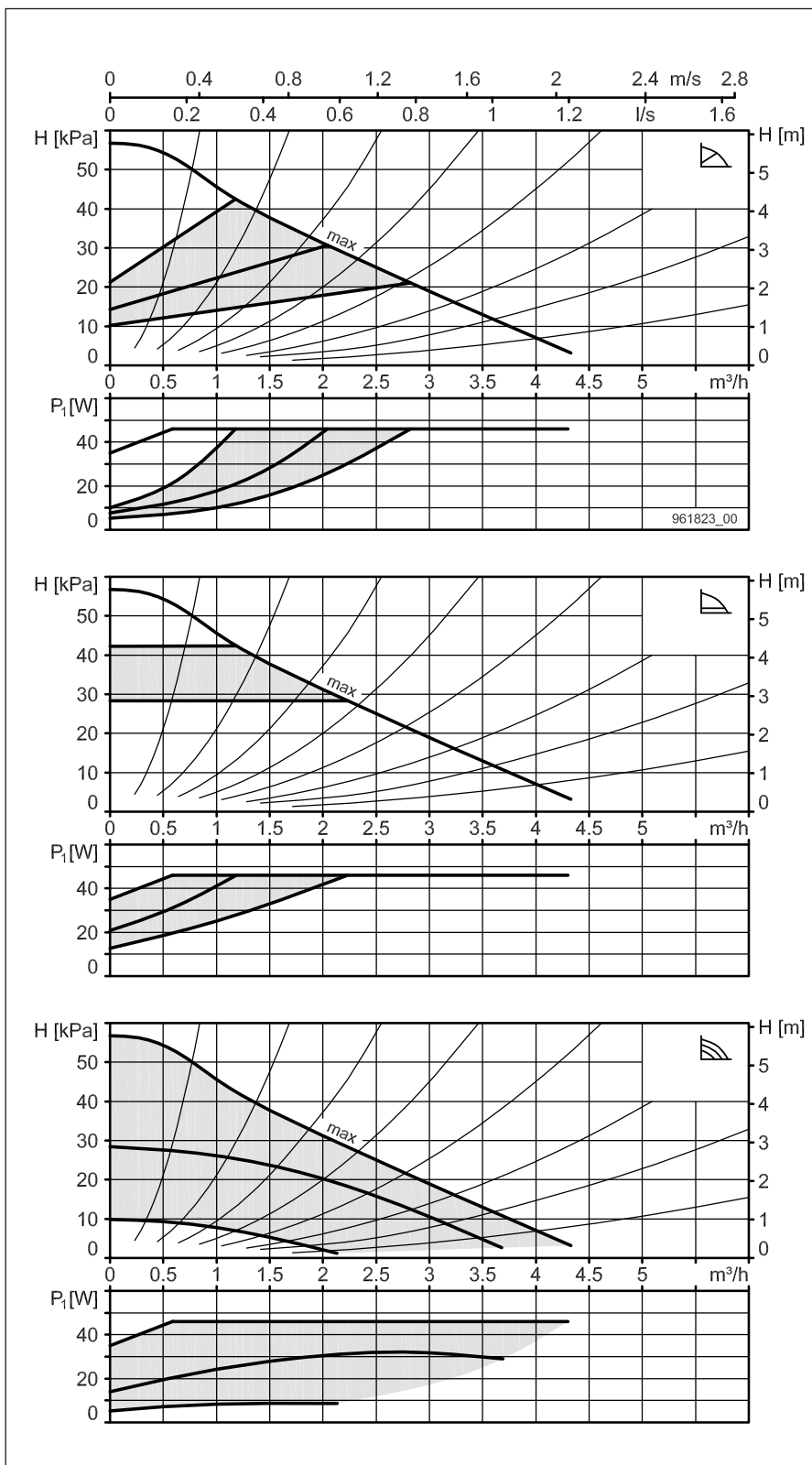
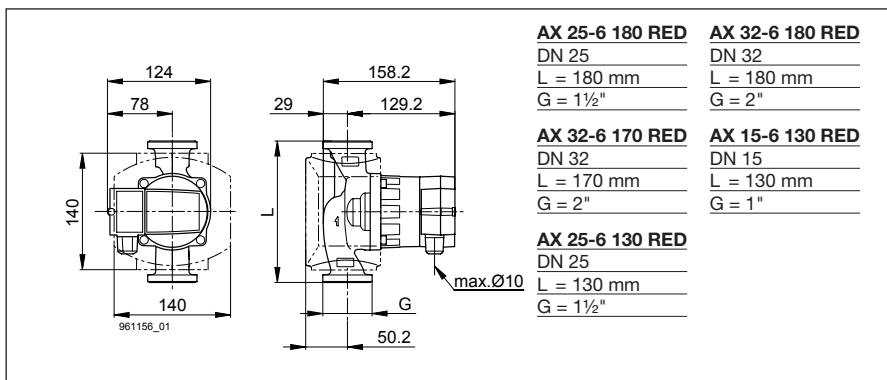
Connction diagram


L, N, PE Power supply

Included in the scope of delivery

- Heat insulation shell

Type	Art. no.
AX 25-6 180 RED	2206410150
AX 32-6 180 RED	2206460150
AX 32-6 170 RED	2206440150
AX 15-6 130 RED	2206360150
AX 25-6 130 RED	2206380150



Heating circulation pumps

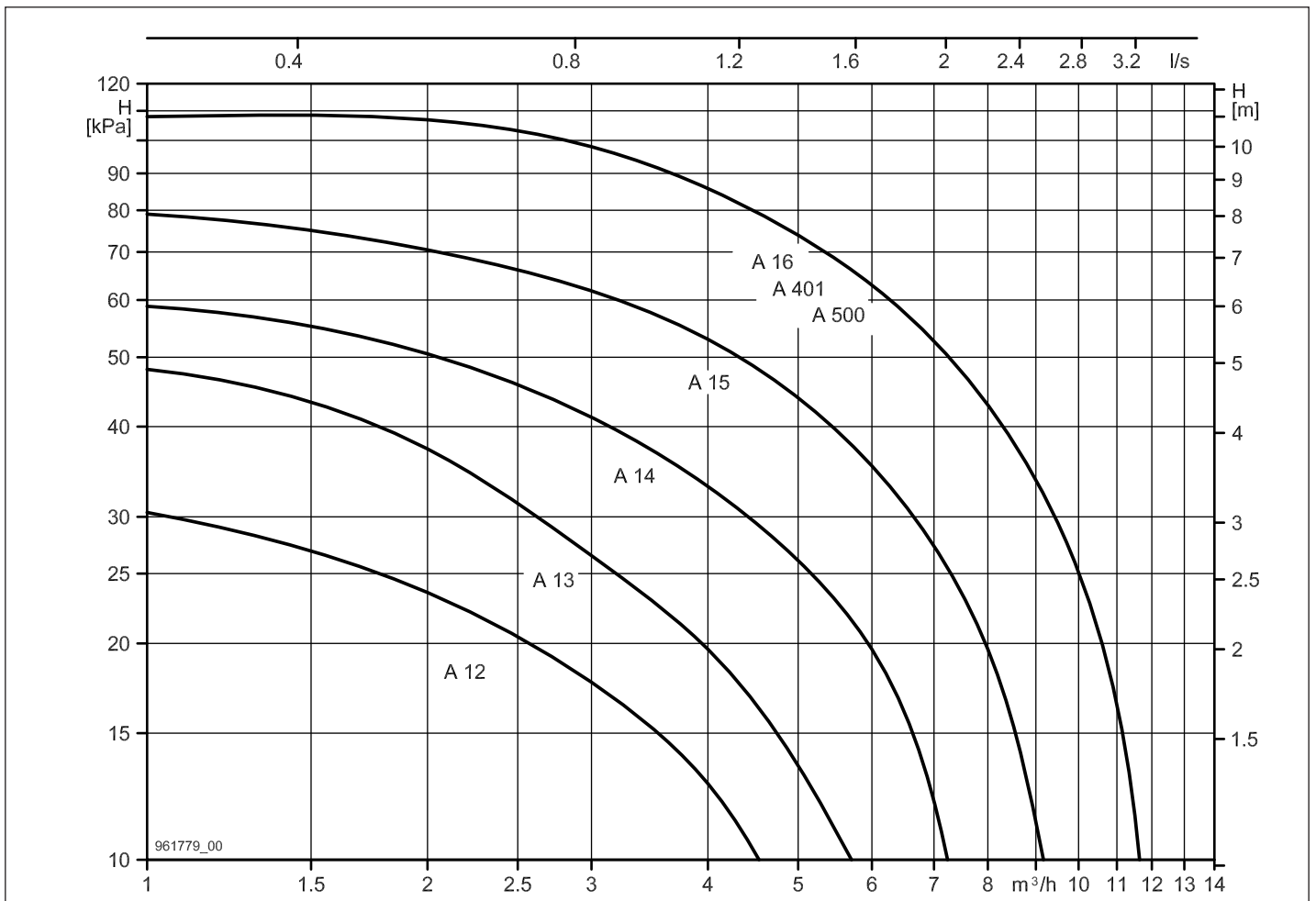
A 12...A 500



Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar	EEI value
A 12	1157380150	32	4	170	G 2"	10	≤0.21
A 13	1157410150	32	5	170	G 2"	10	≤0.21
A 14	1157160150	32	6	170	G 2"	10	≤0.22
A 15	1157190150	32	8	170	G 2"	10	≤0.22
A 12-1	1157390150	25	4	180	G 1½"	10	≤0.21
A 13-1	1157420150	25	5	180	G 1½"	10	≤0.21
A 14-1	1157170150	25	6	180	G 1½"	10	≤0.22
A 15-1	1157200150	25	8	180	G 1½"	10	≤0.22
A 16-1	1160410150	25	11	180	G 1½"	10	≤0.21
A 12-2	1157400150	32	4	180	G 2"	10	≤0.21
A 13-2	1157430150	32	5	180	G 2"	10	≤0.21
A 14-2	1157180150	32	6	180	G 2"	10	≤0.22
A 15-2	1157210150	32	8	180	G 2"	10	≤0.22
A 16-2	1157440150	32	11	180	G 2"	10	≤0.21

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Flanged connection	Max. operating pressure bar	EEI value
A 401	1157450150	40	11	220	PN 6/10	10	≤0.22
A 401-1	1157460150	40	11	250	PN 6/10	10	≤0.22
A 500	1161360150	50	11	220	PN 6/10	10	≤0.22



A 12

A 12-1

A 12-2

Nominal width	DN 25 DN 32
Max. flow head H	4 m
Overall length	170 180 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+95/+110°C *
Ambient temperature	max. 40°C
Net weight	3.8 kg

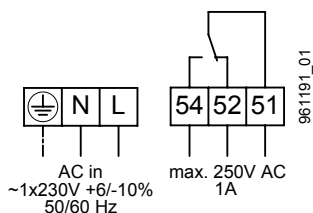
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-33 W
Nominal current	0.1-0.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Heat insulation shell

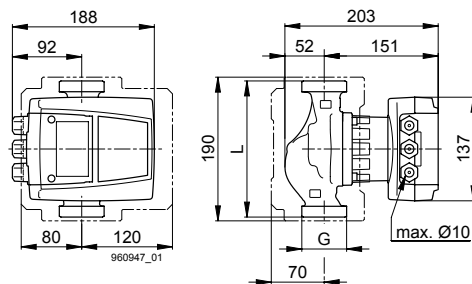
Accessories

- BIM A signal module
- BIM B control module

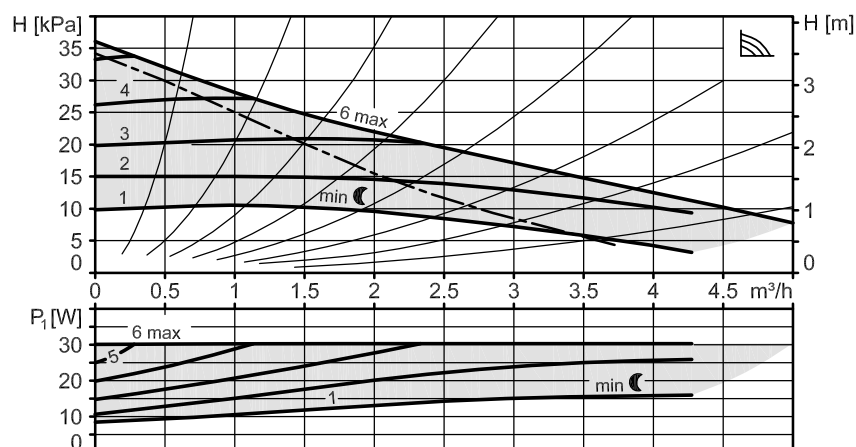
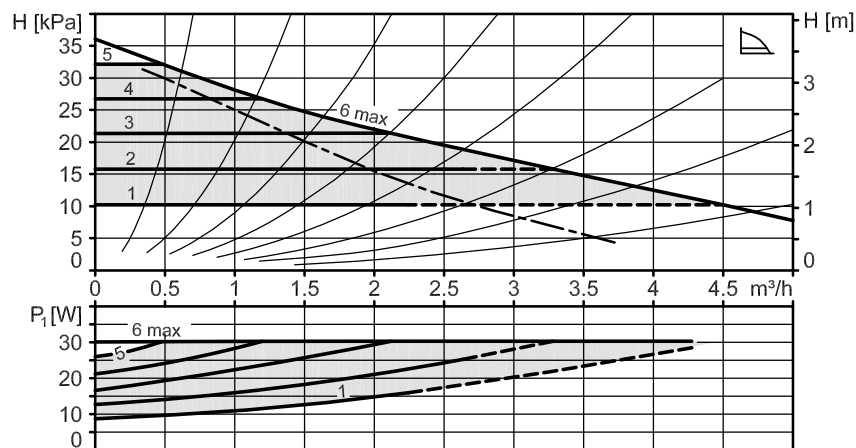
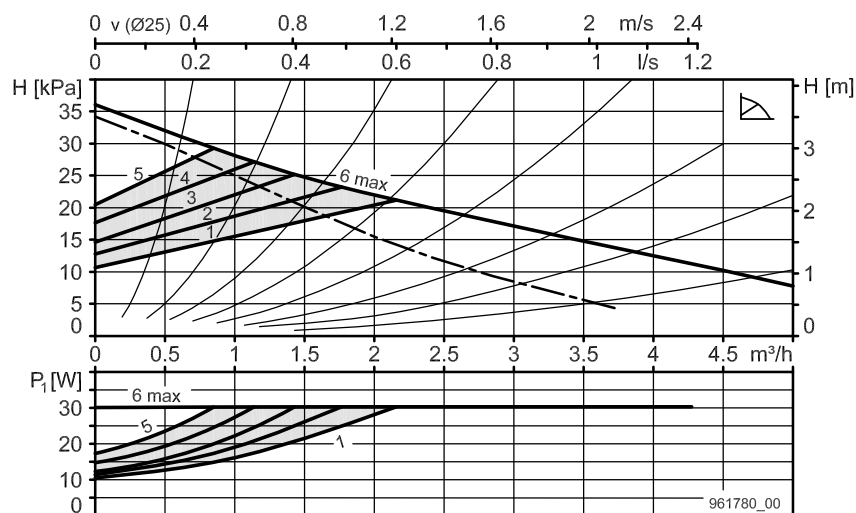
Remarks

* temporarily (ca. 30 min)

Type	Art. no.
A 12	1157380150
A 12-1	1157390150
A 12-2	1157400150



A 12	A 12-1
DN 32	DN 25
L = 170 mm	L = 180 mm
G = 2"	G = 1½"
A 12-2	
DN 32	
L = 180 mm	
G = 2"	



A 13

A 13-1

A 13-2

Nominal width	DN 25 DN 32
Max. flow head H	5 m
Overall length	170 180 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+95/+110°C *
Ambient temperature	max. 40°C
Net weight	3.8 kg

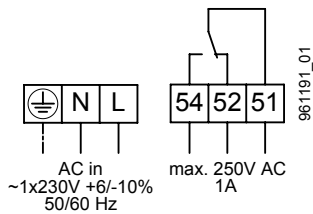
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-50 W
Nominal current	0.1-0.35 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Heat insulation shell

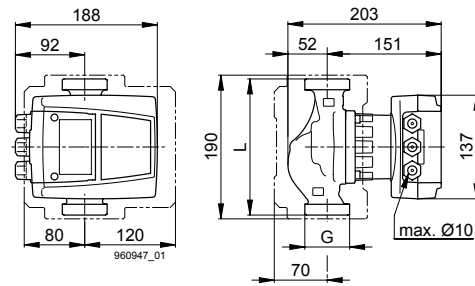
Accessories

- BIM A signal module
- BIM B control module

Remarks

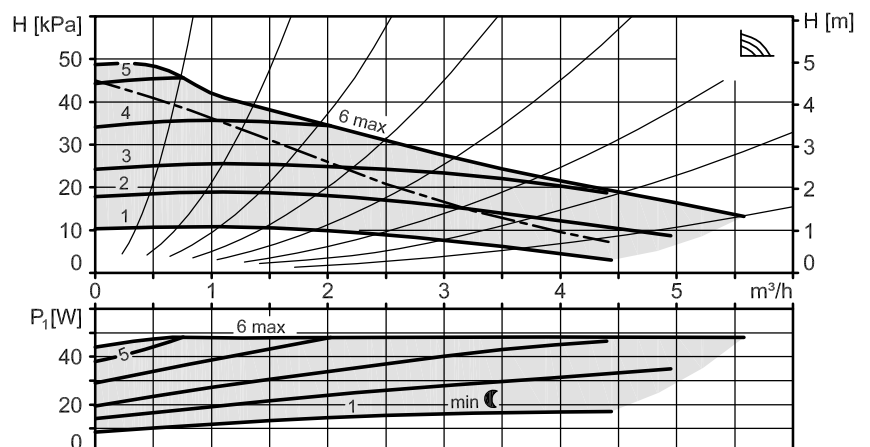
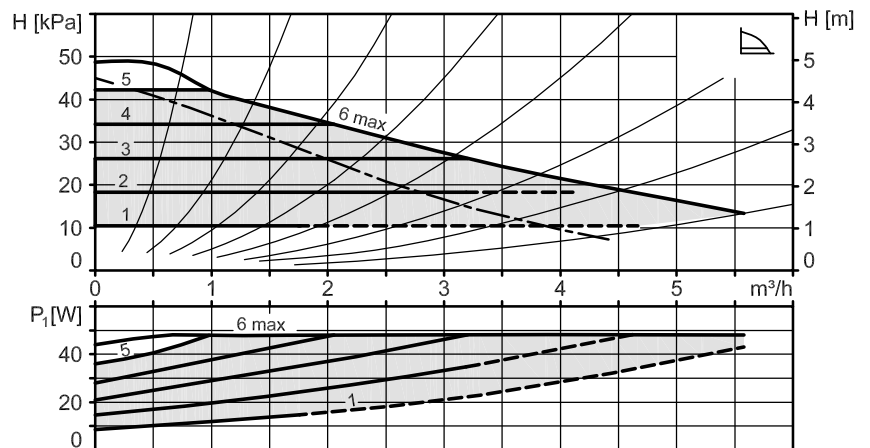
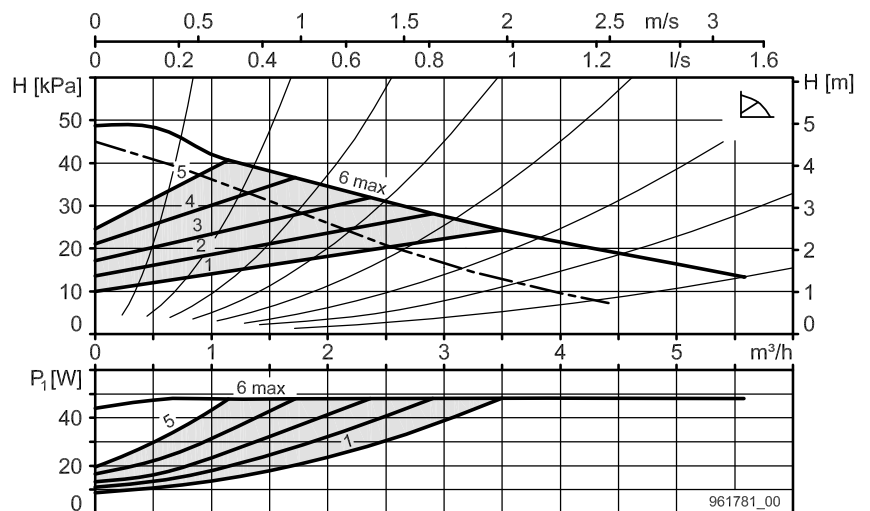
* temporarily (ca. 30 min)

Type	Art. no.
A 13	1157410150
A 13-1	1157420150
A 13-2	1157430150



A 13	A 13-1
DN 32	DN 25
L = 170 mm	L = 180 mm
G = 2"	G = 1½"

A 13-2
DN 32
L = 180 mm
G = 2"

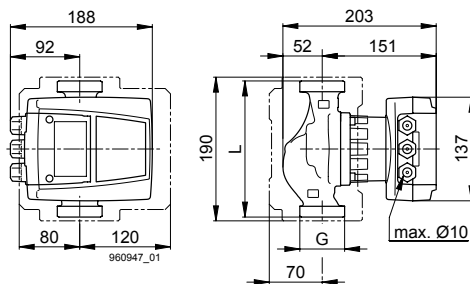


A 14

A 14-1

A 14-2

Nominal width	DN 25 DN 32
Max. flow head H	6 m
Overall length	170 180 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+95/+110°C *
Ambient temperature	max. 40°C
Net weight	3.8 kg



A 14	A 14-1
DN 32	DN 25
L = 170 mm	L = 180 mm
G = 2"	G = 1½"
A 14-2	
DN 32	
L = 180 mm	
G = 2"	

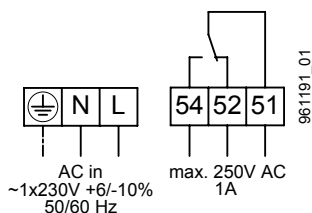
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-70 W
Nominal current	0.1-0.5 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Heat insulation shell

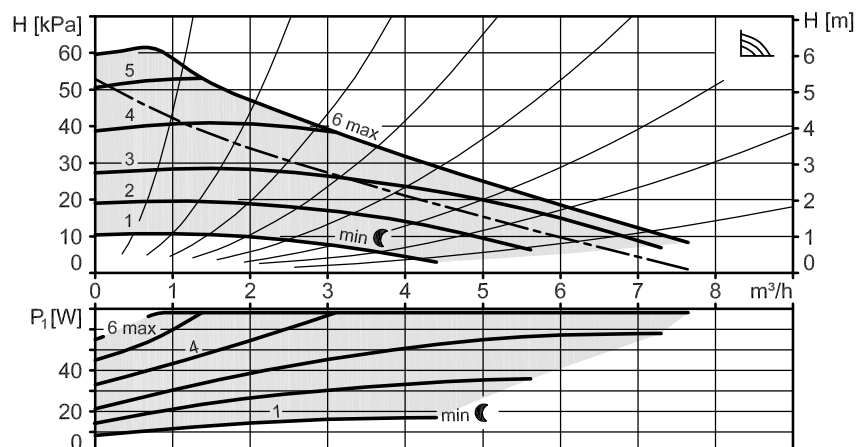
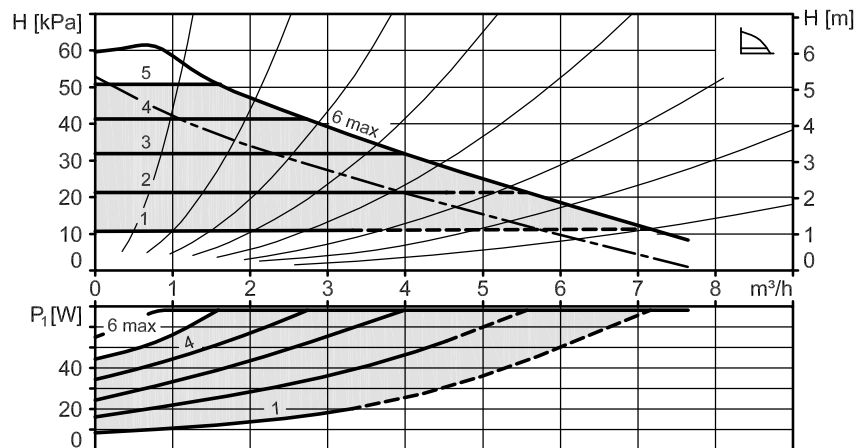
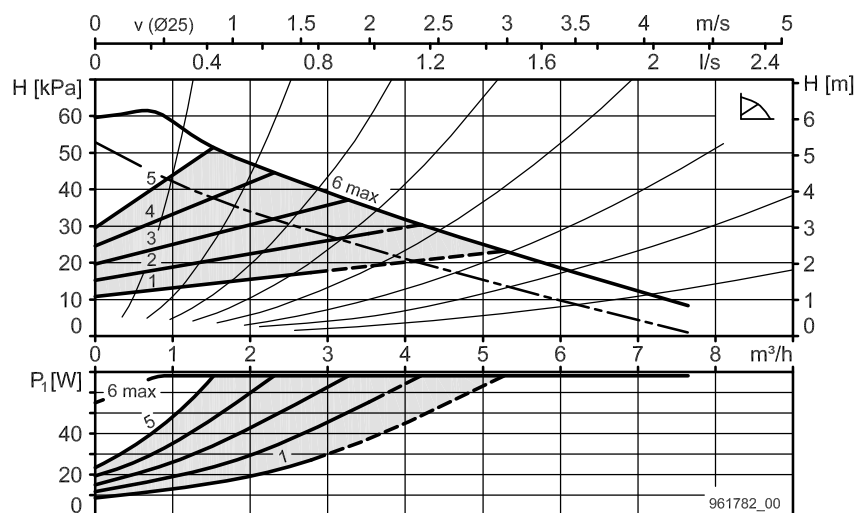
Accessories

- BIM A signal module
- BIM B control module

Remarks

* temporarily (ca. 30 min)

Type	Art. no.
A 14	1157160150
A 14-1	1157170150
A 14-2	1157180150



A 15

A 15-1

A 15-2

Nominal width	DN 25 DN 32
Max. flow head H	8 m
Overall length	170 180 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+95/+110°C *
Ambient temperature	max. 40°C
Net weight	3.8 kg

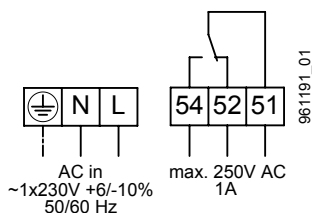
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-107 W
Nominal current	0.1-0.8 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Heat insulation shell

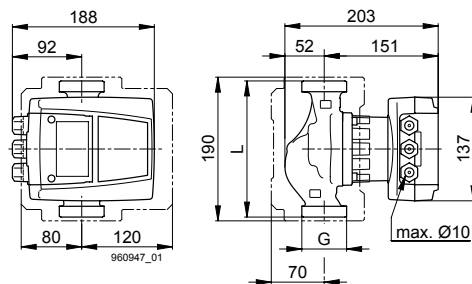
Accessories

- BIM A signal module
- BIM B control module

Remarks

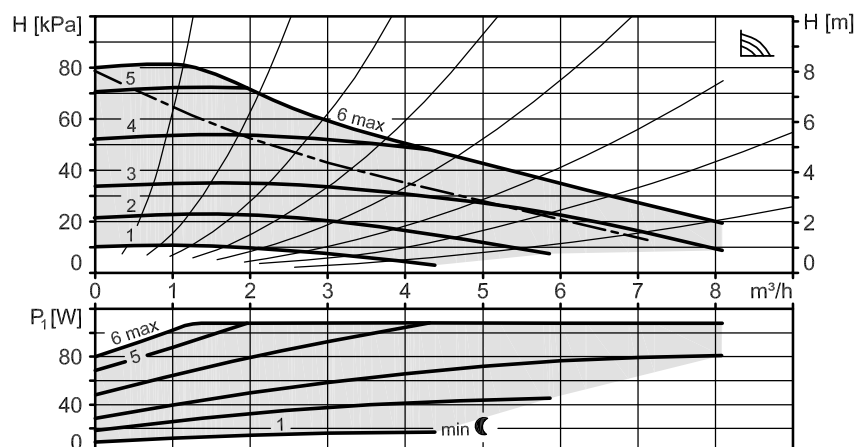
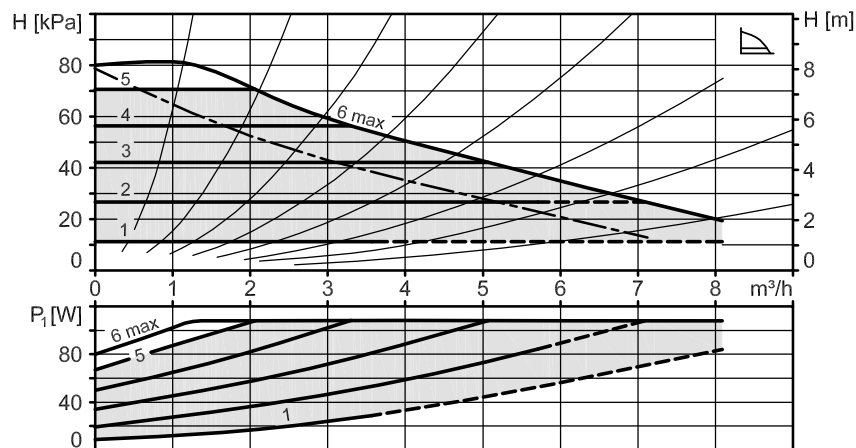
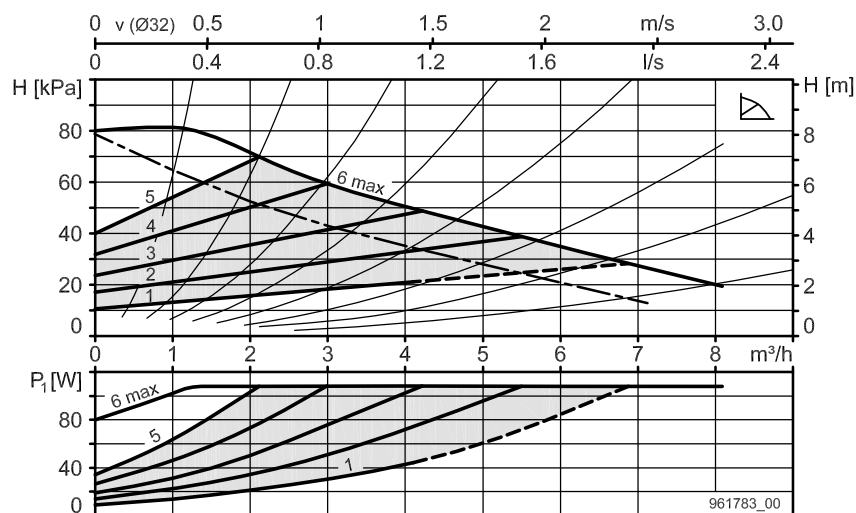
* temporarily (ca. 30 min)

Type	Art. no.
A 15	1157190150
A 15-1	1157200150
A 15-2	1157210150



A 15	A 15-1
DN 32	DN 25
L = 170 mm	L = 180 mm
G = 2"	G = 1½"

A 15-2
DN 32
L = 180 mm
G = 2"



A 16-1

A 16-2

Nominal width	DN 25 DN 32
Max. flow head H	11 m
Overall length	180 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+95/+110°C *
Ambient temperature	max. 40°C
Net weight	3.8 kg

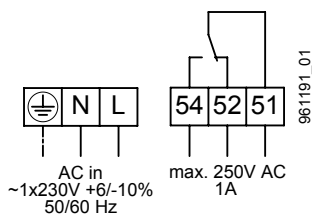
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-174 W
Nominal current	0.1-1.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Heat insulation shell

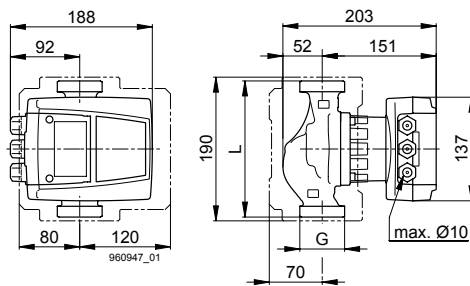
Accessories

- BIM A signal module
- BIM B control module

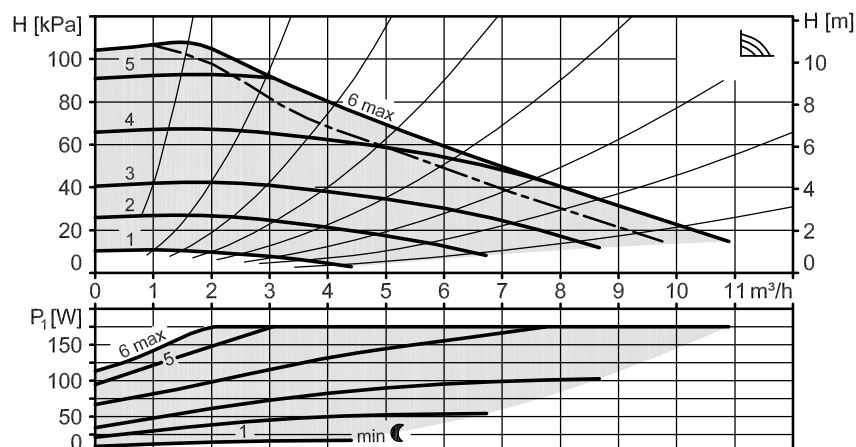
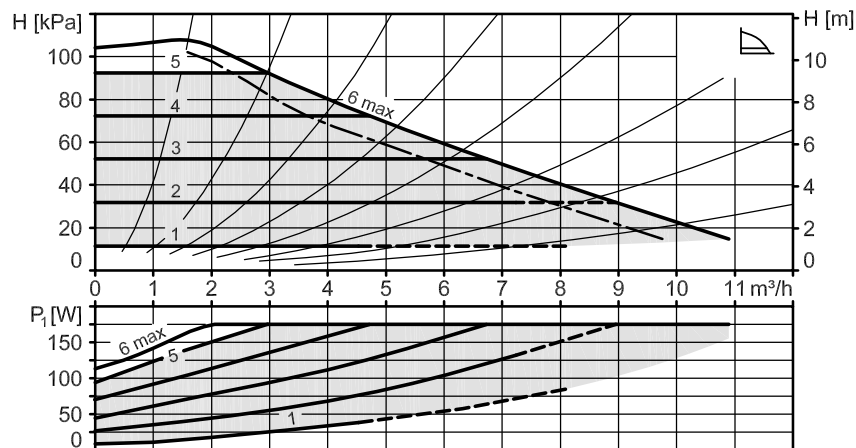
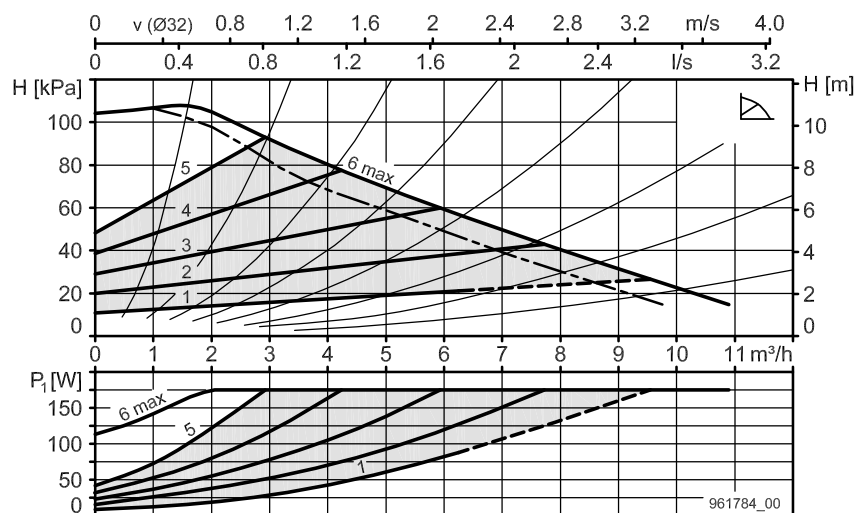
Remarks

* temporarily (ca. 30 min)

Type	Art. no.
A 16-1	1160410150
A 16-2	1157440150



A 16-1	A 16-2
DN 25	DN 32
L = 180 mm	L = 180 mm
G = 1½"	G = 2"



A 401

A 401-1

Nominal width	DN 40
Max. flow head H	11 m
Overall length	220 250 mm
Flanged connection	PN 6/10
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+95/+110°C *
Ambient temperature	max. 40°C
Net weight	9.0 kg

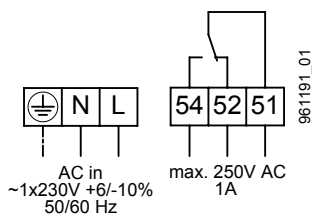
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-174 W
Nominal current	0.1-1.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

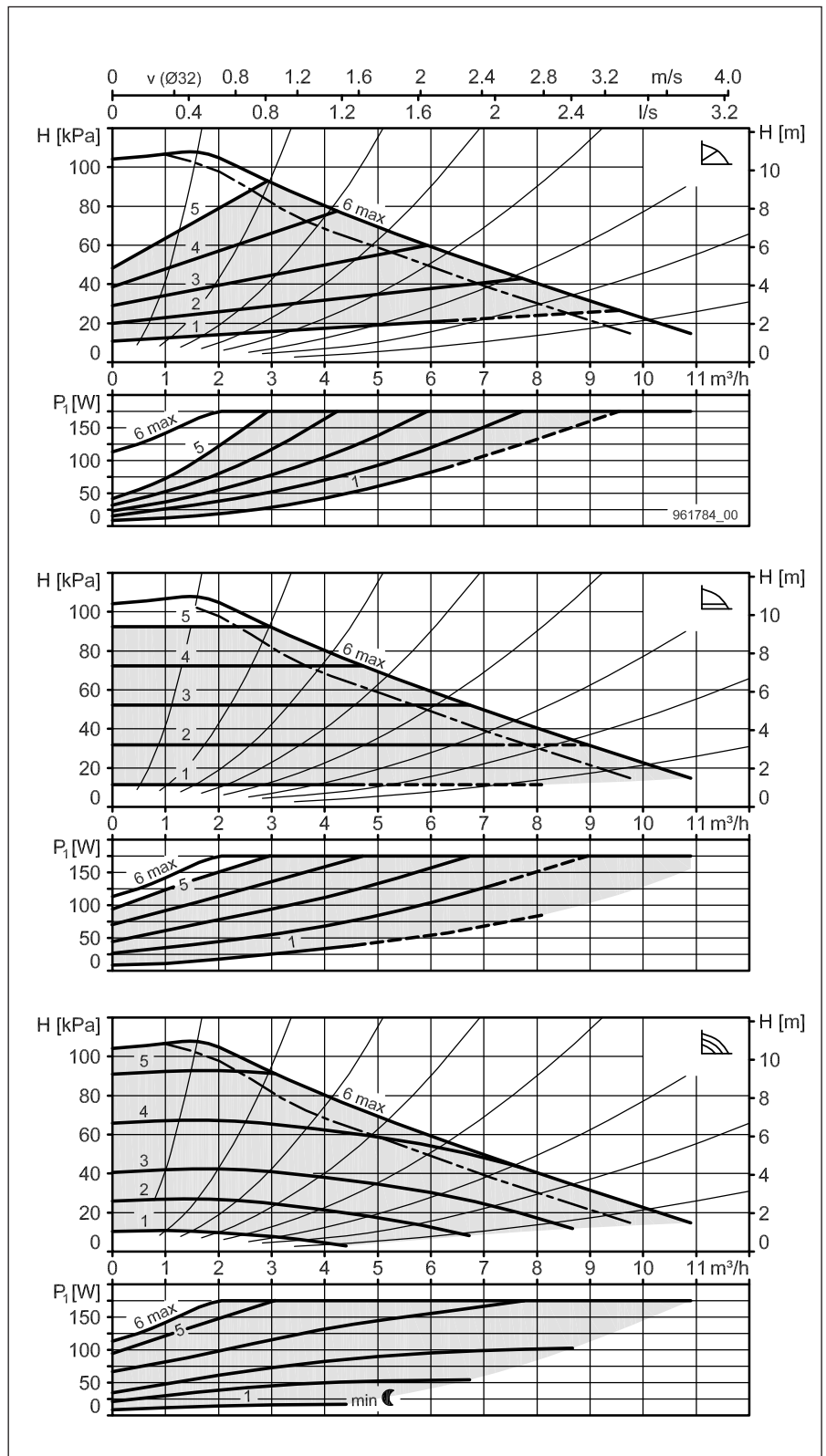
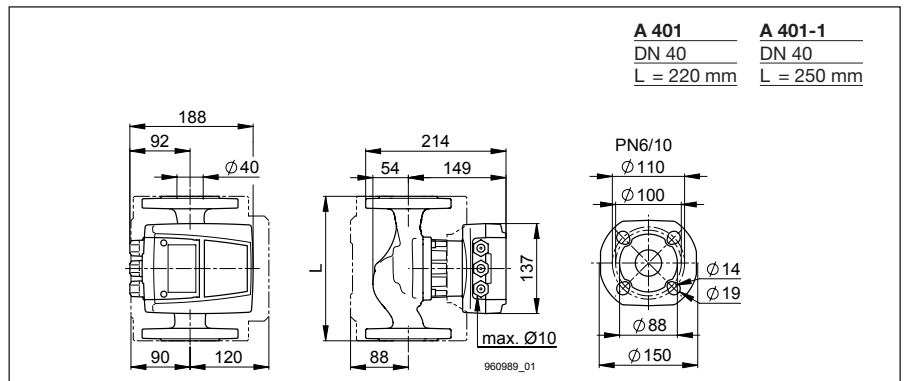
Accessories

- BIM A signal module
- BIM B control module
- Sealing set for flange PN10 / PN16

Remarks

* temporarily (ca. 30 min)

Type	Art. no.
A 401	1157450150
A 401-1	1157460150



Heating



A 500

Nominal width	DN 50
Max. flow head H	11 m
Overall length	220 mm
Flanged connection	PN 6/10
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+95/+110°C *
Ambient temperature	max. 40°C
Net weight	10.5 kg

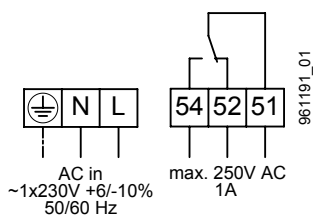
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-174 W
Nominal current	0.1-1.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

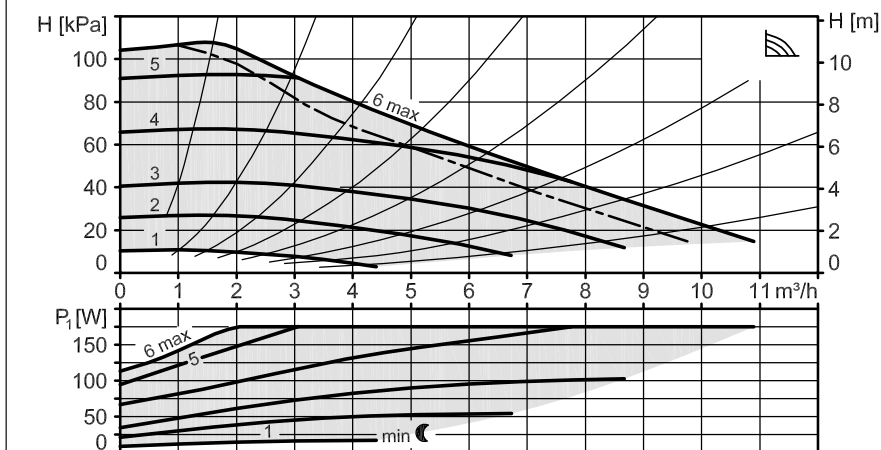
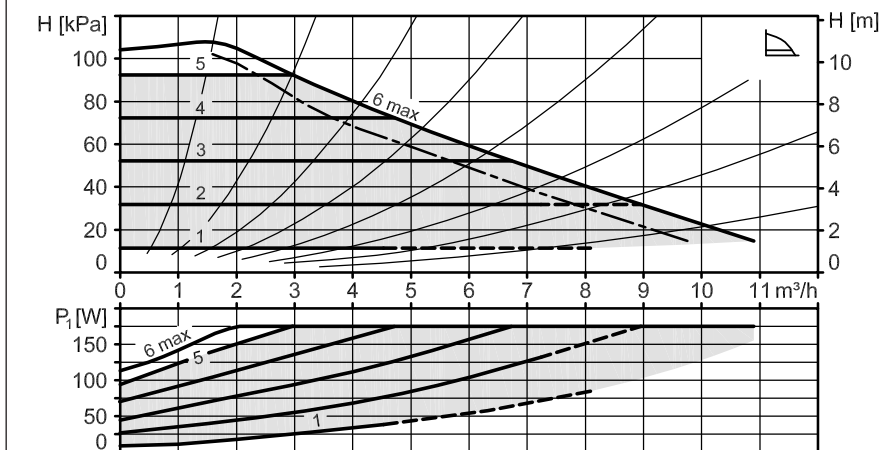
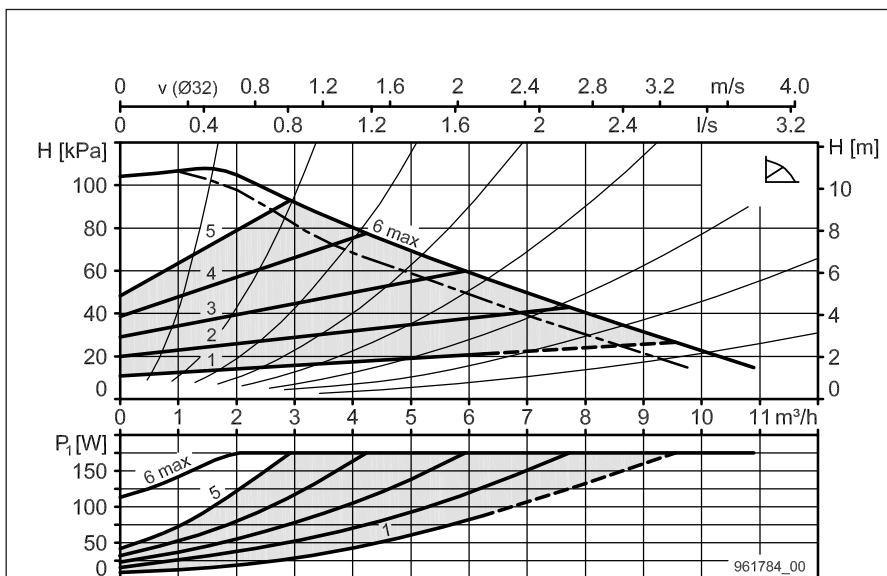
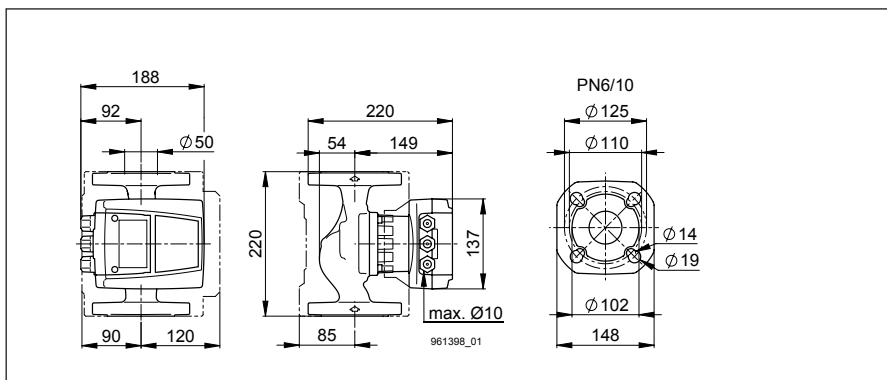
Accessories

- BIM A signal module
- BIM B control module
- Sealing set for flange PN10 / PN16

Remarks

* temporarily (ca. 30 min)

Type	Art. no.
A 500	1161360150



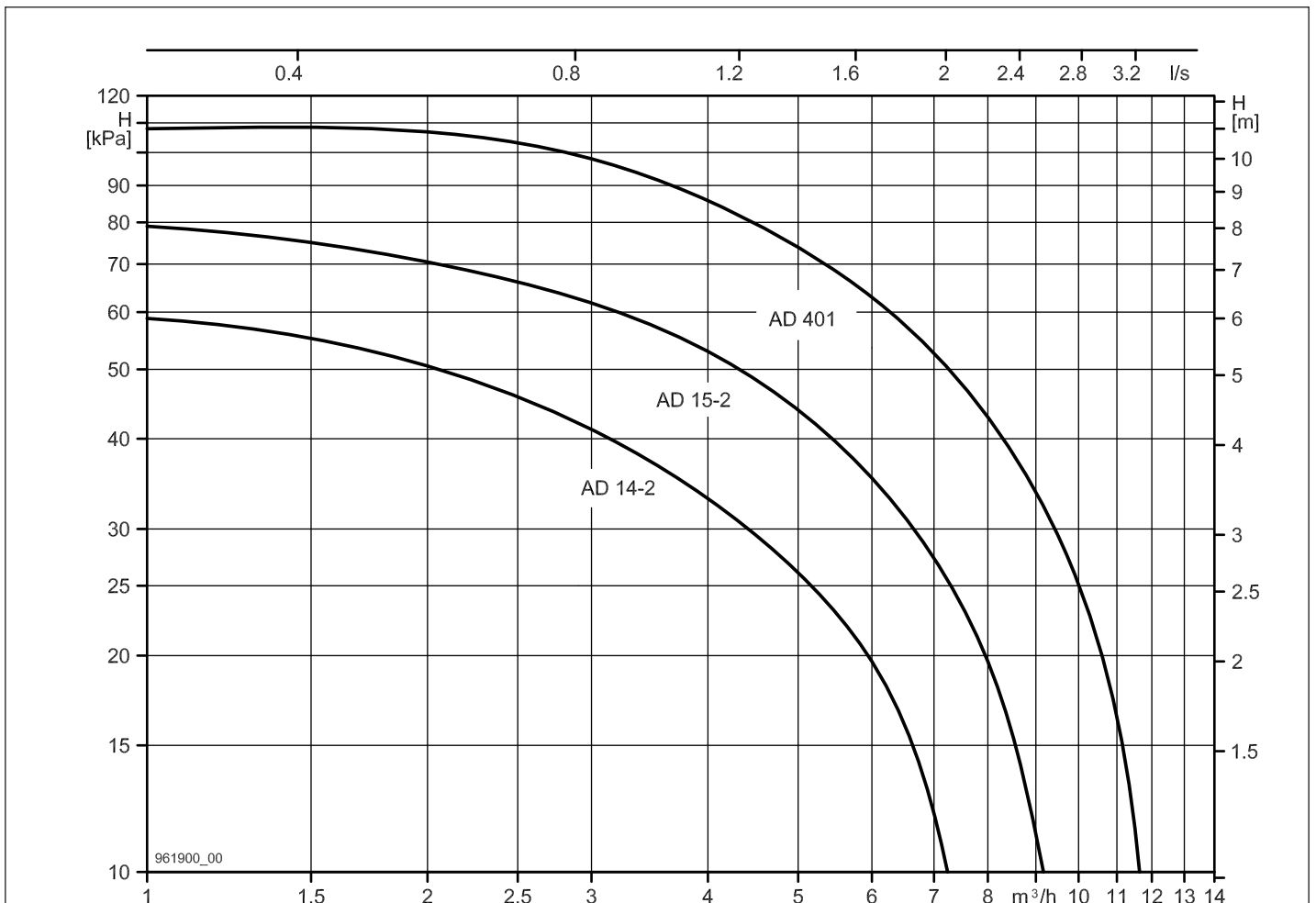
Heating circulation pumps AD 14...AD 401



Summary

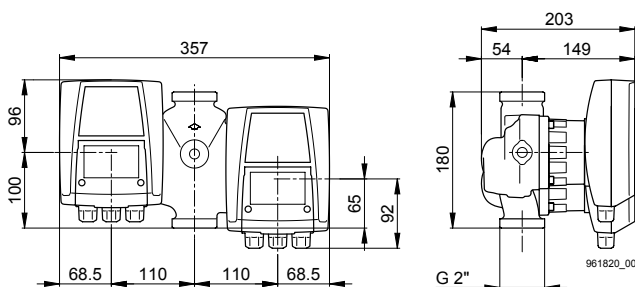
Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar	EEI value
AD 14-2	1162520150	32	6	180	G 2"	10	≤0.22
AD 15-2	1162530150	32	8	180	G 2"	10	≤0.22

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Flanged connection	Max. operating pressure bar	EEI value
AD 401	1157770150	40	11	220	PN 6/10	10	≤0.22



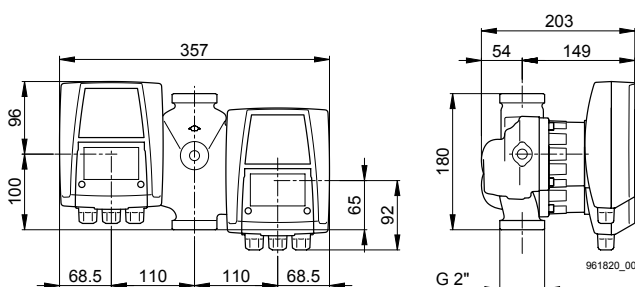
AD 14-2

Art. no.	1162520150
Nominal width	DN 32
Max. flow head H	6 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+95/+110°C *
Ambient temperature	max. 40°C
Net weight	28.2 kg
Characteristic curve	see single pump



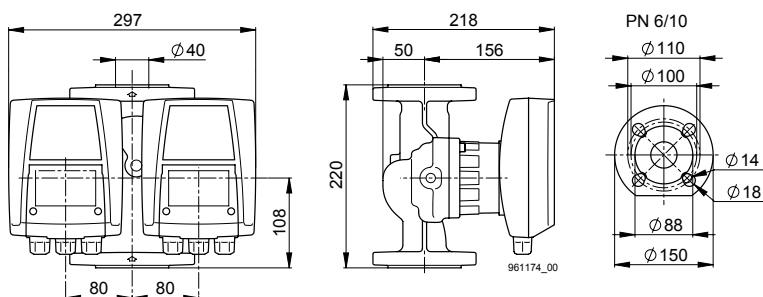
AD 15-2

Art. no.	1162530150
Nominal width	DN 32
Max. flow head H	8 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+95/+110°C *
Ambient temperature	max. 40°C
Net weight	28.2 kg
Characteristic curve	see single pump



AD 401

Art. no.	1157770150
Nominal width	DN 40
Max. flow head H	11 m
Overall length	220 mm
Flanged connection	PN 6/10
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+95/+110°C *
Ambient temperature	max. 40°C
Net weight	30.0 kg
Characteristic curve	see single pump



Cold water circulation pumps

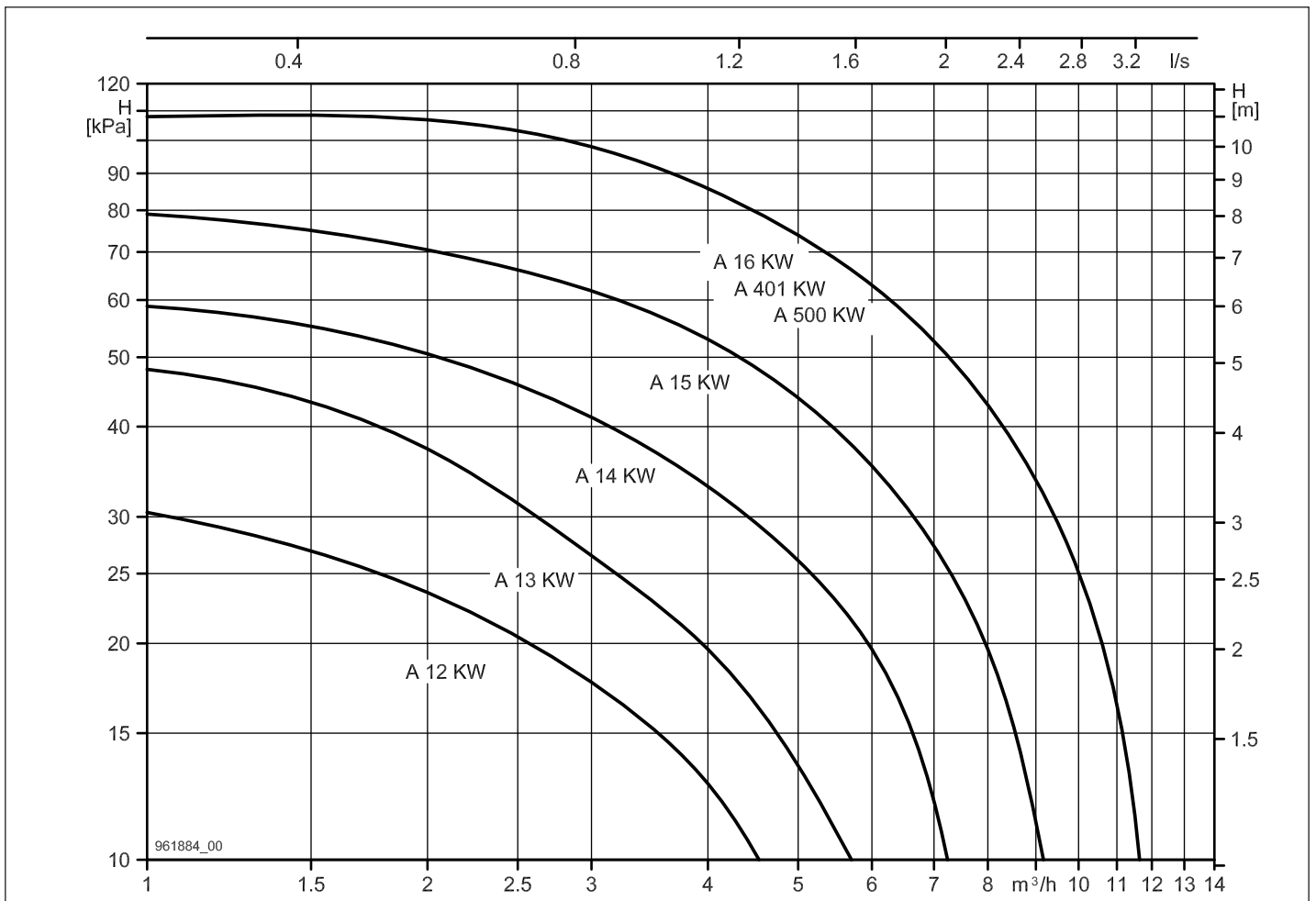
A... KW



Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar	EEl value
A 12-1 KW	1159791160	25	4	180	G 1½"	10	≤0.21
A 13-1 KW	1159821160	25	5	180	G 1½"	10	≤0.21
A 14-1 KW	1159851160	25	6	180	G 1½"	10	≤0.22
A 15-1 KW	1159881160	25	8	180	G 1½"	10	≤0.22
A 16-1 KW	1161231160	25	11	180	G 1½"	10	≤0.21
A 12-2 KW	1159801160	32	4	180	G 2"	10	≤0.21
A 13-2 KW	1159831160	32	5	180	G 2"	10	≤0.21
A 14-2 KW	1159861160	32	6	180	G 2"	10	≤0.22
A 15-2 KW	1159891160	32	8	180	G 2"	10	≤0.22
A 16-2 KW	1159901160	32	11	180	G 2"	10	≤0.21
A 12 KW	1159781160	32	4	170	G 2"	10	≤0.21
A 13 KW	1159811160	32	5	170	G 2"	10	≤0.21
A 14 KW	1159841160	32	6	170	G 2"	10	≤0.22
A 15 KW	1159871160	32	8	170	G 2"	10	≤0.22

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Flanged connection	Max. operating pressure bar	EEl value
A 401 KW	1159911160	40	11	220	PN 6/10	10	≤0.22
A 401-1 KW	1159921160	40	11	250	PN 6/10	10	≤0.22
A 500 KW	1161371160	50	11	220	PN 6/10	10	≤0.22



A 12-1 KW

A 12-2 KW

A 12 KW

Nominal width	DN 25 DN 32
Max. flow head H	4 m
Overall length	180 170 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	-10°C
Max. media temperature	+95°C
Ambient temperature	max. 40°C
Net weight	3.8 kg

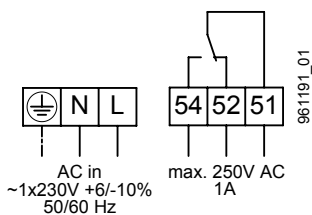
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-33 W
Nominal current	0.1-0.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

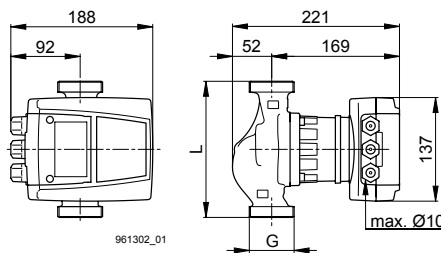
Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

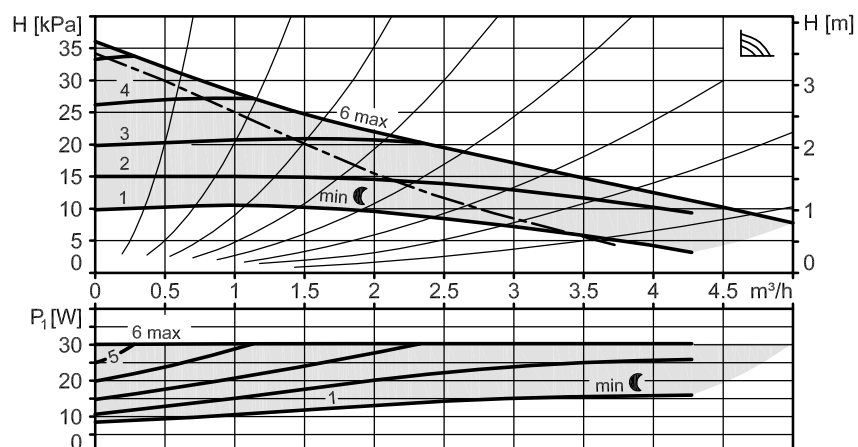
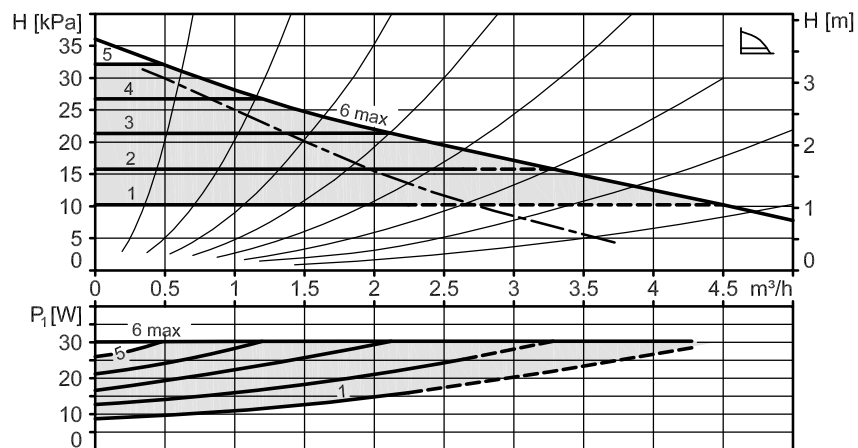
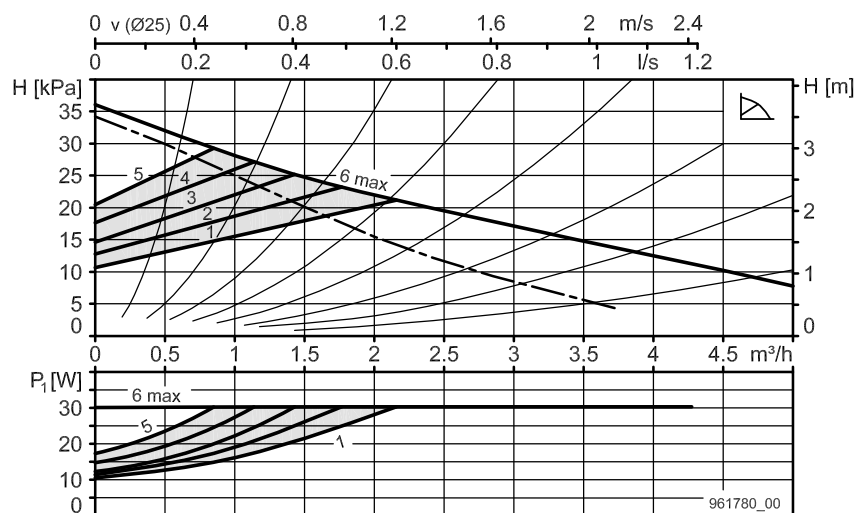
Accessories

- BIM A signal module
- BIM B control module

Type	Art. no.
A 12-1 KW	1159791160
A 12-2 KW	1159801160
A 12 KW	1159781160



A 12-1 KW	A 12-2 KW
DN 25	DN 32
L = 180 mm	L = 180 mm
G = 1½"	G = 2"
A 12 KW	
DN 32	
L = 170 mm	
G = 2"	



A 13-1 KW

A 13-2 KW

A 13 KW

Nominal width	DN 25 DN 32
Max. flow head H	5 m
Overall length	180 170 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	-10°C
Max. media temperature	+95°C
Ambient temperature	max. 40°C
Net weight	3.8 kg

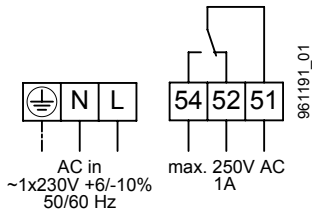
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-50 W
Nominal current	0.1-0.35 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

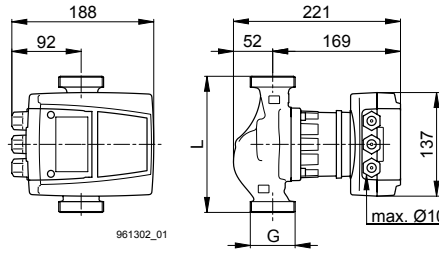
Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Accessories

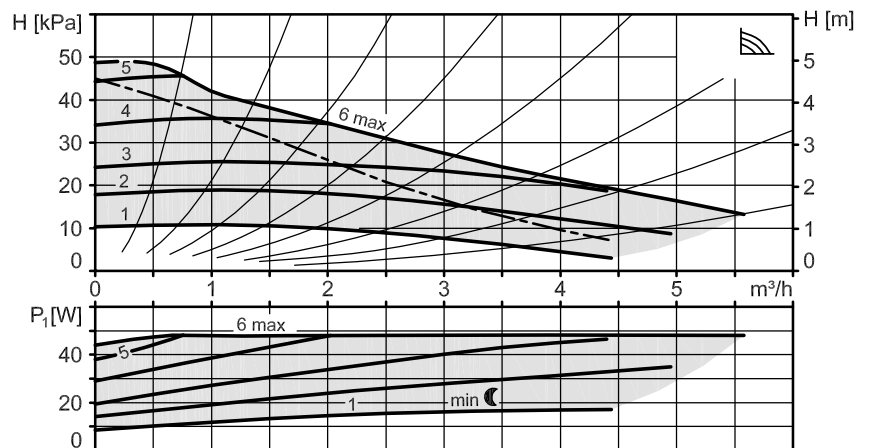
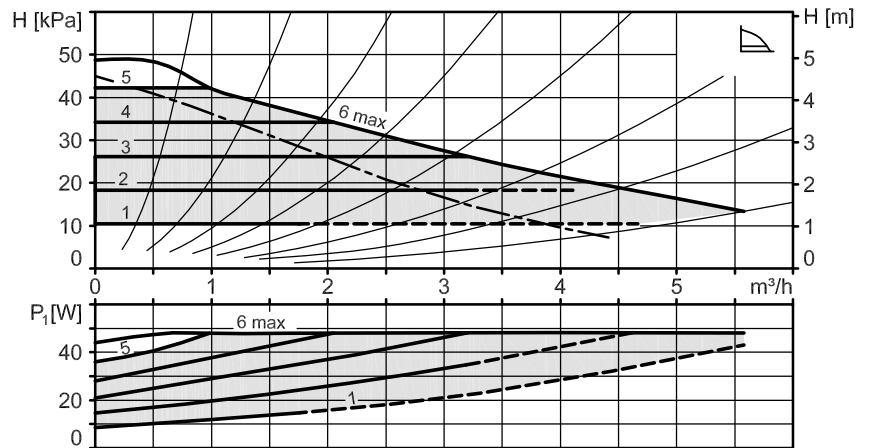
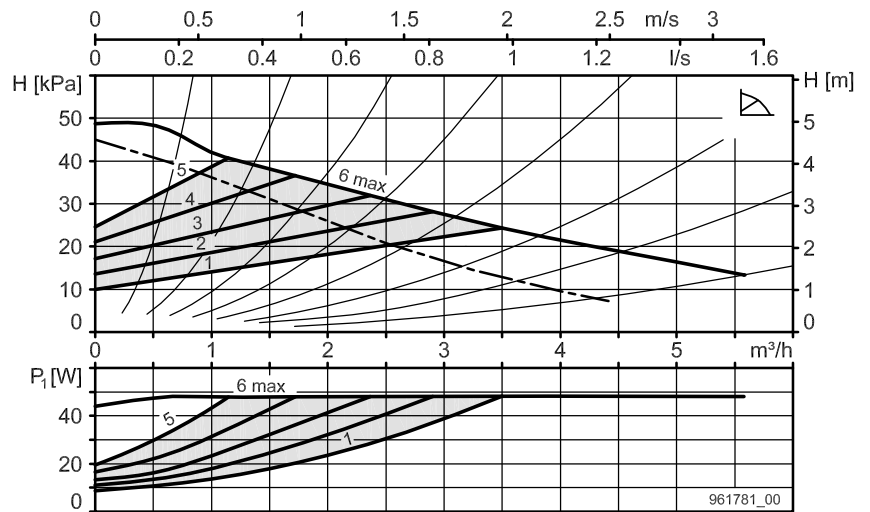
- BIM A signal module
- BIM B control module

Type	Art. no.
A 13-1 KW	1159821160
A 13-2 KW	1159831160
A 13 KW	1159811160



A 13-1 KW	A 13-2 KW
DN 25	DN 32
L = 180 mm	L = 180 mm
G = 1½"	G = 2"

A 13 KW
DN 32
L = 170 mm
G = 2"



A 14-1 KW

A 14-2 KW

A 14 KW

Nominal width	DN 25 DN 32
Max. flow head H	6 m
Overall length	180 170 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	-10°C
Max. media temperature	+95°C
Ambient temperature	max. 40°C
Net weight	3.8 kg

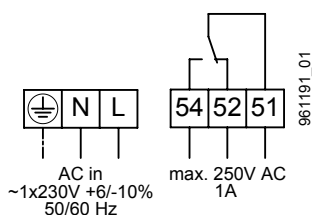
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-70 W
Nominal current	0.1-0.5 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

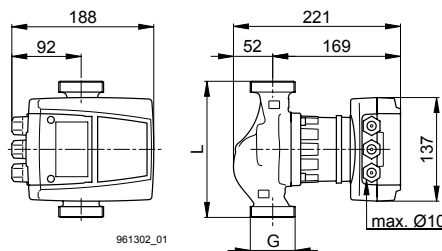
Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Accessories

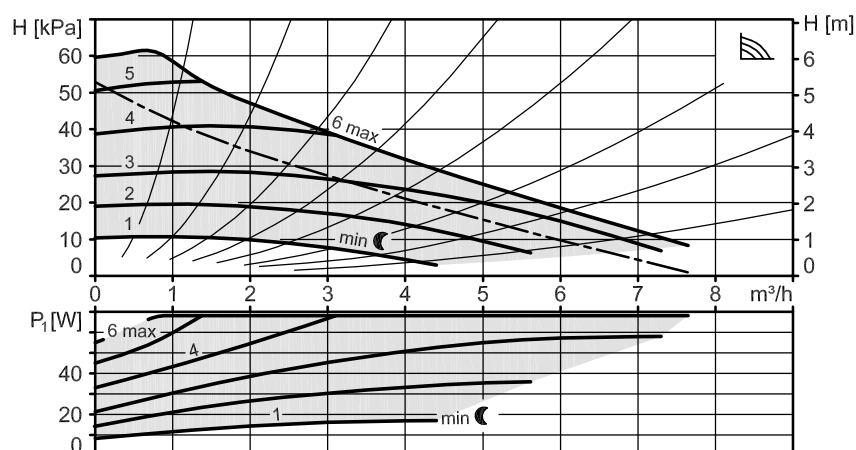
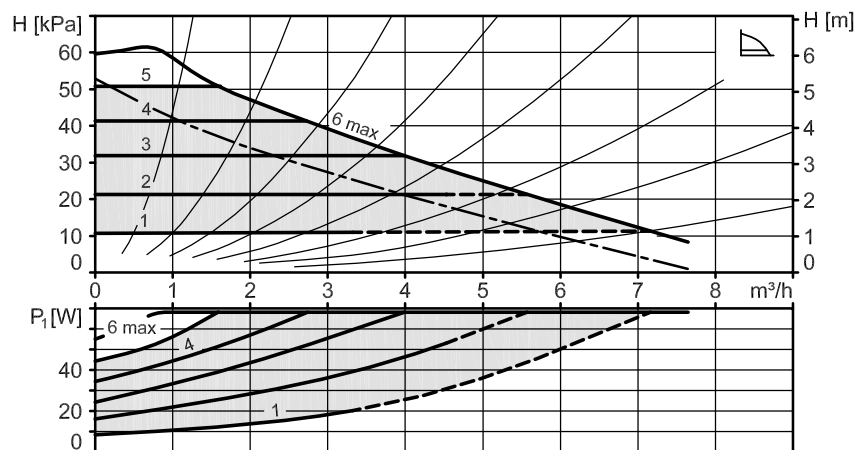
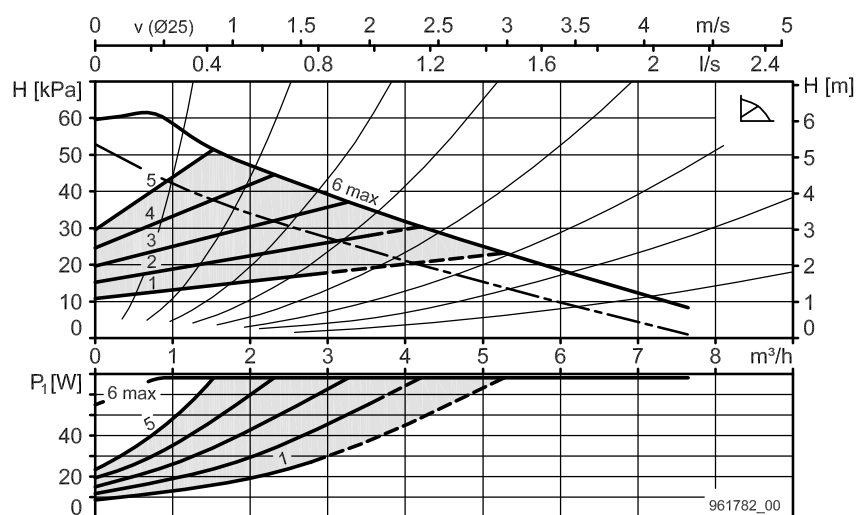
- BIM A signal module
- BIM B control module

Type	Art. no.
A 14-1 KW	1159851160
A 14-2 KW	1159861160
A 14 KW	1159841160



A 14-1 KW	A 14-2 KW
DN 25	DN 32
L = 180 mm	L = 180 mm
G = 1½"	G = 2"

A 14 KW
DN 32
L = 170 mm
G = 2"



A 15-1 KW

A 15-2 KW

A 15 KW

Nominal width	DN 25 DN 32
Max. flow head H	8 m
Overall length	180 170 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	-10°C
Max. media temperature	+95°C
Ambient temperature	max. 40°C
Net weight	3.8 kg

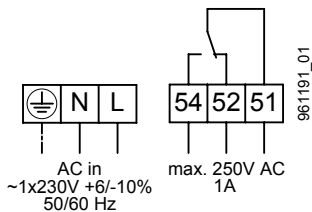
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-107 W
Nominal current	0.1-0.8 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

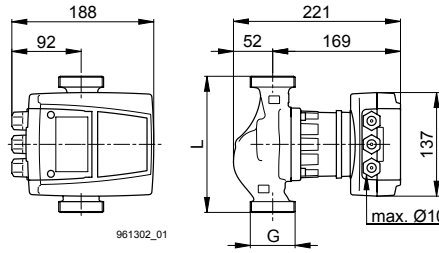
Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

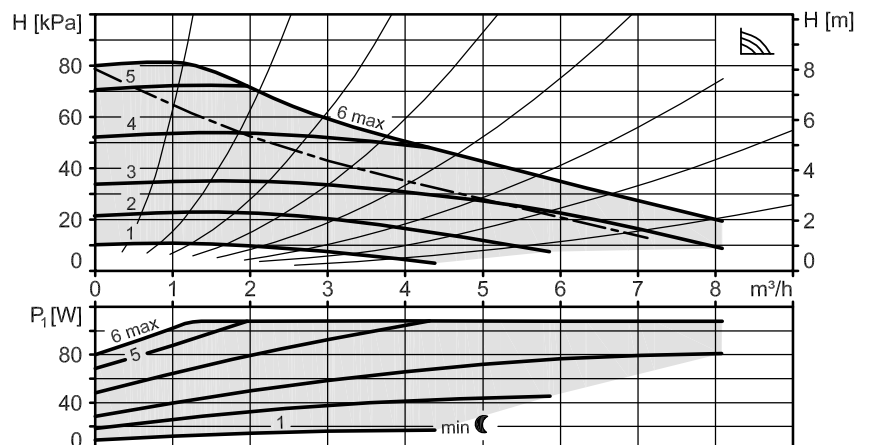
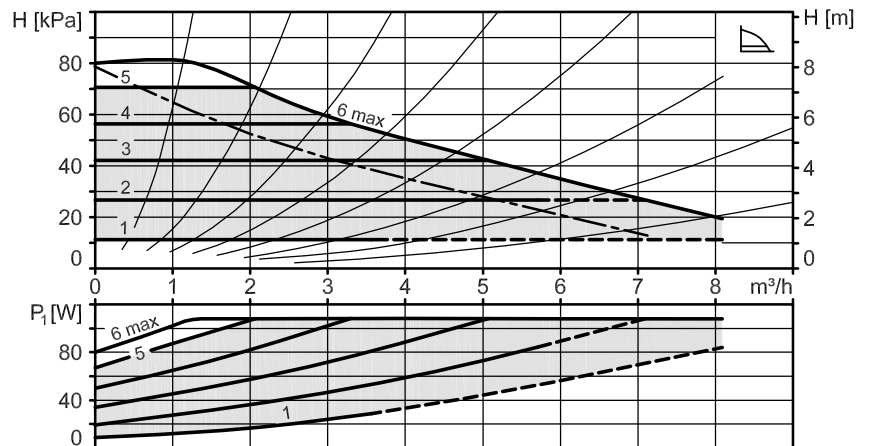
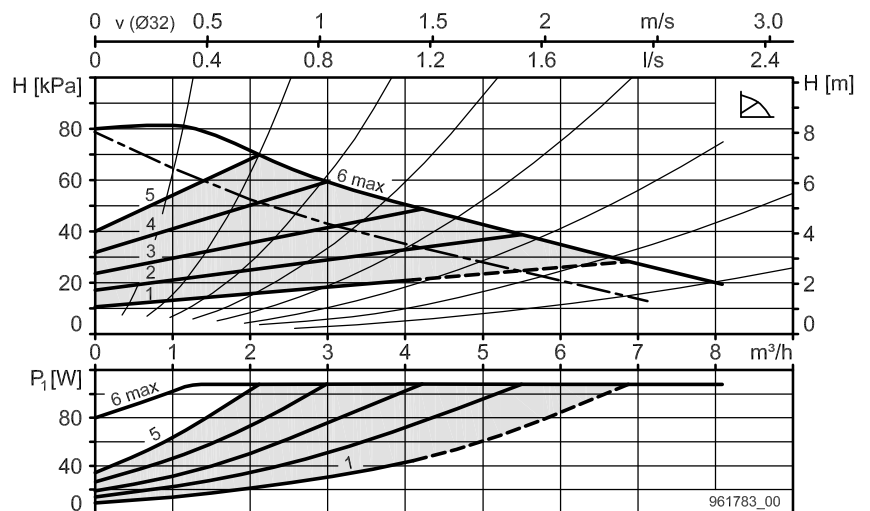
Accessories

- BIM A signal module
- BIM B control module

Type	Art. no.
A 15-1 KW	1159881160
A 15-2 KW	1159891160
A 15 KW	1159871160



A 15-1 KW	A 15-2 KW
DN 25	DN 32
L = 180 mm	L = 180 mm
G = 1½"	G = 2"
A 15 KW	
DN 32	
L = 170 mm	
G = 2"	



A 16-1 KW

A 16-2 KW

Nominal width	DN 25 DN 32
Max. flow head H	11 m
Overall length	180 mm
Threaded connection	G 1½" G 2"
Max. operating pressure	10 bar
Min. media temperature	-10°C
Max. media temperature	+95°C
Ambient temperature	max. 40°C
Net weight	3.8 kg

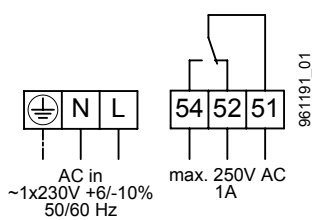
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-174 W
Nominal current	0.1-1.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

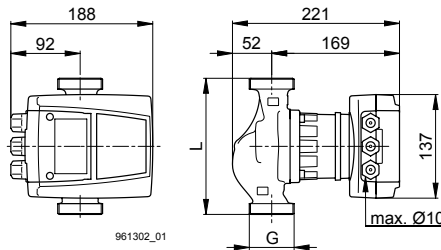
Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

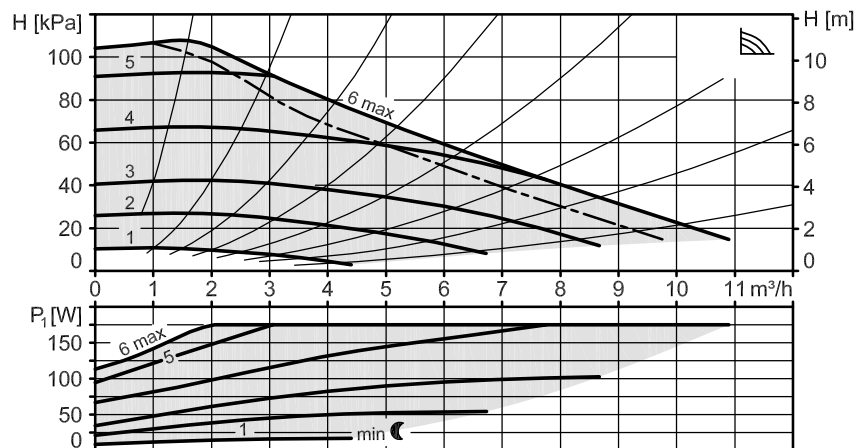
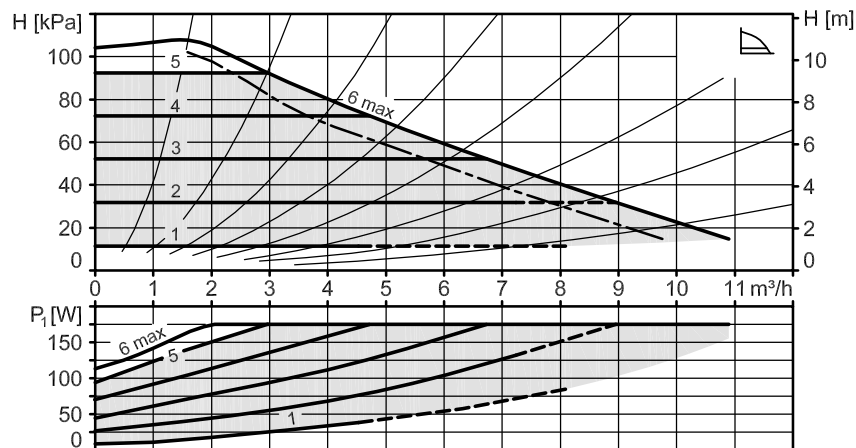
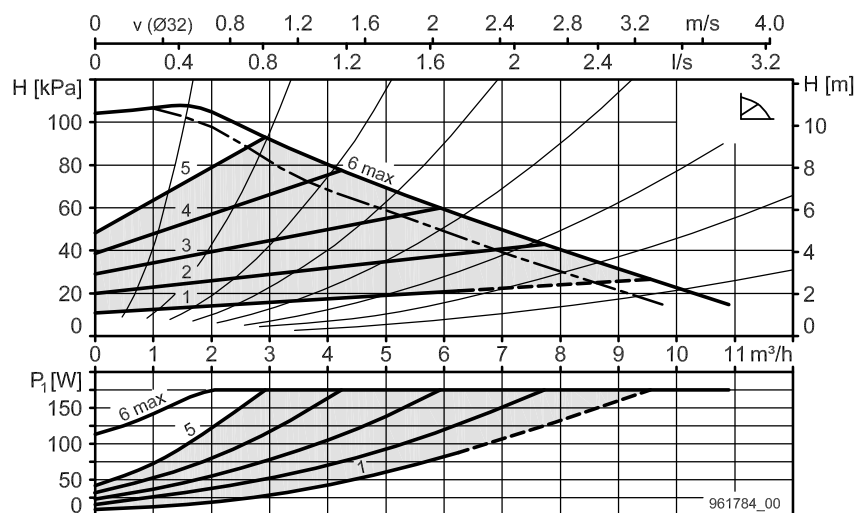
Accessories

- BIM A signal module
- BIM B control module

Type	Art. no.
A 16-1 KW	1161231160
A 16-2 KW	1159901160



A 16-1 KW	A 16-2 KW
DN 25	DN 32
L = 180 mm	L = 180 mm
G = 1½"	G = 2"



A 401 KW

A 401-1 KW

Nominal width	DN 40
Max. flow head H	11 m
Overall length	220 250 mm
Flanged connection	PN 6/10
Max. operating pressure	10 bar
Min. media temperature	-10°C
Max. media temperature	+95°C
Ambient temperature	max. 40°C
Net weight	9.0 kg

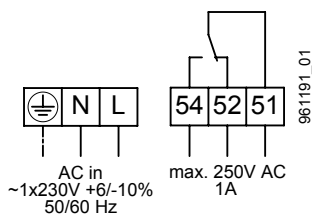
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-174 W
Nominal current	0.1-1.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

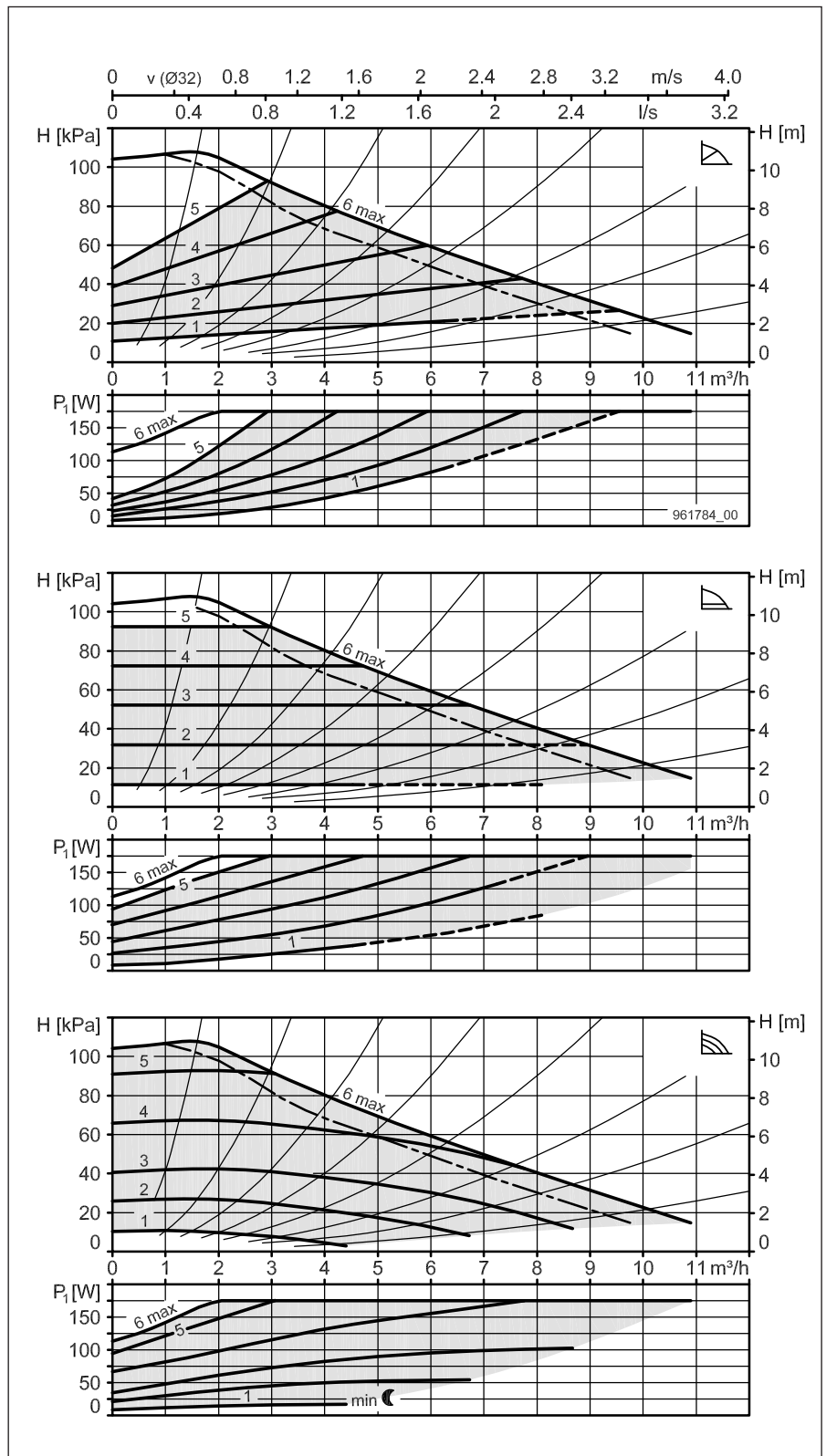
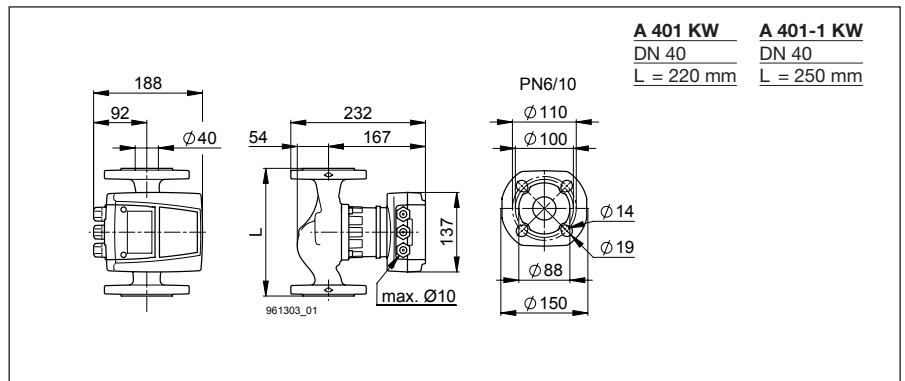
Included in the scope of delivery

- Sealing set for flange PN 6

Accessories

- BIM A signal module
- BIM B control module
- Sealing set for flange PN10 / PN16

Type	Art. no.
A 401 KW	1159911160
A 401-1 KW	1159921160



Air conditioning/Refrigeration



A 500 KW

Nominal width	DN 50
Max. flow head H	11 m
Overall length	220 mm
Flanged connection	PN 6/10
Max. operating pressure	10 bar
Min. media temperature	-10°C
Max. media temperature	+95°C
Ambient temperature	max. 40°C
Net weight	11.0 kg

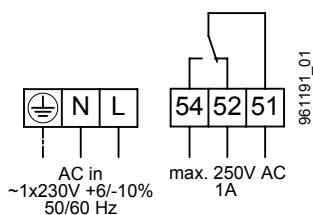
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-174 W
Nominal current	0.1-1.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Sealing set for flange PN 6

Accessories

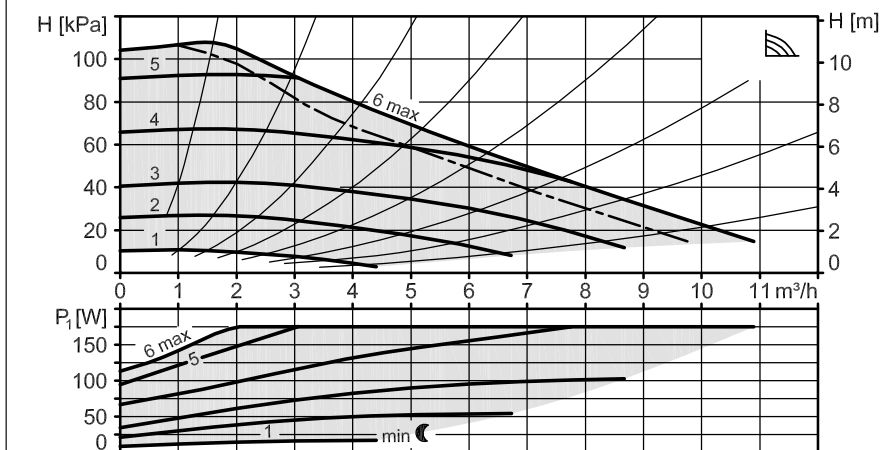
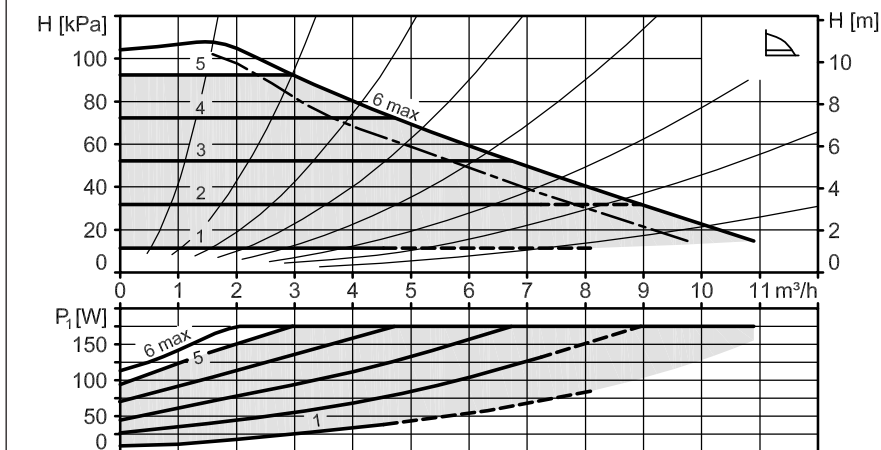
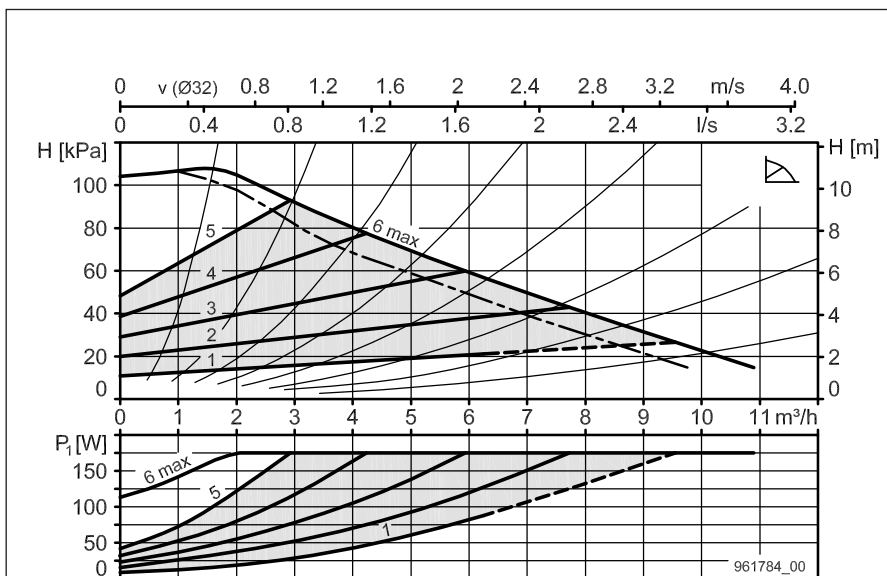
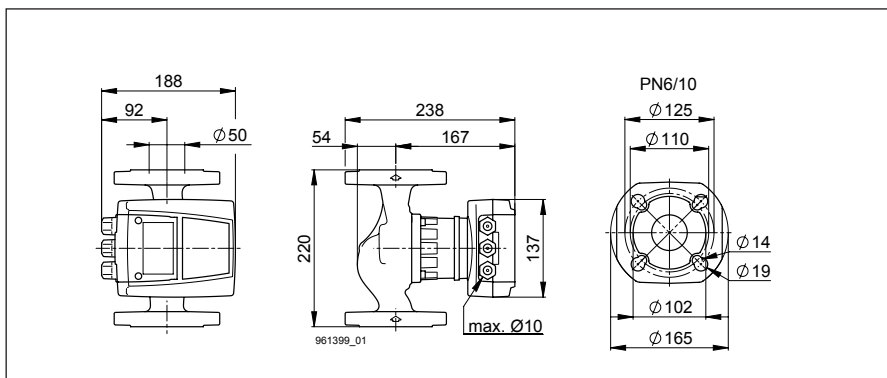
- BIM A signal module
- BIM B control module
- Sealing set for flange PN10 / PN16

Type

A 500 KW

Art. no.

1161371160



Premium cold water circulation pumps ModulA... GREEN T2 mit Flanschanschluss



Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Flanged connection	Max. operating pressure bar	EEl value
ModulA 32F-12 220 GREEN	7000000140	32	12	220	PN 6-16	16	≤0.20
ModulA 40-8 220 GREEN	7000000141	40	8	220	PN 6-16	16	≤0.20
ModulA 40-10 220 GREEN	7000000142	40	10	220	PN 6-16	16	≤0.20
ModulA 40-12 250 GREEN	7000000143	40	12	250	PN 6-16	16	≤0.18
ModulA 40-18 250 GREEN	7000000144	40	18	250	PN 6-16	16	≤0.18
ModulA 50-6 240 GREEN	7000000145	50	6	240	PN 6-16	16	≤0.19
ModulA 50-8 240 GREEN	7000000147	50	8	240	PN 6-16	16	≤0.19
ModulA 50-12 270 GREEN	7000000148	50	12	270	PN 6-16	16	≤0.18
ModulA 50-18 270 GREEN	7000000149	50	18	270	PN 6-16	16	≤0.17
ModulA 65-6 270 GREEN	7000000150	65	6	270	PN 6-16	16	≤0.18
ModulA 65-8 270 GREEN	7000000151	65	8	270	PN 6-16	16	≤0.18
ModulA 65-12 340 GREEN	7000000153	65	12	340	PN 6-16	16	≤0.17
ModulA 65-15 340 GREEN	7000000154	65	15	340	PN 6-16	16	≤0.18
ModulA 80-8 360 GREEN PN6	7000000155	80	8	360	PN 6	6	≤0.17
ModulA 80-8 360 GREEN PN10/16	7000000156	80	8	360	PN 10/16	16	≤0.17
ModulA 80-12 360 GREEN PN6	7000000157	80	12	360	PN 6	6	≤0.17
ModulA 80-12 360 GREEN PN10/16	7000000158	80	12	360	PN 10/16	16	≤0.17
ModulA 100-8 450 GREEN PN6	7000000159	100	12	450	PN 6	6	≤0.18
ModulA 100-8 450 GREEN PN10/16	7000000160	100	12	450	PN 10/16	16	≤0.18
ModulA 100-12 450 GREEN PN6	7000000161	100	12	450	PN 6	6	≤0.18
ModulA 100-12 450 GREEN PN10/16	7000000162	100	12	450	PN 10/16	16	≤0.18

Order reference

Modula (-D) 32 (F) -6 220 RED

Series

Single pump
Twin pump (-D)

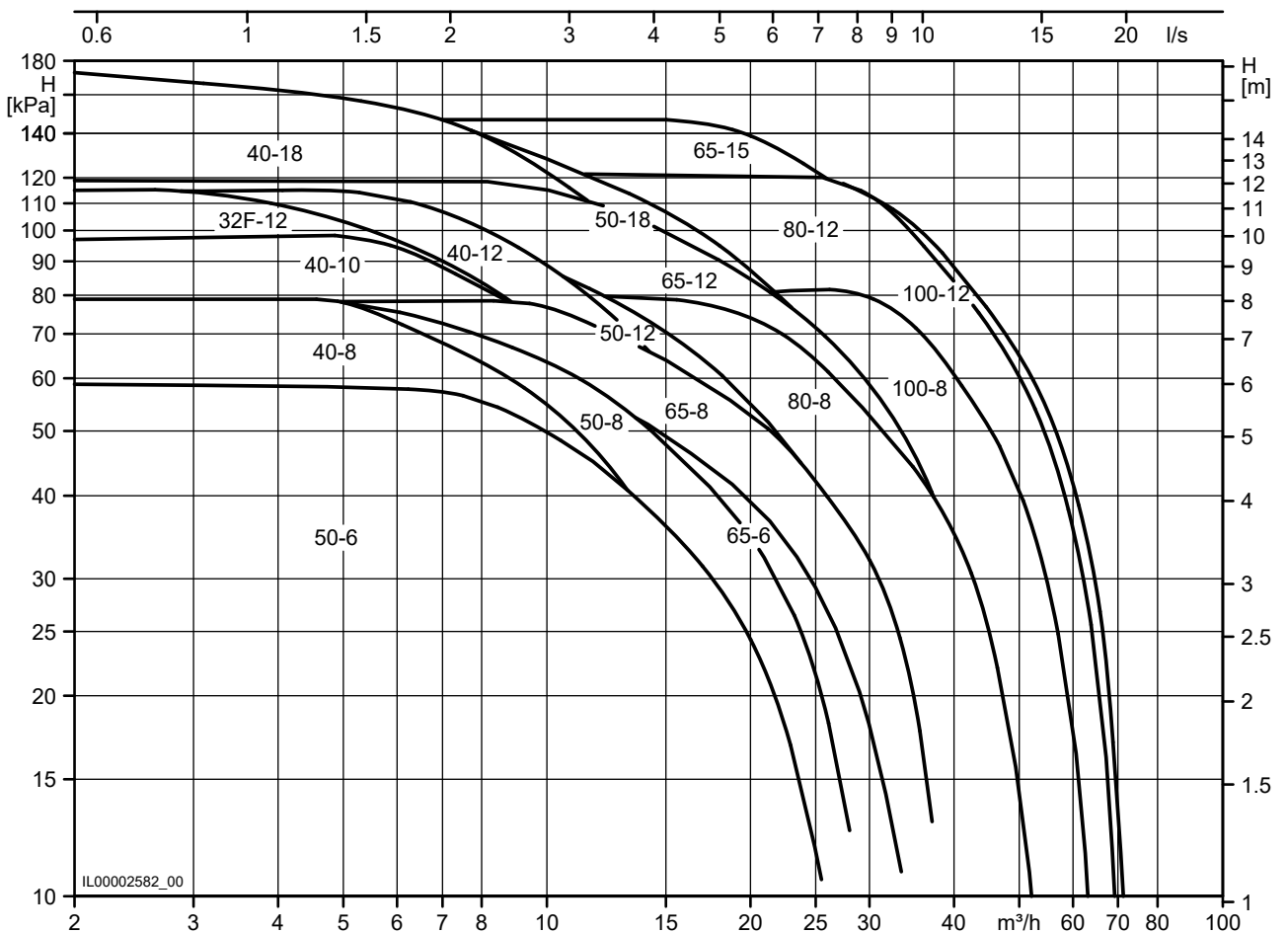
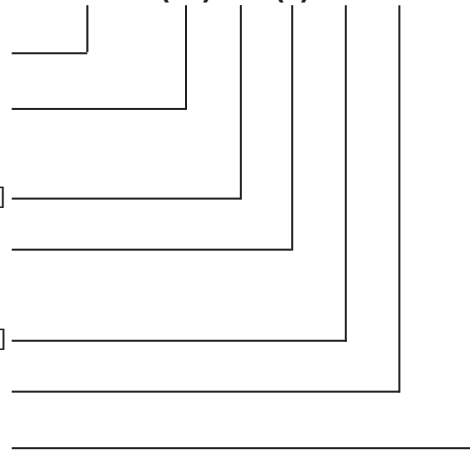
Nominal width (DN) [mm]

Pipeline connection
Flange (F)

Discharge head max. [m]

Installation height [mm]

Field of application
Heating (RED)
Cold water (GREEN)
Service water (BLUE)



Modula 32F-12 220 GREEN

Version	T2 M
Nominal width	DN 32
Max. flow head H	12 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	17.3 kg

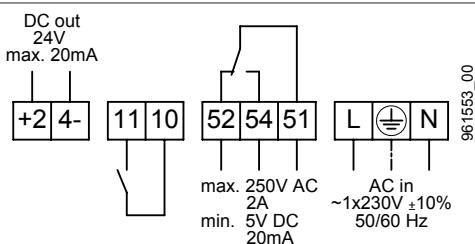
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	15-329 W
Nominal current	0.17-1.51 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.35 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

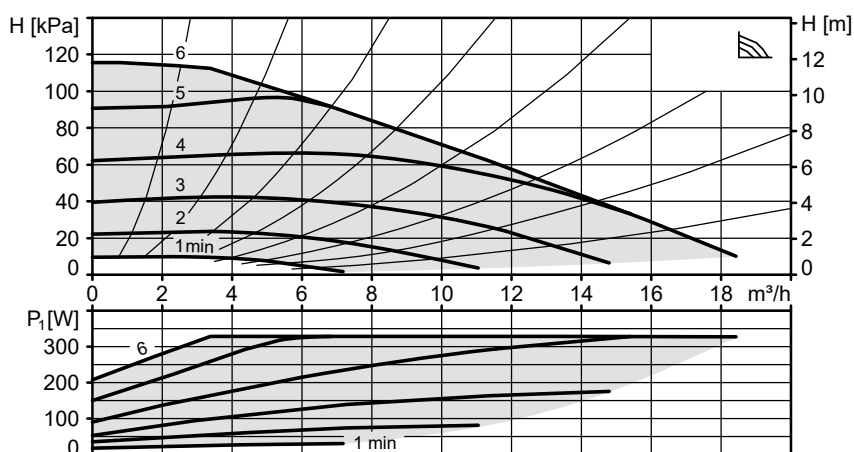
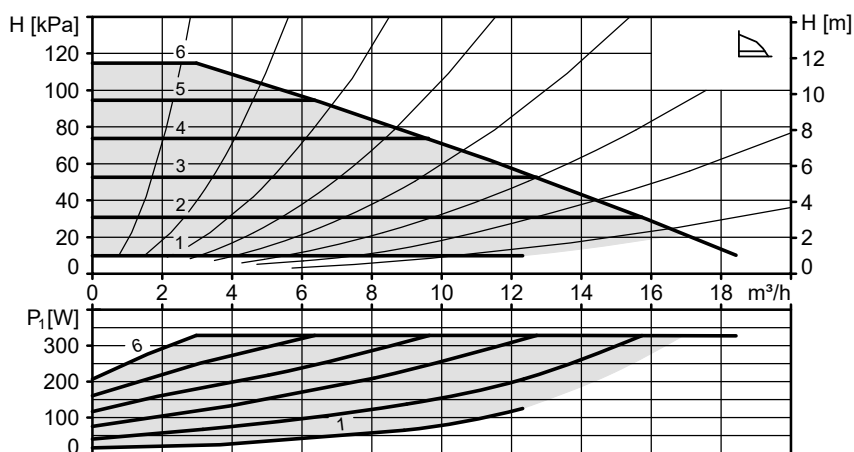
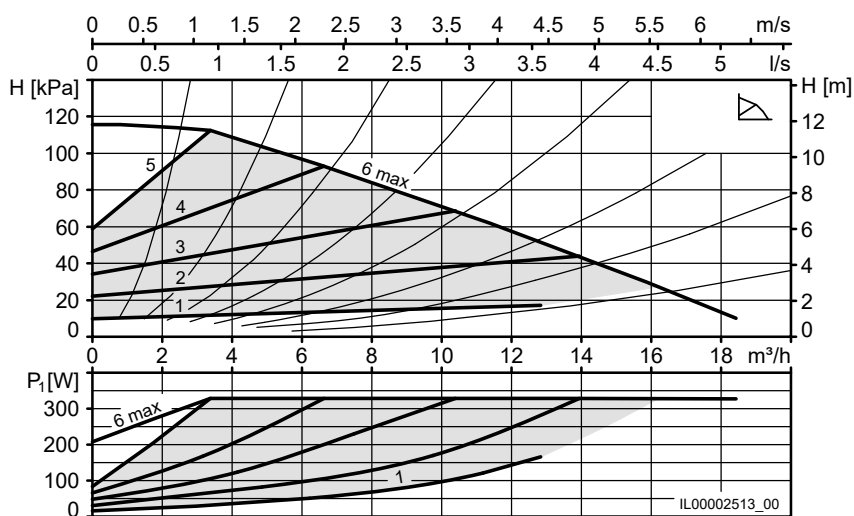
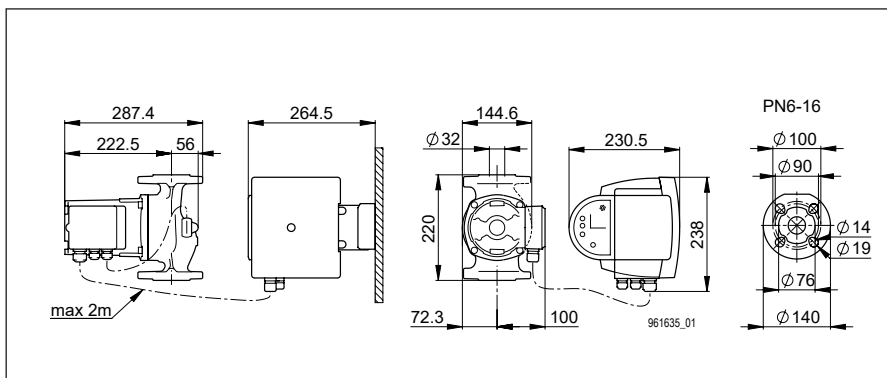
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
Modula 32F-12 220 GREEN	7000000140



Modula 40-8 220 GREEN

Version	T2 M
Nominal width	DN 40
Max. flow head H	8 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	18.3 kg

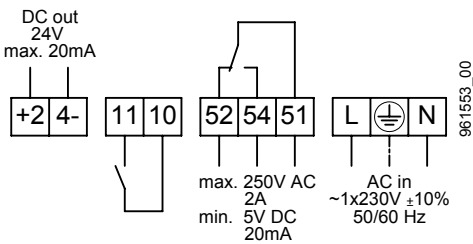
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	18-264 W
Nominal current	0.19-1.23 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

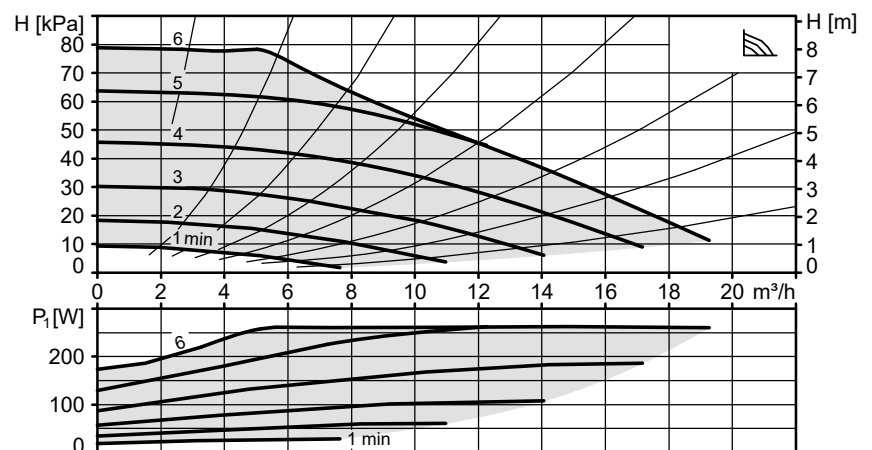
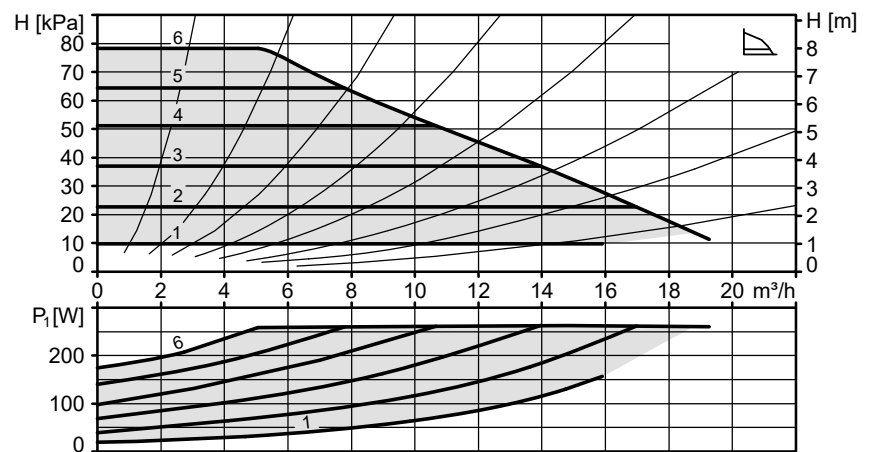
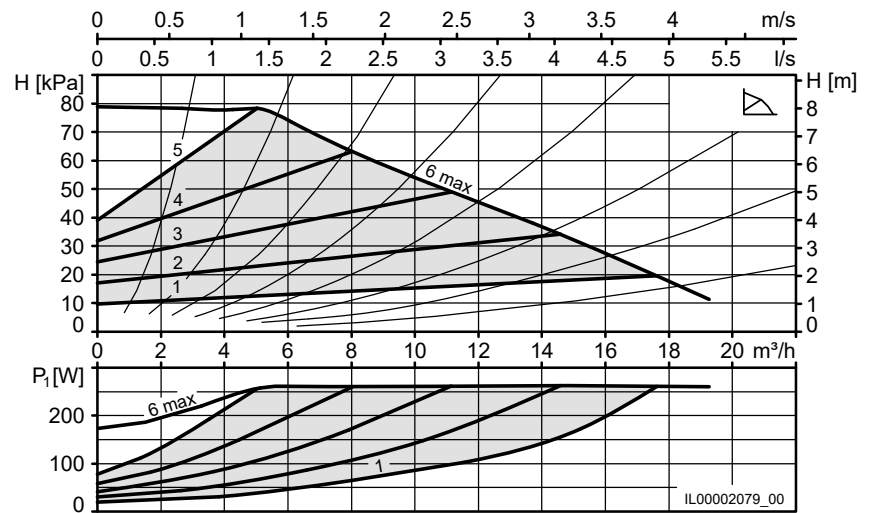
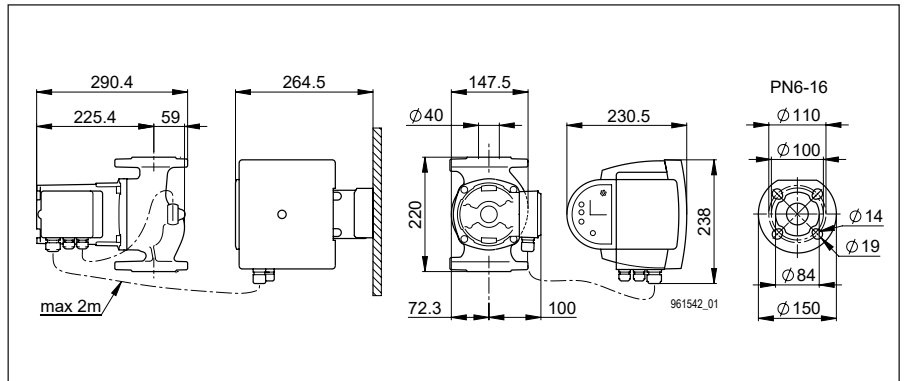
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
Modula 40-8 220 GREEN	7000000141



ModuA 40-10 220 GREEN

Version	T2 M
Nominal width	DN 40
Max. flow head H	10 m
Overall length	220 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	18.3 kg

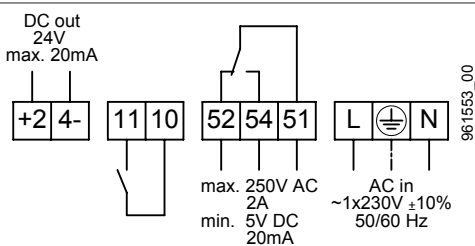
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	18-352 W
Nominal current	0.18-1.60 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

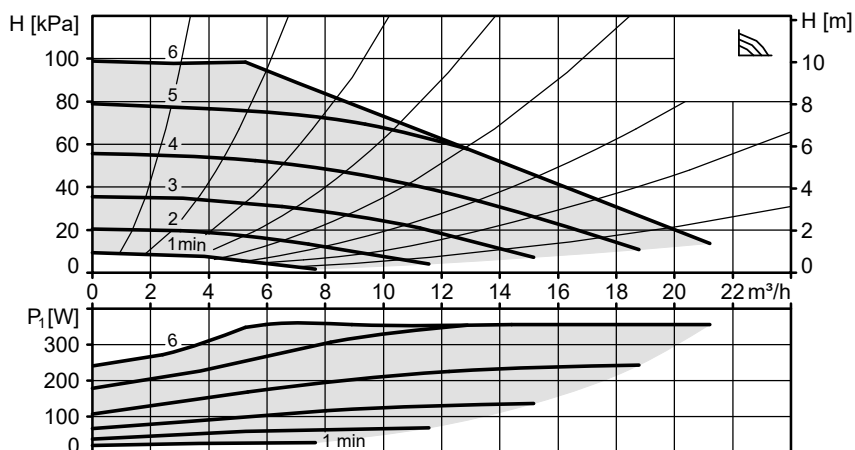
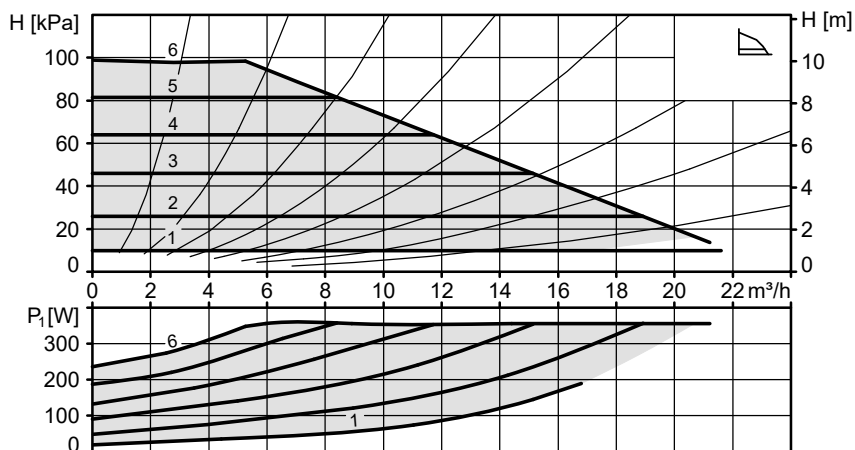
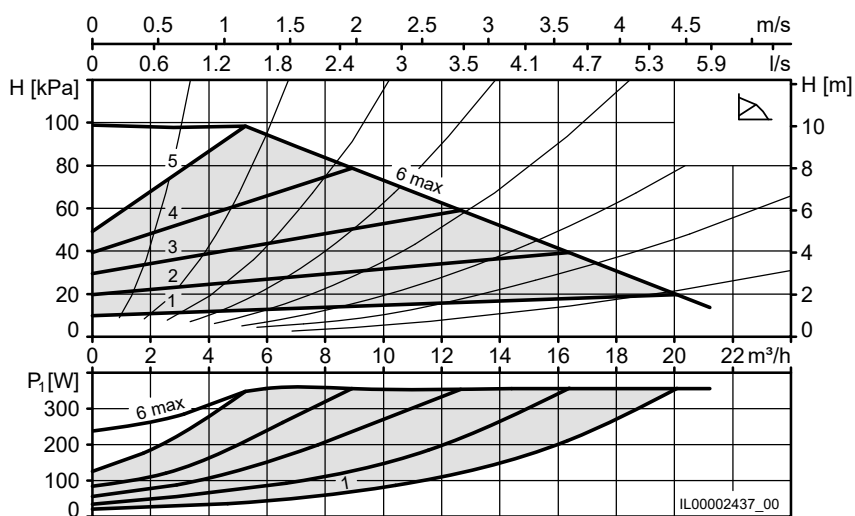
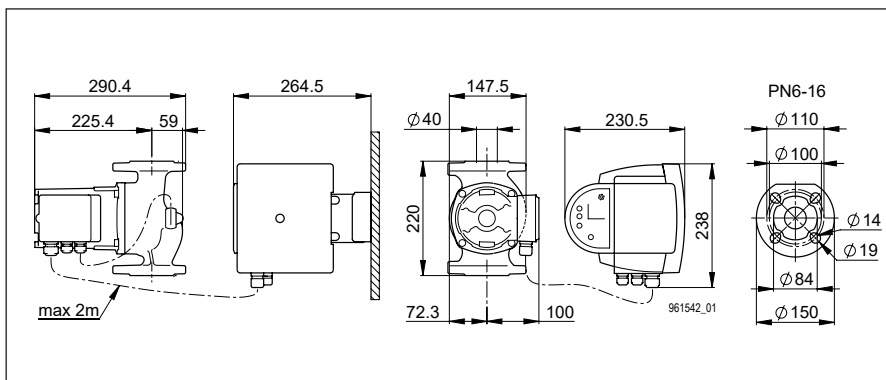
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 40-10 220 GREEN	7000000142



ModuA 40-12 250 GREEN

Version	T2 M
Nominal width	DN 40
Max. flow head H	12 m
Overall length	250 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	18.1 kg

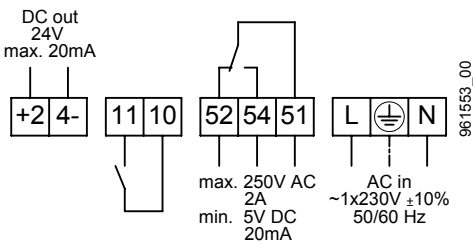
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	16-423 W
Nominal current	0.17-1.93 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

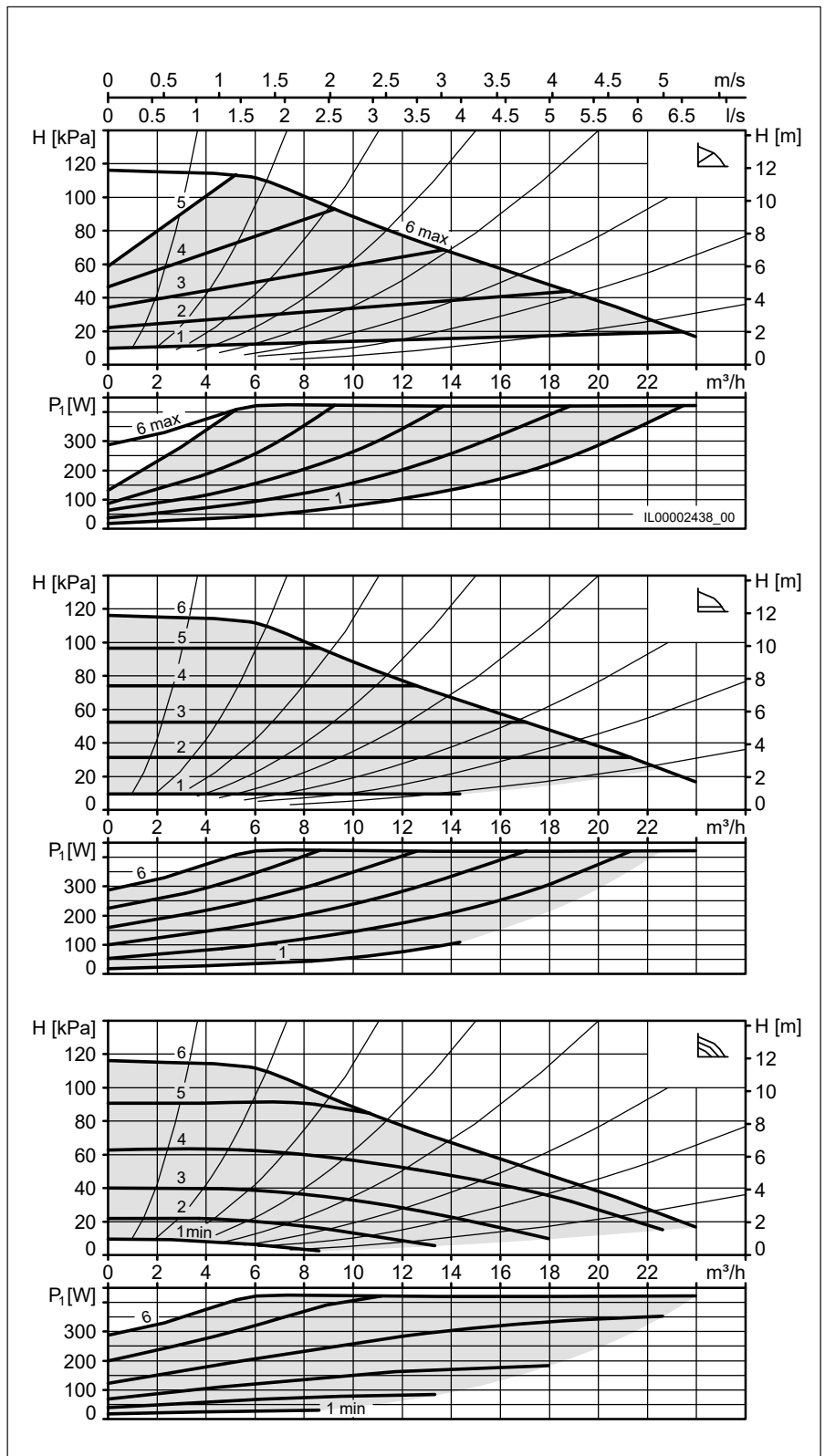
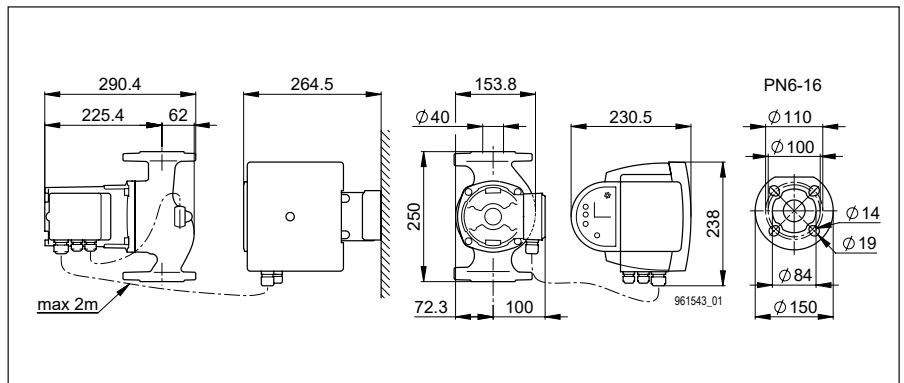
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 40-12 250 GREEN	7000000143



ModuA 40-18 250 GREEN

Version	T2 M
Nominal width	DN 40
Max. flow head H	18 m
Overall length	250 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	18.1 kg

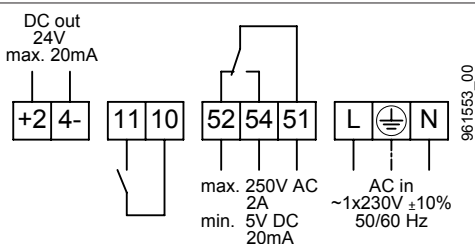
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	16-600 W
Nominal current	0.17-2.70 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

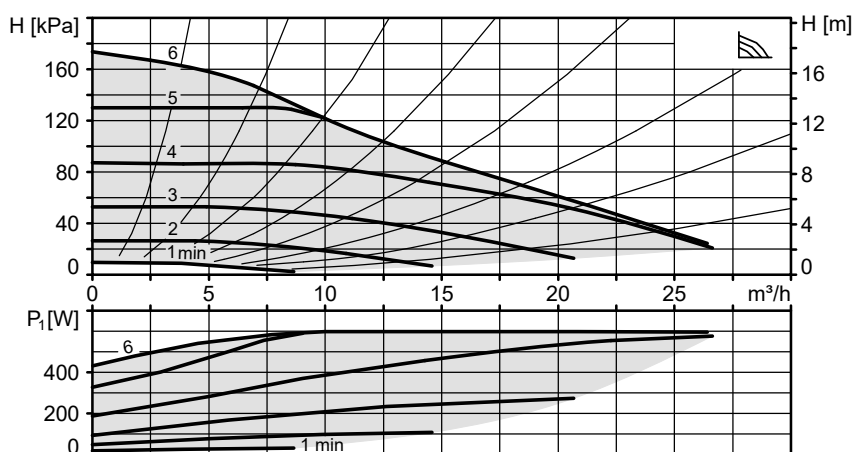
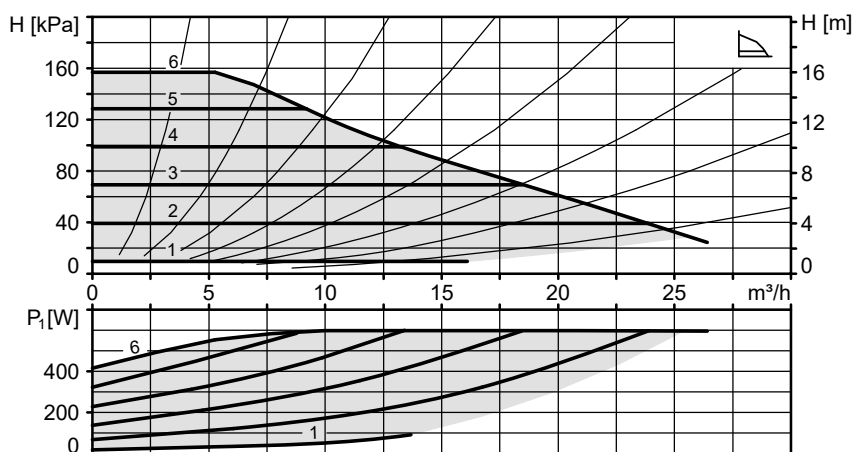
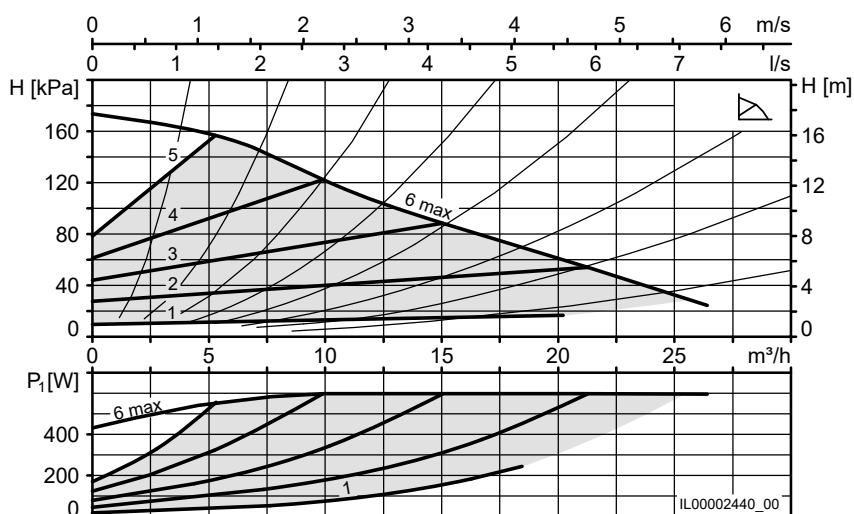
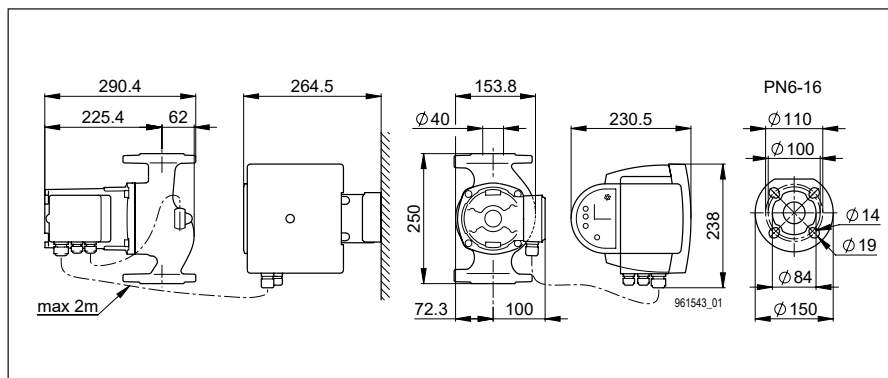
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 40-18 250 GREEN	7000000144



ModuA 50-6 240 GREEN

Version	T2 M
Nominal width	DN 50
Max. flow head H	6 m
Overall length	240 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	19.6 kg

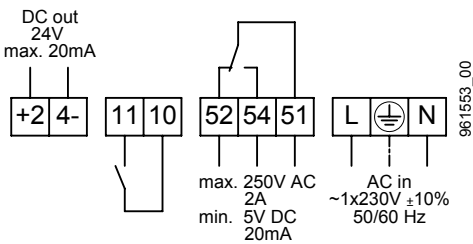
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	21-249 W
Nominal current	0.20-1.15 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.40 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

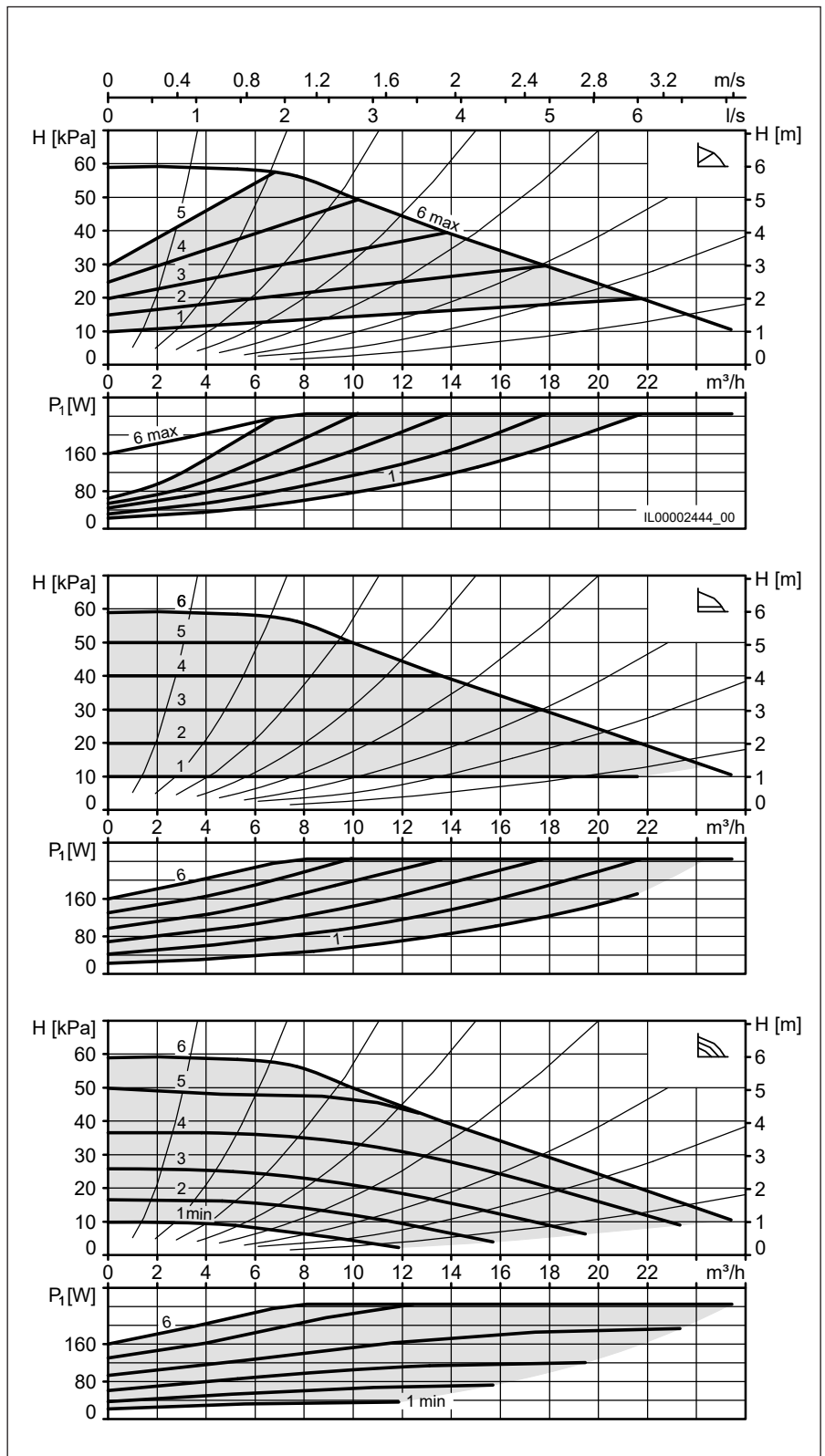
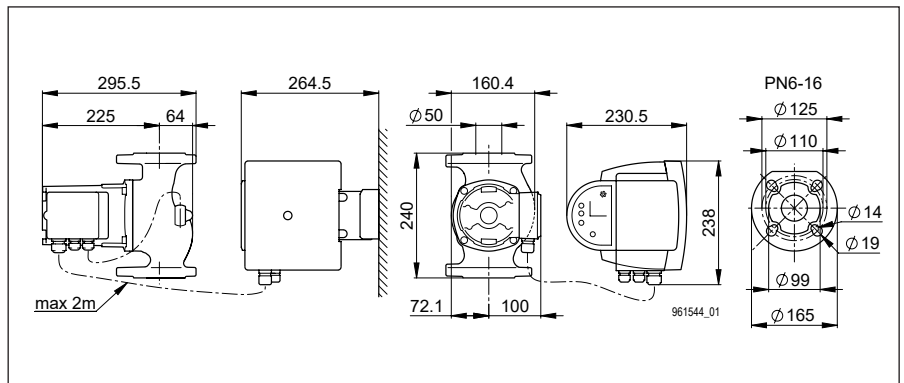
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 50-6 240 GREEN	7000000145



Air conditioning/Refrigeration



ModuA 50-8 240 GREEN

Version	T2 M
Nominal width	DN 50
Max. flow head H	8 m
Overall length	240 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	19.6 kg

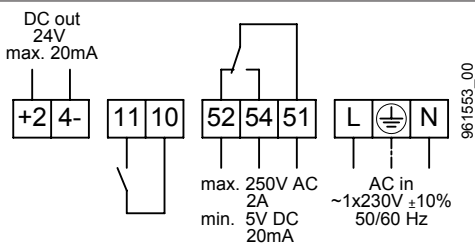
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	21-326 W
Nominal current	0.20-1.49 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.40 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

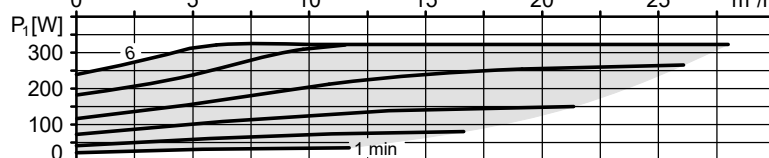
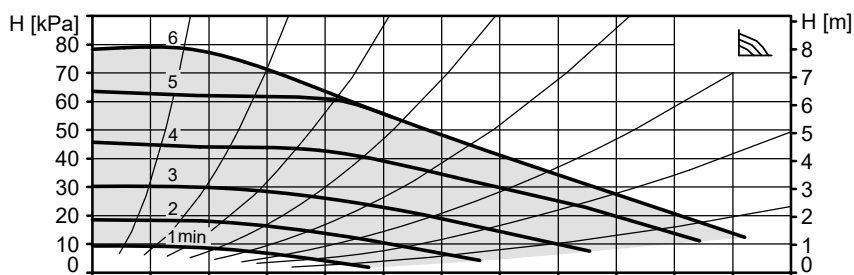
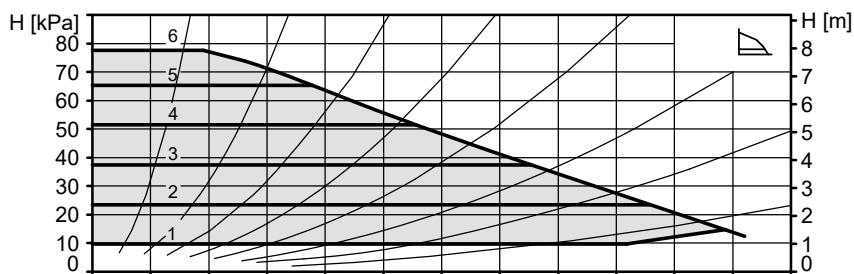
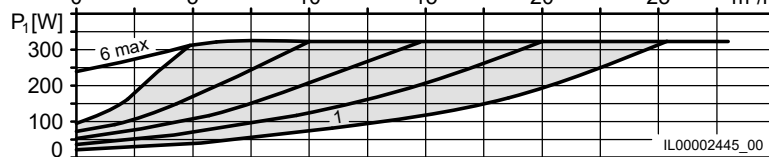
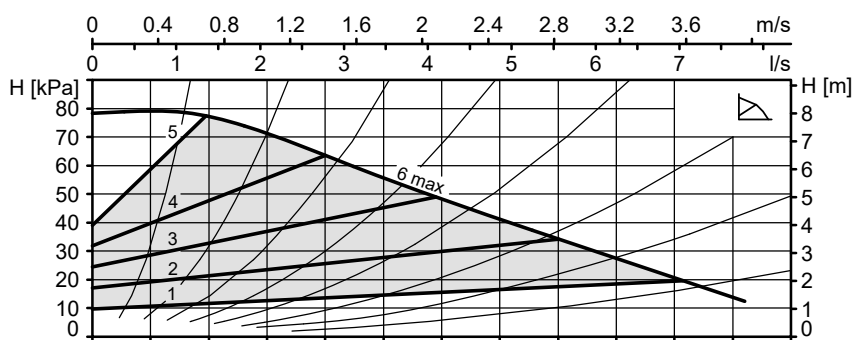
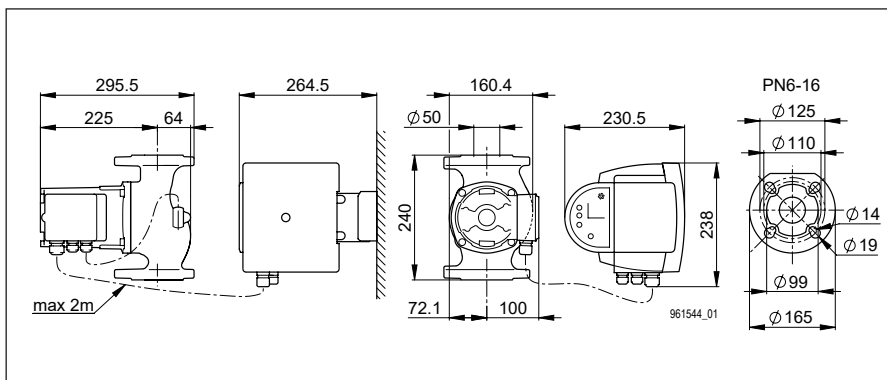
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

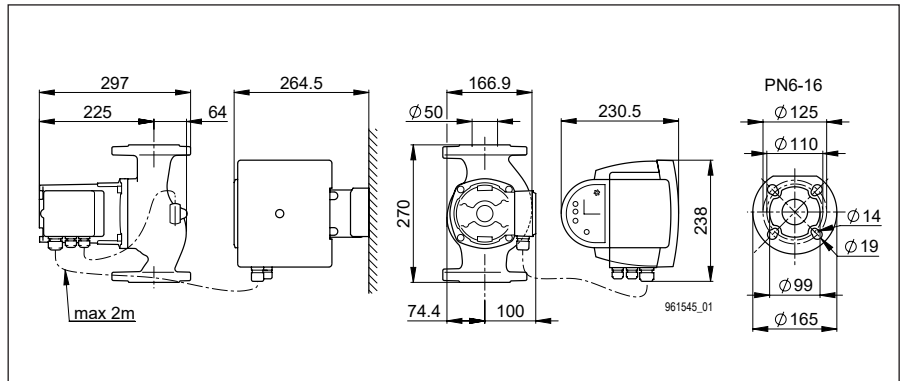
- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 50-8 240 GREEN	7000000147



ModuA 50-12 270 GREEN

Version	T2 M
Nominal width	DN 50
Max. flow head H	12 m
Overall length	270 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	20.1 kg



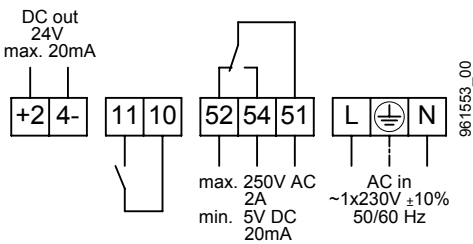
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	21-488 W
Nominal current	0.20-2.23 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 95 °C	0.50 bar
at a water temp. of 110 °C	1.00 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

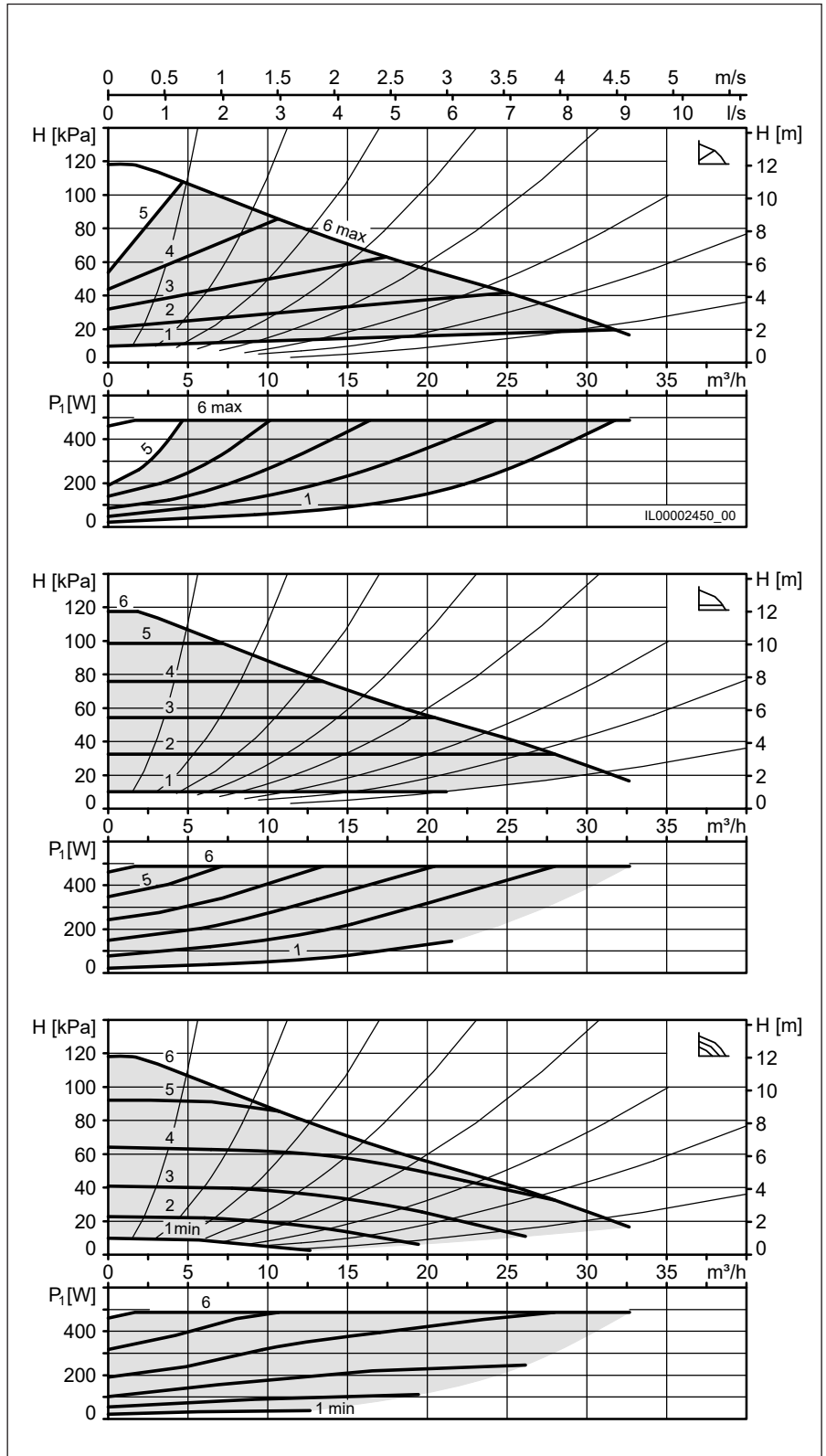
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 50-12 270 GREEN	7000000148



ModuA 50-18 270 GREEN

Version	T2 M
Nominal width	DN 50
Max. flow head H	18 m
Overall length	270 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	20.8 kg

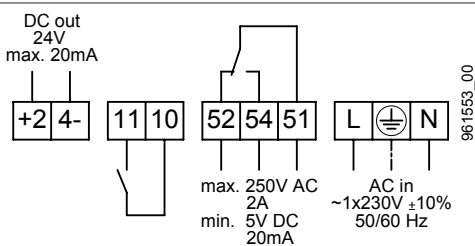
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	21-767 W
Nominal current	0.24-3.44 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

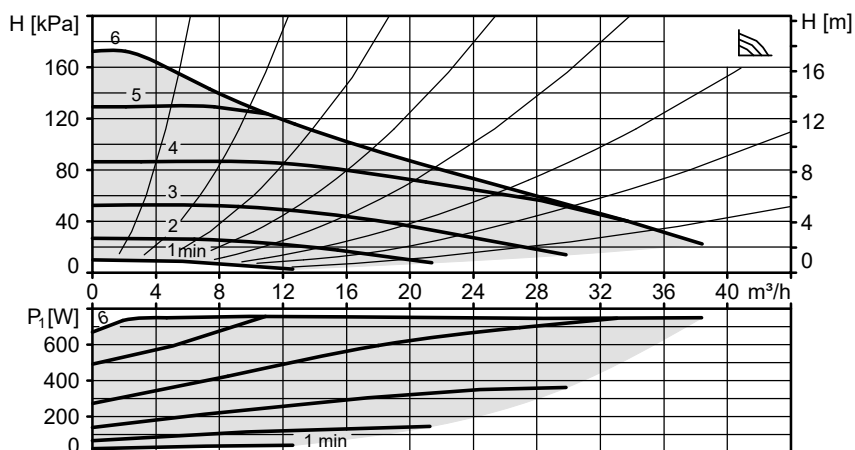
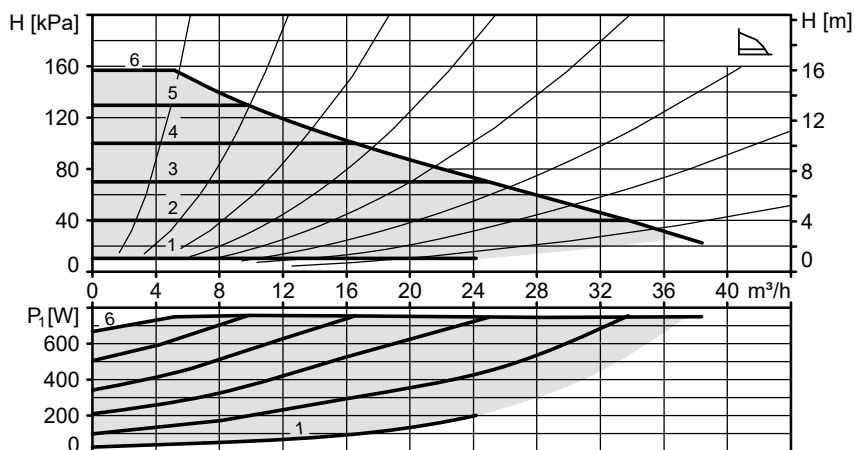
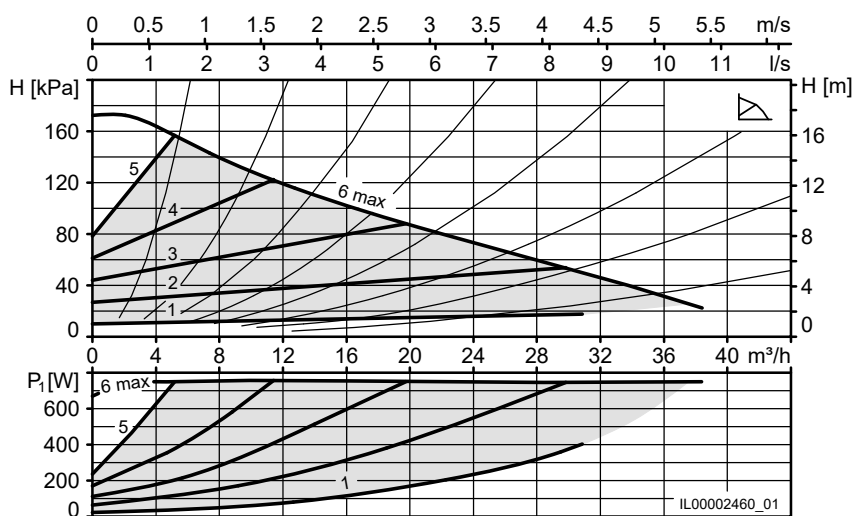
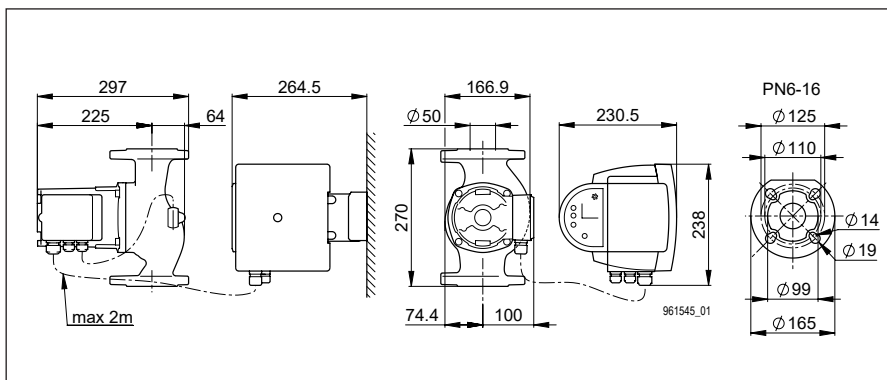
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

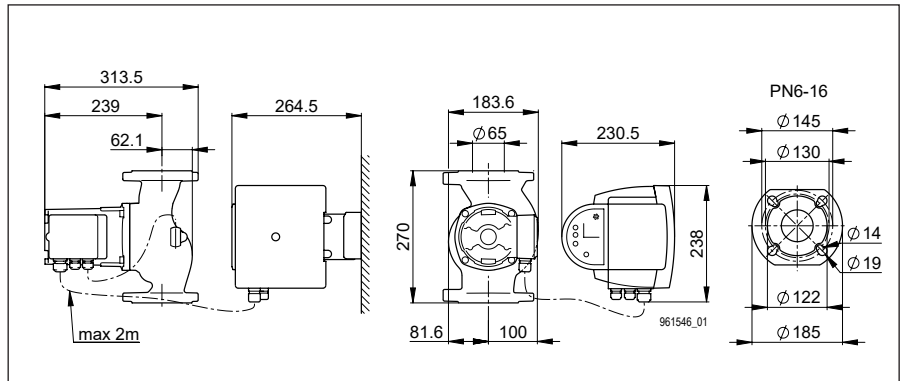
- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 50-18 270 GREEN	7000000149



ModuA 65-6 270 GREEN

Version	T2 M
Nominal width	DN 65
Max. flow head H	6 m
Overall length	270 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	22.6 kg



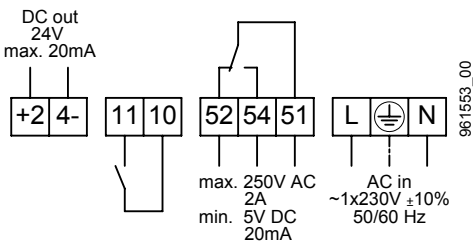
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	23-355 W
Nominal current	0.22-1.58 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



- +2-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

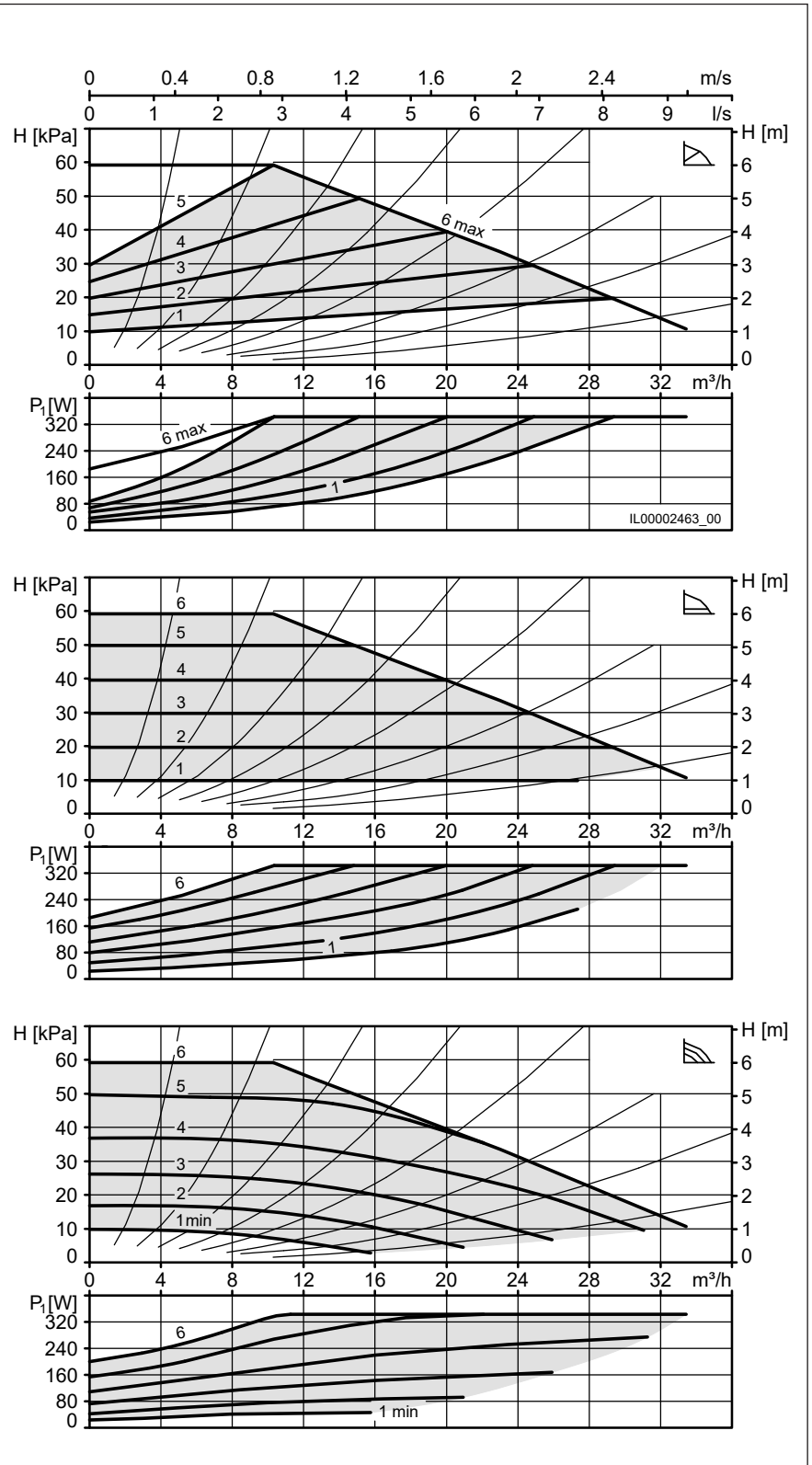
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

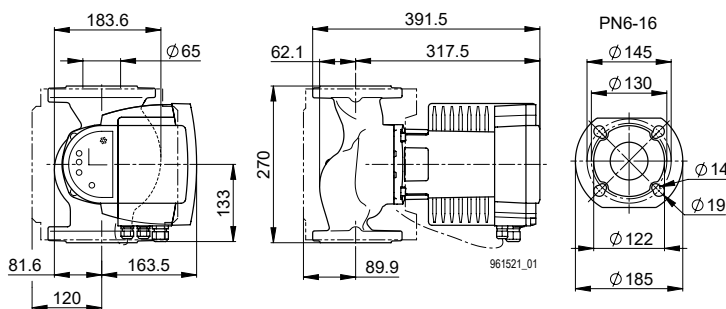
- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 65-6 270 GREEN	7000000150



ModuA 65-8 270 GREEN

Version	T2 M
Nominal width	DN 65
Max. flow head H	8 m
Overall length	270 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	22.6 kg



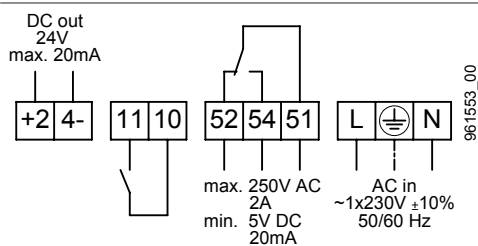
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	24-450 W
Nominal current	0.23-2.05 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+2-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

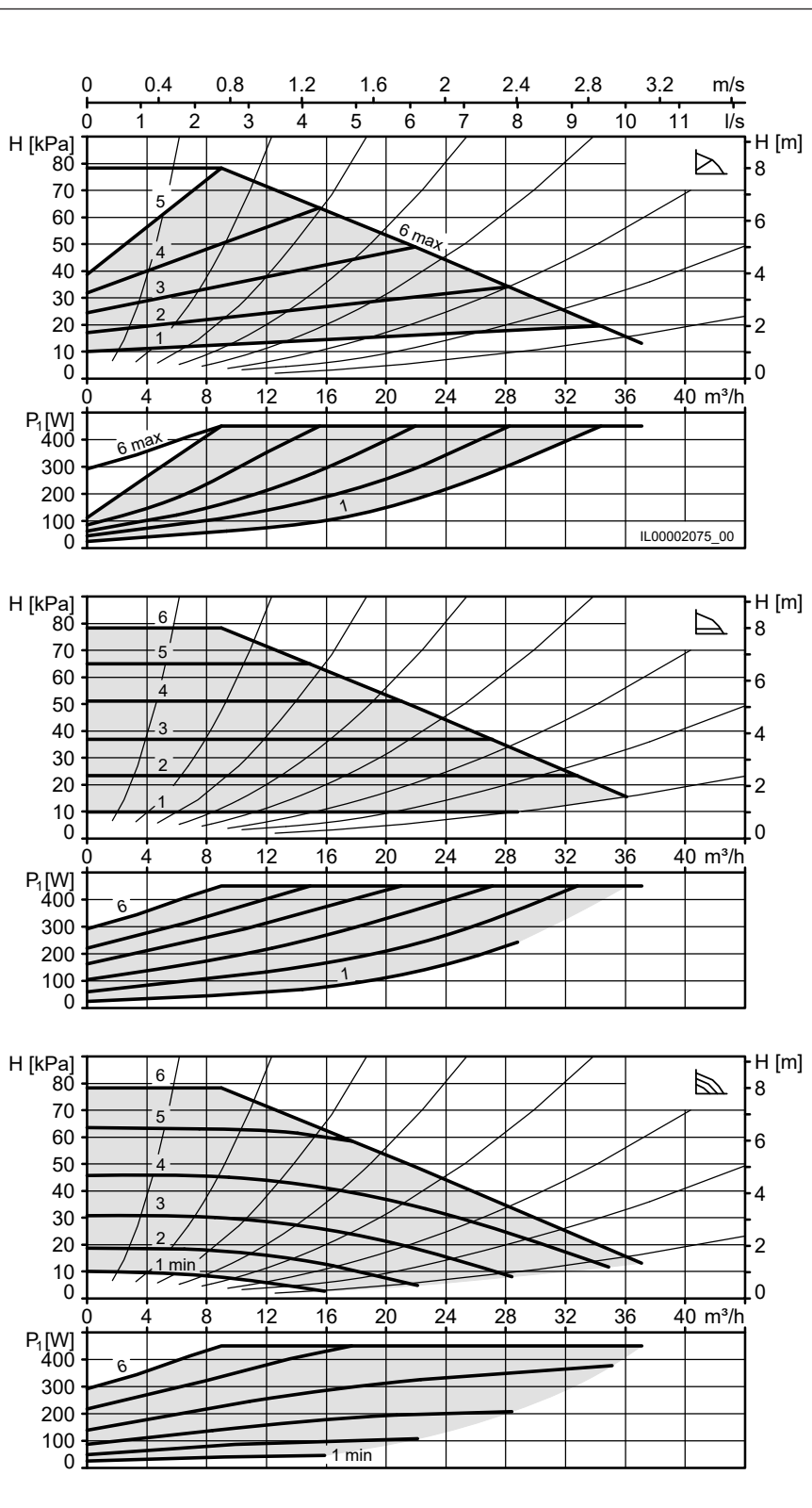
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 65-8 270 GREEN	7000000151



ModuA 65-12 340 GREEN

Version	T2 M
Nominal width	DN 65
Max. flow head H	12 m
Overall length	340 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	23.5 kg

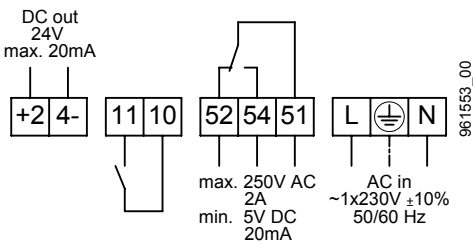
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	25-759 W
Nominal current	0.23-3.36 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

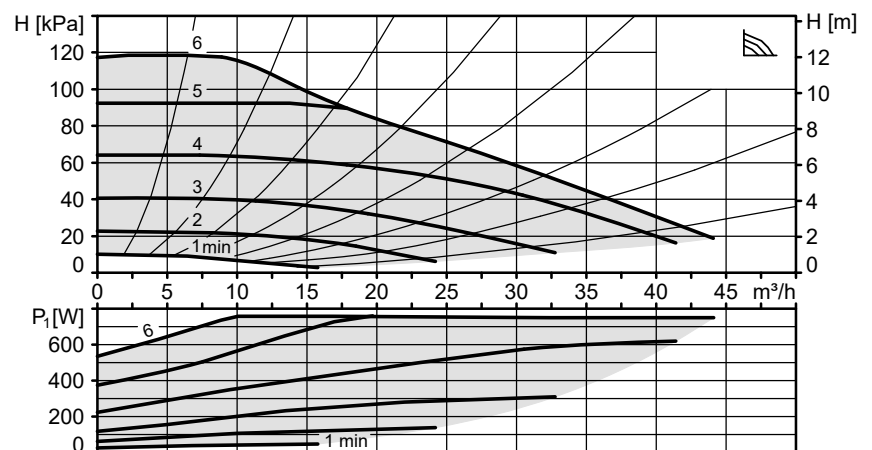
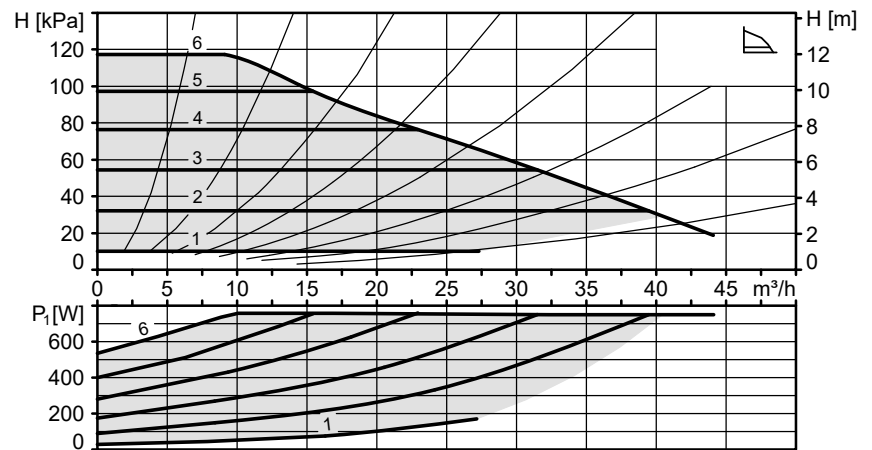
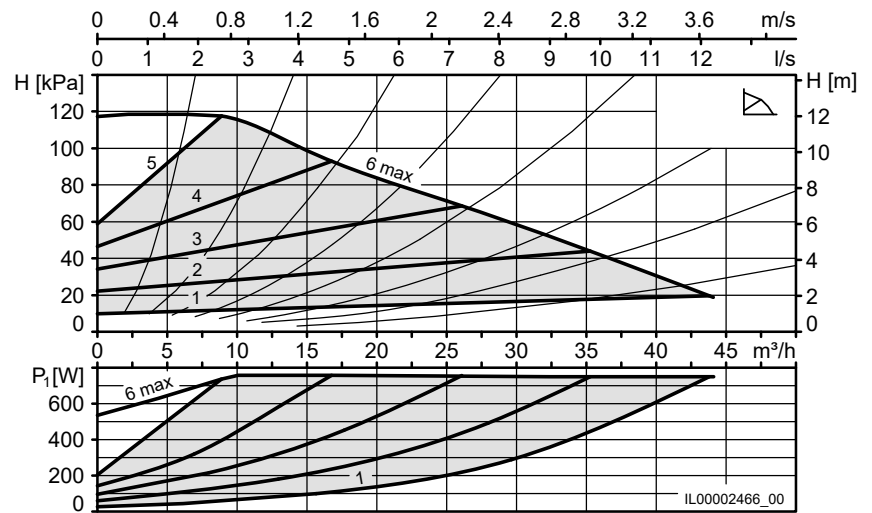
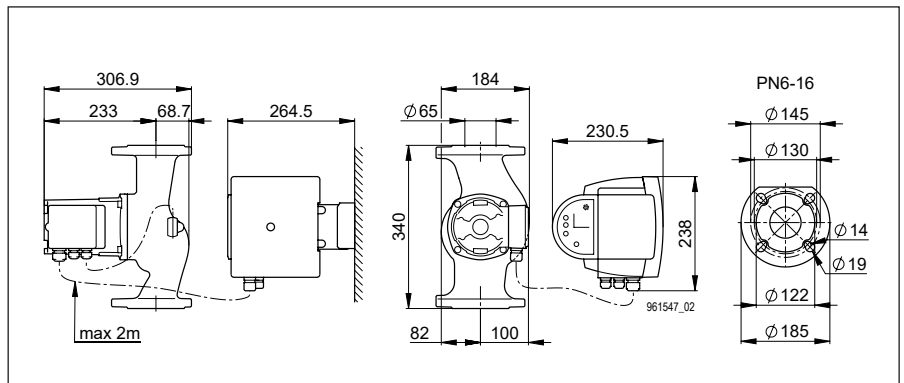
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 65-12 340 GREEN	7000000153



Air conditioning/Refrigeration



ModuA 65-15 340 GREEN

Version	T2 L
Nominal width	DN 65
Max. flow head H	15 m
Overall length	340 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	26.0 kg

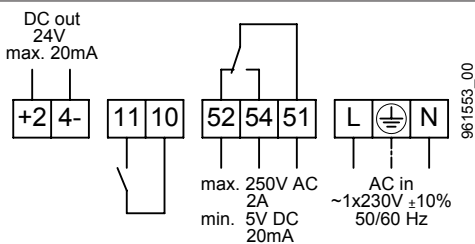
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	30-1343 W
Nominal current	0.27-6.08 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

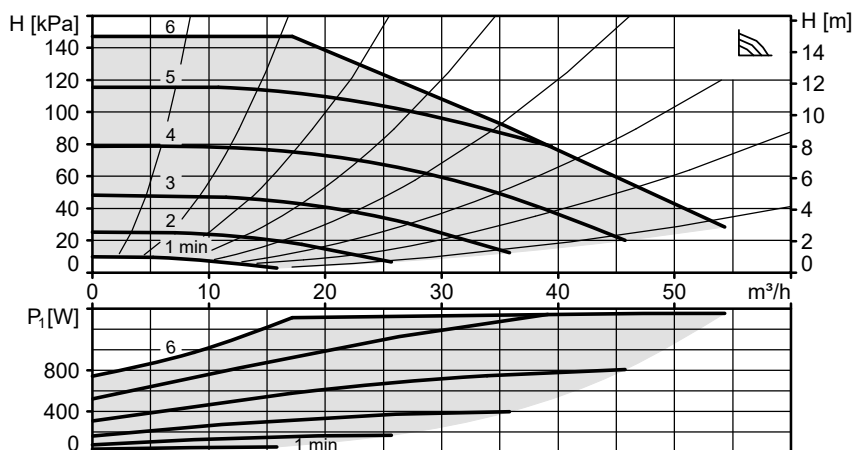
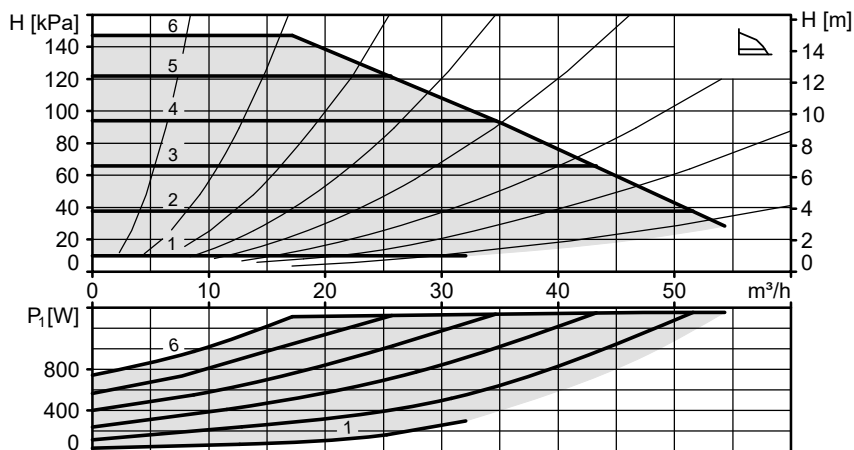
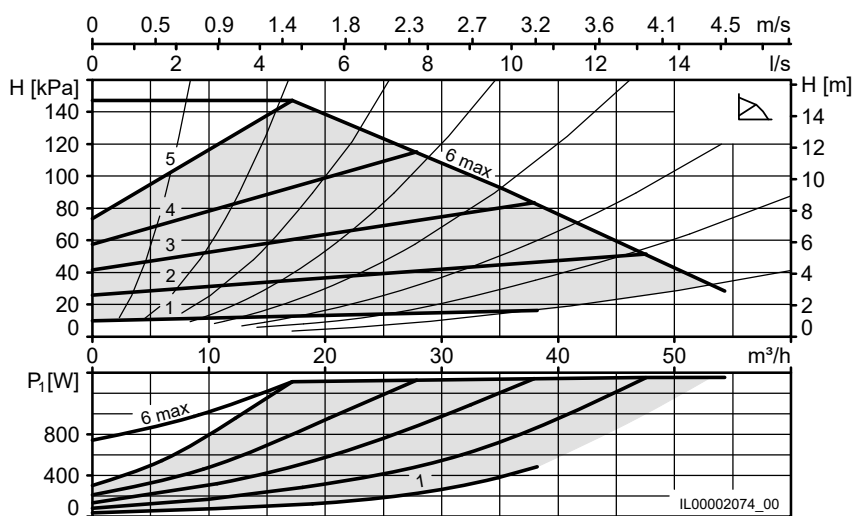
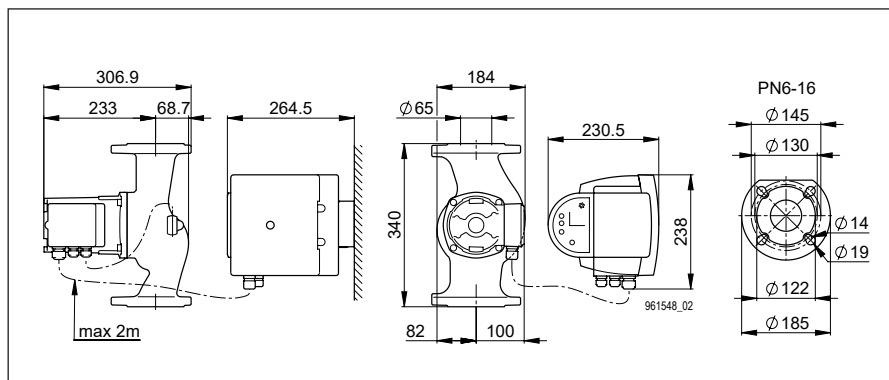
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModuA 65-15 340 GREEN	7000000154



ModuA 80-8 360 GREEN PN6

ModuA 80-8 360 GREEN PN10/16

Version	T2 M
Nominal width	DN 80
Max. flow head H	8 m
Overall length	360 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	31.1 kg

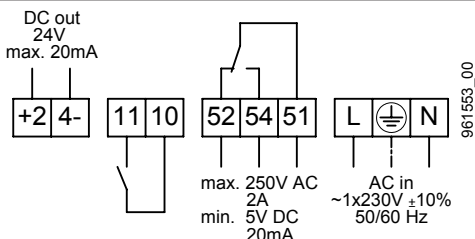
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	25-685 W
Nominal current	0.24-3.09 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.50 bar
at a water temp. of 95 °C	1.00 bar
at a water temp. of 110 °C	1.50 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

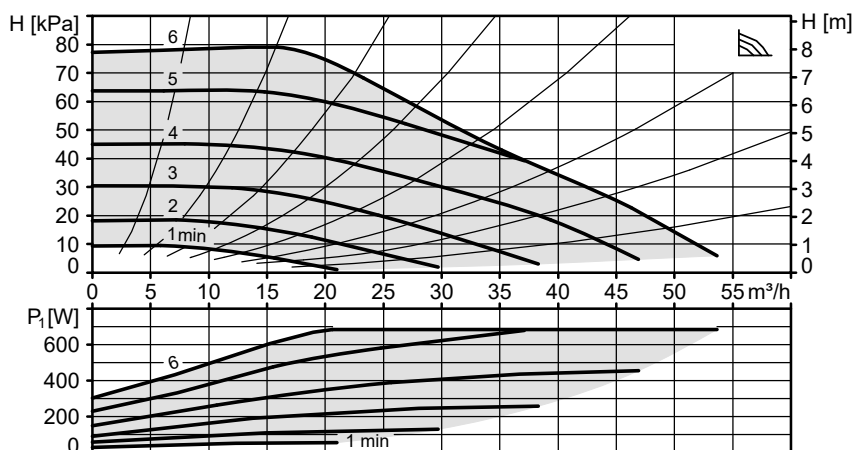
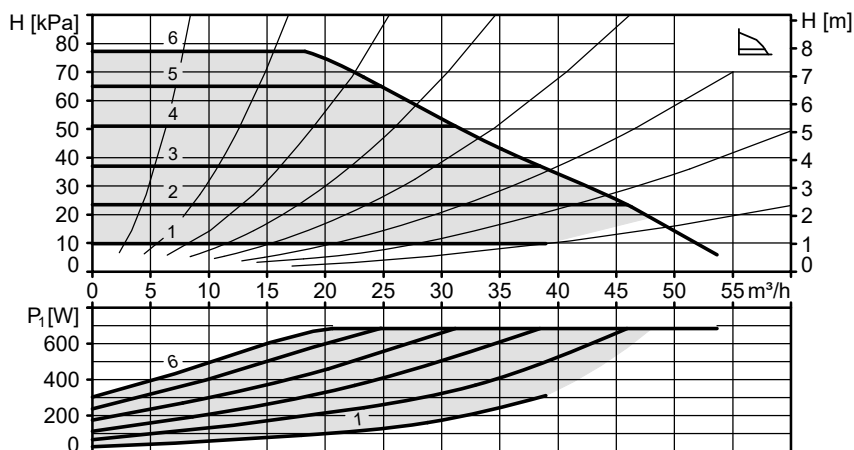
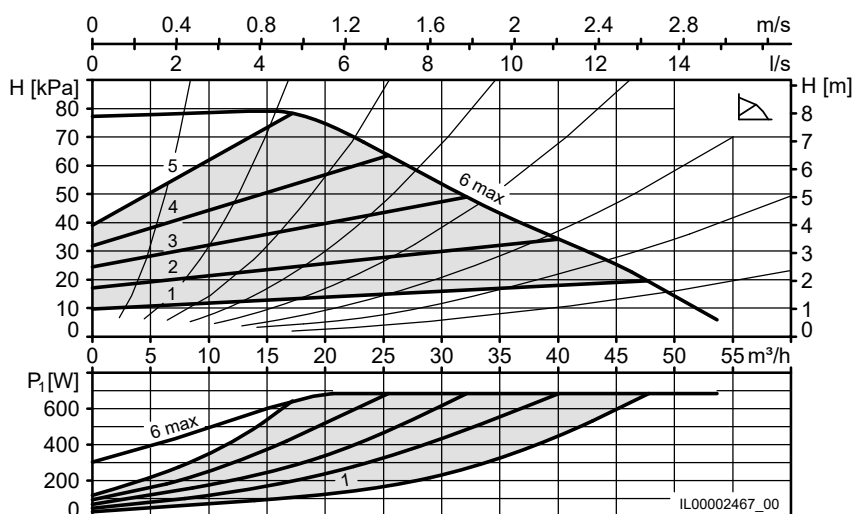
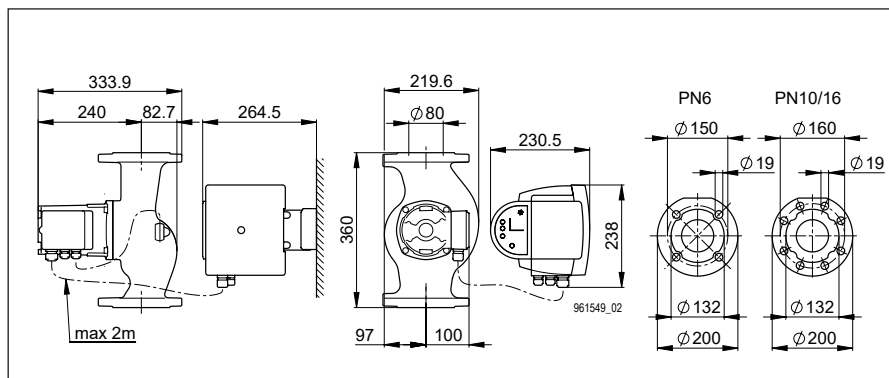
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6 or PN 10/16

Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModuA 80-8 360 GREEN PN6	700000155
ModuA 80-8 360 GREEN PN10/16	700000156



ModuA 80-12 360 GREEN PN6

ModuA 80-12 360 GREEN PN10/16

Version	T2 L
Nominal width	DN 80
Max. flow head H	12 m
Overall length	360 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	31.1 kg

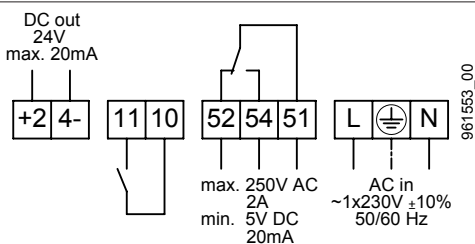
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	30-1476 W
Nominal current	0.27-6.63 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.50 bar
at a water temp. of 95 °C	1.00 bar
at a water temp. of 110 °C	1.50 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

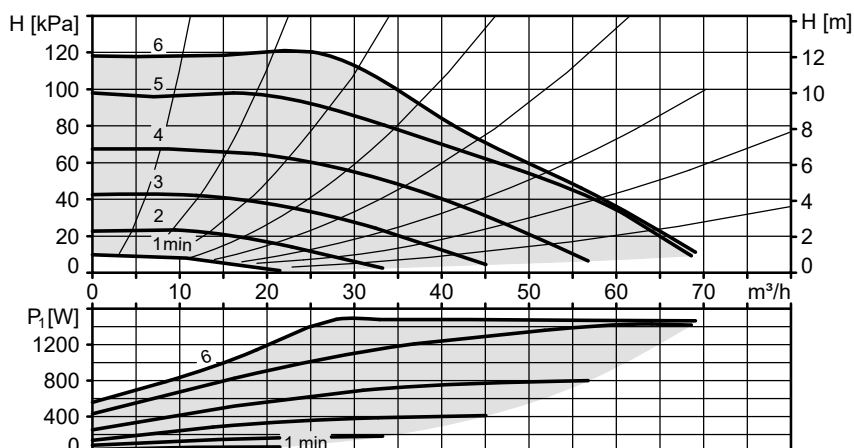
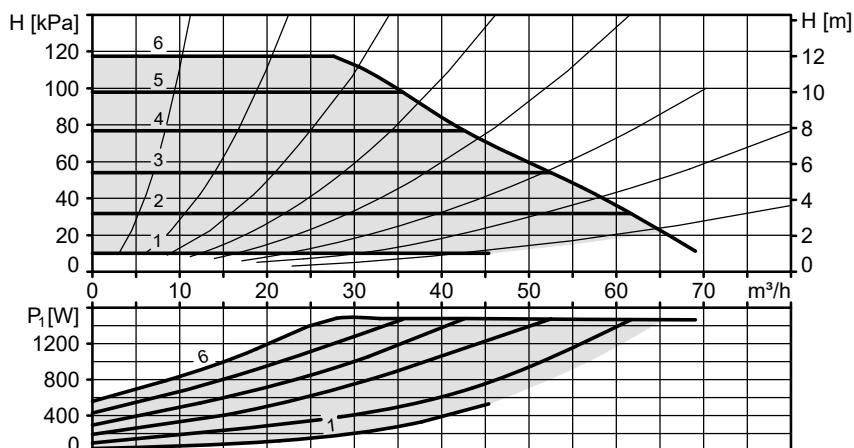
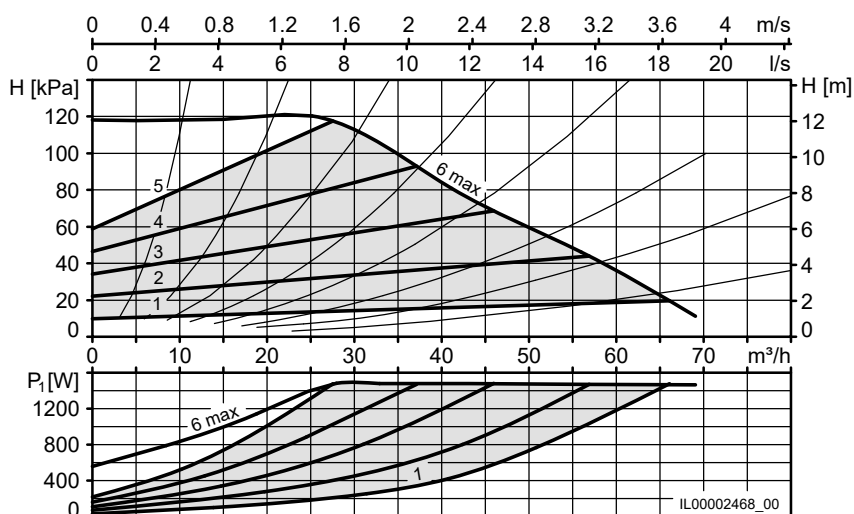
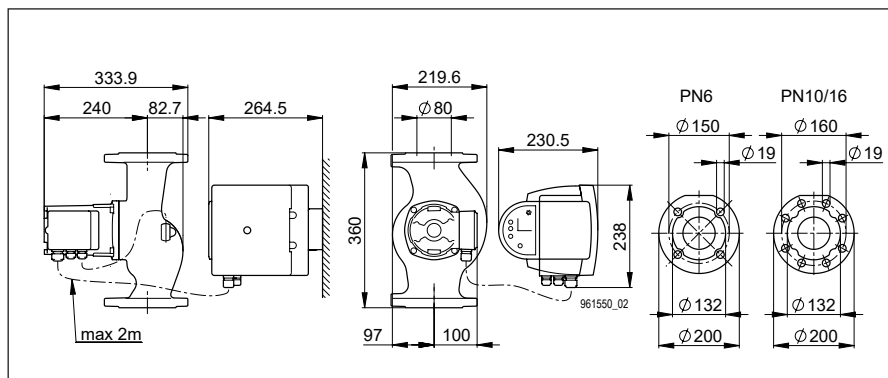
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6 or PN 10/16

Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModuA 80-12 360 GREEN PN6	700000157
ModuA 80-12 360 GREEN PN10/16	700000158



ModuA 100-8 450 GREEN PN6

ModuA 100-8 450 GREEN PN10/16

Version	T2 L
Nominal width	DN 100
Max. flow head H	12 m
Overall length	450 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	36.0 kg

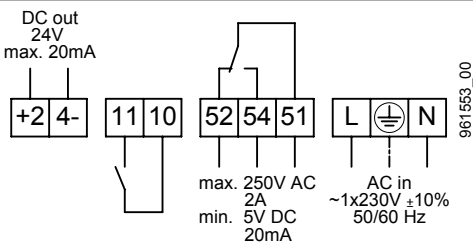
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	30-1082 W
Nominal current	0.28-4.85 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

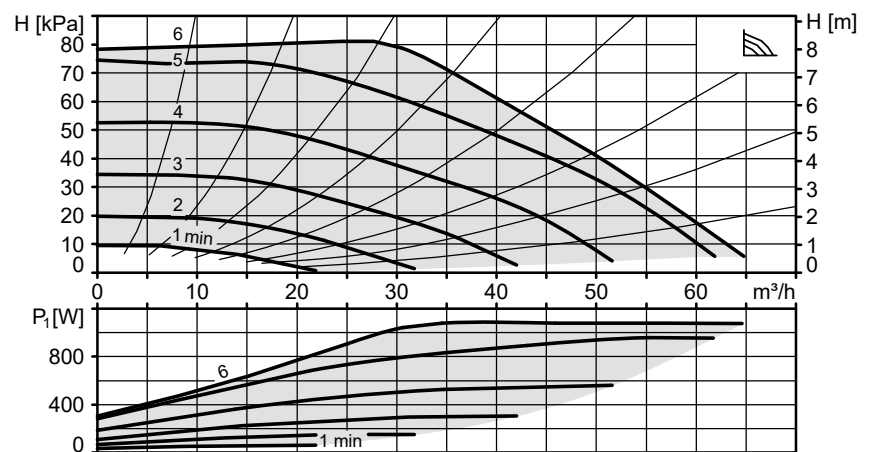
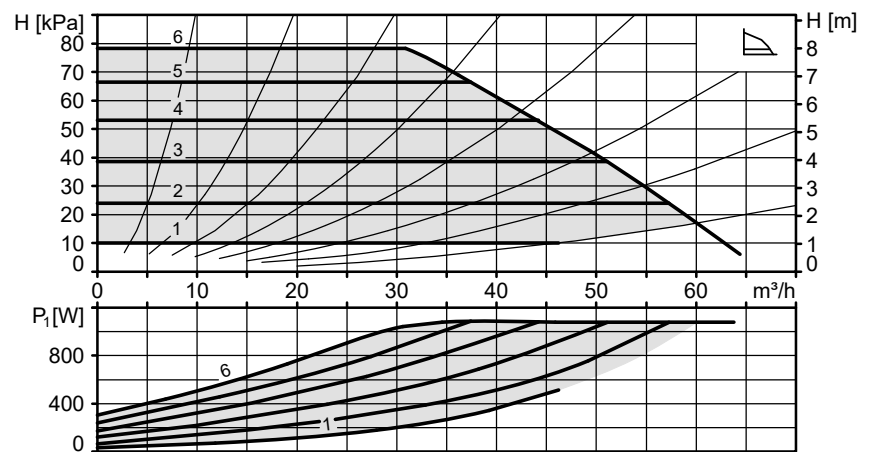
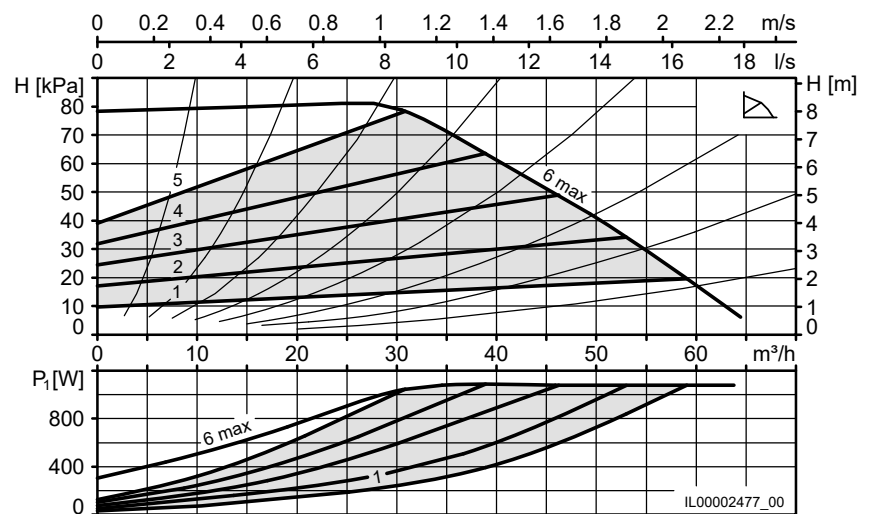
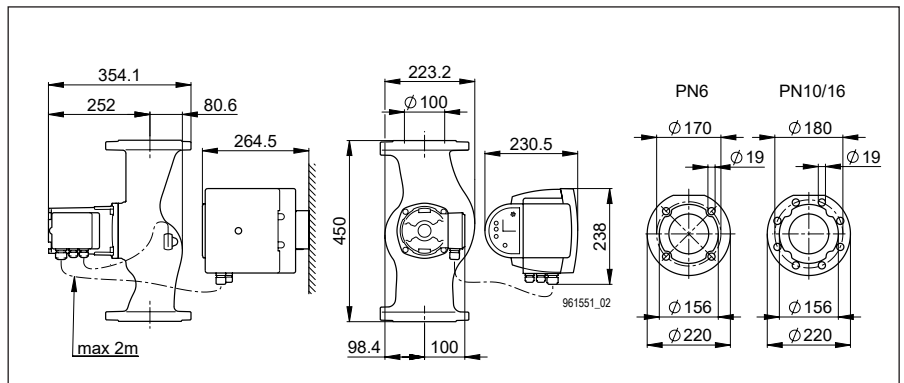
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6 or PN 10/16

Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModuA 100-8 450 GREEN PN6	700000159
ModuA 100-8 450 GREEN PN10/16	700000160



ModulA 100-12 450 GREEN PN6

ModulA 100-12 450 GREEN PN10/16

Version	T2 L
Nominal width	DN 100
Max. flow head H	12 m
Overall length	450 mm
Flanged connection	PN 6 PN 10/16
Max. operating pressure	6 16 bar
Min. media temperature	-10°C
Max. media temperature	+110°C
Ambient temperature	0°C to 40°C
Net weight	36.0 kg

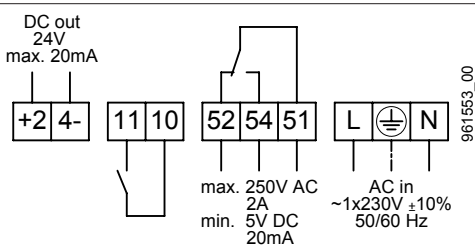
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	30-1551 W
Nominal current	0.28-6.81 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.70 bar
at a water temp. of 95 °C	1.20 bar
at a water temp. of 110 °C	1.70 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

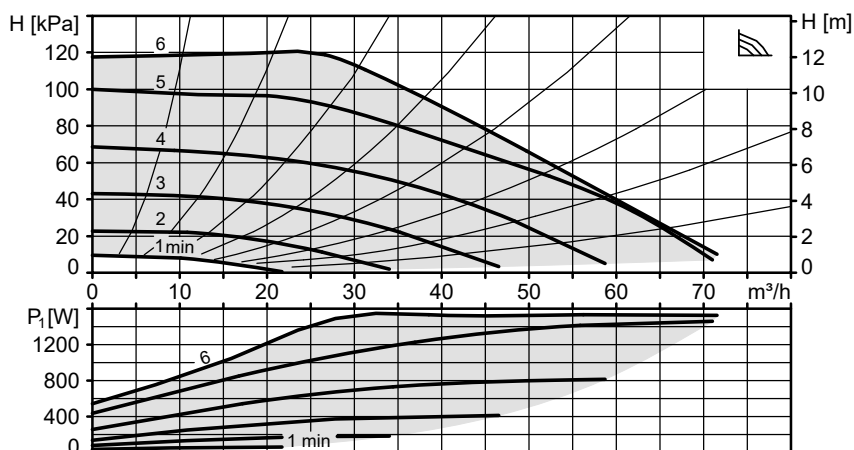
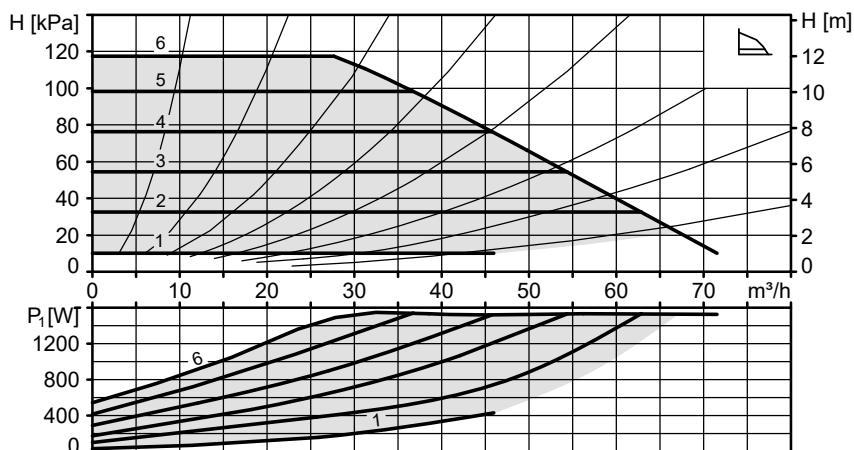
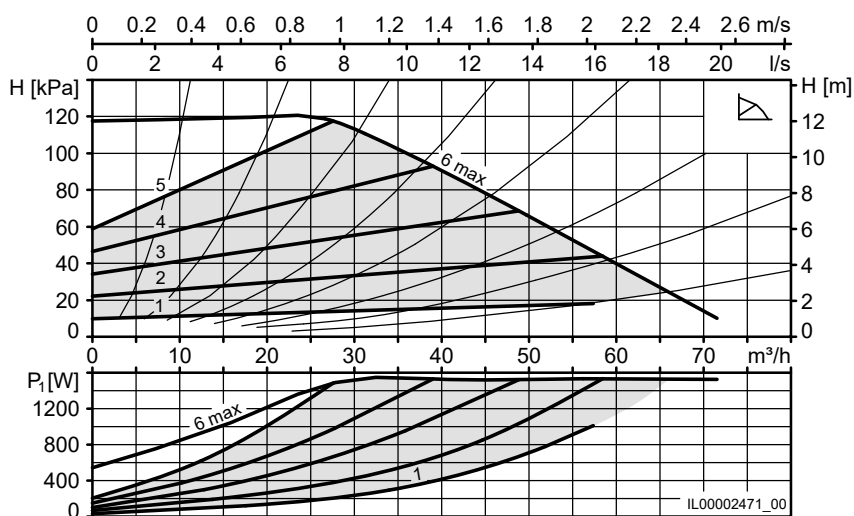
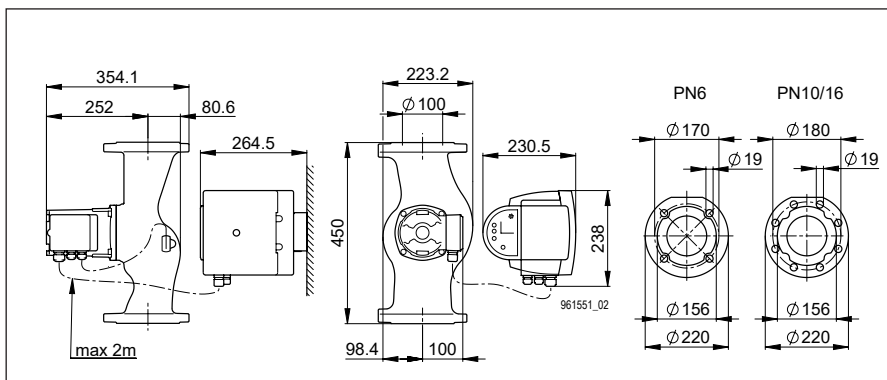
Included in the scope of delivery

- Kit for recessed installation of electronics (pre-installed)
- Sealing set for flange PN 6 or PN 10/16

Accessories

- BIM B3 control module
- BIM BUS-Module

Type	Art. no.
ModulA 100-12 450 GREEN PN6	7000000161
ModulA 100-12 450 GREEN PN10/16	7000000162





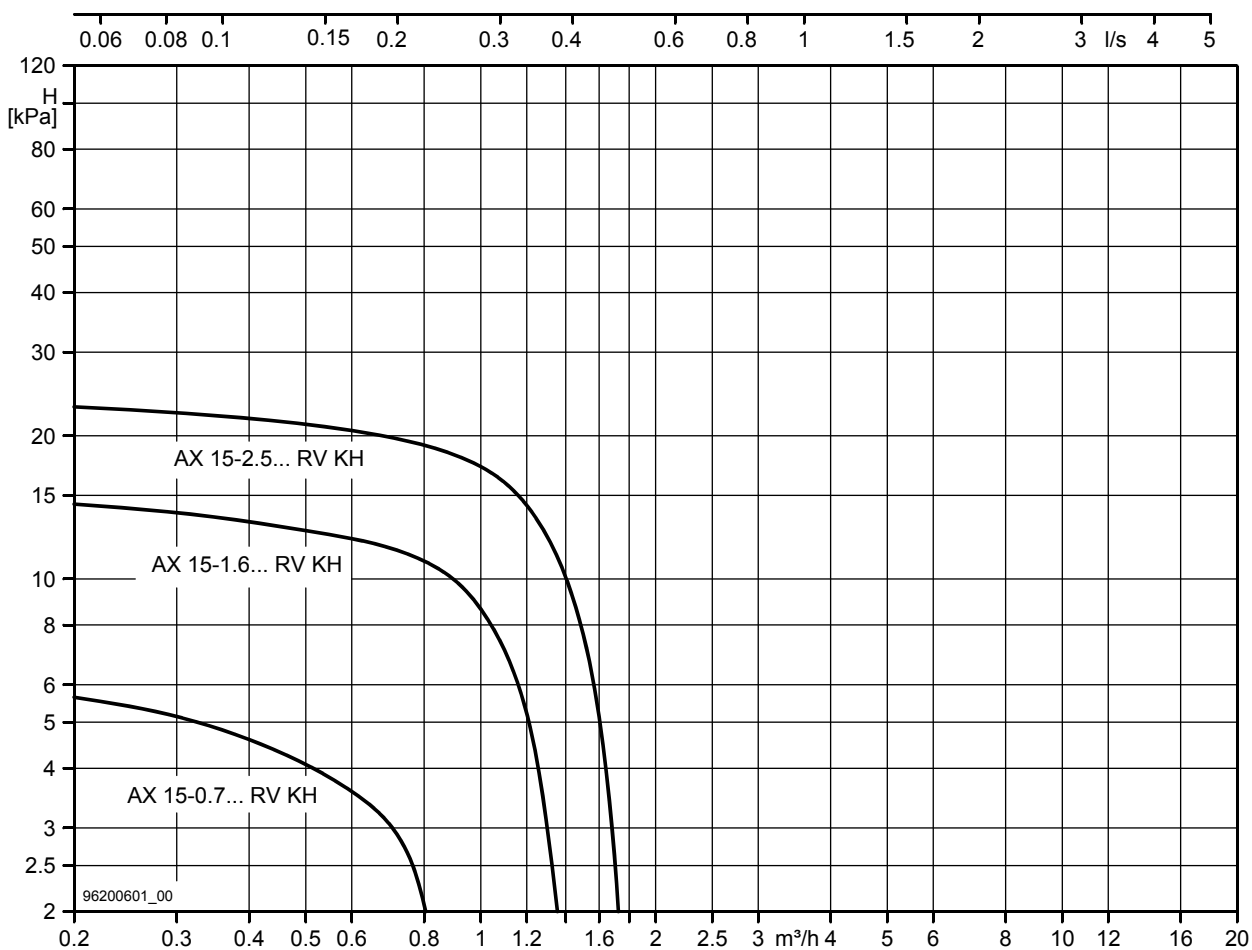
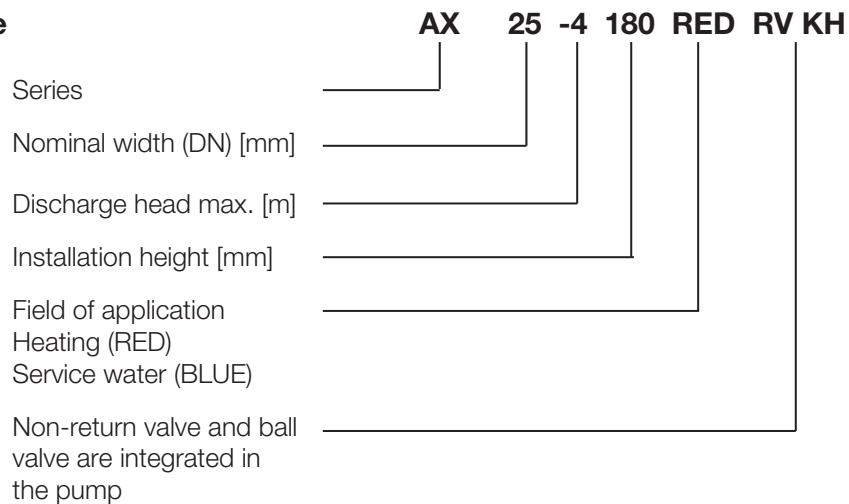
Service water pumps

AX... BLUE RV KH

Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar
AX 15-0.7 BLUE RV KH	2206550150	15	0.7	190	G 1/2"	10
AX 15-1.6 BLUE RV KH	2206560150	15	1.6	190	G 1/2"	10
AX 15-2.5 BLUE RV KH	2206570150	15	2.5	190	G 1/2"	10

Ordering reference



AX 15-0.7 BLUE RV KH

Nominal width	DN 15
Max. flow head H	0.7 m
Overall length	190 mm
Threaded connection	G 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	2.5 kg

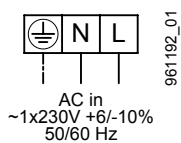
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	5-8 W
Nominal current	0.05-0.07 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 85 °C	0.30 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



L, N, PE Power supply

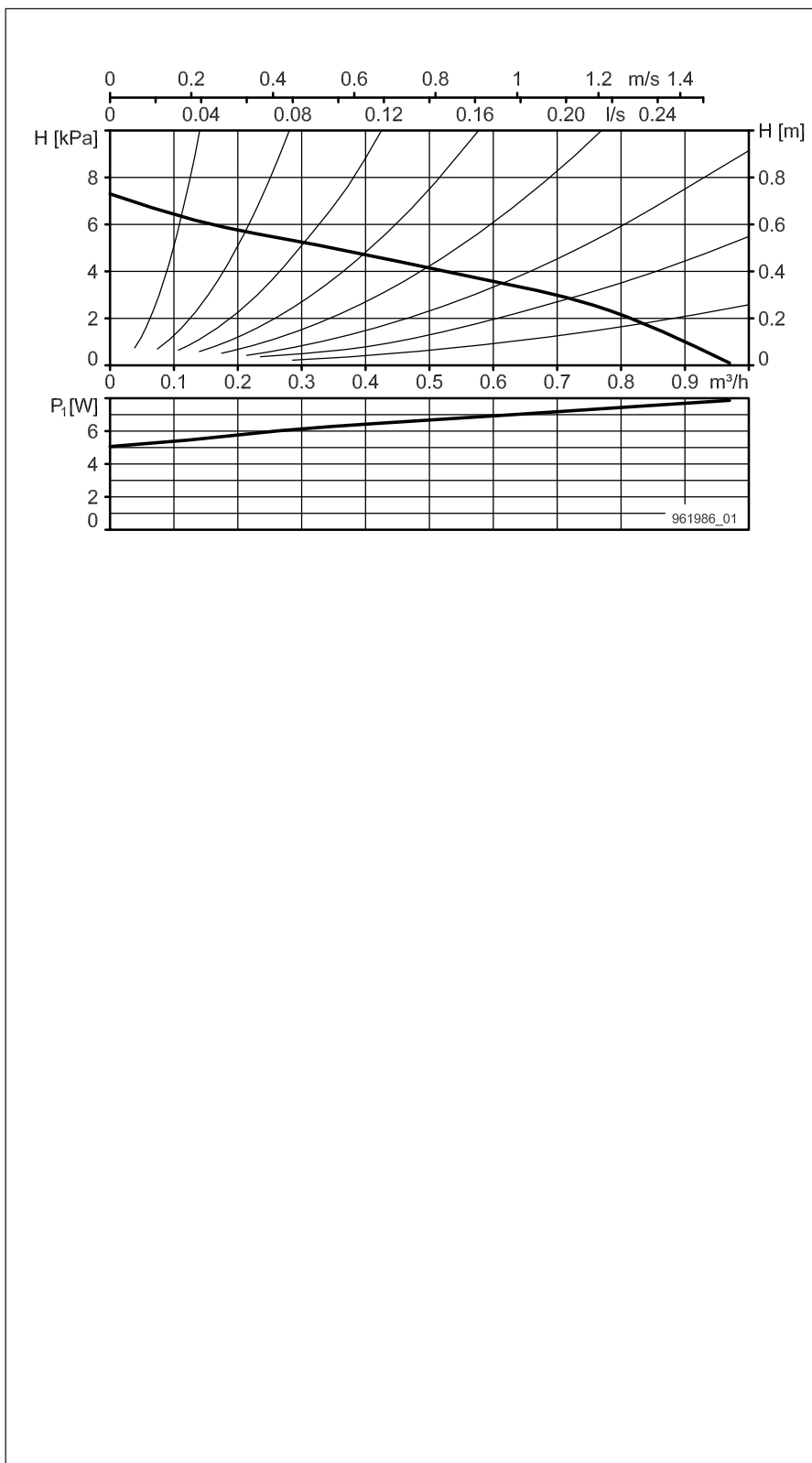
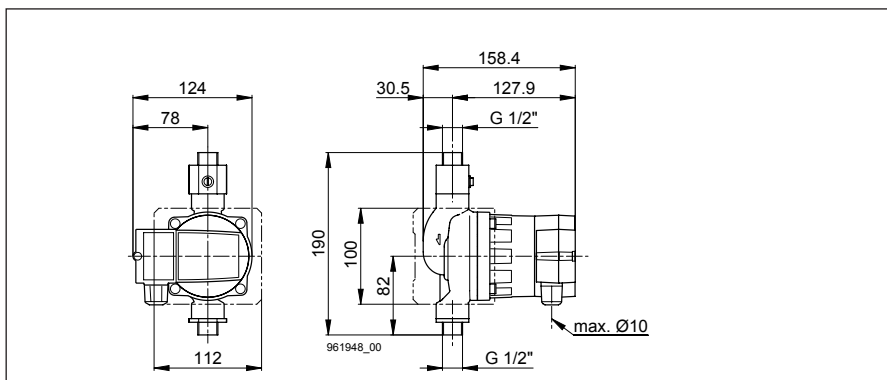
Included in the scope of delivery

- Non-return valve and ball valve are integrated in the pump
- Heat insulation shell
- Sanpress screw connection G 1/2", DN 15

Remarks

Pump housing: bronze

Type	Art. no.
AX 15-0.7 BLUE RV KH	2206550150



AX 15-1.6 BLUE RV KH

Nominal width	DN 15
Max. flow head H	1.6 m
Overall length	190 mm
Threaded connection	G 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	2.5 kg

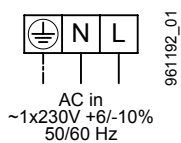
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	9-18 W
Nominal current	0.08-0.15 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 85 °C	0.30 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



L, N, PE Power supply

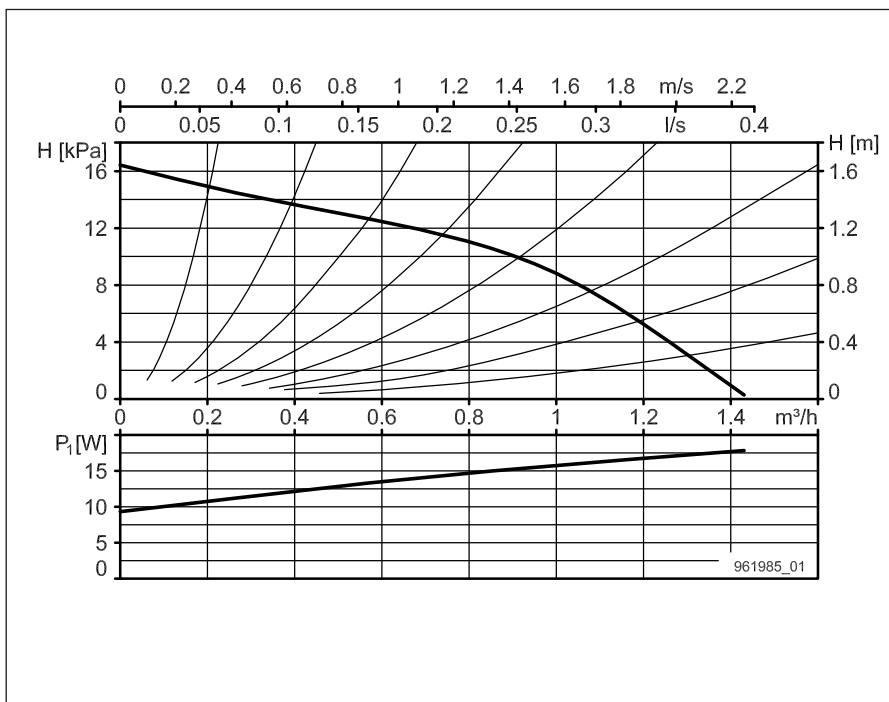
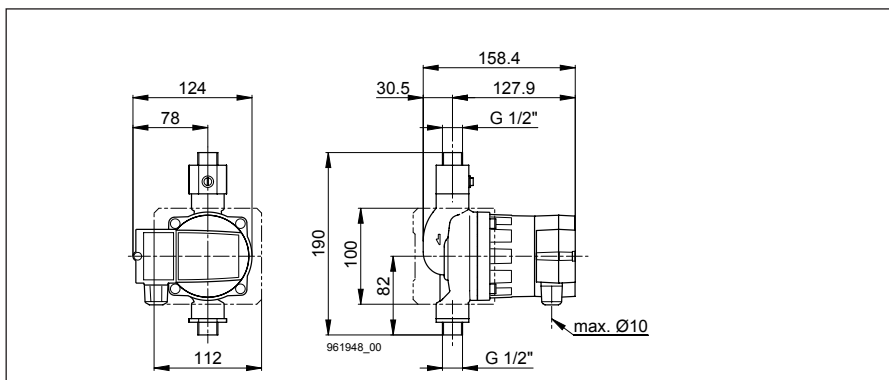
Included in the scope of delivery

- Non-return valve and ball valve are integrated in the pump
- Heat insulation shell
- Sanpress screw connection G 1/2", DN 15

Remarks

Pump housing: bronze

Type	Art. no.
AX 15-1.6 BLUE RV KH	2206560150



AX 15-2.5 BLUE RV KH

Nominal width	DN 15
Max. flow head H	2.5 m
Overall length	190 mm
Threaded connection	G 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	2.5 kg

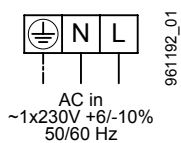
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	14-30 W
Nominal current	0.13-0.26 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 85 °C	0.30 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



L, N, PE Power supply

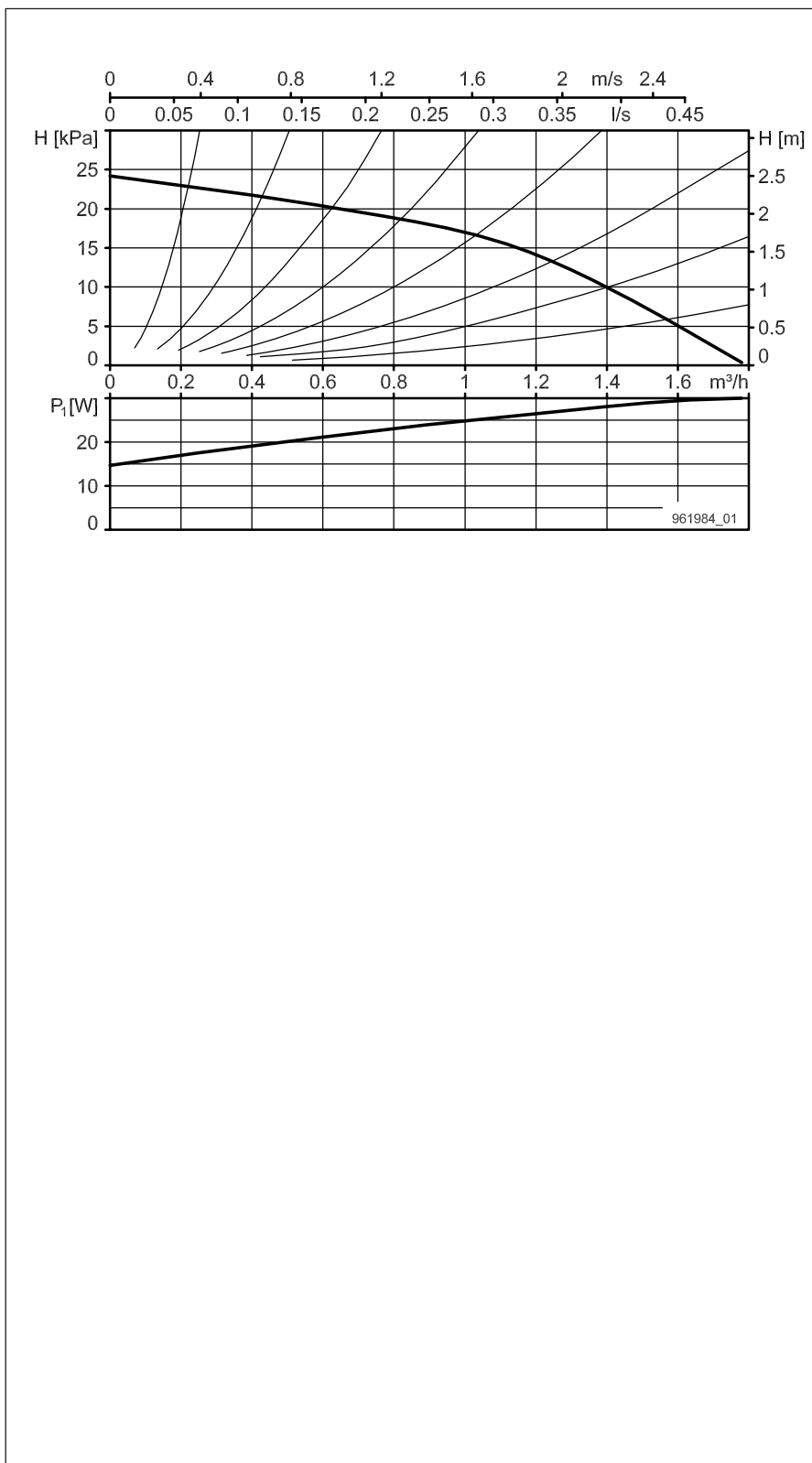
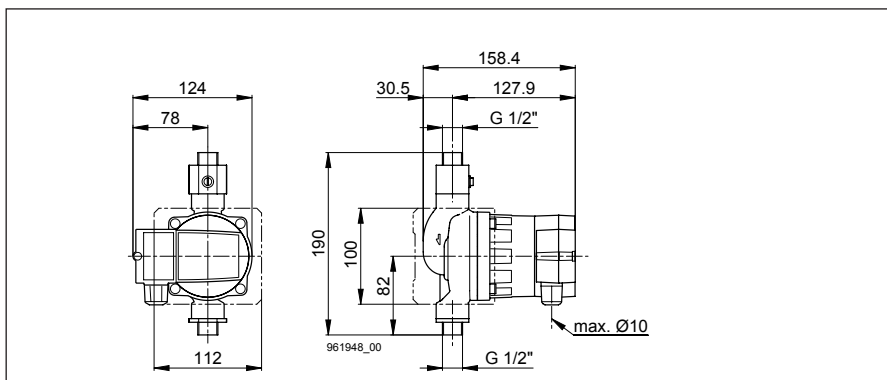
Included in the scope of delivery

- Non-return valve and ball valve are integrated in the pump
- Heat insulation shell
- Sanpress screw connection G 1/2", DN 15

Remarks

Pump housing: bronze

Type	Art. no.
AX 15-2.5 BLUE RV KH	2206570150





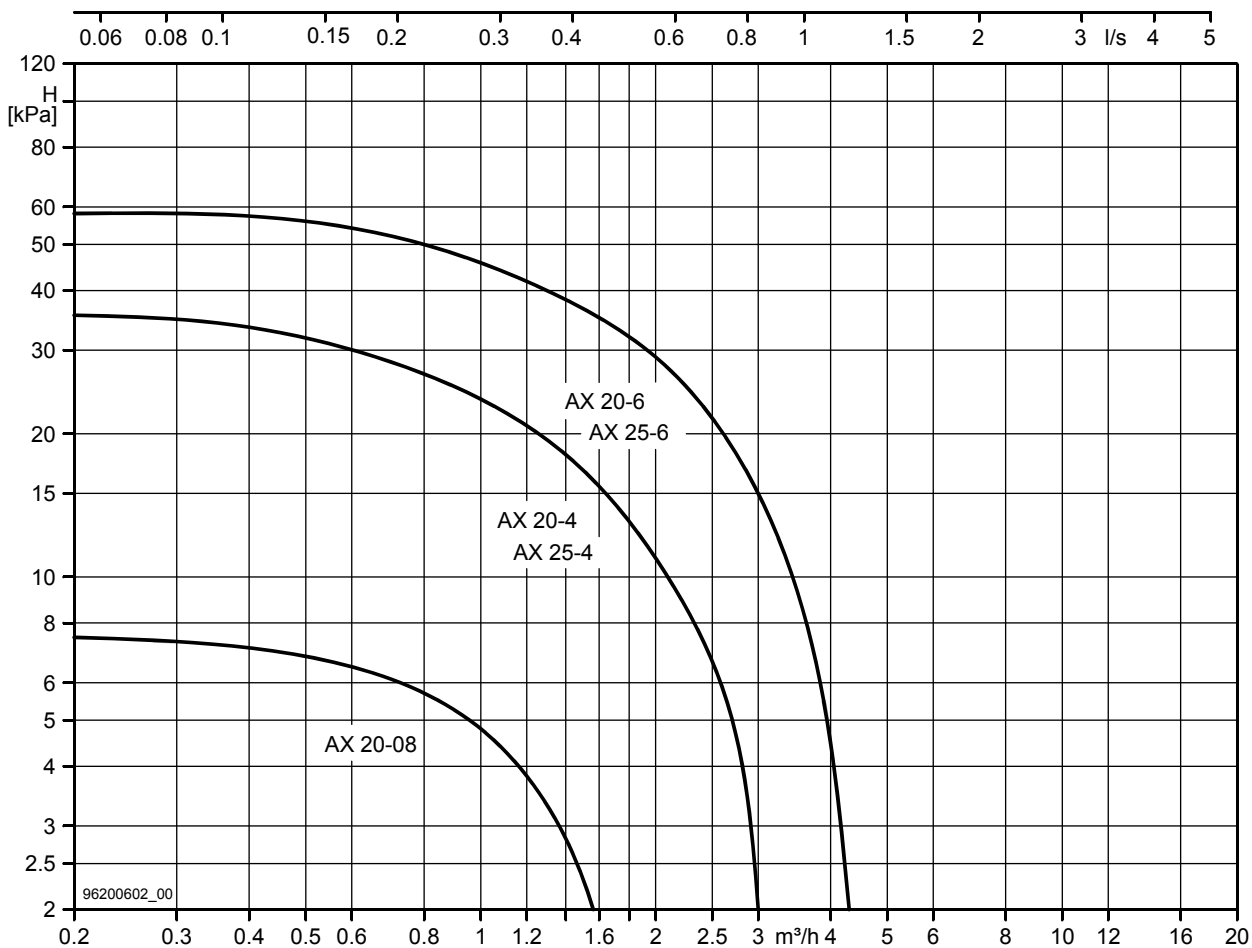
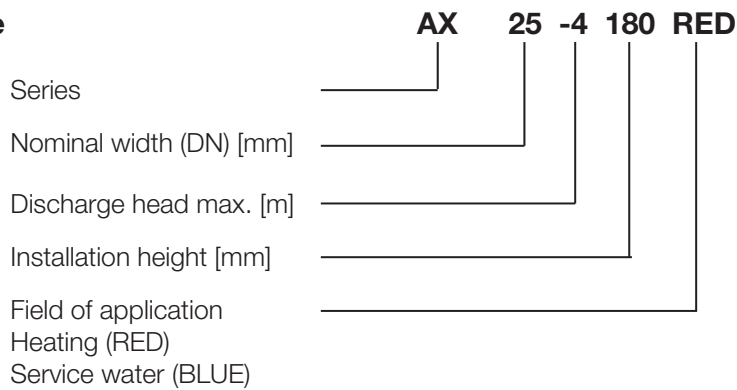
Service water pumps

AX... BLUE

Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar
AX 20-0.8 120 BLUE	2206500150	20	0.8	120	G 1¼"	10
AX 20-4 120 BLUE	2206510150	20	4	120	G 1¼"	10
AX 25-4 180 BLUE	2206520150	25	4	180	G 1½"	10
AX 20-6 150 BLUE	2206530150	20	6	150	G 1¼"	10
AX 25-6 180 BLUE	2206540150	25	6	180	G 1½"	10

Ordering reference



Service water

AX 20-0.8 120 BLUE

Nominal width	DN 20
Max. flow head H	0.8 m
Overall length	120 mm
Threaded connection	G 1 1/4"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	2.3 kg

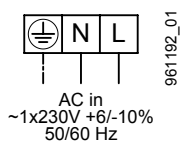
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	4-7 W
Nominal current	0.04-0.08 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 85 °C	0.30 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



L, N, PE Power supply

Included in the scope of delivery

- Heat insulation shell

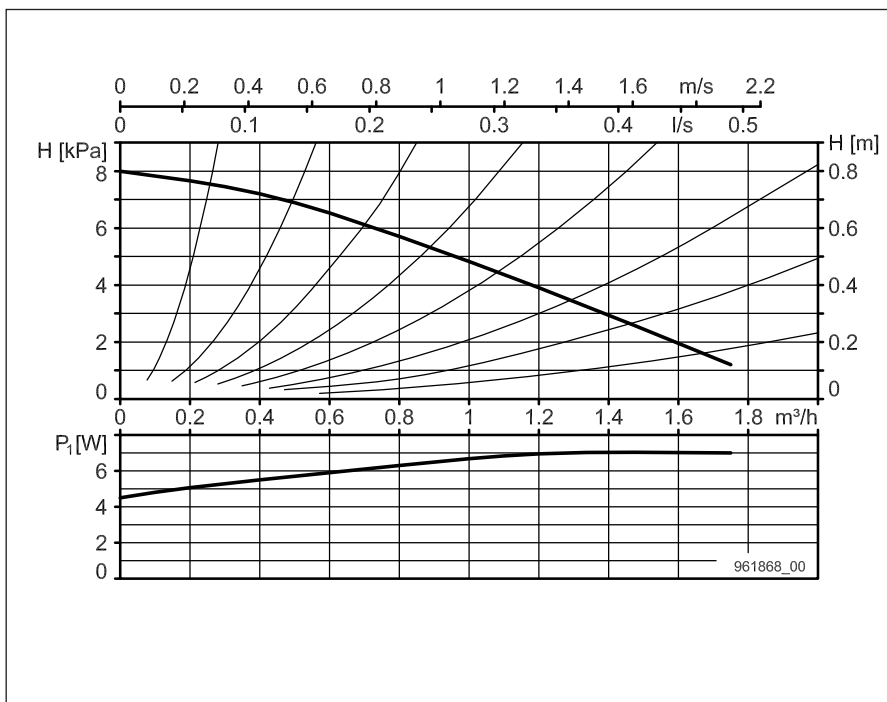
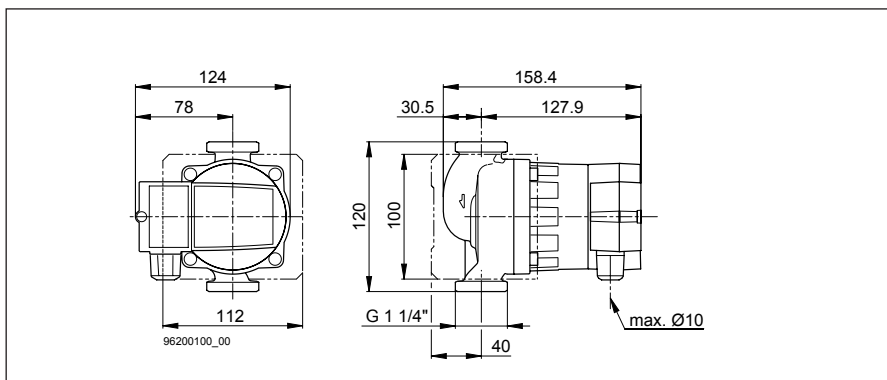
Accessories

- Absperset (Rückschlagventil und Kugelabsperrhahn)

Remarks

Pump housing: bronze

Type	Art. no.
AX 20-0.8 120 BLUE	2206500150



AX 20-4 120 BLUE

Nominal width	DN 20
Max. flow head H	4 m
Overall length	120 mm
Threaded connection	G 1 1/4"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	2.3 kg

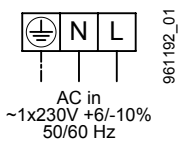
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	5-22 W
Nominal current	0.05-0.19 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 85 °C	0.30 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



L, N, PE Power supply

Included in the scope of delivery

- Heat insulation shell

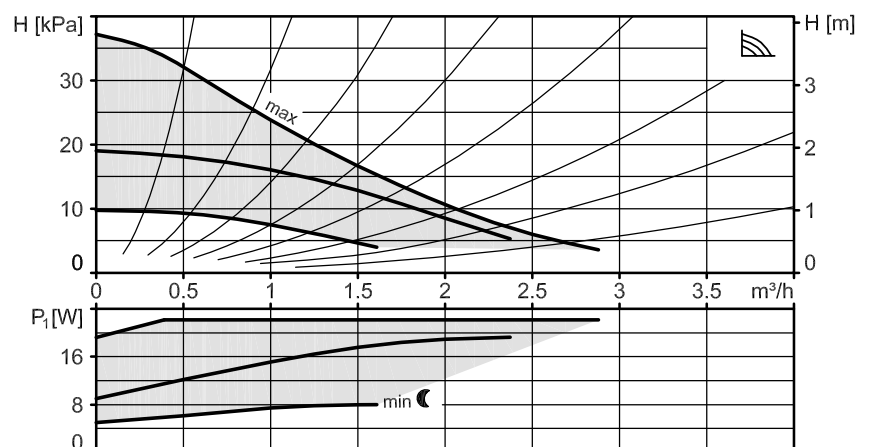
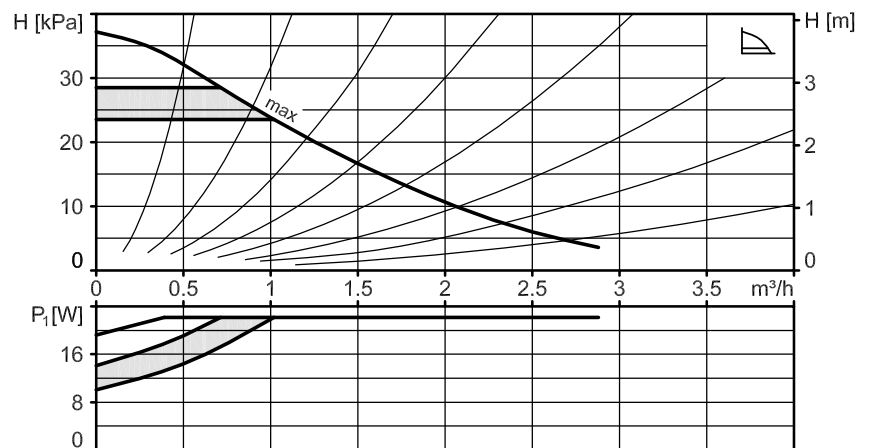
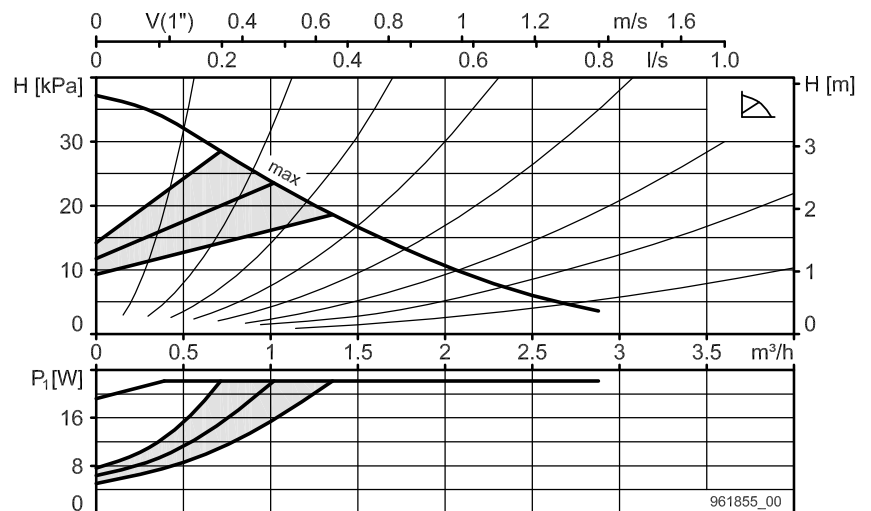
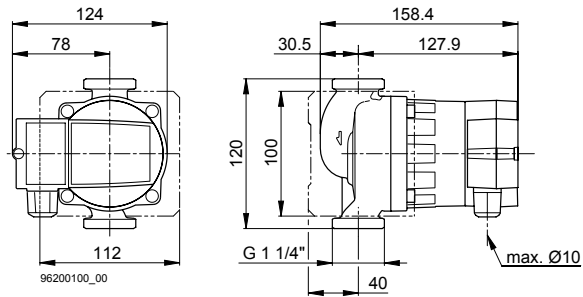
Accessories

- Absperset (Rückschlagventil und Kugelabsperrhahn)

Remarks

Pump housing: bronze

Type	Art. no.
AX 20-4 120 BLUE	2206510150



AX 25-4 180 BLUE

Nominal width	DN 25
Max. flow head H	4 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	2.3 kg

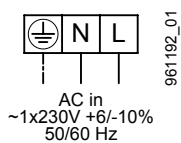
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	5-22 W
Nominal current	0.05-0.19 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 85 °C	0.30 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



L, N, PE Power supply

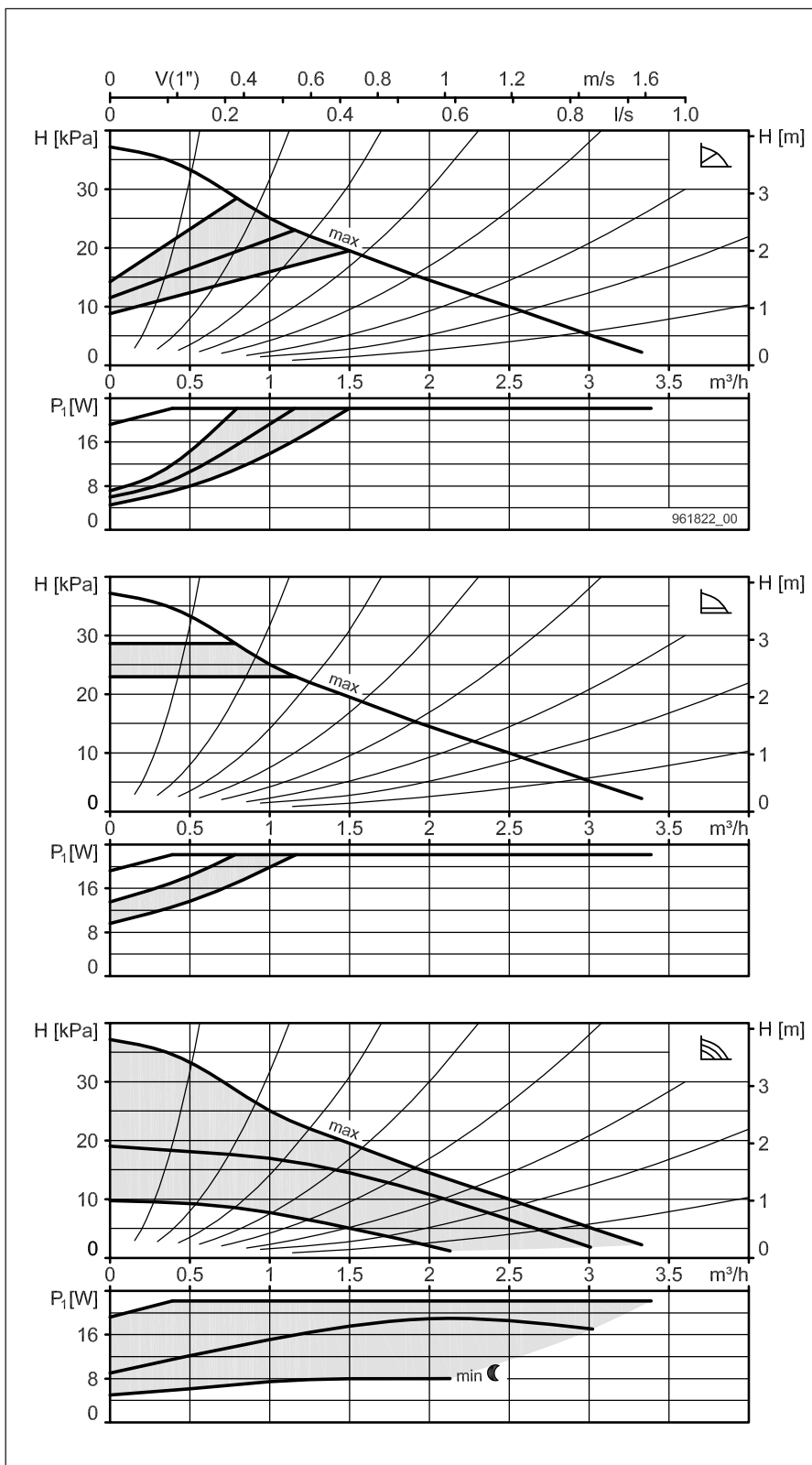
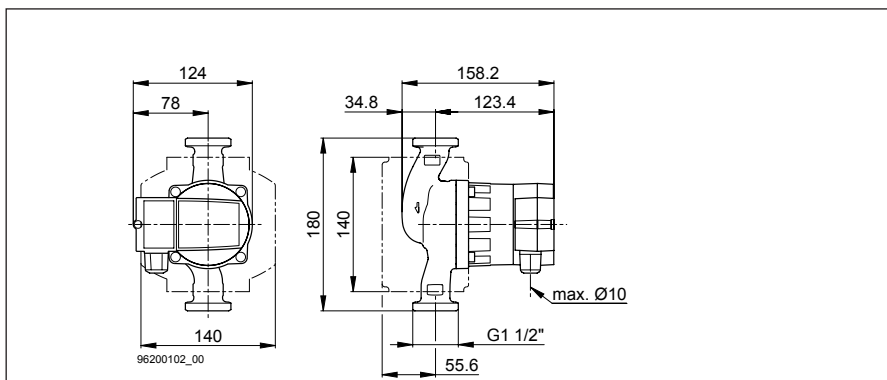
Included in the scope of delivery

- Heat insulation shell

Remarks

Pump housing: bronze
Shut-off set not available

Type	Art. no.
AX 25-4 180 BLUE	2206520150



AX 20-6 150 BLUE

Nominal width	DN 20
Max. flow head H	6 m
Overall length	150 mm
Threaded connection	G 1 1/4"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	2.3 kg

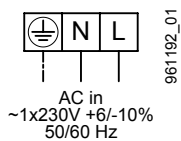
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	5-45 W
Nominal current	0.05-0.38 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 85 °C	0.30 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



L, N, PE Power supply

Included in the scope of delivery

- Heat insulation shell

Accessories

- Absperset (Rückschlagventil und Kugelabsperrhahn)

Remarks

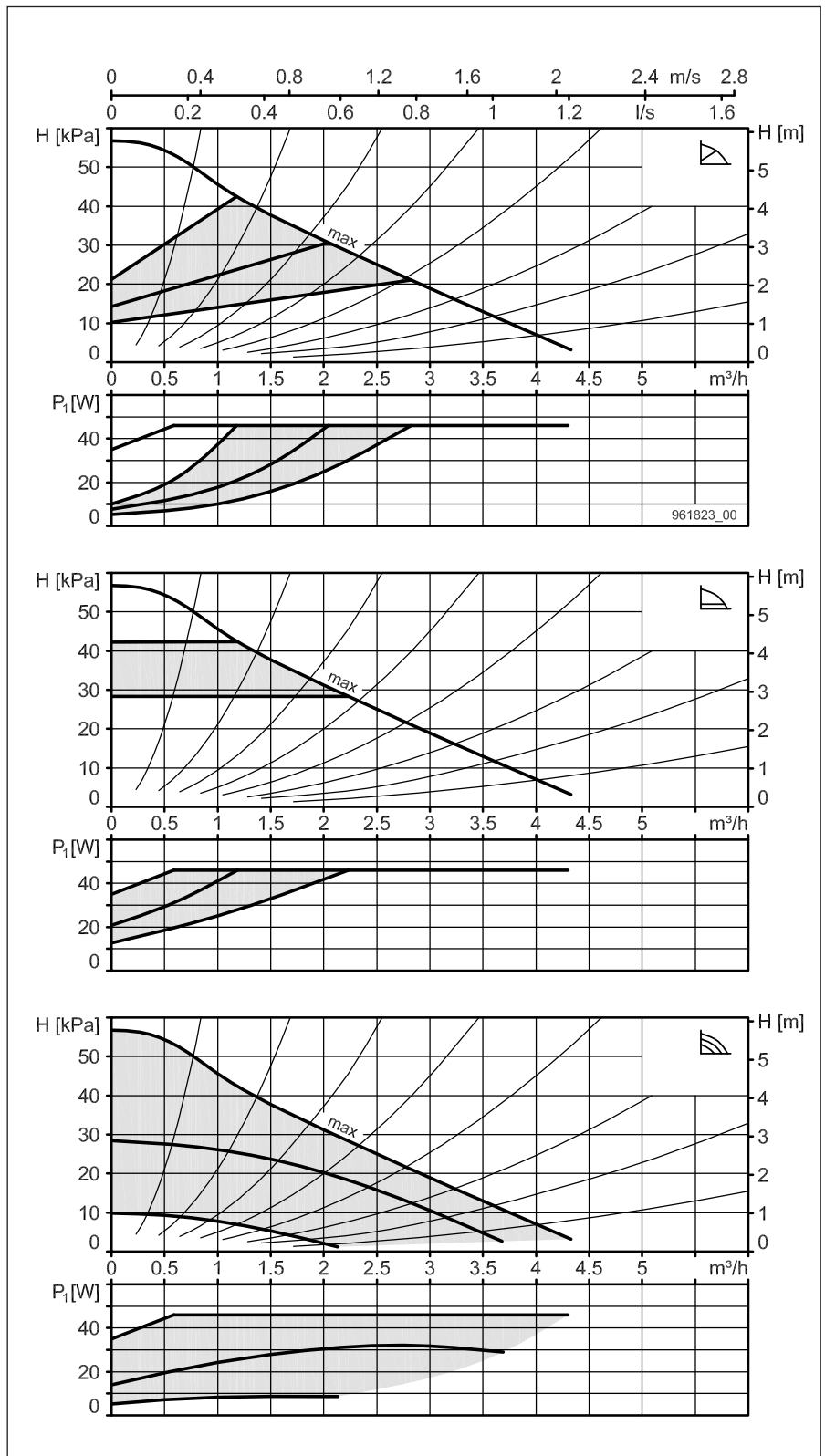
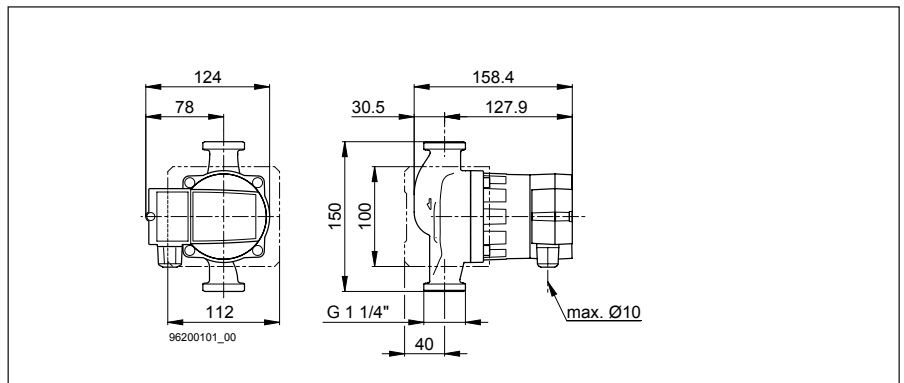
Pump housing: bronze

Type

AX 20-6 150 BLUE

Art. no.

2206530150



AX 25-6 180 BLUE

Nominal width	DN 25
Max. flow head H	6 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	2.3 kg

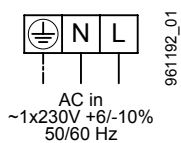
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	5-45 W
Nominal current	0.05-0.38 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.05 bar
at a water temp. of 85 °C	0.30 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



L, N, PE Power supply

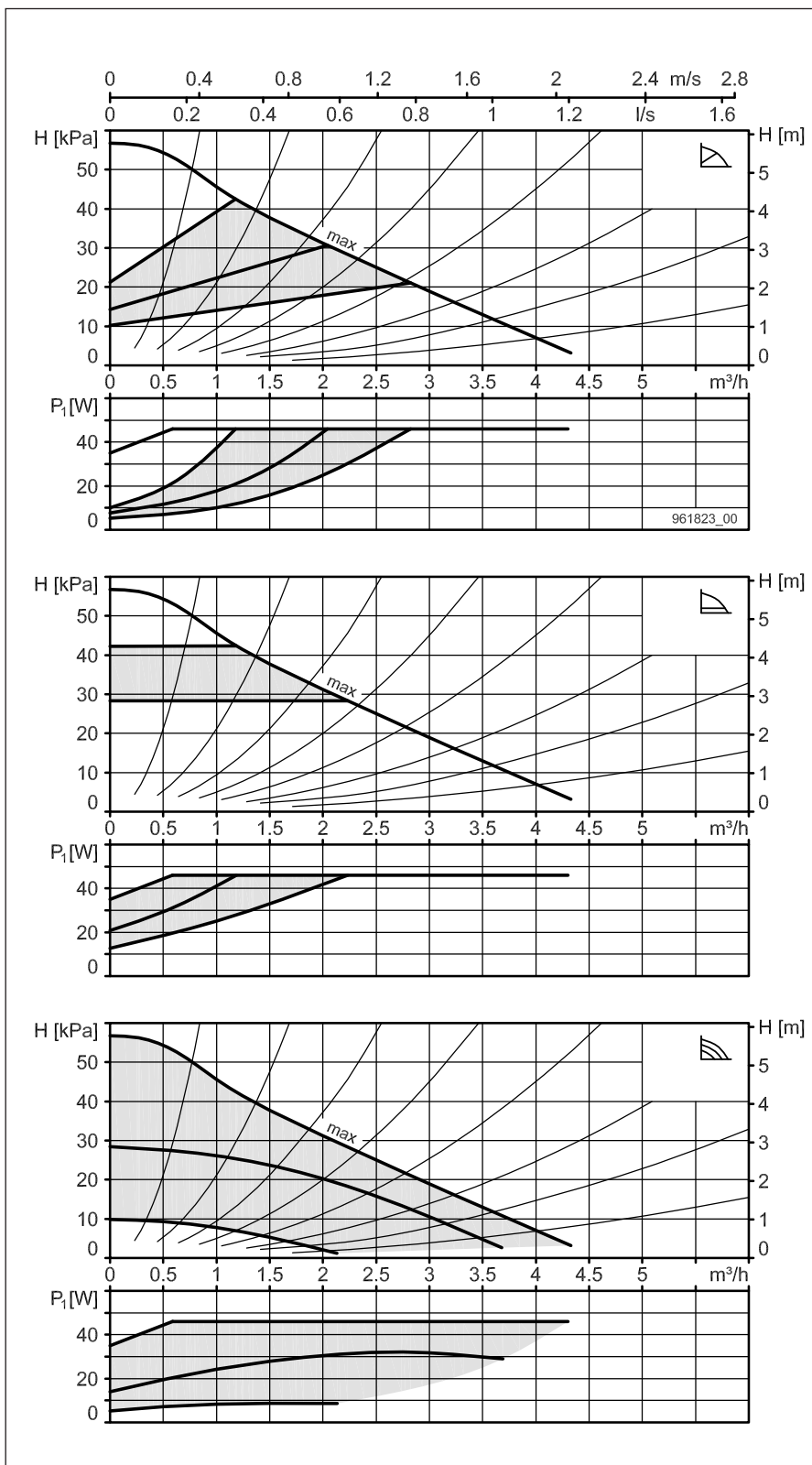
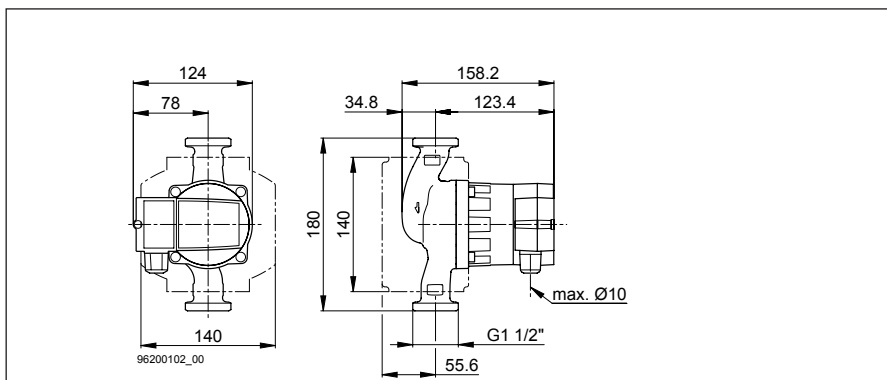
Included in the scope of delivery

- Heat insulation shell

Remarks

Pump housing: bronze
Shut-off set not available

Type	Art. no.
AX 25-6 180 BLUE	2206540150





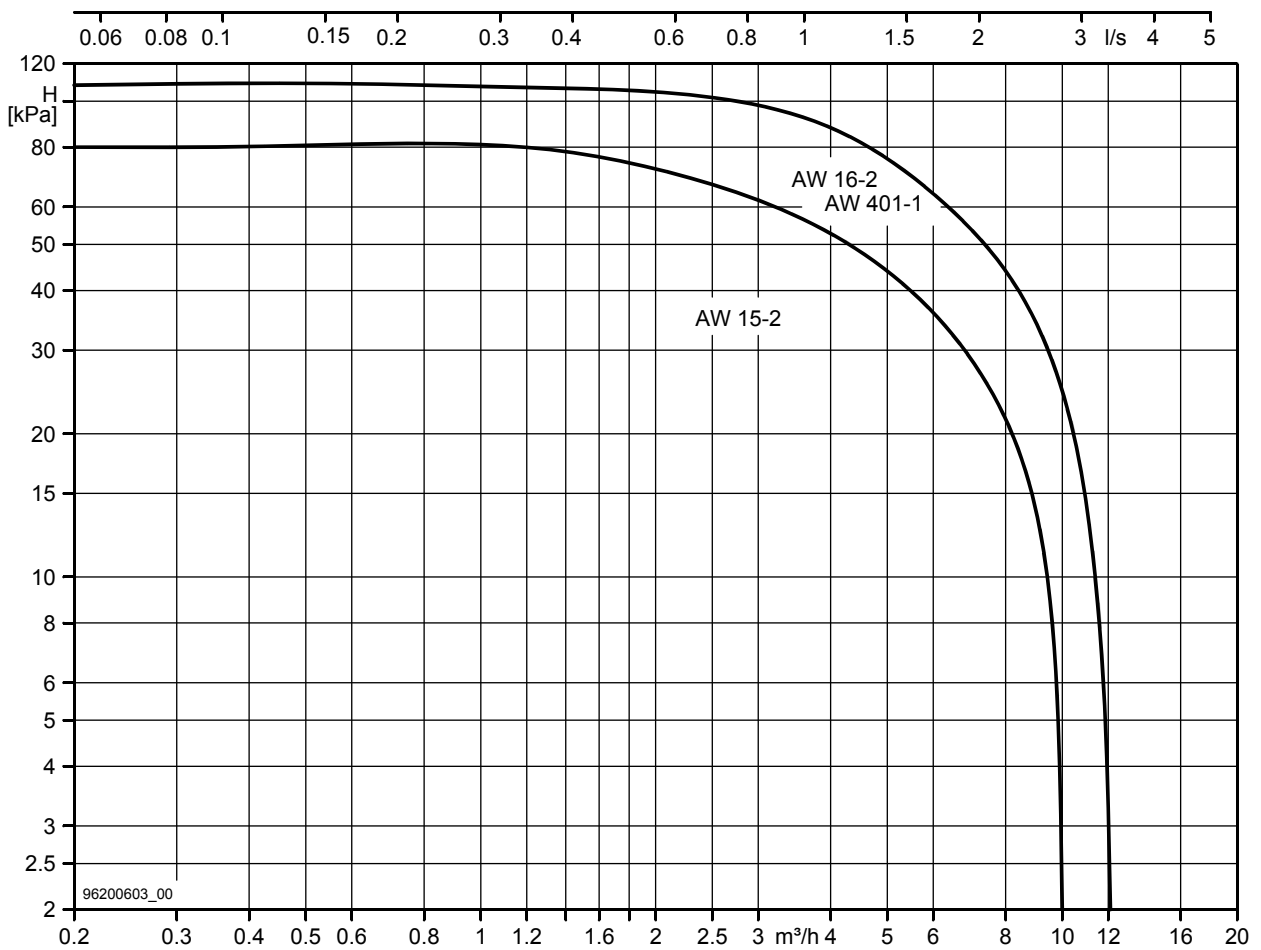
Service water pumps

AW

Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar
AW 15-2	1158620150	32	8	180	G 2"	10
AW 16-2	1161720150	32	11	180	G 2"	10

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Flanged connection	Max. operating pressure bar
AW 401-1	1161400150	40	11	250	PN 6/10	10



AW 15-2

Nominal width	DN 32
Max. flow head H	8 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	4.2 kg

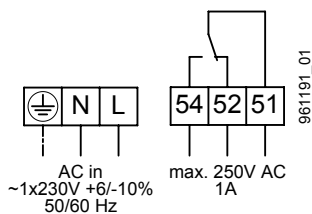
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	8-107 W
Nominal current	0.1-0.8 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.55 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Heat insulation shell

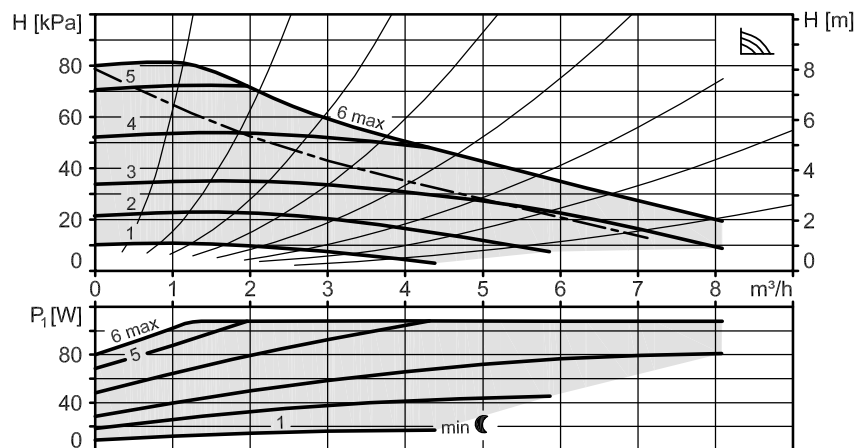
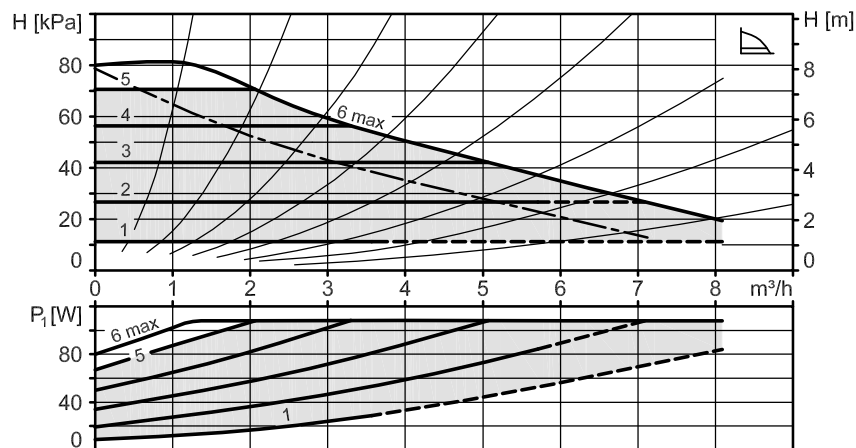
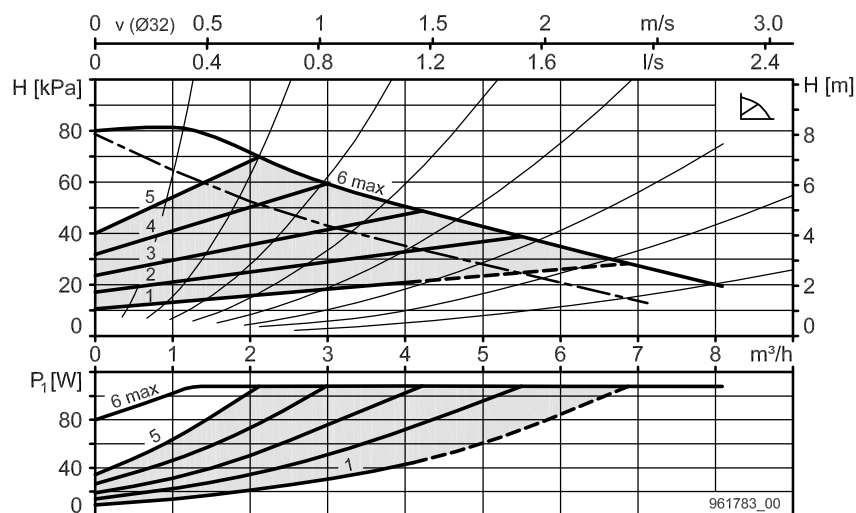
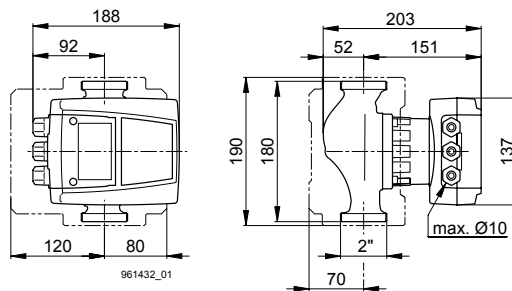
Accessories

- BIM A signal module
- BIM B control module

Remarks

Pump housing: bronze

Type **Art. no.**
AW 15-2 1158620150



AW 16-2

Nominal width	DN 32
Max. flow head H	11 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	4.2 kg

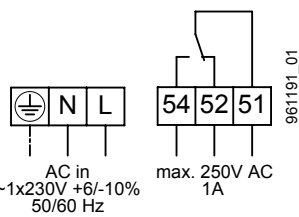
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	8-174 W
Nominal current	0.1-1.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.55 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Heat insulation shell

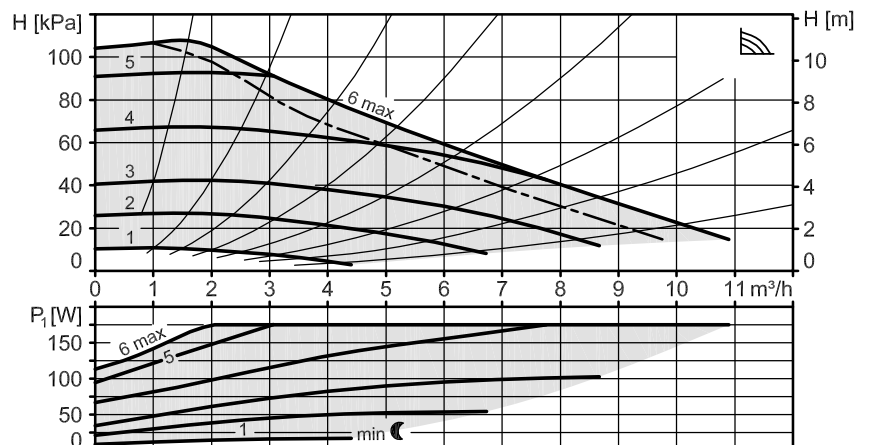
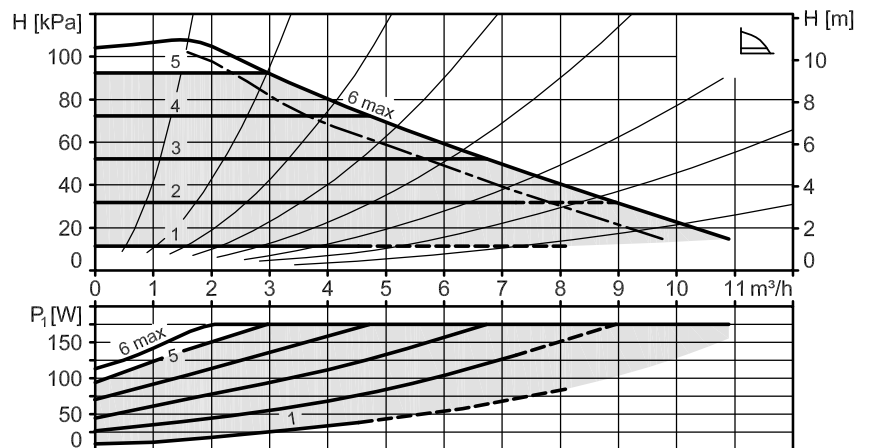
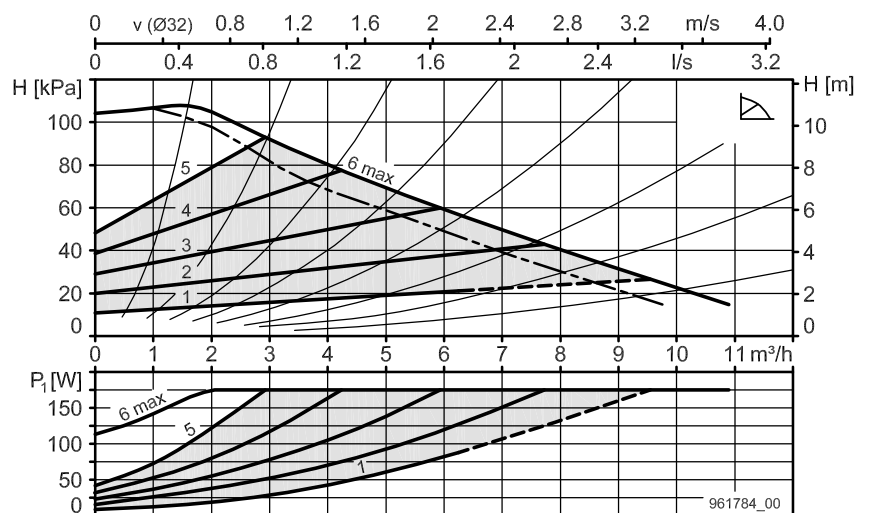
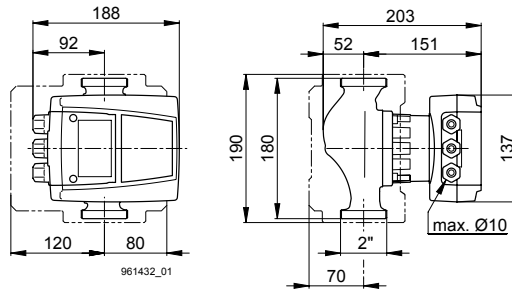
Accessories

- BIM A signal module
- BIM B control module

Remarks

Pump housing: bronze

Type	Art. no.
AW 16-2	1161720150



AW 401-1

Nominal width	DN 40
Max. flow head H	11 m
Overall length	250 mm
Flanged connection	PN 6/10
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	9.0 kg

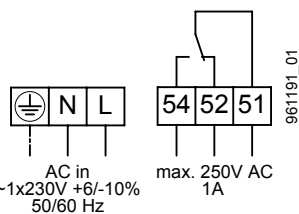
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	8-174 W
Nominal current	0.1-1.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.55 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



52, 54, 51 Error or operating message

L, N, PE Power supply

Switch

- 1 Power limiting (can be deactivated)
- 2 Fault or operating message (switchable)

Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

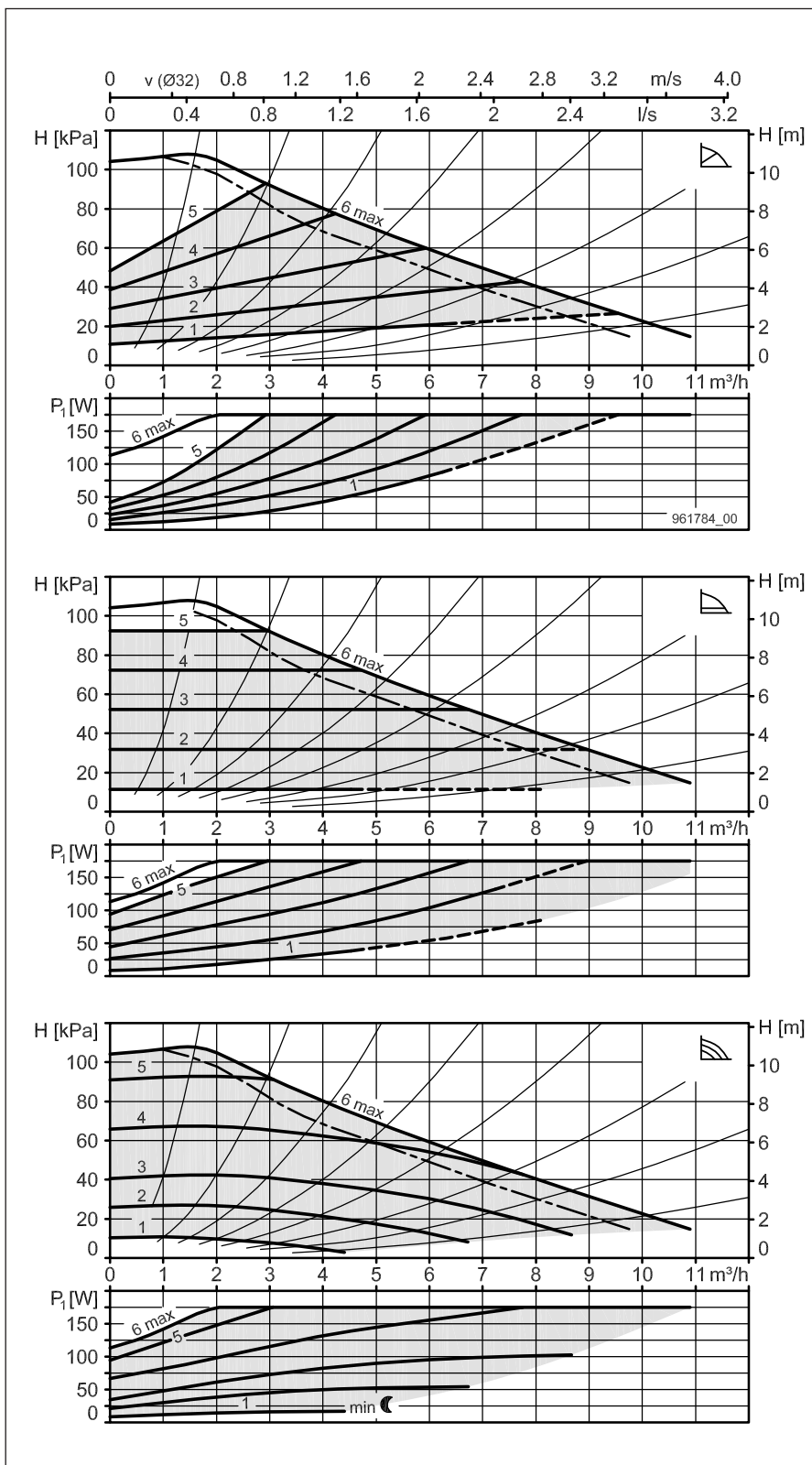
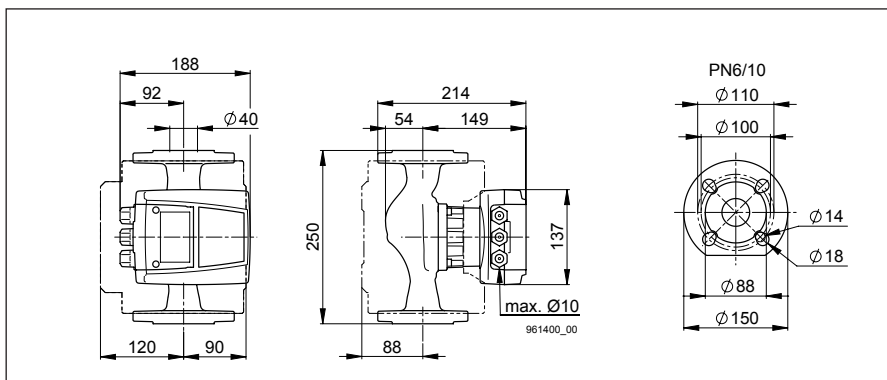
Accessories

- BIM A signal module
- BIM B control module
- Sealing set for flange PN10 / PN16

Remarks

Pump housing: bronze

Type	Art. no.
AW 401-1	1161400150



Premium service water pumps

ModulA...BLUE T2 with threaded connection



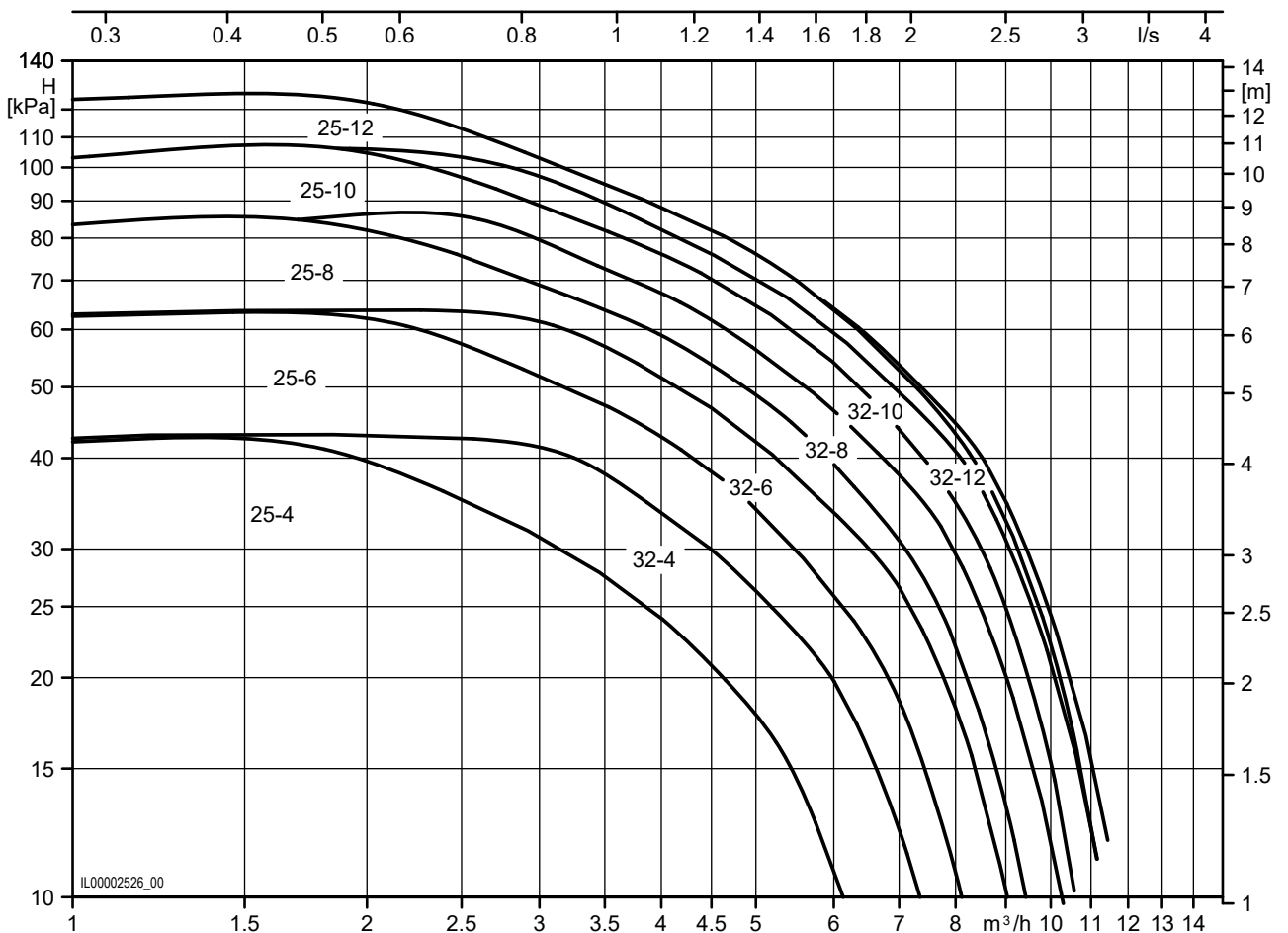
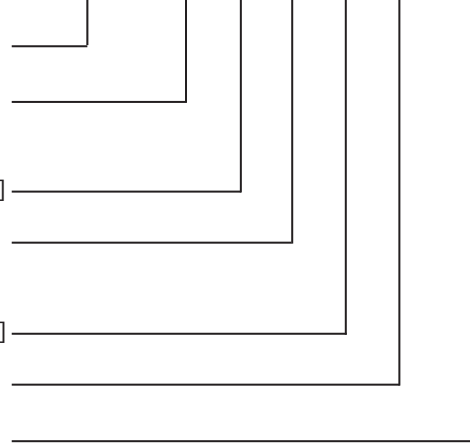
Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Threaded connection	Max. operating pressure bar
ModulA 25-4 180 BLUE	7000000163	25	4	180	G 1½"	10
ModulA 25-6 180 BLUE	7000000164	25	6	180	G 1½"	10
ModulA 25-8 180 BLUE	7000000165	25	8	180	G 1½"	10
ModulA 25-10 180 BLUE	7000000166	25	10	180	G 1½"	10
ModulA 25-12 180 BLUE	7000000167	25	12	180	G 1½"	10
ModulA 32-4 180 BLUE	7000000168	32	4	180	G 2"	10
ModulA 32-6 180 BLUE	7000000169	32	6	180	G 2"	10
ModulA 32-8 180 BLUE	7000000170	32	8	180	G 2"	10
ModulA 32-10 180 BLUE	7000000171	32	10	180	G 2"	10
ModulA 32-12 180 BLUE	7000000172	32	12	180	G 2"	10

Order reference

Modula (-D) 32 (F) -6 220 RED

- Series
- Single pump
- Twin pump (-D)
- Nominal width (DN) [mm]
- Pipeline connection
- Flange (F)
- Discharge head max. [m]
- Installation height [mm]
- Field of application
- Heating (RED)
- Cold water (GREEN)
- Service water (BLUE)



Service water

ModuA 25-4 180 BLUE

Version	T2 S
Nominal width	DN 25
Max. flow head H	4 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	4.8 kg

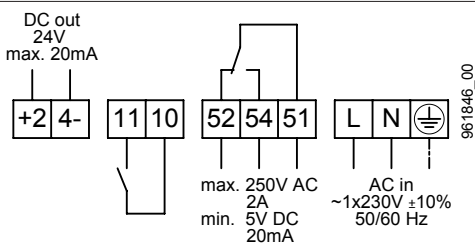
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-49 W
Nominal current	0.08-0.37 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.30 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

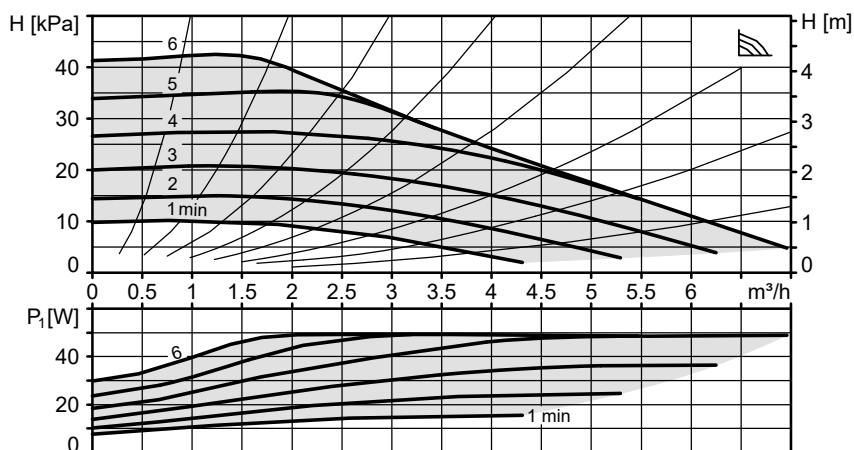
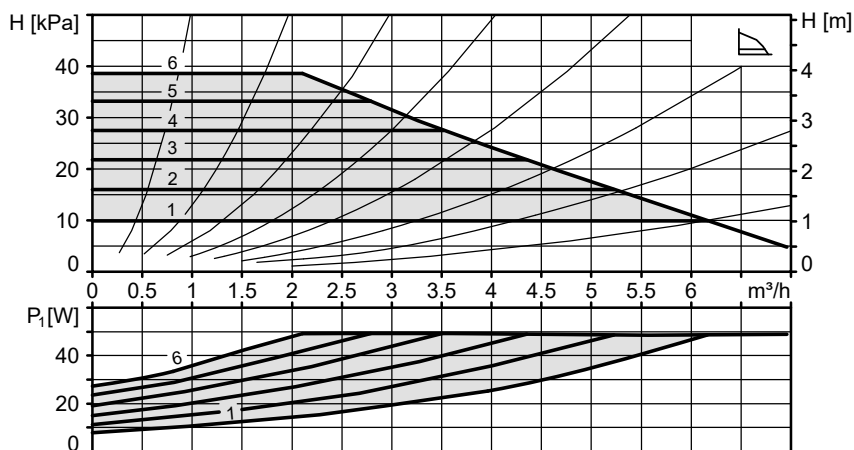
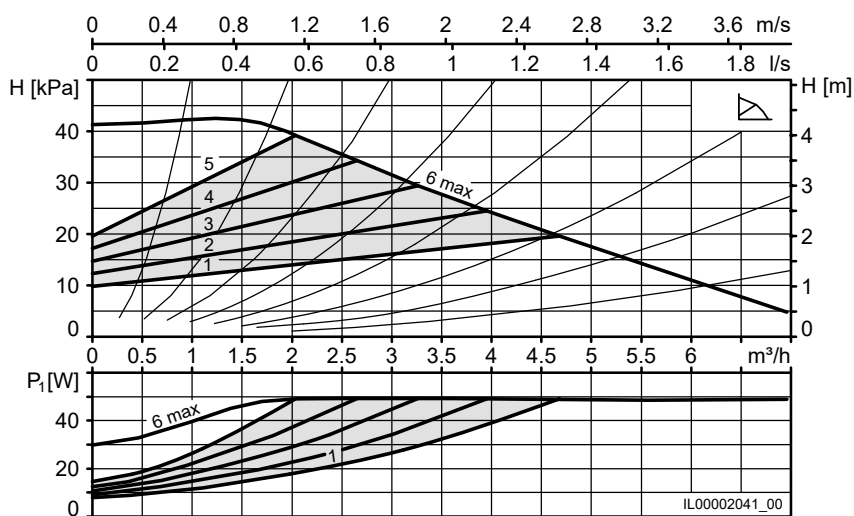
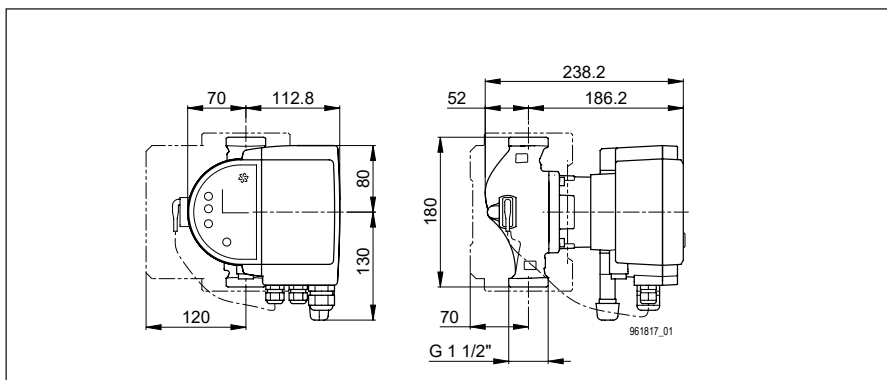
Accessories

- BIM B3 control module
- BIM BUS-Module

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 25-4 180 BLUE	7000000163



ModuA 25-6 180 BLUE

Version	T2 S
Nominal width	DN 25
Max. flow head H	6 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	4.8 kg

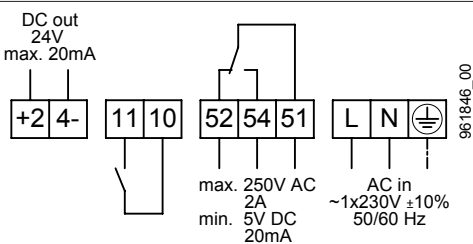
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-83 W
Nominal current	0.08-0.62 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.30 bar
for every ±100 m of altitude	±0.01 bar

Connection diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

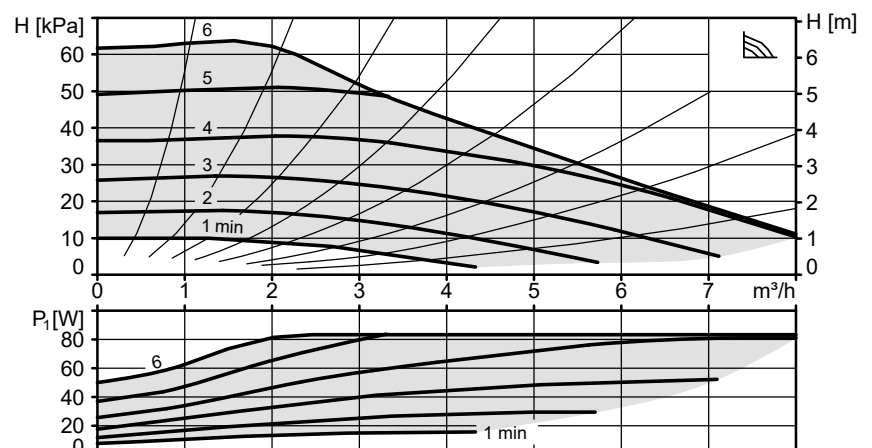
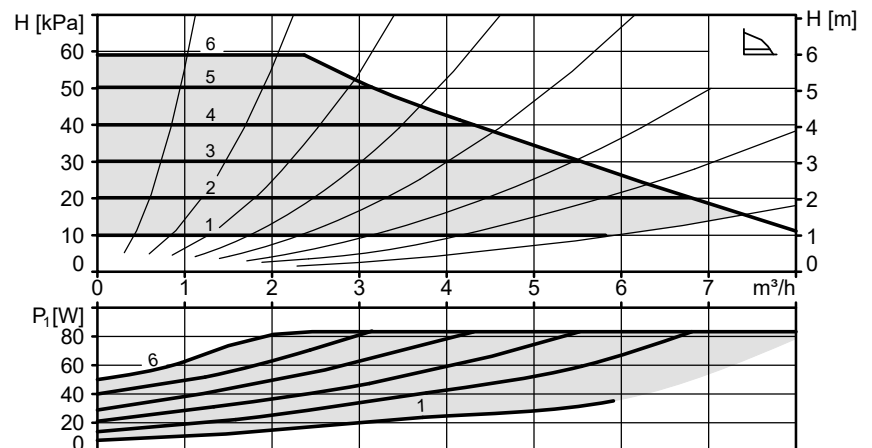
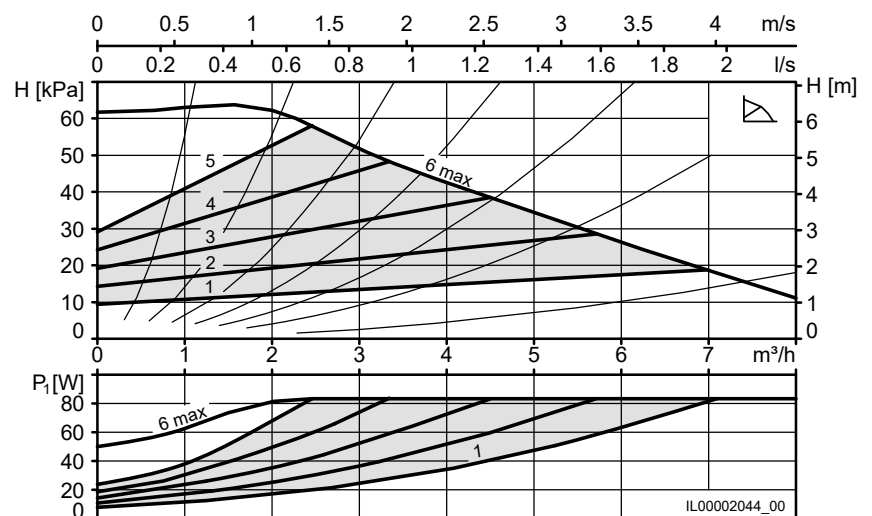
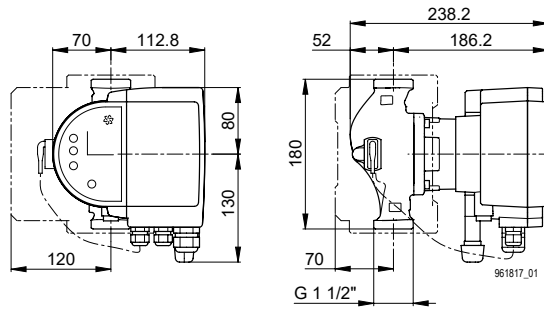
Accessories

- BIM B3 control module
- BIM BUS-Module

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 25-6 180 BLUE	7000000164



ModuA 25-8 180 BLUE

Version	T2 S
Nominal width	DN 25
Max. flow head H	8 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	4.8 kg

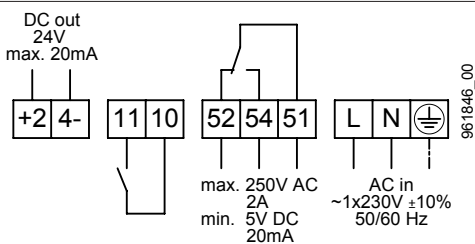
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	7-115 W
Nominal current	0.08-0.85 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.30 bar
for every ± 100 m of altitude	± 0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

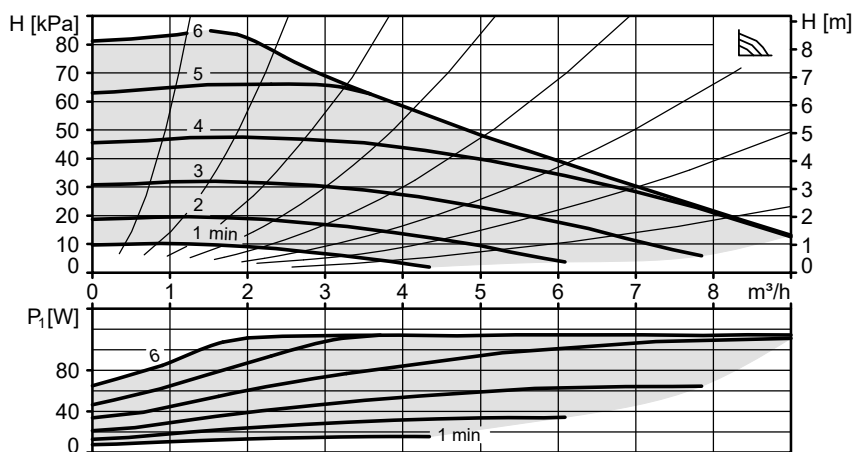
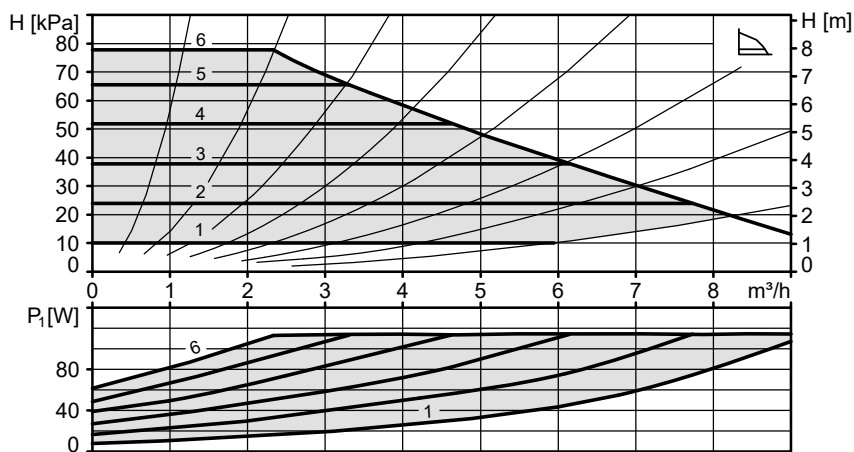
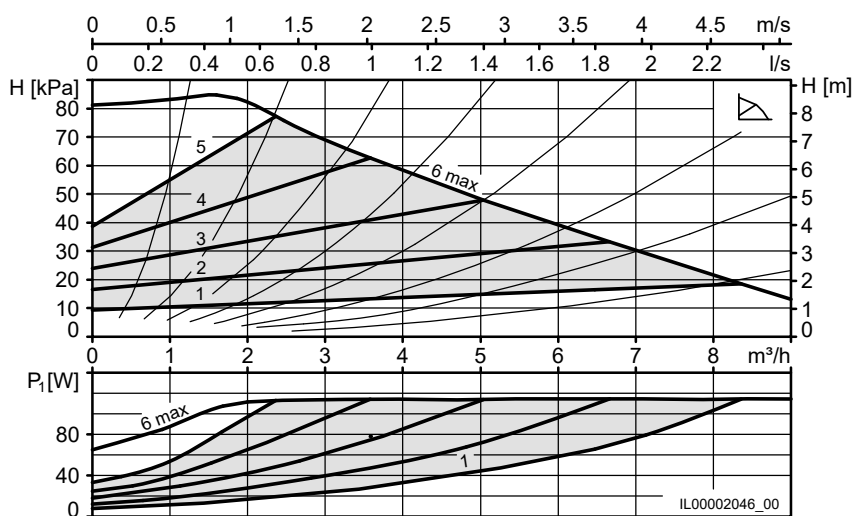
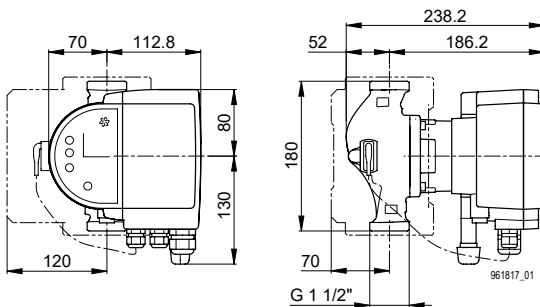
Accessories

- BIM B3 control module
- BIM BUS-Module

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 25-8 180 BLUE	7000000165



ModuA 25-10 180 BLUE

Version	T2 S
Nominal width	DN 25
Max. flow head H	10 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	4.8 kg

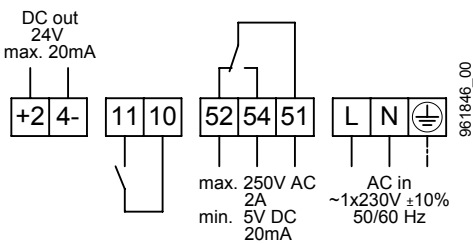
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	7-153 W
Nominal current	0.08-1.15 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.30 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

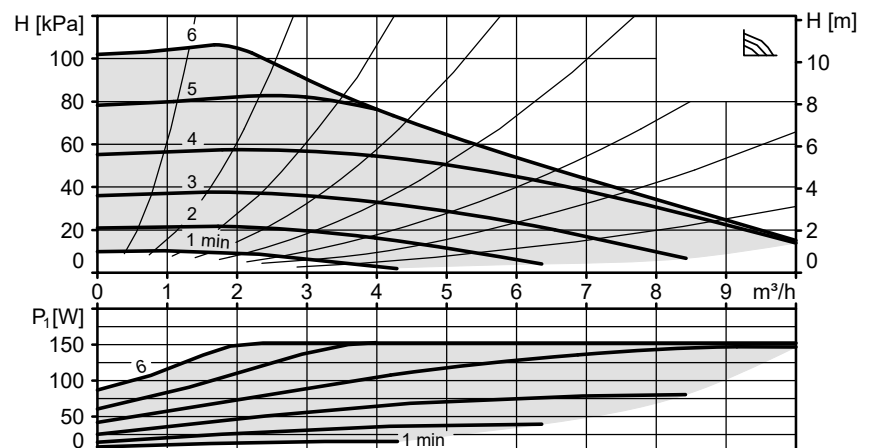
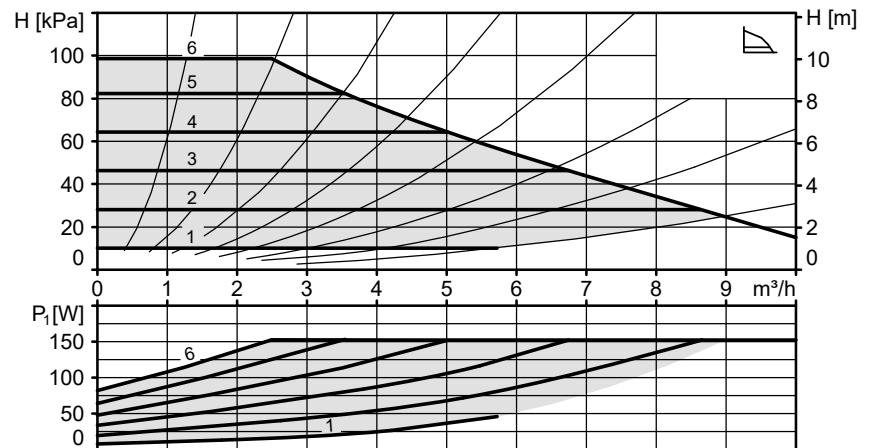
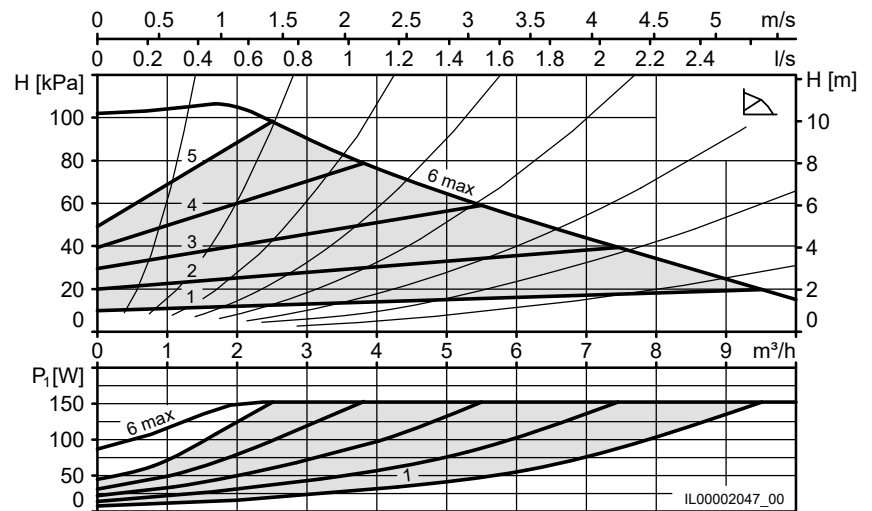
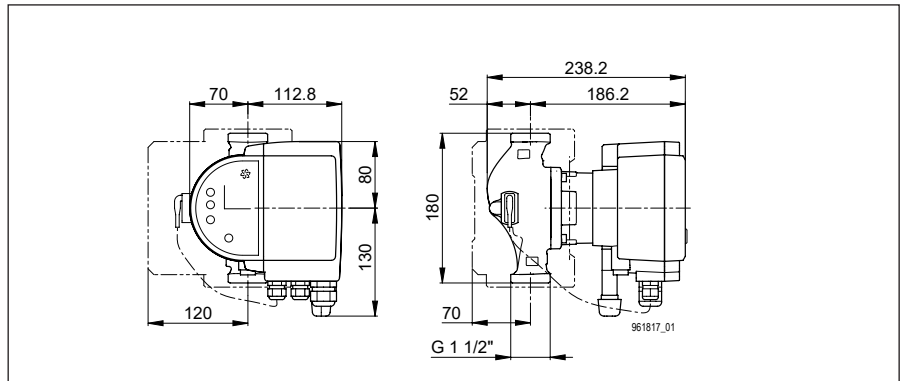
Accessories

- BIM B3 control module
- BIM BUS-Module

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 25-10 180 BLUE	7000000166



ModuA 25-12 180 BLUE

Version	T2 S
Nominal width	DN 25
Max. flow head H	12 m
Overall length	180 mm
Threaded connection	G 1 1/2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	4.8 kg

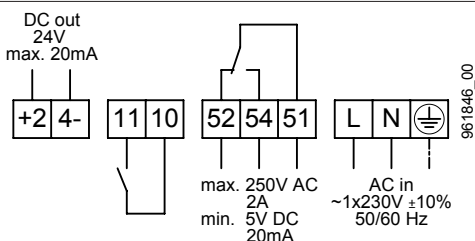
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-181 W
Nominal current	0.08-1.36 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.30 bar
for every ±100 m of altitude	±0.01 bar

Connection diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

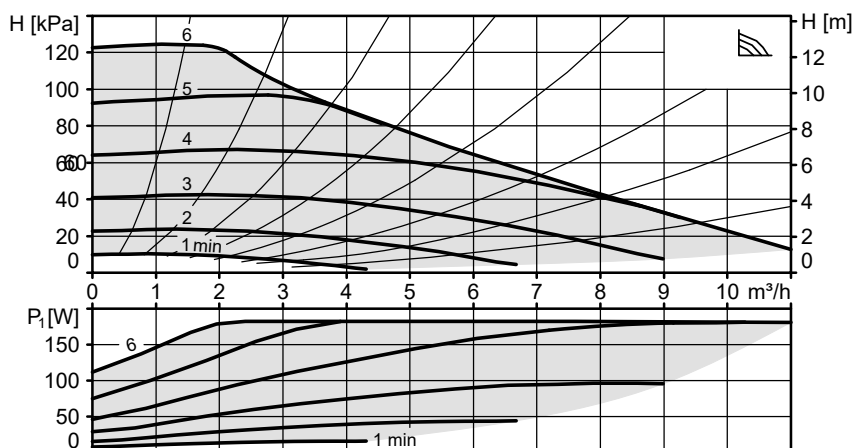
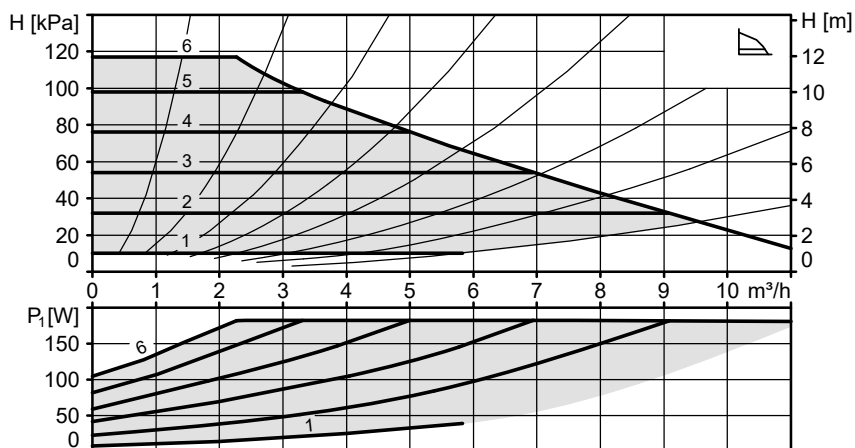
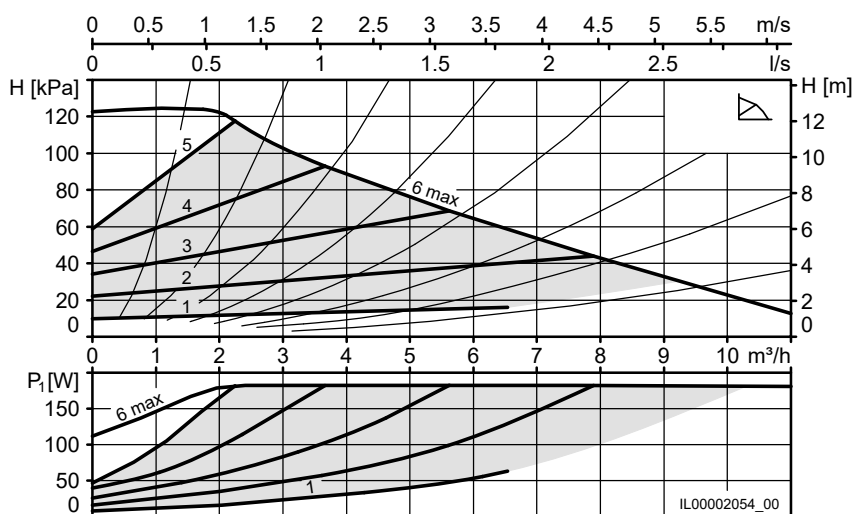
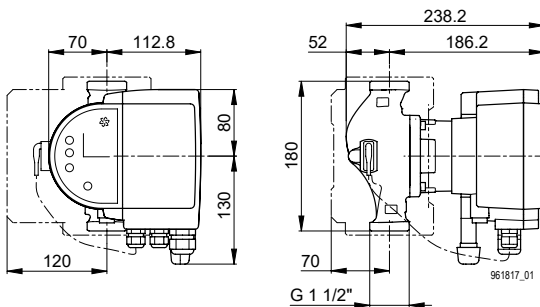
Accessories

- BIM B3 control module
- BIM BUS-Module

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 25-12 180 BLUE	7000000167



ModuA 32-4 180 BLUE

Version	T2 S
Nominal width	DN 32
Max. flow head H	4 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	5.0 kg

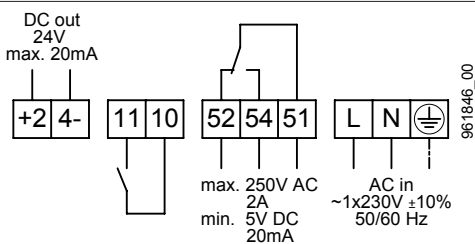
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-66 W
Nominal current	0.08-0.48 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.30 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

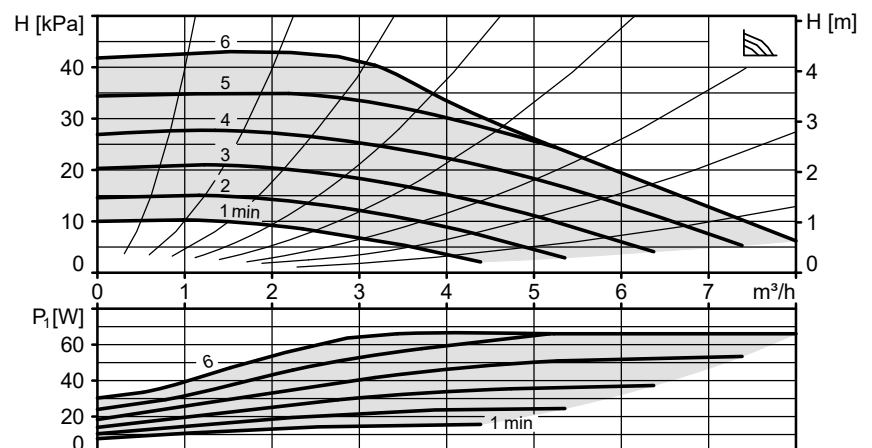
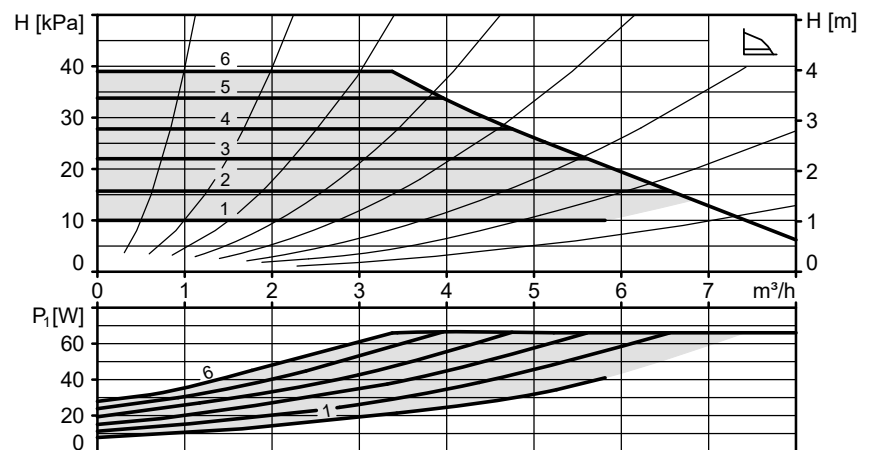
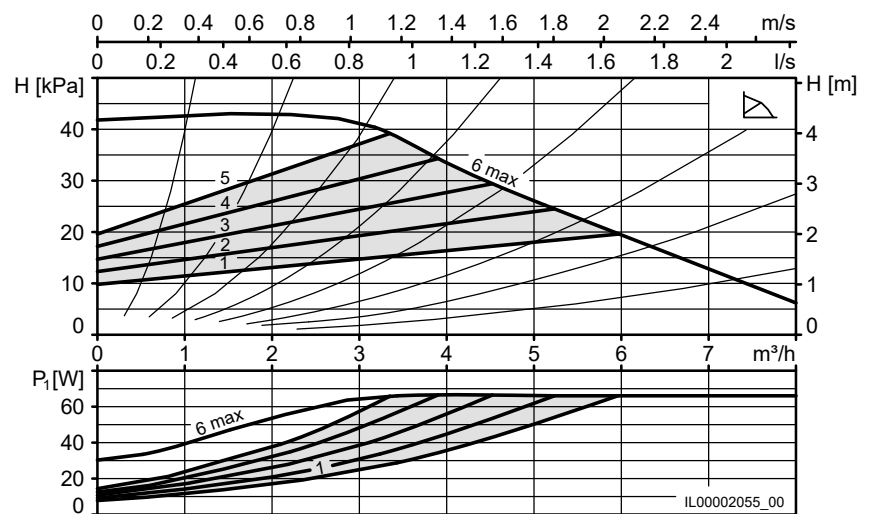
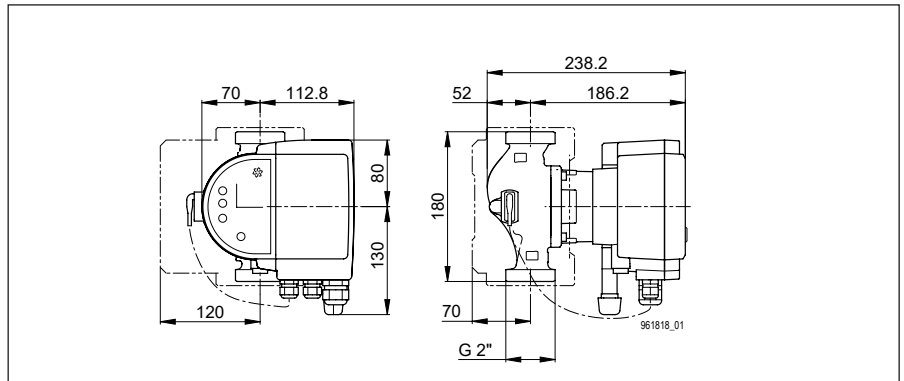
Accessories

- BIM B3 control module
- BIM BUS-Module

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 32-4 180 BLUE	7000000168



ModuA 32-6 180 BLUE

Version	T2 S
Nominal width	DN 32
Max. flow head H	6 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	5.0 kg

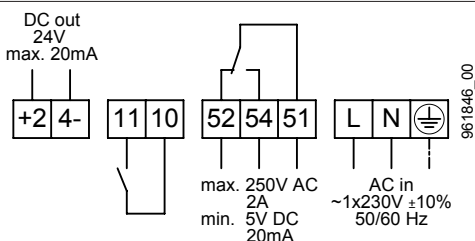
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	7-102 W
Nominal current	0.08-0.73 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.30 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

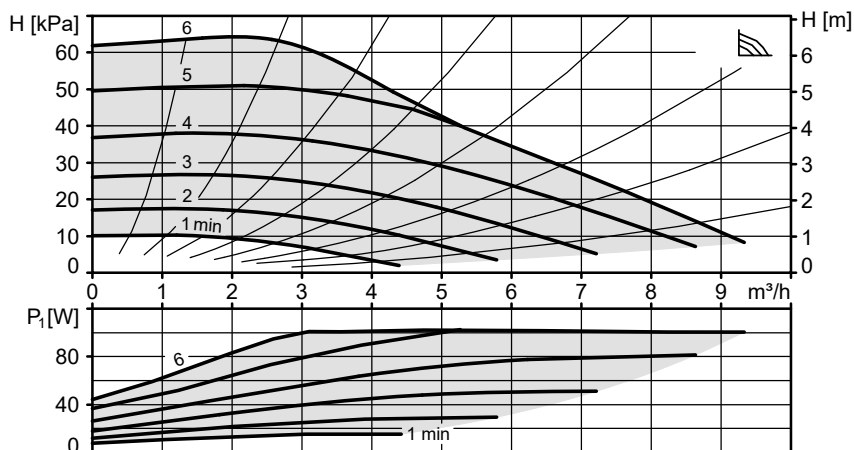
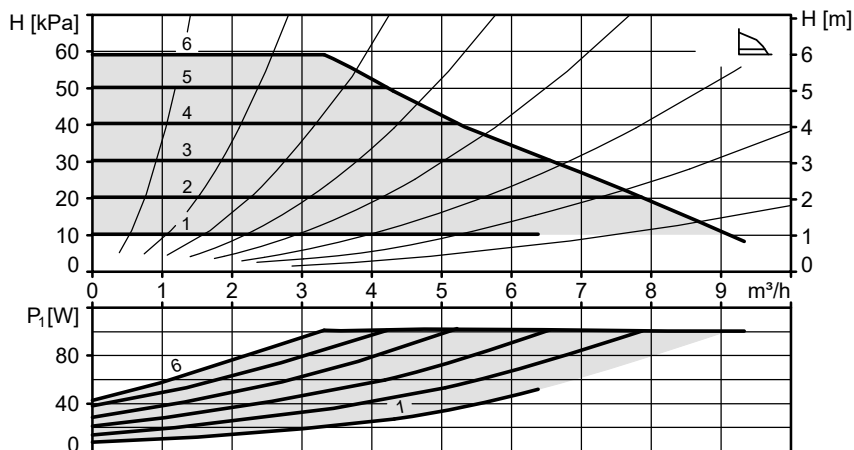
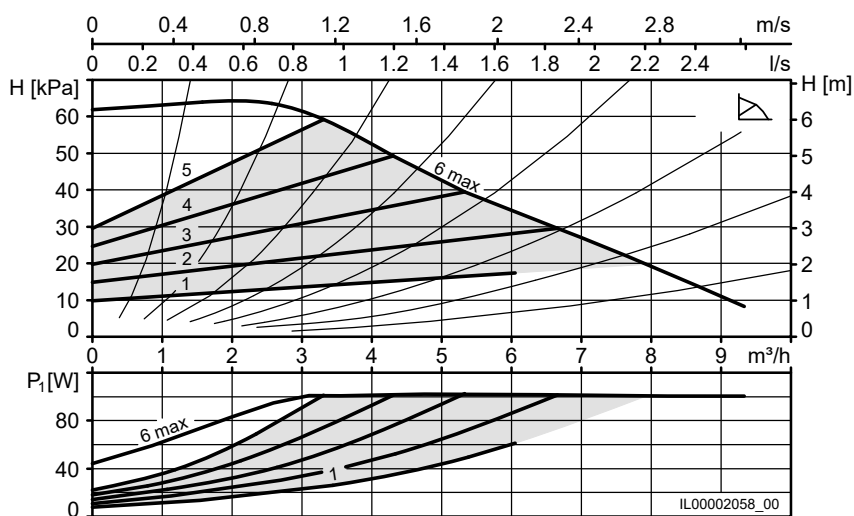
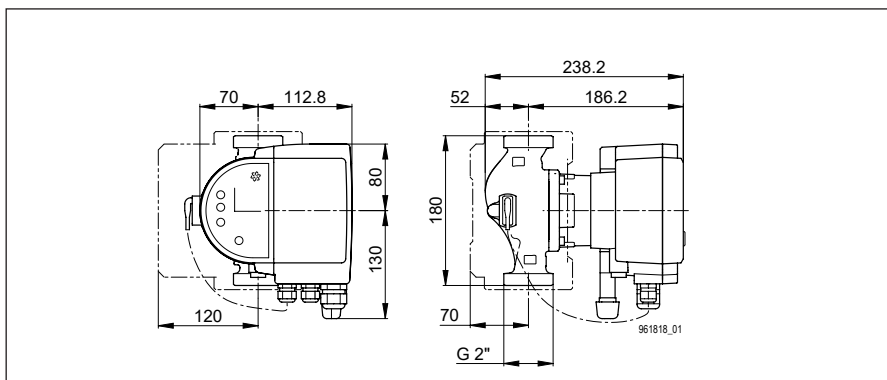
Accessories

- BIM B3 control module
- BIM BUS-Module

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 32-6 180 BLUE	7000000169



ModuA 32-8 180 BLUE

Version	T2 S
Nominal width	DN 32
Max. flow head H	8 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	5.0 kg

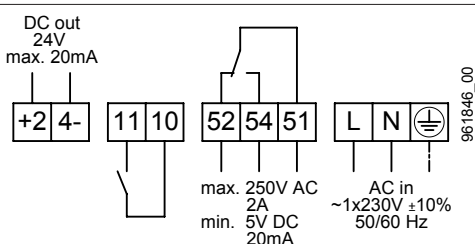
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	7-134 W
Nominal current	0.08-0.97 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.30 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

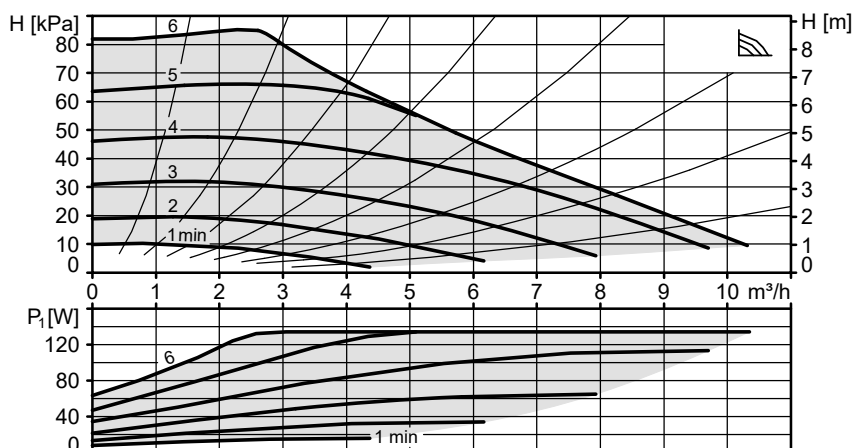
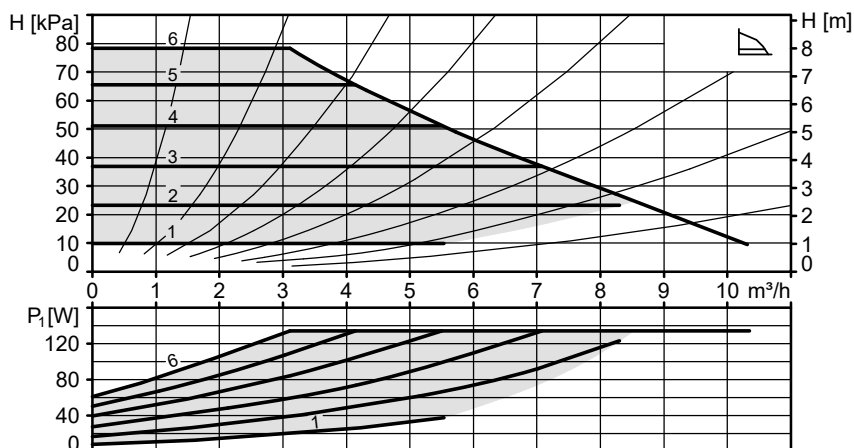
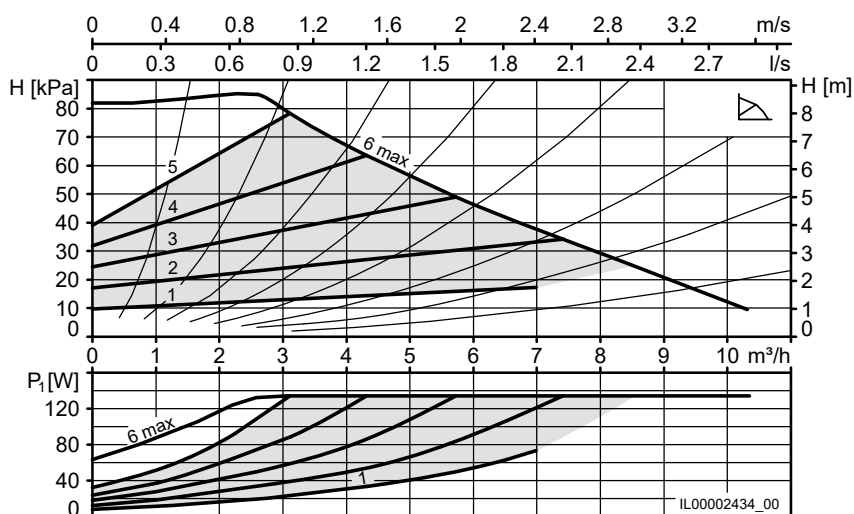
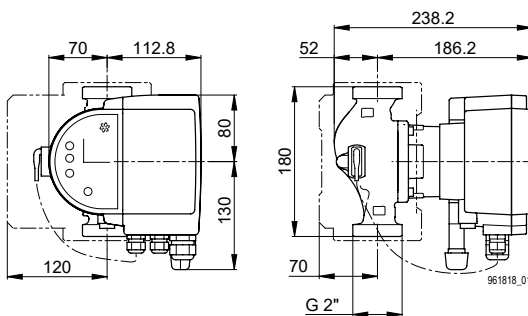
Accessories

- BIM B3 control module
- BIM BUS-Module

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 32-8 180 BLUE	7000000170



ModuA 32-10 180 BLUE

Version	T2 S
Nominal width	DN 32
Max. flow head H	10 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	5.0 kg

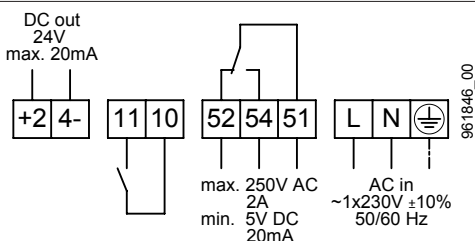
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	7-169 W
Nominal current	0.08-1.25 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.30 bar
for every ± 100 m of altitude	± 0.01 bar

Connection diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

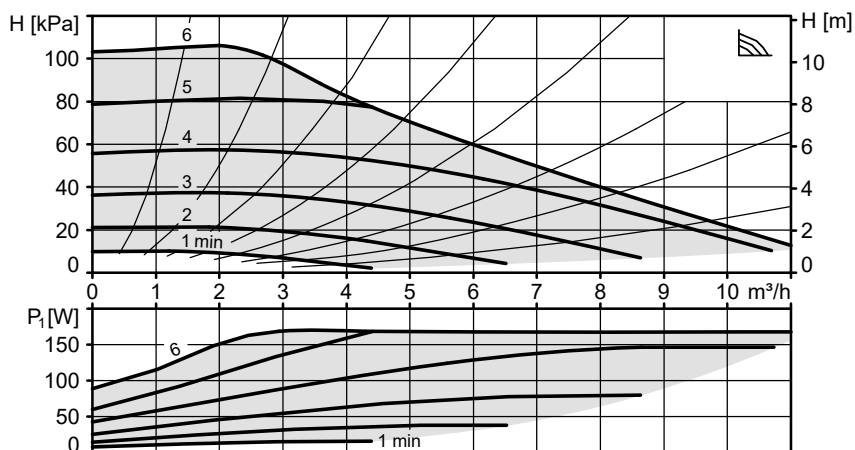
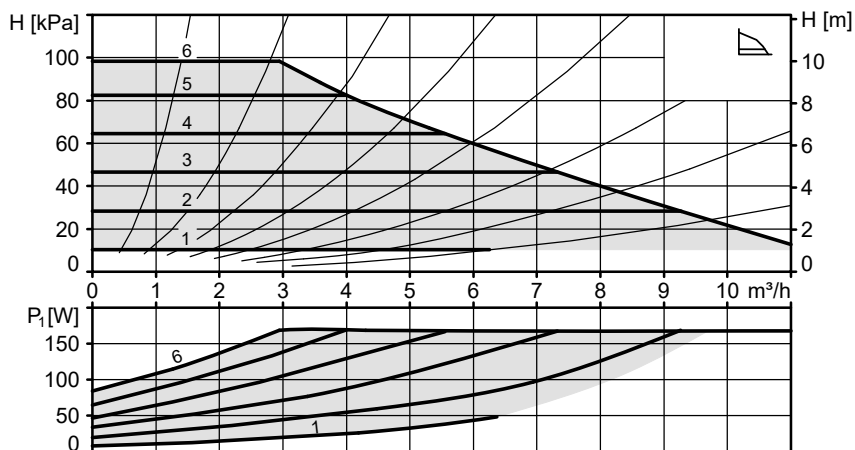
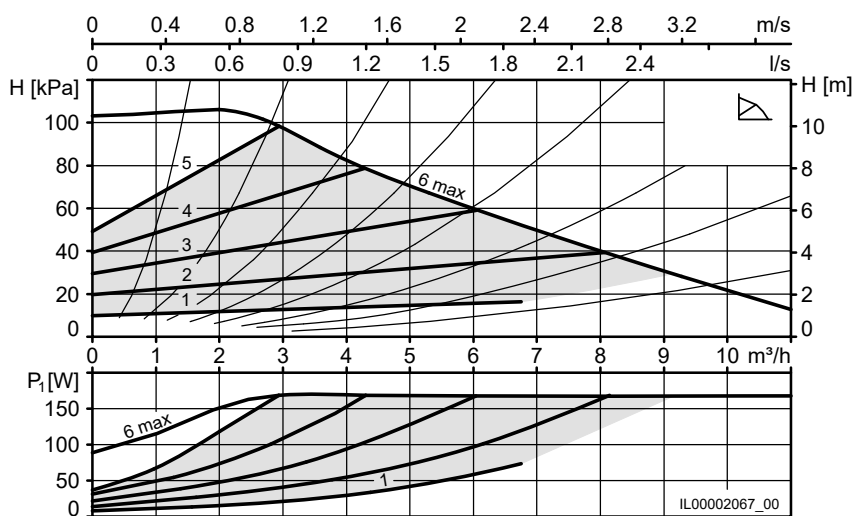
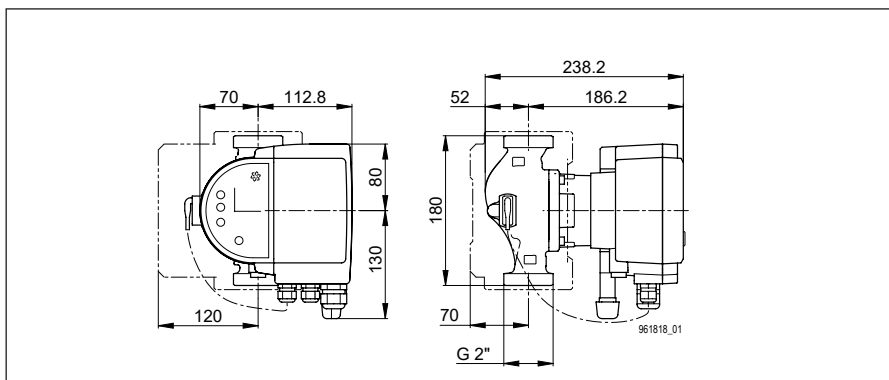
Accessories

- BIM B3 control module
- BIM BUS-Module

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 32-10 180 BLUE	7000000171



ModuA 32-12 180 BLUE

Version	T2 S
Nominal width	DN 32
Max. flow head H	12 m
Overall length	180 mm
Threaded connection	G 2"
Max. operating pressure	10 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	5.0 kg

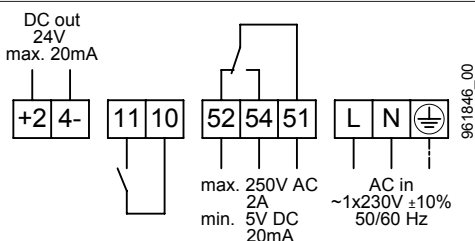
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	7-182 W
Nominal current	0.08-1.36 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.30 bar
for every ±100 m of altitude	±0.01 bar

Connection diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell

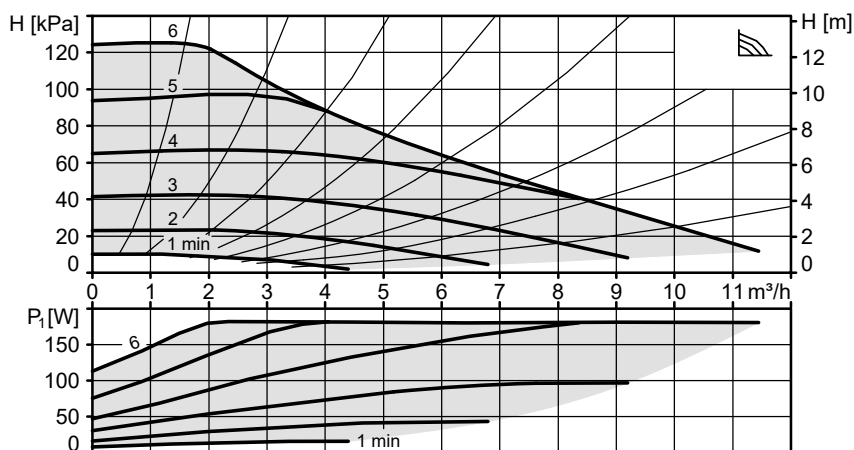
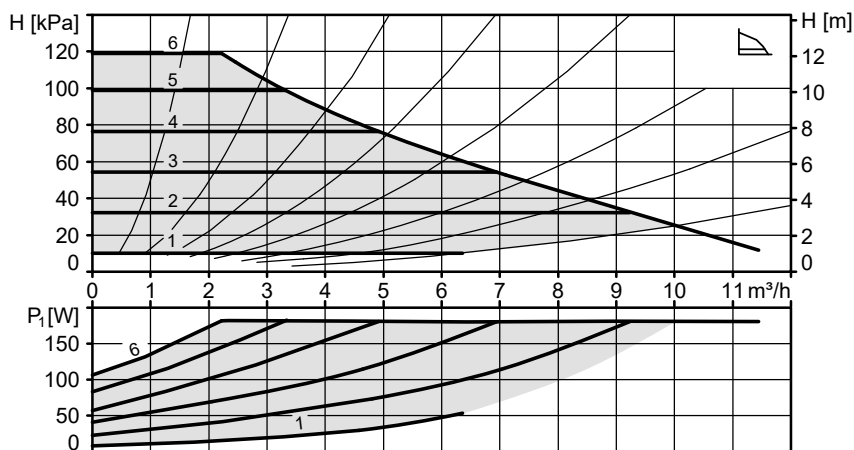
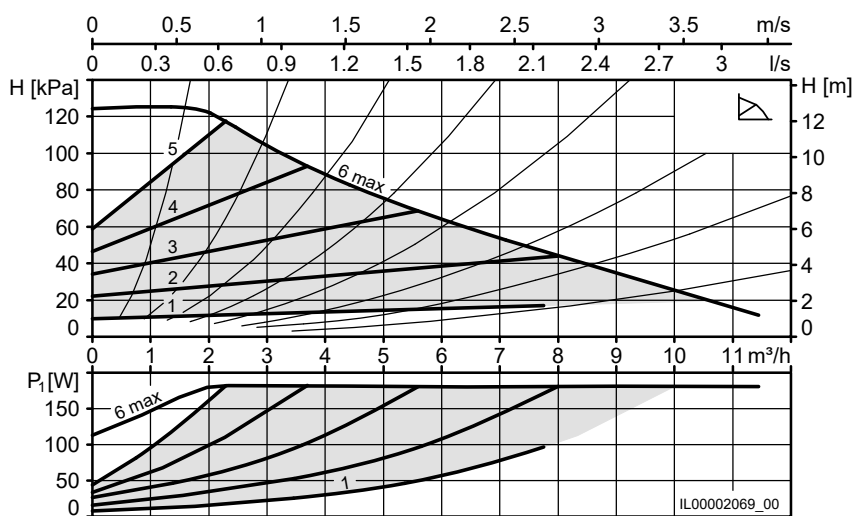
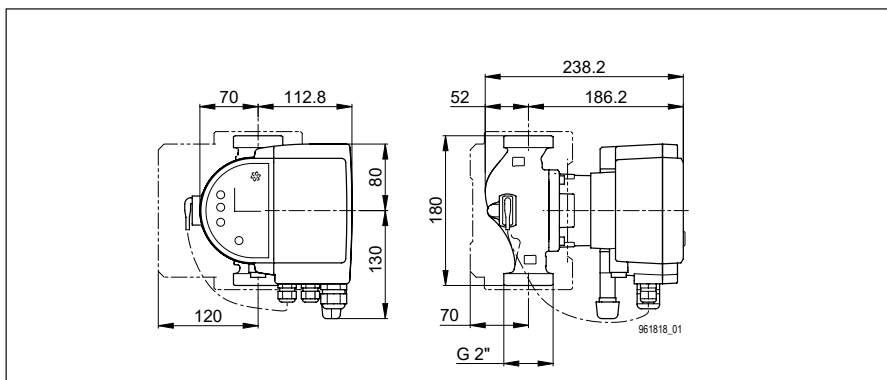
Accessories

- BIM B3 control module
- BIM BUS-Module

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 32-12 180 BLUE	7000000172





Premium service water pumps

ModulA... BLUE T2 with flanged connection

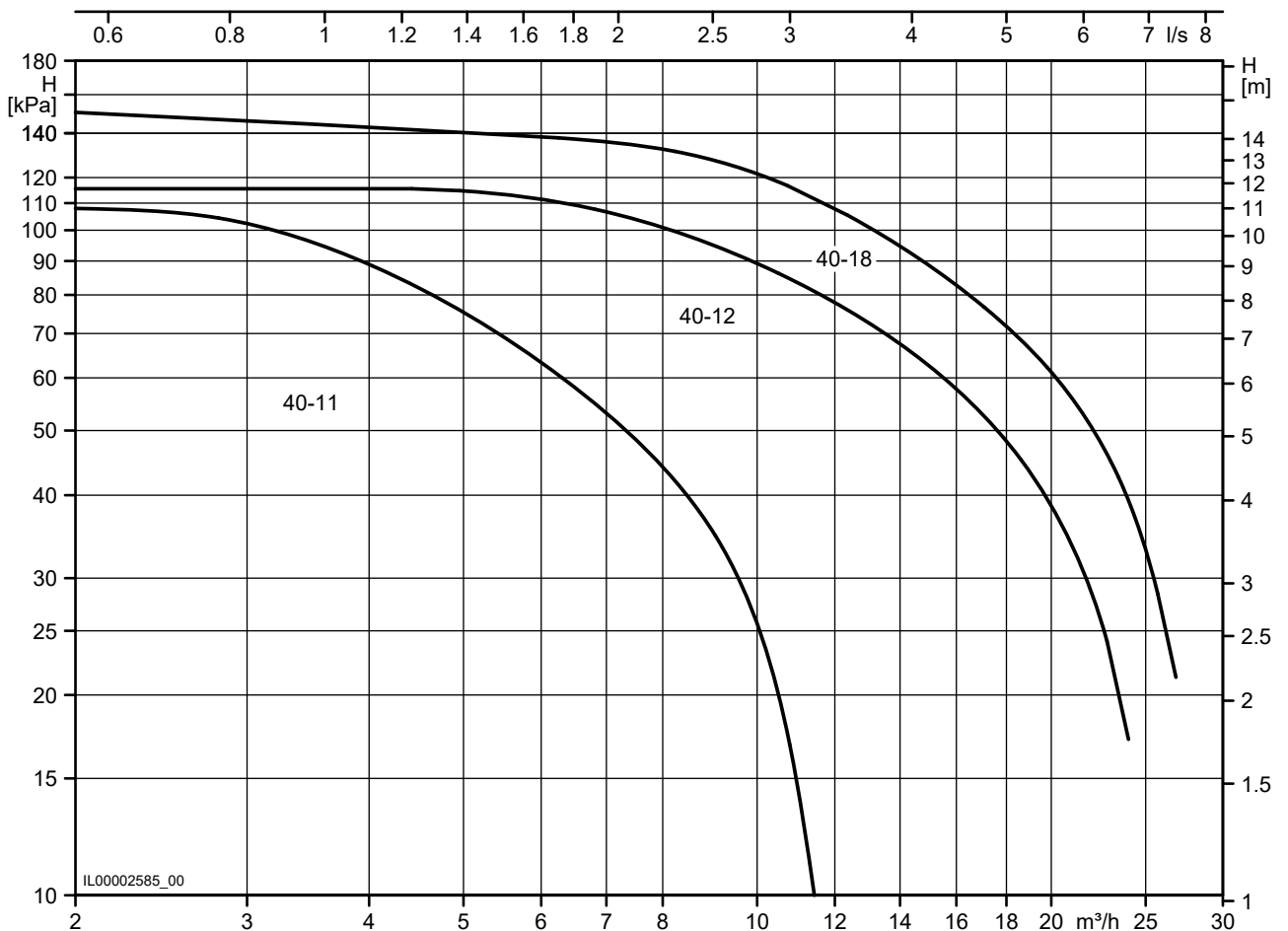
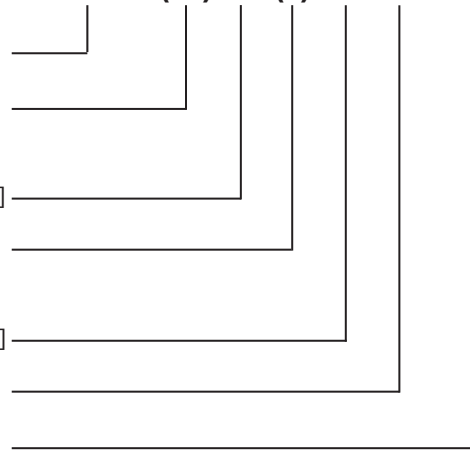
Summary

Type	Art. no.	Nominal width DN	Max. flow head H m	Overall length mm	Flanged connection	Max. operating pressure bar
ModulA 40-11 250 BLUE	7000000173	40	11	250	PN 6-16	16
ModulA 40-12 250 BLUE	7000000174	40	12	250	PN 6-16	16
ModulA 40-18 250 BLUE	7000000175	40	18	250	PN 6-16	16

Order reference

Modula (-D) 32 (F) -6 220 RED

- Series
- Single pump
- Twin pump (-D)
- Nominal width (DN) [mm]
- Pipeline connection
- Flange (F)
- Discharge head max. [m]
- Installation height [mm]
- Field of application
- Heating (RED)
- Cold water (GREEN)
- Service water (BLUE)



Service water

ModuA 40-11 250 BLUE

Version	T2 S
Nominal width	DN 40
Max. flow head H	11 m
Overall length	250 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	8.8 kg

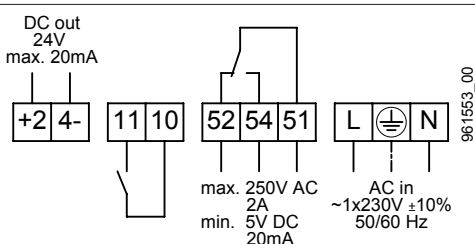
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	8-182 W
Nominal current	0.08-1.39 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.27 bar
for every ±100 m of altitude	±0.01 bar

Connection diagram



- +24-** 24 V DC out
- 11, 10** External OFF or external ON
- 52, 54, 51** Error or operating message
- L, N, PE** Power supply

Switch

- 1** Fault or operating message (switchable)
- 2** External OFF or external ON (switchable)
- 3** Power Limit (activatable)

Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

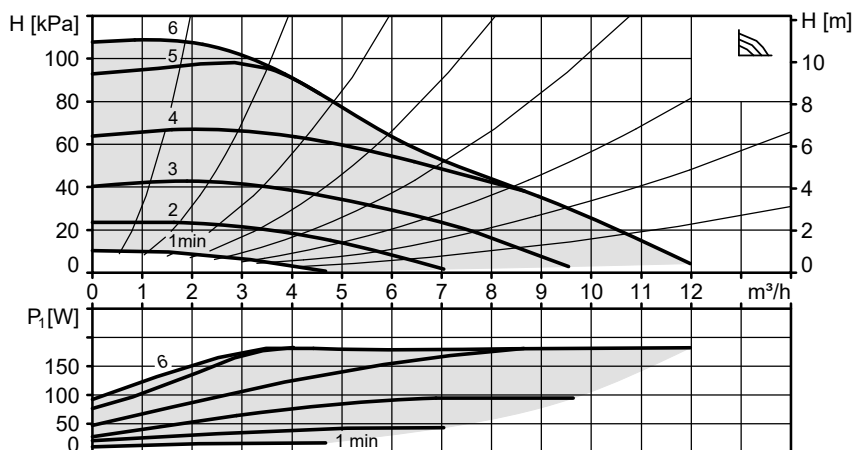
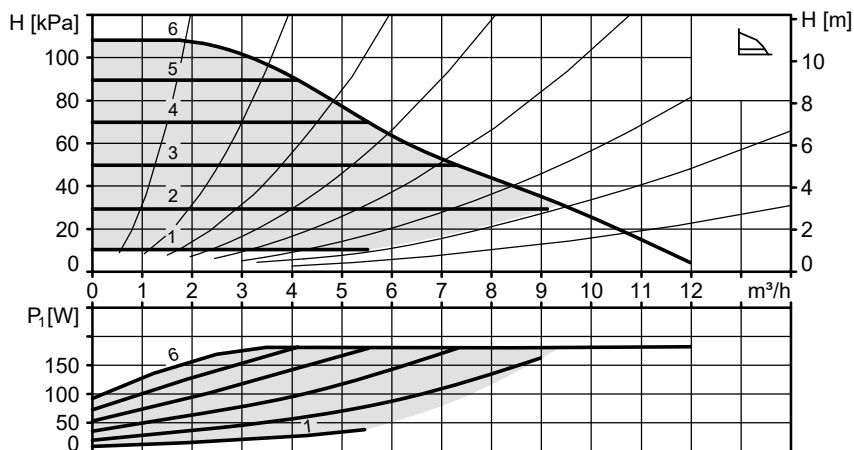
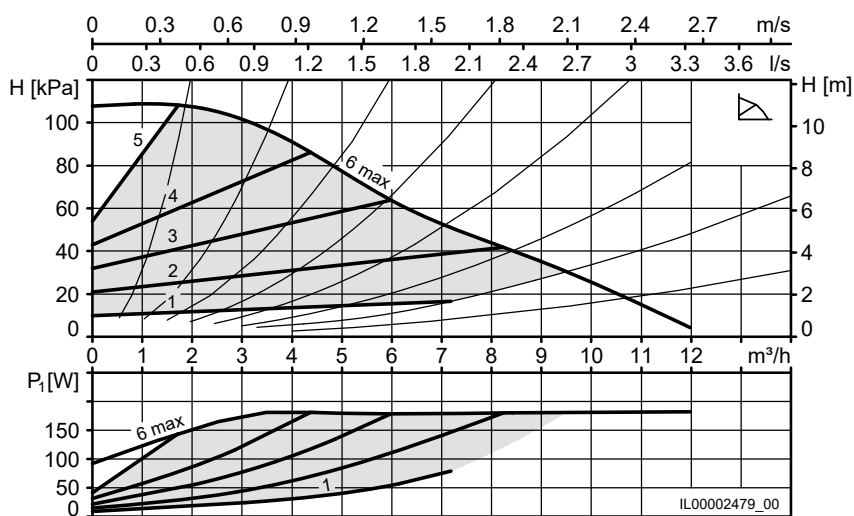
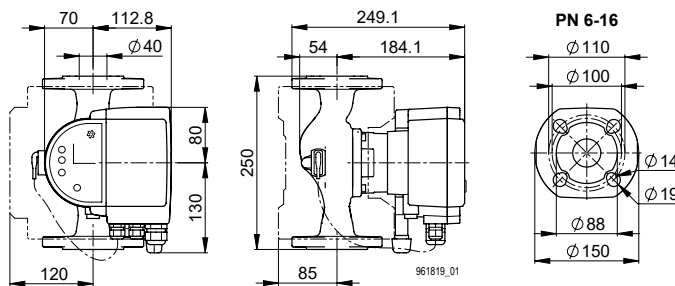
Accessories

- BIM B3 control module
- BIM BUS-Module
- Sealing set for flange PN10 / PN16

Remarks

Pump housing: bronze

Type	Art. no.
ModuA 40-11 250 BLUE	7000000173



ModulA 40-12 250 BLUE

Version	T2 M
Nominal width	DN 40
Max. flow head H	12 m
Overall length	250 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	18.1 kg

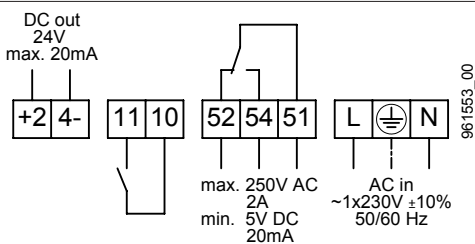
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P ₁	16-423 W
Nominal current	0.17-1.93 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.40 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

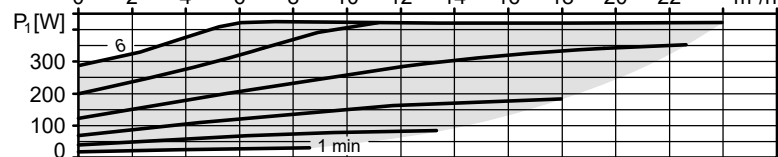
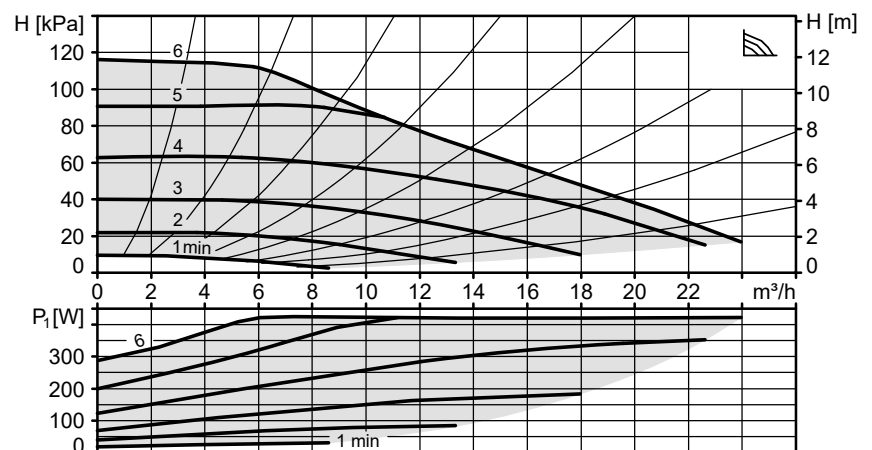
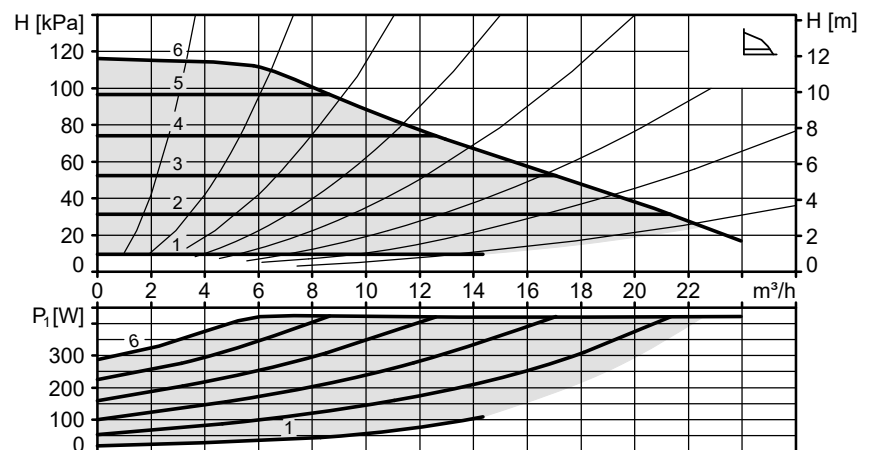
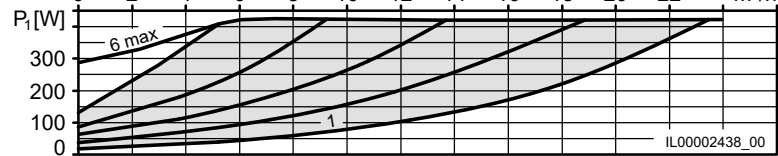
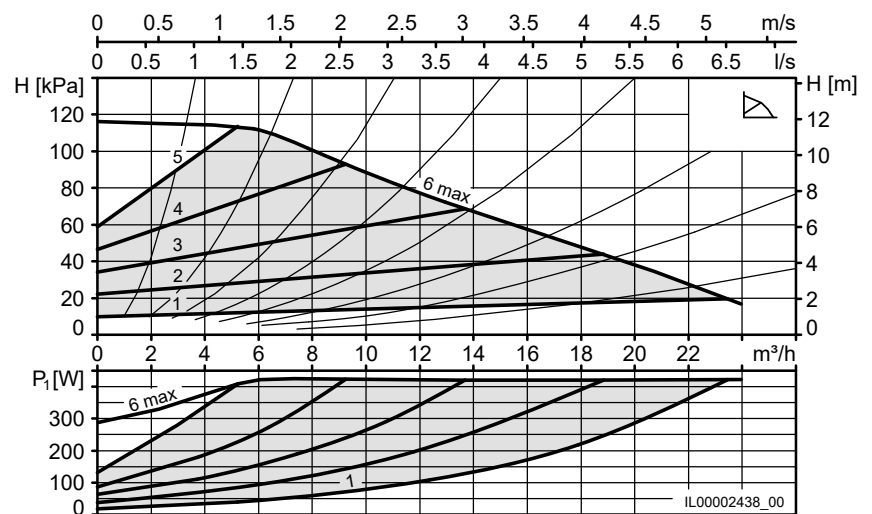
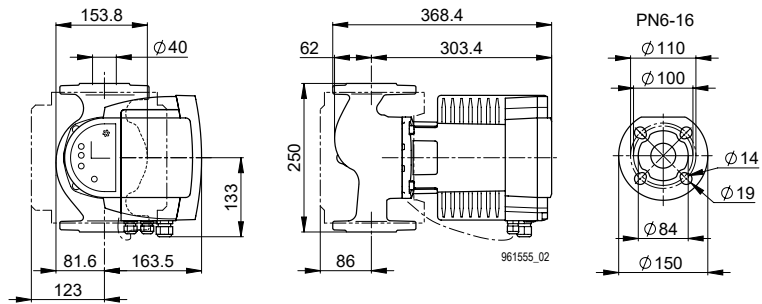
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

Type	Art. no.
ModulA 40-12 250 BLUE	7000000174



ModulA 40-18 250 BLUE

Version	T2 M
Nominal width	DN 40
Max. flow head H	18 m
Overall length	250 mm
Flanged connection	PN 6-16
Max. operating pressure	16 bar
Min. media temperature	+15°C
Max. media temperature	+85°C
Ambient temperature	0°C to 40°C
Permitted degree of water hardness at 65 °C	max. 35°fH = 20°dH
Permitted degree of water hardness at 85 °C	max. 25°fH = 14°dH
Net weight	18.1 kg

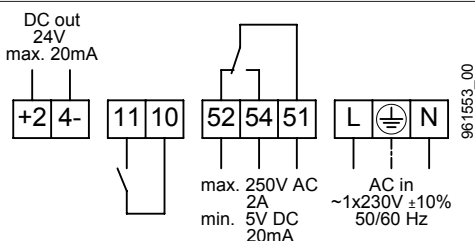
Electrical data

Voltage	1x230 V
Frequency	50/60 Hz
Power P_1	16-600 W
Nominal current	0.17-2.70 A
Motor protection	integrated

Required operating pressure at 500m a.s.l.

at a water temp. of 75 °C	0.10 bar
at a water temp. of 85 °C	0.40 bar
for every ±100 m of altitude	±0.01 bar

Connction diagram



+24-	24 V DC out
11, 10	External OFF or external ON
52, 54, 51	Error or operating message
L, N, PE	Power supply

Switch

- 1 Fault or operating message (switchable)
- 2 External OFF or external ON (switchable)
- 3 Power Limit (activatable)

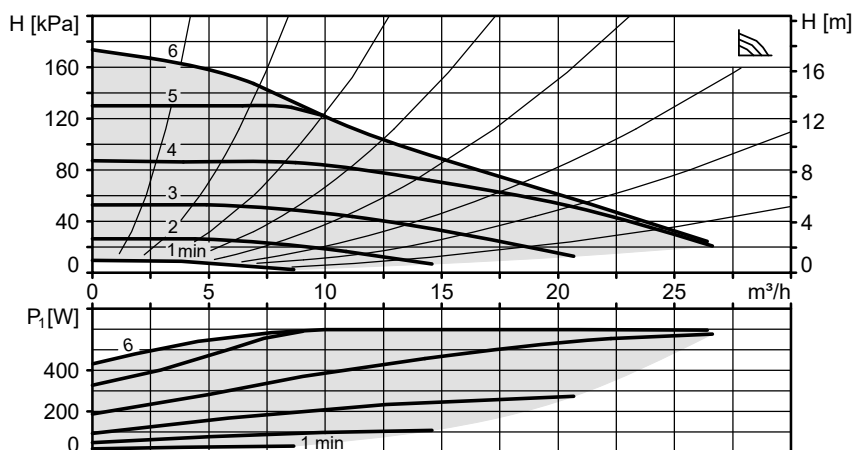
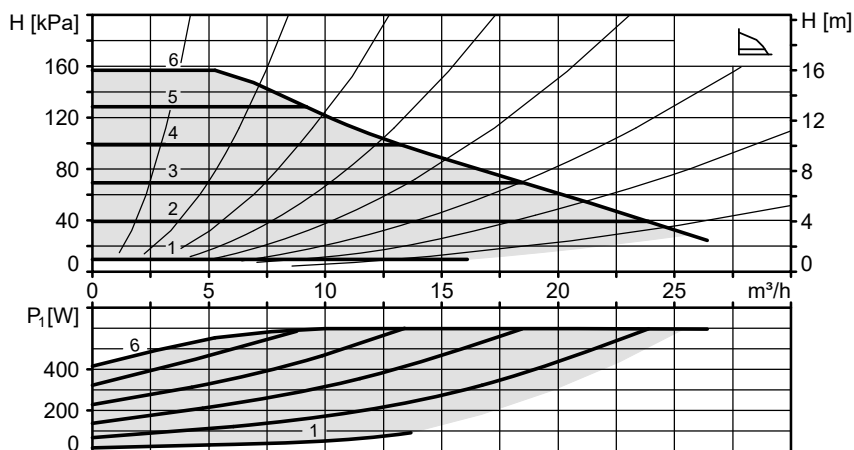
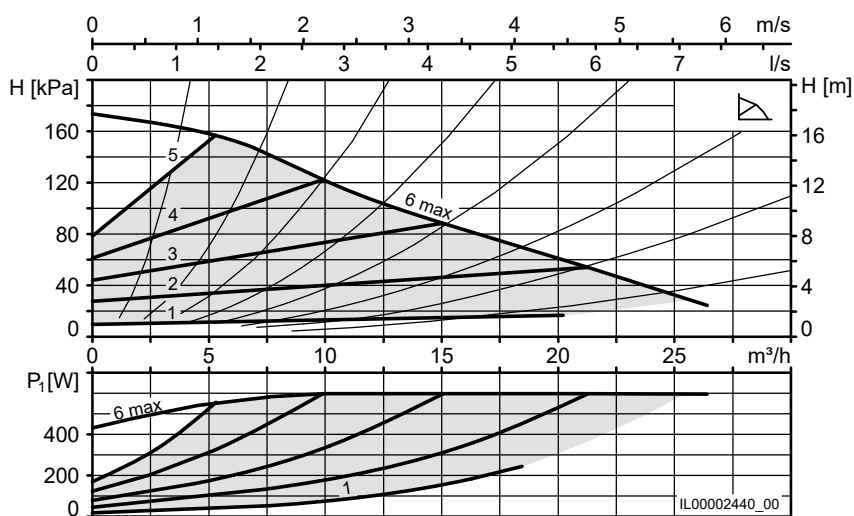
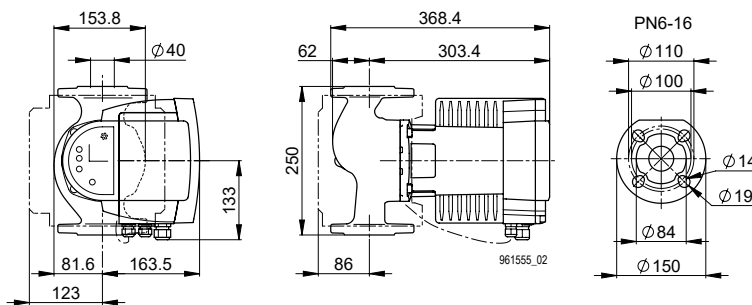
Included in the scope of delivery

- Heat insulation shell
- Sealing set for flange PN 6

Accessories

- BIM B3 control module
- BIM BUS-Module
- Bausatz für abgesetzte Montage der Elektronik
- Sealing set for flange PN10 / PN16

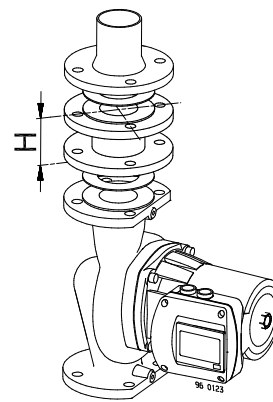
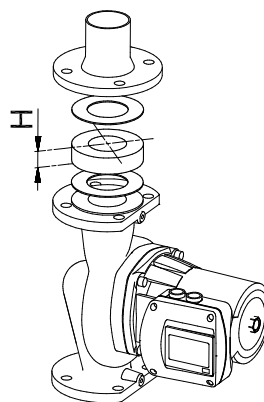
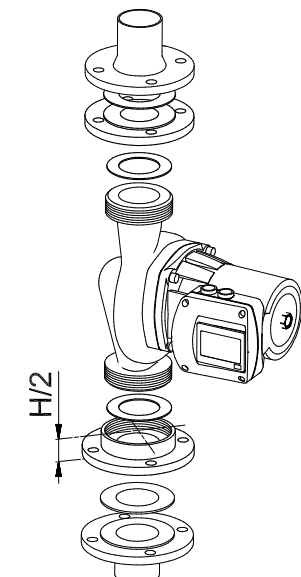
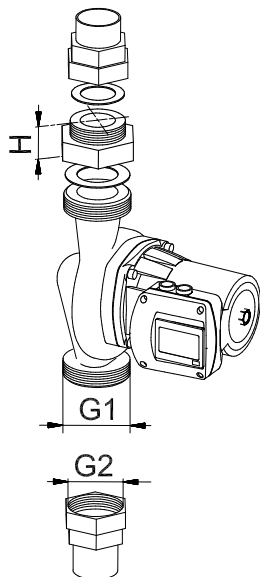
Type	Art. no.
ModulA 40-18 250 BLUE	7000000175



Options

General

Intermediate piece / Threaded flange / Intermediate flange



Intermediate piece

The adapter kit includes an intermediate piece and gaskets.

Z	G1/G2	H	No.
10	1 1/4" / 1 1/4"	30	1129120150*
11	1 1/4" / 2"	20	1124910150*
12	1 1/2" / 2"	20	1132970150
13	2" / 2"	10	1114770150
14	2" / 2"	15	1122190150
15	2" / 2"	20	1110190150
16	2" / 2"	34	1116750150
17	2" / 2"	40	1110200150
21	2" / 2 1/4"	20	1110210150
81	1 1/4" / 2"	40	1143020162*
82	1 1/4" / 2"	60	1143060162*
83	1 1/4" / 1 1/2"	30	1143580162*
84	1 1/4" / 2"	30	1143590162*
85	1 1/4" / 1"	30	1143570150*

* CuZn39Pb3-Hart

Threaded flange (PN 6)

The adapter kit includes two flanges, gaskets and bolts.

Z	G1/DN	H	No.
25	2" / 32	40	1138190150
26	2" / 32	16	1139900150
28	2" / 32	10	1138730150
29	2" / 40	30	1139490150
31	2" / 40	40	2204420150
30	2" / 50	40	1160440150

Square screwed flange (PN 6)

Z	G1/DN	H	No.
70	2" / 32	20	1160450150

Intermediate piece

The adapter kit includes an intermediate piece, gaskets and bolts.

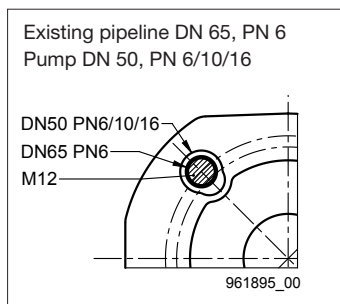
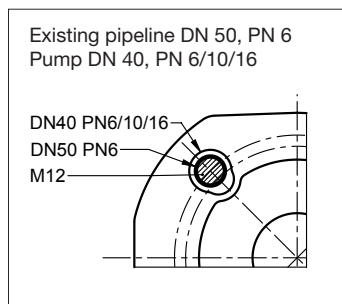
Z	DN	H	No.
32	40	10	1132590150
33	40	20	1115750150
34	40	30	1115740150
35	40	40	1115770150
36	40	50	1122180150
41	50	10	1122170150
47	50	20	1139990150
42	50	30	1109900150
43	50	50	1120580150
56	65	10	1140000150
50	65	30	1109910150
51	65	40	1122160150
59	80	10	1109920150
60	80	30	1111150150
65	100	20	1122640150
66	100	50	1115760150

Intermediate flange (PN 6)

The adapter kit includes an intermediate flange, gaskets and bolts.

Z	DN	H	No.
37	40	73	1116760150
44	50	65	1127530150
45	50	85	1116770150
46	50	135	1116770250
52	65	70	1127540150
53	65	85	1116780150
54	65	125	1127540250
55	65	155	1116780250
61	80	80	1127520150

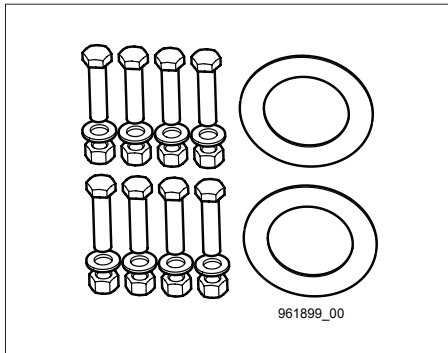
Exchange of pump for differing nominal diameter



Accessories

General

Sealing set for flange PN10 / PN16 (galvanized)



Sealing set consists of:

- seals (AFM)
- fixing screws
- washers

Note:

DN32, DN40, DN50, DN65 PN6

DN80, DN100 PN6

DN80, DN100 PN10/16

Sealing set included in scope of delivery.

Size	Article no.
DN32 PN10-16 galvanized	0015033100
DN40 PN10-16 galvanized	0015033200
DN50 PN10-16 galvanized	0015033300
DN65 PN10-16 galvanized	0015033400

Options

ModulA, ModulA-D

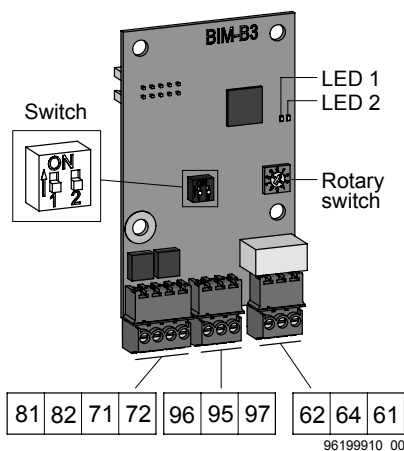
Biral Interface Module BIM B3

BIM With the Biral Interface Module, the ModulA can be easily integrated into any building services control system as required.

Control module:

- self-regulating pumps
- external speed specification
- external specified setting
- Operating signal or ready signal (switchable)
- Alternating mode or reserve mode (switchable)

Connection drawing Clamp description



Clips:

81	Digital input +
82	Digital input -
71	Analogue input +
72	Analogue input -
96, 95, 97	Biral Bus (Twin pump)
62, 64, 61	Operating or ready message

Switch:

- 1 Operating or ready message
- 2 Alternating operation (24/24h) or reserve operation (22/2h)

LED:

- 1 Status
- 2 Heartbeat

Article no.
1672420150

Functions for BIM B3 control module

External speed setting

Rotary switch Pos.	Profile	Diagram	Signal	Speed / Setpoint
1	0-10 V		0... 9.5 V 9.5... 10 V	n_{\min} ... n_{\max} MAX
2	4-20 mA		4... 19.2 mA 19.2... 20 mA	n_{\min} ... n_{\max} MAX
3	PWM heating		0... 10 % 10... 84 % 84... 93 % 93... 100 %	MAX n_{\max} ... n_{\min} MIN Stop (OFF)

Options

ModulA, ModulA-D

Functions for BIM B3 control module

External speed setting

Rotary switch Pos.	Profile	Diagram	Signal	Speed / Setpoint	
4	PWM solar		0... 7 % 7... 16 % 16... 90 % 90... 100 %	Stop (OFF) MIN $n_{min}... n_{max}$ MAX	
5	0-10 V... OFF		0... 1 V 1... 2 V 2... 9.5 V 9.5... 10 V	MIN Stop (OFF) $n_{min}... n_{max}$ MAX	
6	OFF... 0-10 V		0... 1.5 V 1.5... 2.5 V 2.5... 9.5 V 9.5... 10 V	Stop (OFF) MIN $n_{min}... n_{max}$ MAX	

External setpoint setting

7	OFF... 0-10 V		0... 1.5 V 1.5... 2.5 V 2.5... 9.5 V 9.5... 10 V	Stop (OFF) MIN $H_{min}... H_{max}$ MAX	
8	OFF... 0-10 V		0... 1.5 V 1.5... 2.5 V 1.5... 9.5 V 9.5... 10 V	Stop (OFF) MIN $H_{min}... H_{max}$ MAX	

Self-regulating

Rotary switch Pos.	Profile	Description
9	LOCAL 	For self-regulating pumps, this position should be selected. For more information refer to the operating unstructions for the Biral ModulA or VariA.

Slave

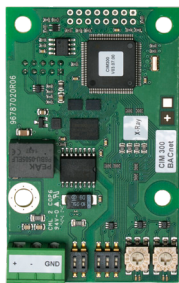
0	SLAVE 	In Alternating or Reserve mode, this position should be selected for the reserve pump.
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Options

ModulA, ModulA-D

Biral Interface Module - BUS Module

BIM PROFIBUS DP (CIM 150)

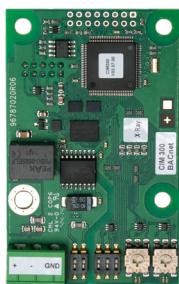


Biral Interface Module used for communication with a PROFIBUS network

Article no.
1672260000

BIM PROFIBUS DP has terminals for the PROFIBUS DP connection. DIP switches are used to set line termination. Two hexadecimal rotary switches are used to set the PROFIBUS DP address. Two LEDs are used to indicate the actual status of the CIM 150 communication. One LED is used for indication of correct connection to the pump, and the other is used to indicate PROFIBUS communication status.

BIM Modbus RTU (CIM 200)

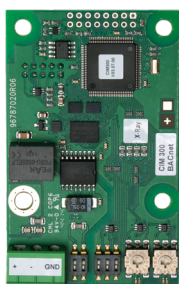


Biral Interface Module used for communication with a Modbus RTU network

Article no.
1672280000

CIM 200 has terminals for the Modbus connection. DIP switches are used to select parity and stop bits, to select transmission speed and to set line termination. Two hexadecimal rotary switches are used to set the Modbus address. Two LEDs are used to indicate the actual status of the CIM 200 communication. One LED is used for indication of correct connection to the pump, and the other is used to indicate Modbus communication status.

BIM BACnet MS/TP (CIM 300)



Biral Interface Module used for communication with a BACnet MS/TP network

Article no.
1672300000

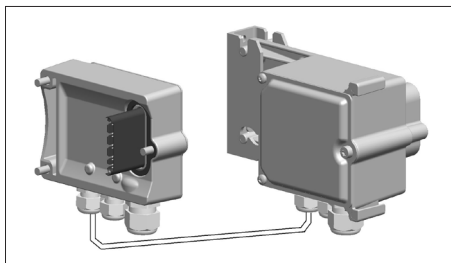
CIM 300 has terminals for the BACnet MS/TP connection. DIP switches are used to set transmission speed and line termination and to select the custom Device Object Instance Number. Two hexadecimal rotary switches are used to set the BACnet address. Two LEDs are used to indicate the actual status of the CIM 300 communication. One LED is used for indication of correct connection to the pump, and the other is used to indicate BACnet communication status.

Further BUS modules on request.

Options

ModulA, ModulA-D

Kit for recessed installation of electronics

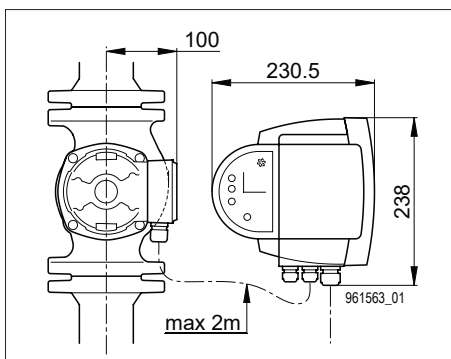


- Media temperature: up to 110 °C
- Ambient temperature: max. 40 °C
- Pump can be insulated up to 100 °C media temperature

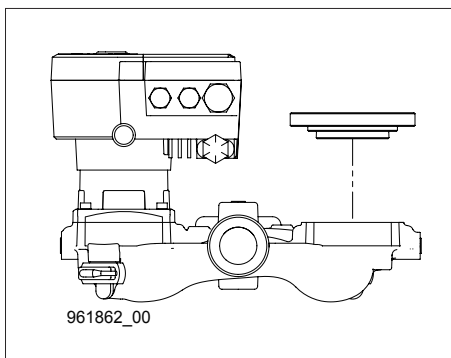
Comment

If condensation forms (the medium temperature lower than ambient temperature), we recommend using the cold water version (GREEN) with coating resistant to condensation.

Pump type	Article no.
32F-12	
40-8, 40-10	
40-12, 40-18	
50-8, 50-12, 50-18	2200690100
65-6, 65-8, 65-12, 65-15	
80-8, 80-12	
100-8, 100-12	



Blind flange



If one of the pump heads on a twin pump is removed for repair, a blind flange can be used to close the opening so that it is possible to continue using the pump with the remaining pump head.

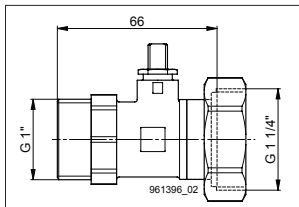
Pump type ModulA-D...	Article no.
32-6, 32-8	
32F-6	2202510150
40-4, 40-6	
32F-12	
40-8, 40-10	
40-12, 40-18	
50-8, 50-12, 50-18	2204140150
65-6, 65-8, 65-12, 65-15	
80-8, 80-12	
100-8, 100-12	

Options

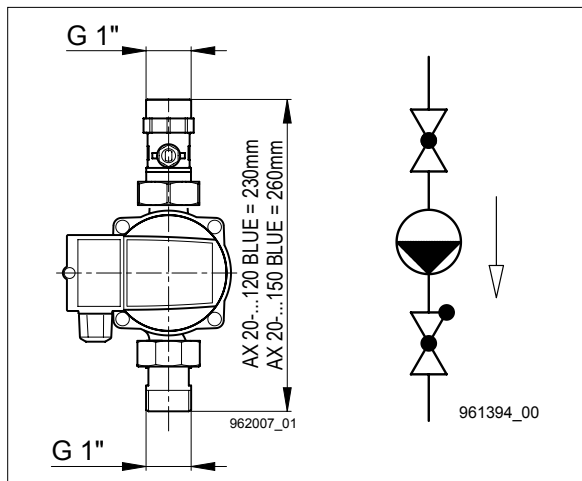
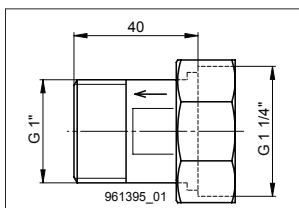
AX... BLUE

Shut-off set

Ball valve



Ball valve



Consisting of non-return valve and ball valve.

Material
brass

Non-return valve
Opening pressure: 20-35 mbar

Item number
1161910150

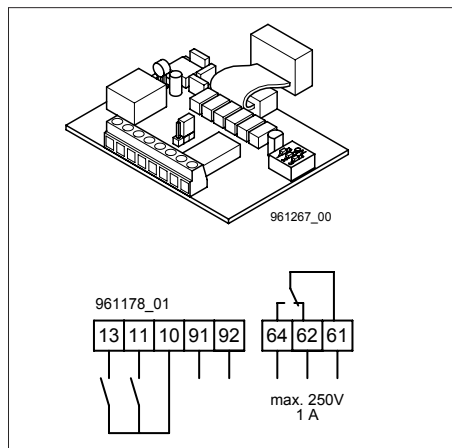
Options

A, AD, A... KW, AW

Biral Interface Module

BIM A Signal module

(for self-regulating pumps)



Connection diagram

10, 11 External OFF with closing contact

10, 11 External minimum speed with closing contact

61, 64 Operating or ready message (switchable) as closing contact: closes at operating/ready message

61, 62 Operating or ready message (switchable) as closing contact: closes at operating/ready message

91, 92 Twin pump function

Functions

- Operating message or ready message (switchable)
- External OFF
- External minimum speed
- Twin pump function

Comment

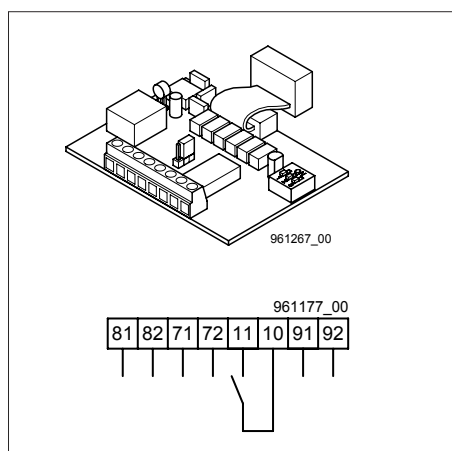
No possible in combination with control module

Item number

1671660150

BIM B control system module

(for regulated pumps)



Connection diagram

10, 11 External OFF with closing contact

81, 82 Digital input PWM profile heating

71, 72 Analogue input 0–10 V/0–20 mA

91, 92 Twin pump function

Functions

- External speed specification 0–10 V/0–20 mA
- External speed specification PWM heating profile
- External OFF
- Twin pump function

Comment

No possible in combination with signal module

Item number

1671670150



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09/20 780000092_01_EX_en

More than pumps

