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1. General data

Circulator pumps

GRUNDFOS ALPHA2 is a complete range of circulator pumps featuring:

• AUTO\textsubscript{ADAPT} function which suits most installations.
• Integrated differential-pressure control enabling adjustment of pump performance to the actual system requirements.
• Automatic Night SetBack (selectable).
• Display showing the actual power consumption in Watt.
• Motor based on permanent-magnet/compact-rotor technology.

The GRUNDFOS ALPHA2 pump is energy-optimised and complies with the EuP Directive (EC Commission Regulation No 641/2009) which will be effective as from 1st January 2013.

For GRUNDFOS ALPHA2 pumps, the energy efficiency index (EEI) is ≤ 0.23. See page 11.

The installation of a GRUNDFOS ALPHA2 pump will reduce the power consumption considerably, reduce noise from thermostatic valves and similar fittings, and improve the control of the system.

Performance range

GRUNDFOS ALPHA2 offers a host of advantages:

- **Energy savings**: Automatic control of the differential pressure.
- **Flexibility**: Suitable for installation in existing systems.
- **Night setback**: Automatic Night SetBack (selectable).
- **Comfort**: Low-noise operation.
- **Safety**: Built-in electrical and thermal protection of the pump.
- **Userfriendliness**: Simple setting and operation.

**Type key**

<table>
<thead>
<tr>
<th>Example</th>
<th>ALPHA2 25 - 40 180</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal diameter (DN) of suction and discharge ports [mm] (15 = 1(1/4&quot;), 25 = 1 1/2&quot;, 32 = 2&quot;)</td>
<td></td>
</tr>
<tr>
<td>Maximum head [dm]</td>
<td></td>
</tr>
<tr>
<td>Port-to-port length [mm]</td>
<td></td>
</tr>
</tbody>
</table>

* Exception: UK version, size 15 = 1 1/2".

**Fig. 1** Performance range, ALPHA2
Applications

GRUNDFOS ALPHA2 is designed for circulating liquids in heating systems. Pumps with stainless-steel pump housing can also be used in domestic hot-water systems.

GRUNDFOS ALPHA2 is suitable for
• systems with constant or variable flows where it is desirable to optimise the pump duty point.
• systems with variable flow-pipe temperature.
• systems where night setback is desired.

GRUNDFOS ALPHA2 is especially suitable for
• installation in existing systems where the differential pressure of the pump is too high during periods of reduced flow demand.
• installation in new systems for fully automatic adjustment of the performance to flow demands without the use of bypass valves or similar expensive components.

Examples of systems

Pumped liquids

Clean, thin, non-aggressive and non-explosive liquids, not containing solid particles, fibres or mineral oil. The pump must not be used for the transfer of flammable liquids such as diesel oil, petrol and similar liquids.
Control of heating systems

The heating required in a building varies greatly during the day due to changing outdoor temperatures, solar radiation and heat emanating from human beings, electric appliances, etc. Add to this that the need for heating may vary from one section of the building to another and that the thermostatic valves of some radiators may be turned down by the users. These circumstances will cause an uncontrolled pump to produce a too high differential pressure when the heating demand is low.

Possible consequences:
- too high energy consumption
- irregular control of the system
- noise in thermostatic valves and similar fittings.

GRUNDFOS ALPHA2 automatically controls the differential pressure by adjusting the pump performance to the actual heating demand, without the use of external components.

AUTO\textsubscript{ADAPT}

The integrated AUTO\textsubscript{ADAPT} function is especially developed for
- underfloor heating systems
- two-pipe systems.

The AUTO\textsubscript{ADAPT} function (factory setting) automatically adjusts the pump performance to the demand, i.e. the size of the system and the heating demand. The performance is adjusted gradually over time. An optimum pump setting cannot be expected from day one.

Operation

The AUTO\textsubscript{ADAPT} function enables the ALPHA2 to control the pump performance automatically:
- Adjustment of the pump performance to the heating demand of the system.
- Adjustment of the pump performance to the variations in load over 24 hours.

In AUTO\textsubscript{ADAPT} mode, the pump is set to proportional-pressure control.

Advantages of pump control

In GRUNDFOS ALPHA2, control is effected by adapting the differential pressure to the flow (proportional- and constant-pressure control). Contrary to an uncontrolled pump, the proportional-pressure-controlled GRUNDFOS ALPHA2 reduces the differential pressure as a result of falling heating demand.

If the heating demand falls - for instance due to solar radiation - the radiator valves will close, and, for the uncontrolled pump, the flow resistance of the system will rise for instance from $A_1$ to $A_2$.

In a heating system with an uncontrolled pump, this situation will cause a pressure rise in the system by $\Delta H_1$.

In a system with a GRUNDFOS ALPHA2 pump, the pressure will be reduced by $\Delta H_2$.

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If the heating demand falls - for instance due to solar radiation - the radiator valves will close, and, for the uncontrolled pump, the flow resistance of the system will rise for instance from $A_1$ to $A_2$.

In a heating system with an uncontrolled pump, this situation will cause a pressure rise in the system by $\Delta H_1$.

In a system with a GRUNDFOS ALPHA2 pump, the pressure will be reduced by $\Delta H_2$.

In a system with an uncontrolled pump, a pressure rise will often cause flow-generated noise in the thermostatic valves. This noise will be reduced considerably with the GRUNDFOS ALPHA2.
Automatic Night SetBack

GRUNDFOS ALPHA2 features selectable Automatic Night SetBack. Automatic Night SetBack is activated with the button on the control box. Factory setting of Automatic Night SetBack: Not active.

If the pump has been set to speed I, II or III, the night setback function is deactivated.

Once Automatic Night SetBack has been activated, the pump automatically changes between normal duty and night setback. Changeover is dependent on the flow-pipe temperature measured by the integrated temperature sensor.

Construction

GRUNDFOS ALPHA2 is of the canned-rotor type, i.e. pump and motor form an integral unit without shaft seal and with only two gaskets for sealing. The bearings are lubricated by the pumped liquid. The pump is characterised by

- integrated AUTOADAPT control
- integrated proportional-pressure control
- integrated constant-pressure control
- three fixed-speed curves
- frequency converter
- permanent-magnet/compact-stator motor
- display showing the actual pump power consumption in Watt (in whole numbers)
- ceramic shaft and radial bearings
- carbon thrust bearing
- stainless-steel rotor can, bearing plate and rotor cladding
- composite impeller
- cast-iron or stainless-steel pump housing
- compact design featuring pump head with integrated control box and control panel.

Material specification

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Description</th>
<th>Material</th>
<th>EN/DIN W. Nr.</th>
<th>AISI/ASTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Controller complete</td>
<td>Composite, PC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Rotor can</td>
<td>Stainless steel</td>
<td>1.4301</td>
<td>304</td>
</tr>
<tr>
<td>11</td>
<td>Shaft</td>
<td>Ceramics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Thrust bearing</td>
<td>Carbon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Bearing plate</td>
<td>Stainless steel</td>
<td>1.4301</td>
<td>304</td>
</tr>
<tr>
<td>16</td>
<td>Impeller</td>
<td>Composite, PP or PES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Pump housing</td>
<td>Cast iron</td>
<td>EN-JL 1020</td>
<td>A48-25</td>
</tr>
</tbody>
</table>

Motor and control box

The motor is a 4-pole synchronous permanent-magnet motor.

The pump controller is incorporated in the control box, which is fitted to the stator housing with two screws and connected to the stator via a terminal plug.

The control box has an integrated control panel with two push-buttons (pos. 1 and 2) and a 2-digit 7-segment display.

Fig. 10 Push-button positions

- Push-button (pos. 1) for selection of control mode.
- Push-button (pos. 2) for activation or deactivation of Automatic Night SetBack.

The light in the display is on when the electricity supply has been switched on. During operation, the display shows the actual pump power consumption in Watt (in whole numbers). Accuracy: ± 5 %.
Faults preventing the pump from operating properly (e.g. blocking) are indicated in the display by "- -".

Possible control box positions:

Fig. 11 Control box positions

The cable entry incorporates cable relief.

Fig. 12 Cable entry with cable relief

**Pump housing with air separator**

The pump housing with air separator is installed in systems where the liquid contains so much air that a circulator pump without air separator cannot start or keep up a continuous circulation. The pump housing is available only for upward water flows.

The air-containing liquid is guided from the suction port to the nozzle of the air-separating chamber and caused to circulate considerably in the relatively large chamber, thus creating a relatively lower pressure at the back (top) of the chamber. This lower pressure combined with the reduced velocity of the liquid in the air-separating chamber will cause a separation of air from the liquid. Due to its lower density, the air will escape through an automatic air vent fitted to the air-separating chamber.

The pump housing has an Rp 3/8 tapping for fitting of an air vent. The air vent is not supplied with the pump.
Installation
In most cases, the installation of the ALPHA2 is reduced to the mechanical installation and the connection to the electricity supply. The pump must always be installed with horizontal motor shaft.

Electrical data

Supply voltage
1 x 230 V - 10 %/+ 6 %, 50 Hz, PE

Motor protection
The pump requires no external motor protection.

Enclosure class
IP 42

Insulation class
F

Relative air humidity
Maximum 95 %

Ambient temperature
0 °C to +40 °C

Temperature class
TF110 to CEN 335-2-51

EMC (electromagnetic compatibility)
EN 61000-6-2 and EN 61000-6-3

Sound pressure level
≤ 43 dB(A)

Start-up
The pump must not be started until the system has been filled with liquid and vented. Furthermore, the required minimum inlet pressure must be available at the pump inlet. The system cannot be vented through the pump.
The pump is self-venting. It need not be vented before start-up.

Liquid temperature
Cast-iron pumps: +2 °C to +110 °C.
Stainless-steel pumps in domestic hot-water systems: +15 °C to +65 °C.
In domestic hot-water systems, it is recommended to keep the liquid temperature below 65 °C to eliminate the risk of lime precipitation.
To avoid condensation in the control box and stator, the liquid temperature must always be higher than the ambient temperature. See table.

<table>
<thead>
<tr>
<th>Ambient temperature [°C]</th>
<th>Liquid temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

System pressure
PN 10: Maximum 1.0 MPa (10 bar).

Inlet pressure
To avoid cavitation noise and damage to the pump bearings, the following minimum pressures are required at the pump suction port.

<table>
<thead>
<tr>
<th>Liquid temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>75 °C</td>
</tr>
<tr>
<td>90 °C</td>
</tr>
<tr>
<td>110 °C</td>
</tr>
<tr>
<td>0.5 m head</td>
</tr>
<tr>
<td>2.8 m head</td>
</tr>
<tr>
<td>10.8 m head</td>
</tr>
</tbody>
</table>

Setting of pump head
With the push-button on the control box, the electronically controlled pump can be set to the following:
• AUTOADAPT operating area
• two constant-pressure curves
• two proportional-pressure curves
• three fixed-speed curves.

Factory setting
The push-button on the pump control box is factory-set as shown in the table below.
This setting is suitable for a large majority of all single-family houses.

<table>
<thead>
<tr>
<th>Pump type</th>
<th>Setting</th>
<th>Automatic Night Setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALPHA2 xx-40</td>
<td>AUTOADAPT</td>
<td>Deactivated</td>
</tr>
<tr>
<td>ALPHA2 xx-50</td>
<td>AUTOADAPT</td>
<td>Deactivated</td>
</tr>
<tr>
<td>ALPHA2 xx-60</td>
<td>AUTOADAPT</td>
<td>Deactivated</td>
</tr>
</tbody>
</table>
Change of performance

The pump performance (flow and head) can be changed by pressing the control box push-button as indicated in the table below and fig. 16.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Pump curve</th>
<th>Function</th>
</tr>
</thead>
</table>
| AUTOADAPT (factory setting) | Highest to lowest proportional-pressure curve | The AUTOADAPT function enables ALPHA2 to control the pump performance automatically within a defined performance range, see fig. 16:  
• Adjusting the pump performance to the size of the system.  
• Adjusting the pump performance to the variations in load over time.  
In AUTOADAPT, the pump is set to proportional-pressure control. |
| PP1                      | Lowest proportional-pressure curve        | The duty point of the pump will move up or down on the lowest proportional-pressure curve, see fig. 16, depending on the heat demand.  
The head (pressure) is reduced at falling heat demand and increased at rising heat demand. |
| PP2                      | Highest proportional-pressure curve        | The duty point of the pump will move up or down on the highest proportional-pressure curve, see fig. 16, depending on the heat demand.  
The head (pressure) is reduced at falling heat demand and increased at rising heat demand. |
| CP1                      | Lowest constant-pressure curve             | The duty point of the pump will move out or in on the lowest constant-pressure curve, see fig. 16, depending on the heat demand in the system.  
The head (pressure) is kept constant, irrespective of the heat demand. |
| CP2                      | Highest constant-pressure curve            | The duty point of the pump will move out or in on the highest constant-pressure curve, see fig. 16, depending on the heat demand in the system.  
The head (pressure) is kept constant, irrespective of the heat demand. |
| III                      | Speed III                                 | ALPHA2 runs at a constant speed and consequently on a constant curve. In speed III, the pump is set to run on the max. curve under all operating conditions. See fig. 16.  
Quick venting of the pump can be obtained by setting the pump to speed III for a short period. |
| II                       | Speed II                                  | ALPHA2 runs at a constant speed and consequently on a constant curve. In speed II, the pump is set to run on the medium curve under all operating conditions. See fig. 16. |
| I                        | Speed I                                   | ALPHA2 runs at a constant speed and consequently on a constant curve. In speed I, the pump is set to run on the min. curve under all operating conditions. See fig. 16. |
|                          |                                           | ALPHA2 changes to the curve for Automatic Night SetBack, i.e. absolute minimum performance and power consumption, provided certain conditions are met. See Automatic Night SetBack. |
Guide to performance curves

Each pump setting has its own performance curve (Q/H curve). However, AUTO<sub>ADAPT</sub> covers a performance range.

A power curve (P1 curve) belongs to each Q/H curve. The power curve shows the pump power consumption (P1) in Watt at a given Q/H curve. The P1 value corresponds to the value that can be read from the pump display. See fig. 17.

### Fig. 17 Performance curves in relation to pump setting

<table>
<thead>
<tr>
<th>Setting</th>
<th>Pump curve</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO&lt;sub&gt;ADAPT&lt;/sub&gt; (factory setting)</td>
<td>Setpoint within the shaded area</td>
</tr>
<tr>
<td>PP1</td>
<td>Lowest proportional-pressure curve</td>
</tr>
<tr>
<td>PP2</td>
<td>Highest proportional-pressure curve</td>
</tr>
<tr>
<td>CP1</td>
<td>Lowest constant-pressure curve</td>
</tr>
<tr>
<td>CP2</td>
<td>Highest constant-pressure curve</td>
</tr>
<tr>
<td>III</td>
<td>Constant speed, speed III</td>
</tr>
<tr>
<td>II</td>
<td>Constant speed, speed II</td>
</tr>
<tr>
<td>I</td>
<td>Constant speed, speed I</td>
</tr>
</tbody>
</table>

Curve for Automatic Night SetBack
Curve conditions

The guidelines below apply to the performance curves on the next pages:

- Test liquid: airless water.
- The curves apply to a density of $\rho = 983.2$ kg/m$^3$ and a liquid temperature of $+60$ °C.
- All curves show average values and should not be used as guarantee curves. If a specific minimum performance is required, individual measurements must be made.
- The curves for the speeds I, II and III are marked.
- The curves apply to a kinematic viscosity of $\nu = 0.474$ mm$^2$/s (0.474 cSt).
- The conversion between head $H$ [m] and pressure $p$ [kPa] has been made for water with a density of $\rho = 1000$ kg/m$^3$. For liquids with other densities, e.g. hot water, the discharge pressure is proportional to the density.

Symbols used on the following pages

Fig. 18 Energy efficiency index (EEI)

The GRUNDFOS ALPHA2 pump is energy-optimised and complies with the EuP Directive (EC Commission Regulation No 641/2009) which will be effective as from 1st January 2013.

For GRUNDFOS ALPHA2 pumps, the energy efficiency index (EEI) is $\leq 0.23$.

Fig. 19 Old energy label

On 1st January 2013, the old A to G energy label will be replaced by the new energy efficiency index (EEI). Only the best of today’s A-labelled circulator pumps will meet the new requirements.

The ALPHA2 with its AUTO$_{ADAPT}$ function is the preferred choice for domestic installations and a true efficiency frontrunner.

The energy efficiency index (EEI) is the difference between the annual energy consumption of the ALPHA2 and the standard consumption of a typical similar model.

The AUTO$_{ADAPT}$ function ensures an energy consumption that is even lower than the indicated EEI, but due to the calculation method, this is not reflected in the EEI.

The ALPHA2 EEI is lower than the EuP 2013 and 2015 requirements.

Fig. 20 EEI limits

For more information about the new energy directive, please visit:

energy.grundfos.com
2. Technical data

ALPHA2 15-50, 15-50 N, 20-50 N (UK)

1 x 230 V, 50/60 Hz

The pump incorporates overload protection.

Connections: See "Union and valve kits" on page 14.
System pressure: Max. 1.0 MPa (10 bar).
Liquid temperature: +2 °C to +110 °C (TF 110).

<table>
<thead>
<tr>
<th>Pump type</th>
<th>Dimensions [mm]</th>
<th>Weights [kg]</th>
<th>Ship. vol. [m³]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EEI</td>
<td>L1</td>
<td>B1</td>
</tr>
<tr>
<td>ALPHA2 15-50</td>
<td>0.20</td>
<td>130</td>
<td>78</td>
</tr>
<tr>
<td>ALPHA2 15-50 N</td>
<td>0.20</td>
<td>130</td>
<td>-</td>
</tr>
<tr>
<td>ALPHA2 20-50 N</td>
<td>0.20</td>
<td>150</td>
<td>-</td>
</tr>
</tbody>
</table>

0.00383
ALPHA2 15-60 (UK)

1 x 230 V, 50/60 Hz

The pump incorporates overload protection.

Connections: See "Union and valve kits" on page 14.
System pressure: Max. 10 bar.
Liquid temperature: +2 °C to +110 °C (TF 110).
Also available with: Stainless-steel pump housing, type N (only ALPHA2 25-60 N 180).

<table>
<thead>
<tr>
<th>Speed</th>
<th>P1 [W]</th>
<th>I_{1/3} [A]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>5</td>
<td>0.05</td>
</tr>
<tr>
<td>Max.</td>
<td>45</td>
<td>0.38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pump type</th>
<th>Dimensions [mm]</th>
<th>Weights [kg]</th>
<th>Ship. vol. [m³]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EEI ≤</td>
<td>L1</td>
<td>B1</td>
</tr>
<tr>
<td>ALPHA2 15-60</td>
<td>0.23</td>
<td>130</td>
<td>77</td>
</tr>
</tbody>
</table>
3. Accessories

Union and valve kits

<table>
<thead>
<tr>
<th>Pump type</th>
<th>Description</th>
<th>Material</th>
<th>Product number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1” unions</td>
<td>Cast iron</td>
<td>529922</td>
</tr>
<tr>
<td></td>
<td>3/4” valves</td>
<td>Brass</td>
<td>519805</td>
</tr>
<tr>
<td></td>
<td>1” valves</td>
<td>Brass</td>
<td>519806</td>
</tr>
<tr>
<td>ALPHA2 25-40 N, 25-60 N</td>
<td>3/4” unions</td>
<td>Brass</td>
<td>529971</td>
</tr>
<tr>
<td></td>
<td>1” unions</td>
<td>Brass</td>
<td>529972</td>
</tr>
<tr>
<td></td>
<td>3/4” valves</td>
<td>Brass</td>
<td>519805</td>
</tr>
<tr>
<td></td>
<td>1” valves</td>
<td>Brass</td>
<td>519806</td>
</tr>
<tr>
<td>ALPHA2 32-40, 32-60</td>
<td>1” unions</td>
<td>Cast iron</td>
<td>509921</td>
</tr>
<tr>
<td></td>
<td>1 1/4” unions</td>
<td>Cast iron</td>
<td>509922</td>
</tr>
</tbody>
</table>

Insulation kits

GRUNDFOS ALPHA2 can be fitted with two insulating shells.

The insulation thickness of the insulating shells corresponds to the nominal diameter of the pump.

The insulation kit, which is tailored to the individual pump type, encloses the entire pump housing. The two shells are easily fitted around the pump.

Service kit

<table>
<thead>
<tr>
<th>Description</th>
<th>Product number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plug</td>
<td>595562</td>
</tr>
</tbody>
</table>

Fig. 21 Insulating shells

Fig. 22 Plug
## 4. Product numbers

**ALPHA2 (for the UK market)**

<table>
<thead>
<tr>
<th>Pump type</th>
<th>Port-to-port length [mm]</th>
<th>Connection</th>
<th>Voltage [V] 50 Hz</th>
<th>Product number</th>
<th>Insulating kit</th>
<th>Data sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALPHA2 15-50</td>
<td>130</td>
<td>G 1 1/2</td>
<td>230</td>
<td>95047509</td>
<td>505821</td>
<td>page 12</td>
</tr>
<tr>
<td>ALPHA2 15-60</td>
<td></td>
<td></td>
<td></td>
<td>95047510</td>
<td></td>
<td>page 13</td>
</tr>
<tr>
<td>ALPHA2 15-50 N</td>
<td></td>
<td></td>
<td></td>
<td>95047511</td>
<td></td>
<td>page 12</td>
</tr>
<tr>
<td>ALPHA2 20-50 N</td>
<td>150</td>
<td>G 1 1/4</td>
<td></td>
<td>95047534</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Further product documentation

WebCAPS

WebCAPS is a Web-based Computer Aided Product Selection program available on www.grundfos.com. WebCAPS contains detailed information on more than 220,000 Grundfos products in more than 30 languages.

Information in WebCAPS is divided into six sections:

- Catalogue
- Literature
- Service
- Sizing
- Replacement
- CAD drawings.

Catalogue

Based on fields of application and pump types, this section contains the following:

- technical data
- curves (QH, Eta, P1, P2, etc.) which can be adapted to the density and viscosity of the pumped liquid and show the number of pumps in operation
- product photos
- dimensional drawings
- wiring diagrams
- quotation texts, etc.

Literature

This section contains all the latest documents of a given pump, such as:

- data booklets
- installation and operating instructions
- service documentation, such as Service kit catalogue and Service kit instructions
- quick guides
- product brochures.

Service

This section contains an easy-to-use interactive service catalogue. Here you can find and identify service parts of both existing and discontinued Grundfos pumps. Furthermore, the section contains service videos showing you how to replace service parts.
This section is based on different fields of application and installation examples and gives easy step-by-step instructions in how to size a product:

- Select the most suitable and efficient pump for your installation.
- Carry out advanced calculations based on energy, consumption, payback periods, load profiles, life cycle costs, etc.
- Analyse your selected pump via the built-in life cycle cost tool.
- Determine the flow velocity in wastewater applications, etc.

In this section you find a guide to selecting and comparing replacement data of an installed pump in order to replace the pump with a more efficient Grundfos pump. The section contains replacement data of a wide range of pumps produced by other manufacturers than Grundfos.

Based on an easy step-by-step guide, you can compare Grundfos pumps with the one you have installed on your site. When you have specified the installed pump, the guide will suggest a number of Grundfos pumps which can improve both comfort and efficiency.

In this section, it is possible to download 2-dimensional (2D) and 3-dimensional (3D) CAD drawings of most Grundfos pumps.

These formats are available in WebCAPS:

2-dimensional drawings:
- .dxf, wireframe drawings
- .dwg, wireframe drawings

3-dimensional drawings:
- .dwg, wireframe drawings (without surfaces)
- .stp, solid drawings (with surfaces)
- .eprt, E-drawings

WinCAPS is a Windows-based Computer Aided Product Selection program containing detailed information on more than 220,000 Grundfos products in more than 30 languages.

The program contains the same features and functions as WebCAPS, but is an ideal solution if no internet connection is available.

WinCAPS is available on DVD and updated once a year.

Subject to alterations.