

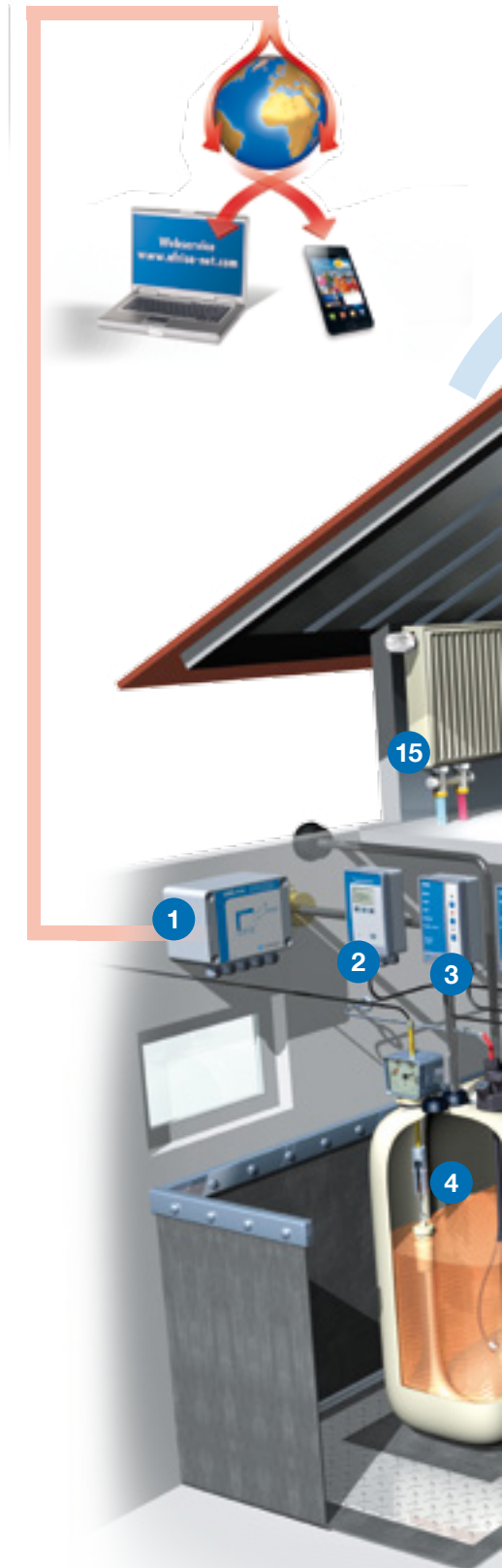


Reducing Heating Costs  
Protecting the Environment  
Living Safely

## Products for energy savings and safe operation of heating systems:







# Reducing heating costs, protecting the environment, living safely

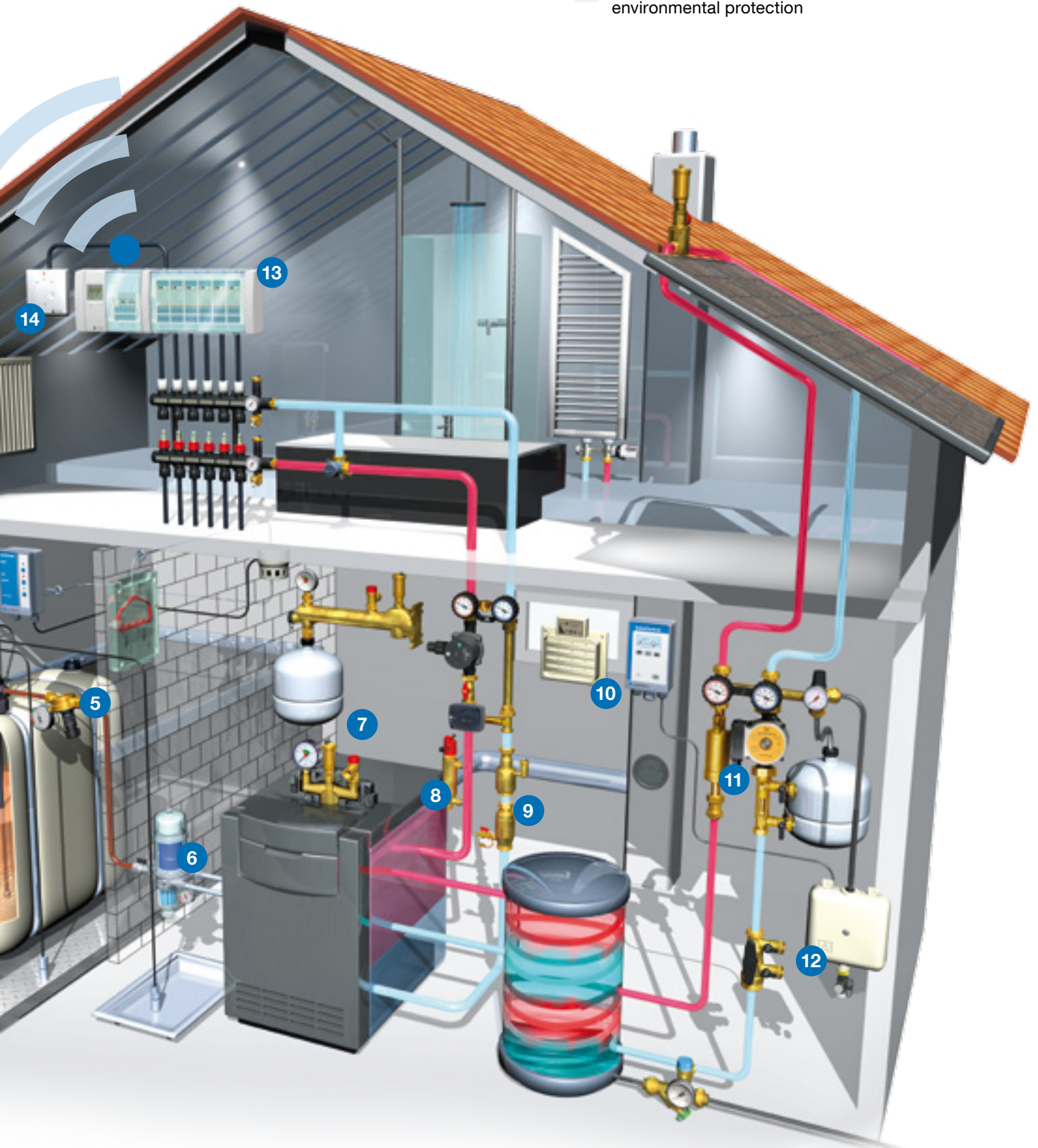
- 1 **EMS** for remote reporting of malfunctions and alarms sent directly to a mobile phone in case of hazardous situations
- 2 Level indicator **TankControl** for optimum use of fuels
- 3 Oil/water alarm unit **ÖWWG 3** for fast detection of leaks
- 4 **Level sensor GWG** with maximum reliability even for biofuels
- 5 **Piston type anti-siphon valve KAV** for maximum protection of oil tanks and low line resistance
- 6 Automatic fuel oil de-aerator **FloCo-TOP-2 series** for reliable single-line mode
- 7 Boiler safety group assembly **KSG** and connection assembly for expansion vessels **GAK** with safety valve, automatic vent and pressure gauge for heating installations (water pressure)
- 8 **Boiler water low level alarm** for protection of the boiler when the water level is too low
- 9 **Air and sludge separator** for clean heating circuit water and optimum heat transmission
- 10 Motorised boiler room vent **Air-Control** for reduced fuel consumption
- 11 Solar pump assembly **PrimoSol®** for effective use of thermal solar systems
- 12 **Collector tank for solar liquid** for reliable collection of solar liquid in the case of system overpressure
- 13 Wired or wireless single room controller **CosiTherm®** to set and control the operating times of underfloor heating systems
- 14 **Room temperature sensor** for optimum control of the room temperature
- 15 **Thermostat valve VarioQ** for reliable hydraulic balancing and enormous reduction of heating costs, in particular of existing heating systems



AFRISO offers a wide range of products for saving energy and for the safe and convenient operation of heating systems. Irrespective of whether the heating system uses regenerative energy or fossil fuels, considerable savings can often be achieved at low costs.

**Benefits:**

-  Reduced operating costs
-  Prolonged service life, safe and efficient operation of tank systems and heating systems
-  Optimum use of fuels
-  Timely warning if hazardous situations arise, also remote alarms, for example, via smartphone
-  High-quality brand products made in Europe
-  Conservation of resources as an active contribution to environmental protection





# Save energy and resources and pro

## For heating and storage rooms

### 10 Motorised boiler room vent **Air-Control**

For reduction of fuel consumption. Suitable for installation in basement windows or inlet ventilation ducts for burner-controlled oxygen supply of heating rooms with oil and gas burners of up to 50 kW.

- No cooling of system or room
- Saves heating costs, is reliable and silent
- Complete with accessories for easy installation



### 4 Level sensor with **metallised sleeve**

The rise in the use of biofuels (EN 14213) results in an environment susceptible to the growth of microorganisms (such as bacteria and fungi). This may cause the level sensor to malfunction and ultimately disable the safety shutoff system. Possible consequences: damage caused by overfilling, long-term odour problems and costly environmental damage. AFRISO level sensors feature a metallised sleeve to protect against such problems.

- The metallised surface and the shape of the slot largely prevent the growth of microorganisms.
- Safety for owners, tenants and petrol tanker operators: The fuel oil always reaches the PTC thermistor for reliable shutoff.



### 3 **WATCHDOG** alarm units for oil and water

WATCHDOG alarm units generate alarms in the event of accumulations of liquids caused by tank leaks, backwater or flooding.



- Audible and visual alarms; Acknowledge button and relay output for additional alarms
- ÖWU with combination probe for distinction of oil and water
- Application areas: Basement, heating and storage rooms, manholes, drip pans, double-walled tanks, inspection ducts
- Optional: EnOcean® wireless module for integration into building automation systems



## Valves and control technology for hydraulic balancing

### 15 Thermostat valves **VarioQ**

Patented system for safe and fast hydraulic balancing directly at the radiator. The required water volumes for the individual radiators are determined on the basis of a heating load calculation, adjusted directly at the valve and checked by means of a measuring instrument. Benefits include considerable savings. In individual cases, this may amount to as much as 15 % and more of the annual heating capacity.



- Adjustable thermostat valve with fixed, calibrated measuring unit
- Increased convenience: Rooms are heated evenly
- Radiators respond quickly to new thermostat valve settings
- No flow noise in the heating system
- Heating system/pump operate with maximum efficiency to save energy
- Increased system reliability
- Improved energetic quality of the building
- Reduced energy consumption saves money and protects the environment due to less emission

# Protect the environment with AFRISO brand

For safe and trouble-free operation of heating systems

## 11 Solar pump assemblies **PrimoSol®**

For the efficient operation of thermal solar systems.

- For installation between collector and storage
- Pre-assembled, tightness-tested and heat-insulated assembly
- Great number of versions: Filling and flushing unit, flow meter with ball valve or vent pot
- Comprehensive range of accessories:
  - Solar controller
  - Solar quick air vent
  - Air separator
  - etc.



## 12 Collector tank for solar liquid

Reliably collects solar liquid in the case of system overpressure.



## 5 Anti-siphon valves

For oil carrying pipes. Keeps fuel oil from being siphoned out of the tank in the case of leaks in the suction line.

- Height difference continuously adjustable up to a max. of 4 m
- Vacuum of oil burner pump is not increased
- Piston type anti-siphon valve approved for outdoor use (manhole) to -25 °C



## 9 Air/sludge separators

For clean water, reliable operation and optimum heat transfer to hot water heating systems and underfloor heating systems.

- Removes lime, rust, sludge and air without using chemicals
- Continuous, automatic de-aeration
- Cleaning during operation



## 6 Automatic fuel oil de-aerators **FloCo-TOP-2 series**

With integrated filter, shut-off valve, vacuum gauge, backflow preventer, bypass valve and drain system. Innovative multiple filtration for maximum separation of dirt particles, clean fuel oil with optimum combustion properties and reduced number of burner malfunctions

- Safety system keeps oil foam from escaping
- PROOFED BARRIER quality label: Fuel oil filter is odour-tight
- Rotatable service indicator: Pressure gauge indicates when it is time to replace the filter



## 6 Sintered plastic sieve **BLUE** for fuel oil filter



- Additional filter surface for longer filter service life compared to standard 50 µm filter inserts
- Optimum servicing properties for fast filter replacement, manufacturer-independent
- High-quality sintered plastic "Made in Germany"

## 8 Boiler water low level alarm **WMS**

Mechanical or electronic version for protection of the boiler when the water level is too low..



# and products.

For drinking water supply and rainwater harvesting



## Domestic water system centre HWSC

Compact, modular drinking water distribution system. Base version comprises all components required for single-/two-family homes.

- Space-saving, pleasing design, heat-insulated
- Time-saving, easy installation
- Memory indicator for next backwashing
- Innovative backwashing system for thorough cleaning of the filter element, low water consumption



reddot design award  
winner 2013

## Water filter WAF 03/04

With backwashable fine filter and pressure reducer for drinking water supply. The innovative backwashing system with impeller ensures fast and thorough cleaning of the filter, low water consumption.

- For constant outlet pressure
- Rotatable cover to indicate the next backwashing date
- Transparent filter cup shows degree of pollution of the filter



## Motor-controlled shut-off valve WaterControl 01

For manual or remotely controlled closing or opening of a water pipe in building after an event message has been received (e.g. leak in a household appliance or a water pipe).

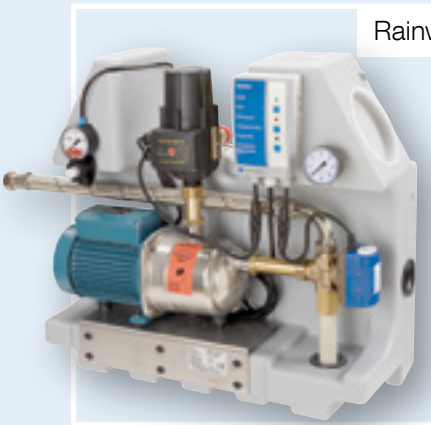
- Event reporting via the water sensors WaterSensor eco/con
- Automatic shutting off of the water pipe in the case of a leak
- Reduced damage after pipe burst
- Optional: Integration into building automation system via AFRISOhome or AFRISOindustry gateway.



## Rainwater system centre RWSC

Rainwater harvesting system for plastic or concrete cisterns or for fuel oil tanks converted to rainwater collectors.

- With analogue or digital tank contents gauge
- Drinking water backup when rainwater level falls below minimum threshold
- For single-family homes, apartment buildings, commercial and industrial companies



## WaterSensor eco and WaterSensor con

For the detection of water at pipes, fittings, washing machines, in basements or utility rooms, below bath tubs or dishwashers or other areas in buildings subject to leak hazards.

- Reporting via EnOcean®-Funk directly to WaterControl 01 or to the AFRISO gateway
- WaterSensor eco does not require batteries; it operates mechanically and uses fibre disks as sensors
- Autonomous operation via photovoltaic cells or battery



## Signal anode

Protects water heaters from corrosion. Visual inspection of the anode from the outside is possible.





## For controlling panel heating and cooling systems



### 13 Single room controller **CosiTherm®**

Controls the temperature of individual rooms in connection with manifold systems for heating and cooling. Available as wired version or with EnOcean® wireless technology for easy integration into building automation systems and convenient remote control via smartphone/tablet.

- System can be operated in "Heating" or "Cooling" mode
- Modular design for the connection of a great number of control circuit / room temperature sensors
- Timer module for adjusting temperature reduction (e.g. day/night/holiday programme), pump operating time and valve protection



### 14 Room temperature sensor wireless/wired

- Measurement and adjustment of room temperature
- Ultra-flat design with a height of 12.5 mm!
- Wireless version:
  - Ideal for retrofitting of existing systems
  - Extremely easy integration into building automation systems
  - Optional humidity measurement

## For tank management and event reporting

### 1 Event reporting systems **EMS**

For remote monitoring of buildings. Error messages and hazard alarms are sent directly to the mobile phone via text messages or to AFRISO Net in conjunction with WATCHDOG alarm units.



### 2 Level indicator **TankControl**

For level measurement and signalling of minimum levels or level differences in interconnected tanks.

- Optimum use of fuels
- With visual/audible alarms; Acknowledge button
- Graphical indication of consumption and remaining range
- Remote measurements up to 15 m
- For the following media: water, fuel oil EL, L M and diesel fuel.



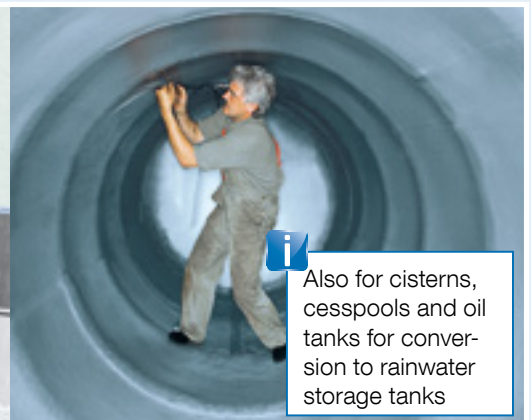
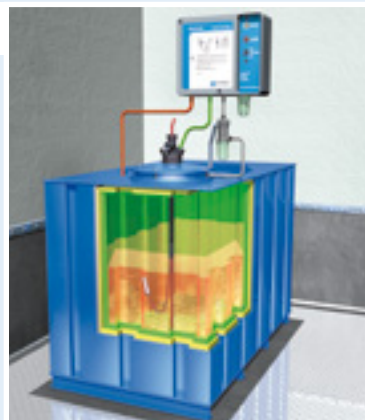
## For safe, tight fuel oil tanks

### Tank protection with plastic inner linings

As corrosion protection and for repairing fuel oil tanks. The AFRISO plastic tank lining is mounted as a second tank wall for the safe storage of the heating medium.

Available for:

- Aboveground and underground horizontal, cylindrical tanks made of steel or glass-fibre reinforced plastic
- Double-walled steel tanks
- Steel tanks welded in basements
- Spherical tanks



Also for cisterns, cesspools and oil tanks for conversion to rainwater storage tanks

# The company

AFRISO, founded by Adalbert Fritz in Schmiedefeld, Germany in 1869, is an innovative, medium-sized company with a total staff of over 1,000 worldwide, over 500 of which are employed at the five German sites.

Traditionally, we manufacture measuring and control devices for temperature and pressure. For more than 50 years now, we have also been manufacturing measuring, control and monitoring devices and systems for environmental protection:

- Level indicators
- Overfill prevention systems
- Leak detectors
- Fittings for heating systems
- Flue gas analysers



Headquarters in Güglingen



Our leading-edge, market-oriented products and innovations result from our comprehensive know-how, a highly motivated and qualified staff and the fact that we understand what the market needs.

Our portfolio covers everything from a comprehensive range of standardised, proven off-the-shelf products all the way to high-grade customised solutions.

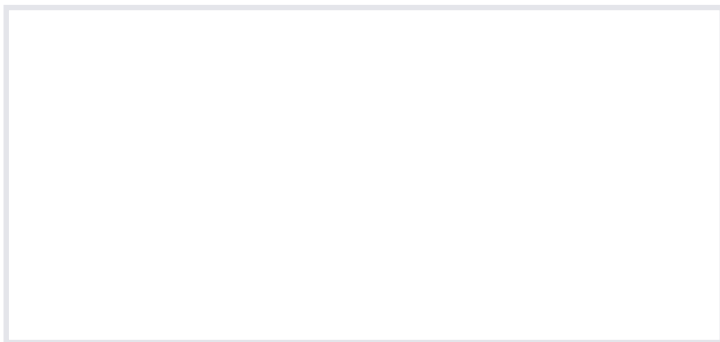
- Research and development
- Tools and equipment making
- Highly versatile and rational production
- Highest quality levels
- National and international approvals

AFRISO stands for leading-edge brand products to meet your requirements.

Environmental management as per ISO 14001 is a matter of course for AFRISO.



For detailed information please request a CD-ROM copy of our complete catalogue at [www.afriso.com/catalogue](http://www.afriso.com/catalogue)



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Technology for Environmental Protection  
Measuring. Controlling. Monitoring.



**AFRISO**