

Smart Building System AFRISOLab

## AFRISO starter kits for more comfort and safety in buildings



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Is the quality of the air in the room OK? Did I turn down the temperature of the underfloor heating system or do I have to turn it up now while I am on the road so it is warm and cosy when I get home? When do I have to place the next fuel oil order? Customers will soon be able to find the answers to these and many other questions on their smartphones. AFRISO has launched the smart building system AFRISOLab and offers a great variety of EnOcean® wireless sensors and actuators to increase the security of plants and buildings, to save energy and to heighten home comfort.

### Fast and direct remedy in the case of water leaks

The starter kit WATER allows users to preclude disastrous water damage in their building at low cost and with very little effort. For this purpose, battery-less water sensors are placed in rooms or locations subject to potential water hazards. If they detect a leak, they send a radio signal to a motorised shut-off valve which closes the main water pipe and keeps further water from escaping.

*Learn more about possible applications on the next page*



**EDITORIAL**

### Dear Reader

Wireless building technology solutions are no longer dreams of the future, they are conquering the market at an amazing pace. Intelligent building controllers increase comfort and are intended to reduce energy consumption – with its smart building system AFRISOLab, AFRISO focuses on yet another important factor: Security of buildings and plants. The new sensors combine decades of experience with

the proven WATCHDOG alarm unit and state-of-the-art wireless technology. This edition of INFORUM or a visit to the IFH/INTERM trade fair 2014 will show you how to get started with a smart building and extend it with other products of EnOcean® Alliance members or even via other wireless standards such as Z-Wave, Zigbee or M-Bus. Look forward to additional product highlights and benefit from one of

our market launch campaigns via your local HVAC wholesaler.

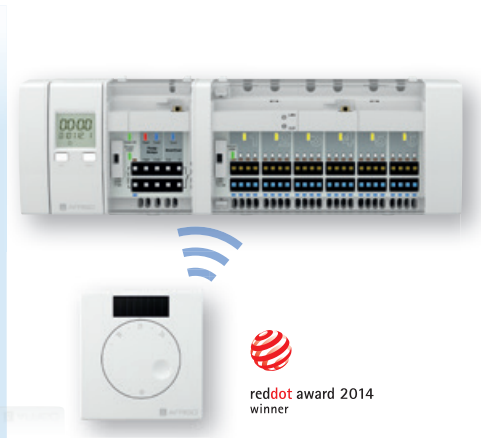
We wish you pleasant reading.

Best regards  
Matthias Blasinger  
Managing Director Sales and Distribution  
AFRISO-EURO-INDEX GmbH

## Title cont.

There are numerous applications where water damage hazards pose risks such as utility rooms with water pipes, below bathtubs, showers or fittings, in drywalls or next to dishwashers and washing machines. Daily use quickly shows another benefit – increased living comfort: It is extremely convenient to just press a button or throw a switch in an app to be assured that the main water pipe is

closed. Just like in the entire AFRISOLab system, the main motto of the first starter kit is: Start with a compact system and enjoy almost limitless expansion possibilities. The starter kit covers the most typical application case in a single-family home, but can be easily expanded by additional water sensors and works as a central control unit without and with a gateway.



### AFRISOhome Gateway

The new AFRISO Gateway transmits alarm messages and state transition messages via WLAN, LAN and GSM to the person in charge (for example, to the owner, the facility manager, the janitor or other configured contacts); the message includes information on which sensor or actuator has signalled the state transition. The base version already features the EnOcean and Z-Wave wireless standards; Zigbee and M-Bus wireless module can be optionally combined.

### Flexible sensor systems

Versatile sensors: The universal radio FTM serves as the basis for the continuously growing product range. Future sensors will be connected to FTM via the plug connection. Already available: Radio transmitters for temperature and/or humidity, minimum/maximum level sensors and conductivity water sensors.

### Temperature control

Ideal for modernisation projects: The single room temperature controller CosiTherm® allows you to combine 2x and 6x controller modules as required. The corresponding wireless room temperature sensors can be operated with or without batteries and excel with an extremely flat, modern design.

## Starter kit WATER



Everything included for a single-family home:

**Water valve WaterControl 01**  
with control unit and motorised shut-off valve  
(connection G1 female)

+ Two battery-less water sensors **WaterSensor eco**

**Special Price  
for craftsmen**

Available from selected HVAC wholesalers from April 08 to June 30, 2014

**NEW**

Compact, flexible and made in Germany

## Optimised fuel oil de-aerator FloCo-TOP 2

The proven automatic fuel oil de-aerator FloCo-TOP 2 features a variety of practical innovations. The de-aerator hood was completely re-designed; the vent hose is connected at the side in an easy and unobtrusive way. The reduced height facilitates installation if mounting space is limited and improves the appearance. The service indicator (vacuum gauge) is now rotatable and shows the owner – regardless of the mounting situation – when it is time to replace the filter. If the filter insert is polluted, the vacuum increases and the heating expert can be notified.

### Benefits

- Compact dual float safety system keeps oil foam from escaping
- Multiple filtration for maximum separation of dirt particles
- Bypass valve for easy and clean burner hose replacement



### Sintered plastic sieve BLUE

- 50 µm filter insert with additional filter surface for longer filter service life
- Optimum replacement characteristics: Filter base does not swell and cannot block
- High-quality sintered plastic “Made in Germany”



Further information:



### Oil filter cup with drain system

- No oil odour caused by oil dripping during filter replacement
- Removing the oil from the oil filter quickly: Connect the hose, open the drain valve, loosen the union nut and drain the oil in a controlled way.
- Suitable for almost all standard filter combinations.



Further information:



### Fast and easy function test

## Tester for anti-siphon valves

The new tester for protection equipment against siphoning allows you to come to a sound conclusion concerning the correct operation of anti-siphon valves and, by implication, the safety of the plant in an easy and rapid way. Mounting is simple: Screw the filter cup of the tester into the fuel oil filter of the facility (not necessary in the case of oil filter cups with test and drain system), plug the hose into the test drain unit, connect the oil suction pump to the other end of the tester and you are ready for testing. For the test, a vacuum is generated which sucks in oil; the oil flows into the tester cup. The vacuum is maintained in the tester cup via the shut-off fitting and displayed by the pressure gauge. When no more oil flows into the tester cup, there is pressure equilibrium. The vacuum can now be read at the test pressure gauge; with a simple formula (hydrostatic pressure / pressure difference), you can determine whether the siphoning protection works.

**NEW**

Protection equipment against siphoning must be checked for correct operation at least every 5 years according to the approval.



Measured, adjusted, works.

# Steiner digs deeper: Hydraulic balancing with VarioQ



Measurable and, therefore, verifiable hydraulic balancing wins HVAC professionals a high degree of trust and long-term customer loyalty.

The AFRISO movie with Matthias Steiner, Olympic gold medalist, central heating system engineer and gas/plumbing expert is highly revealing for everybody interested in energy savings in buildings or in hydraulic balancing. Matthias Steiner had taken a trip to the the baroque city of in Amorbach in the Bavarian Odenwald to learn more about the effects of hydraulic balancing with the VarioQ valve range. Steiner was convinced by the compelling results of hydraulic balancing for HVAC professionals, owners of buildings and tenants.



The measurable thermostat valves feature a fixed, calibrated measuring unit for measurement and adjustment of the volume flow. The heat distribution is adjusted directly at each radiator by limiting the amount of hot water – quickly and easily. The handheld measuring instrument HMG measures the actual flow at the valve so that the water volume calculated for the radiator can be accurately adjusted. In addition, the results of the measurements are available for documentation purposes or applications for funds as well as for further system optimisation. As compared to other methods of hydraulic balancing – for example, by means of adjustable valves without measuring function – VarioQ ensures maximum reliability of hydraulic balancing (in particular, in the case of existing systems). You have to measure if you want to know what is really going on in a heating system.



**Adjustable thermostat valve with measuring function VarioQ**



Further information:



If you have not yet had the opportunity to go into the details of hydraulic balancing or if you have questions, please visit the website [www.einfach-stark.net](http://www.einfach-stark.net) to get your voucher for a one-time visit to a building with on-site support by an AFRISO product expert free of charge.

## HMG 10

Measuring instrument HMG 10 measures the flow rate in litres per hour and the water volume can be easily set at the valve without conversion.



Energy savings and safe operation of heating systems

## Information for your customers

AFRISO offers a wide range of products for saving energy and for the safe and convenient operation of heating systems. The new edition of our brochure "Reducing heating costs, protecting the environment, living safely" provides a clear, easy-to-understand overview of the most important system optimisation options. Demonstrate to your customers the benefits of AFRISO quality products as considerable savings can often be achieved at low costs. We support you with information material. Use the INFORUM fax to request the number of copies you need for mail shots, trade fairs or advertising activities.



Permanently reliable safety shutoff system in battery tank facilities

## Metallised protective sleeve for level sensors



An idea is catching on: More and more professionals and OEM customers rely on the AFRISO level sensor chain with metallised protective sleeve.

The officially required level sensor is contained in one of the tanks. Each additional tank of the facility contains a level switch to limit the filling level; this level switch is connected to the wiring box of the first level sensor. The current circuit of the level sensor which is supplied from the tank vehicle during the filling process and which serves as a safety shutoff system now also includes float switches. The filling process is immediately stopped if any of the tanks of the facility reaches the maximum level.



Further information:



**Current trade fairs**  
and  
**Training seminars**  
on  
[www.afriso.de](http://www.afriso.de)

### Impressum

Publisher:  
AFRISO-EURO-INDEX GmbH  
Lindenstraße 20 · 74363 Güglingen  
info@afriso.de · www.afriso.de

Editors:  
Frank Altmann, Matthias Blasinger

Design:  
Armin Herzog

The publisher is responsible for the content.

Reprint only with publisher's consent.

ID No.: 991517 06795

04/14

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Please send me information on the following topics:

DVD-ROM complete catalogue 2013/2014

AFRISOLab

AFRISO-WATCHDOG alarm units

Digital tank contents indicator DTA 10

Tester for anti-siphon valves

AFRISO level sensor chain / metallised protective sleeve

Flue gas analyser MULTILYZER STe

Energy savings with AFRISO:  
Information for end customers, number of copies: \_\_\_\_\_

Please call me

Please check your address and contact information and make any necessary changes.

Thank you very much!

**NEW****AFRISO**

Universal application with fuel oil, diesel fuel and water, no power cable

## Digital tank contents indicator DTA 10

The new electro-pneumatic tank contents indicator DTA 10 is the ideal universal measuring instrument for tanks of up to a liquid level of 400 cm and a great variety of liquids such as fuel oil, diesel fuel, biodiesel or water. The density of the medium can be entered directly on site; the range is 0.5 to 1.5 g/cm<sup>3</sup>. Linear, spherical and cylindrical horizontal tanks are stored and can be selected; in addition, it is possible to adjust a minimum level; if the level is below this minimum, the tank contents indicator triggers a visual alarm during measurements by means of a display flashing in red. Level measurements are requested by means of pressing the control key. Measured values are displayed in litres, % and liquid level (cm). The tank contents indicator is supplied via a standard 9 V monobloc battery so it can be flexibly positioned at a distance of up to 15 m away from the tank without complex electrical work.

### Benefits

- For various media (density 0.5 to 1.5 g/cm<sup>3</sup>)
- Indication of measured values in litres, % and liquid level (cm)
- Visual alarm by means of display flashing red during measurements
- No external supply voltage required

The all-rounder with outstanding connectivity, ECO sensor, TFT display and Bluetooth Smart

## Flue gas analyser MULTILYZER STe

The new MULTILYZER STe features a vast array of technical highlights, offers maximum ease of use and excels in terms of production quality and design – it just received the prestigious Red Dot Design Award 2014.



reddot award 2014  
winner

The compact design allows the device to be equipped with any combination of up to six measuring cells (O<sub>2</sub>, CO, CO<sub>H2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>). The lead-free ECO sensor (O<sub>2</sub>) ensures an optimised calibration phase and a prolonged service life; in addition, it is resistant to biogenous fuels. All measurement logs can be archived as HTML files without any additional software and opened with any Web browser. It is also possible to convert them to QR codes so that they can be scanned by smartphones and transferred to management software. In addition to the classical interfaces, MULTILYZER STe features the latest Bluetooth technology: "Bluetooth Smart". This allows for easy transfer of measurement data to external

devices; pairing of and communication with additional measuring instruments, printers and pressure/temperature probes is highly energy-saving.



Measurement logs as QR codes

**NEW**