## READY STEADY GO
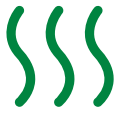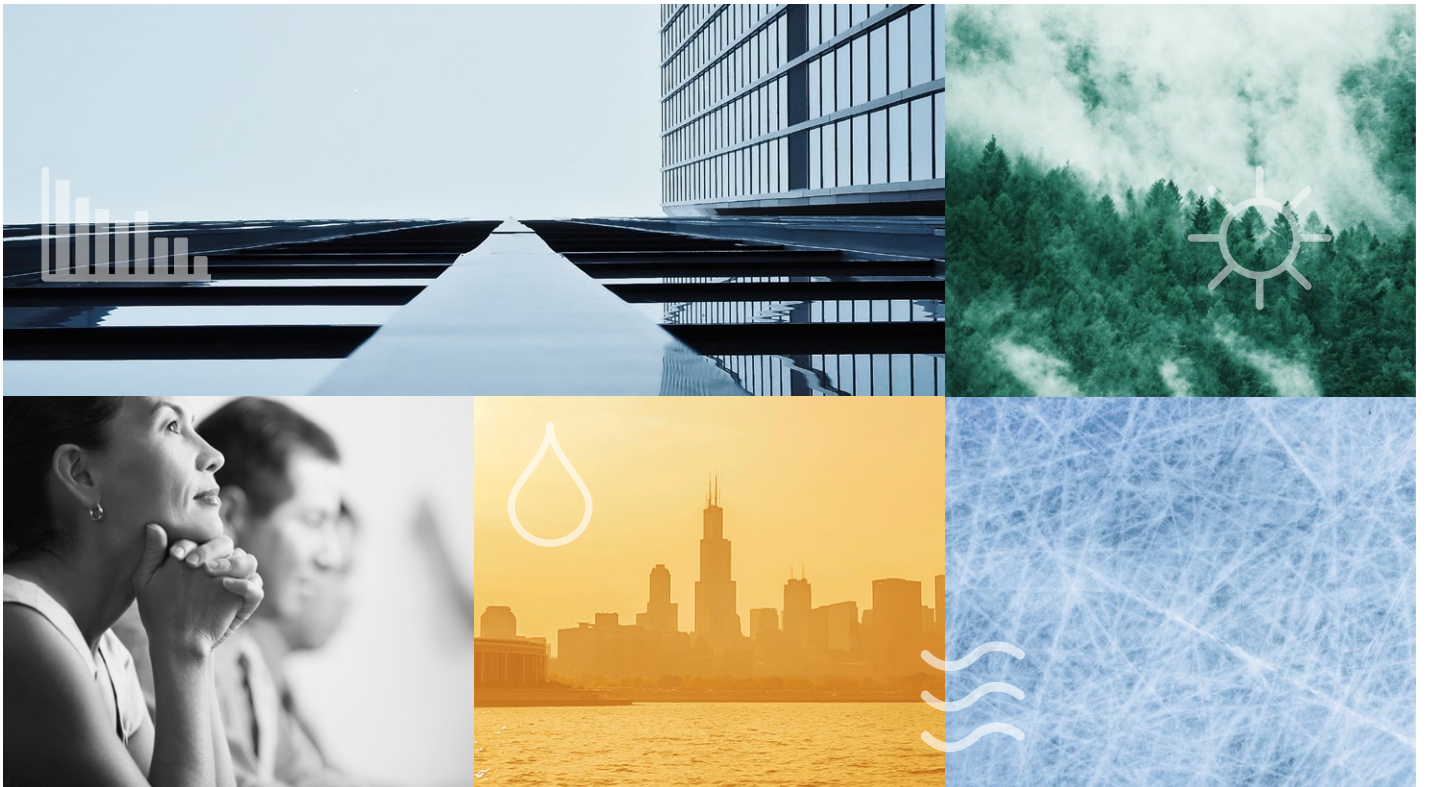
# STANDARDIZED HEATING SOLUTIONS

THE COST-EFFECTIVE ROUTE TO
COMFORTABLE INDOOR CLIMATE
AND ENERGY SAVINGS

**≈REGIN**
THE CHALLENGER

# SAVE MONEY THROUGH **EFFICIENCY.**

One of the major challenges for building owners is ensuring profitable energy investments. This means achieving maximum efficiency of the heating plants in the building while providing comfortable conditions for the occupants. Finding sufficient solutions is key.

At Regin, we believe in smart automation technology for climate control in buildings. Our solutions empower system integrators, manufacturers, and facility owners with reliable tools that save energy and time. Our R&D teams continuously improve our solutions, ensuring future-proof and sustainable installations.

# EFFICIENT HEATING SYSTEM **DESIGN.**

Exigo is Regin's product family of easy-to-use compact controllers for heating substations. They are designed for building operators who are looking for cost- and time-effective replacements of old heating control systems, or building owners who are interested in standardizing the heating control systems in their building stock.

## No programming required.

The most prominent benefit of the Exigo family is its versatility in terms of functionality. Instead of programming advanced heating control functions, system designers and operators take advantage of essential preconfigured standard applications.

## Standard solutions for heating applications.

With a wide range of standard applications for district heating systems, boilers, solar circuits, and buffer tanks, Exigo will meet almost any system requirement. It is also equipped with control options for up to four heating/cooling circuits and two domestic hot water circuits.

# DESIGNED FOR
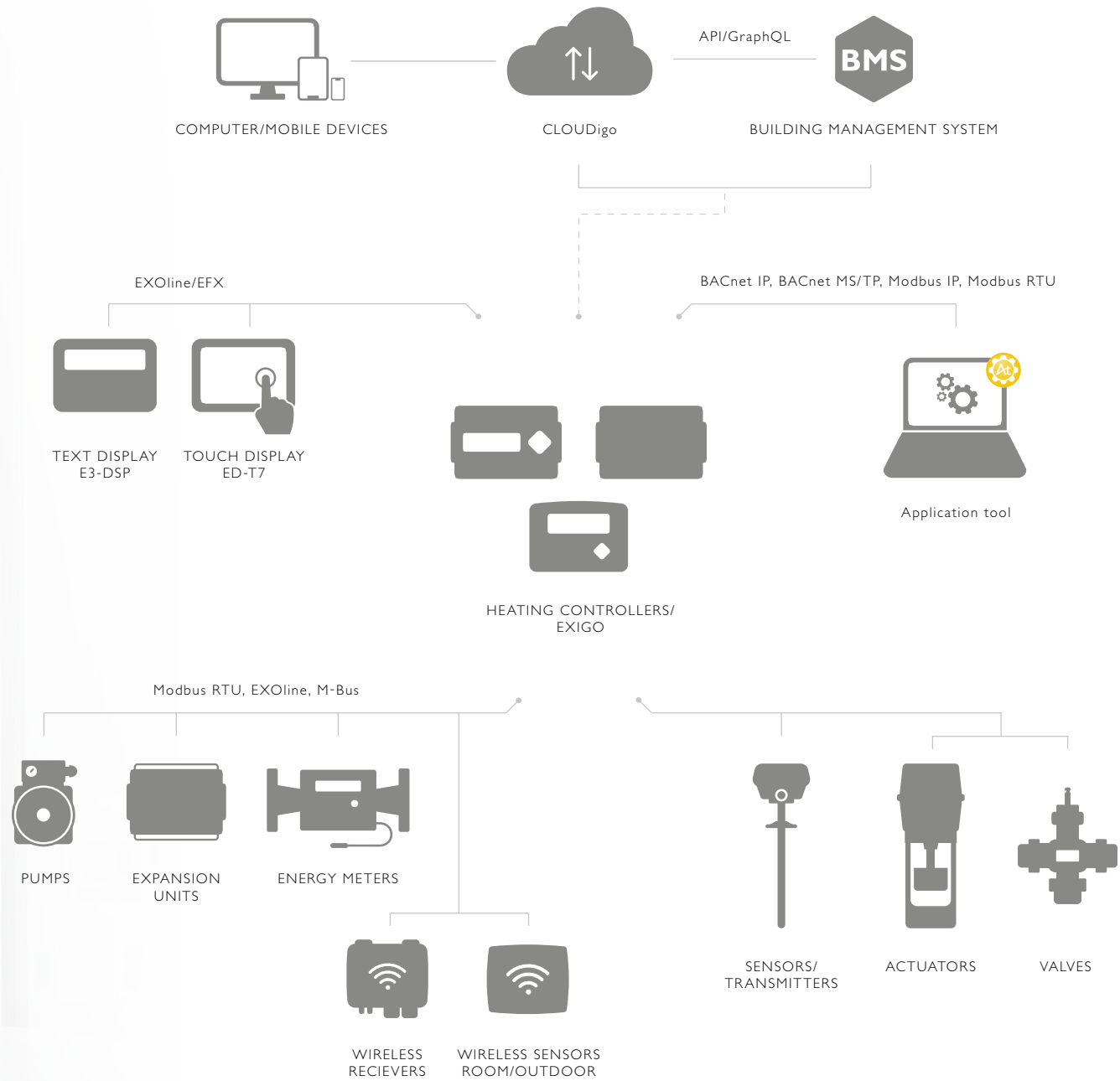# **COST-EFFICIENT**
# SYSTEM ADAPTATION.

Regin's Exigo heating system is designed to empower building owners with a vast array of cost-efficient future opportunities. At any time, it is easy to change the system and add the functionality that is needed.

## Whenever it suits you.

The Exigo heating controller is the heart of your system. With its support for various communication protocols and thanks to various expansion options, Exigo gives you the freedom to quickly expand and adapt the system as soon as new needs occur.

- ✓ Receive values of the outdoor temperature via Modbus
- ✓ Connect up to 16 wireless sensors
- ✓ Communication with up to 10 pumps via Modbus
- ✓ Monitor consumption data via communication with up to 10 M-Bus meters
- ✓ Flexibility in the number of terminals with possible expansion with up to 2 Expansion units

# EXIGO HEATING SYSTEM TOPOLOGY

COMPUTER/MOBILE DEVICES

CLOUDigo

API/GraphQL

**BMS**

BUILDING MANAGEMENT SYSTEM

EXOline/EFX

BACnet IP, BACnet MS/TP, Modbus IP, Modbus RTU

TEXT DISPLAY
E3-DSP

TOUCH DISPLAY
ED-T7

HEATING CONTROLLERS/
EXIGO

Application tool

Modbus RTU, EXOline, M-Bus

PUMPS

EXPANSION
UNITS

ENERGY METERS

WIRELESS
RECIEVERS

WIRELESS SENSORS
ROOM/OUTDOOR

SENSORS/
TRANSMITTERS

ACTUATORS

VALVES

**REGIN** HEATING CONCEPT

# PERFECT FOR STANDARDIZED HEATING CONTROL OF **YOUR BUILDINGS**.

Exigo heating control systems can be adapted to a wide variety of heating functions and is therefore especially suitable for those who are looking for standardized solutions.

Once the hardware has been installed and connected, the configuration of the system is done on the fly. The controller with the scheme of your choice and adapt your configurations either via the text display or by using the smooth functions in Regin's "Application tool".

## HEATING AND COOLING

✓ Controls the supply or return temperature of your system depending on the outside temperature (weather compensation) and/or the room temperature.

✓ Automatic summer shutdown for heating or change-over heating/cooling.

✓ Handles up to four heating systems for heating and cooling.

## DOMESTIC HOT WATER

✓ Handles one or two hot water systems.

✓ Six optional types of domestic hot water systems, including flow-through and storage loading systems.

**REGIN** HEATING CONCEPT

## DISTRICT HEATING CIRCUITS

✓ Demand-based control of a district heating unit.

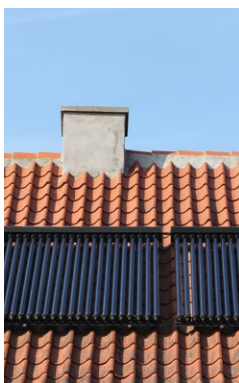✓ Suitable for systems with or without a heat exchanger (direct heat supply).

## BOILER

✓ Control of 1-4 boilers in sequence, 1-step, 2-step, or modulating burners.

✓ Possibility to control system based on

- a fixed or outdoor compensated setpoint
- the highest setpoint of other heating systems that have been configured

## BUFFER TANK

✓ Reduce starts and stops from a boiler

✓ Temperature control according to

- demands of the heating systems
- demands of domestic hot water systems
- external demands via 0...10 V signals

## SOLAR ENERGY SYSTEM

✓ Solar systems for heating of domestic hot water storage tank or buffer tank

✓ Control of the temperature difference between collector sensor and storage sensor.

**REGIN** HEATING CONCEPT

# SMOOTH AND SEAMLESS.

## Truly scalable.

With an Exigo being the center of the heating control system, energy engineers get great flexibility in planning the system with confidence that all network requirements of today and tomorrow will be met. A wide variety of communication options makes it possible to connect additional sensors or meters for precise control of the system, to connect to meters of various external providers, or to integrate the heating system with the existing BMS or additional heat networks, enabling full control from the supervisory level.

## Future-proofed through open communication protocols.

The Exigo heating controllers use open communication protocols to give system architects the best opportunities to modify and grow the system

- ✓ BACnet IP for connection with the automation and management level of a BMS via Ethernet.

- ✓ BACnet MS/TP for serial communication with the automation and management level of a BMS.

- ✓ Modbus TCP for the establishment of master-slave/client-server communication between intelligent devices via Ethernet

- ✓ Modbus RTU for the establishment of serial master-slave/client-server communication between intelligent devices.

# FULL CONTROL
# FROM **ANYWHERE.**

## Fast and easy start-up on site.

Regin's heating controller Exigo is designed with usability and customer experience in focus. This is what makes it fast, easy, and very cost-efficient to install and configure.

For installers on-site, it is easy to download the right application directly into the controller. The simple navigation system of the display makes it quick and easy to configure all settings.

## Configuration and commissioning on the fly.

The configuration software Application tool gives system integrators easy access to the preset applications in the controller. Application tool gives access to energy-efficiency functions, such as effect-limitation, monitoring of energy consumption. It also makes it possible to create functions with wireless sensors.



## CLOUDigo

## CLOUDigo – your own Mini BMS.

CLOUDigo gives building owners one of the most flexible control systems on the market. The HTML5-based portal can function as a "Mini-BMS" with full functionality, but at a minimum cost and faster and easier installation and commissioning.

Access all values and logs in your properties from any mobile device, regardless of where you are, and start saving time. CLOUDigo detects and categorizes deviations and sends all A-alarms via e-mail to ensure immediate handling.

CLOUDigo reads the configuration of the control system and automatically creates a schematic and dynamic flow image. It provides a good overview of the system while making all setting values accessible. Through different authorization levels, you can control who gets to see and do what. Many building owners also appreciate the simple logging feature that can facilitate troubleshooting and report generation.

## Prepared for cloud connection.

Regin's cloud portal for Building Management is equipped with a Graph QL (a query language for your API) gateway for smooth data sharing with other cloud-based systems.

# FUTURE-PROOFED
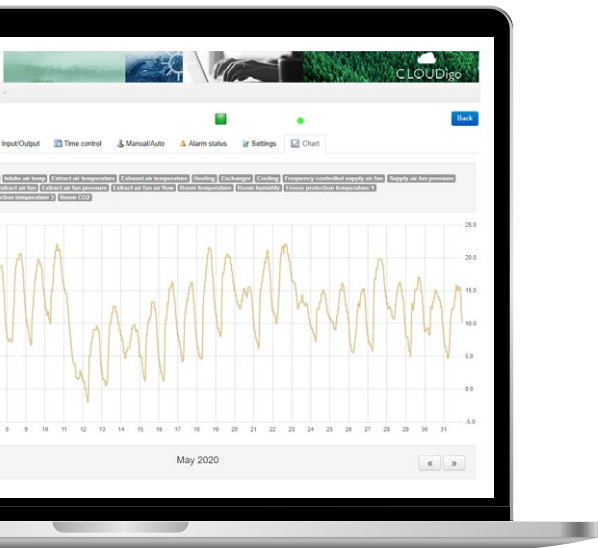## THROUGH
## FUNCTIONALITY

### Smart metering for more efficient energy calculations.

Trustworthy measurement data is key to truly energy-efficient heating systems. M-Bus metering helps you utilize all data to fine-tune your heating system.

Several models of the Regin heating controller Exigo are open for M-bus communication. Calculate your key energy figures by capturing the energy and environmental data from sources with M-bus communication, such as power consumption or gas volumes. Use this data in the web portal CLOUDigo to adjust the system or aggregate the data to your central BMS.



### Peak control for maximum energy savings.

One of the top challenges for energy-efficient heating systems is to avoid high power peaks when the consumption of hot water in the building is high. A smart heating system will "borrow" energy from the heating system and use it for a short time period to heat the water instead. In that way, the combined power consumption will be lower, even in cases when hot water and the heating system are used at the same time.

**REGIN** HEATING CONCEPT

# THE REGIN TOOLBOX
## FOR EFFICIENT
## HEATING SOLUTIONS.

*Every year, we develop and manufacture controllers and components for sustainable heating systems with usability, scalability, and overall cost-efficiency in focus. After 75 years on the market, we know that an efficient heating system is about much more than just the controller. It's about helping building owners find possibilities for energy savings in every single part of the solution.*

## Fine-tune the temperature curve with wireless sensors.

Wireless sensors in apartments help to keep an even temperature level and increase energy efficiency. The temperature in specific zones can be controlled and logged automatically. With the transferred values, the Exigo heating system will recalculate and adjust the temperature to ensure a high level of comfort and an even temperature curve everywhere. That way, caretakers don't have to make any manual adjustments to ensure optimum energy consumption.

Regin's range of Go-Wireless sensors includes everything from room-and outdoor sensors to presence detectors with Modbus communication. With Exigo, your system can handle up to 16 wireless temperature sensors with a communication range of up to 300 meters. In other words, you have all you need for an efficient heating system.

GO WIRELESS

## Configurable controllers for time-saving installation.

Exigo has been developed to be your perfect companion for any challenge where the answer is efficient, intelligent heating solutions and energy savings. The Exigo heating controllers are available in models with 24 V or 230 V, prepared to handle a wide variety of applications from district heating systems to boilers, solar circuits, and buffer tanks with one or several heating circuits. The configurable heating controllers contain loads of smart time-saving features that make it possible to get started in no time. Exigo heating systems are easy and very cost-efficient to design, install, commission, and expand – all according to your specific requirements.

## Expand and add functionality as requirements change.

Regin heating solutions are designed for cost-optimized installations, while they provide a future-proof basis for development. The heating controllers in the Exigo family are all equipped with one, two, or three communication ports as a standard. As the requirements of a heating system change, it is easy to expand the unit with extension units that provide additional IO:s.

This means that the system can be upgraded step by step, putting you in control of the costs.
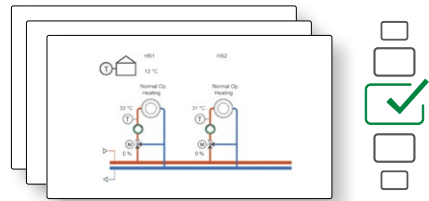
# INSTALL

# CONFIGURE

Ready-made application templates make your installation and configuration fast and efficient.

## COMMUNICATION

EXOline

ASHRAE BACnet™

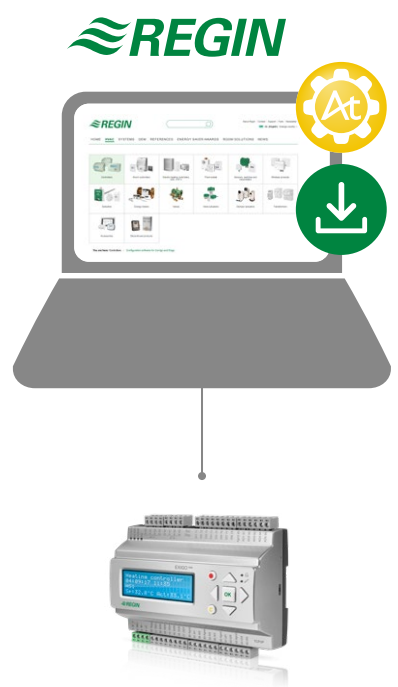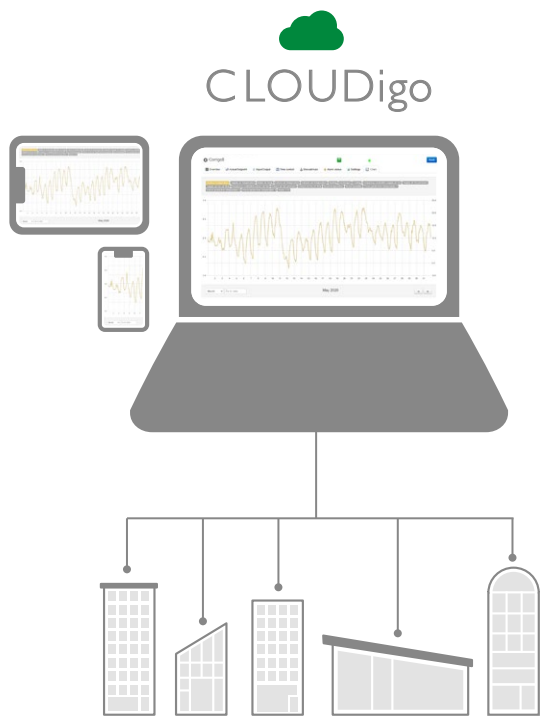Modbus

M-Bus

## DISPLAYS

GO WIRELESS

## FIELD PRODUCTS

Installation and configuration can be made from our desktop Application tool. You can always go back to upgrade or expand your system.

# MONITOR & OPTIMIZE

# UPGRADE & EXPAND

## CLOUDigo

## REGIN

Update the controller
via Application tool or by visiting
**www.regincontrols.com** to get
the latest version of the software –
always benefit from new functions
and features provided
free of cost.

**REGIN** HEATING CONCEPT

YOUR
LOGO
Here

# A PERFECT START FOR **OEM**-**PROJECTS** WORLDWIDE.

In Regin's Ready Steady Go concept for heating you'll find everything you need to achieve a successful OEM-project for your business. Our offer in any OEM-projects covers everything from concept and product design to the finished product; from small to large volumes. To help realize your business strategies we have a dedicated OEM-development team that is used to making fast and cost-efficient adaptations. The team ensures the right priorities and quality during the entire process. We're used to long-term, strategic cooperation – a wide variety of our products are a part of OEM-applications worldwide.

## Maximum flexibility to realize your ideas.

One of the most important arguments for Regin's heating solutions is the flexibility of our controller Exigo. The controller is full of functionality – some regard it as a freely programmable controller. This makes cooperating with Regin cost-efficient. As an OEM-customer it is easy to handle the solution – and should there be any ideas that can't be realized today, Regin's experienced development team can often implement those ideas into the controller.

## A UNIQUE VALUE PROPOSITION FOR OEM-CUSTOMERS

▶ An experienced partner with a skilled and efficient development team, support team and sales contact. We can support you in all steps – from idea to solution. For example:

✓ Programming
✓ Setup
✓ Lifetime support
✓ Labelling

▶ Design for easy manufacturing: Many years of cooperation with OEM-customers have developed our way of working with products. Already in the design phase, we prepare our products for the OEM-market ensuring time-saving production and construction.

▶ Through web-based technology and communication, OEM-customers can access live data from running units that give you as a producer important insights for future development.

# PEOPLE'S WELL-BEING IN A SUSTAINABLE FUTURE.

Swedish-owned AB Regin is an international company in building automation. We create solutions for optimal energy use and a comfortable indoor climate. Our goal is to contribute to a sustainable future for the buildings themselves, and the people within.

Under the Regin brand, a complete program of products and systems for building automation and water & sewerage is developed, produced and sold through subsidiaries, or in partnership with system integrators, OEM-customers and distributors. Regin have offices in Europe and Asia, with its head office located in Gothenburg, Sweden. Visit us at **www.regincontrols.com**

## ≈REGIN
### THE CHALLENGER

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