# resideo **Green combustion** and renewable energy controls



# Our Vision

We imagine a world where homes and buildings are good for the planet, where technology works to simplify everyday life. In that world, people are healthy, happy, and secure.

# Our Purpose

To simplify the connected world so people have peace of mind and can protect what matters most.

# Resideo Fast Facts

### Trusted by 150 million households

**REZI** 

NYSE listed

15 million systems

installed per year

\$ 5.8 billion company

(full year 2021 revenue)

9.3 million

connected customers

**#1 Distributor** 

of global security, fire and low voltage products

Data collected from **32 million** 

sensor points



# Our products and solutions

## working with Global Manufactures and partners to help deliver energy solutions

Resideo leads the way with one of the largest and most comprehensive smart home product portfolios on the market. As the smart homes become more complex, our years of expertise, award-winning design in home technology allows us to simplify the connected home experience for our customers. Safety, energy saving, and reliable performance are the prerequisites for ensuring end-user comfort and peace of mind. Our wide product portfolio can be customized to fit applications from

heatpumps, wall hung boilers to large industrial boilers and burners. Designing innovative systems is key to meet the demands of today's energy emissions laws. Our broad portfolio of customized and standard products is designed to be easy to install in your production line, help you differentiate from your competitors and provide your customers with energy saving.

### APPLIANCES

- Boiler (wall-hung/ floor)
- Heat pump
- Water heater

### **MARKETS**

- Residential
- Intelligent heat management





# **Heat-Pump**

A complete offering for residential heating applications.

at Resideo

Resideo is offering heat pump controls for mono block/ split and hybrid types of appliances to meet high energy efficiency and performance requirements. Resideo controls can provide a complete solution firstly for

Heat pump application lab



Heat pump controls



Safety module

the hybrid heat pump system before going all-electric at second stage. Resideo is also able to provide an application support to their OEM's and can offer heat pump application lab capacities.

# **Hydrogen Evolution**

# resideo H<sub>2</sub> Ready

# Ready for the next generation systems

Our components and systems meet the high energy efficiency and performance requirements demanded by today's environment. We are ready for the hydrogen evolution. Our products are already approved for 100% hydrogen. We offer a complete systems for hydrogen combustion. The systems including e.g. a failsafe flame

supervision and on request a complete combustion control. With our conversion kits a boiler easily can be adapted from natural gas to hydrogen.

### **KEY BENEFITS**

- Compact units, pre-assembled and tested
- Easy to implement in a boiler
- Failsafe flame supervision
- Boiler ready to be converted to 100% hydrogen, without changing the gas valve
- Simple adaptation to the differing hydrogen properties, e.g. lean ignition



PX52 gas valve



Motor driven throttle



Boiler control



Rambler gas valve with motor driven throttle and venturi



# **Gas-Adaptivity**

A complete portfolio solution where the combustion systems are designed to work together.

The iXSCOT™ is a smart combustion system for condensing boilers, delivering gas adaptive advantages and high modulation requirements. The electronic controller and the dedicated gas valve work in synergy to boost boiler performance in all operating conditions. The electronic controller gets information from different inputs, including the flame ionization probe, with direct feedback on the combustion quality.

Condensing boilers achieve high efficiency by using the latent heat from the vapor condensation of exhaust gases, which would otherwise have been wasted. iXSCOT™, thanks to its high modulation range, allows the best performances in any condition.

Controller acts

gas valve

electronically on the

during installation

No manual adjustments

# **Intelligent Heat Management**

Our experienced teams work directly with OEM customers to create customized solutions.

New buildings regulations and market needs in various countries will lead to a complete system offering of hybrid heat generation and heat distribution electronic controls.

Customers will face the increasing impact of more hybrid and more complex appliance controls.

To manage this growing complexity of energy distribution, VariCAN is an all-in-one solution that can communicate with various heating sources.

The intelligent heat management of gas combustion, heat-pump or solar combined with multiple heating/water circuits is one of the key strengths to meet highest energy efficiency requirements. Due to the various extension modules, VariCAN is a modular system so that customers only get what they really need. VariCAN is also the right choice for the control of high-end cascading premix boilers in commercial applications where complex systems need to be managed.

### **KEY BENEFITS**

- Hybrid heat management
- Integrating renewable energy sources
- Modular extendable system: Solar, heat pump, heating circuits, cascading boilers
- Connectivity and home automation





# **Light Commercial**

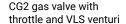
A comprehensive range of products for comfort, performance, environment and safety.

Resideo is offering a wide portfolio for light commercial applications like high-end premix burners or cascading boilers. Finally, with the new range of CG2 gas valves in combination with the new VLS gas/air mixer, Resideo expands its system offering for pneumatic combustion systems in commercial applications up to 300 kW. In combination with the CM4 combustion manager or the maXsys III boiler control an efficient pneumatic system can be built. By adding VariCAN even a complex commercial system can be managed in an intelligent manner.

The CG2 gas valve is designed to be upgraded to the latest gas-adaptive combustion systems and/or the use of hydrogen and to adapt easily to market changes and regulations.







maXsys III boiler control



# Taking the lead in sustainability

Just as we are making sustainability improvements in our products, we are also committed to reducing the impact of our own global footprint and to be on the cutting edge with greener technology.

### **Lotte, Germany**

This new technical center specializes in the testing of safety devices for global boiler and water heater manufacturers and will play a key part in delivering the company's plan for greener, hydrogen technology.

### Nagykanizsa, Hungary

Using solar panels at the company's manufacturing site in Hungary has reduced electrical energy usage from nonrenewable energy sources by 8% — an estimated reduction of CO2 of around 205 metric tons annually.

### Tianjin, China

This lab explores efficient utilization of gas technologies and cutting-edge development trends, enabling a leap in production and research in the China market. These new technologies deliver advanced energy-saving and environmentally friendly products and technologies into the China market.

# 20% Reduction

by 2025 in our energy and water use, greenhouse emission and waste

1.2B kWh

of Electricity Saved

1.6 MT CO2

**Emissions Reduced** 

140MT

Natural Gas Saved

Nearly 2M Resideo thermostats recycled, diverting 9 tons of mercury from waste stream in collaboration with Thermostat Recycling Corporation since 1998.

# Our Values

### At Resideo We:

**Start With The Customer** – We understand our customers' needs and pride ourselves on delivering exceptional experiences.

Act As One Team – We work together toward common goals, engaging from a place of humility and respect.

**Pioneer The Future** – We embrace change, boldly step into the unknown, and relentlessly foster innovation to fuel our growth.

**Make A Difference** – We care about the long-lasting, positive impact we make on each other, our customers, our communities, and the planet.

