

 $\bigcirc$ 

# EXCELLENCE IN HOT WATER



# INTRODUCTION TO ACV

# WHO WE ARE

The origins of ACV date back to 1922 when a group of engineers, passionate about the possibilities of building a business on new technologies in heating and ventilation, established 'Ateliers de Construction d'Appareils de Chauffage et de Ventilation' in Brussels. Seven years later, following a merger with 'Fonderies et Emailleries Sainte Marguerite' and under the leadership of Albert Buchet, ACV began on its course of continuous growth and astute investment in R&D. Steady progress was made in products that were reliable and highly respected in its home market during the middle of the twentieth century.

#### Out in the world

۲

By the 1960's and in response to the use of fuel oil for domestic heating, ACV refocused its strategy on the design and manufacture of superior quality boilers for heating and domestic hot water tanks. By investing in innovation and adopting a no-compromise approach to product design, such as its commitment to the stainless steel Tank-in-Tank concept for hot water cylinders, ACV paved the way for expansion into the highly competitive export market in the 1970's. Still family owned and now represented in over 40 countries across three continents, ACV is well positioned to serve demanding customers in the residential and commercial sectors with high-performance hot water and heating systems.

# WHAT WE DO

#### Excellence in hot water

Hot water is an essential element of modern life. Homes, hospitals, industry and commerce depend on an abundant and reliable supply of hot water for hygiene, washing and warmth. With this ever increasing demand comes a responsibility to produce it as efficiently as possible and with the highest respect for the environment.

ACV originally made a name for itself as a specialist in high-performance hot water systems which deliver at the highest levels of efficiency and is now applying this expertise also to heating systems. With our focus on adaptable, multi-energy tanks.

ACV is a highly respected partner in the provision of hot water and heating solutions, in the design of best-for-purpose installations and in the provision of technical support and after-sales service. With their wealth of field experience our motivated staff are well placed to advise customers on all their hot water and heating requirements.

# REFERENCES



Hôtel MacMahon Champs-Elysées, France



Hospital Quirón Spain



larks & Spencer Simply Food Inited Kingdom



Ethias Arena Belgium



**ACV** 03

# THERMAL COMFORT

# GROUPE ATLANTIC

Thermal comfort, an essential condition for our well-being, has become a major social issue arising from the need to reconcile comfort and health. This gives GROUPE ATLANTIC greater responsibility and strengthens us in our Mission, which guides us to better satisfy of our professional customers and our end customers.

# **OUR MISSION**

To transform prevailing energies into lasting well-being, by creating thermal comfort solutions that are ecologically efficient, accessible to all and suited for individual needs.

# **OUR BUSINESS**

OUR BUSINESS Water heating, air heating, air conditioning and ventilation: GROUPE ATLANTIC develops highperformance solutions that are both competitive and environmentally friendly. Distributed in over 70 countries, they are designed for individual homes, collective housing, offices, shops, schools, airports, hospitals and all other commercial buildings. In France, Europe and throughout the world, we offer a comprehensive range products and services based on the latest technologies in the gas sector, as well as in renewable energies and efficient use of electrical solutions. Our field of expertise includes sanitary hot water, temperature and air quality in homes and commercial buildings.

As true entrepreneurs, we bring passion and a sense of responsibility into our work. We hold our current position as leader of the climate control engineering market in France as well as among the major European players thanks to the efforts of our staff, to our Group's men and women, who work tirelessly on a daily basis to ensure innovation and thermal comfort for all.

### **EXECUTIVE BOARD MEMBERS**

From left to right: Yves Lepelletier (Deputy CEO), Pierre-Louis Francois (CEO), Yves Radat, Jacques Lamoure





۲

04

۲

- P.6 SOLAR CONNECTABLE SMART MULTI ENERGY
- P.7 SMART SMART GREEN SMART E/SMART E PLUS SMART EW

۲

- P.8 COMFORT COMFORT E COMFORT ME 200-300
- P.9 HRI, HRS, JUMBO

# HOT WATER PRODUCERS P.11

P.10 WATERMASTER

## BOILERS P.11

۲

- P.12 HEATMASTER®
- P.13 HEATMASTER® 25 TO 120 TC
- P.14 HEATMASTER® 60-70-100 N HEATMASTER® 200 N HEATMASTER® 201
- P.15 DELTA PRO S NECO
- P.17 PRESTIGE® RANGE
- P.18 PRESTIGE® (24/32 SOLO AND EXCELLENCE 42/50/75/100/120 SOLO)
- P.19 INSTALLATION IN CASCADE
- P.20 COMPACT CONDENS

# **ELECTRIC BOILERS P.21**

- P.21 E-TECH W
- P.22 E-TECH S/P

# ROOM CONTROLS P.23 SERVICE & ENGINEERING P.25 ECODESIGN & ENERGY LABELLING P.26









۲

# TANKS

# HOT WATER

High performance exactly when you need it

#### Avoids lime scale build-up, legionellae and gives years of reliable service

The "Tank-in-Tank" concept is an indirect hot water storage tank totally immersed inside an external tank which forms the primary circuit. The inner tank (always in stainless steel at ACV) is itself a heat exchanger: thanks to the large surface hot water it is quickly heated up and storage volume can be kept to a minimum. What is more, "Tank-in-Tank" systems can be placed in any position and temperature is uniform through-out the tank, avoiding any risk for cold zone and legionellae. Finally, the internal tank is free to move, with its walls expanding and contracting under pressure variations during operation.

۲

This impedes scaling on the surface of the heat exchanger: ensuring that efficiency and performance remain constant throughout the lifetime of the tank.

# SOLAR CONNECTABLE

Hybrid tank for efficient storage of hot water, central to renewable energy systems. The perfect partner for solar, heat pumps, pellet burners and more.

#### A multitude of possibilities

 $\bigcirc$ 

The Smart Multi-Energy tank is the centre piece of any future oriented hot water and system. Install it today, and make decisions later about incorporating new energy sources.

The SLME can be used as a low loss header for heating circuit, and can be installed in a wide variety of heating and hot water applications.

ACV Multi-Energy Tank-in-Tanks are the perfect hot water storage partners for the energy sources of the future, while proven as a core component in systems that perform today.



Together with Smart Multi Energy tanks, thermic panels are an efficient way to improve the energy performance of your dwelling considerably, without losing out on comfort.



# **SMART MULTI ENERGY**

- Multi-Energy cylinder with the advantages of Tank-in-Tank design, incorporates a steel coil located at the bottom of the primary circuit
- Can be used as a low loss header for heating circuit, eliminating the need for additional tanks
- Optional installation of an electric element from 3 to 6 kW
- (inserted into the primary circuit, in order to avoid the lime scaling)
- High quality polyurethane foam insulation (50 mm)

- Double connections for heating and return flow
- 5 models with a total capacity of 200, 300, 400, 600 or 800 L



# **SMART**

- Inner tanks in stainless steel
- Large heat exchange surfacea
- Self-descaling
- Anti-legionellae
- High quality insulation
- 100 to 600 litres capacity
- Several "all position" models

# **SMART GREEN**

#### with a big A

The range of Smart Green tanks is equipped with the latest ACV innovations for maximum efficiency. You can now offer your clients a system far ahead of its time.

- Class "A" tank, according to EU 812/2013
- Practically no loss of heat thanks to innovative insulation. The combination of a vacuum insulated panel (VIP) and polyurethane guarantees excellent energy performances.



 $\bigcirc$ 





# **SMART EW**

- BI-ENERGY: fitted with a 2,2 kW electrical element in the primary circuit to avoid scalding
- 50 mm polyurethane foam insulation
- Thick polypropylene jacket 5 sizes: from 100 to 240 litres





۲

# SMART E SMART E PLUS

- Floor standing
- Optional 3 or 6 kW immersion heater with independent control and safety thermostat located in the bottom of the tank in primary water
- High quality insulation
- 5 models from 130 to 300 litres (E) and 3 models from 210 to 300 litres (E Plus)
- Heat input up to 68 kW





# COMFORT

۲



۲

# COMFORT

- Domestic stainless steel cylinder with tank-in-Tank technology
- Multiposition tank. Can be placed on the floor or on the wall vertically or horizontally (except CF100)
- Polyurethane insulation foam5 sizes: from 100 to 240 litres

# **COMFORT E**

- **BI-ENERGY**: fitted with a 2,2 kW electrical element in the primary circuit to avoid scalding
- 30 mm polyurethane foam insulation
- Thick polypropylene jacket
- 5 sizes: from 100 to 240 litres

# **COMFORT ME 200-300**

# Floor standing high efficiency multi-energy storage tank

- Multi-Energy cylinder with the advantages of Tank-in-Tank design
- Incorporates a steel coil located at the bottom of the primary circuit
  Optional installation of an electric element from 3 to 6 kW
- (inserted into the primary circuit, in order to avoid the lime scaling)
- High quality polyurethane foam insulation (30 mm)
- Primary connections for heating and return flow
- 2 models with a total capacity of 200 and 300 litres



# HRI, HRS



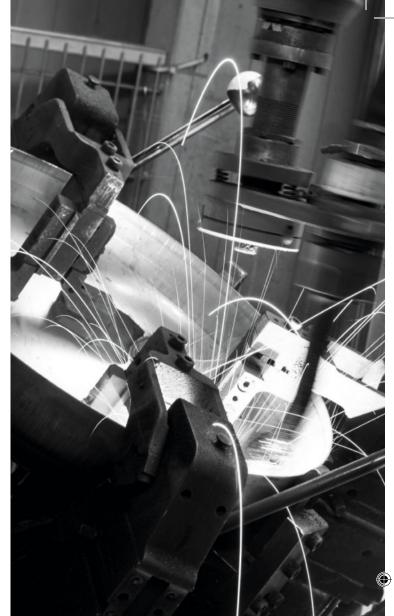
### HRi:

- Floor standing
- M2 fire Protection
- Inverted construction with handhole at the bottom for inspection

۲

- 3 models: 320, 600 & 800 L
- Heat input up to 88 kW
- Insulation : Soft Jacket
- HRs:
- Floor standing
- Insulation HRS: Soft Jacket 100 mm
- 4 models 320, 600, 800 & 1000 L
- Heat input up to 112 kW





# **JUMBO**

#### Jumbo:

- Floor standing
- MO fire protection
- 2 models of 800 and 1000 litres
- Heat input up to 112 kW
- Outer steel jacket supplied separately to enable the tank to pass through standard 800 mm doorways
- All Tanks Can be Placed in Cascading





# **PRODUCERS**

۲

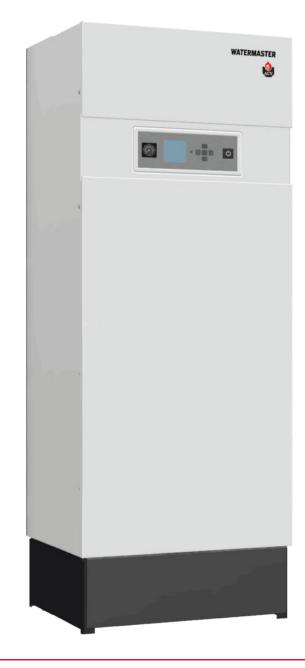
# WATERMASTER

#### Condensing hot water produce

Certified EN89

۲

- Equipped with ACVMax burner and modbus controls
- Condenses in hot water mode
- Delivers an exceptional peak and continuous volumes of hot water
- Stainless Steel domestic hot water tank
   no anode protection required
- Space saving footprint reduced plantroom space requirement
- Stainless steel heat exchanger reduces maintenance and increases system lifespan
- Multiple units can be grouped in cascade for larger applications or back up Vented or unvented use
- 6 models from 25 to 120 kW



219001

# BOILERS

# **TOTAL CONDENSING**

The only boiler which proposes total condensing in both the hot water and heating cycles

#### Why 'Total Condensing'?

With the high levels of building insulation now in place in most properties, requirements for heating output are reducing – and this trend is set to continue with some experts predicting a drop in the boiler load due to heating from around 75% to as low as 45%. At the same time, hot water usage is increasing year-by-year as demand rises for luxury bathing facilities such as high performance showers and spa baths. As hot water demand has in many cases already risen to over half the boiler load, the natural next step is to gain as much efficiency as possible in the production hot water.

The HeatMaster<sup>®</sup> TC has earned an outstanding reputation in the market as probably the only storage combination boiler in the world to actually fully condense during both the hot water and heating modes.

# **HOW DOES IT WORK?**

#### 1. Heating

۲

The heating return enters the lower circuit of the boiler, which allows the boiler to operate in condensing mode. The upper circuit of the HeatMaster® TC is kept at a consistently high temperature due to the internal shunt pump which ensures that the primary water circulates around the heat exchanger flue tubes.

#### 2. Hot water

With the upper circuit maintained at high temperature, the HeatMaster® TC is always ready to supply hot water on demand. The cold water enters through the dual coil at the base of the heat exchanger and is pre-heated before entering the hot water tank. The low temperature of the bottom circuit results in continuous condensation of the flue gases in hot water mode.

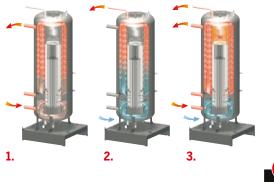
#### Non condensing combination boiler

HEATING	HOT WATER					
High efficiency condensing combi boiler						
HEATING	7% HOT WATER					
ACV HeatMaster <sup>®</sup> tc total condensing boiler						
HEATING	7%	HOT WATER	8%			

#### 3. Heating and hot water

۲

Once up to temperature, the HeatMaster® TC is capable of producing heating and hot water simultaneously.





# A HEART OF STAINLESS STEEL

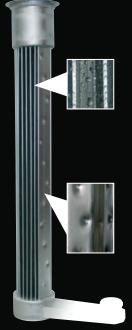
The heart of the HeatMaster<sup>®</sup> TC is ACV's specially designed stainless steel heat exchanger, built on over 80 years experience in the manufacture of heating and hot water products.

۲

- Excellent resistance to corrosion
- Low maintenance
- High efficiency

 $\bigcirc$ 

• Stable boiler temperature control as a result of the use of long flue tubes and a high water content in the system



# **HEATMASTER®**

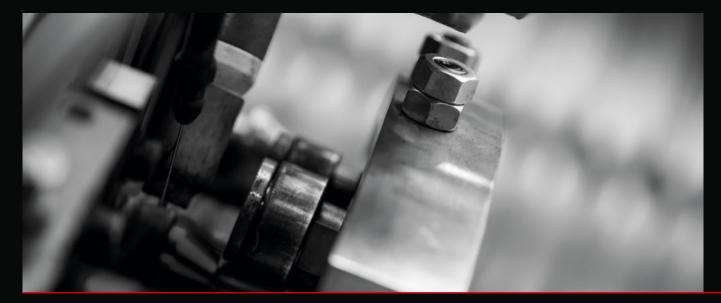
Greatly acclaimed for its robustness, the HeatMaster<sup>®</sup> product range marries power with small spaces. These free-standing boilers have the latest condensing technology on board.

The HeatMaster TC even allows for total condensation with its patented exchanger. Together with the integrated climate regulator, it yields an exceptional return on minimal energy consumption.

#### HM<sup>®</sup> 25 TC - HM<sup>®</sup> 120 TC



 $\bigcirc$ 



# HEATMASTER® 25 TO 120 TC



#### **Total Condensing**

٢

### 습습습습

#### **Certified performance NOx Class 5**

- Totally condensing in both hot water and heating modes
- Responsive to very high demands for hot water: up to 95 litres a minute for the 120 TC<sup>®</sup>.
- High primary capacity: ideal for modernising existing installations
- Modulating pre-mix air/gas burner results in low emissions of NOx: ecological, simple to regulate, easy maintenance, sure and silent
- HeatMaster<sup>®</sup> TC is equipped with the same ACVMax regulation as the Prestige.
- Power modulates between 10 and 25 kW (25 TC<sup>®</sup>) and between 30 and 120 kW (120 TC<sup>®</sup>)

DHW PERFORMANCE (AT	r = 30K)	25	35	45	70	85	120
Input (Natural Gas)	kW	25.0	34.9	45.6	69.9	85.0	120.0
Peak flow 40°C 10'	L/10'	382	440	498	825	868	973
Peak flow 40°C 60'	L/60'	1125	1360	1595	2542	3076	3839
Continuous flow 40°C	L/h	789	1104	1392	2061	2713	3440

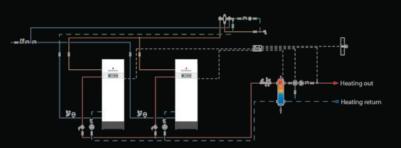
 $\bigcirc$ 

۲

FUEL OPTIONS	NATURAL GAS	PROPANE (LPG)	OIL
	1	1	×

# The only dual service heating cascade capable of total condensation

The installation of more than one HeatMaster® TC in cascade offers increased energy savings and more flexible performance than comparable systems, whether in new build or renovation.





 $\bigcirc$ 

# HEATMASTER® 60-70-100 N



- Multi-energy: the N version is compatible with ACV low NOx premix natural gas or LPG gas burners On/Off BG 2000 S/60, S/70 and S/100, with the oil burners of the ACV BM series and with all other certified burners available on the market.
- 3 models operating at a power range of 34,7 to 107 kW

۲

DHW PERFORMANCE (AT =	= 30K)	60 N	70 N	100 N
Input	kW	69,9	69,9	107
Peak flow 10'	L/10'	474	646	905
Peak flow 60'	L/60'	1942	2133	3172
Continuous flow	L/h	1835	1835	2776

FUEL OPTIONS	NATURAL GAS	PROPANE (LPG)	OIL	
	1	1	1	

# **HEATMASTER® 200 N**

• The 'N' Version is delivered without burner and can be fitted with any certified burner (gas or oil) available on the market

DHW PERFORMANCE (AT = 30	)К)	200 N
Input	kW	154
Peak flow 10'	L/10'	1570
Peak flow 60'	L/60'	4920
Continuous flow	L/h	4020

FUEL OPTIONS	NATURAL GAS	PROPANE (LPG)	OIL
	1	1	1





# **HEATMASTER® 201**

### Non-condensing high capacity Tank-in-Tank boiler

- Integration of ACVMax electronics
- 200 kW power output
- Possibility for cascade
- 6100 I/h continuous flow at 40°c

۲



۲

# **DELTA PRO S**

Floor standing combination boiler. Offers exceptional heating and hot water performance. Available in Gas, Oil and Propane.

- High performance low-cost combined boiler and water heater
- Stainless steel Tank-in-Tank design
- Choice of burner:

۲

- Low-NOx premix gas or LPG (BG2000-S)
- Pressure jet natural gas or LPG
- Pressure jet 28 sec or 35 sec oil
- Fully insulated with rigid polyurethane foam
- Stove enamelled casing
- Control panel including thermostats, thermometer, indicators and on/off switch

- Vented or unvented use
- Stove enamelled casing
- 25 to 55 kW output
- DELTA PRO PACK contains a pump,

A 4-way valve, a 3 bar safety valve and a 12 L expansion vessel in the heating circuit, and a 2 L sanitary expansion vessel and a 7 bar relief valve in the domestic hot water circuit.



# **NECO**

### Floor standing oil boiler

- Floor standing boiler with robust and reliable steel construction
- Simple to install and very easy to maintain with left/right handed door opening
- 3 models 25 30 43 kW



۲

15



# **ACVMAX®**

۲

#### Electronic components

The HeatMaster and Prestige boilers are fitted with the ACVMax<sup>®</sup> system control, designed to be flexible yet easy to use. The control panel with integrated manometer and LCD display provides all necessary information with the simple push of a button.

It monitors and controls the boiler to operate as efficiently as possible. ACVMax® monitors the boiler supply, return and flue gas temperatures and operates the igniter, gas valve and fan. It uses this information to modulate the boiler's firing rate to maintain the required setpoint. ACVMax® offers many advanced control options, which may be adjusted for various applications to achieve optimum boiler efficiency and operation. The integrated manometer allows a simple check of the pressure without having to power-on the boiler.



# SUPPORT OF MULTIPLE PROTOCOLS

#### Open to the outside world

 $\bigcirc$ 

The new HetatMaster and Prestige boilers are the most open appliances ever developed by ACV. With native support for open protocols such as OpenTherm® 3.2 and Modbus®, they can easily be integrated in BMS (Building Management System) systems. The boilers also provides control connectivity for 0-10 V modulation control and two room thermostats. The thermostats can be used in several configurations: On/Off switch with fixed temperature or set by outdoor sensor, constant temperature running on heating set point or set by outdoor sensor..

Further connections allow for triggering alarm systems, connecting different NTC sensors and cascade temperature sensor, drive pumps, solenoids and 3-way valves, ... All connections and functions are easily programmed and activated using the ACVMax<sup>®</sup> graphical user interface.





Off/Arrêt/Uit

Off/Arrêt/Uit

4. Relay configuration

ERROR

FLAME

•

# BOILERS

# **PRESTIGE® RANGE**

#### A heart of stainless stee

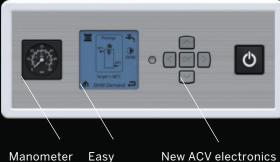
At the core of the Prestige is our unique stainless steel heat exchanger, developed after intensive research and laboratory testing, incorporating the fruit of ACV's long experience in the use of stainless steel in heating and hot-water applications over 80 years.

Combustion gases flow vertically into the heat exchanger flue ways: the flue gases condense in the lower section, drawing off all of the energy created by combustion and giving the Prestige its exceptionally high level of efficiency.

- Unrivalled corrosion resistance
- Reduced maintenance
- Optimum water volume for more stable operation
- High efficiency

۲

#### Users display and simplified controls



Manometer Easy operation

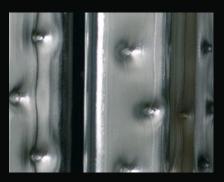
New ACV electronics with LCD display and extended functionality



### At the heart of the Prestige®, a unique heat exchanger











# **PRESTIGE®**

Prestige 24 and 32 solo

### ជ៌ជ៌ជំជំ

۲

#### **Certified performance Nox Class 5**

- Wall mounted gas condensing boiler with high efficiency (108%)
- Stainless steel heat exchanger for a long service life
- Modulating burner with 1:6 ratio, compatible with both natural gas and propane
- ACVMax<sup>®</sup> regulation with graphical user interface
- OpenTherm compatible
- 2 models in the series: 24 and 32 kW



### **PRESTIGE**® 24 and 32 excellence 公公公公公公

#### **Certified performance NOx Class 5**

- Wall mounted gas condensing boiler with high efficiency (108%)
- Stainless steel heat exchanger for a long service life
- Modulating burner with 1:6 ratio, compatible with both natural gas and propane
- ACVMax<sup>®</sup> regulation with graphical user interface
- OpenTherm compatible
- 2 models in the series: 24 and 32 kW
- Integrated 54 liters stainless steel Tank-in-Tank for DHW production



۲





### PRESTIGE® 42/50/75/100 and 120 Solo

ជ៌ជំជំជំជំ

#### **Certified performance NOx Class 5**

- Wall mounted gas condensing boiler with high efficiency (108%)
- Modulating pre-mix burner, adjust it's power to actual needs
- Stainless steel heat exchanger for a long service life
- ACVMax<sup>®</sup> regulation with graphical user interface
- New control panel with manometer and LCD display
- · Cascades up to 4 boilers without additional control unit
- 3 models from 42 to 69,9 kW, with power range of 5.2 to 69.9 kW
- 2 models from 100 to 120 kW, with power range of 12.5 to 115 kW



۲

# WHEN TO INSTALL A PRESTIGE?



In large residential properties where heating and abundant hot water are required.



In offices and public buildings where a flexible and reliable heating solution is demanded.

 $( \blacklozenge$ 



In all applications where there is significant variability and high peak demand in hot water requirements.

# INSTALLATION IN CASCADE - THE POTENTIAL TO CONNECT UP TO 4 PRESTIGE BOILERS WITHOUT ADDITIONAL CONTROLLER

ACV water heaters & boilers can be installed in a cascade: multiple boilers joined together to offer highly flexible power output, from 25% of any one boiler up to 100% of the combined power of all units. By doing this, system efficiency is optimal and emissions are held to a minimum.

This modular system, straightforward to install with the hydraulic kit developed and proposed by ACV, is particularly adapted to systems where there is a high variability in demand, and average normal load is only a fraction of the peak load.

Maximum overall yields and minimum consumption of energy are optimised via the simple-to-adjust interface, which gives the installer complete control over the system parameters. Our local design teams are available to help you select and configure the cascade which is best adapted to your needs.



# **4 EXCELLENT REASONS TO INSTALL A CASCADE**

#### 1. Efficiency

۲

A cascade system allows modulation of the heating power, from the minimum output of one boiler up to the maximum output of all the boilers. Which, in the case of a four-boiler cascade, gives a modulation ratio of at least 16:1, and of course all the permutations between.

#### 2. Back-up

The ACV cascade controllers optimise the potential of the available boilers, if one of the boilers fail, the controller simply adjusts the power of the remaining boilers to compensate.

#### 3. Easy commissioning

One, two, three or four boilers, the commissioning procedure is the same, simple and easy when undertaken by a qualified engineer.

#### 4. Easy maintenance

Any one boiler in a cascade can be serviced and maintained easily whilst the other boilers are operational. This enables the servicing to be carried out at any time of the year and not just during the traditional summer shut down period.



# **COMPACT CONDENS**

#### High output gas condensing boiler for industrial applications

- Available in 8 power versions:
- 168/210/252/294/340/425/510/595 kW
- Compact dimensions
- Floor standing, compact footprint (0,8 m<sup>2</sup>)
  Cast aluminium heat exchanger and manifold
- 107,5% or 108,1% efficiency
- Maxsys regulation



Maxsys Regulation

٢



 $\bigcirc$ 

Compact Condens		170	210	250	300	340	425	510	600
Nominal Input	kW	168	210	252	294	340	425	510	595
Number of elements		5	6	7	8	5	6	7	8
Efficiency at 30% load (EN677)	%	107,5			108.1%				
Operating pressure	bar	6	6			6			
Flue connection	Ømm	200	200			250			
Dimensions	WxHxL mm	600x1180x1320			700x152	0x1220	700x152	0x1550	
Weight	kg	193	210	227	244	314	345	375	433

( )

# **ELECTRIC BOILERS**

٠

When only electric will do

#### A complete range of high quality electrically powered boilers

Electrical energy has a future. With concerns about emissions ever greater, electric heating may stage an impressive comeback to popularity. Today, ACV proposes a range of models each serving a particular customer need, and offering the benefits of our experience in durable and efficient heating and hot water solutions. Even where alternatives are possible, your best choice may be to heat electrically.

The E-tech wall hung boiler is a good choice in a compact model that is installer-friendly and requiring low maintenance and can be fitted in homes or office environments either as a main or back-up supply of heating and hot water.

For electricity to succeed, it is vital that every watt of input finishes up as useful hot water and heating. The range of E-tech S Tank-in-Tank thermal storage units is designed to do just that. Four conveniently sized models are available and each benefits from the clever integration of our stainless steel Tank-in-Tank technology with an equally advanced electric boiler control system.

For the larger commercial and applications we propose the E-tech S, a Floor standing, high output, three phase electric boiler that can be used as a primary heat source or emergency back up.





۲

# E-TECH W

Wall mounted electric sealed system boiler. An economical alternative to LPG and Oil.

**ACV electric boilers are the choice for security and simplicity of use, with our trademark quality and comfort.** ACV proposes a complete range of electrical boilers, in each case adapted to the use of either domestic or industrial application.

 $\bigcirc$ 

- Install anywhere
- They do not need a chimney, and only require the minimum of ventilation (installation costs can be kept very low)
- Maximise security (no flammable fuels)
- Maximum reliability and longevity
- Low maintenance costs
- Extremely silent
- Wall-hung electric boiler for heating only
- Comfort of hydraulic heating
- Boiler body in steel
- Individual low power electric elements in Incoloy

• Two stage power modulation via mechanical thermostat: the E-Tech adapts automatically to the heating demand

- Complete with power relays, switchers, thermostat, manothermometer, heating pump, 8-litre expansion vessel and safety valve
- Two optional kits for instantaneous production of domestic hot water and second circuit respectively
- Compatible with wet radiator or underfloor heating installations
- Optional 24-hour or 7-day time clock
- 5 models with power: with power of 9, 15, 22, 28 or 36 kW







۲

# E-TECH S

# Compact floor standing combination electric boiler. Flexible installation options.

- Combines the strengths of electric heating with the advantages of Tank-in-Tank and the proven reliability of stainless steel.
- 4 power stages
- Quiet operation
- No flue
- Reduced maintenance (no landlord certification)
- Can be used as a stand alone water heater
- High hot water storage temperature reduces legionellae bacteria risk
- Flexible installation options for flow and return connections
- Vented or unvented use with pressure 'SystemPaks' available
- Integral primary heating sealed system kit and circulating pump
- Small footprint enabling compact installation
- Integrated controls



# E-TECH P

۲

#### Floor standing, high output, three phase electric boiler. Use as a primary heat source or emergency back up.

- Steel heating body and removable stainless steel heating elements
- Four power stages controlled by a stage delay timer
- Can easily be de-rated to provide less output if required
- Fully wired power and control circuits
- Stove enamelled casing
- Control panel including thermostats, thermometer, indicators and on/off switch
- Very little maintenance required
- Can also be used in multiple boiler installations
- 5 Models in the range from 57.6 kW to 259.2 kW



(57,6)

# **ROOM CONTROLS**

۲

# **COMFORT AT EVERY MOMENT**

# A COMPREHENSIVE RANGE OF DIGITAL ROOM CONTROLS





The ultimate room control, with touch screen and internet connectivity

- Wireless
- Internet connectivity
- Option: radiator for radiators or underfloor heating
- Accessible from anywhere with iOS or Android app



۲



#### **Central Controller**

۲

It is the smart hub of your heating system. It allows you to schedule, regulate and customize your warmth and hot water with its full-color touch screen and simple menu.



**Radiator Controller** 

Used to control the radiators (also available in option for underfloor heating), they act as both sensors and controllers. Using a two-way wireless communication they are constantly learning about your home interacting with the central controller.



### **Remote Access Gateway**

Connect your RC 300 system to a smartphone ot tablet using the Total Comfort Connect app, giving you control over your climate and comfort in your home.





# **RC 30**

# An affordable and easy to use thermostat

- Thermostat On/Off
- Digital clock
- 7 days program
- 4 daily changes
- AA batteries

 $\bigcirc$ 



٢

# **RC 35**

### Modulating room control unit

#### OpenTherm modulation

- Improves energy efficiency of heating systems by up to 15%
- 7 days program
- 6 daily changes
- 2-wire connection



# **RC 35 RF**

Wireless modulating room control unit

- OpenTherm modulation
- Improves energy efficiency of
- heating systems by up to 15%
- Wireless
- 7 days program
- 6 daily changes
- AA batteries



 $\bigcirc$ 

# **SPECIFICATIONS**

	RC30	RC35	RC35RF	RC300	
Dimensions	133x88x26			139x101x21	
Protocol	On/Off	Opentherm			
Boiler connection	Wired		Wireless Relay Bo	x	
Wiring	Potential free term	ninals	n/a		
Wireless range	n/a		30 m (in residenti	al environment)	
Wireless communication	n/a		ISM (868.0-870.0	0) Mhz, RX Class 2	
Daily programs	7	7			
Daily changes	4	6			
Frost Protection	Yes				
Manual Override	Yes				
Modulating	No	Yes			
Start/Stop optimization (auto-learning)	Yes				
Remote Access Gateway (Internet gateway)	n/a			Included	
Access from anywhere with iOS or Android app	No			Yes	
Power Supply	Two AA size LR6 1.5V batteries	n/a	Two AA size LR6 1.5V batteries	Rechargeable AA size 1.2V batteries	
Operating tempetature	0 – 40 °C				
Storage temperature	-20 – 50 °C				
Relative humidity (without condensation)	10 – 90%				
IP Protection		IP	<sup>2</sup> 30		

Operating the RC300 remotely requires an internet connection and an account on **mytotalconnectcomfort.com.** Your smartphone or tablet must be compatible with the app. Download the app on the **Apple App Store** or on **Google Play.** 

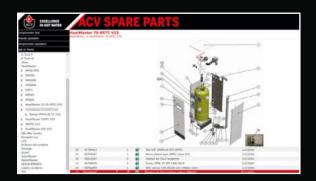
 $\bigcirc$ 

# **SERVICE &** ENGINEERING

۲

# **SPARE PARTS**

We have a large catalogue of spare parts at your disposal, both for current devices as well as previous references that are not produced anymore. We keep spare parts available for at least 10 years after the products have been discontinued. You can easily find the parts you need on a detailed technical drawing of the device in question.



Visit spareparts.acv.com

# ARCHIMEDES

۲

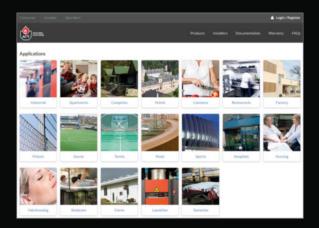
Professional tool to design and configure appropriate solutions for hot water applications.

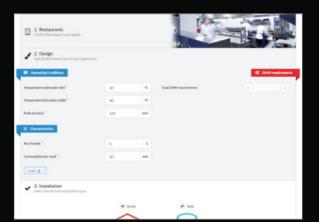
#### Calculate the ideal solution for Domestic Hot Water

As a leader in the design and manufacture of hot water generation systems, ACV offers outstanding expertise in the sizing of installations. Archimedes is the translation of this know-how into a simple and effective software tool.

This software enables professionals to calculate hot water demand for a large variety of applications (hotels, hospitals, athletic centres, camping areas, comfort stations, industrial processes,....): once the application data has been defined, Archimedes offers the user several configurations and provides the corresponding technical files to support further study.

 $\bigcirc$ 





Visit archimedes.acv.com



# ECODESIGN & © ENERGY LABELLING

(

#### Towards a greener type of energy!

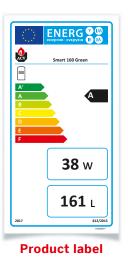
September 2015 saw the implementation of the European Ecodesign Directive. Aim of the directive: reducing negative environmental impacts of products by changing the behaviour of energy consumers.

As a result only the sale of condensing boilers is allowed from now on. These appliances (and installations of which they are part of) require an energy label

#### Everything becomes easier with this label

All applicable products being sold from now on need to have an energy label. Most household appliances already carry such a label. These labels make it easier for the consumer to compare energy performance of different products.

From now on, all our products will thus be delivered with these labels.



#### A system that meets all the standards

As an installer you're responsible for the labels of the systems you install. To help you better with this, we offer you an online tool. It enables you to quickly and efficiently calculate the energy performance of the complete installation. In addition you can download the right labels with the tool. After all the energy performances vary according to the specific combination of all elements you have chosen for your installation.

Make it easy for yourself by ordering all components of a package from ACV and generate the label online. We offer a complete range, from heating to solar devices and thermostat. Completely in line with what your customers want and guaranteeing excellent energy performance

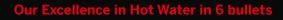
#### Create your own labels through: ecodesign.acv.com



System label



۲





۲

4

#### Stainless steel

Elevates our products to an outstanding level of reliability and durability



### Integrated solutions

All our products work together as a team to fulfill every expectation



#### Quality

The highest quality of materials, technical experts, and production line management result in high quality solutions



### Lifetime values

Most of ACV Triangle Tube products can be adapted to renewable energy sources



### Product innovation

Our commitment to in-house R&D results in a unique and advanced product range



4

#### **Contractor Resources**

Get all the support you need with training, system design, advice and service from our proactive local support teams



#### Belgiun

ACV Belgium nv/sa Oude vijverweg 6 1653 Dworp - Belgium T +32 (0)2 334 82 40 Belgium.info@acv.com

#### Chile

Albin Trotter y ACV Itda San pablo 3802 Quinta normal -Santiago - Chile T +56 2 772 92 62 F +56 2 772 92 63 Chile.info@acv.com

#### China

۲

ACV Heating technology (Beijing) co., ltd. 9/f China central place tower 2 79 Jianguo road, Chaoyang district Beijing 100025 - China T +86 10 5920 4288 China.info@acv.com

#### **Czech republic & Slovakia**

ACV Cr spol. s r.o. Na krecku 365 109 04 Praha 10 - Czech republic T +420 2 720 83 341 F +420 2 720 83 343 Ceskarepublika.info@acv.com

#### Franc

ACV France sa Zac du bois chevrier, 122 rue Pasteur 69780 Toussieu - France T +33 4 72 47 07 76 F +33 4 72 47 08 72 France.info@acv.com

۲

#### Germany

ACV Wärmetechnik gmbh Gartenstrasse 08132 Mülsen St. Jacob -Germany T +49 37601 311 30 F +49 37601 311 31 Deutschland.info@acv.com

#### Italy

ACV Italia Via pana 92 48018 Faenza (ra) - Italia T +39 0546 64 61 44 F +39 0546 64 61 50 Italia.info@acv.com

#### Polan

ACV Polska sp. z.o.o. ul.witosa 3 87 - 800 Włocławek - Poland T +48 54 412 56 00 F +48 54 412 56 01 Polska.info@acv.com

 $\bigcirc$ 

#### Russia

ACV Russia 8th Tekstylschicov 11, of. 220 109129 Moscow - Russia T +7 499 272 1965 Russia.info@acv.com

#### Spain

ACV Sspana s.a. C/de la teixidora 76 Pol. ind. les hortes 08302 Mataro - Spain T +34 93 759 54 51 F +34 93 759 34 98 Spain.info@acv.com

#### **United Kingdom & Ireland**

ACV UK Itd St. David's business park Dalgety bay - fife - ky11 9pf T +44 1383 82 01 00 F +44 1383 82 01 80 Uk.info@acv.com

#### JSA

Triangle Tube 1240 Gorest parkway - suite 100 West deptford nj 08066 T +1 856 228 8881 Sales.triangletube@acv.com

#### Distributor



#### **ACV INTERNATIONAL NV/SA** Oude Vijverweg 6

1653 Dworp - BELGIUM T +32 (0)2 334 82 40 international.info@acv.com



EXCELLENCE IN HOT WATER A BRAND OF GROUPE ATLANTIC