

Advenco Ardent 9–36 kW

Indirect Electric Wall-Hung Boilers



The Advenco Ardent range of wall-hung electric boilers are designed to provide a high capacity, reliable, and compact solution to a building's hot water and central heating demands.

The Advenco Ardent electric boiler range features multiple electric heating elements immersed into an integrated water storage tank to provide a rapid and reliable source of thermal energy to serve a heating system or indirect water heater.

Available as a compact wall-hung appliance with outputs from 9 to 36 kW, the Ardent electric boiler range includes stepped power control to provide optimum heating output and economically adjust the heating load when approaching the set point temperature, and range rating to tailor the boiler power to suit the application. The Ardent range is available in two model ranges:

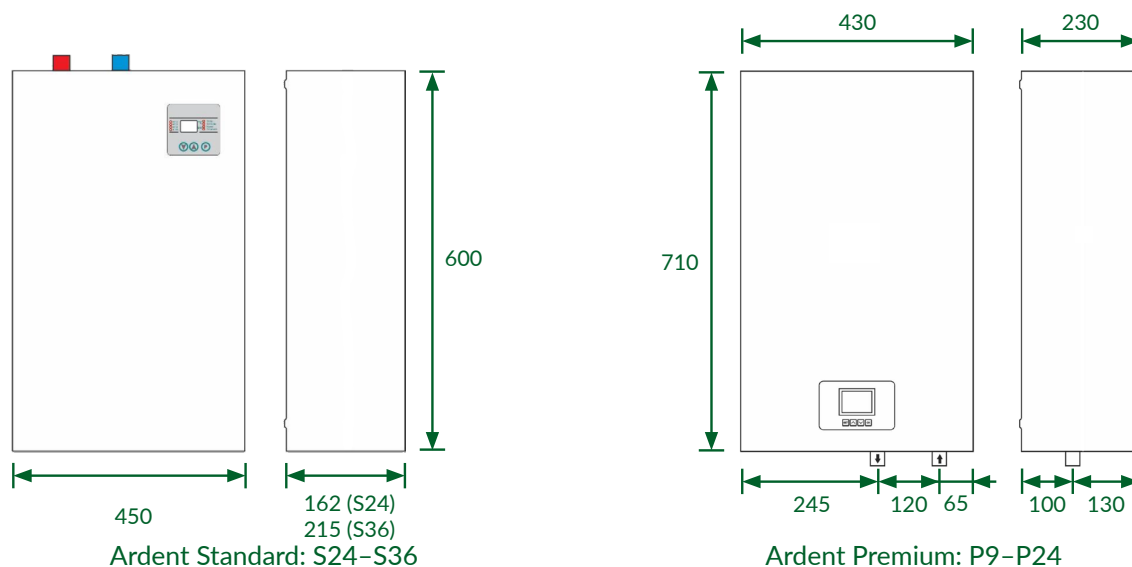
S Range: The Ardent Standard range features three heating elements with thermostat input and output control to an external pump.

P Range: The Ardent Premium range features six to nine heating elements and an integrated expansion vessel, relief valve, and circulation pump. The Premium range features all controls of the Standard range in addition to controls for a 3-port valve and fault output.

All boilers feature a front mounted LCD display and protective IP20 or IP40-rated outer shell as well as integrated overheat safety protection. The Ardent range is ideal for integration with heat pump systems to provide a high temperature energy source in the coldest period of the year.

FEATURES

- Indirect hot water system design eliminates scale build-up common on direct electrical immersion heaters.
- Multiple heating elements per unit provide inbuilt redundancy.
- Stepped element control to reduce start-up current and excessive or uneven wear on heating elements.
- Compact wall-hung arrangement.
- Simple integration into existing systems.
- Modern electric-only operation avoids reliance on gas energy supplies.



Ardent Standard: Specifications	S24		S36	
	Power supply	400V 3phase/50Hz	440V 3phase/50Hz	400V 3phase/50Hz
Power output	24.0 kW	29.0 kW	36.0 kW	43.6 kW
Full load current at design resistance	35 A	39 A	53 A	58 A
Element configuration	3× 8.0 kW	3× 9.7 kW	3× 12.0 kW	3× 17.9 kW
Element rod resistance design/tolerance	19.8Ω ±10%		22.0Ω ±10%	
Heating rod efficiency	100%		100%	
Inlet and outlet connections	1" (DN25)		1" (DN25)	
Boiler water content (l)	14.2		21.0	
Maximum operating temperature (°C)	80		80	
Operating pressure range (bar)	0.5 – 3.0		0.5 – 3.0	
Sound power level (dB)	46		46	
Housing protection	IP20		IP20	
Dimensions H × W × D (mm)	600 × 450 × 162		600 × 450 × 215	
Empty weight (kg)	13.5		17.2	

Ardent Premium: Specifications	P9			P12		P24	
	Power supply	230V 1ph/50Hz	400V 3phase/50Hz	440V 3phase/50Hz	400V 3phase/50Hz	440V 3phase/50Hz	400V 3phase/50Hz
Power output	9.0 kW	9.0 kW	10.9 kW	12.0 kW	14.5 kW	24.3 kW	29.4 kW
Full load current at design resistance	40 A	13 A	15 A	18 A	20 A	36 A	39 A
Element configuration	6× 1.5 kW	6× 1.5 kW	6× 1.8 kW	6× 2.0 kW	6× 2.4 kW	9× 2.7 kW	9× 3.3 kW
Element rod resistance design/tolerance	35.3Ω ±10%			26.5Ω ±10%		19.6Ω ±10%	
Heating rod efficiency	100%			100%		100%	
Inlet and outlet connections (inch)	G 3/4"			G 3/4"		G 3/4"	
Boiler water content (l)	12.5			12.5		12.5	
Expansion vessel water content (l)	7.0			7.0		7.0	
Maximum operating temperature	80			80		80	
Operating pressure range (bar)	0.8 – 2.2			0.8 – 2.2		0.8 – 2.2	
Sound power level (dB)	32			32		32	
Housing protection	IP40			IP40		IP40	
Dimensions H × W × D (mm)	700 × 430 × 230			700 × 430 × 230		700 × 430 × 230	
Empty weight (kg)	25			25		25	