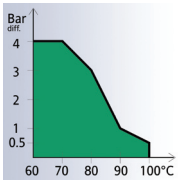
APV Compakva S36+

District heating unit

Product description
The APV Compakva 36+ is a complete district heating unit for heating of domestic water and for differential pressure control of district heating for direct under-floor heating and central heating. The unit has radiator system outlets prior to the distribution system for use in combined central heating systems. The simple and extremely compact design makes the APV Compakva 36+ the smallest unit of its type on the market.

- Innovative technology and design
- The smallest on the market
- Low operating costs

Application
The APV Compakva 36+ can be connected directly to the district heating network at maximum flow temperature of 130°C. Operating conditions depend upon differential pressure and the temperature of the district heating water. To secure a smooth and noise free operation the unit is equipped with a differential pressure controller.
The graph illustrates operating conditions without the need for a differential pressure controller for the domestic water. The use of a differential pressure controller set at a maximum value of 40 kPa is recommended for levels outside the green area.



Components and function
The APV Compakva 36+ consists of the following main components: An APV multifunctional block, an APV plate heat exchanger, two thermostatic valves, a differential pressure controller and a pump.

APV multifunctional block
The multifunctional block functions as a pipe arrangement, cover, back panel and sensor accelerator. The special channel design combined with the position of the sensor in the multifunctional block accelerates the
closing function of the valve. This contributes to low energy consumption and reduces operating costs.

Differential pressure controller
The differential pressure controller ensures optimum operating conditions for the thermostatic radiator valves.

Pump
The pump on the central heating circuit circulates the water through the central heating circuit and the plate heat exchanger. The extremely energy-efficient pump features a built-in frequency converter that reduces power consumption by as much as 40% compared to traditional pumps, and eliminates noise.

Temperature control
The APV Compakva 36+ features temperature control of both domestic water and central heating. The domestic water thermostatic valve ensures a consistent tap water temperature. When the district heating unit is not in use, the thermostatic valve ensures a suitable idle temperature. This means that hot water is available within a few seconds, and unheated domestic water is not wasted. The thermostatic valve for central heating ensures a consistent central heating temperature

Domestic water circulation
The APV Compakva 36+ is ready-fitted domestic water circulation installations ensuring hot water as soon as the tap is turned on, no matter how far the tap is from the water heater. Circulation pipes can be connected to the built-in ½" end caps - or outside the unit.

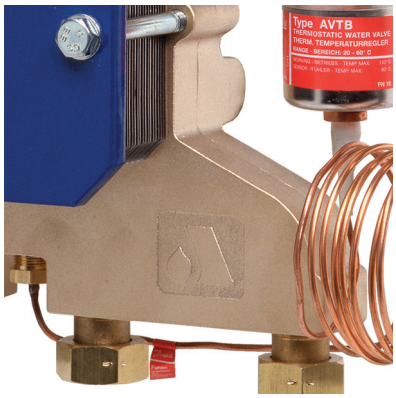
Domestic water safety equipment
The domestic water system must be fitted with a safety valve in accordance with local regulations. The patented multifunctional block makes it possible to remove the ½" end cap and mount a safety valve (pos.6).

Note: Safety valve, non-return valve and circulation pump are not supplied by APV.

Mounting
The APV Compakva 36+ is designed for wall-mounting. Fitting is simple and the positioning of all pipe connections at pipe bracket distance from the wall facilitates a neat pipe arrangement.

Cabinet
Cabinet for APV Compakva 36+ is available upon request.

Packaging
APV Compakva 36+ comes in shock-resistant packaging.



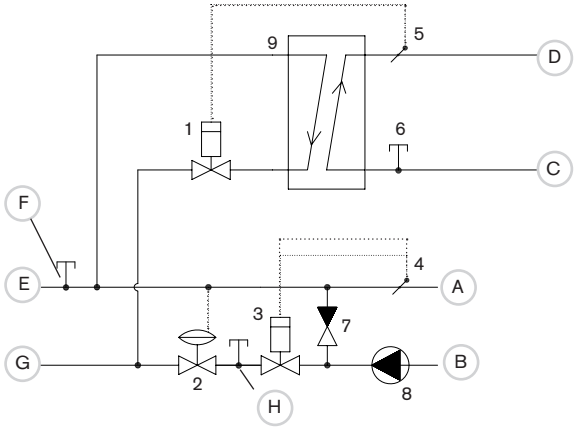
Technical data and specifications

Domestic water system									
APV Type	District heating temperature	60°C / 19,5°C			60°C / 21°C				Cabinet
	Domestic water temp.	10°C / 45°C			10°C / 45°C				
	Total pressure loss (DH) kPa	Capacity kW	Domestic water l/h	No. of houses	Total pressure loss (DH) kPa	Capacity kW	Domestic water l/h	No. of houses	
Compakva S36+	25	32,3	795	1	40	42,4	1043	1	Additional equipment

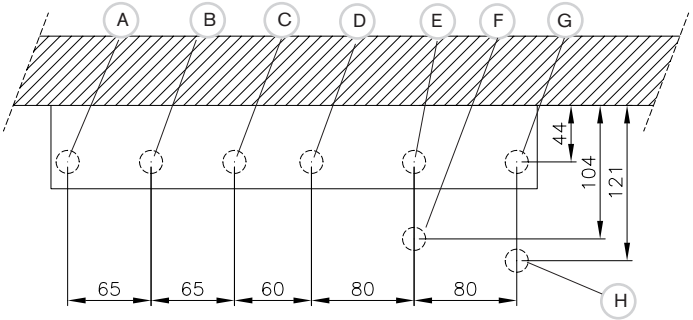
Measurements (without cabinet)				
APV Type	Width mm	Height mm	Depth mm	Weight kg
Compakva S36+	400	350	225	19,7

Pressure level	PN10
Max temp.	130°C
Connections	3/4"
Materials	Red brass/stainless steel AISI 316

Flow diagram



Connections seen from above



1. Thermostatic valve, domestic water
2. Differential pressure controller
3. Thermostatic valve, under-floor heating
4. Temperature sensor, under-floor heating
5. Temperature sensor, domestic water
6. ½" end cap for possible circulation pipe
7. Non-return valve
8. Low energy pump
9. APV plate heat exchanger

A Under-floor heating, forward
B Under-floor heating, return
C Cold domestic water, inlet
D Hot domestic water, outlet
E District heating water, forward
F Radiator, forward
G District heating water, return
H Radiator, return

APV, An SPX Brand, Platinvej 8, 6000 Kolding, Denmark
Phone: +45 70 278 444 Fax: +45 70 278 445
Email heat.europe@apv.com

For more information about our worldwide locations, approvals, certifications, and local representatives, please visit www.apv.com.

Issued: 10/2008 1001-03-10-2008-GB

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