Type summary   Albatros^2

The **Albatros^2 family is a comprehensive range of controls. It offers solutions for basic to complex heating plant.**

- **Uniform and integral operating philosophy with clear-text display and menu-driven operation**
- **Wireless or hard-wired peripheral devices (e.g. room unit, outside sensor)**
- **All-polar connections**
- **Extensive service and diagnostic functions**
- **remote supervision**

Use

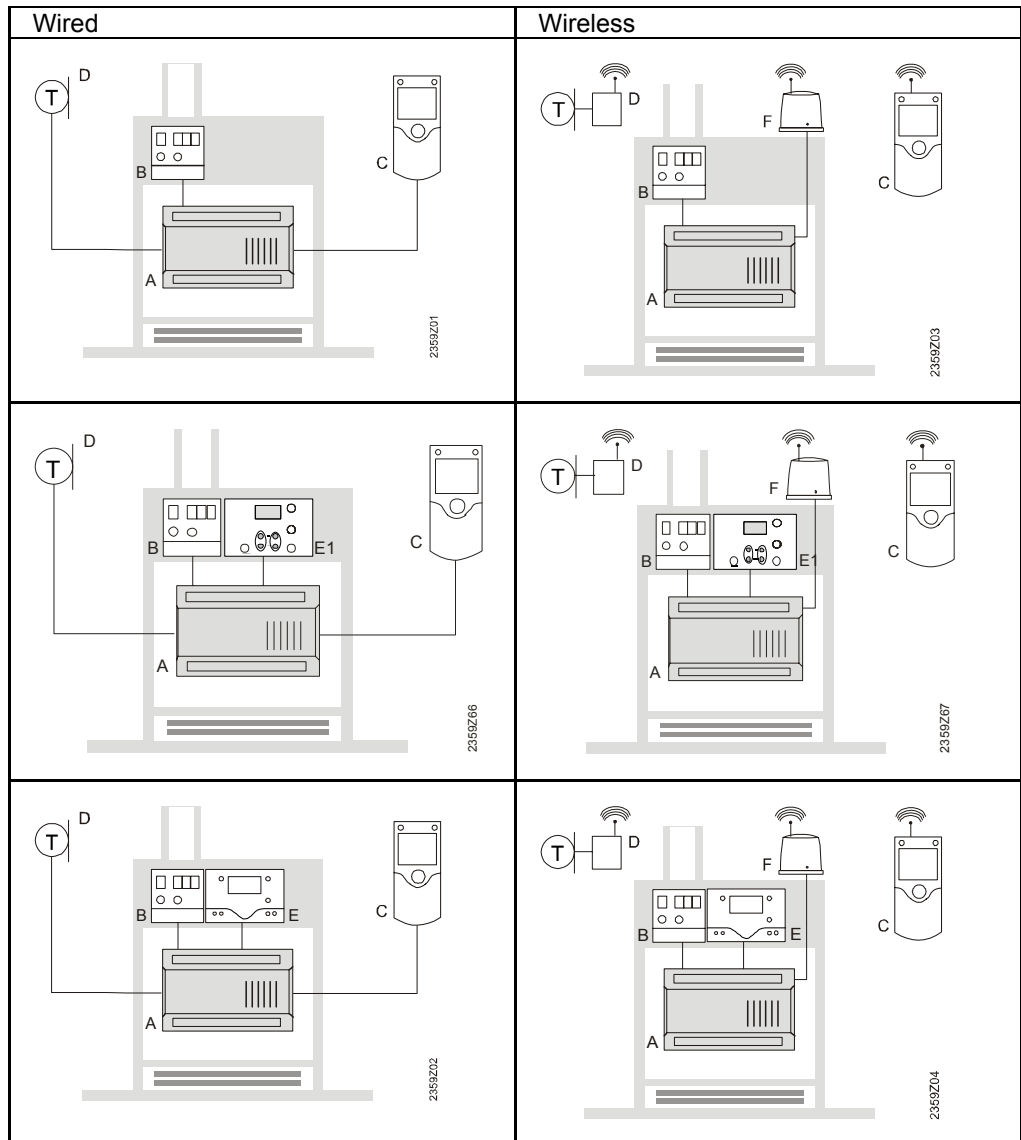|	
Types of buildings	• Residential and nonresidential buildings with own zone heating and DHW heating facility • Residential and non-residential buildings with a central heating plant
Types of heating systems	• Standard heating systems with: Radiator, convector, floor, ceiling and radiation heating systems, DHW heating and buffer storage tanks • Types of heat sources: Oil/gas boilers, heat pumps, solar plant, solid fuel boilers

Functions

	RVS13.123 RVS13.143 RVS53.183	RVS43.143	RVS63.243 RVS63.283	RVS61.843	RVS46.530	RVS46.543
Heat source boiler						
1-stage burner	•	•	•			
2-stage burner			•			
Modulating burner			•			
Electronic temperature controller (EN14597 / EN 60730-2-9)	•	•	•			
Minimum and maximum limitation of the boiler temperature	•	•	•			
Optimum start control with minimum limitation of the boiler temperature	•	•	•			
Protective boiler startup	•	•	•			
Protection against boiler overtemperatures (pump overrun)	•	•	•			
Burner cycling protection by observing a minimum burner running time	•	•	•			
Maintained boiler return temperature with bypass pump	•	•	•			
Maintained boiler return temperature with mixing valve		•	•			
Frost protection boiler	•	•	•			
Fuel-type changeover with external heat producer		•	•			
Economy mode		•	•			
Modulating boiler pump			•			
Heat source heat pump						
Control of brine/water, water/water or air/water heat pumps				•		
1- or 2-stage heat pumps				•		
Detailed fault status, service and error messages				•		
Electric immersion heater (3-stage) for buffer and DHW storage tanks				•		
Monitoring of high-pressure, low-pressure, hot-gas, compressor windings and compressor three-phase current				•		
Minimum compressor on / off time				•		
Compensation of running time-related surplus heat / heat deficit				•		
Frost protection functions, defrost functions				•		
Tariff control				•		
Fuel-type changeover with external heat producer				•		
Active and passive cooling				•		
Heat source solar						
1 collector field	•	•	•	•		•
2 collectgor fields		•	•	•		
DHW storage tank charging	•	•	•	•	•	•
Buffer tank charging		•	•	•		
Swimming-pool filling		•	•	•		
Storage tank with external heat exchanger		•	•	•		
Overtemperature protection:collector	•	•	•	•	•	•
Pump hours-run counter, energy yield	•	•	•	•	•	•
Frost protection	•	•	•	•	•	•
Modulating solar pump			•	•		
Heat source solid fuel boilers uncontrolled						
Differential temperature switch		•	•			
Selectable reference (B31, B41, …)		•	•			
Pump hours run counter		•	•			
Frost protection		•	•			
Heat source cascade						
Cascade master for up to 16 heat generators		•	•	•		
Cascade slave		•	•	•		
Mixed cascade, with step-controlled and modulating heat generators		•	•	•		
Separate DHW circuit		•	•	•		
Cascade pump, high return temperature maintenance		•	•	•		
Various cascade strategies		•	•	•		
Heating circuit control						
Automatic, continuous and protection mode	•	•	•	•	•	•
Weather compensation only	•	•	•	•	•	•
Weather compensation with room influence	•	•	•	•	•	•
Room temperature compensation only	•	•	•	•	•	•
1st mixing circuit/pump heating circuit with 7-day program	•	•	•	•	•	•
2nd mixing circuit/pump heating circuit with 7-day program	•		•			
Optional pump heating circuit with 7-day program	•	•	•	•	•	•
Holiday program	•	•	•	•	•	•
Inclusion of thermal dynamics of building (building time constant)	•	•	•	•	•	•
Automatic adaptation of the heating curve	•	•	•	•	•	•
Automatic summer / winter changeover, Automatic 24-hour heating limit	•	•	•	•	•	•
Fast setback and boost heating, OSSC	•	•	•	•	•	•

Raising of setback temperature based on outside temperature	•	•	•	•	•	•
Floor cure function	•	•	•	•	•	•
Frost protection flow, building and plant	•	•	•	•	•	•
Primary controller, delivery pump		•	•	•	•	•
Modulating heating circuit pump			•	•		
Cooling circuit control						
Automatic and continuous mode		•		•	•	•
Weather-compensation only		•		•	•	•
Weather-compensation with room temperature influence		•		•	•	•
Room temperaturecompensation only		•		•	•	•
1 mixing circuit/pump heating circuit with 7-day program		•		•	•	•
Holiday program		•		•	•	•
2-pipe or 4-pipe hydraulic system		•		•	•	•
Humidity monitoring		•		•	•	•
Enable signal for external cooling generator		•		•	•	•
Enable signal for external dehumidifer		•		•	•	•
DHW control						
DHW storage tank charging with 7-day program	•	•	•	•		•
DHW charging with charging pump or diverting valve	•	•	•	•		•
DHW control with temperature sensor or control thermostat	•	•	•	•		•
Selectable priority (absolute / shifting / none)	•	•	•	•		•
Selectable DHW program (based on DHW program / heating programs / 24 hours)	•	•	•	•		•
DHW push, manually or automatically	•	•	•	•		•
Legionella function	•	•	•	•		•
DHW discharging protection	•	•	•	•		•
Control of DHW circulating pump, electric immersion heater	•	•	•	•		•
Overtemperature protection DHW storage tank	•	•	•	•		•
Primary controller, flow-type calorifier		•	•	•		•
Frost protection DHW	•	•	•	•		•
Buffer storage tank						
Automatic heat generation lock		•	•	•		
Buffer storage tank minimum temperature		•	•	•		
Buffer storage tank reloading		•	•	•		
Overtemperature protection buffer storage tank		•	•	•		
Frost protection buffer storage tank		•	•	•		
General						
LPB communications for connection into a system		•	•	•	•	•
Automatic summer/winter time change	•	•	•	•	•	•
Automatic identification of sensors	•	•	•	•	•	•
Input and output test	•	•	•	•	•	•
Service and error messages	•	•	•	•	•	•
Status display for partial plant diagram	•	•	•	•	•	•
Parameter reset	•	•	•	•	•	•
Read/write parameters with operator units	•	•	•	•	•	•
Multifunctional inputs and outputs	•	•	•	•	•	•
Connection facility radio receiver	•	•	•	•	•	•
Extension module for 2 mixing valve/pump circuit	• •		•	•	•	•
Extension module for function extensions		•	•	•	•	•
Connection facility service tool (via OCI700)	•	•	•	•	•	•
Connection facility for remote monitoring (via OCI611)	•	•	•	•	•	•

Range summary

	Wired	Wireless
Operation with room unit	2359Z01	2359Z03
Operation with "basic" operator unit (additional room unit optional)	2359Z66	2359Z67
Operation with "clear-text" oeprator unit (additional room unit optional)	2359Z02	2359Z04

A   Basic unit RVS…
B   Power section AVS16…
C   Room unit QAA75… / QAA78…
D   Outside sensor AVS13…
E   HMI AVS37…
F   Radio module AVS71…

Product image

Basic unit
RVS1../RVS5..
RVS4../RVS6..

The basic unit is the actual heating / heat pump controller with all-polar input and output terminals. It has no operating elements. Operation and communication take place via detached wired or wireless ancillary units.
Optional accessories:
RAST5 connector AGP.. (see user manual)
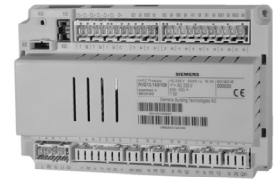
Expansion module
AVS75.390

Using the mixing valve module, the basic unit can be extended by one heating circuit. The module is connected via a ribbon cable and has the other connection terminals integrated.
Optional accessories:
Connecting cable AVS82.490 (0.4 m) to basic unit
RAST5 connector AGP.. (see user manual)

Operator unit clear-text
AVS37.294

The operator unit is for integration into the boiler and is then wired to the basic unit. It displays the functions and settings of the basic unit.
The operator unit is supplied complete with housing, requiring a panel cutout of 96 x 144 mm.
Optional accessories:
Connecting cable, AVS82.491, (1 m) to basic unit
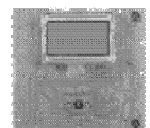Cover, AVS92.290, as protection from physical contact on the rear of the unit

Operator unit basic
AVS37.390

The operator unit is for integration into the boiler and is then wired to the basic unit. It displays the main functions and settings of the basic unit, making them convenient and easy to operate.
The operator unit is available in a PCB version

Room unit clear-text
QAA75.610
Without LCD illumination

QAA75.611
With LCD illumination

QAA78.610

The room unit offers clear-text operation and records the room temperature. It can be fitted in the room or on the boiler, depending on the requirements. It displays the functions and settings of the basic unit, making them convenient and easy to operate.
It is available in 2 versions: Wireless (QAA78..) or wired (QAA75..).
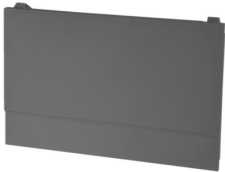Optional accessory:
Service cable AVS82.495

Room unit basic
QAA55.110

The room unit offers clear-text operation and acquires the room temperature.

Power supply AVS16.290 q	The power section powers the components used in the boiler. It has a mechanical STB (safety limit thermostat), is fused, and has 4 switches and lamps.	
Dummy cover AVS38.291	Cover for openings measuring 96x144 mm	
Radio module AVS71.390	The radio module with transmitter, receiver and antenna makes possible the wireless connection from basic unit to unit and from the outside sensor. It is connected to the basic unit via a ribbon cable.	
Radio repeater AVS14.390	The radio repeater is used for covering longer or difficult distances.	
Wireless external sensor AVS13.399	The external sensor is part of a kit consisting of sensor and radio module. It is used as an extension to the radio module and permits wireless outside temperature measurements.	
Sensor QAC34, QAD36 QAR36, QAZ36	NTC temperature sensors QAC34, 1 kΩ (A-characteristic) QAD36, QAR36, QAZ36 10 kΩ (A-characteristic)	
Interfaces OCI..	OCI364.03 Connection of RVS43/46/63 controllers to boiler controllers with OpenTherm interface. OCI700: Using the ACS7xx software, the interface facilitates visualization, handling and recording of setting parameters on site. OCI611: Using the ACS7xx software, the interface facilitates remote monitoring and operation of the system via the telephone network from any location.	

Type summary

ASN	Name	B2358	U2357*01	U2354*01	U2355*01	U2357*01a	U2354*01a	U2355*01a	P2359
	B = Operating instructions **U** = User manual **P** = Basic documentation								
RVS13.123	Basic unit boiler		X			X			X
RVS13.143	Basic unit boiler		X			X			X
RVS53.183	Basic unit boiler		X			X			X
RVS43.143	Basic unit boiler, communicating			X			X		X
RVS63.243	Basic unit boiler, communicating			X			X		X
RVS63.283	Basic unit boiler, communicating			X			X		X
RVS61.843	Basic unit heat pump, communicating				X			X	X
RVS46.543	Basic unit zone, communicating								X
AVS75.390	Extension module		X	X	X				
AVS37.294/109	Operator unit boiler (en, de, fr, it, nl, da, es, pt)	X	X	X					
AVS37.294/209	Operator unit WP1 (en, de, fr, it, nl, da, es, pt)				X				
AVS37.294/309	Operator unit WP2 (en, de, fr, it, nl, da, es, pt)				X				
AVS37.294/509	Operator unit boiler (en, cs, sk , pl, ru, none)	X	X	X					
QAA75.61../101	Room unit heating circuit (en, de, fr, it, nl, da, es, pt)	X	X	X	X				
QAA75.61../301	Room unit heating circuit (en, de, fr, it, nl, da, es, pt)	X	X	X	X				
QAA75.61../501	Operator unit boiler (en, cs, sk , pl, ru, none)	X	X	X	X				
QAA78.610/101	Operator unit heating circuit, wireless	X	X	X	X				
QAA78.610/301	Room unit heating circuit, wireless (en, de, fr, it, nl, da, es, pt)	X	X	X	X				
QAA78.610/501	Room unit heating circuit, wireless (en, cs, sk , pl, ru, none)	X	X	X	X				
AVS16.290	Power section		X	X	X				
AVS71.390	Radio module		X	X	X				
AVS14.390	Radio repeater		X	X	X				
AVS13.399	Wireless outside sensor		X	X	X				
QAC34	Outside sensor	Q1811							
QAD23	Strap-on temperature sensor	Q1801							
QAZ36	Immersion temperature sensor	Q1843							
QAR36	Clip-on temperate sensor	Q1806							
OCI364.03	OpenTherm/LPB Interface	Q2905							
OCI700	Service tool	N5655							
OCI611	Central communication unit	N2533							

Building Technologies
HVAC Products

Type summary