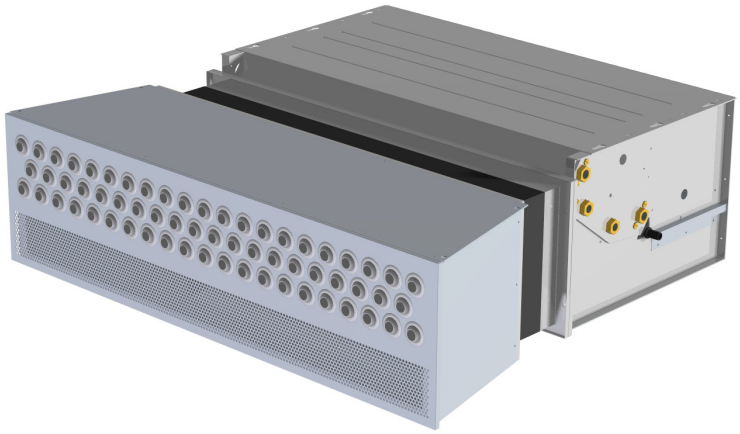
SCHAKO
KLIMA-LUFT

Compact Air-Conditioning Module

Model Aquaris KWB



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Compact Air-Conditioning Module Model Aquaris KWB

Contents

Compact Air-Conditioning Module Model Aquaris KWB

Description

The compact air-conditioning module Aquaris Silent has been designed for installation in suspended corridor ceilings for the air-conditioning of office rooms. The arrangement of supply air and return air grilles on one side of the room creates a rolling motion with an optimum air flow through the room.

The plug-in compact air-conditioning module allows a cost-efficient and quick installation in the suspended ceilings of the corridor areas located next to the rooms to be air-conditioned. This allows full utilisation of the room heights, thus reducing the building height.

The sound-optimised housing guarantees a very quiet operation.

The compact air-conditioning unit Aquaris KWB air-conditions and dehumidifies while complying with the comfort requirements according to DIN EN 13779. The sensible cooling capacity is up to 1.46 kW at air flow rates of 315 m²/h. A penetration depth of up to 5 m into the room is achieved. As standard, the unit is equipped with 3 different speeds and available in 2-pipe or 4-pipe designs. It is possible to integrate room operating devices from a wide range of brands.

Room air is sucked into the compact air-conditioning unit via the perforated air intake grille, cleaned by the horizontally built-in filter, cooled or heated in the Aquaris and returned to the room as cooled or heated supply through a nozzle diffuser. The compact air-conditioning module can be operated either as pure recirculating air cooling device or as recirculating air / fresh air device. To this end, processed external air can be supplied to the blow unit via a lateral connecting piece in the false ceiling and blown into the room via the nozzle diffuser. The filter can be pulled out of the device laterally, either on one side or, where space is restricted, on both sides for sectioned designs.
For maintenance, service, retrofitting, etc., inspection openings in sufficient number and size must be provided on site.

Characteristics of the combined supply and return air grille of the KWB type.
Supply air is delivered into the room at an angle from one side. The developing room roll enables optimum room flow, allowing fresh supply air to be evenly distributed in the entire room. In all KWB models, a stable air jet is produced, which is stable even the temperature difference is < 10 K and does not drop uncontrollably into the occupied area. The adjustable nozzles allow the air flow to be set to a divergent flow, thus increasing the induction and a very good reduction in temperature and speed as a result of this. The high inductive effect gives an even temperature distribution also in the heating mode.

Construction

Plenum box
- Galvanised sheet steel

Nozzles
- Plastic, similar to RAL colour 9010 (white) or RAL 9005 (black)

Faceplate
- Sheet steel painted to RAL 9010 (white)

Filter
- Filter class G2
- Steel frame

Housing
- Galvanised sheet steel

Condensate pan
- Galvanised sheet steel

Fan
- Fan housing made of galvanised sheet steel with aluminium impeller Aluminium

Heat exchanger
- 2-pipe
- 4-pipe
- Galvanised sheet steel frame
- Aluminium blades
- Copper pipes

Flexible connecting piece
- Galvanised sheet steel frame

Model

KWB - Faceplate with integrated mobile nozzles (3-row) for supply air, punched grille for return air.

Accessories

Room operating unit
- Two-point controller for heating and/or cooling systems

Valves and valve drives
- for water-side control of air after-treatment devices

Condensate pump
- for draining the water of condensation formed at the cooling register

Valve condensate pan
- Galvanised sheet steel, heat-insulated

Relay kit
- for decoupling up to 5 Aquaris Silent operated in parallel at one control unit.

Compact Air-Conditioning Module Model Aquaris KWB

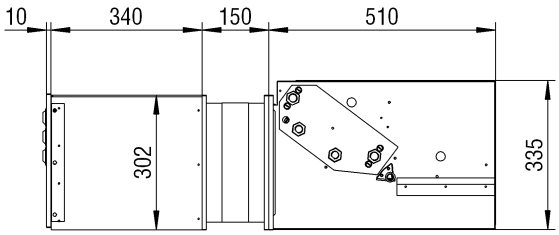
Models and dimensions

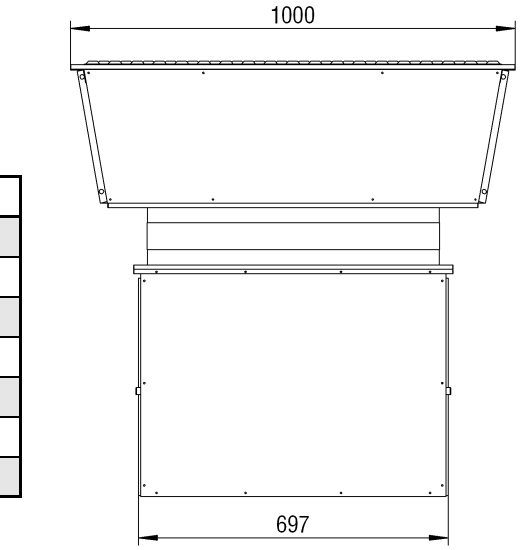
Dimensions

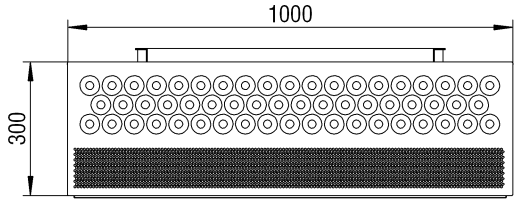
Aquaris KWB-10

Water inlet temperature	7 °C
Water outlet temperature	12 °C
Air inlet temperature	27 °C
Relative humidity	47%

Aquaris KWB-10-2-R	**max**	**medium**	**min**
Air volume (m³/h)	200	140	95
Total capacity (kW)	1,27	0,95	0,68
Sensible capacity (kW)	0,95	0,70	0,49
Amount of water (l/h)	219	163	116
Water-side pressure loss (kPa)	7,42	4,40	2,44
Sound power [dB(A)]	40,9	33,9	28,3
Sound pressure level* [dB(A)]	36,6	29,6	24,0







Aquaris KWB-10-4-R	**max**	**medium**	**min**
Air volume (m³/h)	195	135	95
Heating capacity[1] (kW)	1,35	1,05	0,81
Amount of water (l/h)	117	90	70
Water-side pressure loss (kPa)	3,36	2,14	1,37

[1] Air inlet temperature = 20°C,
Water inlet temperature of 70°C, Δt = 10°C

Correction factors for cooling capacity

27°C/47%	7°C / 12°C	1,00
	6°C / 12°C	1,02
	10°C / 16°C	0,79
	16°C / 19°C	0,56
26°C/50%	7°C/12°C	0,94
	6°C / 12°C	0,96
	10°C / 16°C	0,72
	16°C / 19°C	0,49

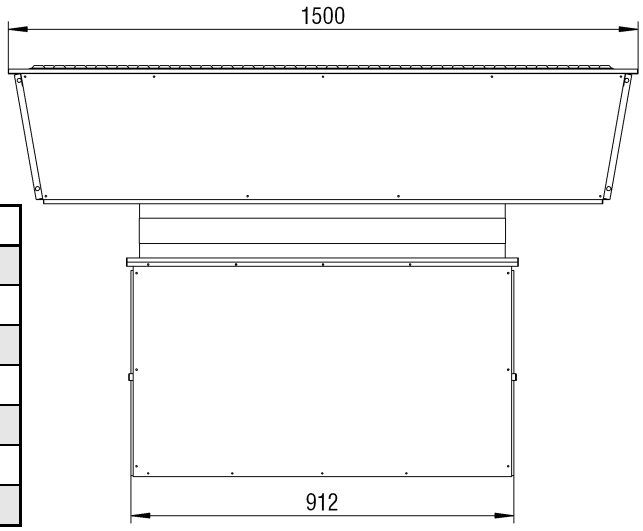
*

Room	55 m³
Distance from noise source r	2 m
Direction of noise source Q	4
Sound absorption coefficient α	0,15

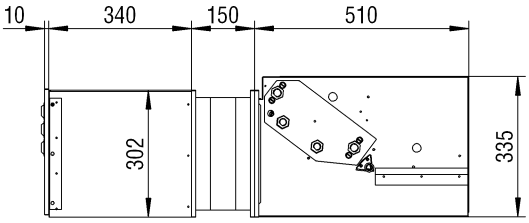
Compact Air-Conditioning Module Model Aquaris KWB

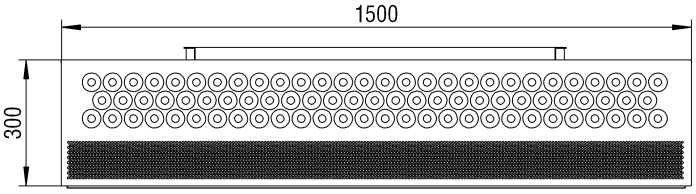
Aquaris KWB-20

Water inlet temperature	7 °C
Water outlet temperature	12 °C
Air inlet temperature	27 °C
Relative humidity	47%



Aquaris KWB-20-2-R	**max**	**medium**	**min**
Air volume (m³/h)	315	260	230
Total capacity (kW)	1,95	1,67	1,51
Sensible capacity (kW)	1,46	1,24	1,12
Amount of water (l/h)	335	287	259
Water-side pressure loss (kPa)	6,42	4,88	4,09
Sound power [dB(A)]	43,1	38,7	35,7
Sound pressure level* [dB(A)]	38,8	34,4	31,4





Aquaris KWB-20-4-R	**max**	**medium**	**min**
Air volume (m³/h)	305	255	225
Heating capacity[1] (kW)	2,07	1,83	1,68
Amount of water (l/h)	179	158	145
Water-side pressure loss (kPa)	9,04	7,28	6,25

[1] Air inlet temperature = 20°C,
Water inlet temperature of 70°C, Δt = 10°C

Correction factors for cooling capacity

27°C/47%	7°C / 12°C	1,00
	6°C / 12°C	1,01
	10°C / 16°C	0,80
	16°C / 19°C	0,56
26°C/50%	7°C / 12°C	0,94
	6°C / 12°C	0,96
	10°C / 16°C	0,74
	16°C / 19°C	0,50

*

Room	55 m³
Distance from noise source r	2 m
Direction of noise source Q	4
Sound absorption coefficient α	0,15

Compact Air-Conditioning Module Model Aquaris KWB

Dimensions of accessories

Valves

VMP46

Three-way valve having a nominal pressure of 16 bar.
Brass housing.
External thread connections G...B.
Provided with manual adjuster.

Valve types

		Cooling (for 2-pipe)	Heating (additionally for 4-pipe)
Size	10	VMP46.10-0.63	VMP46.10-0.63
	20	VMP46.10-1.0	VMP46.10-0.63

Actuator STA219/STA719

Electrothermal actuator for valve of 2.5 mm nominal stroke.
Including motion and position display.
Operating mode 24 V DC.
- OPEN/CLOSE function or proportional PWM

Actuator STA219

- Actuator 230 V AC
- OPEN/CLOSE function or proportional PWM

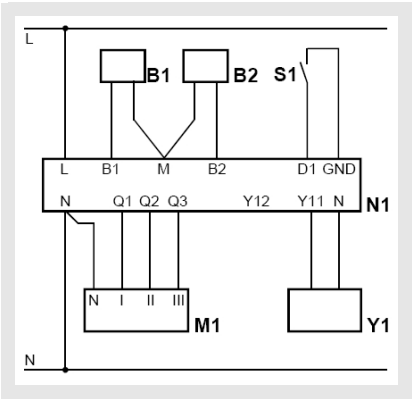
Actuator STA719

- Actuator 24 V AC
- OPEN/CLOSE function or proportional PWM

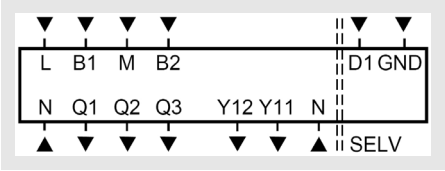
Compact Air-Conditioning Module Model Aquaris KWB

Room temperature controller for 2-pipe system
Model RCC10

- Output for On/Off valve actuator
- Outputs for three-speed fan
- Control either by room temperature or return air temperature, as desired
- Automatic heating/cooling mode switchover
- Standard, Economy, Antifreeze operating modes or OFF
- Switchover contact input for remote circuit
- Control parameters selectable
- Operating voltage AC 230 V



B1 = Return air sensor (temperature sensor QAH11.1)
B2 = Changeover sensor (temperature sensor QAH11.1 + changeover assembly kit ARG86.3)
M1 = 3-speed fan
N1 = Room temperature controller RCC10 / RCC10.1
S1 = External operating modes selector switch
Y1 = Zone valves MVE..., MXE...



For systems without automatic switchover, an external switch can be used for manual switchover instead of the sensor.
For systems with permanent heating mode, the controller input is used without the sensor.
For systems with permanent cooling mode, the controller input must be electrically short-circuited (B2 with M).

L, N = Operating voltage AC 230 V
B1 = Signal input "return air temperature sensor"
M = Measurement zero "return air temperature sensor" and "changeover sensor"
B2 = Signal input "Changeover Sensor"
D1, GND = Signal input for potential-free operating mode switch (direction of action adjustable)
Q1 = Control output "Fan speed I" AC 230 V
Q2 = Control output "Fan speed II" AC 230 V
Q3 = Control output "Fan speed III" AC 230 V
Y11 = "Valve" AC 230 V control output (work contact, for currentless closed valves)
Y12 = "Valve" AC 230 V control output (closed contact, for currentless open valves)

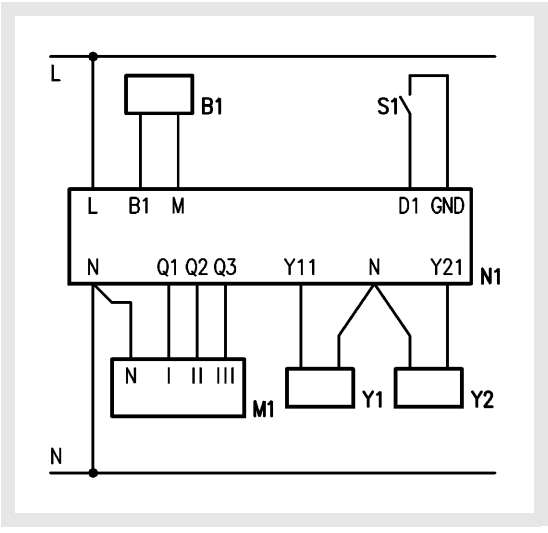
Compact Air-Conditioning Module Model Aquaris KWB

Room temperature controller for 4-pipe system
Model RCC30

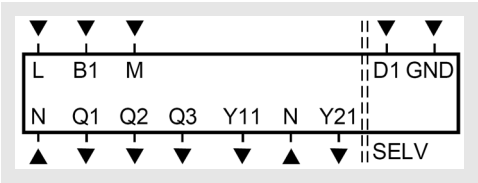
- Outputs for On/Off valve actuators
- Outputs for three-speed fan
- Control either by room temperature or return air temperature, as desired
- Standard, Economy, Antifreeze operating modes or OFF
- Operating mode switchover contact input for remote circuit
- Control parameters selectable
- Operating voltage AC 230 V

Model RDF30

- Outputs for 2-point valve drives
- Outputs for three-speed fan
- Control either by room temperature or return air temperature, as desired
- Standard, Economy and Stand-By operating modes
- Operating mode switchover contact input for remote circuit
- Control parameters adaptable over a wide range
- Operating voltage AC 230 V
- Display of the room temperature, actual value or setpoint value can be selected.



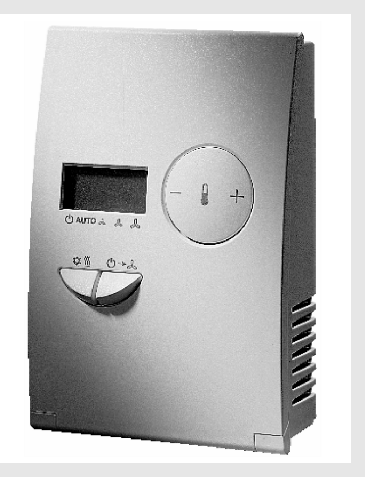
B1 = Return air sensor (temperature sensor QAH11.1)
M1 = 3-speed fan
N1 = Room temperaturre controller RCC30 or RDF30
S1 = External operating modes selector switch
Y1 = Heating valve
Y2 = Cooling valve



L, N = Operating voltage AC 230 V
B1 = Signal input "return air temperature sensor"
M = Measurement zero "return air temperature sensor"
B2 = Signal input "Changeover Sensor"
D1, GND = Signal input for potential-free operating mode switch (direction of action adjustable)
Q1 = Control output "Fan speed I" AC 230 V
Q2 = Control output "Fan speed II" AC 230 V
Q3 = Control output "Fan speed III" AC 230 V
Y11 = "Heating Valve" AC 230 V control output
Y12 = "Cooling Valve" AC 230 V control output

Compact Air-Conditioning Module Model Aquaris KWB

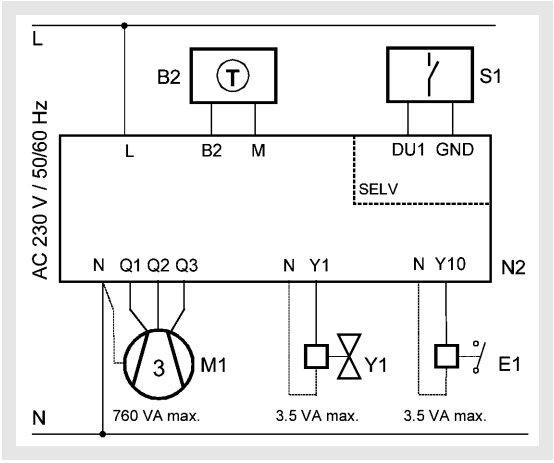
Model ACR12.441



Digital compact room controller for 2-pipe with/without heating element or 4-pipe fan coil units

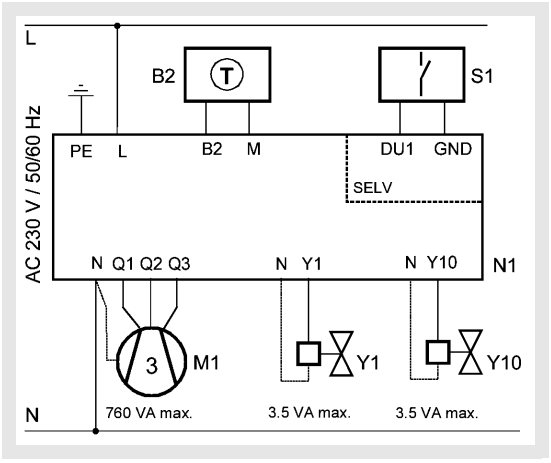
- Proportional PWM outputs for electrothermal valve actuators 230 V AC
- Automatic or manual 3-speed fans
- Manual or automatic winter/summer (heating/cooling) selector switch (including QAH11.1 sensor)
- Three operating modes: Standard, Economy or Standby mode
- Digital input: Operating modes selector switch (for motion detector or open window)
- Optional input for return air temperature sensor (QAH11.1) in the 4-conductor Aquaris Silent

Connection diagram
2-pipe fan coil unit with / without heating element

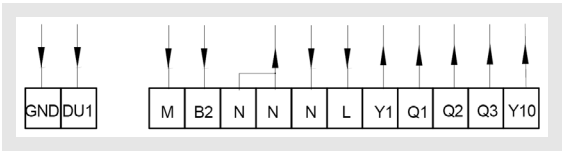


B2 = Changeover sensor (2-pipe system) or return air sensor (4-pipe system)
E1 = Ext. relay E heater
M1 = 3-speed fan
N1 = Controller parameterised for 4-pipe system
N2 = Controller parameterised for 2-pipe system
S1 = Window contact or presence detector
Y1 = in N1 application, heating valve
in N2 application, heating or cooling valve (changeo--ver)
Y10 = in N1 application, cooling valve
in N2 application, relay for E heater

4-pipe fan coil unit



DU1 = Window contact or presence detector, SELV
GND = Measurement zero
M = Measurement zero for sensor input
B2 = Changeover input or return air cooler QAH11.1
N, L = Power supply AC 230 V
Y1 = 4-pipe system / valve output heating / AC 230 V
2-pipe system / valve output heating or cooling / AC 230 V
Q1 = Fan Speed 1 output / AC 230 V
Q2 = Fan Speed 2 output / AC 230 V
Q3 = Fan Speed 3 output / AC 230 V
Y10 = 4-pipe system / valve output cooling / AC 230 V
2-pipe system / output for ext.relay E heater/ AC 230 V



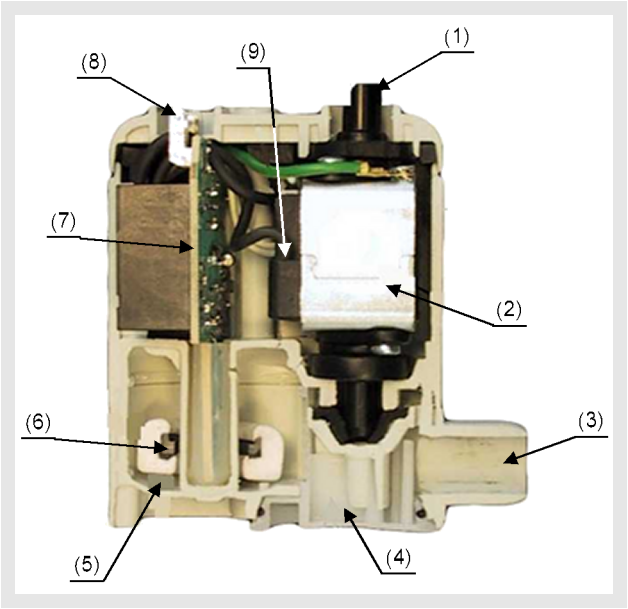
Other contol units available on request!

Compact Air-Conditioning Module Model Aquaris KWB

Condensate pump

Description

The condensate pump is used to remove the water of condensation from the cooling register, in case there is not enough gradient towards the on-site drain system. With alarm message (when water height rises above 27 mm).



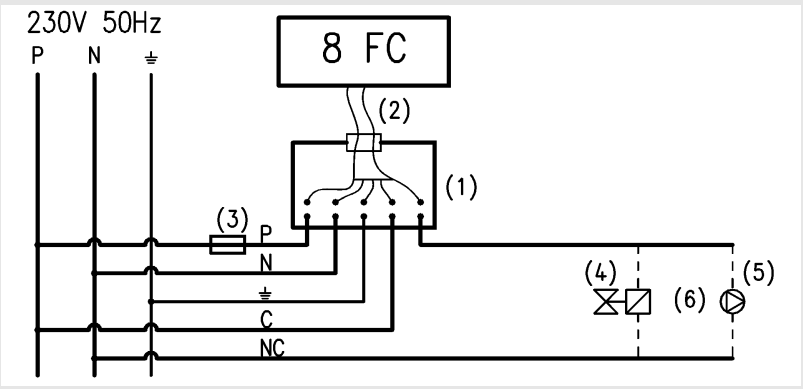
(1) Condensate drain Ø 8 mm outside (Ø 6 mm inside)
(2) Pump
(3) Condensation inlet Ø 17 mm outside
(Rubber intake Ø 15 mm inside)
(4) Filter (for particles > 1 mm)
(5) Float
(6) Magnet
(7) Electronic control
(8) Connection
(9) Thermal protection

Technical data

Power supply	230 V-50/60 Hz
Output	(230 V-50 Hz) 6 W
Rated current	30 mA
Maximum power	10 W
Thermal protection	90 °C
Alarm contact	NC contact
Safety measure	Connection to earth
medium	Water
Temperature of the medium	between 0° C and 33° C
Ambient temperature	max. 50°C
Max. flow	8 l/h
Max. pressure difference	8 m
Max. delivery height	8 m
Pump type	Piston pump
Sound level	<28 dB(A)
Dimensions	91 × 68 × 45 mm
Float switch	ON (24 mm); OFF (19 mm); ALARM (27 mm)

Compact Air-Conditioning Module Model Aquaris KWB

Connection scheme / terminal diagram
Condensation water pump type 8 FC

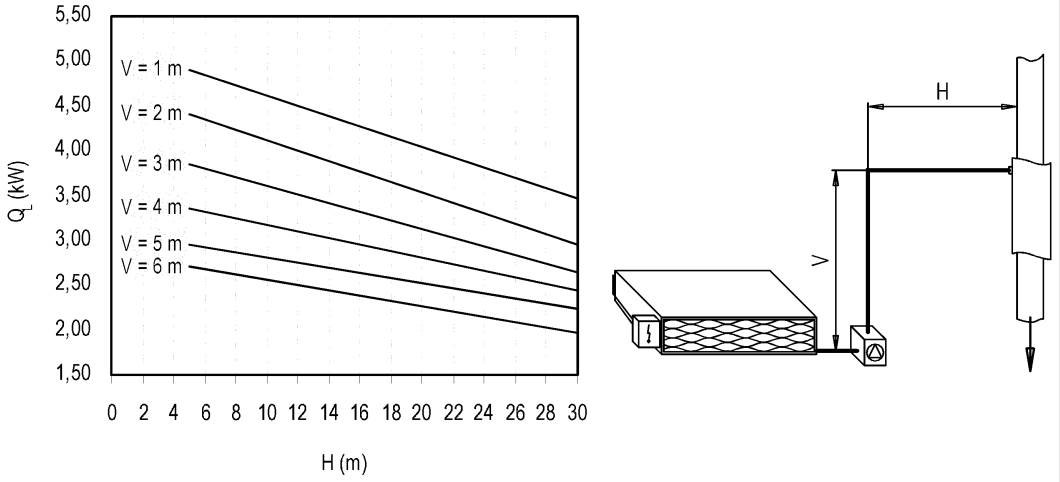


on-site:

(1)	Plenum box	P	= red
(2)	cable	N	= blue
(3)	630 mA fuse	Connection to earth	= yellow / green
(4)	Solenoid valve	C	= black
(5)	Compressor	NC	= black
(6)	or		

Important:
The pump is equipped with a C & NC / C & NO (reversible) overflow alarm contact (8 A/250 V). The connecting cable must be selected accordingly. The contact can be used, for example, to switch off a cooling system in which there is a risk of condensate overflow (after a detailed check of the customer specification and the resulting electric connection diagram by the installer). The installation is done on site. The condensation water pumps are delivered unassembled.
Optionally, the assembly and wiring can be done ex works (at an extra charge).

The diagram shows the capacity of the condensation water pump as a function of the vertical distance V and the horizontal distance H (relative to the latent capacity).



Q_L = Latent capacity
Q_L = Q_{ges} - Q_{sen}
Q_{ges} = Total capacity
Q_{sen} = Sensible capacity
Q_V = Amount of condensate

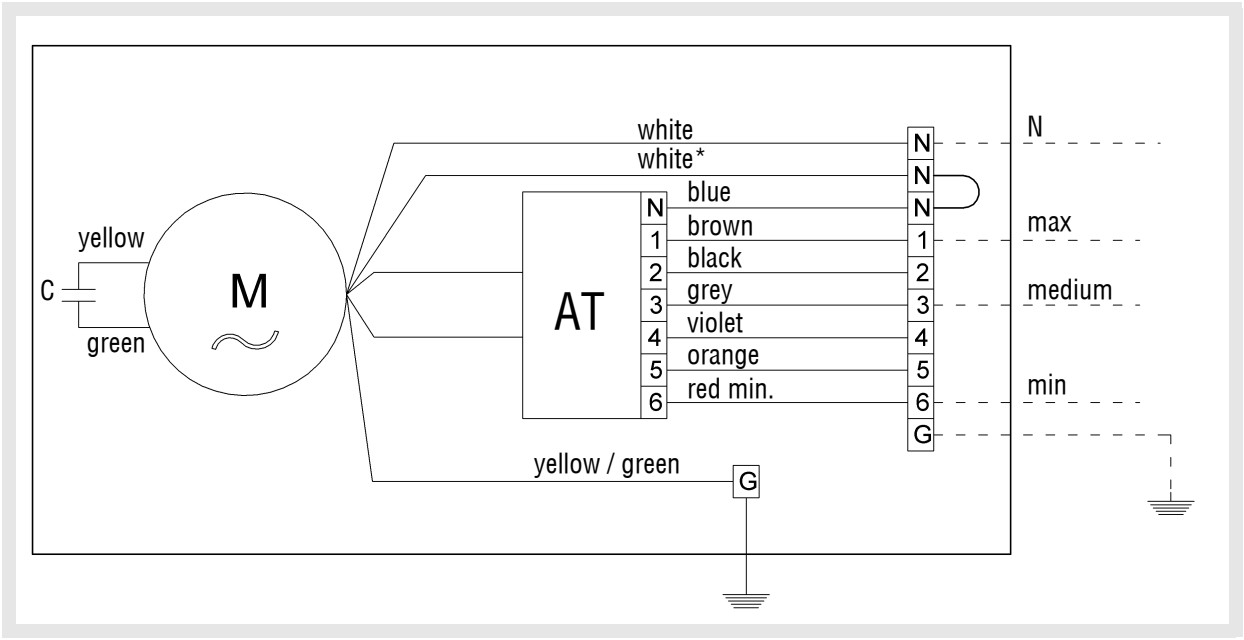
$$Q_V\ (l/h) = \frac{Q_{ges} - Q_{sen}\ (W)}{680}$$

Compact Air-Conditioning Module Model Aquaris KWB

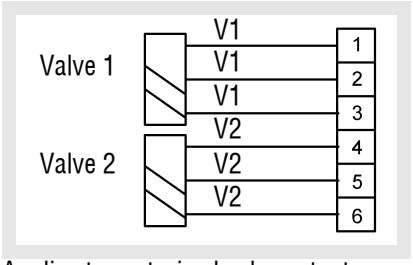
Technical data

Circuit diagrams

Wiring thermo contact, overload protection

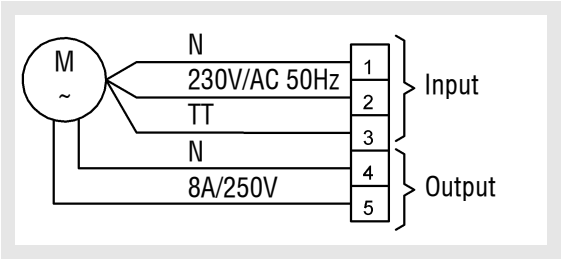


Electric valves



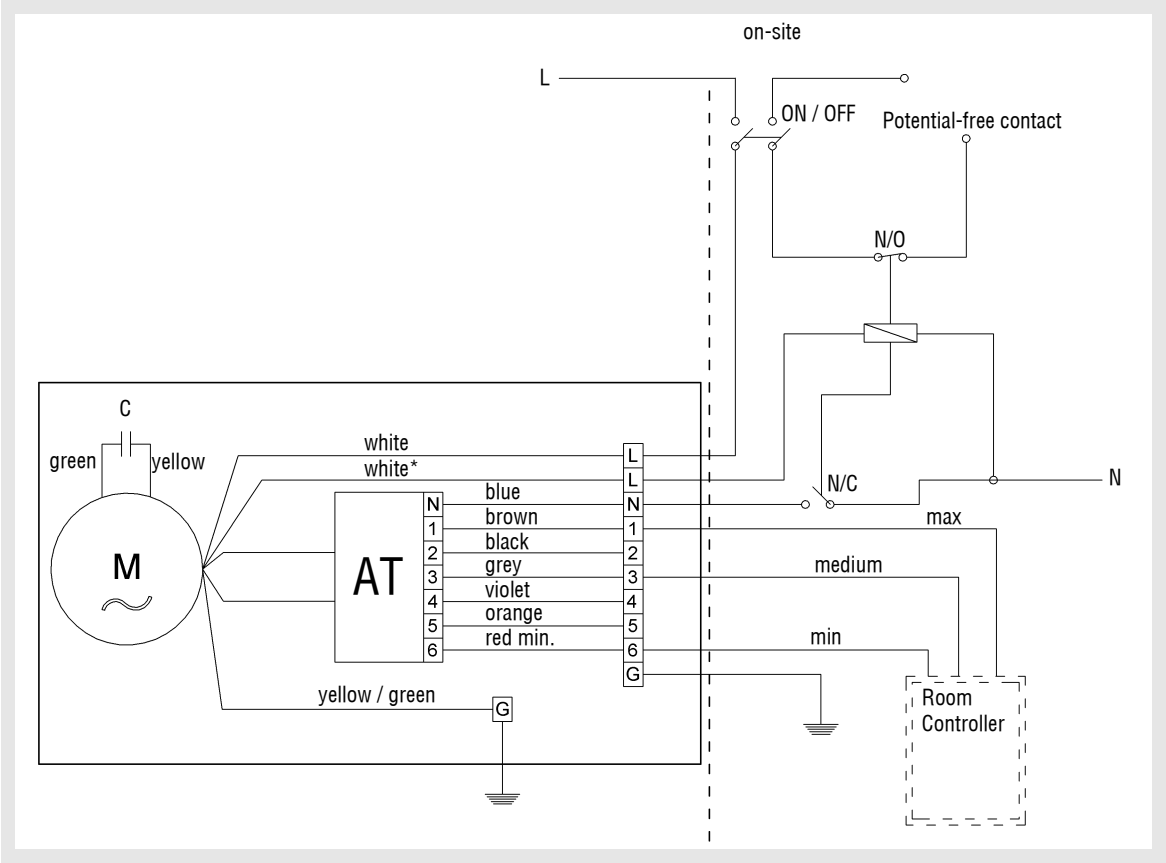
Applies to motorised valve actuators
For thermal actuators, terminals 3 and 6 are not used.

Condensate pump



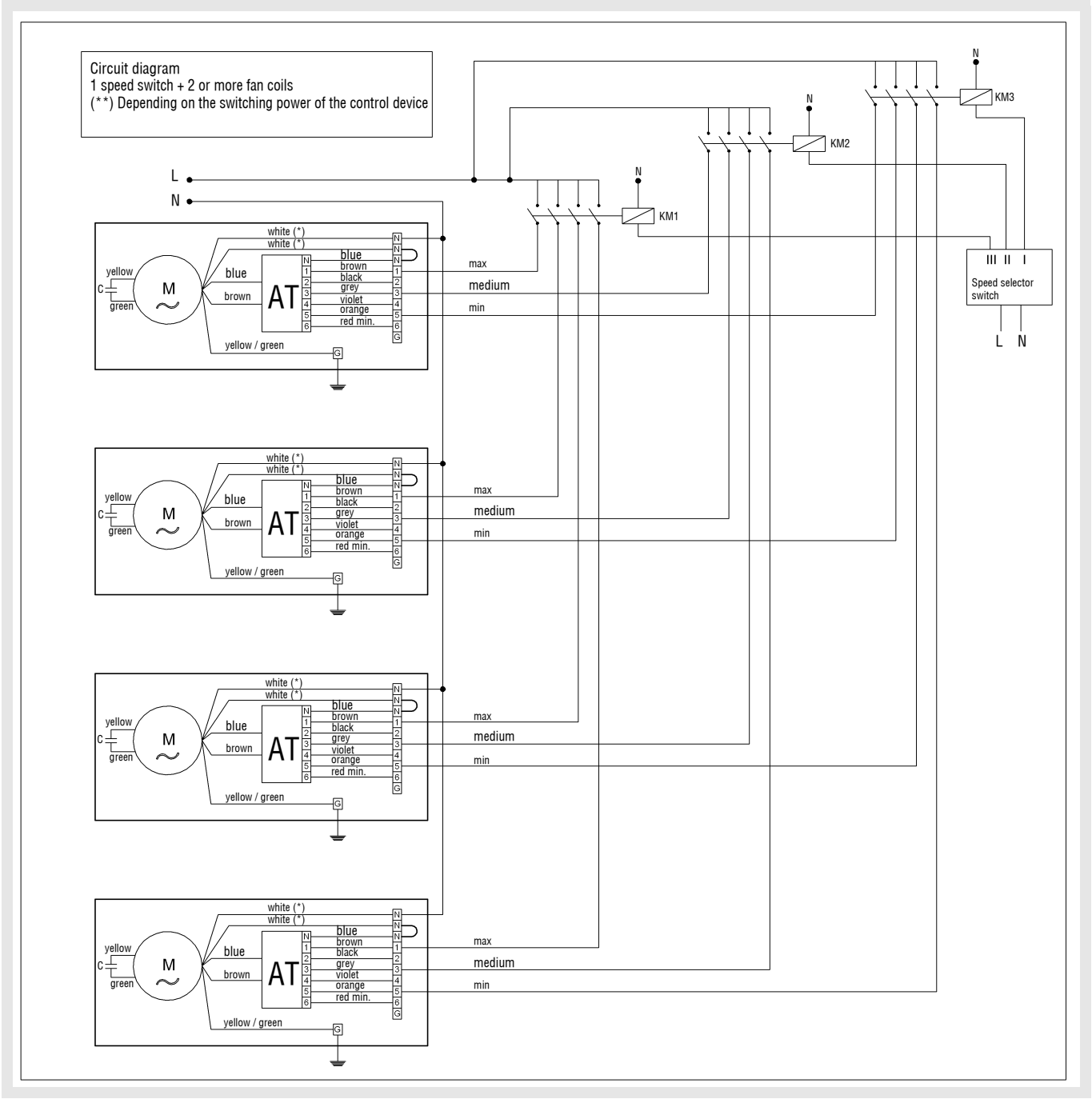
Compact Air-Conditioning Module Model Aquaris KWB

Wiring thermo contact, overload protection, operational and fault message



Compact Air-Conditioning Module Model Aquaris KWB

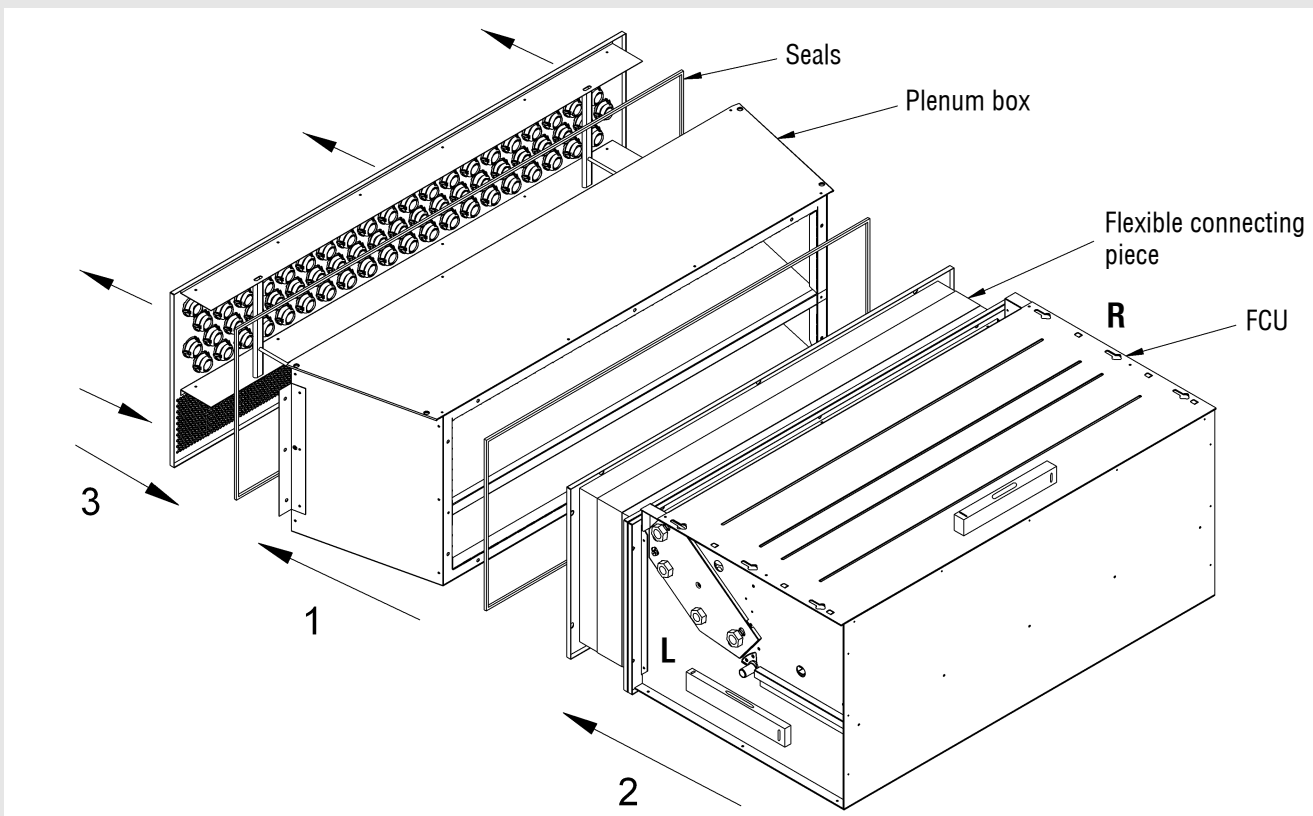
Wiring for parallel operation



white (*) = potential-free thermo contact as overload protection for motor

Compact Air-Conditioning Module Model Aquaris KWB

Mounting information



1 Suspend plenum box from ceiling and fasten it to the wall with screws.
2 Screw FCU to plenum box with flexible connecting piece and suspend from ceiling sound-decoupled.
3 Screw diffuser to plenum box by means of concealed mounting (-VM).

Compact Air-Conditioning Module Model Aquaris KWB

Operating and maintenance instructions

Symbols used

The following symbols are used on the following pages:

Warning

Danger, electric power

Important or useful information

Qualification requirements

The installation and maintenance work must be carried out by qualified specialists only. Current regulations, instructions and laws must be adhered to.

In those cases in which the device is installed by non-qualified personnel, SCHAKO shall be exempt from any liability.

Designated use of the Aquaris Silent fan coil unit

The Aquaris Silent fan coil unit was developed exclusively for use in air-conditioning, heating and ventilation installations.

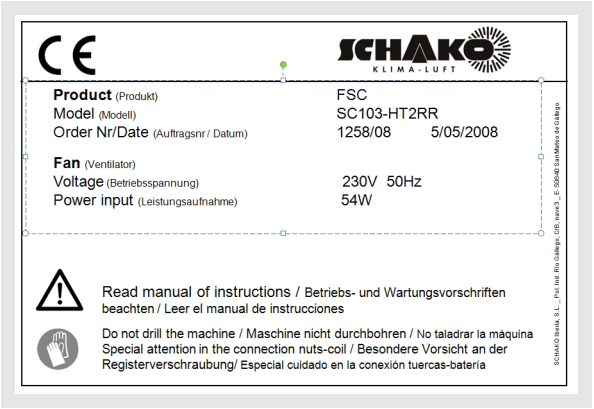
The Aquaris Silent fan coil units must not be used in extremely damp areas nor in areas with high dust content, outdoors or in areas subject to explosion hazards. Not adhering to these regulations shall exempt SCHAKO from any liability for possible damage.

Characteristic data

The Aquaris Silent fan coil units from SCHAKO are manufactured in the following designs:

- Fan housing made of galvanised sheet steel with aluminium impeller

A sticker containing the exact type designation is attached to the front of the Aquaris Silent fan coil unit.



Ambient conditions

During use of the Aquaris Silent fan coil unit, the following ambient conditions must be adhered to:

- **Cooling or heating agent**: water or glycols (ethylene glycol or propylene glycol) in concentrations below 60%.
- **Water inlet temperature:** 5°C to 95°C
- **Air inlet temperature:** 2°C to 45°C
- **Maximum working pressure:** 8 bar / 95°C
- **Power supply:** 230 V ± 6%, 50/60 Hz (all motors are heat-protected from overheating to temperatures above 150°C)
- **Protection class:**IP32

The water used for operating the unit must conform to water grade according to DIN 50930 and VDI 2035.

Not adhereing to the ambient conditions may result in damage. Please adhere to these values, in order to ensure a proper operation of the Aquaris Silent fan coil unit. Not adhering to the ambient conditions shall exempt the manufacturer from any liability for damage resulting from such use.

Compact Air-Conditioning Module Model Aquaris KWB

Electrical data

The following electrical data are the highest values that were measured at a power supply of 230 V - 50 Hz and the 1st fan speed.

Type	Power consumption P (W)	Current consumption I (A)
10	31	0,15
20	41	0,20

Water capacity of the heat exchangers

Type	Cooling register (3 rows)	Heating register (1 row)
10	1.2 l	0.3 l
20	1.6 l	0.4 l

Installation

Before installation

- Check whether the wall or ceiling is suitable for the installation and can carry the weight of the Aquaris Silent fan coil unit.

The Aquaris Silent fan coil unit must be assembled such that the connection and maintenance is possible without problems.

The Aquaris Silent fan coil units must not be installed in areas containing flammable gases.
The device is not designed for outdoor use.

Before connecting electric and hydraulic devices, disconnect the power supply to avoid accidents.

Installation instructions

- When installing the Aquaris Silent fan coil unit, it must be properly aligned.
- For easy removal of the condensate from the unit, we recommend a 3% inclination of the drain pipe. As standard, the condensate drain is open on the valve connecting side and closed on the opposite side.
- In order to reduce the noise level of the Aquaris Silent fan coil unit, it is recommended fastening the Aquaris Silent fan coil unit and connecting the lines through sound insulation or vibration absorbers.
- Make sure that the Aquaris Silent fan coil unit is mounted on all available mounting points toward the ceiling. Make sure that the screws are firmly tightened.

Connect the ducts of the hydraulic network to the collector of the battery using a spanner. To avoid damage, the lines must not be pressed directly against the collector of the batteries.

- For easy ventilation, it is recommended placing the entrance of the heat conducting fluid on the lower collector. All batteries have a sheet steel screw connection with an inner thread of **1/2 " SAE**. Both the connection of the condensate pan and the optionally provided connection of the condensate pan for the valves have an outer diameter of 16 mm.

Please establish the electrical connections according the enclosed circuit diagrams. (see Page °12 ff.)

Maintenance

For this unit, only the following maintenance work shall be carried out::

- Regular cleaning or replacement of the filter, since a soiled filter causes the pressure loss to increase. The filter can be pulled out of the device laterally, either on one side or, where space is restricted, on both sides for sectioned designs. Suitable inspection openings must be provided on site, to guarantee accessibility to the device.
- Check and properly clean the condensate pan and the drain channel.

For reasons of safety, maintenance work must be carried out with the power disconnected (electric and hydraulic) and if the device is set to heating, sufficient time must elapse for the heat exchanger to cool down. (It is recommended that maintenance work be carried out in protective gear like gloves and eye protection). When performing maintenance work on the Aquaris Silent fan coil unit, always wear protective gloves when removing the unit enclosure.

Do not pour any fluids into the Aquaris Silent fan coil unit as this could lead to electric damage and endanger people.

If the device was not used over an extended period of time, it is advisable to check that no elements are present which could hinder normal operation. The heat exchanger must be aired.

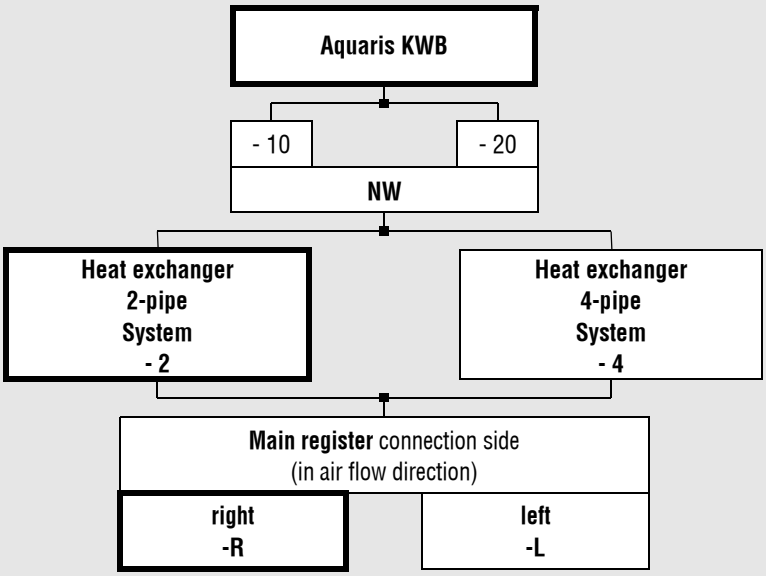
Compact Air-Conditioning Module Model Aquaris KWB

Troubleshooting

Problem	Possible causes	Solution
(1) The fan is not working.	The Aquaris Silent fan coil unit has no electric power..	Connect cable.
	The operating mode swithc is in OFF.	Move switch to ON. (room operating unit)
	The electric protective devices have cut off the power supply.	Inform the installer.
	The control has switched off, since the established nominal temperature has been reached.	Select Manual mode or change the nominal temperature.
(2) The unit is losing water.	The hydraulic circuit has not been sealed off properly.	Inform the installer.
	Leaks in the connection of the condensate pan.	Inform the installer.
	Overflow in the condensate pan.	Check whether the connection is clogged. / Inform the installer.
	Heat exchanger is damaged.	Inform the installer.
	Lines for the cold water have not been insulated properly.	Inform the installer.
(3) The control effects constant startups and shutdowns.	The control device or the temperature sensor have been installed at an unsuitable location.	Inform the installer.
	The heating fluid temperature is too high or too low.	Inform the installer.
	The cooling fluid temperature is too high or too low.	Inform the installer.
	Other elements controlled locally use the heat-conducting fluid of the same circuit.	Inform the installer.
	The control has not been connected properly.	Disconnect the power supply to the Aquaris Silent fan coil unit and inform the installer.
(4) The Aquaris Silent fan coil unit is cooling or heating insufficiently.	The fan is not working.	See problem (1).
	Insufficient air throughput.	Select a higher speed.
	The air intake or air blow holes or the lines are clogged.	Remove cloggings and clean the Aquaris Silent fan coil unit.
	Filter soiled./clogged.	Clean or replace the filter.
	The heat exchanger interior contains air.	Inform the installer.
	The heat load is higher than intended.	Check whether doors and windows are closed and make sure that no additional cold or heat sources are in place. /If this does not solve the problem, inform the installer).
	The amount of water in the heat exchanger is too small.	Inform the installer.
	The supply and return temperature of the exchanger have not been set correctly.	Inform the installer.
	The nominal value of the control device has been set incorrectly.	Change nominal value.
	The temperature sensor of the control device is exposed to a direct heat source.	Inform the installer. Install sensor in a different location.
(5) The unit is too loud.	The air intake or air blow holes or the lines are clogged.	Remove cloggings and clean the Aquaris Silent fan coil unit.
	Defective fan bearing.	Inform the installer.
	Fan impeller is unbalanced.	Inform the installer.
	Filter soiled./clogged.	Clean or replace the filter.

Compact Air-Conditioning Module Model Aquaris KWB

Order details



Accessories:

Condensate pump	Relay kit	Control
Valves	Valve drive	Valve condensate pan
Room operating unit		

Order example:
Aquaris KWB-10-2-R

Unless stated otherwise, the thick-frame model will be delivered!

Compact Air-Conditioning Module Model Aquaris KWB

Specification texts

Plug-in compact air-conditioning module for offices for installation in corridor false ceilings for unilateral air intake and evacuation, observing stringent requirements of air throw and sound. Filter easy to replace without requiring special tools. Control via 3-speed switch or by means of room temperature sensor, depending on room temperature.
Product: SCHAKO **type Aquaris KWB-...-**

- Model:
  - 10...
  - 20...

- Heat exchanger:
  - 2-pipe (-2)
  - 4-pipe (-4)

- Electric connection:
  - left
  - right

- Water connection:
  - left (-L)
  - right (-R)

- Condensate connection:
  - left
  - right

Accessories:

- Valves for water-side control of air after-treatment devices in closed circuits
  - Three-way valve with T-bypass having a nominal pressure of 16 bar. Red brass housing.
    External thread connections G...B. Type VMP 46...
- Room operating unit
  - Two-point controller for heating and/or cooling systems
  - Other control versions available on request
- Relay kit for disconnecting up to 5 Aquaris Silent operated in parallel on one control unit.
- Valve condensate pan made of galvanised sheet steel for discharging the condensate formed in the valve into the drain channel.
- Condensate pump for removing the water of condensation from the cooling register, in case there is not enough gradient towards the on-site drain system. Equipped with an overflow alarm contact (8 A/250 V) when the water height rises above 27 mm.