



Climate control system "RAM klima"



Wall and roof-mounted coolers from 300 to 4000 W

Cooling with industrial air conditioners

The coolers, included to "RAM klima" climate control system, allow performing effective cooling of the equipment within the enclosure installed outside or in premises with different temperature ranges.

The feature of this type of cooling is that the cooler does not use external medium air to recover heat from the enclosure, thus insulating the equipment from external atmosphere, which can contain dust and reagents potentially dangerous for the equipment.

A necessary condition for correct operation of the cooler is provision of a dust and moisture protection degree at least IP54.

"RAM klima" system is provided with a variety of versions of the coolers to solve different tasks. Wall-mounted and ceiling-mounted coolers, which allow performing effective cooling of the equipment within the enclosure in the environmental temperature range T_a from +20 to +50 °C and with range of cooling power from 300 to 4000 W with single-, two- and three-phase feed voltage, are used for cooling of the enclosures installed in the premises.

Outdoor coolers are used for effective cooling of enclosures installed outside or in aggressive process media. These coolers have the cooling power range from 1000 to 2000 W with single-phase feed voltage. High dust and moisture protection degree IP56, insularity of electric and electronic components against the environment, and special version of cooler's enclosure allow locating of the equipment in climatic areas with the environmental temperature from -60 °C and performing effective cooling of the equipment from -40 to +55 °C, what is approved by laboratory tests.

Mounting accessories, eye bolts and a hole cut out template, included to a kit, simplify transportation and installation of a unit. Monitoring and setting of basic parameters of the cooler are performed using an electronic thermostat or using RS-485 (RTU) remote control interface. Temperature created within the enclosure T_i is set in the range from +30 to +40 °C. The lower limit of a cooling temperature value can be expanded by a request.

The R134a grade coolant is a basic heat carrier of this device and is safe for humans as well as for the environment. When the cooler is operating, air dehumidification within the enclosure takes place forming the condensate, which congregates in a special dish located within the unit and is vaped automatically. An automatic tripping function is provided in coolers to prevent an emergency situation in case of achievement of a critical moisture level.

The cooler shell is made of high-quality steel with thickness of 1.5 mm and further painting into RAL 7045 color. It is possible to make the enclosure of AISI 304 or 316 grade stainless steel.

Ease of change of a filter pad is caused by convenience of removal of a metal grid located on a front panel and does not require the additional tools and stopping of the unit. An aluminium filter, which prevents deposition of aggressive agents on lamellae of a condenser and provides long service life, is used during operation of the coolers in places with contaminated process medium.

Basic advantages



Safe and ecofriendly

Use of R134a grade coolant ensures safety for people and environment



High dust and moisture protection level

A closed loop of foamed polyurethane on the entire inside perimeter of the cooler provides dust and moisture protection level IP54



Automatic condensate removal

A built-in system of automatic condensate removal does not require additional installation of a system of drainage pipes



Ease of installation

The eye bolts, hole cut out templates and additional accessories, included to the kit, make it possible to perform installation of the cooler on the enclosure in a prompt and simple manner



Remote control and additional signaling

RS-485 standard built-in interface makes it possible to control operation of the cooler and connect it to a common management network of the climate control system (up to 32 units)



Local control

A digital thermostat, located on the front panel, performs monitoring and control of the parameters in real-time mode

Wall-mounted coolers from 300 to 4000 W



Purpose:

- change of the airflow temperature.

Material:

- steel with thickness of 1.5 mm, RAL 7035 powder coating;
- AISI304 or AISI316 stainless steel – on request.

Distinctive features:

- dust and moisture protection degree is IP54;
- built-in electronic thermostat;
- built-in moisture evaporator with liquid level control;
- complete with the removable air filter;
- cooler remote control is possible.

Scope of supply:

- cooler, eye bolts, mounting accessories, mounting hole template.

Roof-mounted coolers from 1000 to 4000 W



Purpose:

- change of the airflow temperature.

Material:

- steel with thickness of 1.5 mm, RAL 7035 powder coating;
- AISI304 or AISI316 stainless steel – on request.

Distinctive features:

- dust and moisture protection degree is IP54;
- built-in electronic thermostat;
- built-in moisture evaporator with liquid level control;
- complete with the removable air filter;
- cooler remote control is possible.

Scope of supply:

- cooler, eye bolts, mounting accessories, mounting hole template.

Wall-mounted outdoor coolers from 1000 to 2000 W



Purpose:

- change of the airflow temperature.

Material:

- steel with thickness of 1.5 mm, RAL 7035 powder coating;
- AISI304 or AISI316 stainless steel – on request.

Distinctive features:

- dust and moisture protection degree is IP56;

Scope of supply:

- cooler, eye bolts, mounting accessories, mounting hole template.



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