AEROSTAR

RoofStar

Roof air conditioner

Power range: 36 – 89 kW

Solutions that work

Is a monoblock refrigeration unit with air cooling of the condenser.

Assignment
RoofStar can be used for complex air treatment in warehouse terminals, hypermarkets, manufacturing plants, stadiums, restaurants, cafes, theaters and other buildings.

It is possible to choose additional optional equipment for roof air conditioners that highly improves the individual approach to each object.

Can be mounted both on the roof of the building and on the ground level on specially prepared site.

Variants of execution
Heat pump, gas heating, electric heating, only cooling, gas heating + heat pump, electric heating + heat pump.

R410A

Filled with highly efficient refrigerant R410a at the factory, which ensures their environmental safety and energy efficiency.

Advantages

Saving space and money.
Thanks to installation on the roof of the building it does not need any special camera inside the building, which means no additional costs for its maintenance.

Built-in economizer.
Allows mixing and processing of fresh air and air from the room as well as supplying inside already processed clean air. This is also a significant saving of costs.

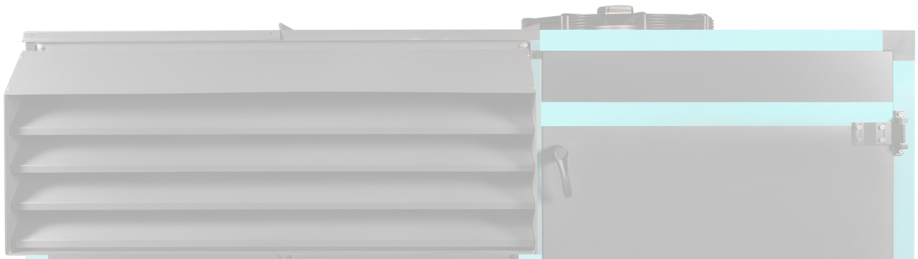
High energy efficiency (EER and COP)
High level of comfort created by the unit and reduction of expenses for electricity are reached thanks to the use of highly effective compressors and fans with intelligent control system.

Low noise level.
Due to the use of low-noise fans and optimization of air flow, it was possible to reduce the noise level of the unit. Compressors are mounted on vibration dampers; to reduce the transmission of vibrations to building structures, the unit can be installed on anti-vibration spring supports.

Easy installation and maintenance.
The use of an intuitive control system, implemented design solutions (for example, the use of adjustable fans with direct drive) and easy access to the modules of the unit highly simplify the maintenance of the equipment.

Monoblock design of the conditioner.
Allows reducing time and costs of installation works as it does not need any laying of the refrigerant pipelines in buildings.

AIR CONSUMPTION
3000-16000 m³/h



Design of the unit

RoofStar units of the 5th up to the 16th standard size, have a frame construction consisting of the aluminum profile and galvanized panels filled with mineral wool.
The panels are galvanized, externally painted with powder paint.

Removable panels and doors provide free access to all elements of the roof air conditioner, allowing easy maintenance. The RoofStar design allows combining the side of connection to external power sources and service accesses. The side is determined by the direction of air flow, either it is right or left.

Fans
High-tech blades are used in condenser fans. Thus it was possible to reduce air turbulence, increase heat transfer efficiency and reduce the noise level of the unit.

Fan of recirculation air
Placed in the support frame of the roof conditioner.

The scroll compressor ensures efficient operation of the unit at partial load.

Controller
Modicon M172

Filters of class C4 (efficiency - more than 90%) and class of fire resistance M1; the scope of supply includes a galvanized frame, the presence of which simplifies the cleaning and replacement of the filter. Is included in the standard delivery set.

Mixing chamber
Built-in economizer. Allows mixing and processing of fresh air and air from the room, as well as to give out already processed clean air inside.

Model	Unit	A5-36	A8-64	A12-68	A16-90
Heat pump					
Refrigeration capacity	kW*	36,12	63,76	67,68	89,82
Power consumption during cooling	kW*	10,59	17,96	19,06	25,3
Number of compressors	pcs.	2	2	2	3
Number of gas circuits	pcs.			1	
Boiling point	^{o}C			5	
Condensation temperature	^{o}C			50	
Refrigerant				R410A	
Fans					
Consumption of operating air	m3/h	5000	8000	12000	16000
Maximum free pressure	Pa	800	1000	1000	1000
Air flow (blowing of condenser)	m3/h	1x8000	2x9500	2x15000	4x9500
Gas heating					
Performance on the input	kW	34,85	65,0	82,0	130,0
Performance o the output	kW	33,56	62,93	80,03	125,86
Connection		G ¾''	G ¾''	G ¾''	G ¾''
Electric radiator					
Total productivity	кВт	36	54		90
Number of steps		2 ст. (9/27)	2 ст. (7/27)		3 ст. (36/27/27)
Dimensions of the unit					
Length (L)	mm	1415	1940	2300	2300
Width (W)	mm	2000	2200	3000	4405
Height (H)	mm	1415	1670	1870	1745
Weight	kg	625	925	1225	1375

*parameters are calculated for 35oC/45% degrees of outside air. The manufacturer reserves the right to make changes that do not impair the performance of the equipment.

Convenient unit control from your smartphone with Aerostar APP

Makes it simple at any time and from anywhere in the world:

- control the parameter of equipment operation
- manage the settings
- receive notifications of emergencies
- consult customer service of AEROSTAR

FOR ANDROID DEVICES

FOR IOS DEVICES

- individual settings
- all settings on one screen
- individual schedule
- reports
- instant notifications of accidents
- service support

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