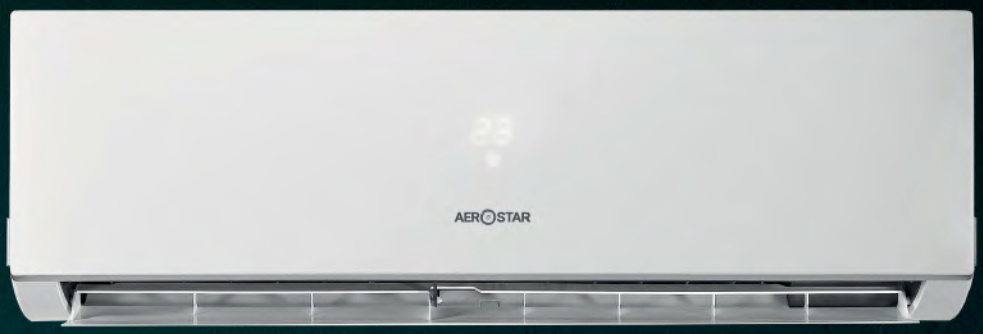
AEROSTAR

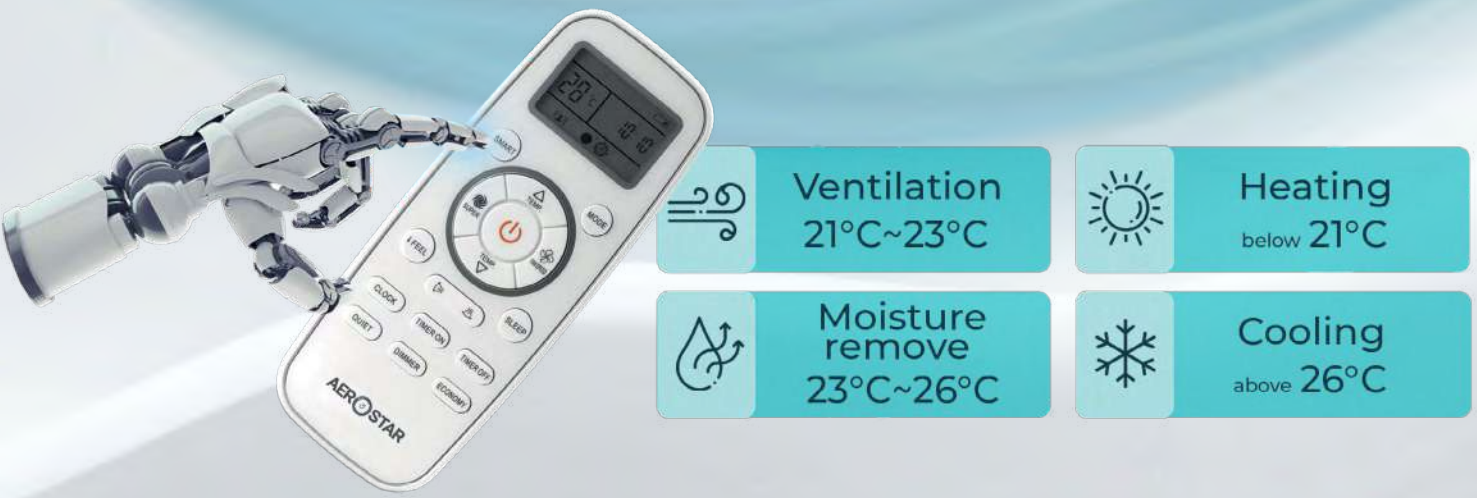


DOMESTIC AND LIGHT COMMERCIAL AIR CONDITIONING SYSTEMS


AEROSTAR
Solutions that work

SMART MODE

A single press of the Smart button automatically switches on the optimal air conditioner mode according to the room temperature.



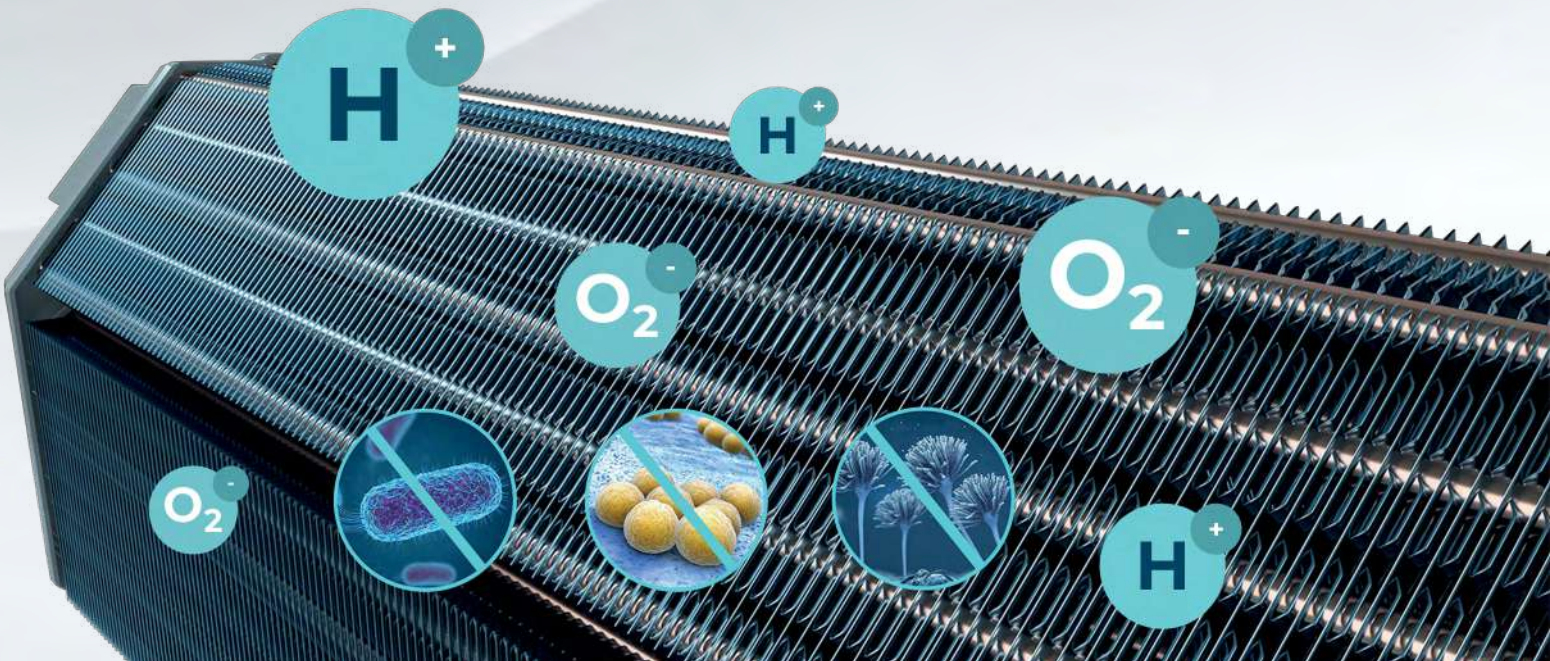
It is a convenient mode for cases of a rapid temperature change outside during the day or for users who do not want to think about choosing the air conditioner mode.

Just select the desired room temperature and SMART mode, and a special free-logic algorithm will determine the best suitable air conditioner's operating mode and fan settings.

HI-NANO

HI-NANO is a technology that uses one of the most effective forms of plasma ions.
They effectively destroy bacteria, viruses and allergens, eliminate odors in the room.

High air ionization contributes to a more relaxing and deeper sleep.



SELF-CLEANING AND MOLD PROTECTION

The advanced Self-clean technology minimizes the amount of dust and dirt that accumulates on the heat exchanger, thus maximizing the air conditioner's performance.

After turning off the air conditioner, the indoor fan continues operating for another 30 seconds to dry the evaporator.

ULTRA HI DENSITY FILTER

It is a new generation of high purification filter. Compared to a regular dust filter, the high purification filter removes more than 90% of dust and other particles from the indoor air. The filter is simply cleaned of dirt under running water.

INVERTER MOTOR

Ensures smart operation of the air conditioner and minimizes energy losses. This compressor operates more effectively and smoothly, allowing maximum temperature control and low noise.

Heated outdoor unit chassis

Since outdoor chassis can be easily freezed due to high humidity and low temperatures and negatively affect the operation of the air conditioner, Aerostar uses electric cables for chassis heating.

This technology helps to avoid freezing, maintaining high performance of the split system.

I FEEL MODE

The I FEEL function is a high-precision temperature sensor integrated into the remote control.

It measures the temperature of the air in the place where it is located and sends the information to the indoor unit of the air conditioner.

This way, the split system optimizes its operation so that the set parameters reach a comfortable level at the location of the remote control.

Super cooling

Powerful cooling (increases the cooling efficiency by 25%) that protects against heat at high ambient temperatures (up to 50°C).

Silent mode

The design of the indoor unit has been optimized, by means of including a low-noise motor and a specially designed aerodynamic structure for the entire air duct, starting from the air intake grille and further passing through the heat exchanger of improved design, the shape of the air distribution nozzle and the special shape of the louvers.

This allowed the indoor unit noise level to be reduced to extremely low levels, starting at 19 dB(A) in silent mode.

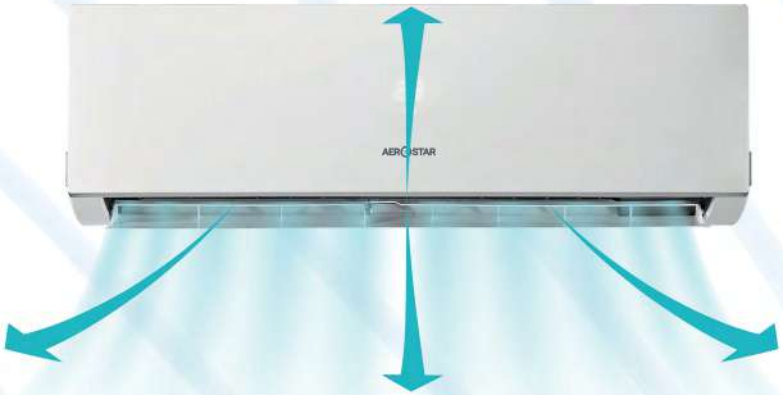
Eco-friendly refrigerant R32

Advantages compared to R410A: no impact on the ozone content in the air (less impact on global warming), higher energy efficiency, high thermal conductivity and cooling capacity.

4 sleep modes

High-quality sleep is the key to a healthy life. We offer 4 modes that are suitable for people of all ages.

SLEEP 1 > SLEEP 2 > SLEEP 3 > SLEEP 4 > OUT SLEEP MODE



Automatic and continuous air flow

The air distribution technology of Aerostar's air conditioner provides the user with maximum comfort. Automatic horizontal and vertical louvers allow choosing any of the 4 most convenient modes at the current moment:

- The simultaneous automatic operation of the blinds ensures the most even cooling of the room, creating the effect of constant air movement, without formation of the draft inside the room.
- The fixed position of the horizontal louvers with automatic operation of the vertical louvers allows the air flow to be directed from right to left in a predetermined horizontal direction.
- The fixed position of the vertical louvers with the automatic operation of the horizontal louvers allows the air flow to be directed up and down in a predetermined vertical direction.
- The constant position of the horizontal and vertical louvers creates the possibility of spot cooling.

"Standby Heating" mode +8°C

During cold winters, a special heating mode protects your home from freezing by maintaining a temperature inside of 8°C even when there is no one in the room.

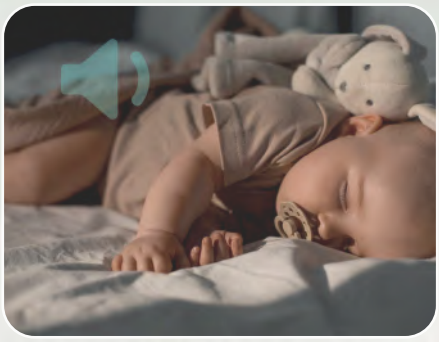
AIR CONDITIONERS OF DJ SERIES

The DJ series is the perfect combination of stylish appearance, attractive price and functionality.

- Coarse filter
- 24-hour timer
- 5 speeds
- Louvers control (vertical/horizontal)
- Standby heating
- Super-quiet mode (19dB)
- Sleep mode
- Smart mode
- Super cooling
- Automatic restart
- Silent mode
- 2 outlets for drainage (left or right)

HIGH ENERGY EFFICIENCY

All models meet the high energy efficiency class "A+" for cooling and "A++" for heating.



LOW NOISE LEVEL

The noise level of the indoor unit at minimum speed is only 19 dB(A).

WIDE RANGE OF OPERATING EMPERATURES

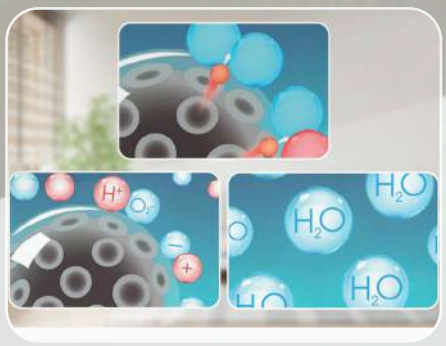
Split systems have an extended temperature range when operating for heating and cooling — the minimum allowed outside air temperature is -15 °C.

SMART MODE

The system is equipped with Smart mode — automatic selection of the target temperature in the range of 22-26 °C, with minimal power consumption.

"STANDBY HEATING"

The "Standby heating +8°C" function allows maintaining the temperature of +8°C and prevents the room from freezing or cooling during cold periods in case of the temporary absence of the residents.



COLD PLASMA

Additionally, the air conditioners are equipped with Cold Plasma air purification, that kills viruses and prevents the spread of infectious diseases.

DJ SERIES TECHNICAL SPECIFICATIONS

Model		DJ AER-09A-R32-IU DJ AER-09A-R32-OU	DJ AER-12A-R32-IU DJ AER-12A-R32-OU	DJ AER-18A-R32-IU DJ AER-18A-R32-OU	DJ AER-24A-R32-IU DJ AER-24A-R32-OU
Capacity					
SEER	Cooling	6,1	6,1	6,1	6,3
SCOP	Heating	4	4	4	4
Energy saving class	Cooling	A++	A++	A++	A++
Energy saving class	Heating	A+	A+	A+	A+
Cooling capacity	W	2600(1000-2800)	3400(1000-4000)	5000(1000-6000)	7000(2100-7500)
Heating capacity	W	2700(1000-3000)	3800(1000-4200)	5600(1600-6250)	7100(2100-7800)
Rated consumption (Cooling)	W	760(190-1300)	1140(190-1600)	1540(260-2300)	2230(350-2800)
Rated consumption (Heating)	W	660(190-1300)	1050(190-1600)	1515(350-2300)	2150(340-2930)
Dehumidification	l/h	0,9	1,2	2,0	2,5
Air flow	m^3/h	550	580	1000	1100
EER Cooling	W/W	3,42	2,98	3,25	3,14
COP Heating	W/W	4,09	3,62	3,69	3,30
Refrigerant		R32	R32	R32	R32
Refrigerant charge volume	gram	510	580	1170	1320
Noise level, indoor unit	dB	39/37/35/19	39/37/35/19	45/43/41/19	46/44/42/19
Noise level, outdoor unit	dB	54	54	54	56
Average consumption (Cooling)	kW/h	149	195	287	389
Average consumption (Heating)	kW/h	700	945	1610	1855
System					
Compressor type rotary		rotary	rotary	rotary	rotary
Compressor brand		GMCC	GMCC	GMCC	HIGHLY
Expansion device		Capillary	Capillary	Capillary	Expansion valve
Evaporator/condenser		Copper tube and aluminum plates			
Liquid pipe	inch(mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)
Gas pipe	inch(mm)	3/8 (9,52)	3/8 (9,52)	1/2 (12,7)	5/8 (15,88)
Other					
Wireless remote control		✔	✔	✔	✔
Washable polypropylene coarse filter		✔	✔	✔	✔
24-hour timer		✔	✔	✔	✔
5 speeds and automatic control over the internal		✔	✔	✔	✔
Control of vertical and horizontal louvers		✔	✔	✔	✔
Voltage, frequency, phase		220-240V~,50Hz,1P	220-240V~,50Hz,1P	220-240V~,50Hz,1P	220-240V~,50Hz,1P
Rated current, A	Cooling	3,4	5,0	6,9	9,9
	Heating	3,0	4,7	6,8	9,6
Dimensions WxHxL	Indoor unit	765×280×220	765×280×220	934×325×244	1100×325×244
	Outdoor unit	660×483×240	660×483×240	810×585×280	860×667×310
Weight (kg)	Indoor unit	7,7	7,7	12	13
	Outdoor unit	21	21,5	33	41
Temperature range	Cooling	-15°C-52°C	-15°C-52°C	-15°C-52°C	-15°C-52°C
	Heating	-15°C-24°C	-15°C-24°C	-15°C-24°C	-15°C-24°C
Max. length of the pipeline (without adding refrigerant)	m	5	5	5	5
Max. pipeline length	m	20	20	20	20
Height difference	m	10	10	15	15
Amount of additional refrigerant	g/m	20	20	20	30

AIR CONDITIONERS OF CL SERIES

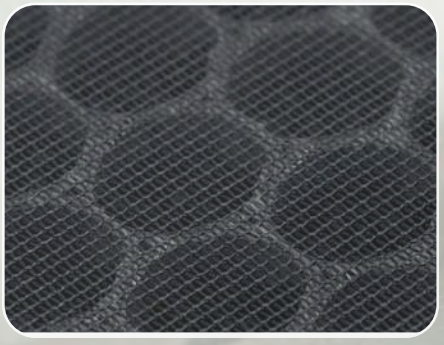
Air conditioner of CL series – is adapted for heating operation at ambient temperature down to -25°C.

HIGH ENERGY EFFICIENCY

The split system has a high level of seasonal energy efficiency (SEER-8.5; class "A+++"), which means that the device produces 8.5 times more cold than it consumes electricity.

PRECISE ADJUSTMENT OF THE AIR FLOW

The air conditioners comply with European energy efficiency standards and are equipped with a 5-speed indoor fan and refrigerant leakage indicator. The fan provides the possibility of precise adjustment of the air speed – from a weak blow to a powerful stream that will cool or warm the room in minutes.



ULTRA HI DENSITY FILTER

The comprehensive air purification system includes an updated ULTRA HI Density filter that removes more than 90% of dust and other particles from indoor air.

WI-FI MODULE

If you install a Wi-Fi module in the air conditioner, you can control it remotely using any Android or Apple smartphone.

CL SERIES TECHNICAL SPECIFICATIONS


Coarse filter

24-hour timer

5 speeds


Louvers control (vertical/horizontal)

Standby heating

Super-quiet mode (19dB)


Sleep mode

Smart mode

Super cooling

Automatic restart


Silent mode


2 outlets for drainage (left or right)

Model		CL AER-09A-R32-IU / CL AER-09A-R32-OU	CL AER-12A-R32-IU / CL AER-12A-R32-OU	CL AER-18A-R32-IU / CL AER-18A-R32-OU	CL AER-24A-R32-IU / CL AER-24A-R32-OU
Capacity					
SEER	Cooling	8,5	8,5	7,8	7,9
SCOP	Heating	4,6	4,6	4,6	4,6
Energy saving class	Cooling	A+++	A+++	A++	A++
Energy saving class	Heating	A++	A++	A++	A++
Cooling capacity	W	2600(800-3200)	3500(1000-4000)	5000(1500-6300)	7000 (1600-7800)
Heating capacity	W	3000(800-3300)	3900(1000-4400)	5400(1600-6200)	7500 (1800-8000)
Rated consumption (Cooling)	W	590(170-1400)	890(190-1500)	1295(260-1800)	2000(420-2760)
Rated consumption (Heating)	W	720(170-1500)	1000(190-1600)	1380(320-1650)	2100(395-2850)
Dehumidification	l/h	0,9	1,2	2	2,2
Air flow	m^3/h	520/480/430/410/370	580/520/470/430/400	950/900/830/750/660	1100/1000/910/840/760
EER Cooling	W/W	4,41	3,93	3,86	3,50
COP Heating	W/W	4,17	3,90	3,91	3,57
Refrigerant		R32	R32	R32	R32
Refrigerant charge volume	gram	750	800	1150	1500
Noise level, indoor unit	dB	39/36/26/19	39/36/27/19	45/39/33/19	48/41/33/19
Noise level, outdoor unit	dB	53	54	56	59
Average consumption (Cooling)	kW/h	107	144	224	310
Average consumption (Heating)	kW/h	700	852	1187	1522
System					
Compressor type rotary		rotary	rotary	rotary	rotary
Compressor brand		Toshiba GMCC	Toshiba GMCC	Toshiba GMCC	Toshiba GMCC
Expansion device		expansion valve	expansion valve	expansion valve	expansion valve
Evaporator/condenser		Copper tube and aluminum plates			
Liquid pipe	inch(mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	3/8 (9,52)
Gas pipe	inch(mm)	3/8 (9,52)	3/8 (9,52)	1/2 (12,7)	5/8 (15,88)
Other					
Wireless control panel LCD		✔	✔	✔	✔
Washable polypropylene coarse filter		✔	✔	✔	✔
24-hour timer		✔	✔	✔	✔
5 speeds and automatic control over the internal		✔	✔	✔	✔
Control of vertical and horizontal louvers		✔	✔	✔	✔
Voltage, frequency, phase		220-240V~,50Hz,1P	220-240V~,50Hz,1P	220-240V~,50Hz,1P	220-240V~,50Hz,1P
Rated current, A	Cooling	2,6	4,0	5,8	8,9
	Heating	3,2	4,5	6,2	9,4
Dimensions WxHxL	Indoor unit	830×256×195	830×256×195	930×300×220	1032×325×224
	Outdoor unit	780×540×260	810x585x280	860×667×310	900×750×340
Weight (kg)	Indoor unit	7,1	7,3	10	12
	Outdoor unit	28	33	39	49
Temperature range	Cooling	-15°C-50°C	-15°C-50°C	-15°C-50°C	-15°C-50°C
	Heating	-25°C-24°C	-25°C-24°C	-25°C-24°C	-25°C-24°C
Max. length of the pipeline (without adding refrigerant)	m	5	5	5	5
Max. pipeline length	m	20	20	20	20
Height difference	m	10	10	15	15
Amount of additional refrigerant	g/m	20	20	20	30

MULTI-SPLIT SYSTEMS

Multi-split systems

The use of Aerostar multi-split systems can significantly improve the exterior of buildings, because instead of 5 outdoor units, only 1 will be installed. In addition to great flexibility in use, Aerostar multi-split systems also provide the consumer with a wide selection of indoor units.

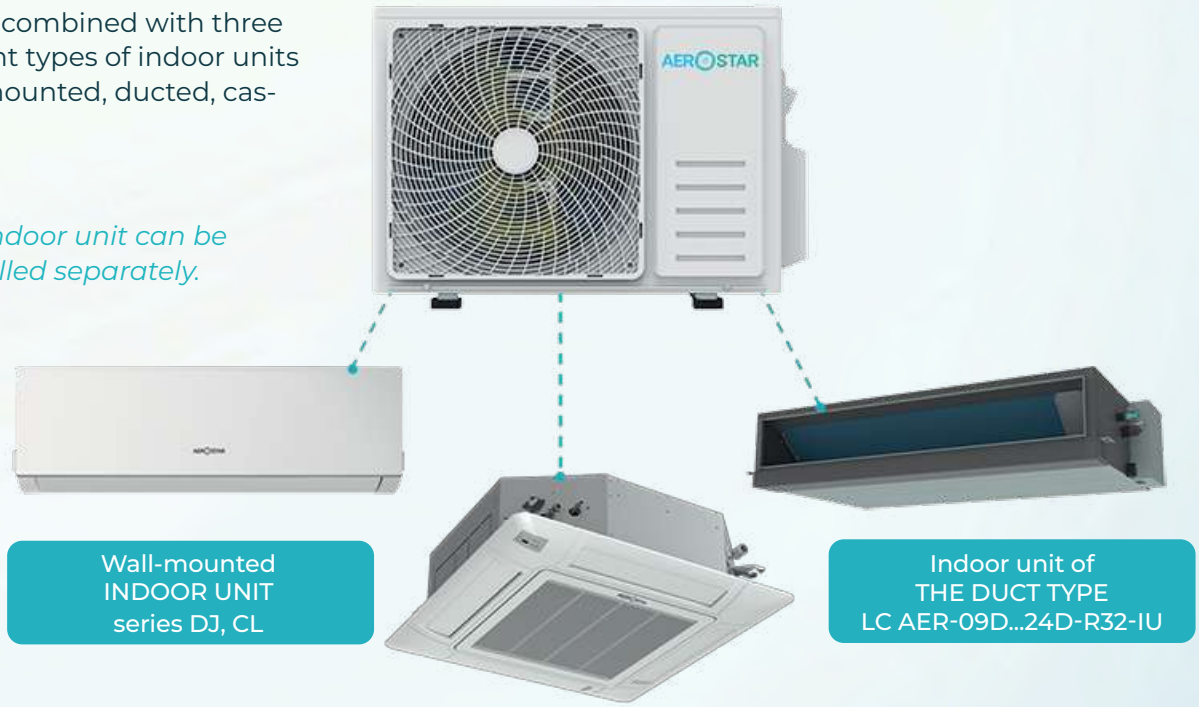
- The maximum number of connected indoor units – up to 5;
- Energy saving and highly accurate temperature maintenance due to DC Inverter technology;
- Reliable double rotary DC Inverter compressor;
- Smooth start of the compressor;
- Electronic expansion valve;
- Increased heat exchange due to internal notches in the heat exchanger tubes;
- Heating mode at outdoor temperatures up to -20°C;
- Protective cover for the outdoor unit valves;
- The maximum total length of the line is up to 80 m, up to 20 m. to each unit.

The optimal solution to create a climate in each room of your premise simultaneously, due to one powerful outdoor unit and the ability to connect as many indoor units as required.

Easy connection to 3 different indoor units

A single Aerostar outdoor unit can be combined with three different types of indoor units (wall-mounted, ducted, cassette).

Each indoor unit can be controlled separately.



Wall-mounted
INDOOR UNIT
series DJ, CL

Indoor unit of
THE DUCT TYPE
LC AER-09D...24D-R32-IU

Indoor unit of
THE CASSETTE TYPE
LC AER-09C...24C-R32-IU

COMPACT DESIGN

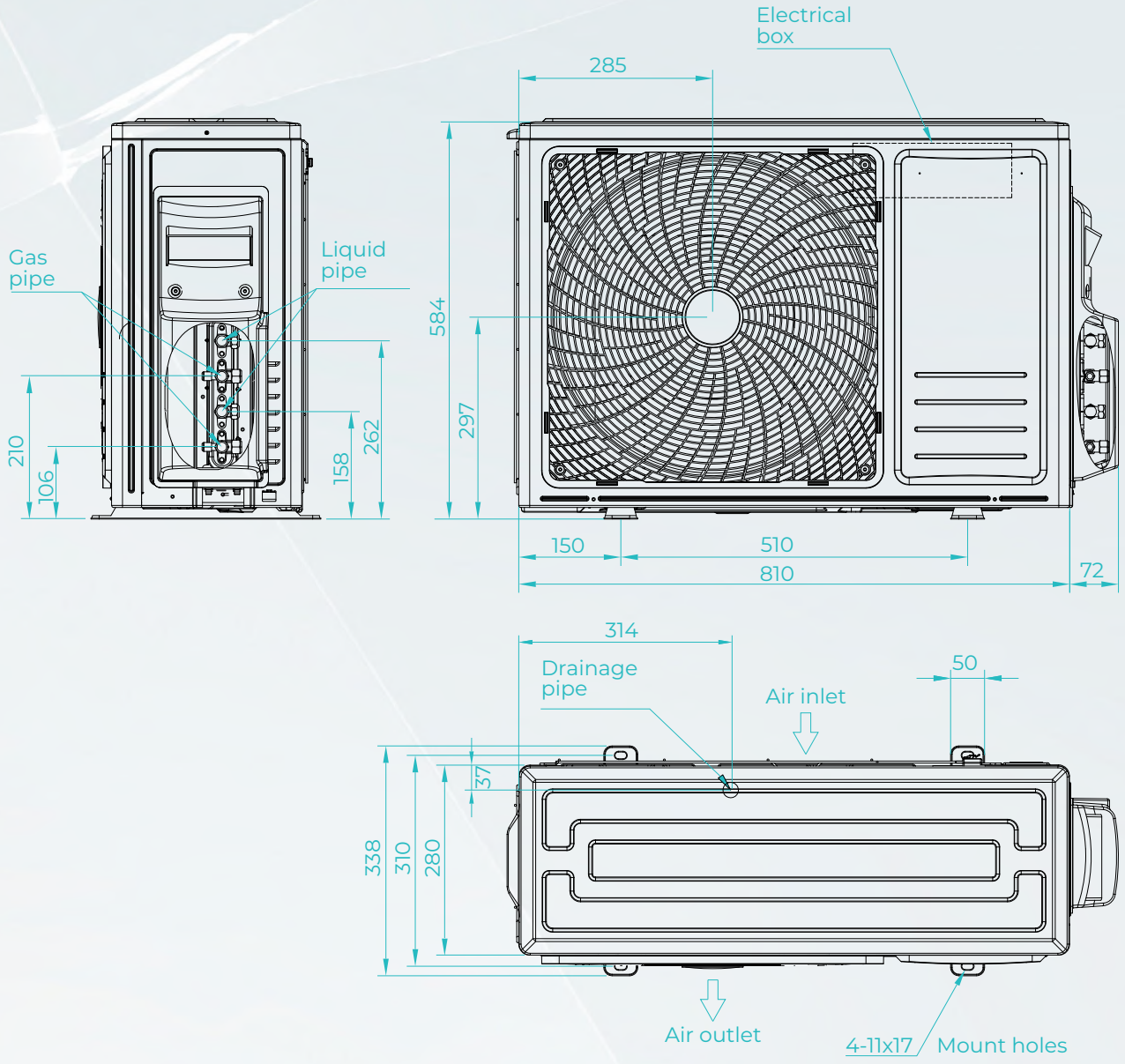
- The most compact multi-split model in its class.
- Optimal dimensions of the device for easy installation, flexible choice of installation place and various transportation methods.

Technical parameters of the multi-split systems of FM series

Types (combinations)		up to 2 IDUs	up to 3 IDUs	up to 4 IDUs	up to 4 IDUs	up to 4 IDUs	up to 5 IDUs
Model		FM AER 18U2-R32-OU	FM AER 21U3-R32-OU	FM AER 24U4-R32-OU	FM AER 27U4-R32-OU	FM AER 36U4-R32-OU	FM AER 42U5-R32-OU
Capacity							
SEER	Cooling	7,60	8,00	7,80	7,50	6,50	6,50
SCOP	Heating	4,40	4,40	4,40	4,40	4,01	3,72
Energy saving class	Cooling	A++	A++	A++	A++	A++	A+
Energy saving class	Heating	A+	A+	A+	A+	A+	A
Cooling capacity	W	5000 (1200-6600)	6300 (2000-9000)	7200 (2500-11000)	8000 (2500-12000)	10000 (2600-11500)	12500 (3800-15300)
Rated consumption (Cooling)	W	1245	1470	1895	2145	3100	3610
Rated current (Cooling)	A	5,5	6,5	8,4	9,5	13,8	15,6
Heating capacity	W	5500 (1200-7000)	7000 (2000-9000)	8000 (2500-11000)	9000 (2500-12000)	11000 (2200-12000)	13500 (3300-17200)
Rated consumption (Heating)	W	1300	1580	1928	2195	2800	3600
Rated current (Heating)	A	5,7	6,9	8,6	9,7	12,4	15,6
Air flow	m^3/h	2300	3150	3150	3150	4000	5000
Noise level	dB	60	63	64	64	68	75
Temperature Range	Cooling	-15~50	-15~50	-15~50	-15~50	-15~48	-15~48
	Heating	-20~24	-20~24	-20~24	-20~24	-15~24	-15~24
Compressor	Brand	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC
Power supply							
Voltage, frequency, phase		220-240/50&60/1~	220-240/50&60/1~	220-240/50&60/1~	220-240/50&60/1~	220-240/50&60/1~	220-240/50&60/1~
Rated current, A	Cooling	11,0	17,3	17,3	17,3	17,5	32
	Heating	11,0	17,3	17,3	17,3	17,5	32
Refrigerant pipes							
Liquid pipe	mm	6,35×2	6,35×3	6,35×4	6,35×4	6,35×4	6,35×5
Gas pipe	mm	9,52×2	9,52×3	9,52×4	9,52×4	9,52×4	9,52×5
Other							
Dimensions WxHxL	mm	810×580×280	860×670×310	860×670×310	860×670×310	950×840×340	950×1050×340
Weight (kg)	kg	35	45	48	48	73	90
Size in the package WxHxL	mm	940×630×385	990×730×450	990×730×450	990×730×450	1110×920×460	1110×1200×460
Gross weight	kg	38	49	52	52	78	102
Max. length(each)	m	20	25	25	25	20	20
Max. length (total)	m	30	50	60	60	60	80
Max. height difference	m	15	15	15	15	15	15
Refrigerant		R32	R32	R32	R32	R32	R32
Refrigerant quantity	g	1050	1460	1750	1750	2200	3000
Max. length of the pipeline (without adding refrigerant)	m	15	15	20	20	20	25
Amount of additional refrigerant	g/m	12 g/m over 15m	12 g/m over 15m	12 g/m over 20m	12 g/m over 20m	12 g/m over 20m	12 g/m over 25m

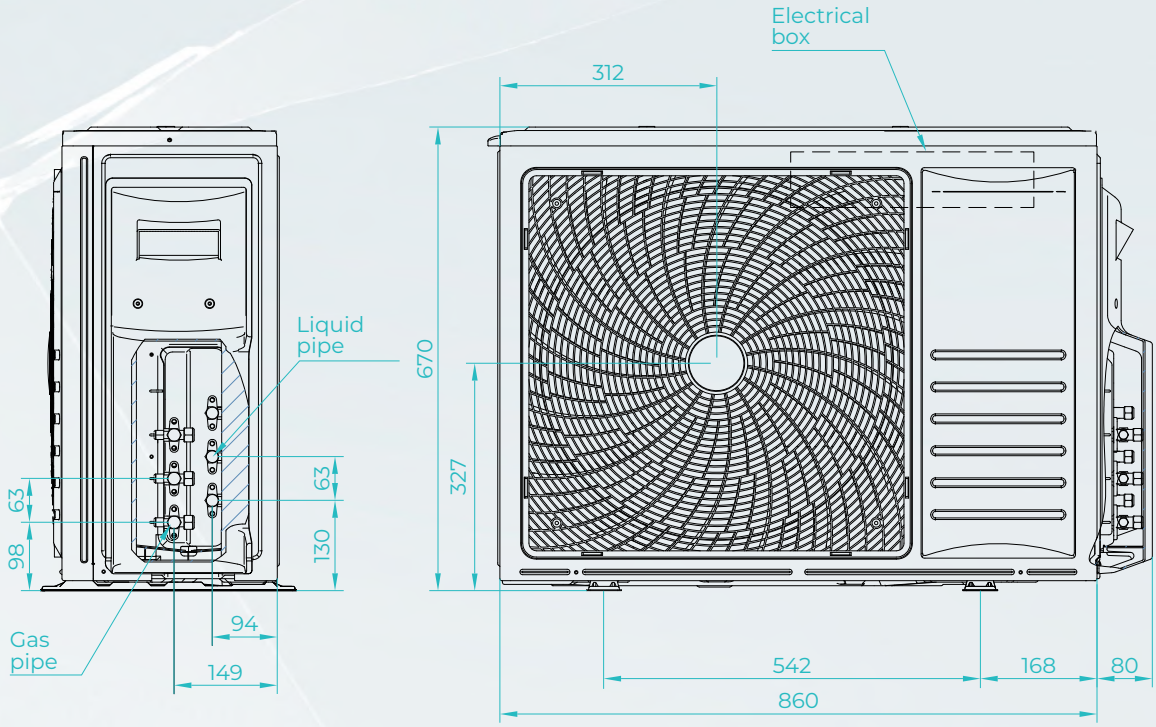
SCHEMES AND DIMENSIONS OF THE UNITS

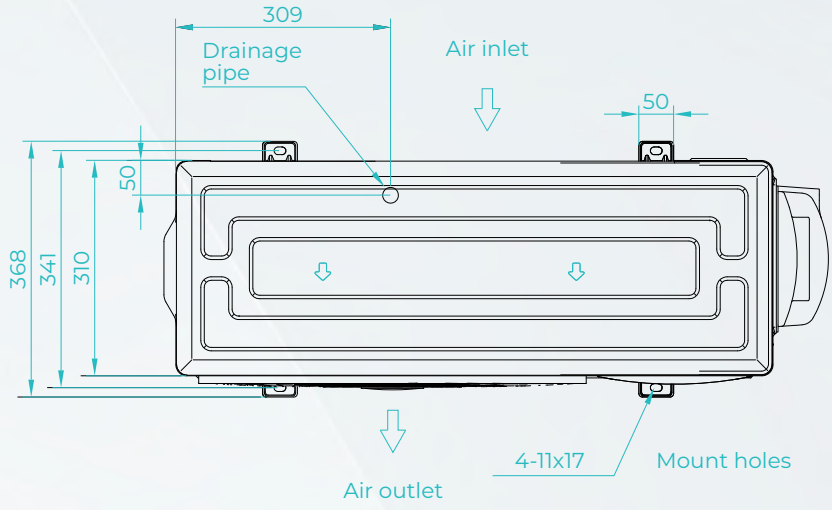
AEROSTAR FM AER-18U2-R32-OU



SCHEMES AND DIMENSIONS OF THE UNITS

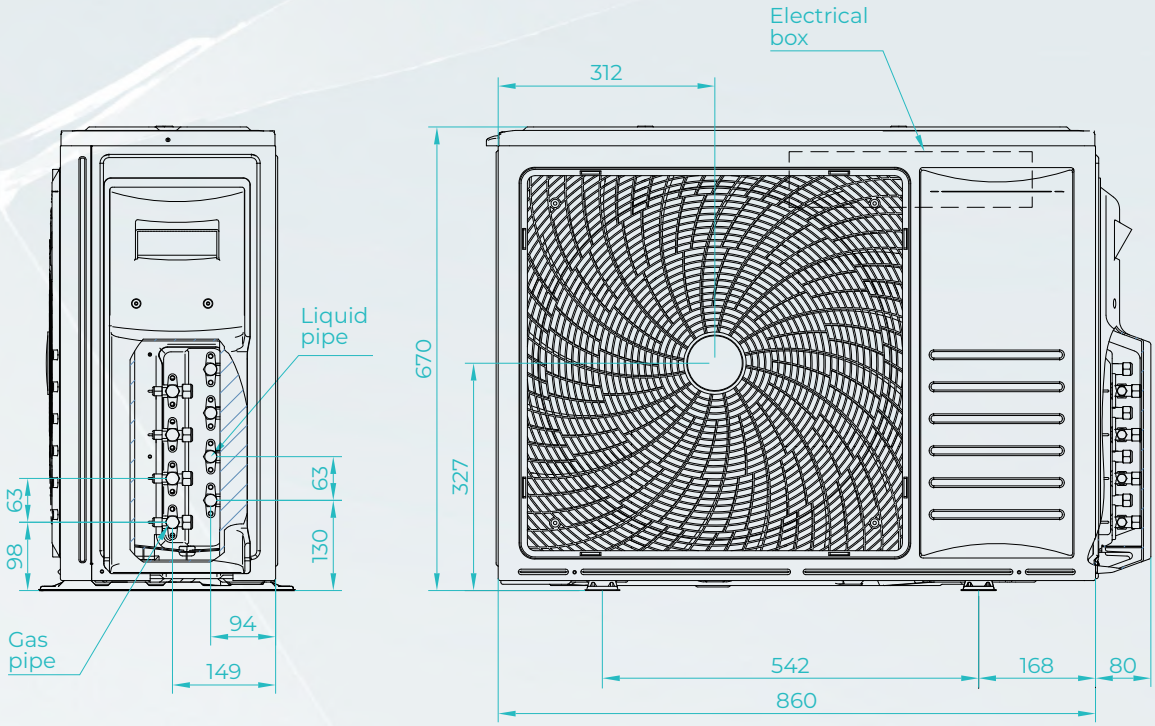
AEROSTAR FM AER-21U3-R32-OU

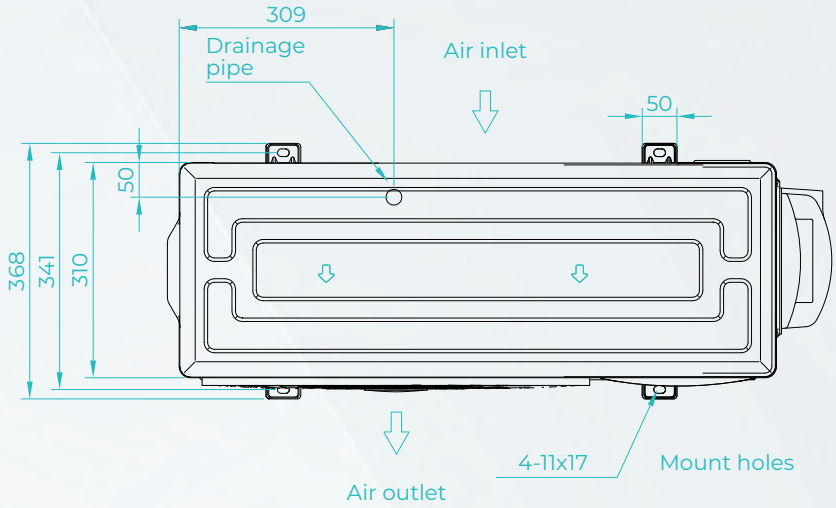




SCHEMES AND DIMENSIONS OF THE UNITS

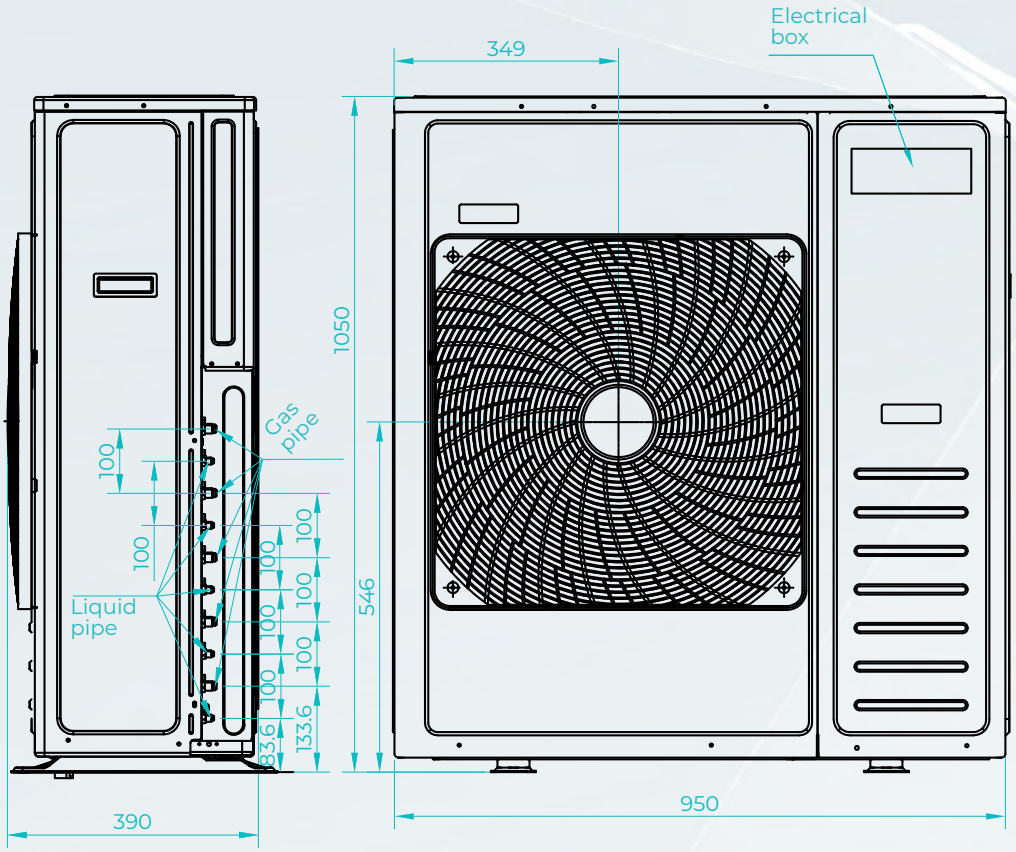
AEROSTAR FM AER-24U4-R32-OU
AEROSTAR FM AER-27U4-R32-OU

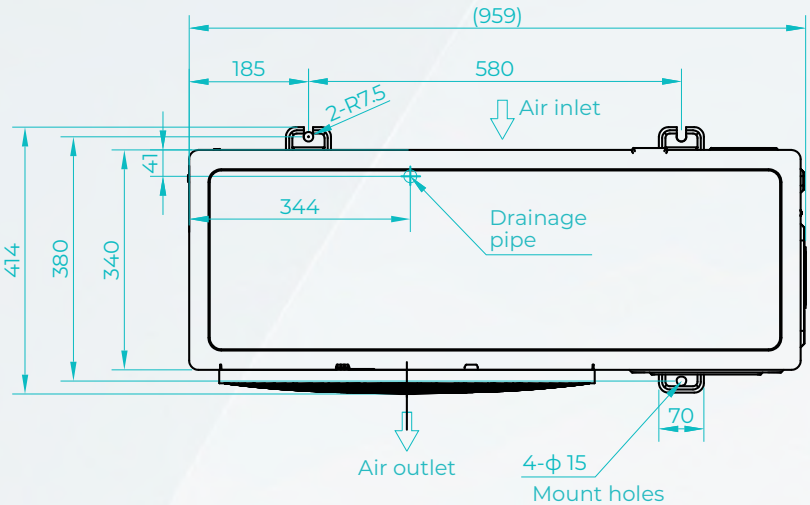




SCHEMES AND DIMENSIONS OF THE UNITS

AEROSTAR FM AER-42U5-R32-OU





LIGHT COMMERCIAL SPLIT SYSTEMS

INDOOR CASSETTE UNITS

The circular air supply distributes the air evenly so the room temperature is perfectly balanced.

Remote control included, wired remote control can be connected (optional).

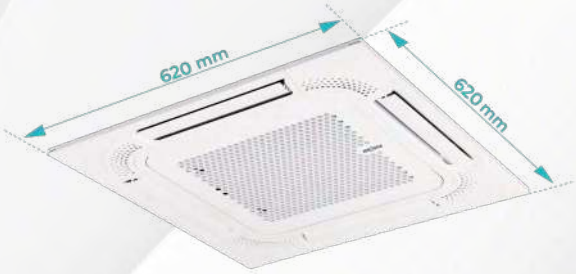
Individual control of the position of each of the four louvers.

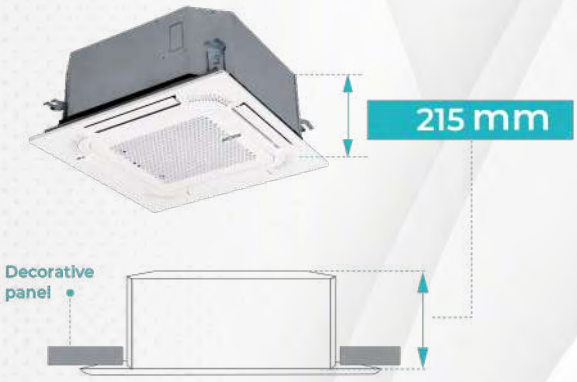
Includes a standard coarse dust filter.

The integrated drainage pump can lift condensate up to a height of 1200 mm.

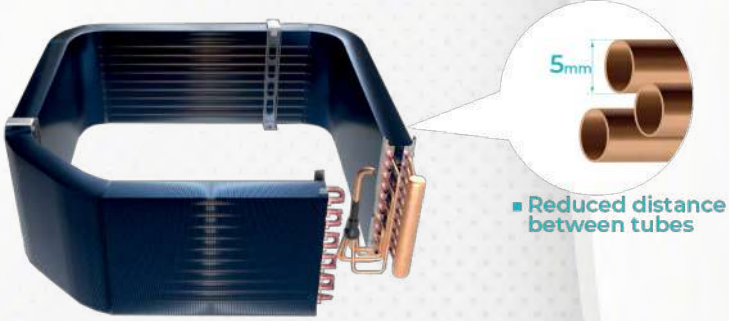
The "Auto Restart" function allows you saving all the settings after a power failure or power surge.

The slimmest indoor unit in its lineup with a body height of only 215 mm

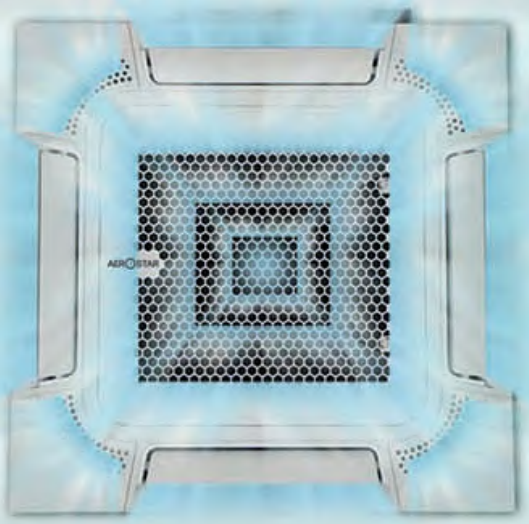




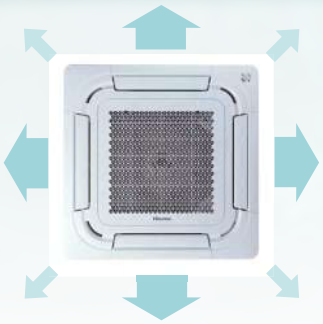
The cassette unit has a G-type design with extended heat exchange area. It contains a powerful and efficient heat exchanger with a tube diameter of only 5 mm.

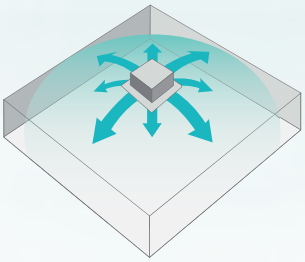


360
ROUND FLOW

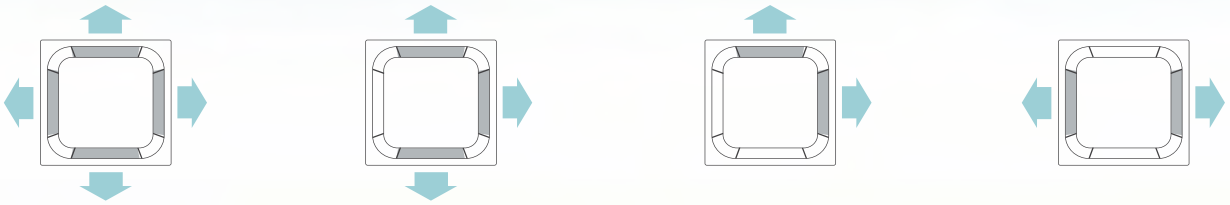


The all-round airflow provides optimal efficiency and comfort. The panel design ensures smooth airflow and perfect temperature balance.

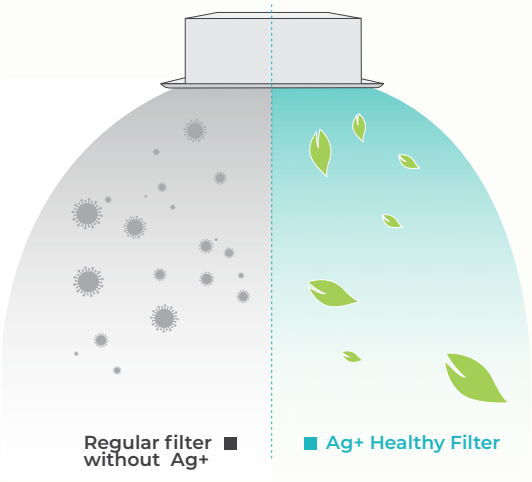




Individual airflow control



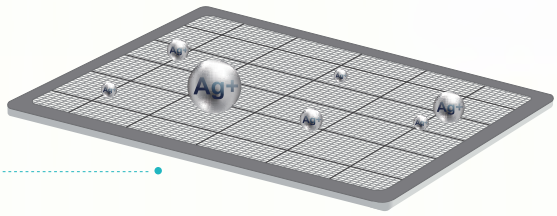
AG+ HEALTHY FILTER



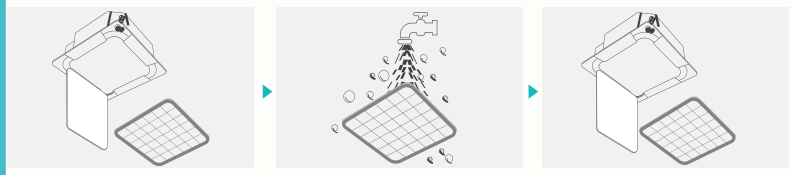
Prevents the spread of bacteria

E. coli 99,99%	Anti-mold	Staphylococcus virus 99,99%

Effectively kills bacteria by destroying their internal structure



The filter is easy to clean and wash. Once the filter is cleaned, the grille can be installed on either side due to the special design.



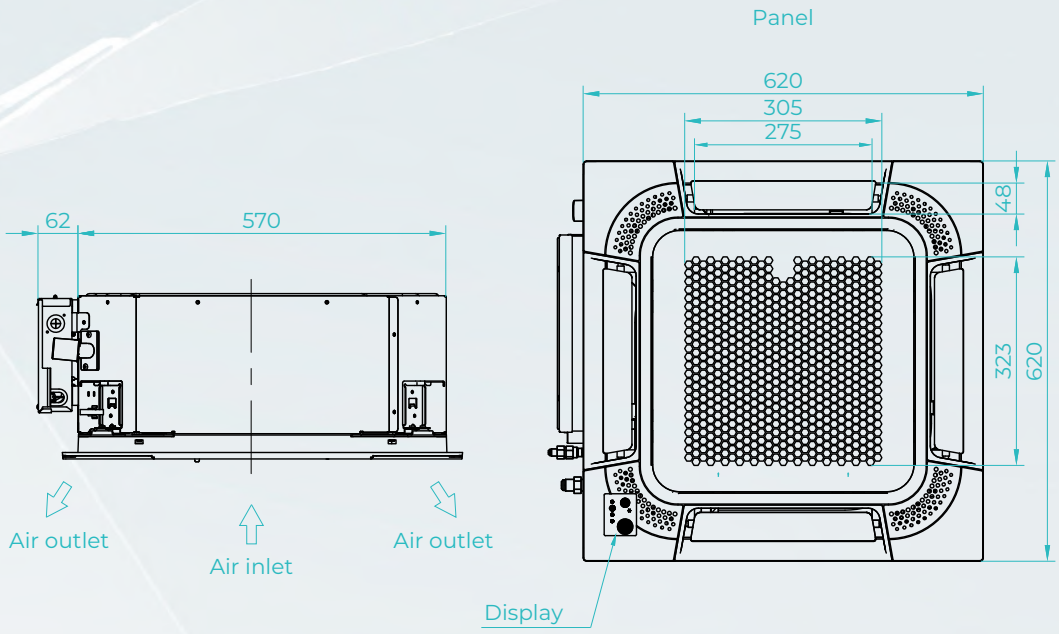
Technical parameters of cassette units

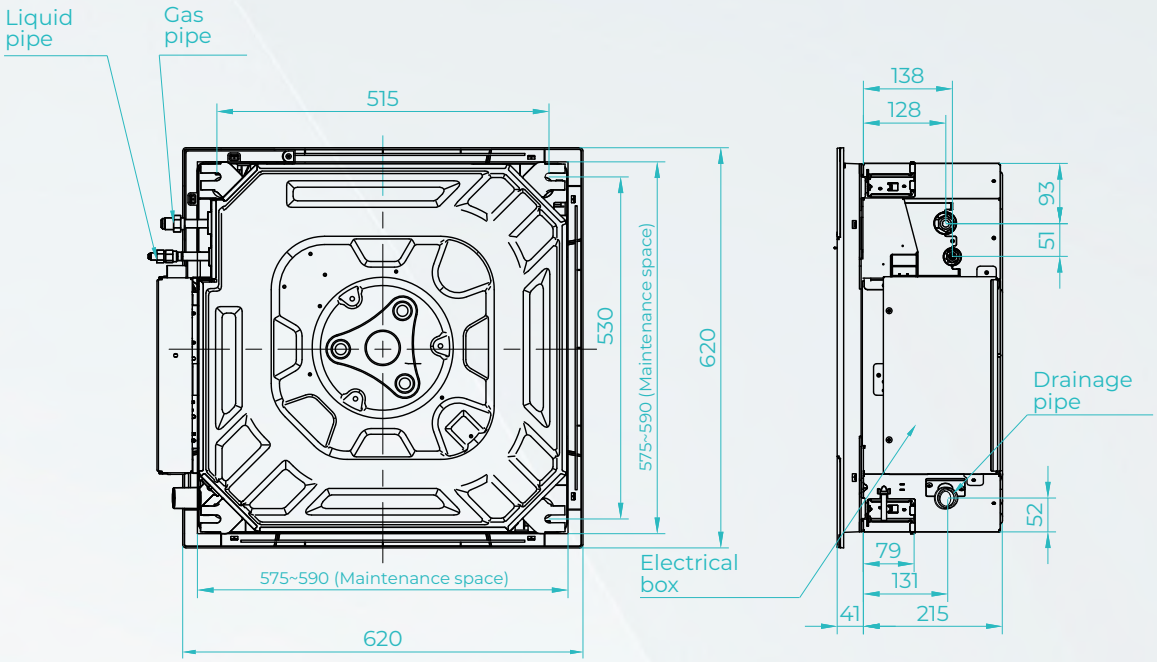
		INDOOR CASSETTE UNIT						
		LC AER-09C-R32-IU	LC AER-12C-R32-IU	LC AER-18C-R32-IU	LC AER-24C-R32-IU	LC AER-36C-R32-IU	LC AER-48C-R32-IU	LC AER-60C-R32-IU
Panel		PE-QEA/LD	PE-QEA/LD	PE-QEA/LD	PE-QFA/CD	PE-QFA/CD	PE-QFA/CD	PE-DA-B29
SEER	Cooling	7,2	7	6,7	7,1	7	6,07	5,55
SCOP	Heating	4,6	4,6	4,4	4,6	4,4	4,4	4,13
Energy saving class	Cooling	A++	A++	A++	A++	A++	A+	A+
Energy saving class	Heating	A++	A++	A+	A++	A+	A+	A+
Cooling capacity	kW	2,6	3,5	5	7	10	14	17,2
Rated consumption (Cooling)	kW	0,62	0,875	1,36	1,89	2,63	4,73	6,6
EER	kW	4,19	4	3,67	3,7	3,8	2,85	2,61
Heating capacity	kW	3,5	4	5,5	8	11	16	20
Rated consumption (Heating)	kW	0,75	0,1	1,48	2,11	2,86	5,44	6,65
COP	kW	4,27	4	3,71	3,8	3,85	2,94	3
Voltage, frequency, phase (from external to internal unit)	W	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60
Dimensions (WxHxL)	mm	570×215×570	570×215×570	570×215×570	840×236×840	840×272×840	840×272×840	840×298×840
Panel size (WxHxD)	mm	620×40×620	620×40×620	620×40×620	950×50×950	950×50×950	950×50×950	950×45×950
Weight, net	kg	15,5	15,5	15,5	23	26	26	32
Air flow (High/Med/Low)	m^3/h	600/500/400	600/500/400	700/600/510	1200/1000/840	1650/1400/1150	2000/1750/1550	2200/1700/1400
Noise level (High/Med/Low)	dB (A)	38/34/30	38/34/30	42/38/34	43/40/37	50/46/42	52/49/46	53/46/44
Controller type	Type	Wireless	Wireless	Wireless	Wireless	Wireless	Wireless	Wireless
Diameter of drainage pipe	mm	32	32	32	32	32	32	32
Drainage pump	—	✔	✔	✔	✔	✔	✔	✔
Air filter	—	✔	✔	✔	✔	✔	✔	✔
Compatible with multi split	—	✔	✔	✔	✔	—	—	—

		OUTDOOR UNIT						
		LC AER-09-R32-OU	LC AER-12-R32-OU	LC AER-18-R32-OU	LC AER-24-R32-OU	LC AER-36-R32-OU	LC AER-48-R32-OU	LC AER-60-R32-OU
Compressor type	—	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
Brand	—	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC
Input power	kW	0,77	0,77	1,18	2,08	3	3,15	3,7
Rated current	A	5,3	5,3	7,7	9,45	5,25	13,2	7,02
Voltage, frequency, phase (outdoor unit)		220-240/1/50&60	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60	380-415/3/50&60	380-415/3/50&60	380-415/3/50&60
Dimensions (WxHxL)	mm	810×580×280	810×580×280	860×670×310	900×750×340	900×1170×320	900×1170×320	950×1386×340
Weight, net	kg	34	34	44	53/57	81/90	83/92	109.0/122.0
Noise level	dB (A)	51	51	53	56	57	58	63
Refrigerant		R32	R32	R32	R32	R32	R32	R32
Refrigerant amount	kg	0,87	0,87	1,2	1,5	2,72	3	3,4
Liquid pipe / gas pipe	mm	Φ6,35/Φ9,52	Φ6.35/Φ9.52	Φ6,35/Φ12,7	Φ9.52/Φ15.88	Φ9.52/Φ15.88	Φ9.52/Φ15.88	Φ9.52/Φ15.88
Max. pipe length	m	30	30	50	50	50	60	
Max. height difference	m	15	15	30	30	30	30	30
Max. pipe length (w/o charging)	m	5	5	5	5	7,5	7,5	5
Add. refrigerant charge	g/m	15	15	15	35	35	35	28
Operating range	Cooling	-15~52	-15~52	-15~52	-15~52	-15~52	-15~52	-15~48
	Heating	-20~24	-20~24	-20~24	-20~24	-20~24	-20~24	-15~24

SCHEMES AND DIMENSIONS OF THE UNITS

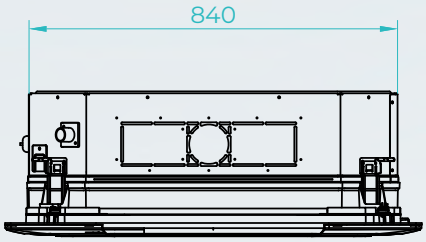
AEROSTAR LC AER-09C-R32-IU
AEROSTAR LC AER-12C-R32-IU
AEROSTAR LC AER-18C-R32-IU

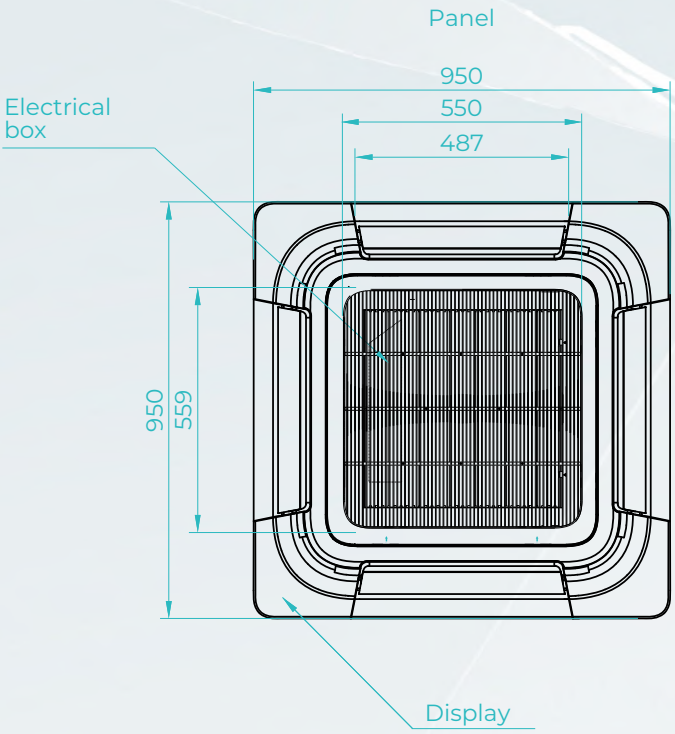


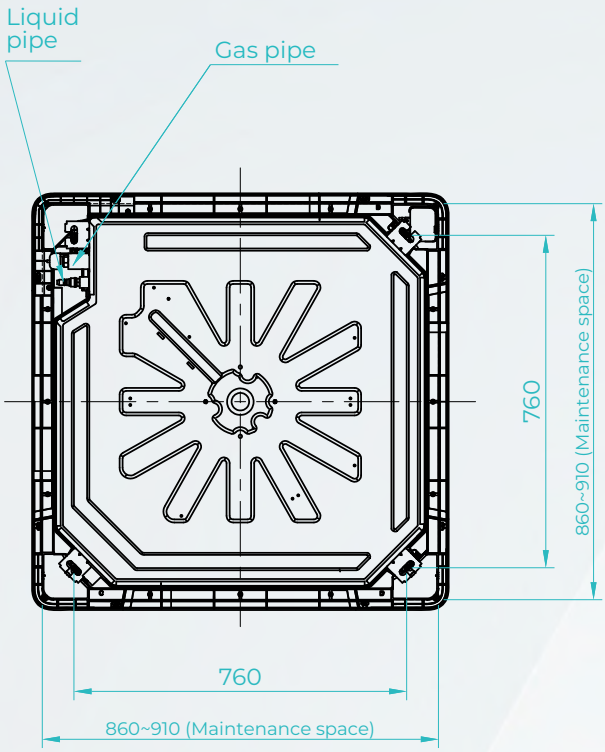


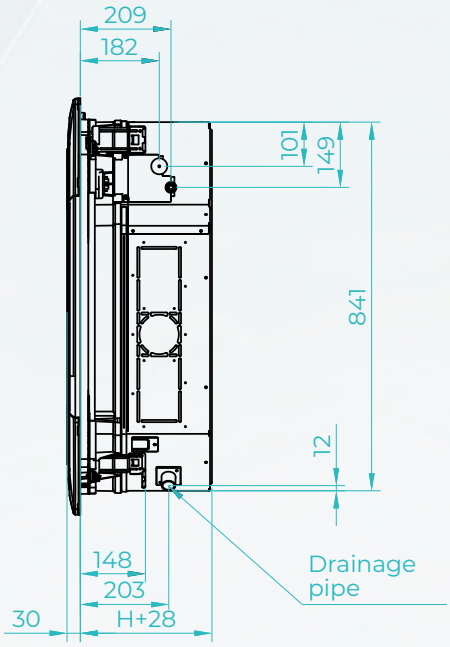
SCHEMES AND DIMENSIONS OF THE UNITS

AEROSTAR LC AER-24C-R32-IU
AEROSTAR LC AER-36C-R32-IU
AEROSTAR LC AER-48C-R32-IU





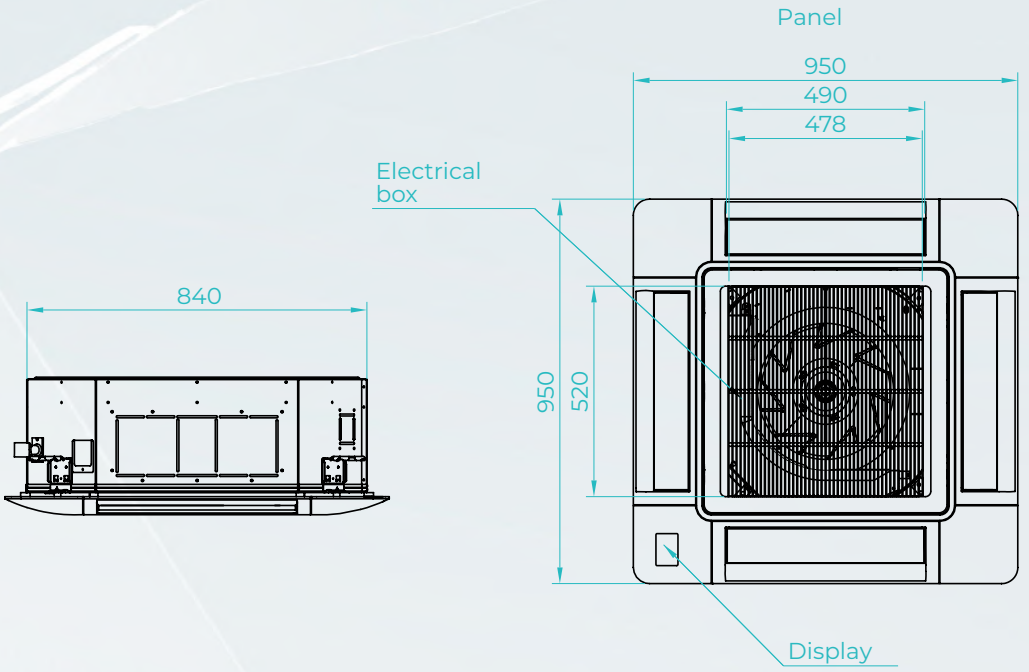


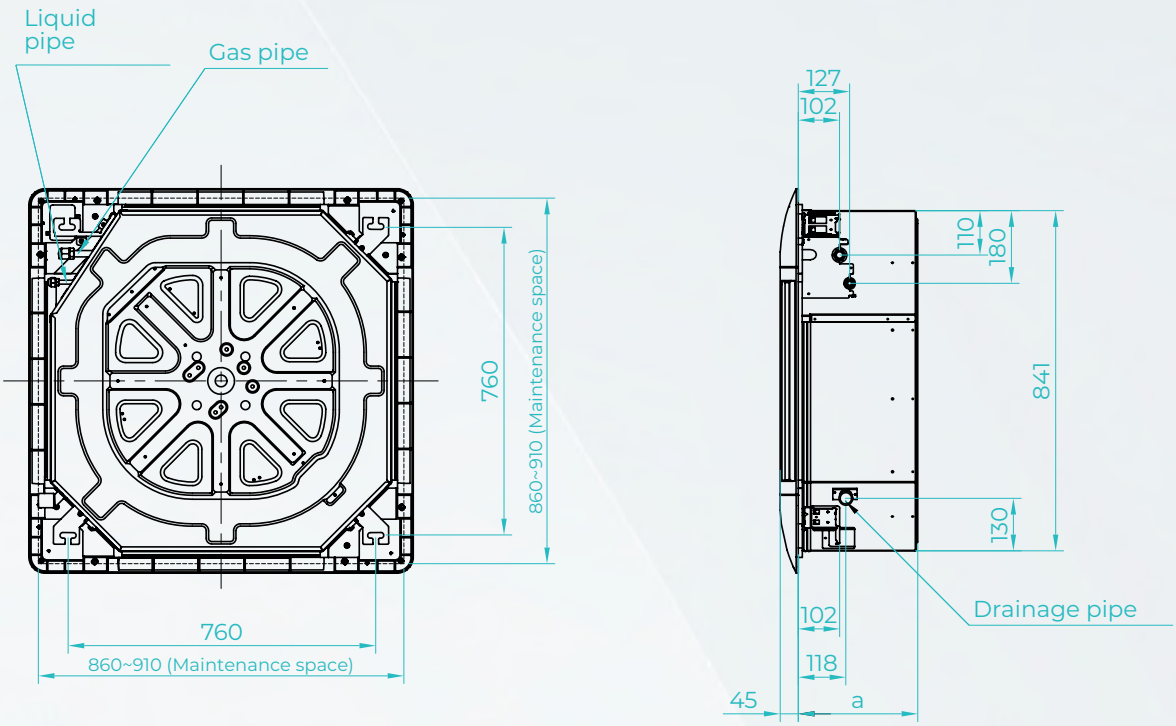


Model	H
18K~24K	236
36K~48K	272

SCHEMES AND DIMENSIONS OF THE UNITS

AEROSTAR LC AER-60C-R32-IU





Model	a
60K	298

INDOOR UNITS OF THE DUCT TYPE INDOOR UNITS

Automatic restart

Compact unit housing

Super cooling

Drainage pump

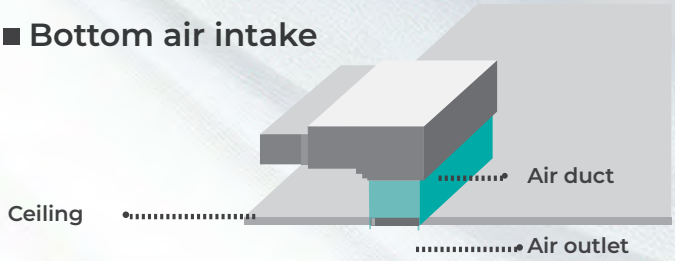
Self-diagnosis and protection

Sleep mode

The duct type units are characterized by a compact design (height starting from 190 mm) and the ability to adjust the static pressure required for the current application.
All duct type units are equipped with a switch that switches the operation of the fan to the desired mode.

In all models of the product line the static pressure can be set.

■ **Bottom air intake**

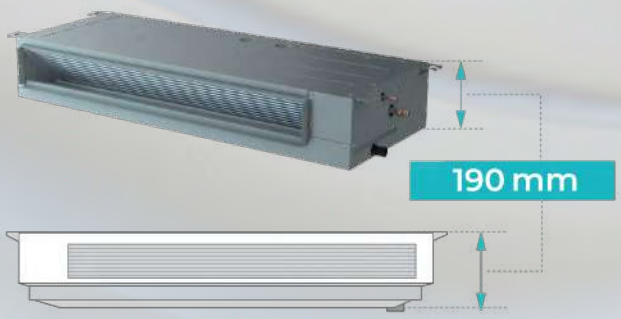


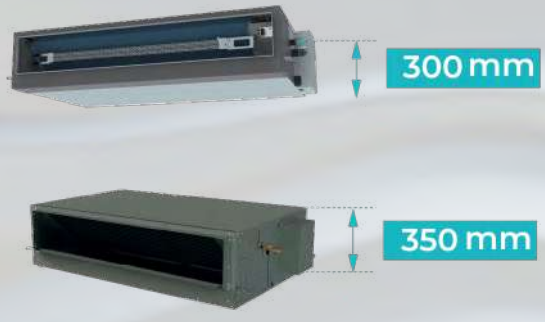
■ **Side air intake**

The air intake direction can be changed from side to bottom.
*It is recommended to choose the side air intake.
This reduces the noise level by 5 dB.

External static pressure up to 200 Pa

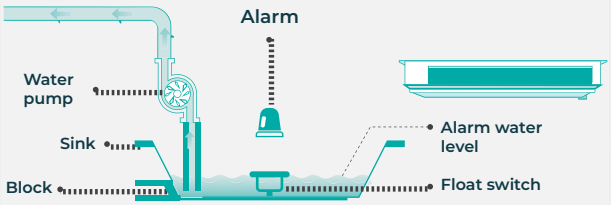
SLIM BODY



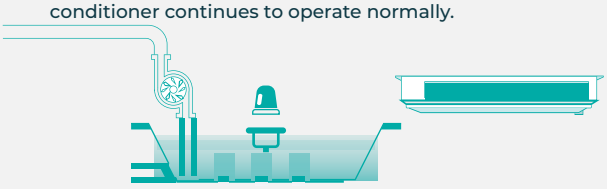


WATER LEVEL SENSOR

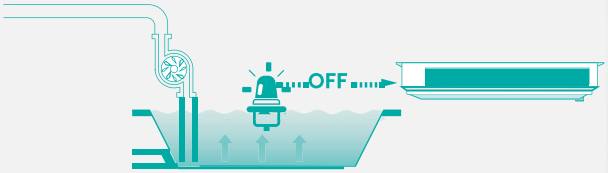
❶ Water level sensor



❷ When the drainage pump stops working and the water level rises due to the large drain pan design, the air conditioner continues to operate normally.



❸ When the water level rises so much that the sensor touches the alarm, the air conditioner stops working

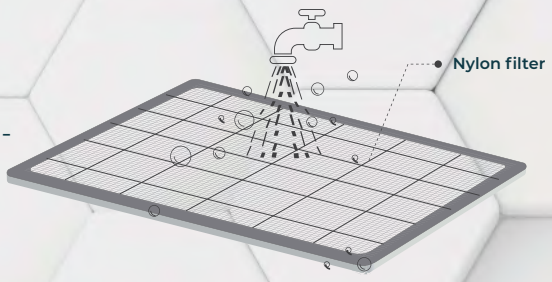


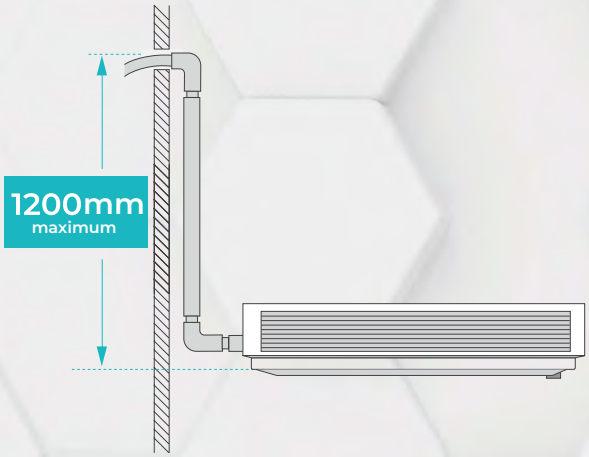
The float switch ensures that the water is always below a safe level, even if the pump fails or the drain is blocked.
This is double protection against water leaks. All Aerostar duct type units are equipped with a float switch by default.
The drain pan is large enough to hold all the water that returns from the drainage pipe in case of a sudden power outage.

NYLON FILTER

All Aerostar duct type units are equipped with a nylon filter by default.

The long-lasting filter reduces the replacement and cleaning time. It is washable, so dust is easily removed.





INTEGRATED DRAINAGE PUMP

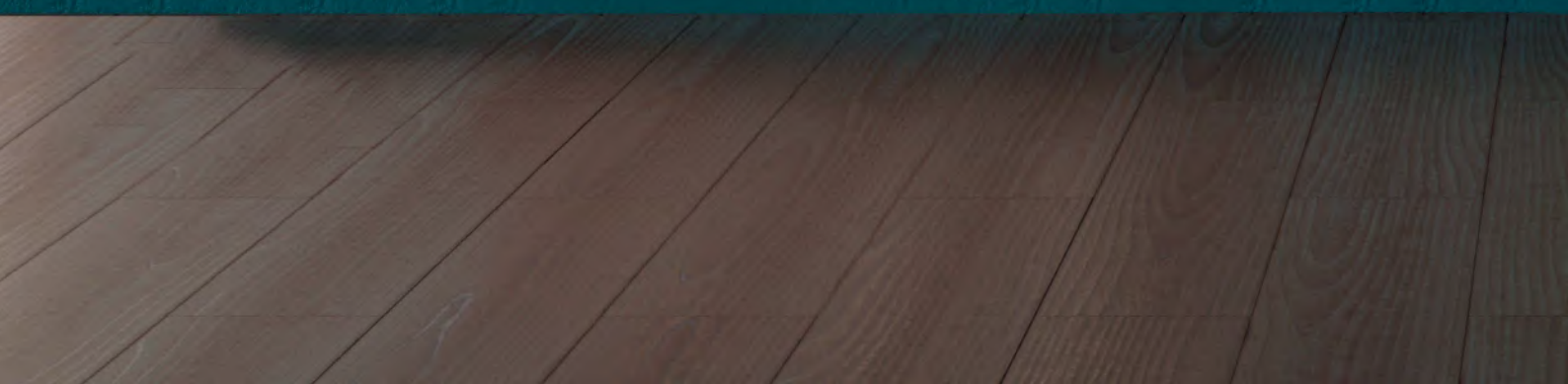
The maximum condensate elevation height is 1200 mm.

*For long-term operation, the recommended drainage elevation is < 800 mm.

Technical parameters of indoor duct type units

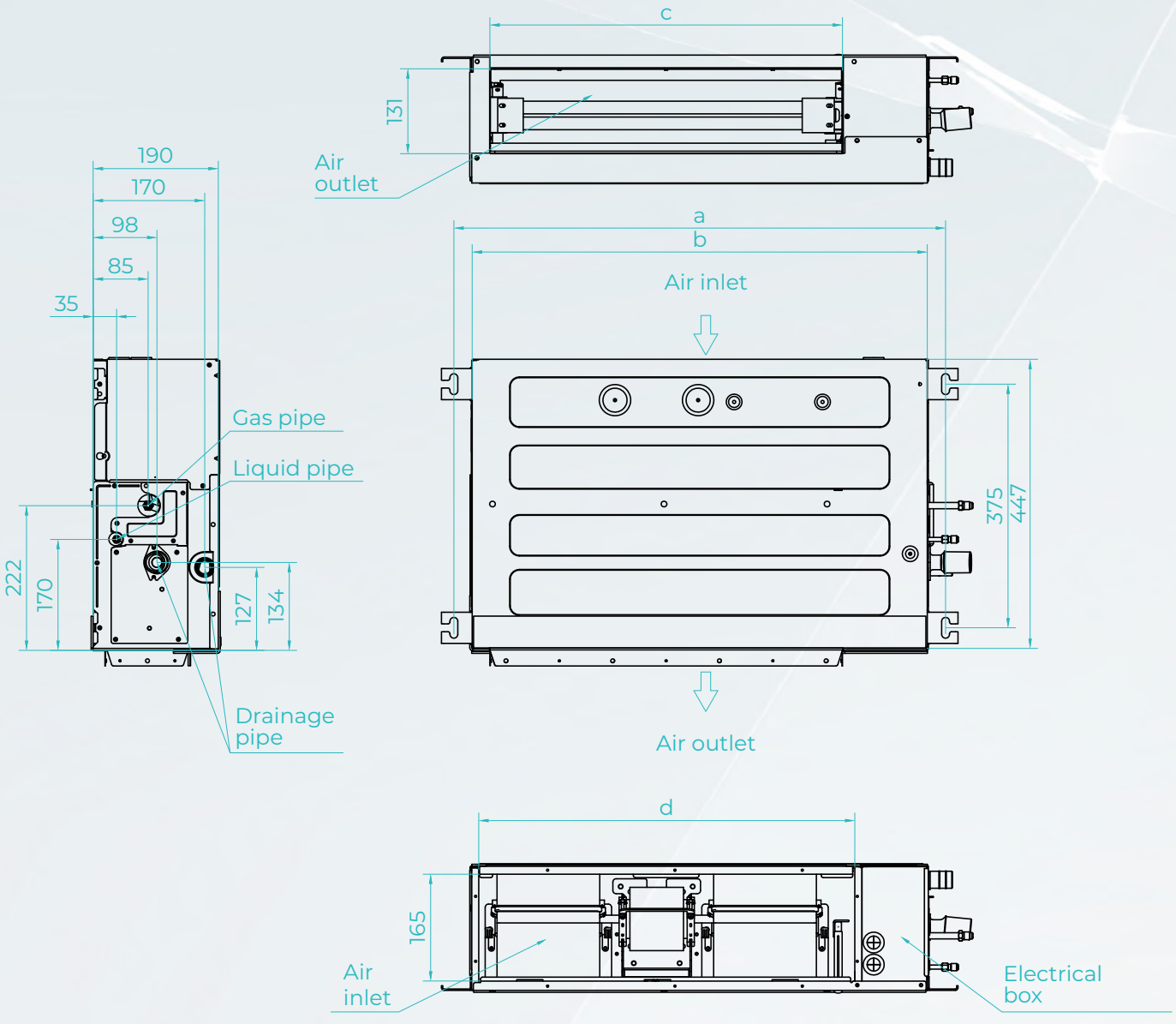
		INDOOR DUCT TYPE UNIT					
		LC AER-09D-R32-IU	LC AER-12D-R32-IU	LC AER-18D-R32-IU	LC AER-36D-R32-IU	LC AER-48D-R32-IU	LC AER-60D-R32-IU
SEER	Cooling	7,2	7	7	7	6,07	5,9
SCOP	Heating	4,3	4,3	4,6	4,4	4,27	3,6
Energy saving class	Cooling	A++	A++	A++	A++	A+	A+
Energy saving class	Heating	A+	A+	A++	A+	A+	A+
Cooling capacity	kW	2,6	3,5	5	10	13,5	17,5
Rated consumption (Cooling)	kW	0,59	0,87	1,28	2,63	4,65	6,6
EER	kW/kW	4,41	4,02	3,9	3,8	2,9	2,65
Heating capacity	kW	3,2	4	5,5	11	16	18,5
Rated consumption (Heating)	kW	0,74	1	1,32	2,75	4,7	6,1
COP	kW	4,31	4	4,15	4	3,4	3,03
Voltage, frequency, phase (from external to internal unit)	W/f/Hz	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60
Internal dimensions (WxHxL)	mm	910×190×447	910×190×447	1180×190×447	1400×300×800	1400×300×800	1300×350×800
Weight, net	kg	18	18	24,5	53/59	53/59	51,0/60,0
Air flow (High/Med/Low)	m^3/h	600/484/400	600/484/400	900/840/780	2000/1800/1600	2400/2200/1900	2400/2200/1900
Noise level (High/Med/Low)	dB	36/33/30	36/33/30	41/37/33	42/39/36	43/40/37	49/46/43
External pressure	Pa	0~50	0~50	0~50	0~200	0~200	0~150
Control panel	Type	Wire	Wire	Wire	Wired	Wired	Wired
Drain pipe diameter	mm	32	32	32	32	32	32
Drainage pump	—	✔	✔	✔	✔	✔	Option
Air filter	—	✔	✔	✔	✔	✔	Option
Compatible with multi split	—	✔	✔	✔	—	—	—

		OUTDOOR UNIT					
		LC AER-09D-R32-OU	LC AER-12D-R32-OU	LC AER-18D-R32-OU	LC AER-36D-R32-OU	LC AER-48D-R32-OU	LC AER-60D-R32-OU
Compressor type	—	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
Brand	—	GMCC	GMCC	GMCC	GMCC	GMCC	GMCC
Input power	kW	0,77	0,77	1,18	2,68	3,15	4
Rated current	A	5,3	5,3	7,7	5,25	13,2	7,02
Voltage, frequency, phase (external unit)	V/ph/Hz	220-240/1/50&60	220-240/1/50&60	220-240/1/50&60	380-415/3/50&60	380-415/3/50&60	380-415/3/50&60
Dimensions (WxHxL)	mm	810×580×280	810×580×280	860×670×310	900×1170×320	900×1170×320	950×1386×340
Weight, net	kg	34	34	44	81/90	83/92	109.0/122.0
Noise level	dB (A)	51	51	53	57	58	63
Refrigerant	—	R32	R32	R32	R32	R32	R32
Refrigerant amount	kg	0,87	0,87	1,2	2,8	3	3,4
Liquid pipe / gas pipe	mm	Φ6,35/Φ9,52	Φ6,35/Φ9,52	Φ6,35/Φ12,7	Φ9,52/Φ15,88	Φ9,52/Φ15,88	Φ9,52/Φ15,88
Max. pipe length	m	30	30	50	50	60	50
Max. height difference	m	15	15	30	30	30	30
Max. pipe length (w/o charging)	m	5	5	5	7,5	7,5	5
Add. refrigerant charge	g/m	15	15	15	35	35	28
Operating range	Cooling	-15~52	-15~52	-15~52	-15~52	-15~52	-15~48
	Heating	-20~24	-20~24	-20~24	-20~24	-20~24	-15~24



SCHEMES AND DIMENSIONS OF THE UNITS

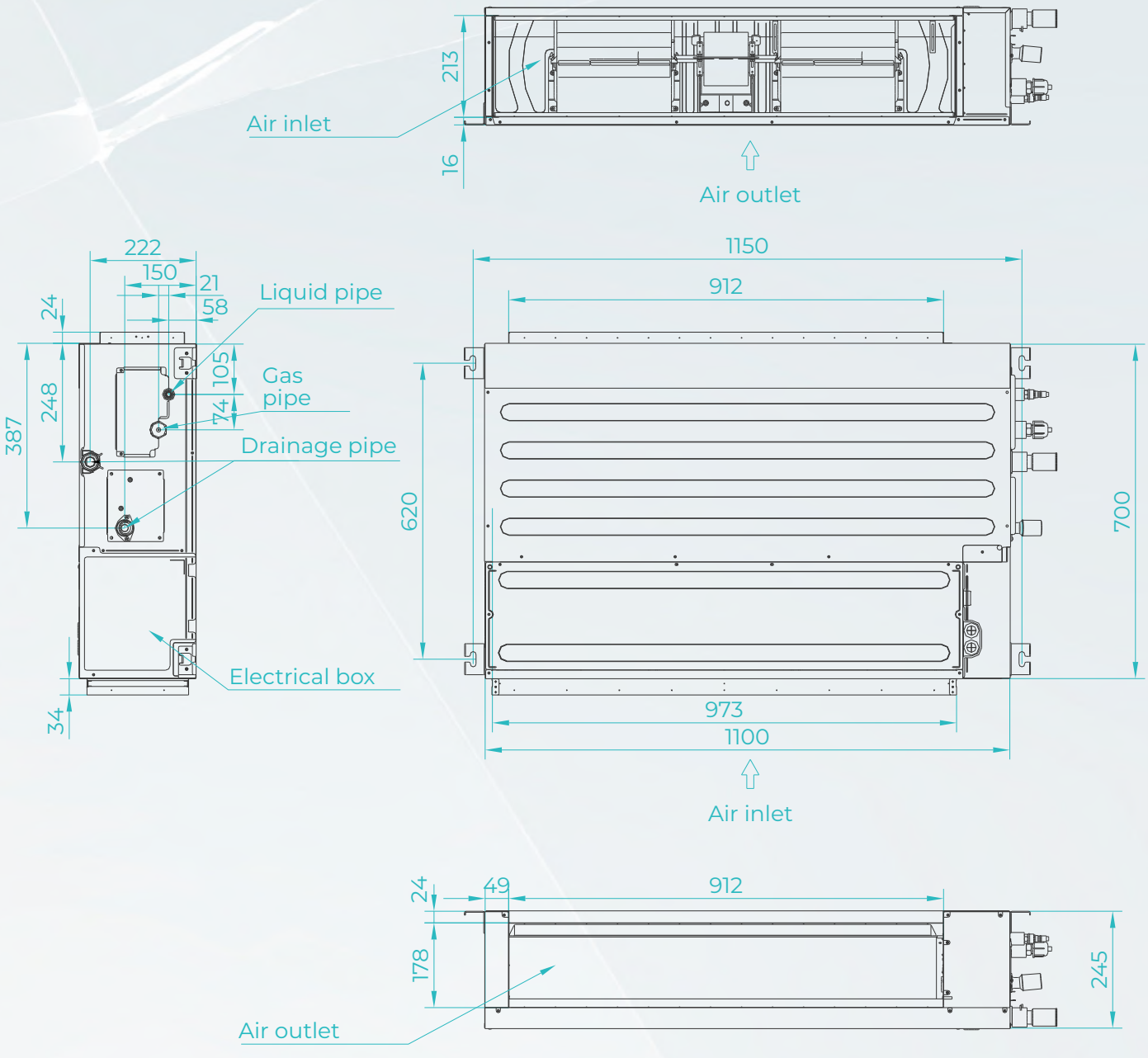
AEROSTAR LC AER-09D-R32-IU
AEROSTAR LC AER-12D-R32-IU
AEROSTAR LC AER-18D-R32-IU



Model (Btu/h)	a	b	c	d
9K/12K	961	910	749	786
14K/18K	1231	1180	1019	1056

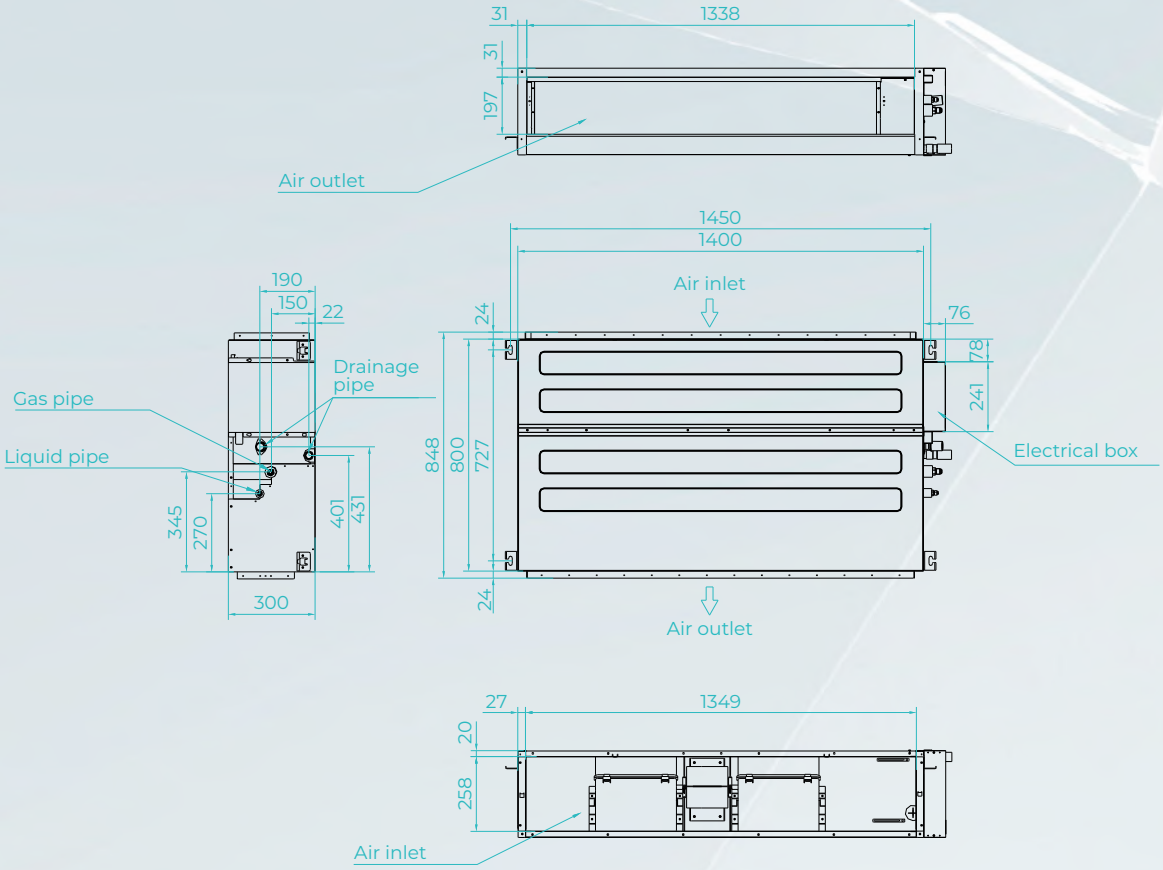
SCHEMES AND DIMENSIONS OF THE UNITS

AEROSTAR LC AER-24D-R32-IU



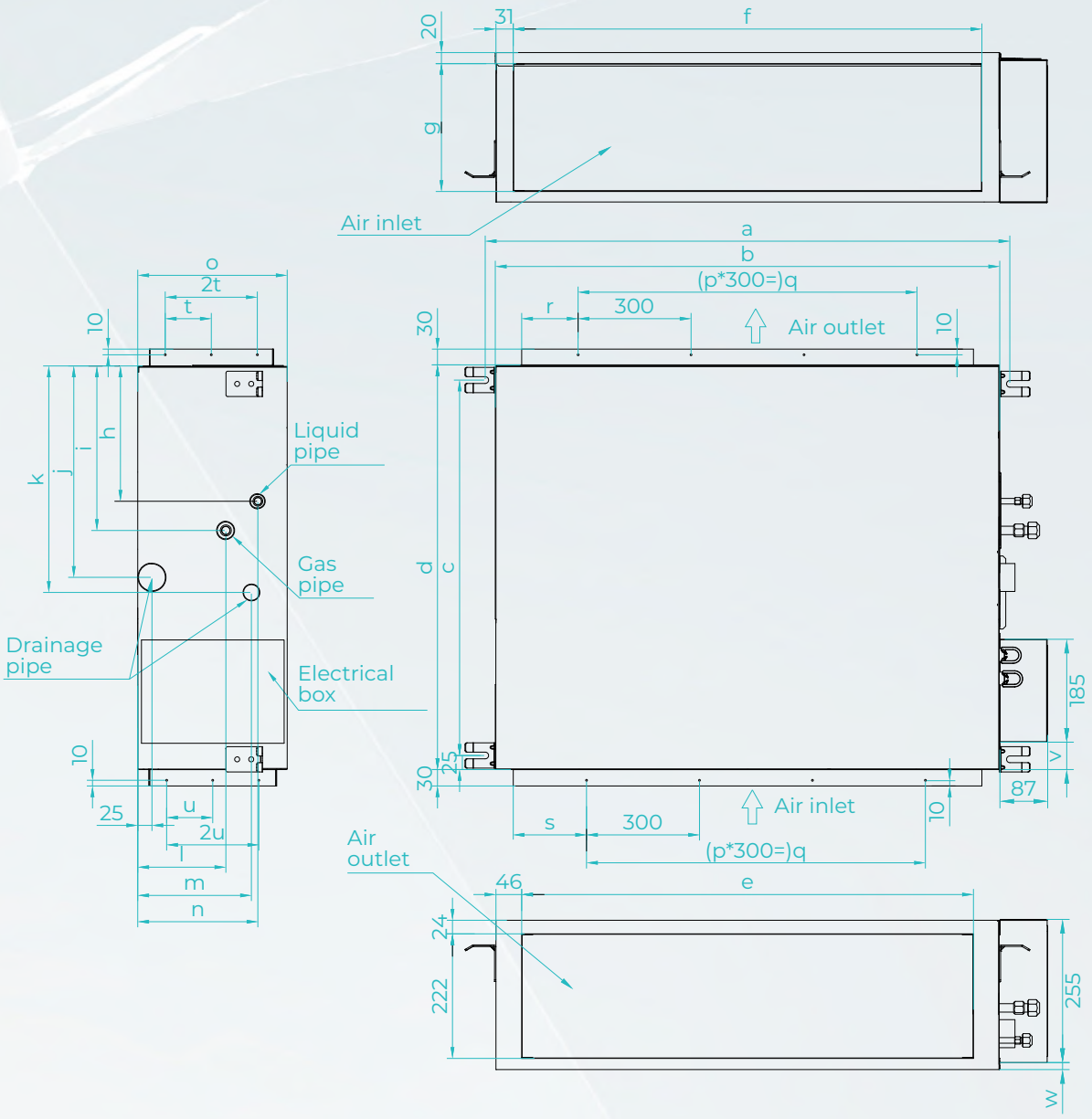
SCHEMES AND DIMENSIONS OF THE UNITS

AEROSTAR LC AER-36D-R32-IU
AEROSTAR LC AER-48D-R32-IU



SCHEMES AND DIMENSIONS OF THE UNITS

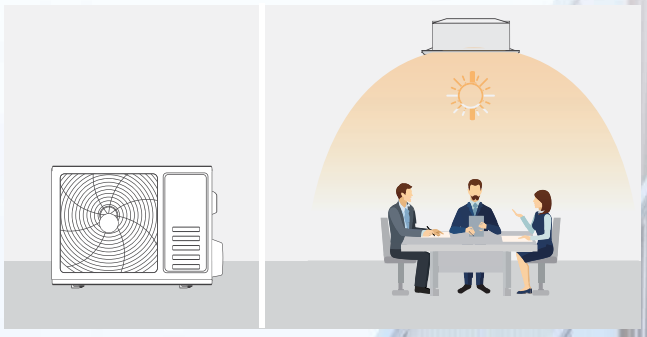
AEROSTAR LC AER-60D-R32-IU



Model	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w
60K	1334	1300	756	800	1205	1235	308	237	312	375	400	204	186	242	350	3	900	153	168	90	140	110	49

OUTDOOR UNITS

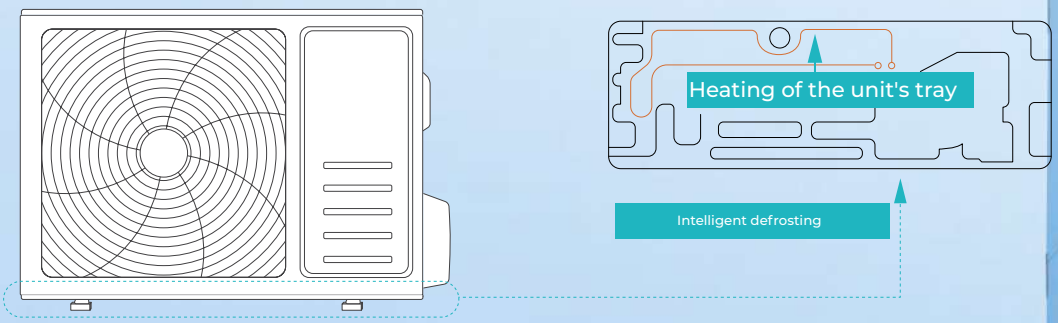
Cooling:
-15°C to 52°C



Heating:
-20°C to 24°C

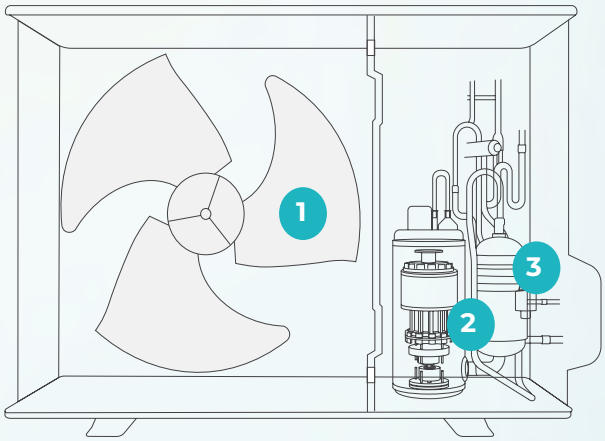
ELECTRIC CHASSIS HEATER

Prevents formation of ice in the pan, especially at very low temperatures.

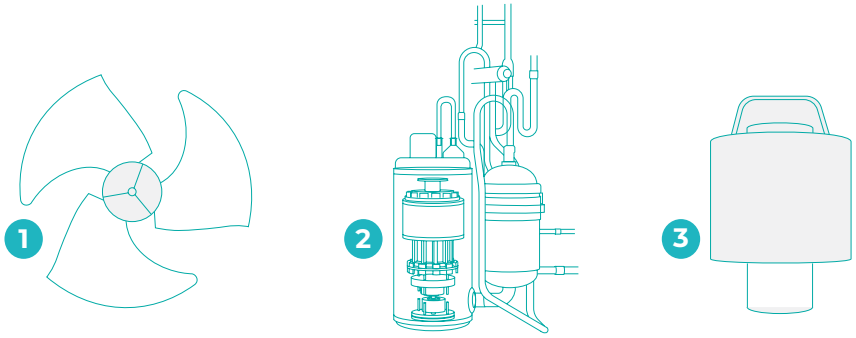


ENERGY EFFICIENT OUTDOOR UNIT

- SEER to 7,50
- SCOP to 4,60
- Energy efficiency level A++/A+++

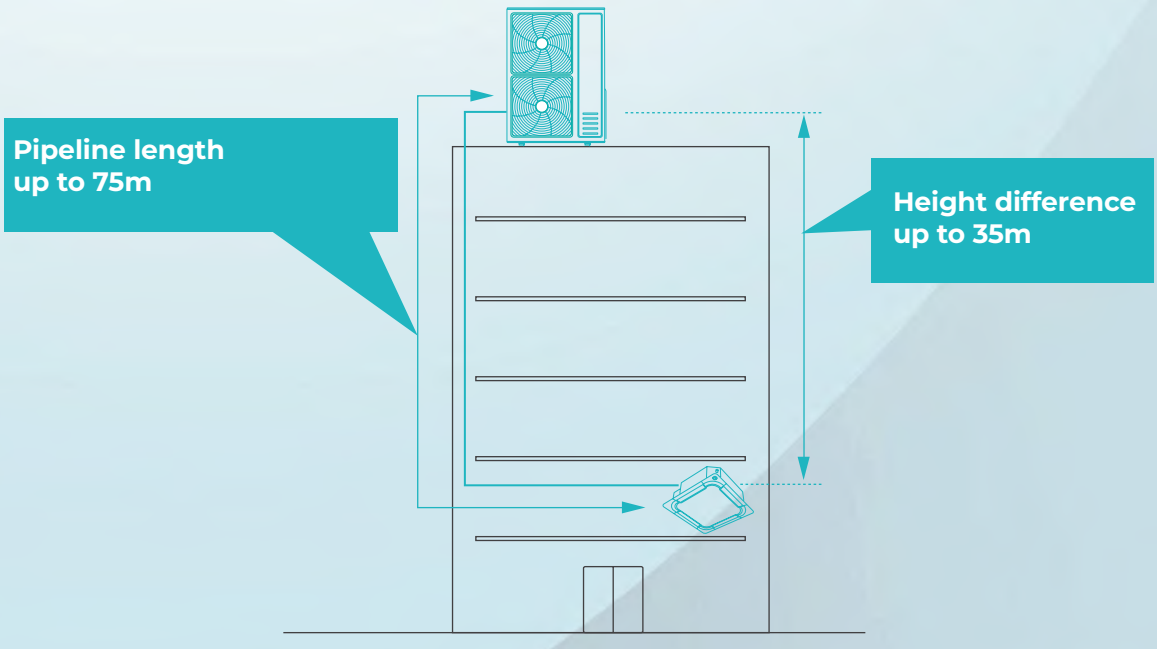


1. DC fan motor
2. DC Invertor compressor
3. Electronic expansion valve



A LONG LINE AND A LARGE DIFFERENCE IN HEIGHT

Due to the high flexibility of installation, the air conditioners can be installed in facilities with piping lengths of up to 75 m and a height difference of up to 30 m.



AHU-KIT INTERFACE

Aerostar Light Commercial* series outdoor units are able to work in combination with Aerostar ventilation equipment. The control and coordination of the outdoor unit with the ventilation unit is carried out by installing the AHU-KIT Aerostar interface. The automation of the air handling unit is connected to the AHU-KIT interface, which in its turn is connected to the outdoor unit and starts it in the mode set by the automation controller of the unit.

There are several ways to control the performance of the outdoor unit:

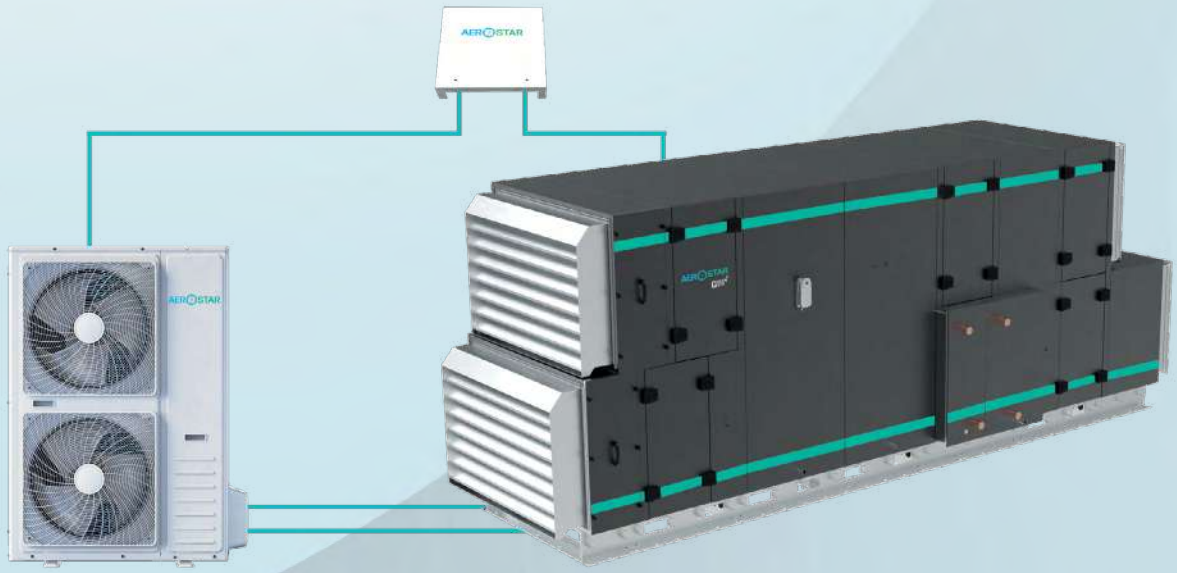
1. **Discrete control modes — 4 discrete inputs allow setting the required power by the corresponding combination of input signals;**
2. **Analog control modes, among which the following can be used: 0-10 V or 1-5 V voltage control, 4-20 mA current control and 0-10 kΩ variable resistance control;**
3. **Control via Modbus;**
4. **Control using Aerostar wired remote controller;**
5. **Automatic control mode without using any external discrete and analog control signals — the air temperature is maintained by the installed temperature sensor, which is connected directly to the AHU-KIT Aerostar.**

It is possible to switch the operating mode (cooling/heating) using a separate discrete input on the AHU-KIT Aerostar or to fix the operation in one required mode. Also, the user is provided with 7 digital outputs, each of which is programmed with its own factory function, including the "Defrost" and "Error" signals.

All AHU-KIT Aerostar settings are made by changing the position of the DIP switches on the AHU-KIT control board.

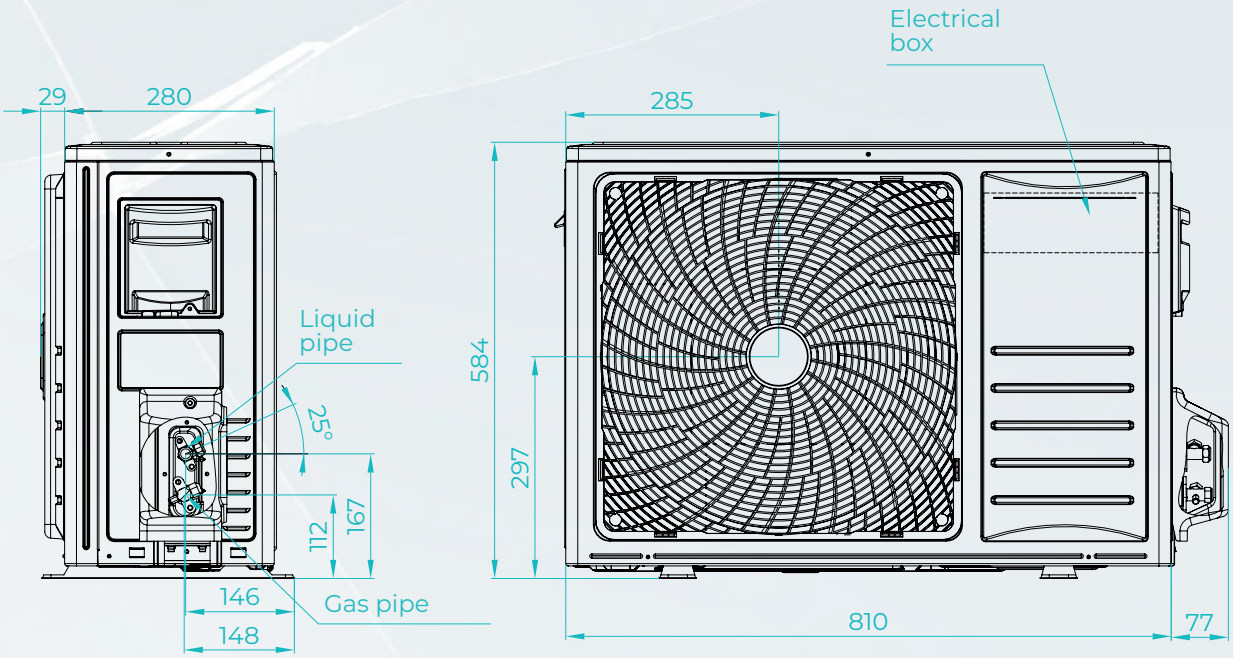
For more detailed information, please refer to the AHU-KIT Aerostar interface installation and operation manual.

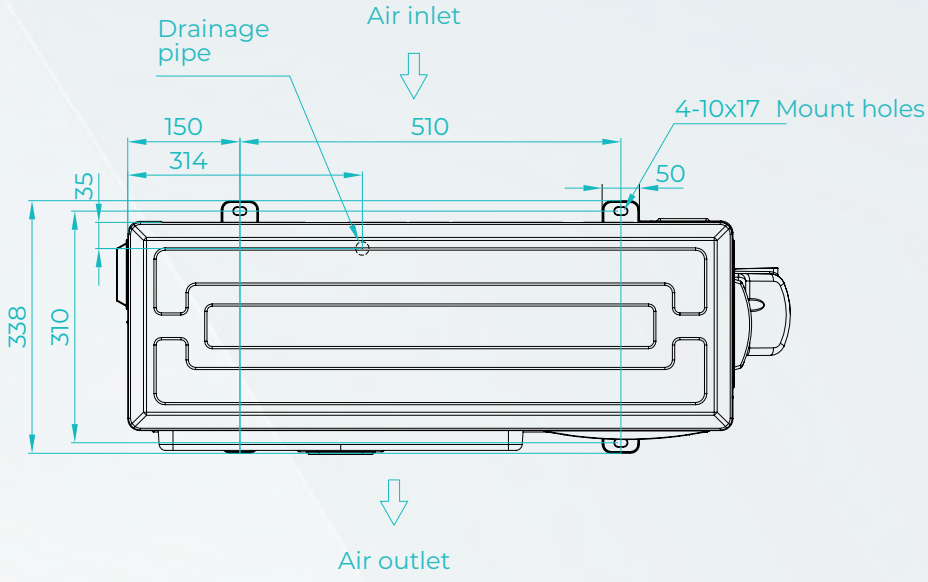
*Marking of external units LC AER-09...85-R32-OU



SCHEMES AND DIMENSIONS OF THE UNITS

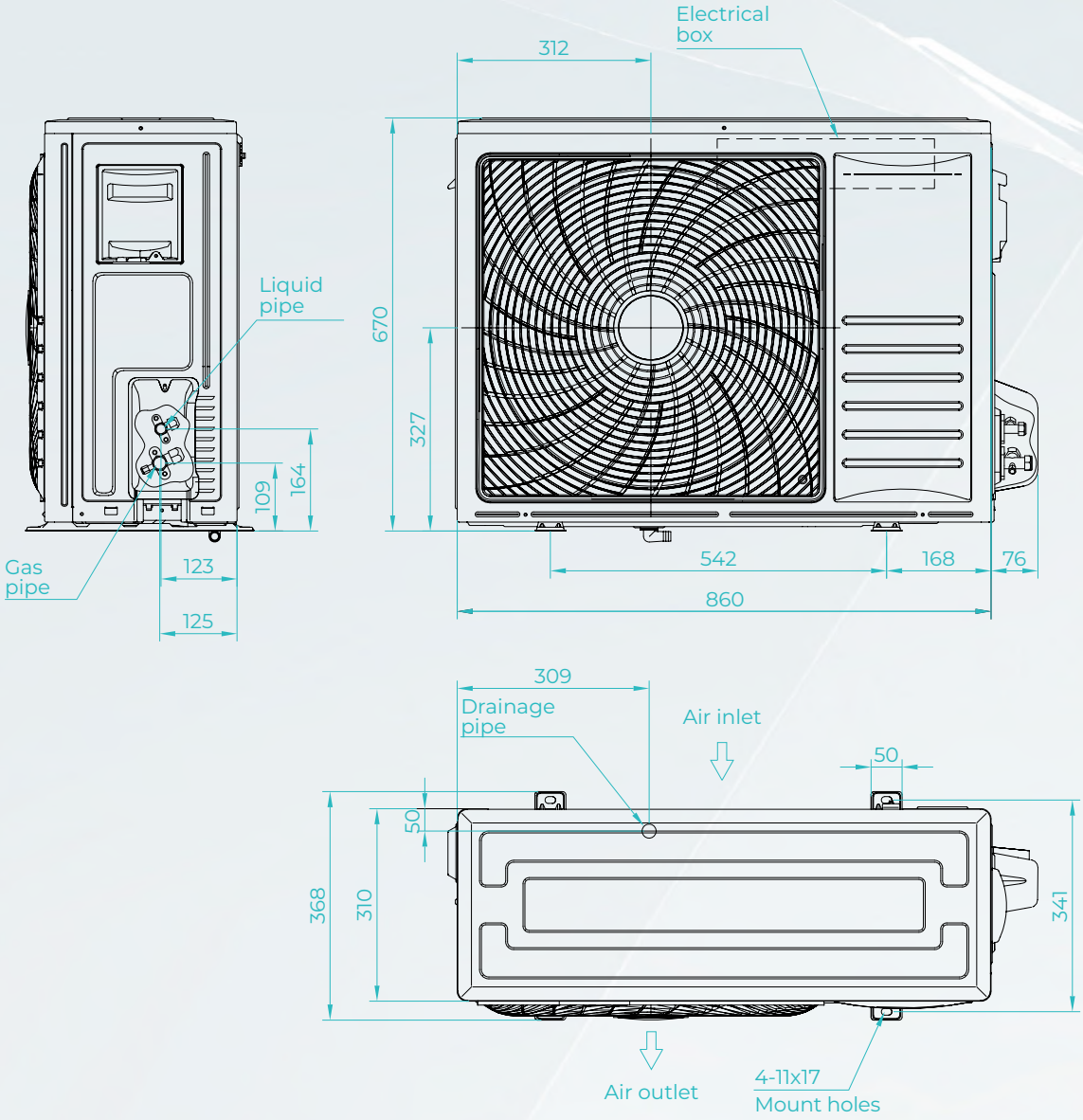
AEROSTAR LC AER-09-R32-OU
AEROSTAR LC AER-12-R32-OU





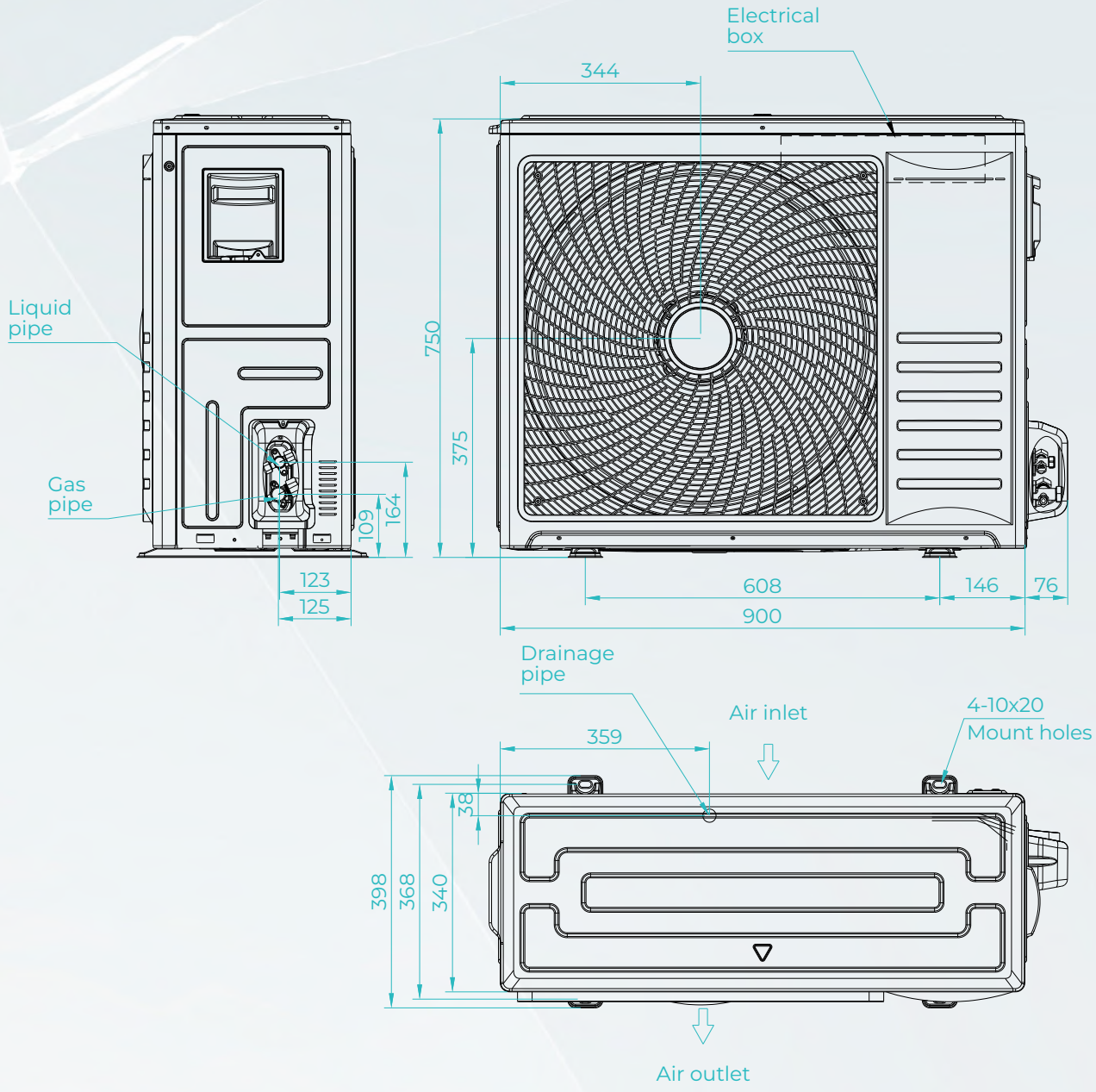
SCHEMES AND DIMENSIONS OF THE UNITS

AEROSTAR LC AER-18-R32-OU



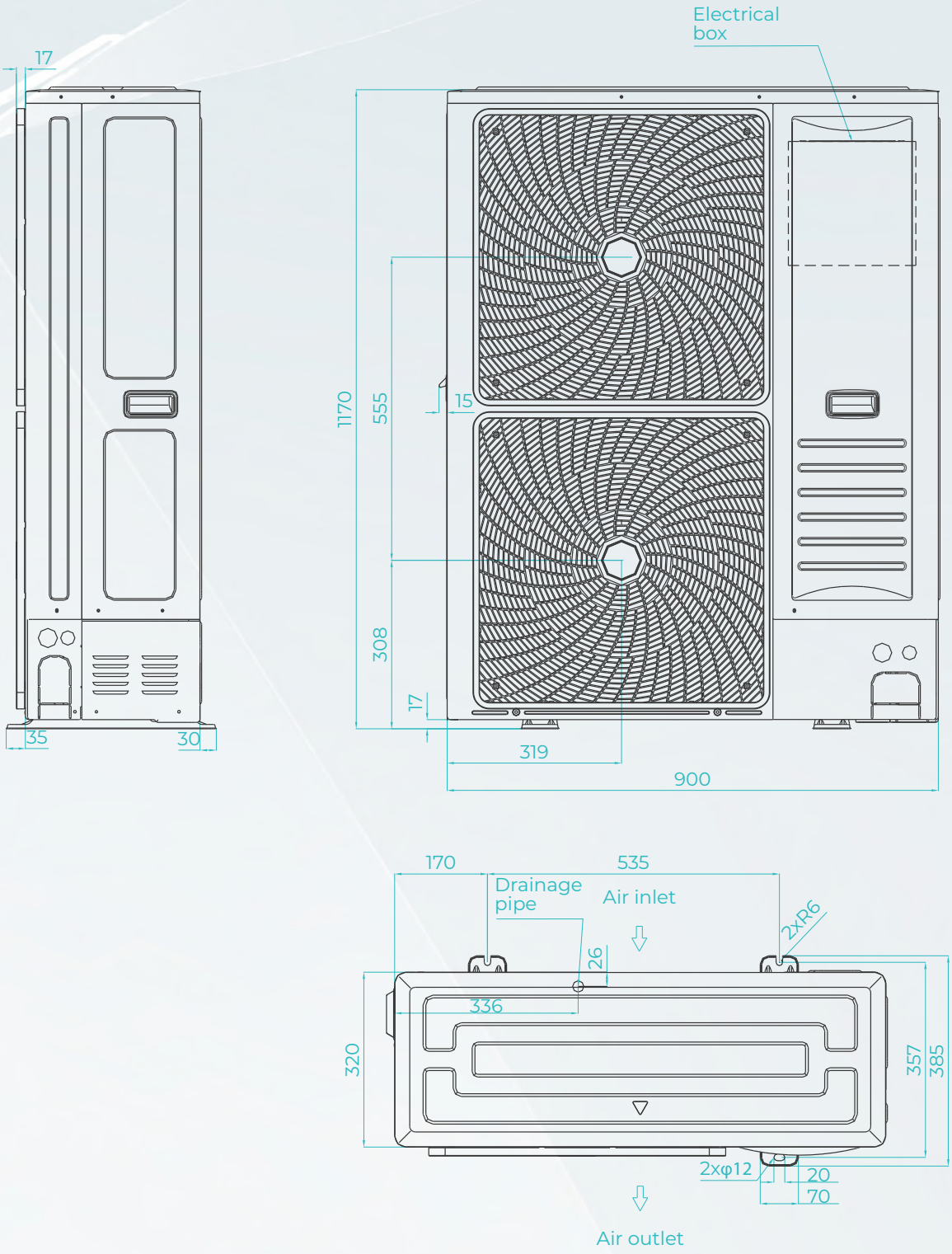
SCHEMES AND DIMENSIONS OF THE UNITS

AEROSTAR LC AER-24-R32-OU



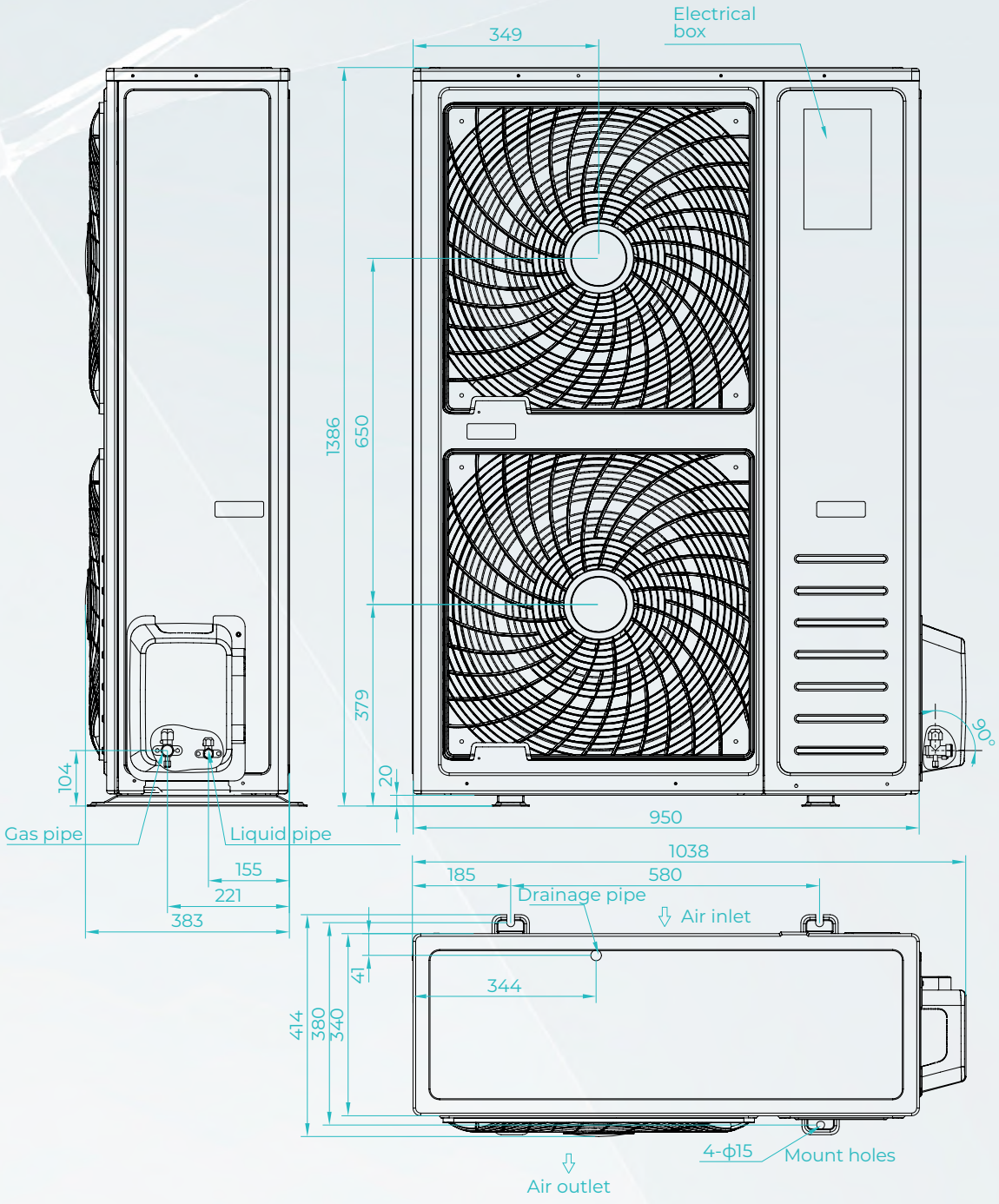
SCHEMES AND DIMENSIONS OF THE UNITS

AEROSTAR LC AER-36-R32-OU
AEROSTAR LC AER-48-R32-OU



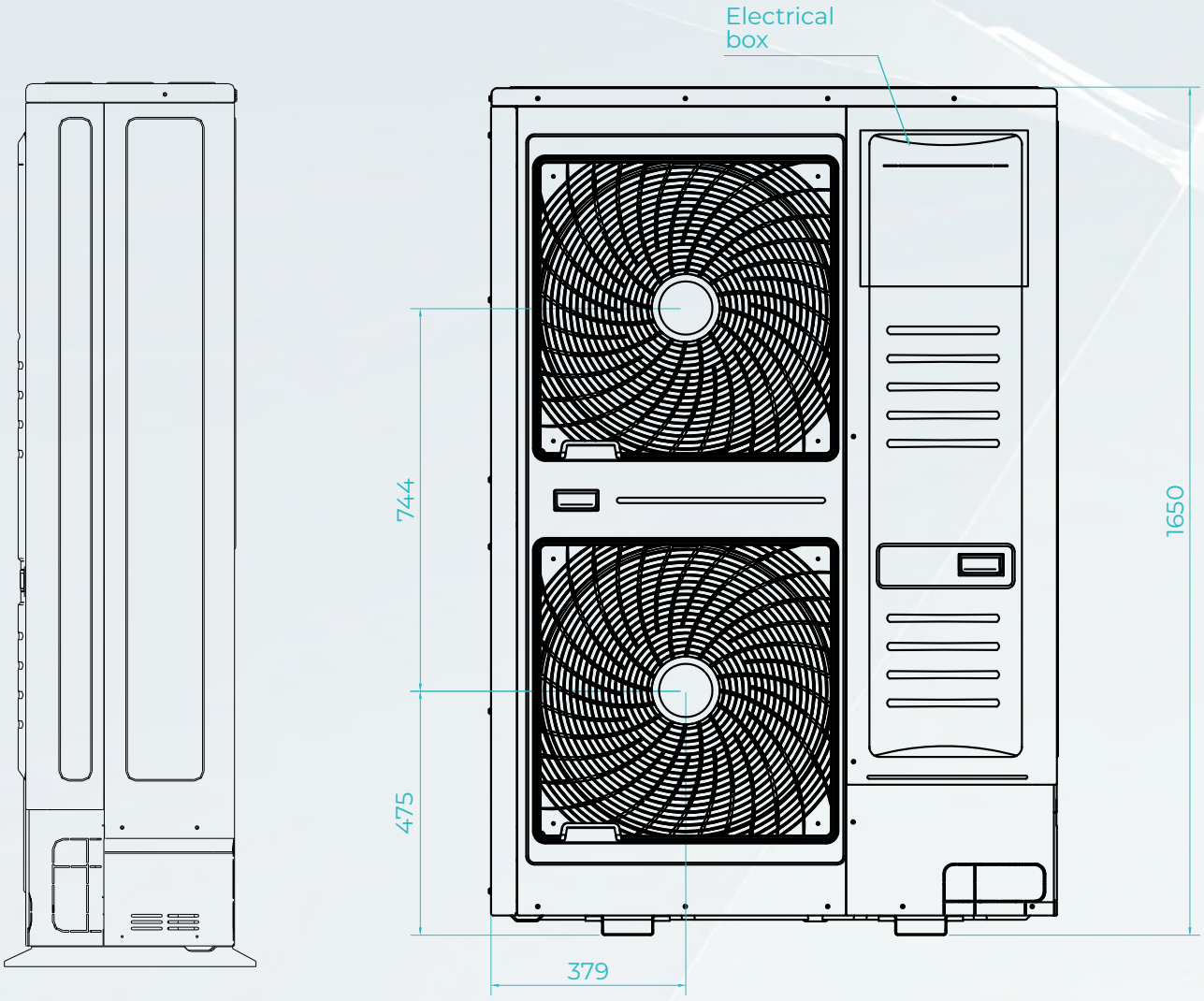
SCHEMES AND DIMENSIONS OF THE UNITS

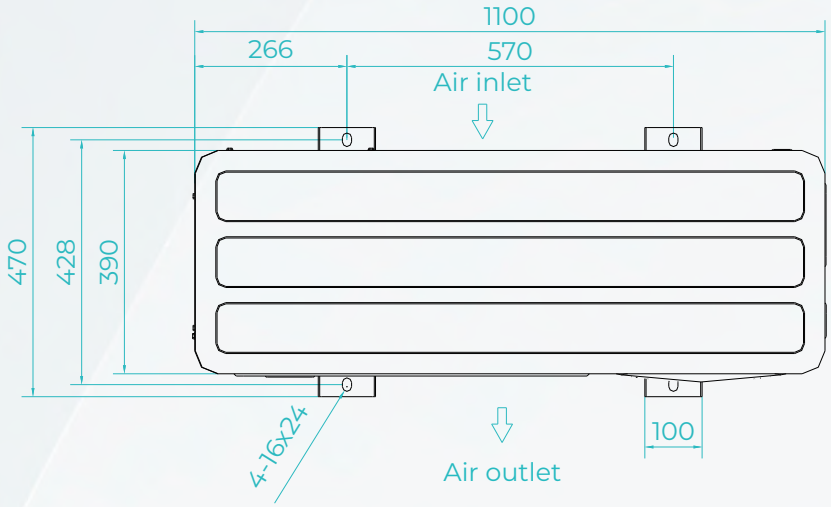
AEROSTAR LC AER-60-R32-OU



SCHEMES AND DIMENSIONS OF THE UNITS

AEROSTAR LC AER-75-R32-OU
AEROSTAR LC AER-85-R32-OU

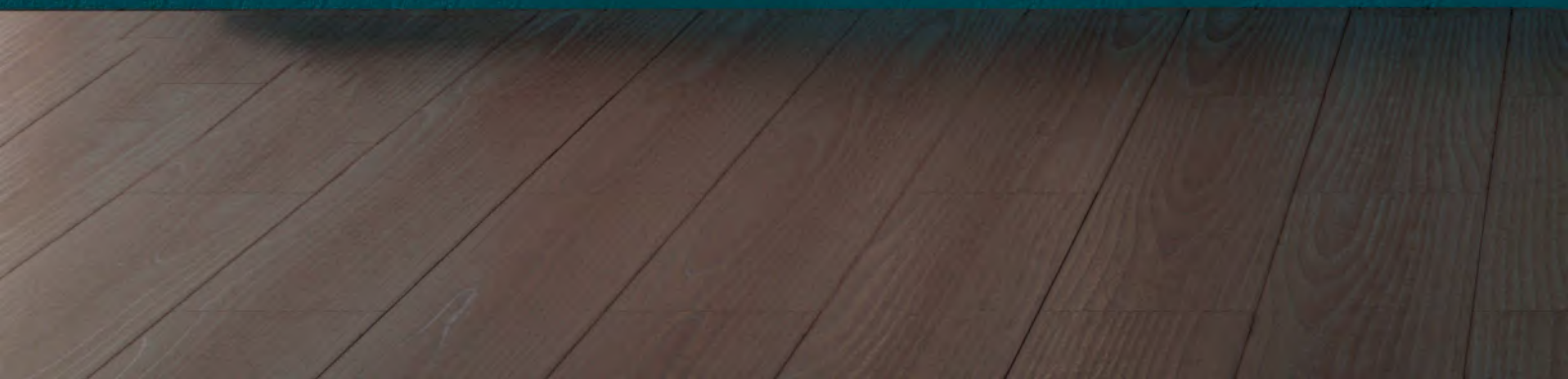




Technical parameters of the outdoor units

		Aerostar LC AER-75-R32-OU	Aerostar LC AER-85-R32-OU
SEER	Cooling	6,00	5,82
SCOP	Heating	3,90	3,90
Energy saving class	Cooling	A+	A+
Energy saving class	Heating	A	A
Cooling capacity	kW	19	23
Rated consumption (Cooling)	kW	6,33	9,78
EER	kW/kW	3,00	2,35
Heating capacity	kW	22	25
Rated consumption (Heating)	kW	5860	7240
COP	kW	3,75	3,45
Compressor type	—	ROTARY	ROTARY
brand	—	GMCC	GMCC
Input power	kW	4,91	4,91
Rated current	A	7.7	7.7
Voltage, frequency, phase (External unit)	V/ph/Hz	380-415/3/50&60	380-415/3/50&60
Dimensions WxHxL	mm	1100×1650×390	1100×1650×390
Weight, net	kg	140	140
Noise level	dB (A)	61	61
Refrigerant	—	R32	R32
Refrigerant, amount	kg	4,60	4,60
Liquid pipe / Gas pipe	mm	Φ9.52/Φ22.22	Φ9.52/Φ22.22
Max. pipe length	m	75	75
Max. height difference	m	30	30
Max. pipe length (w/o charging)	m	5	5
Add. refrigerant charge	g/m	35	35
Temperature range	Cooling	-15~50	-15~50
	Heating	-20~24	-20~24

Remark:
LC AER-75-R32_04, LC AER-85-R32-04 are used only like compressor-condenser units.



CONTROL SYSTEM

AER-MB-1 COMMUNICATION UNIT

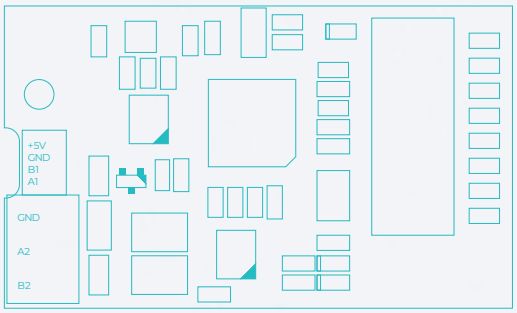
The AER-MB-1 communication unit is designed to establish communication between the indoor unit of the air conditioner and the controller or SCADA system using the ModBus RTU RS-485 protocol.

TECHNICAL PARAMETERS

Supply voltage	5VDC
Data transfer protocol	ModBus RTU RS-485 9600, 19200, 8N1
Number of ModBus RTU addresses	126

TERMINALS

The [+5V, GND, Bl, A1] connector is used to connect the matching unit to the indoor unit of the air conditioner.



Terminals [GND, A2, B2] are used to establish communication with the controller or SCADA system, where:

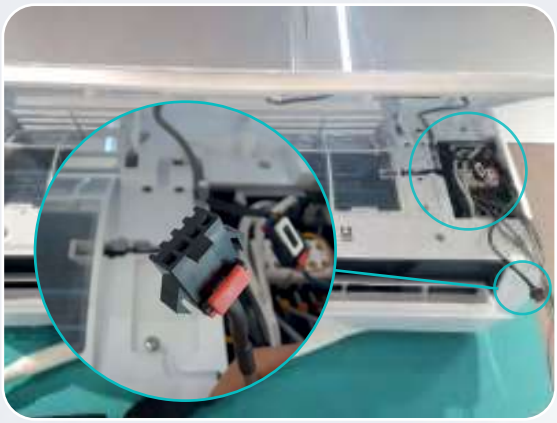
- ✓ **GND — not connected**
- ✓ **A2, B2 — RS-485 connection to the master controller or SCADA system**

INSTALLATION OF AER-MB-1

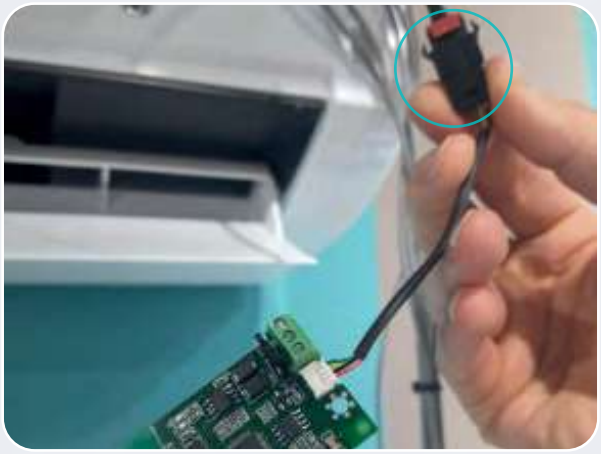
① Disconnect the power from the indoor unit

② Open the unit

③ Find the interface cable near the terminal box as shown in the figure

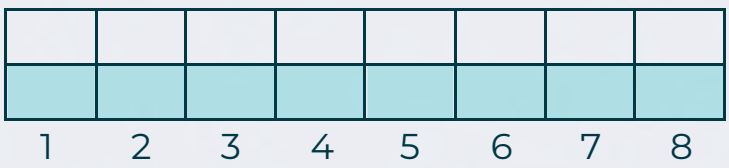


④ Connect the interface cable to the matching unit



⑤ Install the AER-MB-1 and connect the power to the indoor unit

DIP-switches



Off (default)

[1...7] - ModBus adress* settings.
[8] - ModBus baudrate 9600 (off), 19200 (on) settings

*If all DIP-switches in position OFF, ModBus address = 1

MANAGEMENT SYSTEM

The SCADA system, BMS allows you to combine all engineering systems, such as

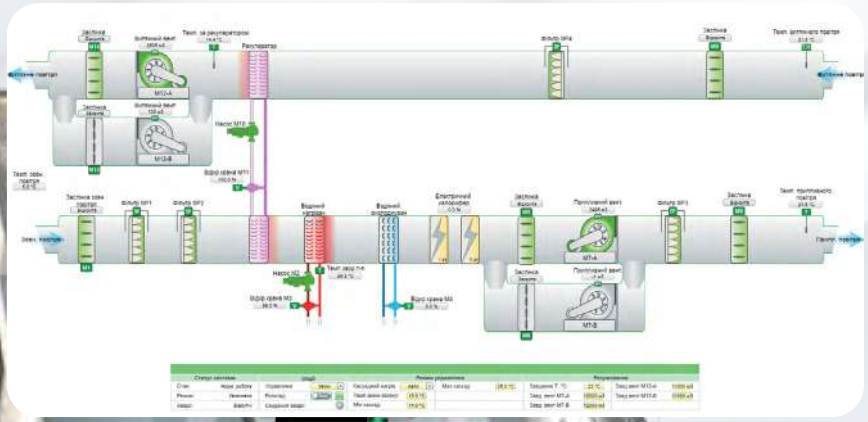
- Ventilation
- Air conditioning (curtains, air conditioners)
- Cooling (chiller / fan coil / VRF)
- Heat supply (rooftops, heating stations, boilers, radiator heating, convectors)
- Pump stations
- Water supply (cold water, hot water)
- Sewerage system
- Smoke exhaust fan and air pressure fans

This helps to predict and optimize the operating costs of buildings.

- Fire retardant/smoke exhaust valves
- Power supply (automatic transfer switches, power grid states, diesel generators)

- Lighting (indoor/outdoor/ architectural)
- Transportation (elevators, escalators, moving walkways)

- Energy accounting (heat, water, electricity meters)
- Gas pollution control (methane, carbon monoxide)



AEROSTAR GROUP

RECOGNIZED LEADER IN THE VENTILATION EQUIPMENT MARKET

15,000 m2 of production space
+7000 clients from all over the world

514 employees

Domestic market share: 26%
Imported manufacturers: 50%
Other domestic producers: 24%

Productive capacity:

3840 air treatment units

4350 tons of metal

AS A COMPANY WE OFFER:

RELIABLE PRODUCTS.
Aerostar is the first Ukrainian manufacturer to receive an international certificate Eurovent.
We improve our performance every year and confirm the status of a “reliable manufacturer”.

EUROVENT CERTIFIED PERFORMANCE
AHU №19.04.077
GreenStr
www.eurovent-certification.com

In accordance with TUV NORD CERT procedures, the company applies a management system in accordance with the international quality standard: ISO 9001:2015

“Products are of the same quality as German and Italian”
Vasyl Khmelnitsky, "K.Fund"

NON-STANDARD SOLUTIONS TO COMPLEX PROBLEMS

70% of the range are systems developed by our Research & Design Center for the implementation of complex engineering projects.

WE PROVIDE TECHNICAL SERVICE

After installing the systems, our specialists teach the operation department how to operate the equipment. The service department provides feedback to the client. Service centers in all regions allow you to quickly respond to requests.

WE CREATE SMART SYSTEMS

The equipment is designed to achieve maximum efficiency from work and reduce energy consumption.

AUTOMATION AND DISPATCHING

For the convenience of managing engineering systems, we suggest using a dispatch system that can combine ventilation, air conditioning, heating, water supply, gas supply, lighting, and elevator control systems and other equipment. The dispatch system provides key advantages of facility management:

– constant centralized control of the operation of engineering systems;
– reducing the influence of the human factor;
- control without the constant presence of an operator and duty personnel

LEAN CONCEPT

We use the lean manufacturing principle in organizing processes. All systems are aimed at obtaining the greatest results with small resources. This allows us to continually improve quality without increasing costs.

Regulated terms production for each type of product.
The presence of a large amount of ready-made equipment in the warehouse makes it possible to quickly provide the production facility.

Using quality components from
Germany, Switzerland, Slovakia, Italy, Finland, France, Slovenia.

24/7 SUPPORT SERVICE.
On-line in a convenient way for you (by calling, contact via application, or by writing by email).

Equipping installations with energy-saving technologies,
which allows you to save up to 90% energy and reduce operating costs.

PAROC punker ROENEST ZIEHL-ABEGG SIEMENS
ABB APS AROSIO GRUNDFOS KLINGENBURG twe Schneider Electric WILO


AEROSTAR
Solutions that work

Convenient control of equipment from a smartphone with Aerostar APP

Allows you to: at any time from anywhere in the world:

- control parameters equipment operation
- change settings
- receive messages about emergency situations
- consult with service department AEROSTAR

- individual settings
- all equipment on one screen
- personal schedule
- reports
- instant accident alerts
- service support

FOR ANDROID DEVICE

FOR IOS DEVICE

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Version 1.003