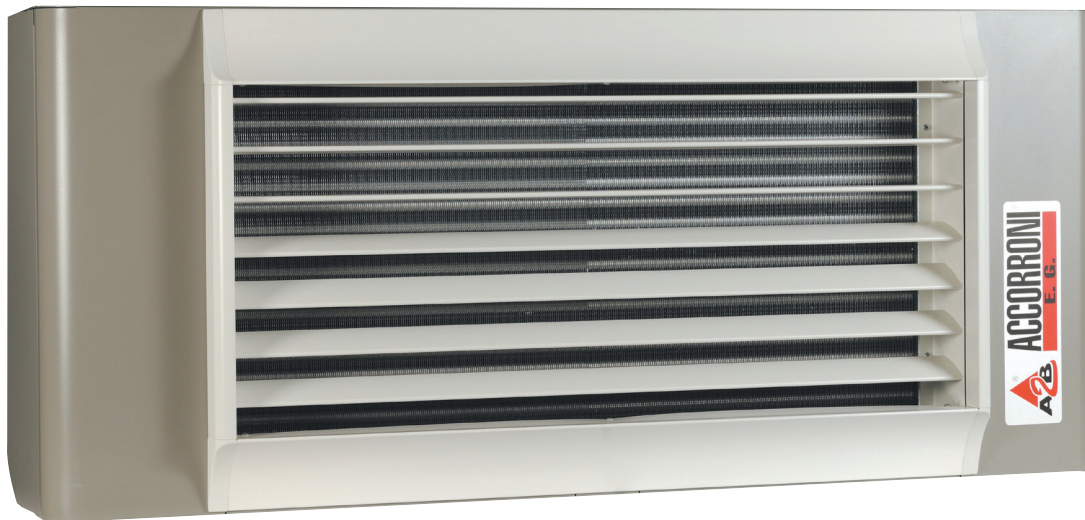


Hanging heaters in horizontal projection

Aeroclima STYLE 10 - 15



MADE
IN ITALY



VENTILAZIONE
A PIU' VELOCITA'



ABBINAMENTO
OTTIMALE



CONDIZIONAMENTO



RISCALDAMENTO

 **ACCORRONI**[®]
E. G.
Climate Technology

Hanging heaters in horizontal projection Aeroclima Style 10-15 Heating and / or cooling systems

GENERAL INFORMATION for proper installation

It contains all the news related to the description of the devices and their technical characteristics.

TECHNICAL INFORMATION FOR THE INSTALLER

It collects all the technical details and recommendations that the installer must comply with to realize the project.

Important notes for the consultation:

- 1 For the purposes of a correct and safe use of the device, the designer, the installer, the user and the service to their respective responsibilities, are required to comply with what is indicated in this manual.
It must be kept for future reference and must accompany the machine for its entire lifespan, including the case of transfer to third parties.
- 2 **WARNING!** Following information that, because of their importance, must be scrupulously observed and for which non-compliance can result in damage and / or impair the safety of use. The paragraphs highlighted in bold contain information, warnings or important tips that you should carefully evaluate.
- 3 The A2B Accorroni E.G. LTD accepts no responsibility for any damage caused by improper use, to a use other than that prescribed and by an incomplete or approximate application of the instructions contained in this manual.
- 4 The technical data, styling characteristics, components and accessories listed in this manual are not binding. The A2B Accorroni E.G. LTD reserves the right to introduce at any time whatever modifications deemed necessary to the improvement of its product.
- 5 References to laws, regulations and technical rules mentioned in this manual are for information only and to be considered valid at the date of printing, as indicated on the last page. The entry into force of new provisions or amendments to current laws do not constitute grounds for any obligation of the A2B Accorroni E.G. LTD against third parties.
- 6 The A2B Accorroni E.G. LTD is responsible for the conformity of his product to laws, directives and construction standards in force at the time of commercialization. The knowledge and observance of the laws and standards regarding plant design, installation, operation and maintenance are the exclusive responsibility for their respective powers, the designer, installer and user.

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SECTION A - GENERAL INFORMATION

1.0 MAIN FEATURES

1.1 CLASSIFICATION OF THE UNITS

The heaters Aeroclima Style, horizontal projection, wall installation, are fed by water and are particularly suitable for heating and cooling of industrial buildings, craft, warehouses, laboratories, etc..

1.2 CERTIFICATIONS - CE MARK

The affixing of the CE marking ensures the conformity of the equipment with the Machinery Directive 98/37/CEE, the Low Voltage Directive 73/23 / CEE, the Electromagnetic Compatibility Directive 89/336/CEE and their subsequent amendments.

These products are then subjected to the marking CE were tested according to the harmonized standards applicable to them and shall be accompanied by appropriate declaration attached.

1.3 STRUCTURAL CHARACTERISTICS

The Aeroclima consists essentially of a heat exchange between the circulating fluid inside exchanger (hot or chilled water) and the air flow provided by a fan group.

The ambient air is sucked from / by the fan / and pushed through the heat exchanger, which yields the heat in the winter, or escapes it in the summer.

In the summer cycle is also formed, according to the temperature and humidity conditions of the air, condensation that is collected in the basin and let it drain outside.

The treated air is discharged into the environment through the grille with horizontal wings from extruded aluminum and manually adjustable.

The cover piece is made of steel sheet, painted on polyester powder, to guarantee of long duration in time.

In the rear are, according to the model, one or two convection fans axial type with safety grill.

The engines of the fans are single-phase external rotor prepared for different operating speeds, through a special auto-transformer.

The units are designed for use in systems from type 2 pipe, with hydraulic connections placed on the left, looking at the device front.

The heat exchange coil is made with copper tubes and aluminum fins fixed by mechanical expansion of the tubes.

The connections to the electrical panel, housed in a special waterproof box are situated on the right side of the appliance.

The hydro and electro connections are also accessible laterally after removal of the respective shaped panels.

The unit is supplied with fixing bracket to the wall made of metal pipe, with a mounting system to simplify the installation, as well as to allow an optimal positioning of the device and the vertical rotation.

1.4 PACKING

The unit is shipped in standard packaging recyclable cardboard with internal protections, which also contains:

- This manual
- The certificate of guarantee
- The support bracket to the wall.

The manual and the warranty card must be delivered to the owner of the good, so keep them carefully for any future use or reference.

WARNING! It 's important to verify that the packaging is not damaged by the delivery.

1.5 ACCESSORIES SUPPLIED ON DEMAND

On request can be supplied the following accessories:

- Remote control with room thermostat, switch summer / winter and fan speed;
- Temperature thermostat (40°C);

1.6 FIELD OF APPLICATION

The devices are designed and manufactured for heating and cooling of the air in rooms, craft, commercial and industrial areas and must be used only for this purpose, in relation to their technical specifications and performance.

The quality and size of the materials used were chosen to ensure a long lifetime.

Warning! All uses not expressly indicated in this manual are considered improper and are not allowed; in particular do not require the use of the equipment in industrial processes and / or the installation in a corrosive or explosive atmosphere; is not permitted to supply the units with a hot water or steam.

Any liability of the manufacturer for damage to persons, animals or things caused by nonobservance of this manual, or from changes tampering of the product, improper installation, adjustment, maintenance and improper use, will be rejected.

Failure to comply with the recommendations in this manual cancels the warranty conditions.

1.7 SAFETY

Warning! The installation and the maintenance should be made only by skilful personnel.

The connection to the power supply must be in accordance with the current standards of the local installations low.

During installation and maintenance, it is always to operate in the conditions of maximum safety, following the instructions in this manual and any warning labels on the product.

Do not leave containers of flammable substances near the appliance.

Before each operation, inspection, maintenance, or anything else involving access to parts inside the unit, disconnect the General Electric power supply.

1.8 1.8 Dimensions - Serie Aeroclima Style - Model 10

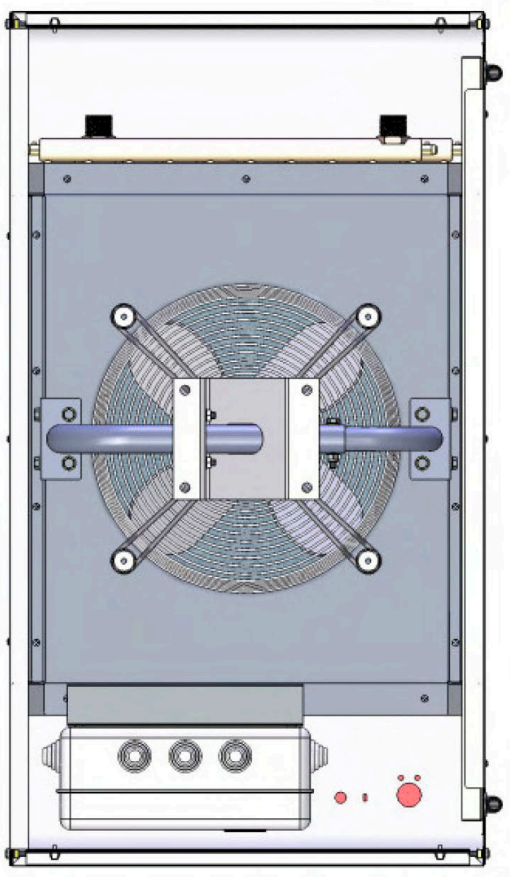
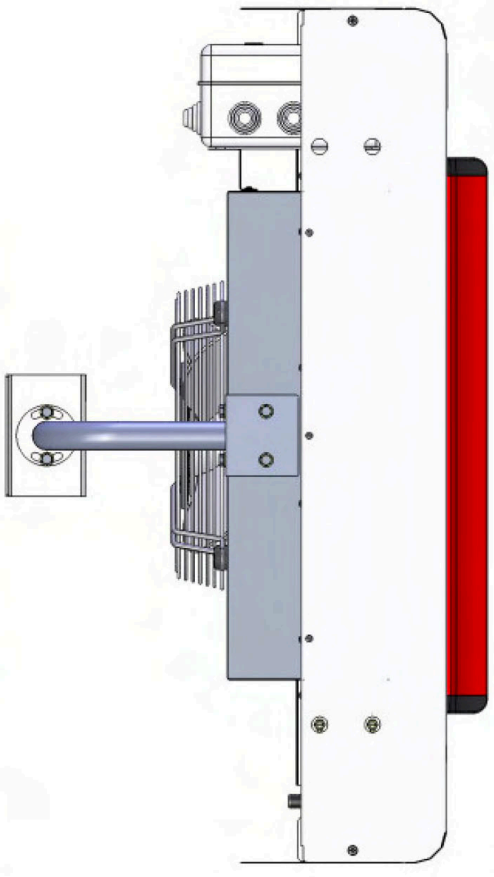
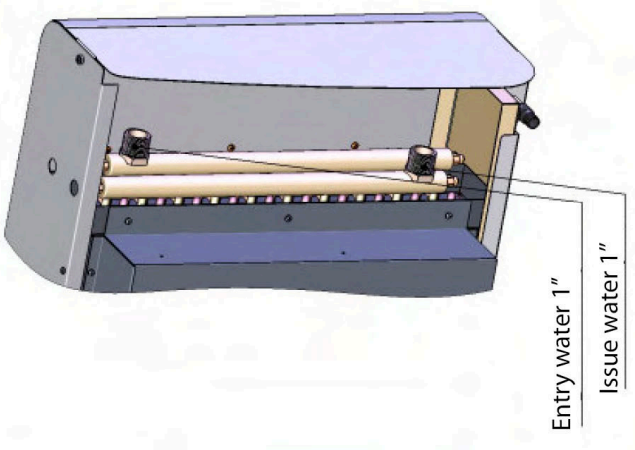
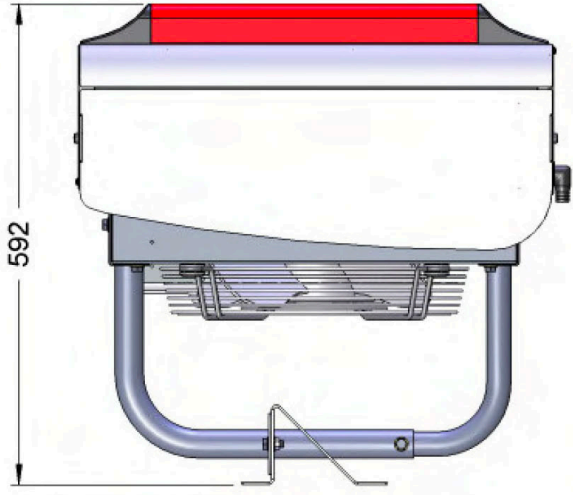
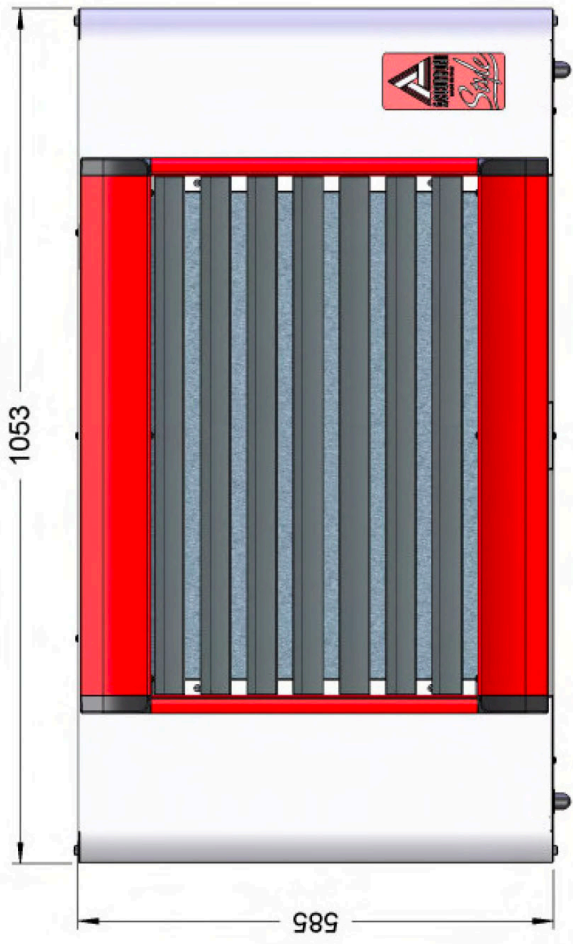


Fig.1

1.8 1.8 Dimensions - Serie Aeroclima Style - Model 15

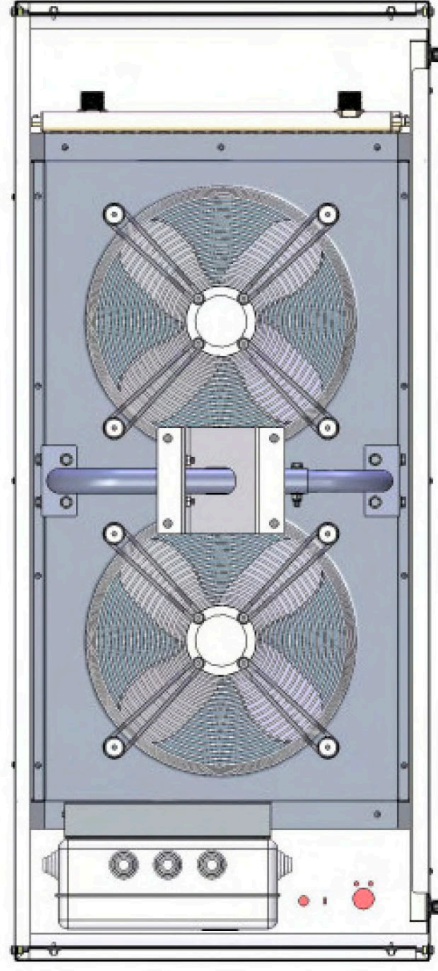
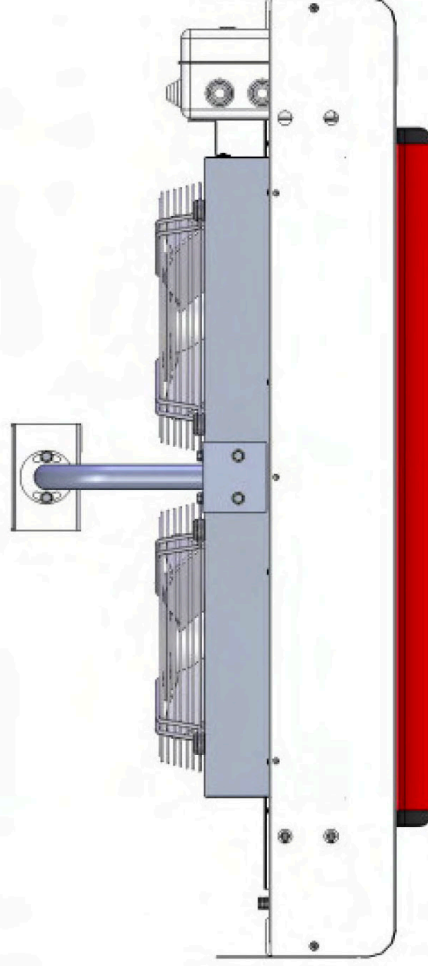
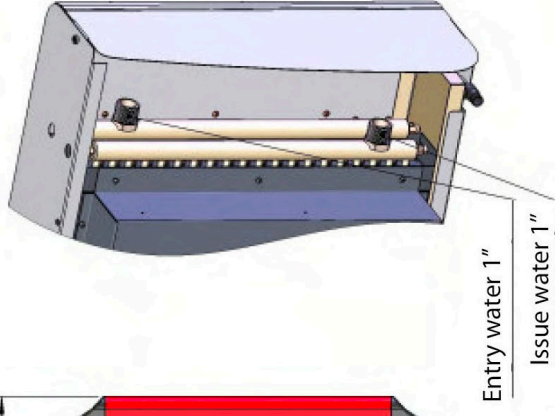
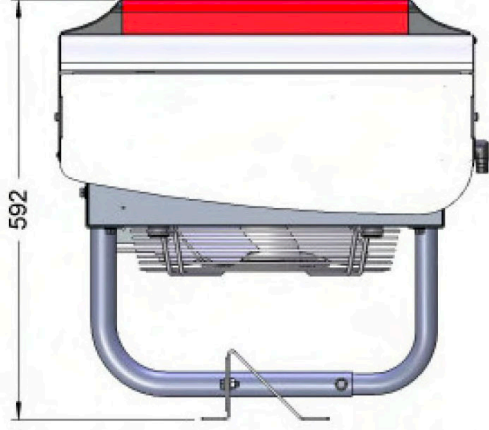
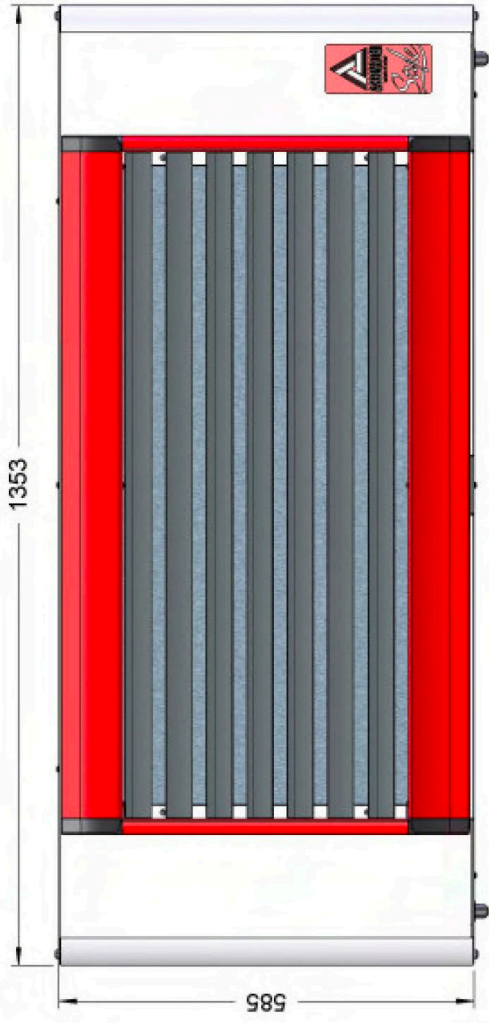


Fig. 2

Components - Serie Aeroclima Style

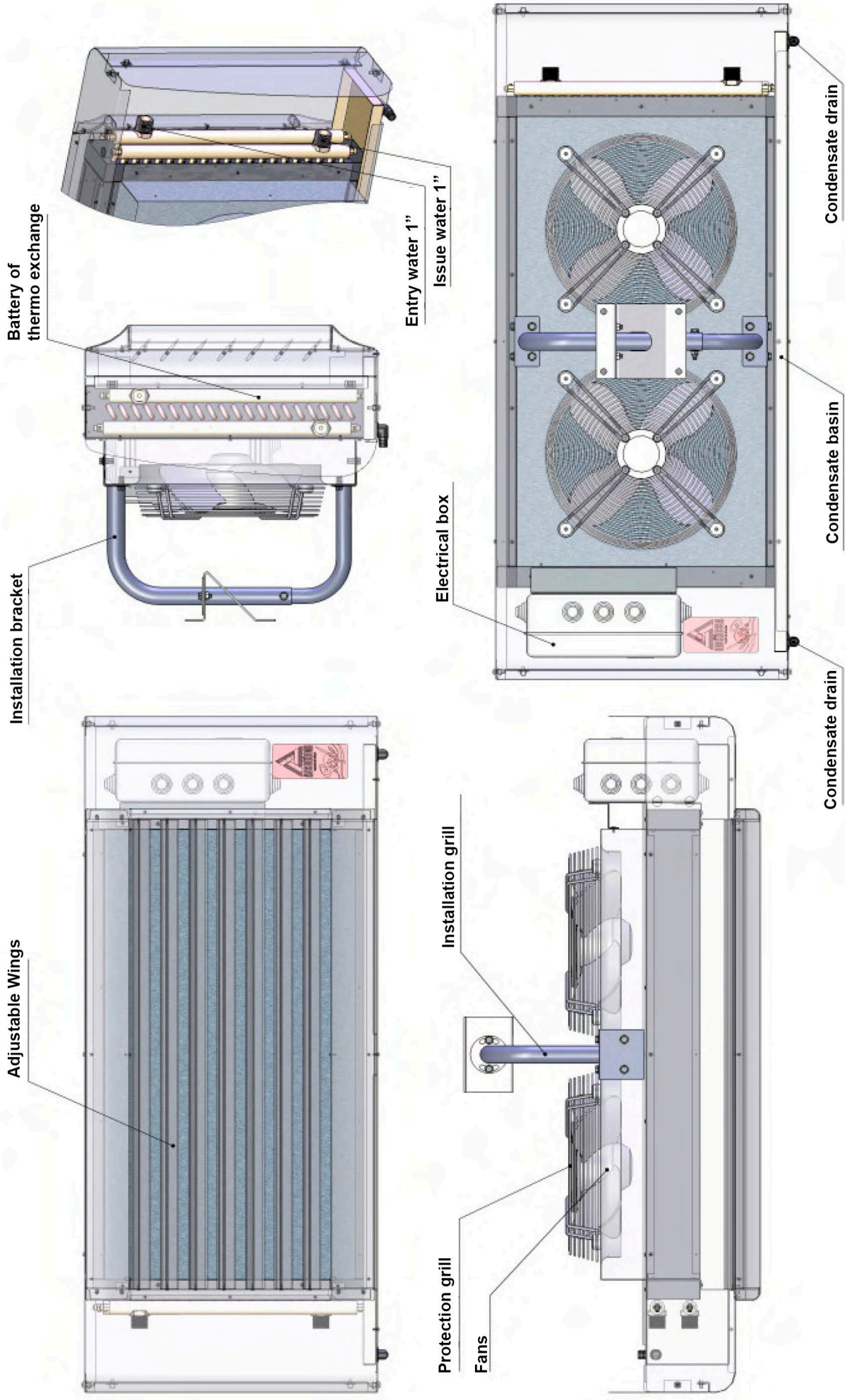
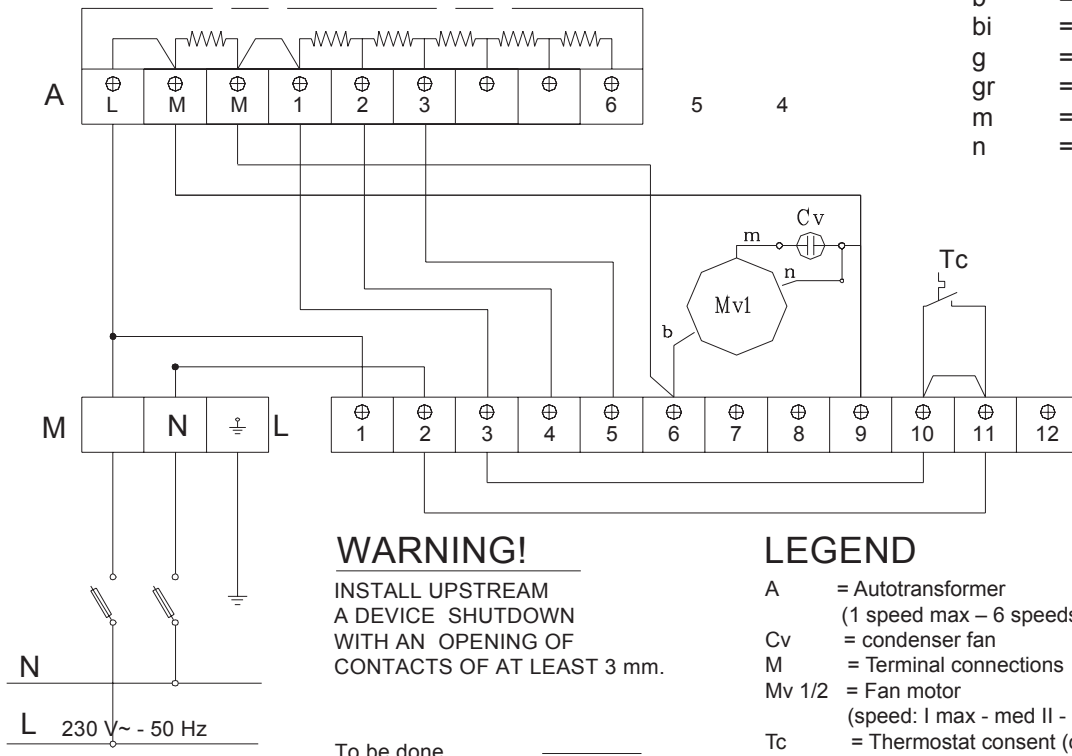


Fig. 3

1.9 WIRING BASE - Aeroclima Style 10

KEY COLORS

b = blue
 bi = white
 g = yellow
 gr = gray
 m = brown
 n = black



WARNING!

INSTALL UPSTREAM
 A DEVICE SHUTDOWN
 WITH AN OPENING OF
 CONTACTS OF AT LEAST 3 mm.

LEGEND

A = Autotransformer
 (1 speed max – 6 speeds min)
 Cv = condenser fan
 M = Terminal connections
 Mv 1/2 = Fan motor
 (speed: I max - med II - III min)
 Tc = Thermostat consent (optional)

To be done _____
 Done _____

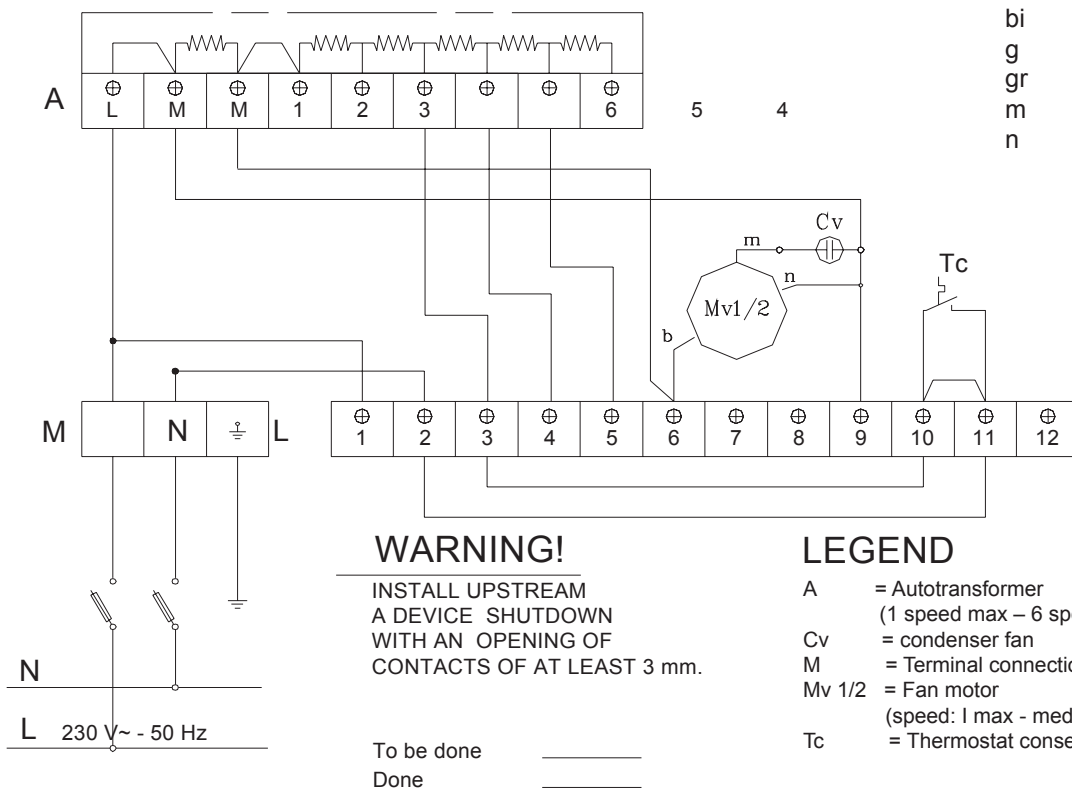
To mount the Tc, remove the bridge between 10:11

Fig. 4

1.9 WIRING BASE - Aeroclima Style 15

KEY COLORS

b = blue
 bi = white
 g = yellow
 gr = gray
 m = brown
 n = black



WARNING!

INSTALL UPSTREAM
 A DEVICE SHUTDOWN
 WITH AN OPENING OF
 CONTACTS OF AT LEAST 3 mm.

LEGEND

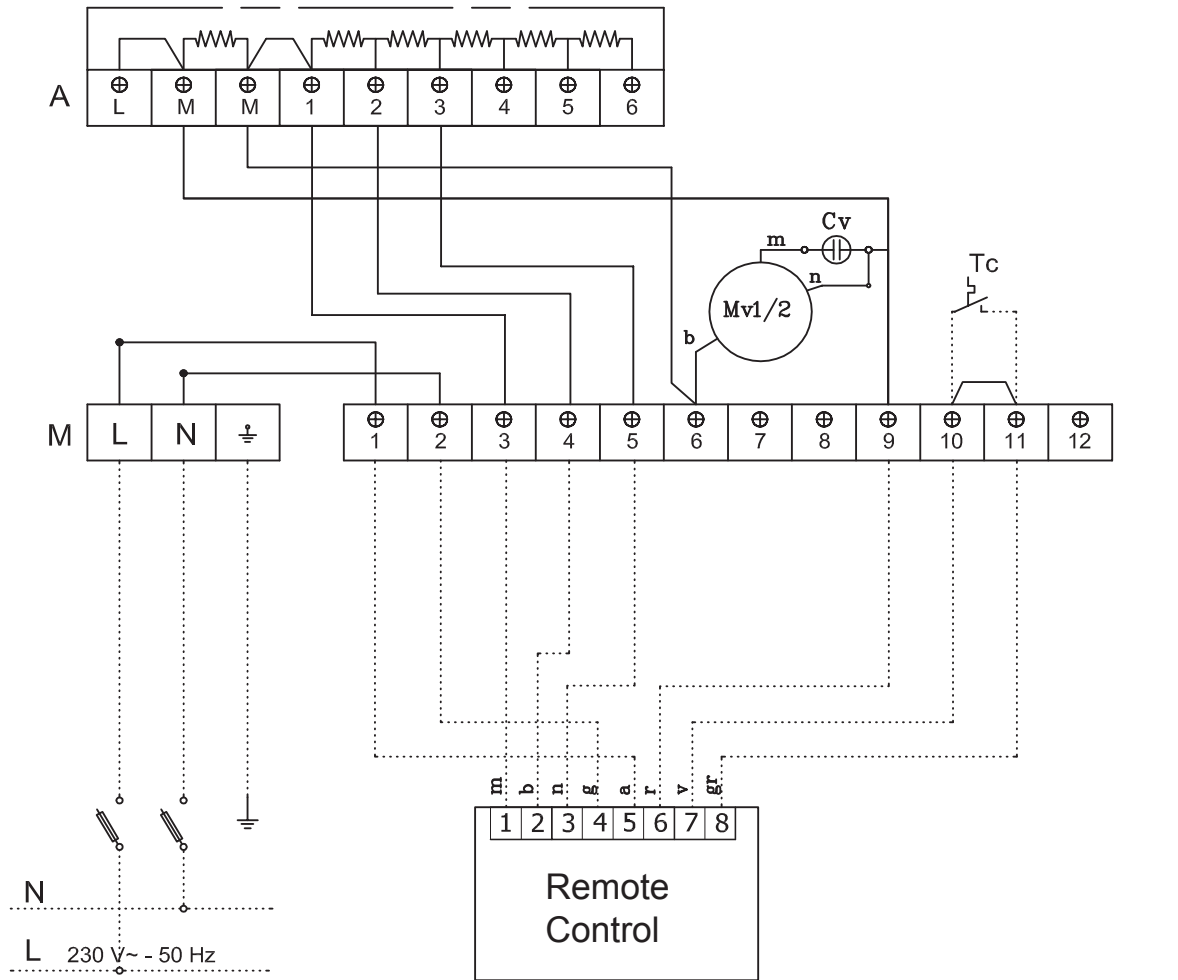
A = Autotransformer
 (1 speed max – 6 speeds min)
 Cv = condenser fan
 M = Terminal connections
 Mv 1/2 = Fan motor
 (speed: I max - med II - III min)
 Tc = Thermostat consent (optional)

To be done _____
 Done _____

To mount the Tc, remove the bridge between 10:11

Fig. 5

1.9 WIRING WITH THERMOSTAT 36205217 - Aeroclima Style 15



WARNING!

INSTALL UPSTREAM
A DEVICE SHUTDOWN
WITH AN OPENING OF
CONTACTS OF AT LEAST 3 mm.

To be done _____
Done _____

To mount the Tc, remove the bridge between 10:11

LEGEND

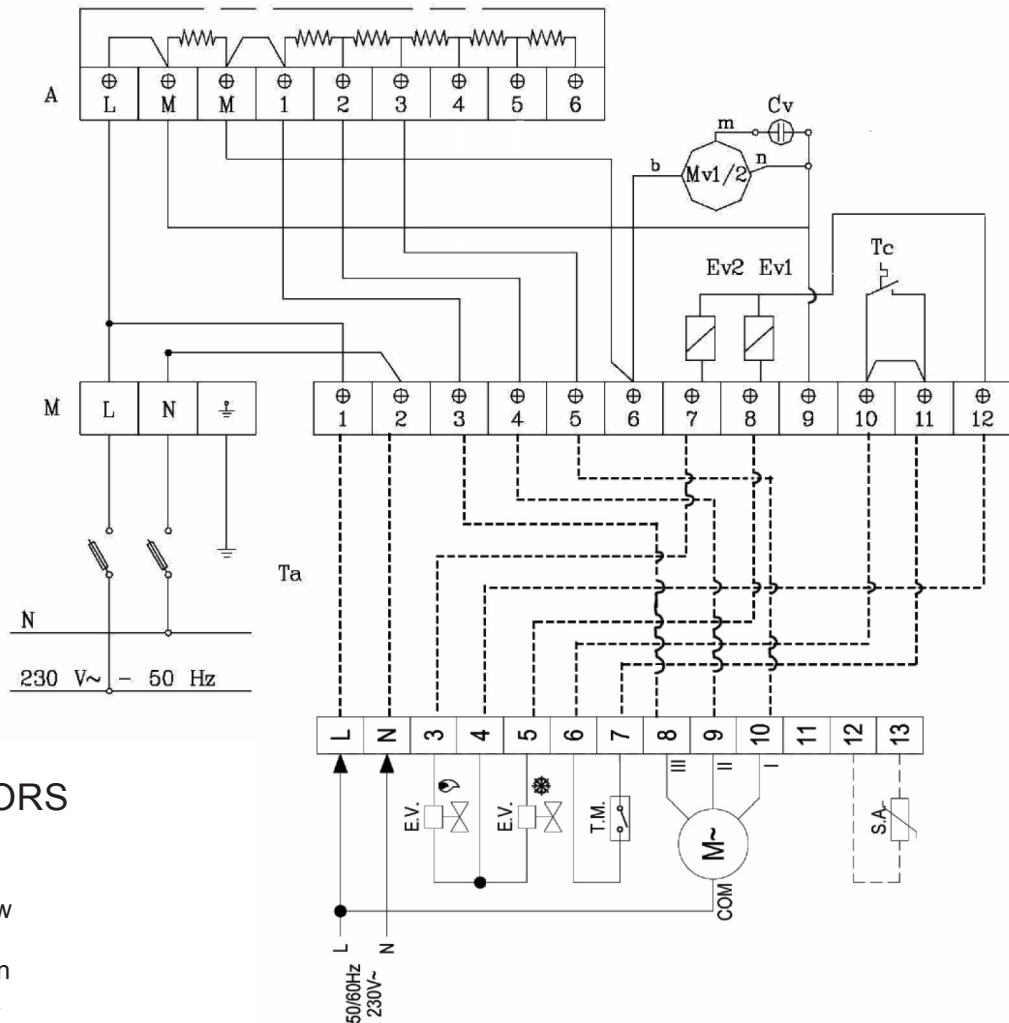
- A = Autotransformer
(1 speed max – 6 speeds min)
- Cv = condenser fan
- M = Terminal connections
- Mv = Fan motor
(speed: I max - med II - III min)
- Tc = Thermostat consent (optional)

KEY COLORS

- b = blue
- bi = orange
- g = yellow
- gr = gray
- m = brown
- n = black
- v = green
- r = red

Fig. 6

1.9 WIRING WITH THERMOSTAT 50005230 - Aeroclima Style 10



KEY COLORS

- b = blue
- bi = white
- g = yellow
- gr = gray
- m = brown
- n = black

LEGEND

- A = Autotransformer
(1 speed max – 6 speeds min)
- Cv = condenser fan
- Ev1-2 = 3 way valves (not included from fabric)
- M = Terminal connections
- Mv = Fan motor
(speed: I max - med II - III min)
- Ta = Ambiance thermostat
- Tc = Thermostat consent (optional)

To be done _____
 Done _____

WARNING!

INSTALL UPSTREAM
 A DEVICE SHUTDOWN
 WITH AN OPENING OF
 CONTACTS OF AT LEAST 3 mm.

THERMOSTAT NOTES:

- MOTOR**
 Summer = ever on
 Off = shutdown
 Winter = ever on thermostat of consent

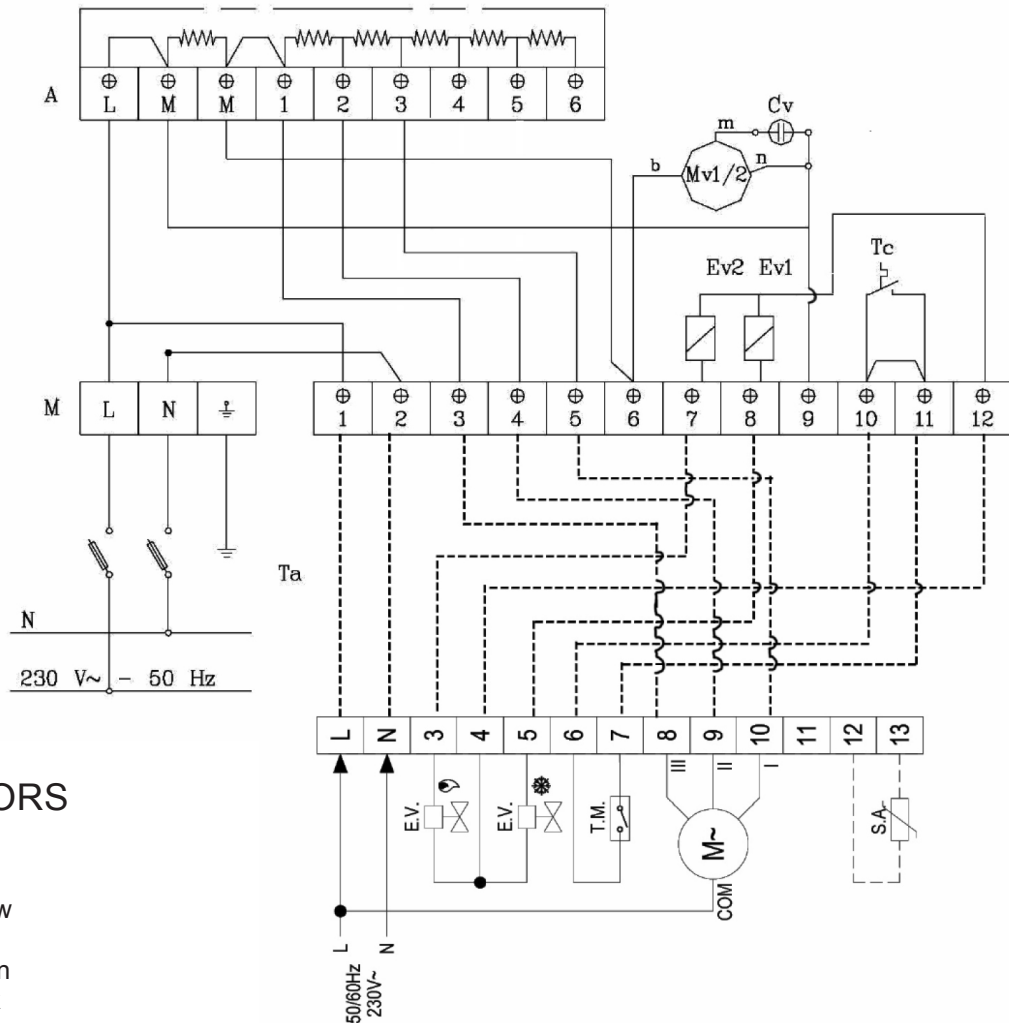
- ELECTRO VALVES**
 Summer = EV cold thermostat
 Off = all shutdown
 Winter = EV warm thermostat

- CONTROLLED DEVICES**
 N° 2 motors on 3 speeds
 N°2 electro valves
 Selection summer/winter
 Thermostat of consent

To mount the Tc, remove the bridge between 10:11

Fig. 7

1.9 WIRING WITH THERMOSTAT 50005230 - Aeroclima Style 10



KEY COLORS

- b = blue
- bi = white
- g = yellow
- gr = gray
- m = brown
- n = black

LEGEND

- A = Autotransformer
(1 speed max – 6 speeds min)
- Cv = condenser fan
- Ev1-2 = 3 way valves (not included from fabric)
- M = Terminal connections
- Mv = Fan motor
(speed: I max - med II - III min)
- Ta = Ambiance thermostat
- Tc = Thermostat consent (optional)

To be done _____
 Done _____

THERMOSTAT NOTES:

- MOTOR**
 Summer = ever on
 Off = shutdown
 Winter = ever on thermostat of consent

- ELECTRO VALVES**
 Summer = EV cold thermostat
 Off = all shutdown
 Winter = EV warm thermostat

- CONTROLLED DEVICES**
 N° 2 motors on 3 speeds
 N°2 electro valves
 Selection summer/winter
 Thermostat of consent

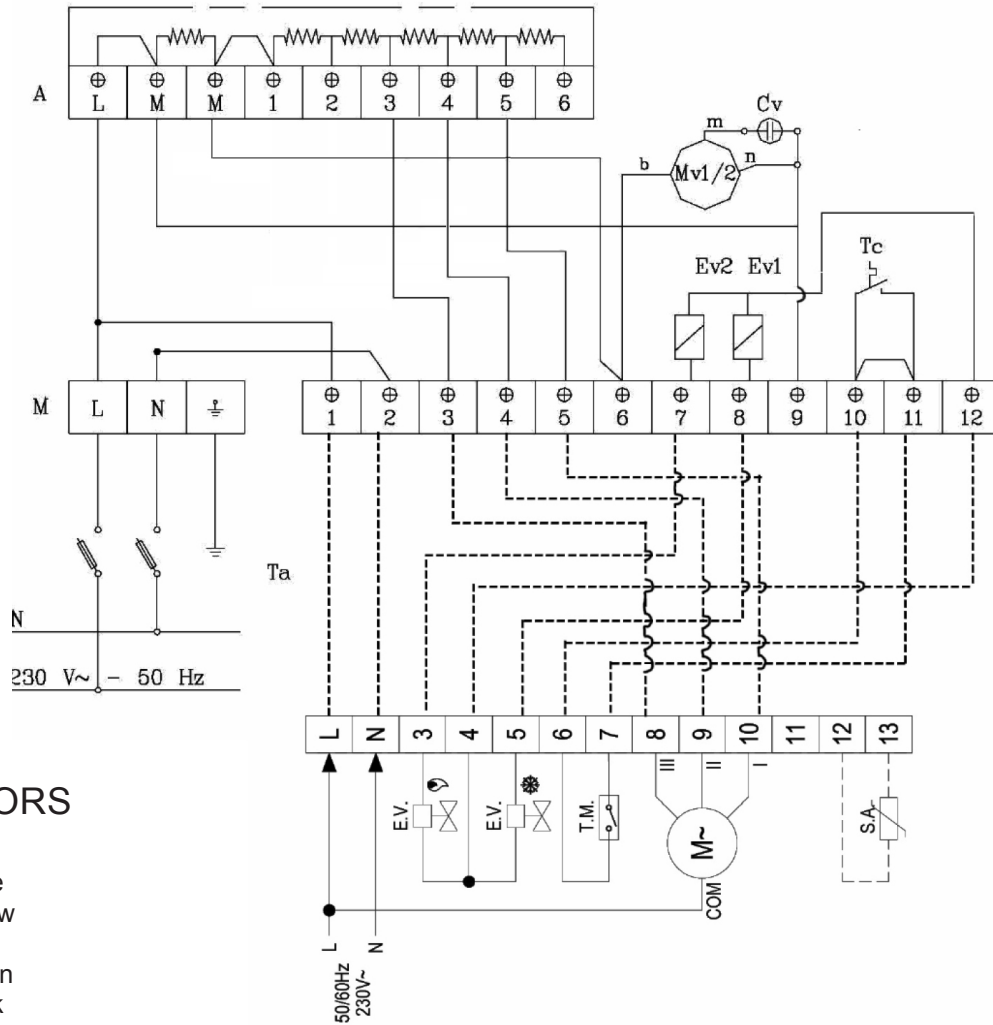
WARNING!

INSTALL UPSTREAM
 A DEVICE SHUTDOWN
 WITH AN OPENING OF
 CONTACTS OF AT LEAST 3 mm.

To mount the Tc, remove the bridge between 10:11

Fig. 8

1.9 WIRING WITH THERMOSTAT 50005230 - Aeroclima Style 15



KEY COLORS

- b = blue
- bi = white
- g = yellow
- gr = gray
- m = brown
- n = black

LEGEND

- A = Autotransformer
(1 speed max – 6 speeds min)
- Cv = condenser fan
- Ev1-2 = 3 way valves (not included from fabric)
- M = Terminal connections
- Mv = Fan motor
(speed: I max - med II - III min)
- Ta = Ambiance thermostat
- Tc = Thermostat consent (optional)

To be done _____
 Done _____

THERMOSTAT NOTES:

- MOTOR**
 Summer = ever on
 Off = shutdown
 Winter = ever on thermostat of consent

- ELECTRO VALVES**
 Summer = EV cold thermostat
 Off = all shutdown
 Winter = EV warm thermostat

- CONTROLLED DEVICES**
 N° 2 motors on 3 speeds
 N°2 electro valves
 Selection summer/winter
 Thermostat of consent

WARNING!

INSTALL UPSTREAM
 A DEVICE SHUTDOWN
 WITH AN OPENING OF
 CONTACTS OF AT LEAST 3 mm.

To mount the Tc, remove the bridge between 10:11

Fig. 9

Technical datasheet AEROCLIMA STYLE 10 - 15

DESCRIPTION	U.M.		STYLE 10	STYLE 15
Heating output - water inlet $\Delta T = 70\text{ }^{\circ}\text{C}$ ($\Delta T 10^{\circ}\text{C}$) Room temperature $\Delta T = 20\text{ }^{\circ}\text{C}$	kW	max	24,60	42,50
		med	22,80	32,40
		min	19,60	26,70
Water flow rate	l/h		2116	3655
Water pressure drop	kPa		12,3	14,1
Hydraulic circuit's volume	l		4,0	6,0
Air temperature rise	$^{\circ}\text{C}$	max	33,5	31,5
		med	34,1	34,9
		min	35,9	37,2
Heating output - water inlet $\Delta T = 50\text{ }^{\circ}\text{C}$ ($\Delta T 5\text{ }^{\circ}\text{C}$) Room temperature $\Delta T = 20\text{ }^{\circ}\text{C}$	kW	max	14,90	25,80
		med	13,80	19,60
		min	11,90	16,20
Water flow rate	l/h		2563	4438
Water pressure drop	kPa		16,2	21,4
Air temperature rise	$^{\circ}\text{C}$	max	20,3	19,1
		med	20,7	21,1
		min	21,8	22,6
Cooling output Water inlet $\Delta T = 7\text{ }^{\circ}\text{C}$ ($\Delta T 5\text{ }^{\circ}\text{C}$) Room temperature d.b. $27\text{ }^{\circ}\text{C}$, w.b. $19\text{ }^{\circ}\text{C}$ (47% R.H.)	kW	max	10,20	17,40
		med	9,60	13,90
		min	8,48	11,80
Sensitive cooling capacity Water inlet $\Delta T = 7\text{ }^{\circ}\text{C}$ ($\Delta T 5\text{ }^{\circ}\text{C}$) Room temperature d.b. $27\text{ }^{\circ}\text{C}$, w.b. $19\text{ }^{\circ}\text{C}$ (47% R.H.)	kW	max	8,39	14,50
		med	7,78	11,10
		min	6,72	9,20
Water flow rate	l/h		1754	2993
Water pressure drop	kPa		9,2	11,4
Air flow rate	m^3/h	max	2180	4000
		med	1980	2750
		min	1620	2130
Auxiliary fan speeds (*)	n. / (m^3/h)		15/(450÷2200)	15/(1080÷4600)
Fans number	n.		1	2
Sound pressure level (5 m. in open field, direction factor = 2)	dB(A)	max	49,5	49,6
		med	47,8	42,3
		min	45,6	37,7
Sound power level	dB(A)	max	71,5	71,6
		med	69,8	64,3
		min	67,6	59,7
Sound pressure auxiliary speeds (**)	dB(A)		32,0÷56,3	34,8÷65,3
Power supply			230V/1/50Hz	
Launching	m	vel. max	20	22
		vel. min	14	15
Electrical power input	W	max	115	220
		med	105	200
		min	85	180
Max absorbed current	A		0,63	1,20
Fan/s IP code			IP44	
Unit IP code			IP24	
Functional limits				
Water inlet temperature min÷max	$^{\circ}\text{C}$		3÷80	
Max pressure	kPa		800	
Air inlet temperature max	$^{\circ}\text{C}$		45	
Net weight	kg		44	59

(*) Additional fan speed selectable

(**) Sound pressure level calculated, for all speeds, at 1 m, in open field with and direction factor = 2, in the value of min. and max. of the speeds available.

Table 1 - Performances in heating - Aeroclima Style 10

Yields heating ΔT 5 °C

Description		Thermo power (kW) - variable air temperature db (°C)											
Inlet air temp °C		20	15	10	5	20	15	10	5	20	15	10	5
Air flow m³/h		2.180				1.980				1.620			
Water input	45°C	12,10	15,00	18,00	21,10	11,20	13,90	16,70	19,50	9,67	12,00	14,40	16,80
	ΔT air °C	16,5	20,4	24,5	28,7	16,8	20,8	25,0	29,2	17,7	22,0	26,4	30,8
	50°C	14,90	17,90	20,90	24,00	13,80	16,60	19,40	22,20	11,90	14,20	16,60	19,10
	ΔT air °C	20,3	24,3	28,4	32,6	20,7	24,9	29,1	33,2	21,8	26,0	30,4	35,0
	55°C	17,80	20,70	23,80	26,90	16,40	19,20	22,00	24,90	14,10	16,50	18,90	21,40
	ΔT air °C	24,2	28,2	32,4	36,6	24,6	28,8	33,0	37,3	25,8	30,2	34,6	39,2

Yields heating ΔT 10 °C

Description		Thermo power (kW) - variable air temperature db (°C)											
Inlet air temp °C		20	15	10	5	20	15	10	5	20	15	10	5
Air flow m³/h		2.180				1.980				1.620			
Water input	60°C	18,90	21,90	25,00	28,20	17,50	20,30	23,20	26,10	15,10	17,50	20,00	22,50
	ΔT air °C	25,7	29,8	34,0	38,4	26,2	30,4	34,7	39,1	27,6	32,0	36,6	41,2
	65°C	21,80	24,80	27,90	31,10	20,20	23,00	25,90	28,80	17,40	19,80	22,30	24,80
	ΔT air °C	29,7	33,7	38,0	42,3	30,3	34,4	38,8	43,1	31,9	36,2	40,8	45,4
	70°C	24,60	27,70	30,90	34,10	22,80	25,70	28,60	31,60	19,60	22,10	24,60	27,20
	ΔT air °C	33,5	37,7	42,0	46,4	34,1	38,5	42,8	47,3	35,9	40,5	45,0	49,8
	80°C	30,40	33,50	36,70	40,00	28,10	31,00	34,00	37,00	24,20	26,63	29,20	31,90
	ΔT air °C	41,4	45,6	49,9	54,4	42,1	46,4	50,9	55,4	44,3	48,7	53,5	58,4

Yields heating ΔT 15 °C

Description		Thermo power (kW) - variable air temperature db (°C)											
Inlet air temp °C		20	15	10	5	20	15	10	5	20	15	10	5
Air flow m³/h		2.180				1.980				1.620			
Water input	60°C	17,20	20,20	23,20	26,40	15,90	18,70	21,60	24,50	13,80	16,20	18,70	21,20
	ΔT air °C	23,4	27,5	31,6	35,9	23,8	28,0	32,4	36,7	25,3	29,7	34,2	38,8
	65°C	20,10	23,10	26,20	29,40	18,60	21,50	24,30	27,30	16,10	18,50	21,00	23,50
	ΔT air °C	27,3	31,4	35,6	40,0	27,9	32,2	36,4	40,9	29,5	33,9	38,4	43,0
	70°C	23,00	26,10	29,20	32,40	21,30	24,20	27,10	30,00	18,40	20,90	23,40	25,90
	ΔT air °C	31,3	35,5	39,7	44,1	31,9	36,2	40,6	44,9	33,7	38,3	42,8	47,4
	80°C	28,80	31,90	35,10	38,40	26,70	29,60	32,50	35,60	23,00	25,50	28,00	30,70
	ΔT air °C	39,2	43,4	47,7	52,2	40,0	44,3	48,7	53,3	42,1	46,7	51,3	56,2

Table 2 - Performances in heating - Aeroclima Style 15

Yields heating ΔT 5 °C

Description		Thermo power (kW) - variable air temperature db (°C)											
Inlet air temp °C		20	15	10	5	20	15	10	5	20	15	10	5
Air flow m³/h		4.000				2.750				2.130			
Water input	45°C	20,90	26,00	31,10	36,40	16,00	19,80	23,70	27,70	13,20	16,30	19,50	22,80
	ΔT air °C	15,5	19,3	23,1	27,0	17,3	21,4	25,6	29,9	18,4	22,7	27,1	31,7
	50°C	25,80	30,90	36,10	41,40	19,60	23,50	27,50	31,50	16,20	19,30	22,60	25,90
	ΔT air °C	19,1	22,9	26,8	30,7	21,1	25,3	29,7	34,0	22,6	26,9	31,5	36,1
	55°C	30,70	35,80	41,10	46,50	23,30	27,20	31,20	35,30	19,20	22,40	25,70	29,00
	ΔT air °C	22,8	26,5	30,5	34,5	25,1	29,3	33,6	38,1	26,7	31,2	35,8	40,4

Yields heating ΔT 10 °C

Description		Thermo power (kW) - variable air temperature db (°C)											
Inlet air temp °C		20	15	10	5	20	15	10	5	20	15	10	5
Air flow m³/h		4.000				2.750				2.130			
Water input	60°C	32,60	37,80	43,10	48,50	25,00	28,90	33,00	37,10	20,60	23,90	27,20	30,60
	ΔT air °C	24,2	28,0	32,0	36,0	27,0	31,2	35,6	40,0	28,7	33,3	37,9	42,6
	65°C	37,60	42,80	48,20	53,60	28,70	32,70	36,80	41,00	23,70	26,90	30,30	33,80
	ΔT air °C	27,9	31,7	35,7	39,7	30,9	35,3	39,7	44,2	33,0	37,5	42,2	47,1
	70°C	42,50	47,80	53,20	58,80	32,40	36,50	40,60	44,80	26,70	30,00	33,40	36,90
	ΔT air °C	31,5	35,4	39,4	43,6	34,9	39,4	43,8	48,3	37,2	41,8	46,5	51,4
	80°C	52,40	57,80	63,40	69,00	39,90	44,00	48,20	52,60	32,80	36,20	39,70	43,20
	ΔT air °C	38,8	42,9	47,0	51,2	43,0	47,4	52,0	56,7	45,7	50,4	55,3	60,1

Yields heating ΔT 15 °C

Description		Thermo power (kW) - variable air temperature db (°C)											
Inlet air temp °C		20	15	10	5	20	15	10	5	20	15	10	5
Air flow m³/h		4.000				2.750				2.130			
Water input	60°C	29,50	34,70	40,00	45,40	22,80	26,80	30,80	34,90	18,90	22,20	25,50	28,90
	ΔT air °C	21,9	25,7	29,7	33,7	24,6	28,9	33,2	37,6	26,3	30,9	35,5	40,2
	65°C	34,60	39,80	45,10	50,60	26,60	30,60	34,70	38,80	22,00	25,30	28,70	32,10
	ΔT air °C	25,7	29,5	33,4	37,5	28,7	33,0	37,4	41,8	30,6	35,2	40,0	44,7
	70°C	39,60	44,90	50,30	55,70	30,40	34,40	38,50	42,70	25,10	28,50	31,80	35,30
	ΔT air °C	29,4	33,3	37,3	41,3	32,8	37,1	41,5	46,0	34,9	39,7	44,3	49,1
	80°C	49,60	55,00	60,50	66,10	38,00	42,10	46,30	50,60	31,30	34,70	38,20	41,70
	ΔT air °C	36,8	40,8	44,9	49,0	41,0	45,4	49,9	54,6	43,6	48,3	53,2	58,1

Table 5 - Index of correction Thermo Power (Pt) to use auxiliary speed

Index Pt auxiliary speed Aeroclima Style 10

Fan speed	min	med	max	max	med	min
Connection autotransformer	1	1,00	0,93	0,80		
	2	0,76	0,57	0,47		
	3	0,61	0,45	0,38		
	4	0,53	0,40	0,35		
	5	0,49	0,38	0,32		
	6	0,43	0,33	0,28		

To obtain the values of the Thermal Power on the different speeds, it is necessary to multiply the value of power indicated in Table 1 with the index of correction refers to the set speed.

Index Pt auxiliary speed Aeroclima Style 15

Fan speed	min	med	max	max	med	min
Connection autotransformer	1	1,10	1,04	0,91		
	2	1,06	0,89	0,72		
	3	1,00	0,77	0,63		
	4	0,79	0,60	0,51		
	5	0,66	0,51	0,44		
	6	0,54	0,44	0,37		

To obtain the values of the Thermal Power on the different speeds, it is necessary to multiply the value of power indicated in Table 2 with the index of correction refers to the set speed.

Table 6 - Index of correction Cooling capacity (Pf) to use auxiliary speed

Index Pt auxiliary speed Aeroclima Style 10

Fan speed		min		med		max	
Cooling power (Pf)		Pf tot.	Pf sens.	Pf tot.	Pf sens.	Pf tot.	Pf sens.
Connection autotransformer	1	1,00	1,00	0,94	0,93	0,83	0,88
	2	0,80	0,76	0,62	0,57	0,52	0,47
	3	0,66	0,61	0,50	0,45	0,43	0,38
	4	0,59	0,54	0,45	0,41	0,40	0,36
	5	0,54	0,49	0,43	0,38	0,37	0,32
	6	0,48	0,43	0,39	0,34	0,33	0,29

To obtain the values of Pf total and Pf sensible on the different speeds, it is necessary to multiply the value of power indicated in Table 3 power with the index of correction for the set speed.

Index Pf auxiliary speed Aeroclima Style 15

Fan speed		min		med		max	
Cooling power (Pf)		total	sensible	total	sensible	total	sensible
Connection autotransformer	1	1,08	1,10	1,03	1,04	0,93	0,91
	2	1,05	1,06	0,91	0,89	0,76	0,72
	3	1,00	1,00	0,78	0,78	0,66	0,71
	4	0,83	0,79	0,65	0,60	0,57	0,51
	5	0,70	0,66	0,57	0,51	0,49	0,44
	6	0,60	0,55	0,49	0,44	0,42	0,37

To obtain the values of Pf total and Pf sensible on the different speeds, it is necessary to multiply the value of power indicated in Table 4 with the index of correction for the set speed.

Warning! The values in highlighter in the line 1 and 2 can be used only for ambience with a low grade of humidity. In opposite, it is possible that the water will be expulsed through the exchanger.

Table 7 - Index of correction Cooling capacity for the use of water / glycol ethylene

	%	Total Pf	Sensible Pf
glycol ethylene	10%	0,97	0,99
	20%	0,96	0,98
	30%	0,90	0,95
	40%	0,84	0,92

Table 8 - Values of sound pressure in function of speed of ventilation and the distance

Sound pressure Aeroclima Style 10

Description	U.M.	Tests conditions																	
		Vel. 1 (di serie)			Vel. 2			Vel. 3			Vel. 4			Vel. 5			Vel. 6		
		Max	Med	Min	Max	Med	Min	Max	Med	Min	Max	Med	Min	Max	Med	Min	Max	Med	Min
Number of fans	n°	1																	
Motor turnover	RPM	1.355	1.235	1.010	971	670	530	723	515	427	613	449	366	530	400	327	467	348	283
Air flow (20°C 1.013 mbar)	m³/h	2.180	1.981	1.625	1.517	1.041	822	1.134	780	637	973	688	582	863	637	520	736	552	451
Lpa (1 m)	db(A)	63,5	61,8	59,6	56,3	48,5	45,6	49,9	42,8	40,9	46,3	39,8	37,6	43,1	37,3	35,1	40,4	34,3	32,0
Lpa (3 m)	db(A)	54,0	52,3	50,1	46,7	39,0	36,1	40,3	33,3	31,4	36,7	30,3	28,0	33,6	27,8	25,6	30,8	24,8	22,4
Lpa (5 m)	db(A)	49,5	47,8	45,6	42,3	34,5	31,6	35,9	28,8	26,9	32,3	25,8	23,6	29,1	23,3	21,1	26,4	20,3	18,0
Lpa (10 m)	db(A)	43,5	41,8	39,6	36,3	28,5	25,6	29,9	22,8	20,9	26,3	19,8	17,6	23,1	17,3	15,1	20,4	14,3	12,0

Pressione sonora Aeroclima Style 15

Description	U.M.	Tests conditions																	
		Vel. 1			Vel. 2			Vel. 3 (di serie)			Vel. 4			Vel. 5			Vel. 6		
		Max	Med	Min	Max	Med	Min	Max	Med	Min	Max	Med	Min	Max	Med	Min	Max	Med	Min
Number of fans	n°	2																	
Motor turnover	RPM	1.363	1.251	1.057	1.290	1.014	772	1.190	844	640	876	597	474	675	473	387	515	365	294
Air flow (20°C 1.013 mbar)	m³/h	4.607	4.226	3.507	4.363	3.379	2.538	3.995	2.759	2.130	2.889	1.988	1.623	2.231	1.623	1.325	1.753	1.325	1.082
Lpa (1 m)	db(A)	66,5	64,8	62,6	65,3	60,2	55,8	63,6	56,3	51,7	56,9	48,7	45,2	51,2	43,7	40,8	45,4	38,1	34,8
Lpa (3 m)	db(A)	57,0	55,3	53,1	55,8	50,7	46,2	54,0	46,7	42,2	47,4	39,2	35,6	41,7	34,1	31,2	35,8	28,5	25,3
Lpa (5 m)	db(A)	52,5	50,8	48,6	51,3	46,3	41,8	49,6	42,3	37,7	42,9	34,8	31,2	37,3	29,7	26,8	31,4	24,1	20,8
Lpa (10 m)	db(A)	46,5	44,8	42,6	45,3	40,2	35,8	43,6	36,3	31,7	36,9	28,7	25,2	31,2	23,7	20,8	25,4	18,1	14,8

Charge leaks water side exchanger Aeroclima Style 10/15
- inlet water temperature 10°C constant, variable water flow -

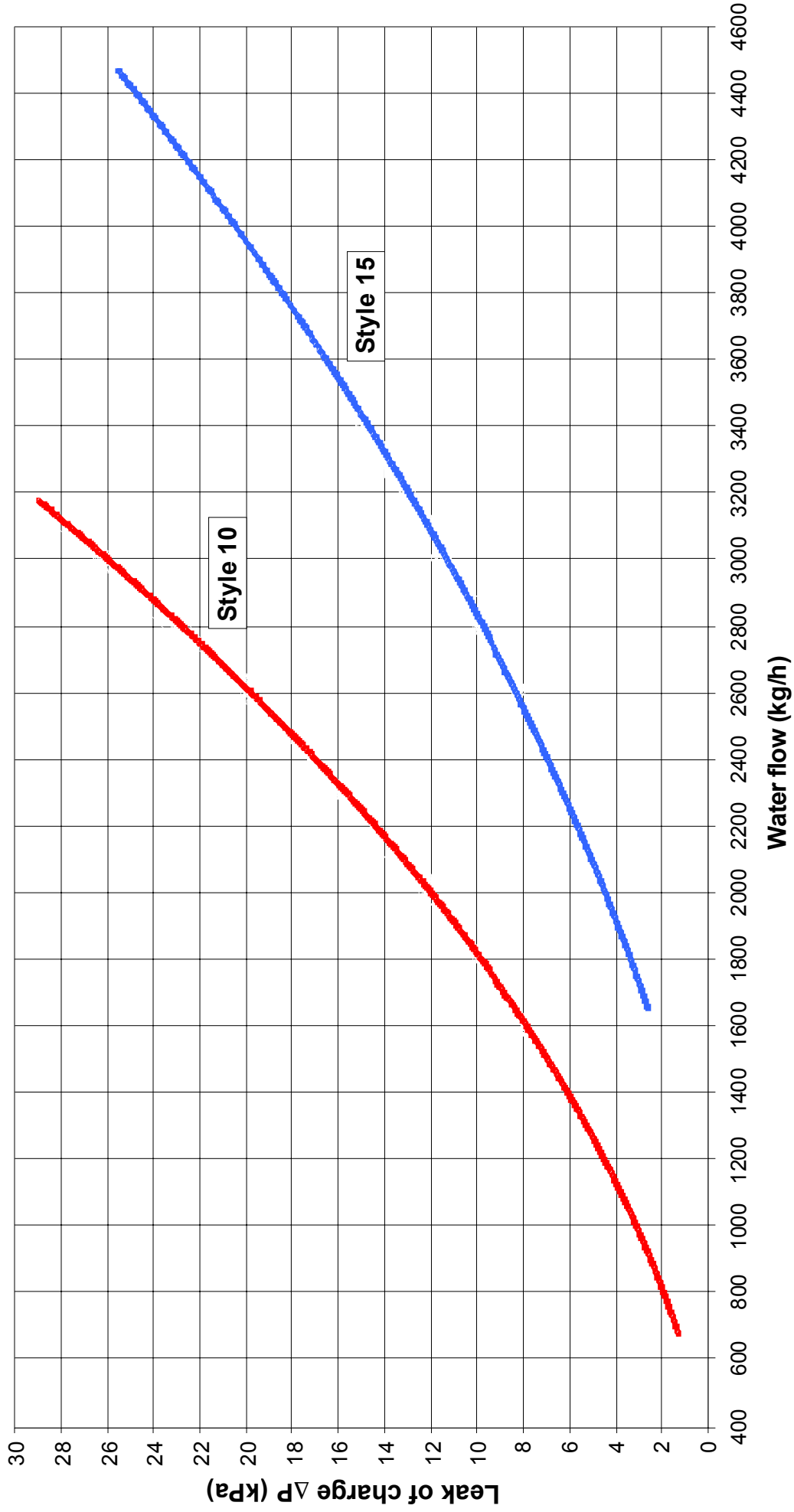


Fig. 8

SECTION B - TECHNICAL INFORMATION FOR THE INSTALLER

2.0 WARNINGS

2.1 QUALIFICATION OF THE INSTALER

WARNING! It is recommended that a only qualified person operates the installation of the unit.

2.2 Pre installation

Before starting the installation, you must make sure that the solutions chosen and the eventual project comply with the rules and regulations in force, especially with respect to the heat generator or the refrigerator.

It is necessary to verify the compliance of the installation in relation to the electrical system of the premises in according to the CEI Electrical Safety

2.3 TRANSPORTATION AND HANDLING

Aeroclima Style can be handled with cart lift truck or pallet truck, taking care to balance of the weight on the supports. For security reasons, and the relatively high weight, it is not allow lifting the appliance by hand.

Warning! A single person can lift to a maximum weight of 30 kg.

Avoid using suspension slings or ropes, since there are no specific anchor points.

Please, follow the instructions on the cardboard with the appropriate notation.

Upon delivery, check that during the transport there has been no damage visible on the packaging and / or on the unit.

If damage has occurred immediately expose claim.

Do not install equipment damaged in shipping.

2.4 USING OF THE INSTRUCTIONS

This manual is an integral part of the product and it must be delivered to the owner of the unit so that it retains carefully for any future use or for consultation.

Warning! When you begin with the installation or working on the appliance observe all instructions in this manual and whatever applicable to the product according the national safety standards.

The changes connections of any kind and / or failure to compliance with these instructions will cause immediately invalidate the warranty and of producer responsibility.

3.0 INSTALLATION

3.1 GENERAL INFORMATION - POSITIONING

Before carrying out the installation check ouz the following conditions:

a) it is possible to arrive at the chosen point with the

power supply line single-phase 230 Volts ~ 50 Hz and that the position expected to match the plumbing connections and the attacks on the unit;

- b) that the location is suitable for a correct air diffusion into the environment and that the flow air is not impeded by obstacles such as shelving, or otherwise, that the air flow itself does not disturb the people. In the case where the in the same local are installed multiple devices, it is convenient to distribute the air in opposite directions flows;
- c) the position of installation allows accessibility for the maintenance. The optimum mounting height is between 2.4 and 3.5 m and is seen as the vertical distance between the floor and the base of the unit; heights distance than or less indicated should be evaluated carefully in order to ensure correct air circulation inside the room.

The unit is supplied from fabric completed with special support bracket that allows a quick installation.

At the end of the mounting of the wall bracket, the unit must be placed horizontally and eventually in little slope for the condensate drain. (see fig. 9)

Warning! Make sure that the wall on which will be fixed the bracket support can support the weight of the appliance.

3.2 WATER CONNECTIONS

Warning! Check the specifications of the device of the water circulation and the load losses of the batteries, shown in fig. 8.

Connect the pipes of the hydraulic system o the water in/outlet attacks 1" placed on the side of the unit (Fig. 3).

In the case of metal pipes, it is recommended to follow the following requirements:

- Install air vents at high points of the pipes;
- Install shutoff valves on the pipes supply and return water to facilitate maintenance operations avoiding download of the whole plant;
- Insulate the pipes to prevent heat loss and condensation.

Warning! Before filling the pipes, make sure do not contain material stranger as sand, debris, flakes rust and anything else.

For use in cooling is necessary to provide appropriate piping that allows the drainage of condensate. This pipeline will be connected by choosing one of the two attacks which is fitted to the unit (see fig. 9).

3.3 ELECTRICAL CONNECTIONS

Warning! Make the electrical connections with power off and only after completing the plumbing connections.

Make sure that the power supply available is of the type 230 V - single phase - 50 Hz.

3.3 ELECTRICAL CONNECTIONS

Warning! Make the electrical connections with power off and only after completing the plumbing connections.

Make sure that the power supply available is of the type 230 V - single phase - 50 Hz.

It is necessary to install near the appliance a switcher all poles of adequate capacity (with an opening of the contacts of at least 3 mm) for the possible arrest of the device.

It is forbidden the use of pipes gas and / or water to the grounding of the device. The manufacturer is not responsible for any damage caused by the lack of grounding of the unit and failure in the wiring diagrams.

Insert the power cable through the cable gland, taking care to cut the conductors so that the yellow / green earth is more along the other two. This precaution, in case of triggering, allows the cable to ground to go out for the final connections.

The power cable must be suitable to the type of plant installed and must have adequate diameter the seal on the cable clamp (recommended H05 VVF 3x1, 5

mm²). Connect the power cable to the terminals of the phase (L), neutral (N) and earth on the terminal block in the cabinet (see electric diagrams 1.9).

To use the control panel with thermostat Code 50005230-36205217 (supplied on request) see the wiring diagrams relating to different models.

4.0 OPERATION

4.1 VERIFICATIONS

Before starting the Aeroclima Style, ensure that you have complied with the provisions and regulations on the installation of these equipment, particularly with regard to the water supply's pipe sizing.

Before proceeding with the start, to check:

- The safety conditions and all requirements given in this manual have been complied with;
- Fasten the bracket to the wall is stable and the buffer zones are free from any obstacle or material that prevents the easy accessibility to unit;
- The plumbing and electrical connections, particularly with attention to the ground, have been made correctly;
- The devices for loading, unloading and vent system are in good operating condition and have been adequately controlled;
- A purge air has been carried out inside of water pipes and the heat exchanger unit.

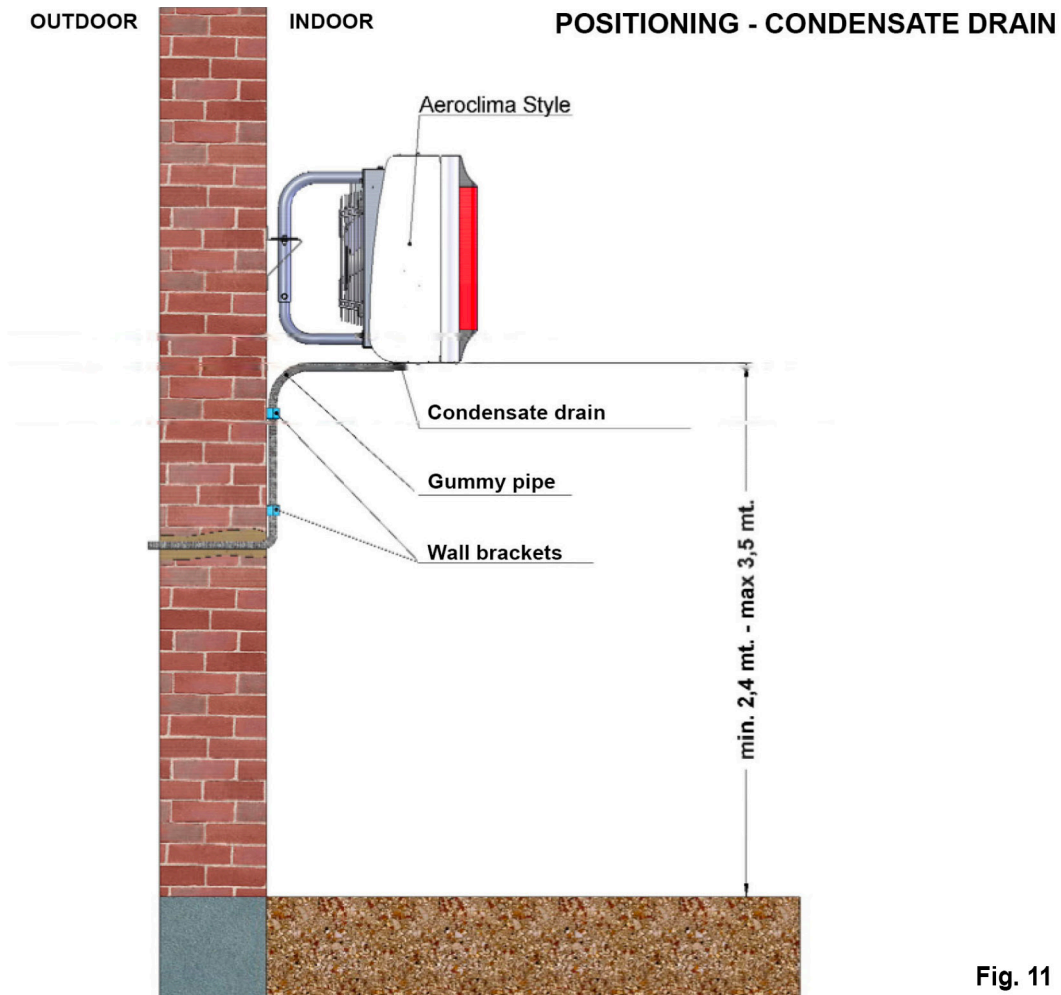


Fig. 11

4.2 STARTING

Supply tension, point 3.3.

If the unit is controlled by an ambient thermostat, set the device on the temperature value that you want reach in environment and verify the speeds ventilation.

4.3 USER INFORMATION

It is recommended to inform the user of all operations necessary for the proper functioning of the device, with particular regard to the stages of switching on and off; on periodic inspections, which must be carried out by qualified personnel.

5.0 DEFECTS OPERATION

5.1 PRELIMINARY CHECKS

Before technical check, make sure that:

- a) the power supply is properly connected and any external regulation organs, such as a room thermostat or clock programmer are working properly;
- b) spy valves, mounted on the hydraulic pipes, are in the open position.

5.2 POSSIBLE DEFECTS

Below are listed the possible failures with a list of possible causes.

5.2.1 The fans do not work.

- a) Control systems and external control device are failures (thermostat, on / off);
 - Verify correct operation.
- b) The connection of the fan power supply is damaged or broken;
 - Restore the wiring correctly. Check that the motor is not blown and in the case replaced.
- c) the auto-transformer inside the damaged;
 - Replace the auto-transformer with a new one, entering inside the electrical panel of the unit. Restore the connections according to the wiring diagram.

5.2.2 Water leak from the battery

- a) The hydraulic connections are not made correctly;
 - Restore the hydraulic connections correctly.
- b) The heat exchanger has corrosion and / or lost seal;
 - Replace the heat exchanger with a new one, seeking however, any external cause of the problem (the presence of a corrosive atmosphere or aggressive substances in the environment)

5.2.3 The fan also stops in situation of operation request

- a) Thermal protection of the motor

- Verify, that the absorption of the motor does not differ too much from the nominal values. Identify the reason of overheating and possibly replace the fan.

5.2.4 Noise or vibration during operation

- a) the fan is noisy and / or vibrating
 - Check the correct rotation of the blades of the fan and the presence of possible frictions. Remove any buildup of dust. Check the tightening of the screws grill/motor and grill/unit.

6.0 REPLACEMENT OF COMPONENTS

For replacement of components is required specific technical skills. It is recommended to call always an Authorized Technical Centre.

For safety and quality reasons, it is recommended to use always original spare parts.

Warning! All the following operations must be carried out with the appliance off and disconnected from the electricity power supply.

6.1 REPLACEMENT OF THE FAN

Disconnect the electrical connection of the fan from the terminal board.

Unscrew the four screws that fix the grill fan to the rear panel of the heater.

Remove the unit and release the fan from the grill by removing the four screws.

Clean the grill from dust and starting at the new fan replacing.

Take care to use the original screws, as thread depth greater than 5 mm may damage the engine.

Restore the connection taking care to respect the electric connection as the original wiring diagram.

7.0 OPERATION PERIODIC MAINTENANCE

Warning! The operations described below must be carried out with the appliance off, disconnected from the electricity power supply.

7.1 USUAL MAINTENANCE

Recommended at the beginning of each season:

- a) clean the external parts of the device with a damp cloth;
- b) wipe with the help of a brush or a jet of compressed air dust deposits from the battery and the intake grille of the fan;
- c) check that the condensate drain hole is free from any element clogging, which may prevent proper drainage of condensate;

7.2 ANNUAL CHECK

In order to minimize the possibility of faults and maintain good working of the heater, you should run, at least once a year, a general inspection of the unit.

DICHIARAZIONE DI CONFORMITA'

Fornitore : A2B Accorroni E.G. srl
Indirizzo : 60027 Osimo (AN) – Via D'Ancona,37
Tel 071/723991 – Fax 071/7133153
Apparecchio : Aerotermo Aeroclima Style 10 - 15

Con riferimento agli apparecchi in oggetto nelle versioni aerotermini pensili a proiezione orizzontale destinati al riscaldamento degli ambienti mediante fluido tipo acqua, la A2B Accorroni E.G. srl

DICHIARA

che il prodotto

- è conforme alle disposizioni di sicurezza degli apparecchi elettrici d'uso domestico o similare – Norme generali EN 60335-1 (2002) (+A1 + A1/EC + A2 + A11 + A12 + A13);
- è conforme alle disposizioni di sicurezza degli apparecchi elettrici d'uso domestico o similare – Parte 2: Norme particolari per le pompe di calore, per i condizionatori d'aria per i deumidificatori EN 60335-2-40 (2005-06) (+A1);
- è conforme alle disposizioni di metodi di misura delle caratteristiche di radiodisturbo degli apparecchi elettrodomestici, e similari a motore o termici, degli utensili e degli apparecchi elettrici EN 55014-1 (2006);
- è conforme alle disposizioni di metodi di misura per campi elettromagnetici degli apparecchi elettrici di uso domestico e similari con riferimento all'esposizione umana EN 62233 (2008-04) (+A1);
- è conforme alle disposizioni di compatibilità elettromagnetica (EMC) Parte 3: Limiti – Sezione 2: Limiti per le emissioni di corrente armonica (apparecchiature con corrente di ingresso ≤ 16 A EN 61000-3-2 (2006) (+A1 +A2);
- è conforme alle disposizioni di compatibilità elettromagnetica (EMC) Parte 3: Limiti – Sezione 3: Limitazione delle fluttuazioni di tensione e dei flicker in sistemi di alimentazione in bassa tensione per apparecchiature con corrente nominale ≤ 16 A EN 61000-3-3 (1995) (+A1);
- è conforme alle disposizioni di requisiti di immunità per apparecchi elettrodomestici, utensili ed apparecchi elettrici similari.

e conformi alla direttiva CE sui prodotti da costruzione e rispettano i requisiti della seguente direttiva:

- ATEX 94/9/CE 2006/42/CE 2006/95/CE 2004/108/CE 93/68/CEE 92/31 CEE

Osimo, Settembre 2010



Il legale Rappresentante

Altamura Lorenza

Altamura Lorenza



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