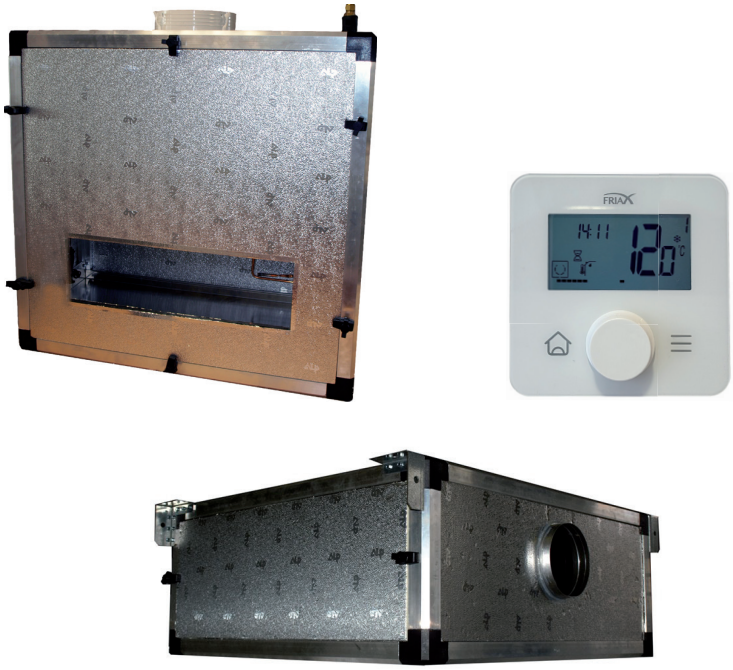
FRIAX INDUSTRIE

TECHNICAL INSTALLATION MANUAL



Evaporator EVG / EVI Vintage

PRODUCT REGISTRATION

Register your products now to validate your installation and benefit from improved support if needed.

La FRENCH FAB

FABRIQUÉ EN FRANCE

LAURÉAT Réseau Entreprendre SAVOIE

EN-NT-SPC-EVG-EVI-VTX-0726

Specifications may change without prior notice to reflect product improvements.

Warning

Read the manual carrefully before using the device and
keep it for futur reference.



This symbol indicates that the installation manual should be read carrefully.



This symbol indicates that a technician must handle this equipment in referring to the installation manual.



This symbol indicates that information are available, such as the manual operating instructions or installation manual.

- Improper installation or use can result in personal injury, property damage, and voiding of the manufacturer's warranty. Failure to comply with safety instructions and local standards during the installation releases the manufacturer from all liability.

- Make sure to install the device in a place protected from the elements and frost-free.

- The equipment should be installed in a room without a permanent source of fire, such as open flame, a combustion device, an electric heater, etc..

- The possible stagnation of refrigerant gas leaks in unventilated rooms can create a risk of fire or explosion if the refrigerant comes into contact with an ignition source.

- Be aware that some refrigerant gases can be odorless.

- Any intervention on a refrigeration circuit must be carried out by a professionnal authorized by an accredited body certifing the competence to handle refrigerant fluids.

- The appliance must be free of obstructionsat all times to ensure proper operation and reduce safety risks.

- Do not puncture any component of the refrigerant circuit.
- Use care when handling the equipment to avoid malfunction.

- The device must be installed in accordance with local wiring regulations.

- Make sure that the characteristics of the device are compatible with those of electrical installation.

- Make sure the AC outlet is grounded.

- Do not use the device if it is damaged.

- Do not connect the power supply until the entire installation is complete.

- Always switch off the appliance and unplug it from the mains for cleaning and maintenance.

- Do not put your hands or objects in the air inlets and outlets.

- Do not try to repair the device yourself.

- Any use and / or modification not approved by the manufacturer may be dangerous for your safety and your health.

- This appliance must not be used by children.

- The user should understand and be aware of the potential dangers associated with the use of the device.

- Use only the means and / or tools recommended by the manufacturer for defrosting or cleaning.

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Presentation

Thank you for choosing a Friax cellar system to control the aging of your wines. Take the time to read this user manual. It will allow you to understand and master the operations to install and adjust your device.

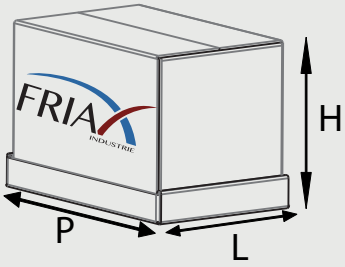
Receipt of the package

We invite you to examine the package upon receipt for possible damage to the cardboard or missing items. Please note your comments regarding the condition of the package on the carrier's delivery note: they will be used in the event of damage noted upon unpacking.

Your package contains the following items:

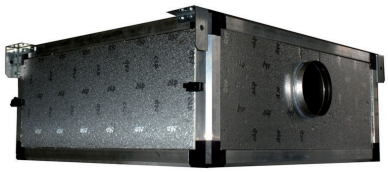
- 1 × Box containing a remote control, wall mounting bracket, batteries and fixing screws
- 1 × Control box with a 6 m RJ12 cable
- 1 × Indoor unit

The manual corresponding to the condensing unit is located inside its packaging.

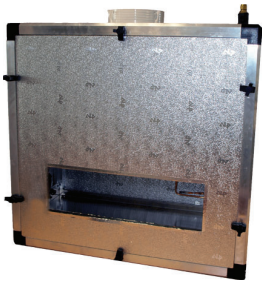


Dimensions excluding pallet:

Evaporator EVG



Evaporator EVI





a control box



6m RJ12 cable



Remote control box + probe

Technical data

+32°C EXT		SPC	30	48	82	122	170	230
Fluid			R513A	R513A	R513A	R513A	R513A	R513A
Cooling capacity		W	780	1130	1470	2370	2750	3440
Heating capacité		W	800	800	850	1000	1600	2000
Absorbed power in cold	GCH	W	626	779	967	1265	1597	1720
	GCG		636	812	1001	1349	1738	1978
	GCW		572	725	913	1195	1538	1678
Absorbed power in hot		W	977	977	1027	1177	1942	2342
Max Cold/Hot Intensity	GCH	Amax	6.64/4.83	6.74/4.83	10.14/5.05	11.64/6.35	14.66/9.65	15/11.35
	GCG		6.54/4.83	6.64/4.83	10.04/5.05	11.54/5.7	16.46/9.65	16.96/11.35
	GCW		5.15/4.83	5.25/4.83	8.65/5.05	10.15/5.7	13.17/9.65	13.67/11.35
C.O.P Air conditioner	GCH	W/W	1.25	1.45	1.52	1.87	1.72	2.00
	GCG		1.23	1.39	1.47	1.76	1.58	1.74
	GCW		1.36	1.56	1.61	1.98	1.79	2.05

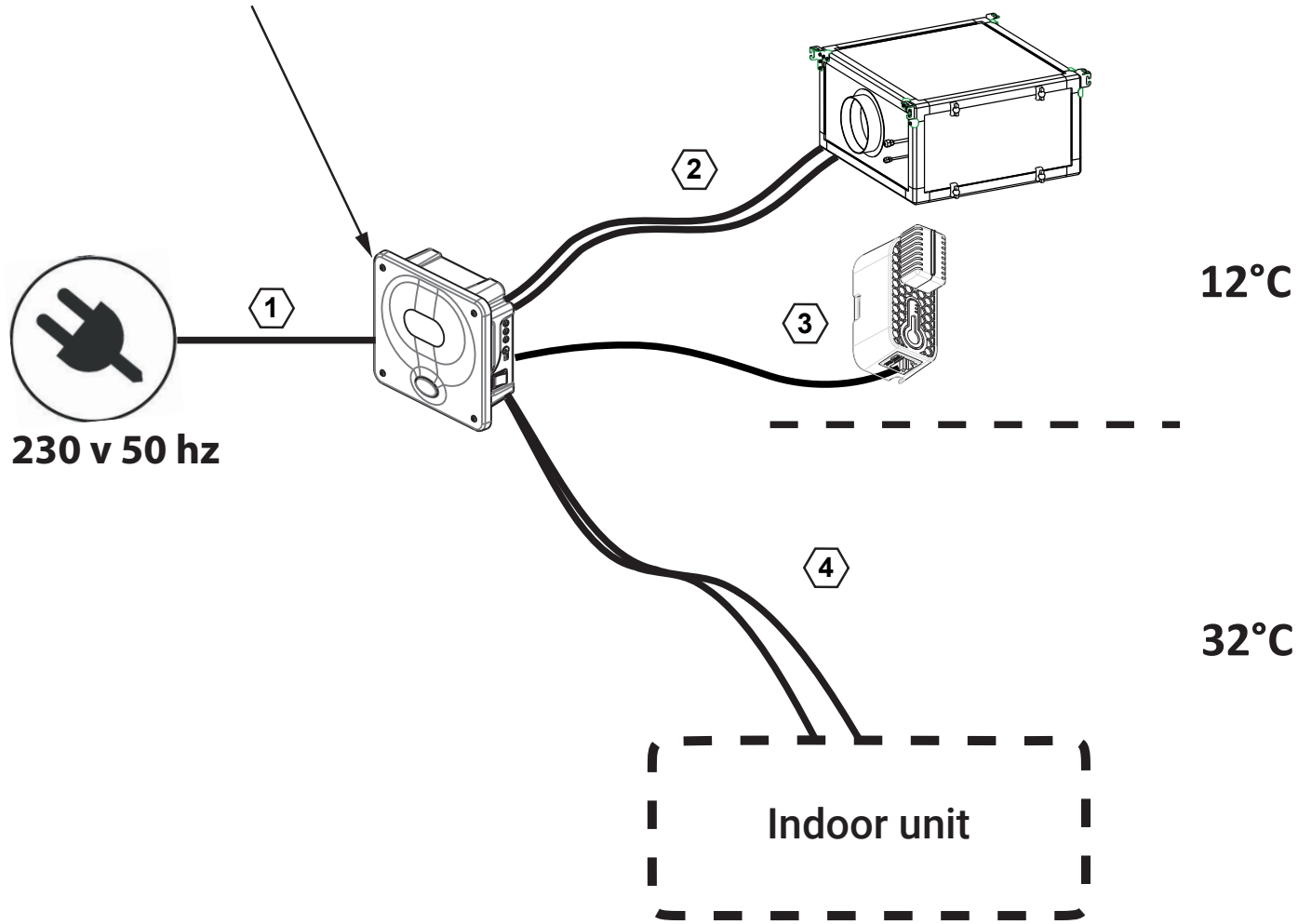
Indoor unit	SPC	30	48	82	122	170	230
Ø Fan		1	1	1	1	2	2
Air flow	m3/h	310	490	560	580	1075	1100
Available pressure	Pa	100	100	100	100	100	100
IMax. evaporator current cool mode	Amax	1.33	1.33	1.33	1.33	2.85	2.85
Max. evaporator current Hot mode	Amax	4.83	4.83	5.05	5.7	9.65	11.35
Gas connections Suction line	Ø	3/8"	3/8"	3/8"	1/2"	5/8"	5/8"
Gas connections Liquid line	Ø	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"
Net weight	Kg	26	26	32	36	48	56
Body color		Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium

Electrical connections

SPC EVG-EVI	30-48-82-122	170 230
Voltage/Frequency	230V / 50Hz	230V / 50Hz
Protection	10A	16A 20A
1 Power supply to control Box	3g1.5²	3g2.5²
2 Indoor Unit ==> Control box Max length 6 meters	1x (5g1.5²) 1 x (3 x 1mm²)	1x (6g2.5²) 1 x (3 x 1mm²)
3 Cellar probe ==> Control box	Câble RJ12 6m fourni	Câble RJ12 6m fourni
4 Outdoor Unit ==> Control box Max length 20 meters	1x (3g1.5²) 1 x (2 x0.5mm²)	1x (3g2.5²) 1 x (2 x0.5mm²)

Schematic diagram

The regulation box must be less than 6m from the evaporator for the probe to function properly.



If the evaporator is mounted outside the cellar (OUT) in an environment above 25°C, over-insulation must be considered to avoid condensation problems on the bodywork and thermal break profiles. of the chassis. For example, we can use an Armaflex type insulation made from a 25 mm plate.

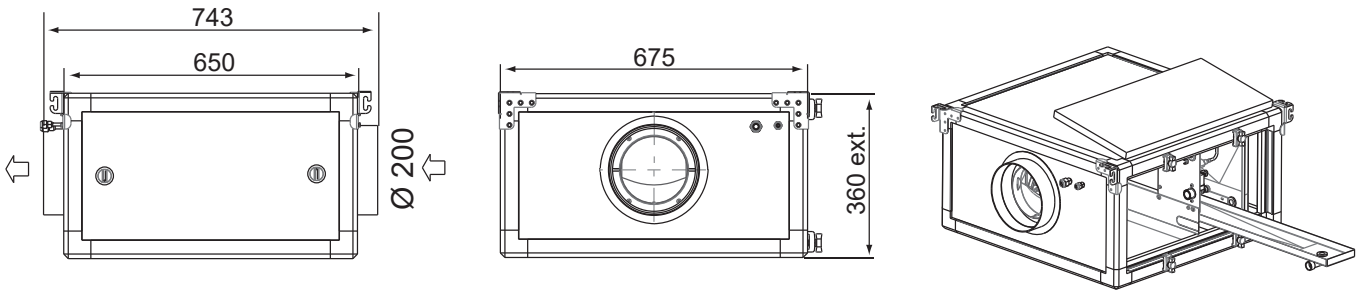
Dimensions and Mounting of the Evaporators

1. EVG Ceiling mount

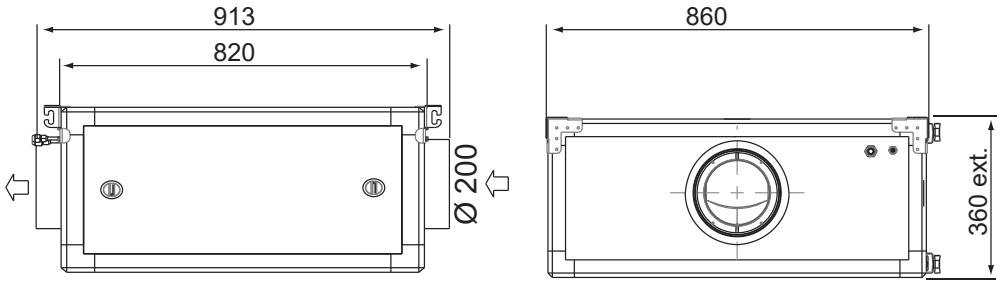
The accessories (screws, dowels, washers) necessary for installing the evaporator are not provided.

- The unit is mounted under the ceiling using the brackets integrated into the device.
- It is essential to ensure alignment and level to allow proper condensate drainage.
- Check the load-bearing capacity of the ceiling.

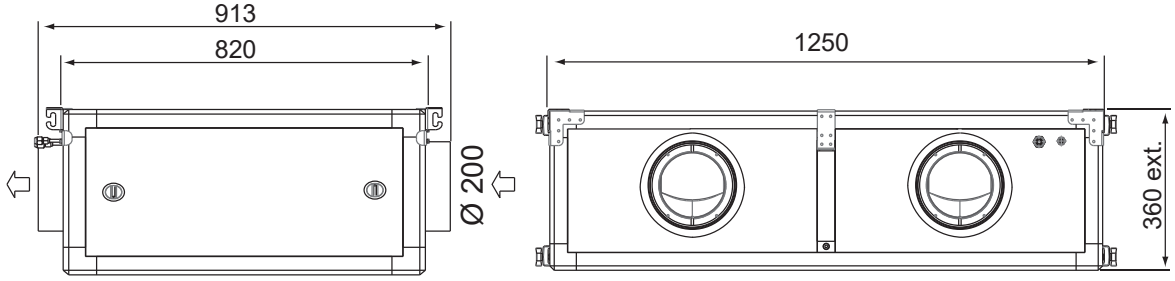
SPC 30 - 48 EVG



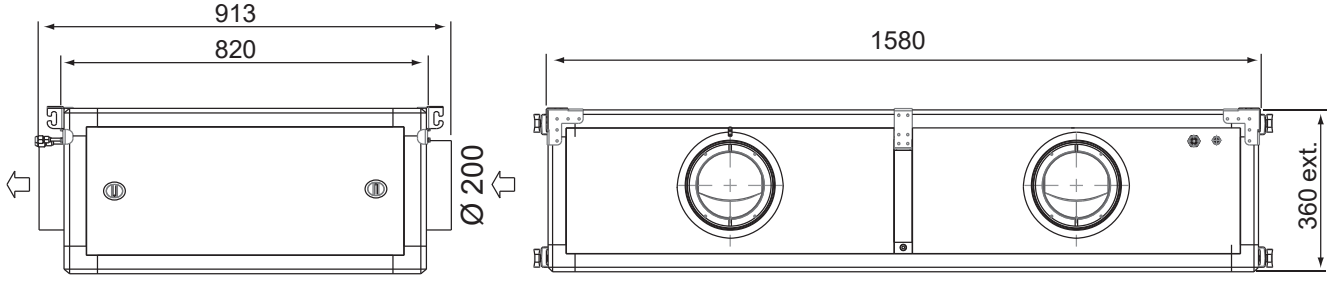
SPC 82 - 122 EVG



SPC 170 EVG



SPC 230 EVG



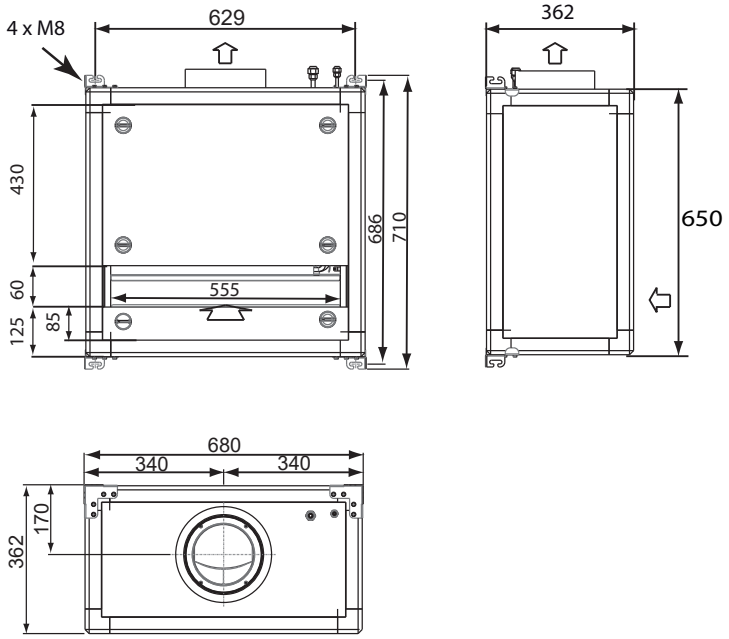
2. EVI Wall mounting

The accessories (screws, dowels, washers) necessary for installing the evaporator are not provided.

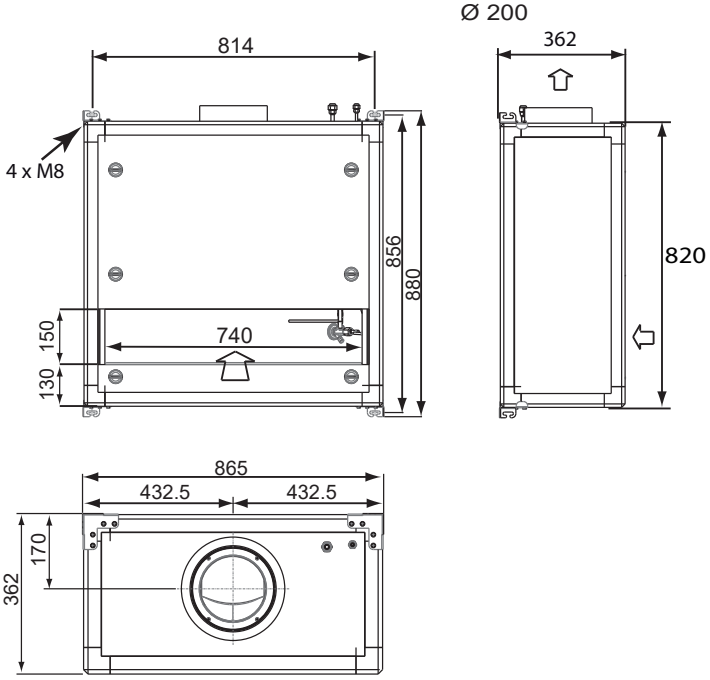
- The unit is wall-mounted using the fixing brackets supplied with the appliance.
- It is essential to maintain proper alignment and level to ensure correct condensate drainage.
- Check the load-bearing capacity of the wall.
- The axis of the return air opening must be at least 50 cm above the finished floor level.

Suction hole dimensions in IN / OUT assembly

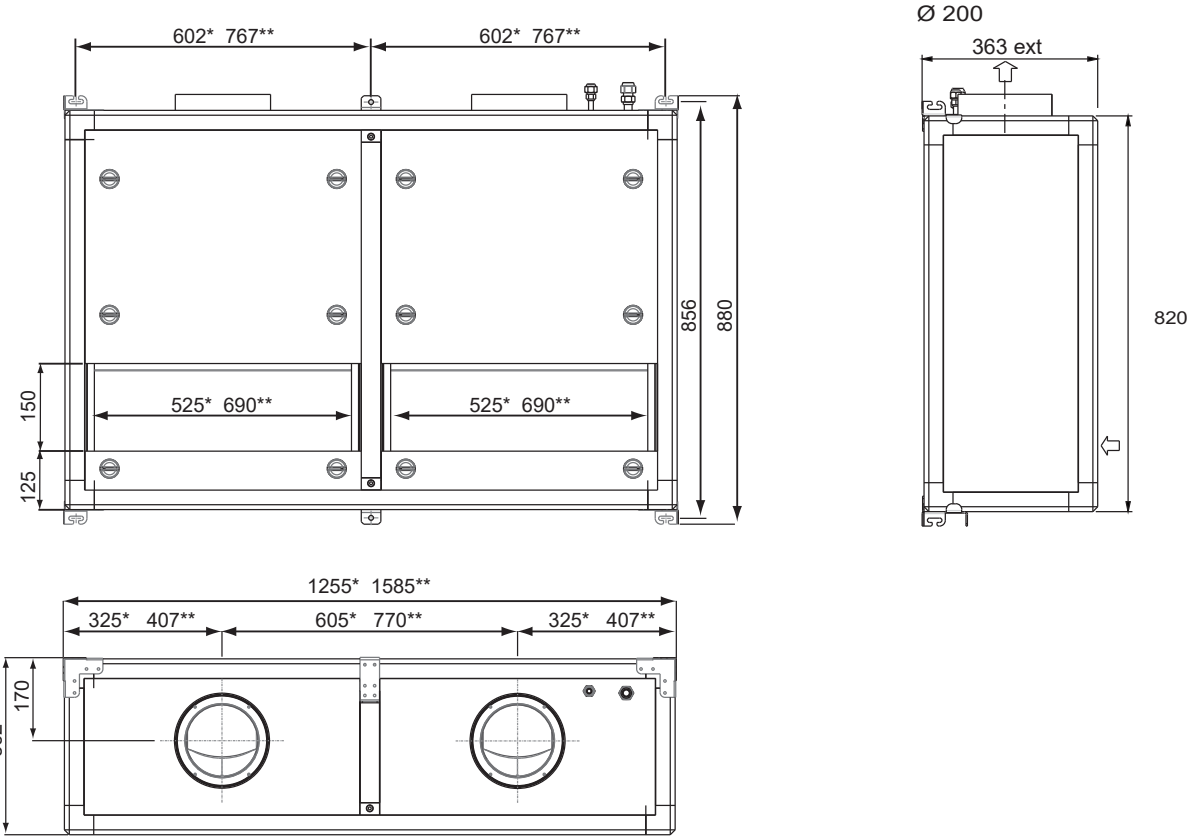
SPC 30- 48 EVI
IN-OUT



SPC 82 - 122 EVI

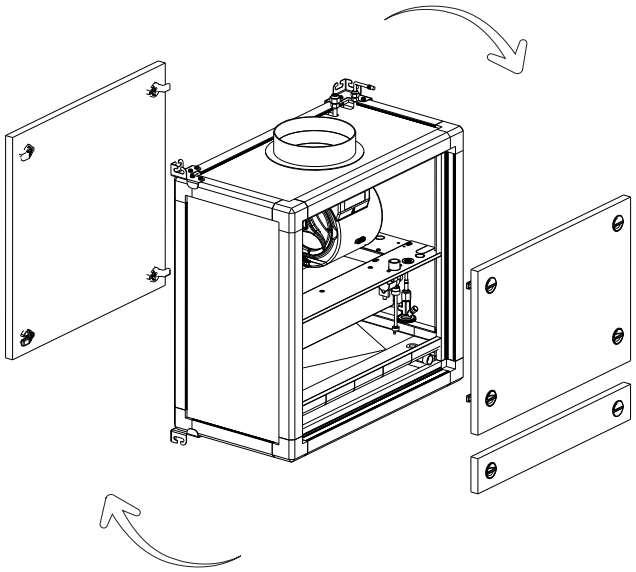


SPC 170* - 230** EVI

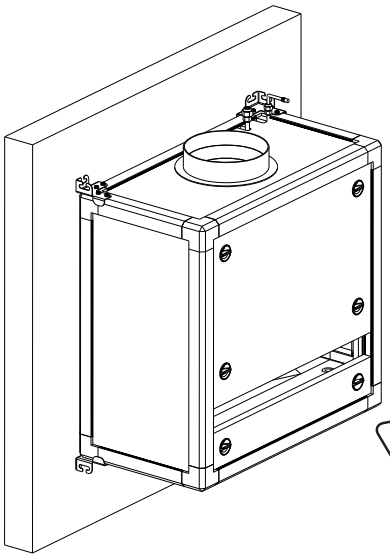


3. Type of installation for EVI version IN or OUT

The EVI are delivered as standard in the IN version, it is possible to install it in the OUT version by reversing the panels as in the image below.



A. Version IN



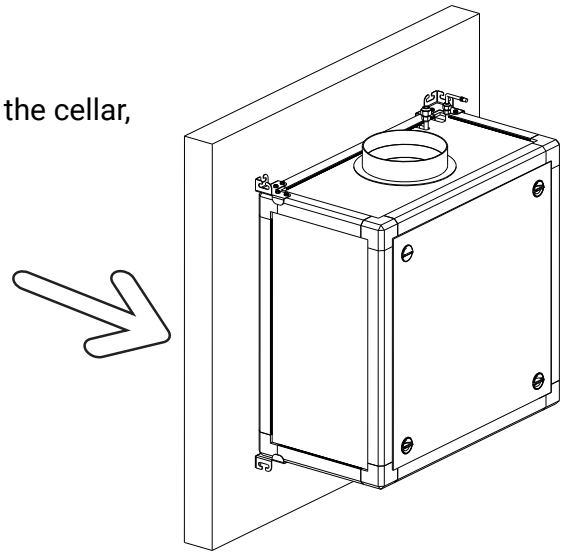
In the IN version the device is fixed on the interior side of the cellar, the panels do not need to be reversed.

Air inlet
cellar side

B. Version OUT

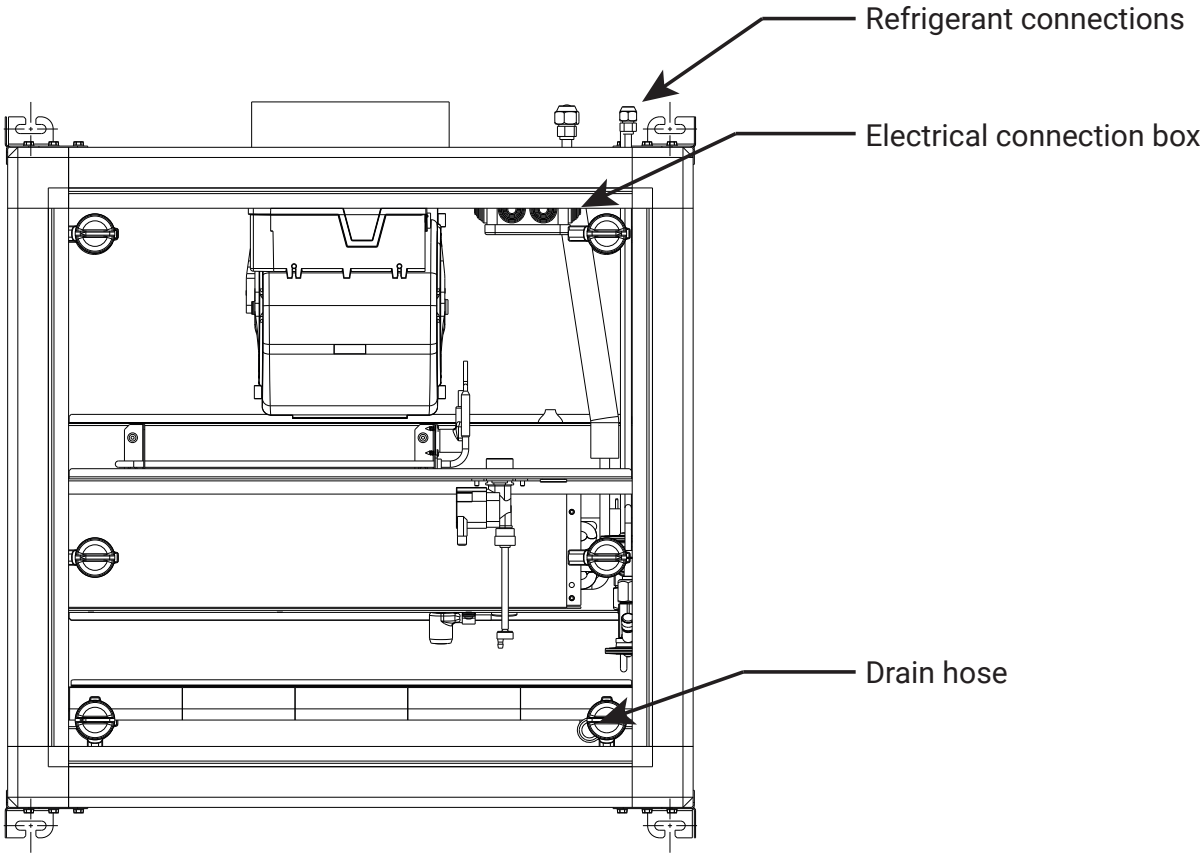
In the OUT version, the device is attached to the exterior side of the cellar, the panels are to be reversed.

Air inlet
cellar side



4. Connections of the Indoor Unit

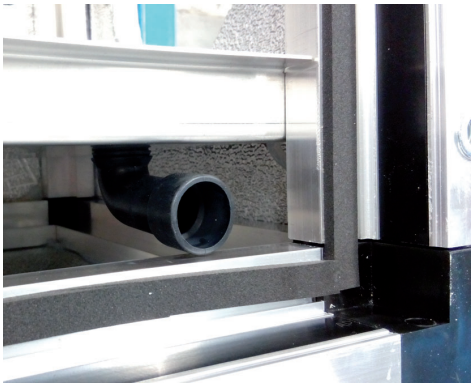
- Connect the liquid line to the smaller diameter connection and the suction line to the larger diameter connection inside the evaporator.
- Refer to the condensing unit manual to complete the refrigeration installation.

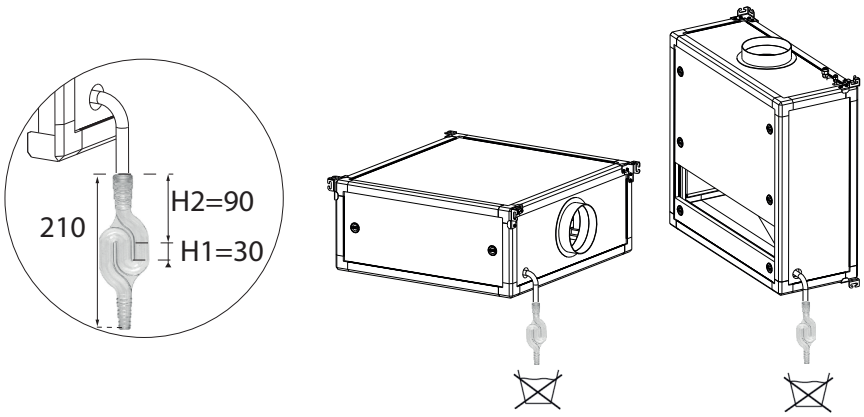


5. Drain Connection

Connect the drain pipe (Ø20) to the end of the elbow.

A manometric trap (sold separately), with a pressure drop of 100 Pa, is required to offset the fan pressure and ensure proper drainage.

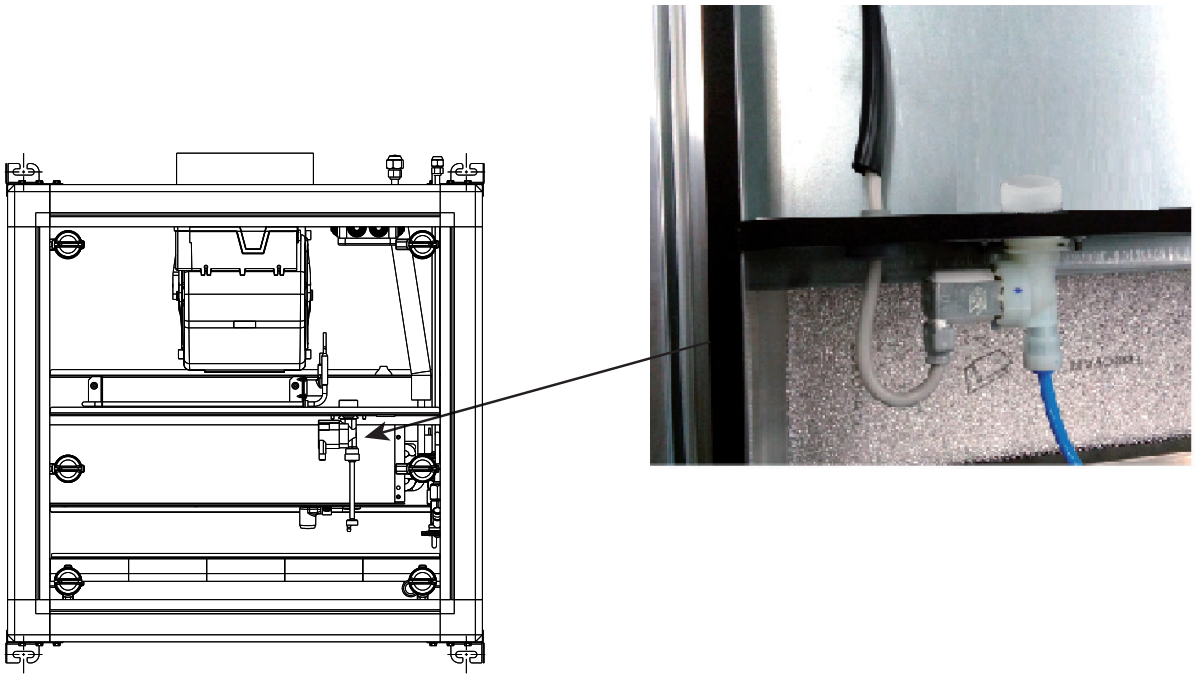




The minimum height H1 and H2 of a trap for a pressure drop of 100 Pa must be between 30 and 40 mm, which corresponds to 60 to 80 mm below the condensate outlet.

6. Vintage Humidifier Connection

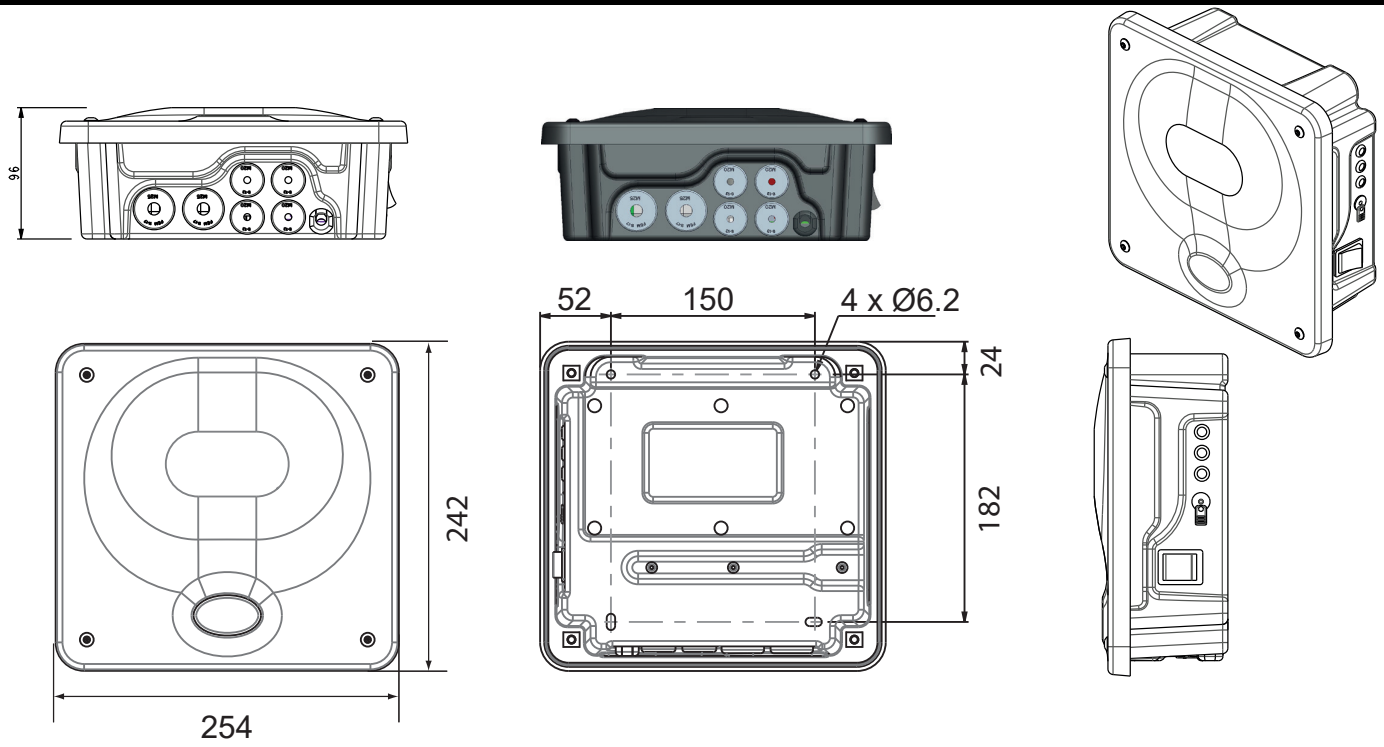
Connect the water supply using the **KLPWSECU kit** (sold separately) to the inlet of the solenoid valve (Ø20/27 mm).

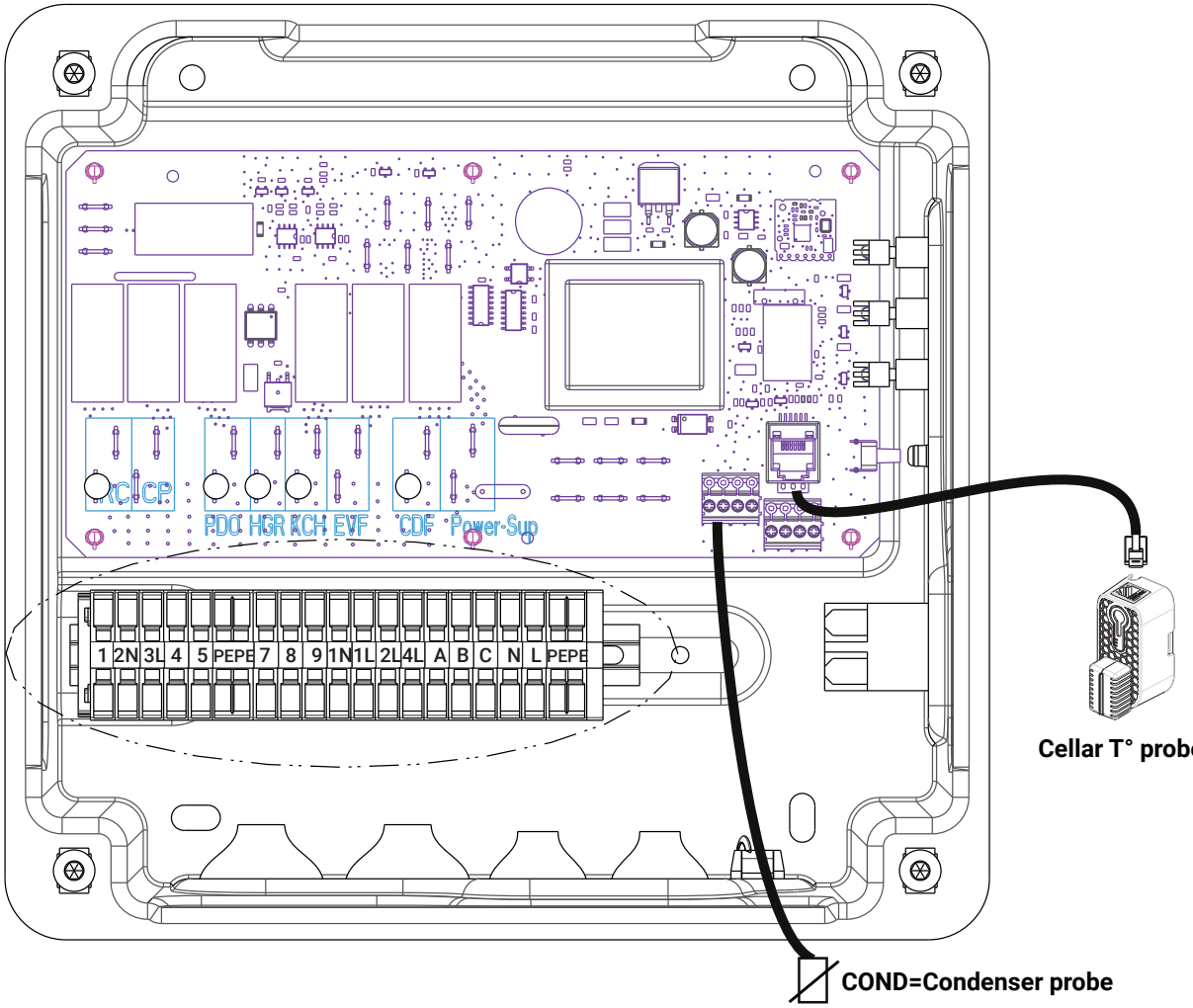


In case of water pressure greater than 2.8 bars, the use of a pressure limiter kit is essential.

The water, drainage, and electrical connections are located inside the evaporator.
They must be made at their designated locations by drilling through the fixed panels selected for installation (excluding removable panels intended for maintenance), and then carefully sealing with silicone to prevent any condensation or thermal loss once the connections are completed.

Electrical connection





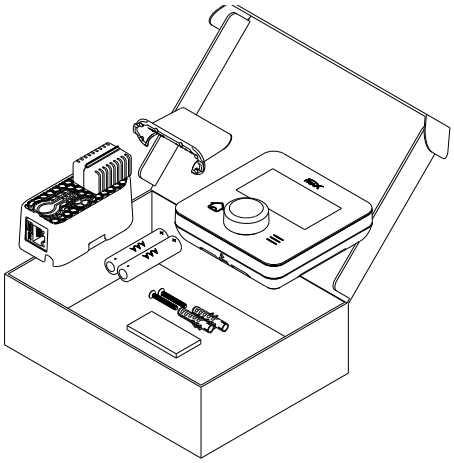
1=Casing resistance	3L= EV Pump Down SPC170-230	1N=Neutral indoor unit
2N=Neutral EXT group	5=Compressor supply spc170-230	1L=HGR power supply
4=Condenser fan	7-8-9 = Condenser fan control	2L= Resistance power supply
3L=Compressor spc 30-48 82-122	a-b-c Evaporator fan control	4L=Evaporator fan power supply
	N-L 230V box power supply	

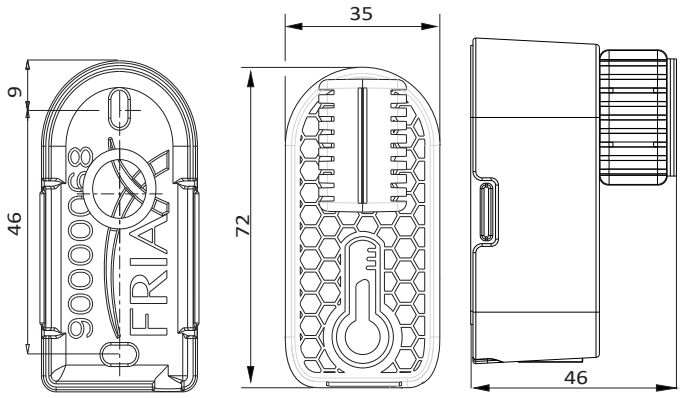
Probe mounting

Probe placement and connection

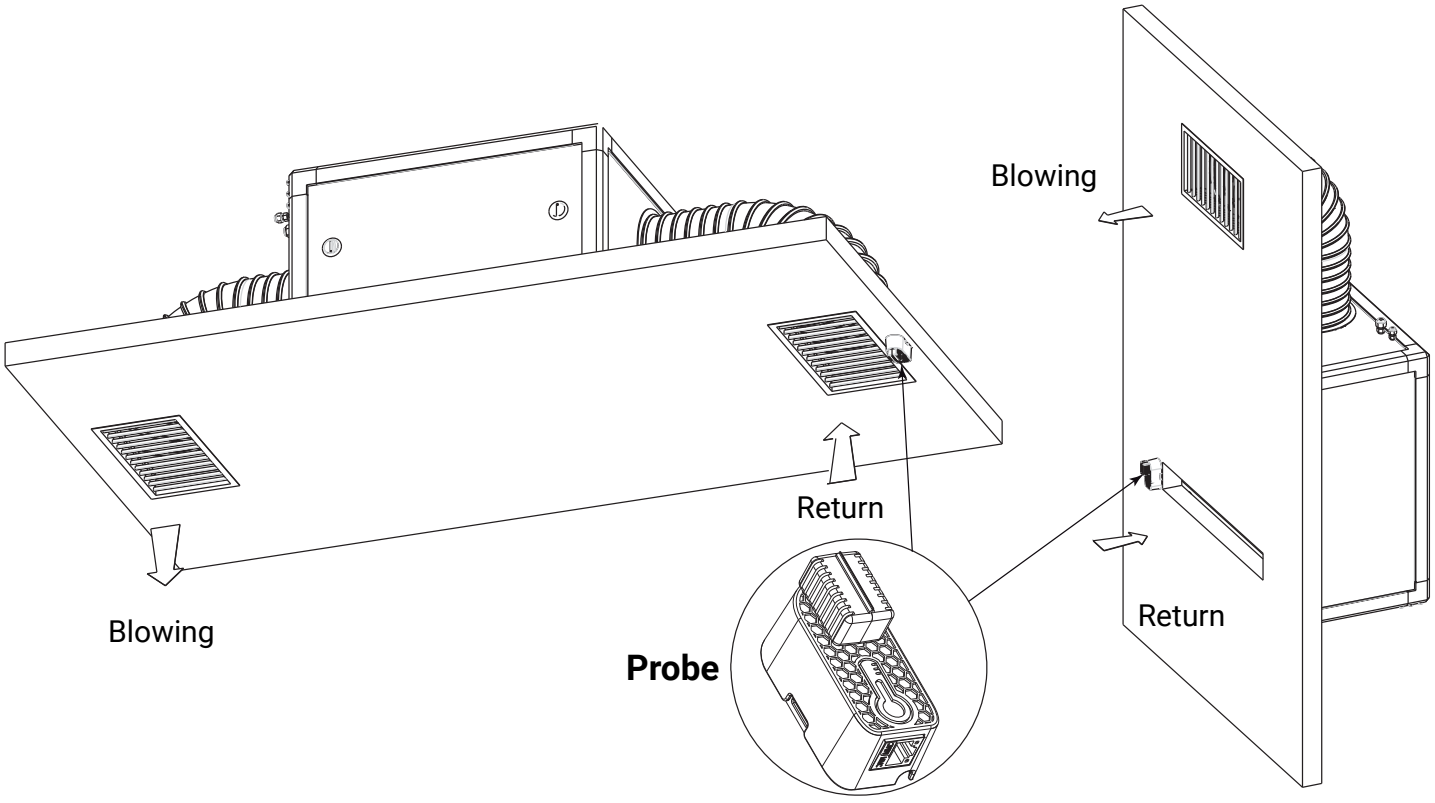
The remote control box comes with:

- a remote control and its support
- 2 LR03 batteries
- a probe installed in its support
- screws and their plugs (wall mounting)
- double-sided strips (fixing on the evaporator)





Attach the probe to the evaporator or to the wall, near the return air, in order to measure the ambient temperature of the cellar. A 6-meter RJ12 (class 6) cable is provided with the control unit for the connection.

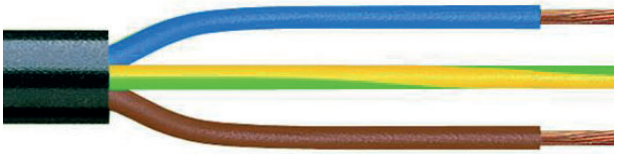


Electrical connection

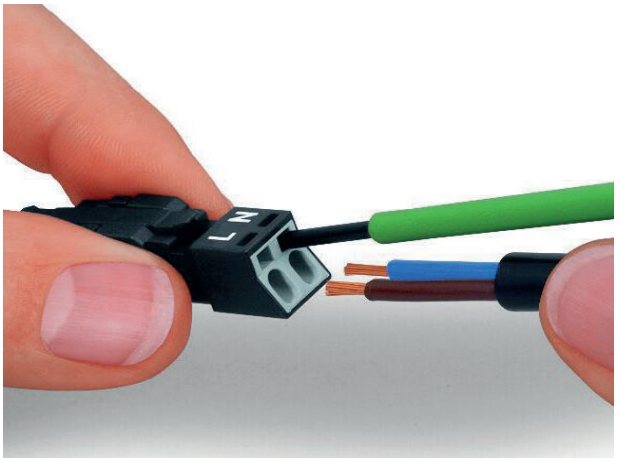
Installing the connectors

3 connectors are delivered to you in a bag in the evaporator box, for be connected to your cables following the assembly below.

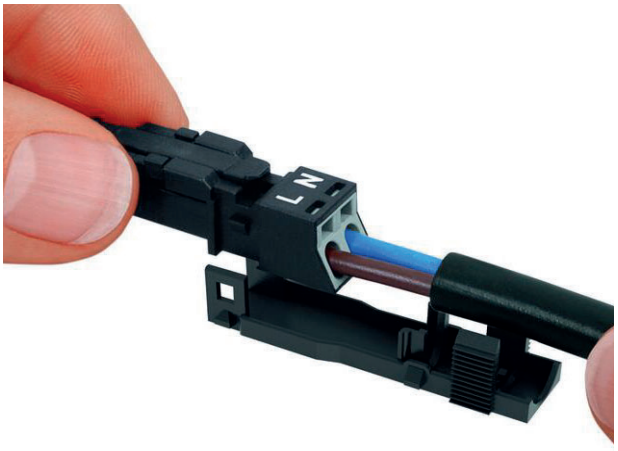
- Stripping length = 30 mm (2 poles), 37 mm (3 poles), 45 mm (4 and 5 poles)
- Wire stripping length = 9 mm
- Ground wire advance = 8 mm



1. Actuate the tension spring using a handling tool with blade width is 2.5 mm and insert the stripped wire as far as it will go to connect flexible conductors. The connection of the rigid cables is carried out by direct insertion.



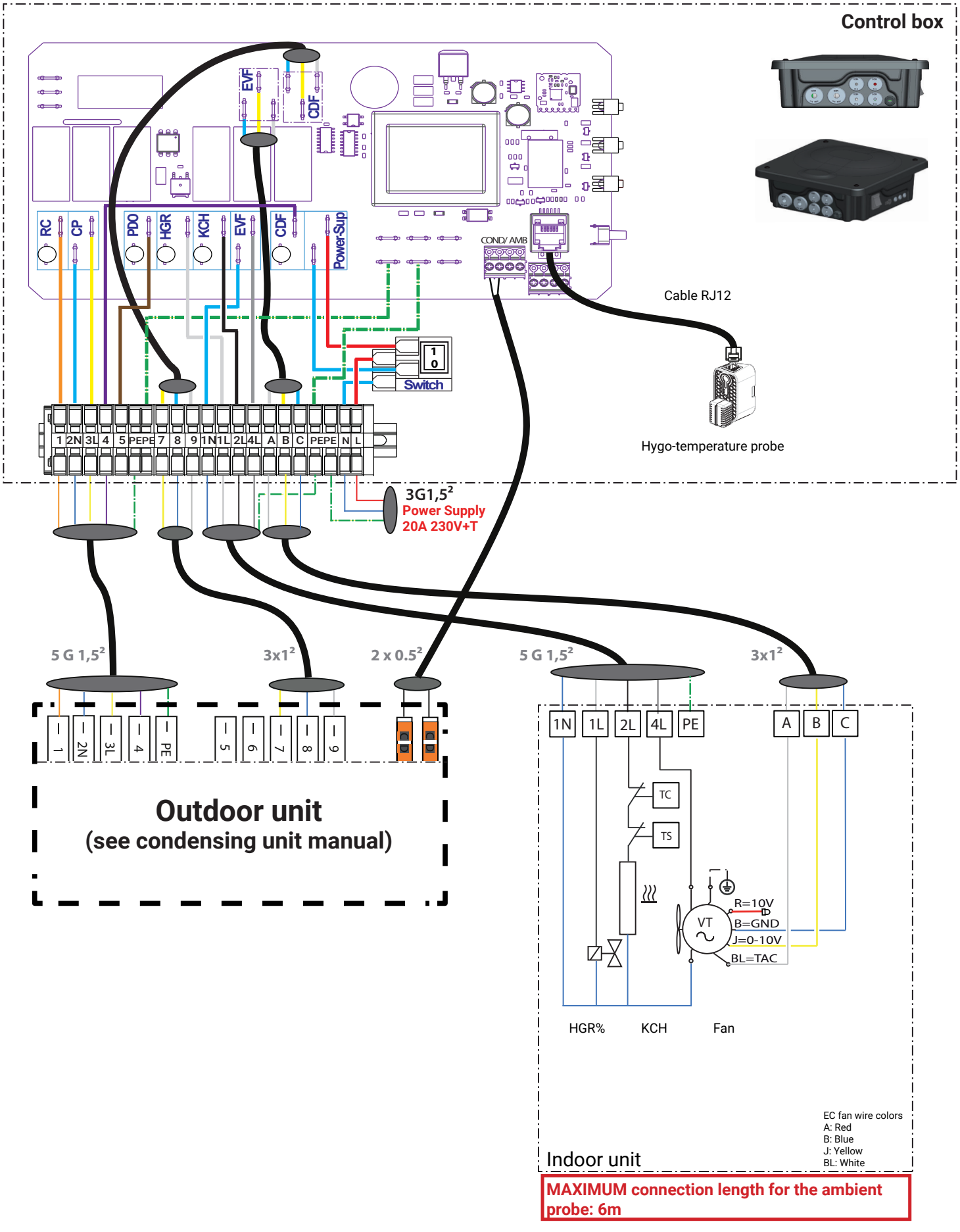
2. Snap the wired connector into the lower part of the discharge housing traction.



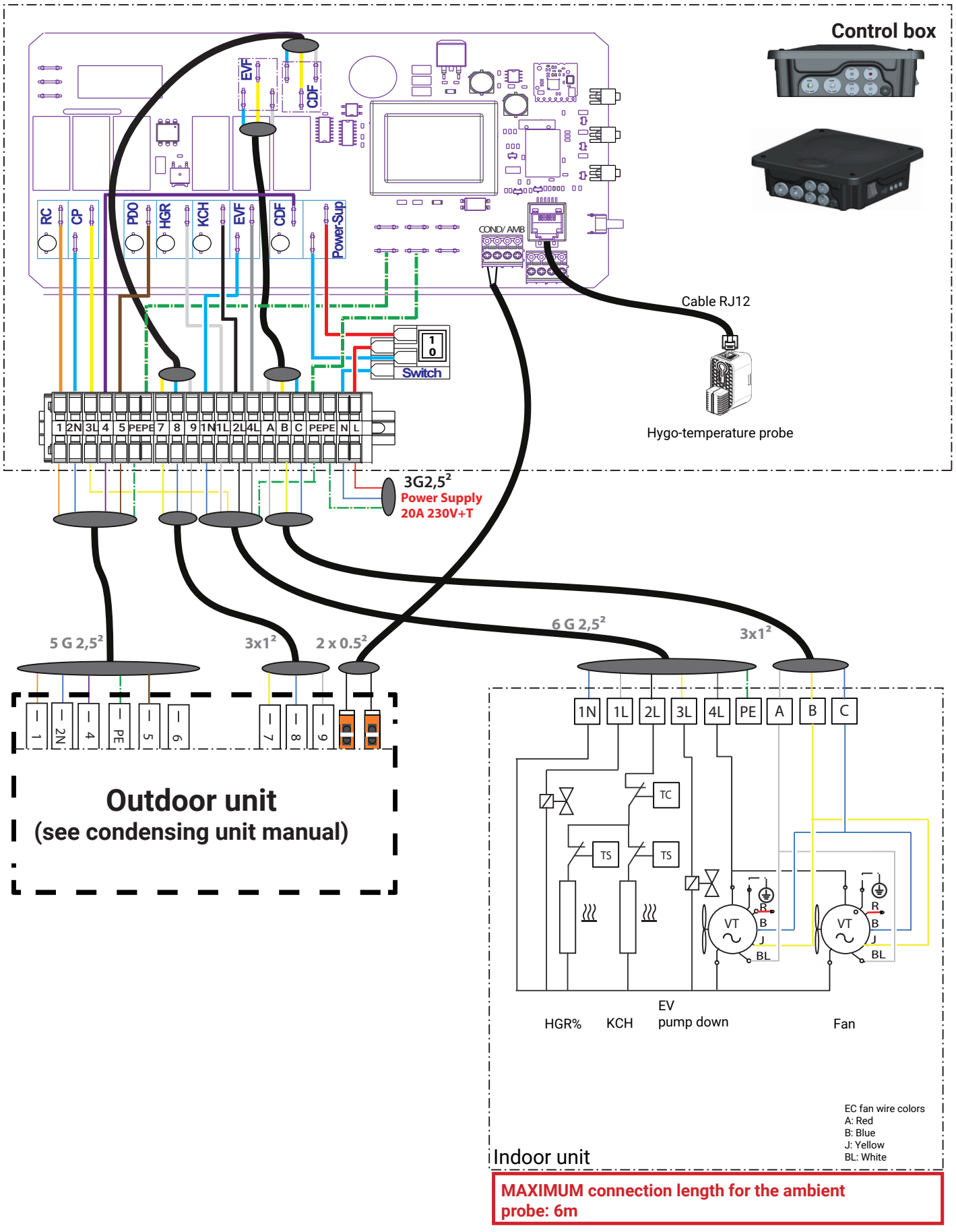
3. Snap the upper part of the housing strain relief.



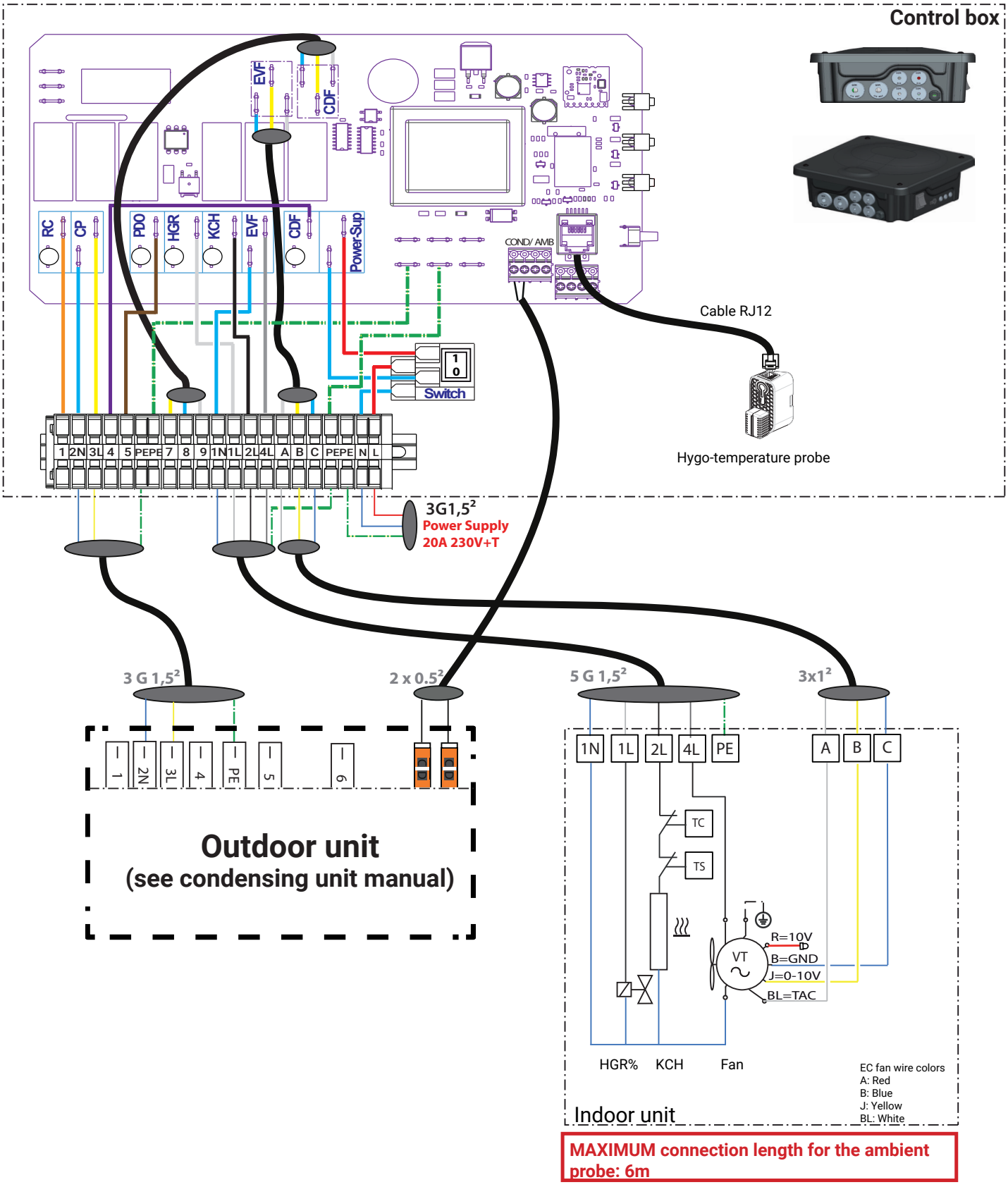
Electrical connection SPC GCH-GCG 30-48-82-122-EVG-EVI Vintage



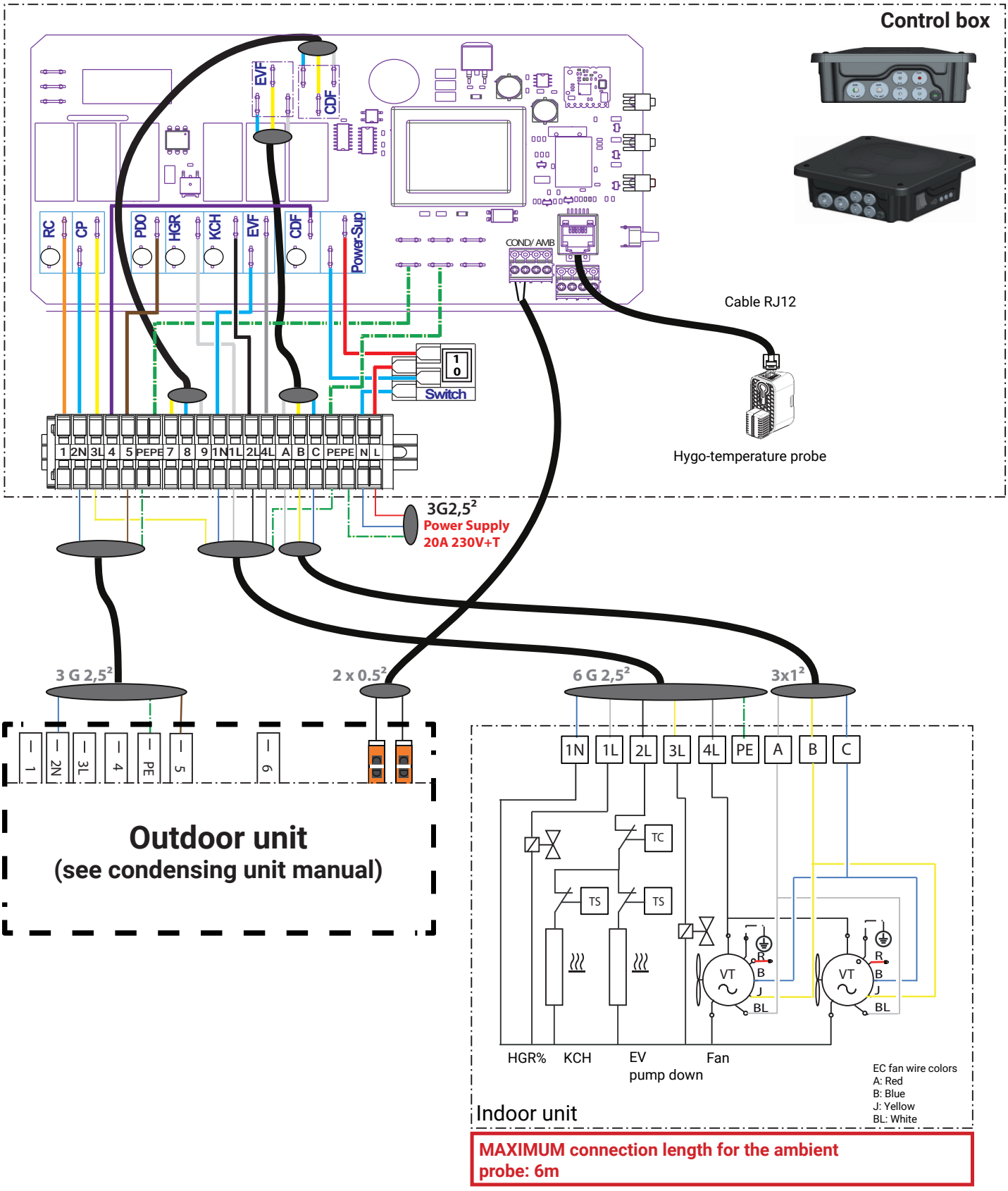
Electrical connection SPC GCH-GCG 170-230-EVG-EVI Vintage



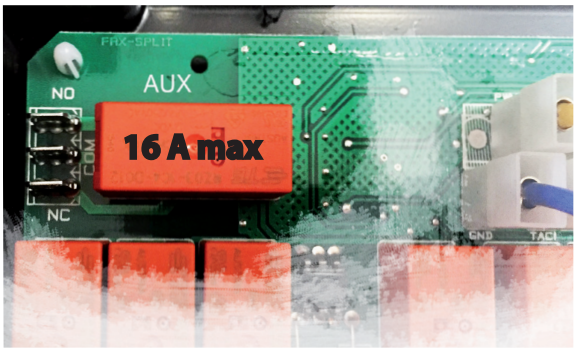
Electrical connection SPC GCW 30-48-82-122-EVG-EVI Vintage



Electrical connection SPC GCW 170-230-EVG-EVI Vintage



Auxiliary contact

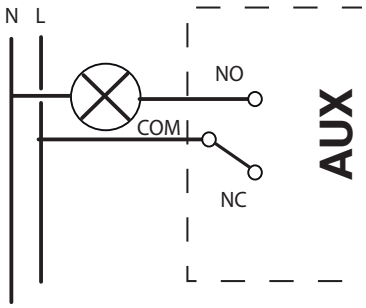


The card is equipped with an auxiliary contact COM-NO-NC
2 functions can be associated with the auxiliary contact:
- ECL lighting function
- Alarm reporting function

The card is basically programmed for lighting function.

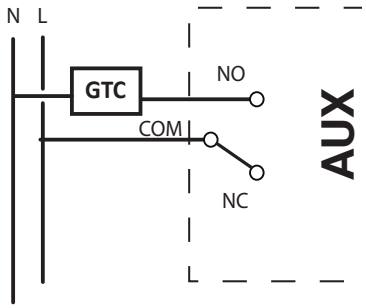
Lighting function:

To turn on the lighting, refer to the RSF2 Commissioning & Use instructions, ==>Summary==>Menu architecture==>Menu 3 FUNC Lig ON/OFF command.



Alarm report function:

To switch the alarm reporting relay, refer to the installer parameter instructions, Modify parameter 45:
1 = “type 1” alarms
2 = “type 2” alarms
1+2 = “type 1+2” alarms



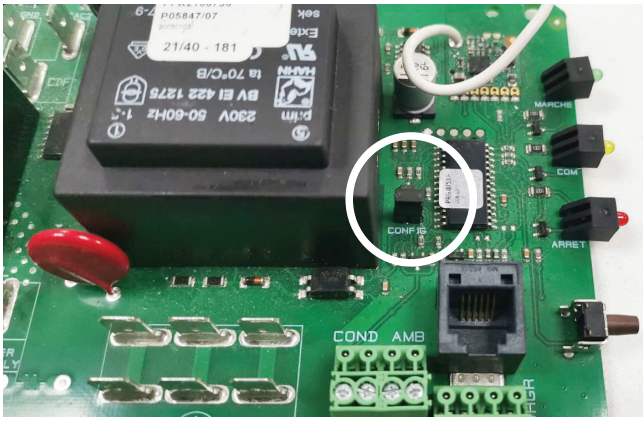
Electronic Board Configuration for 50°C Condensation:

By default, FRIAX air conditioners are designed for a nominal capacity with condensation at 45 °C (Configuration 1) and a maximum outdoor temperature of 35 °C.
It is possible to increase the condensation temperature to 50 °C (Configuration 2) in cases where the installation is located in a region or country where the outdoor temperature is between 35 °C and 43 °C.

Procedure to switch to Configuration 2:

- Locate the control board of the air conditioner.
- Move the corresponding switch on the board to activate Configuration 2.
- Perform a hard reset to apply the modification.

Note:
This modification allows the air conditioner to adapt to local climate conditions. However, a performance loss of approximately 10 % should be expected in this configuration.



Configuration 1 :



Configuration 2 :



Maintaining your cellar air conditioner

The following maintenance operations, repeated **every 6 months**, will ensure that your air conditioner retains its optimum performance and lasts as long as you and your wine.

Warning!

Before any maintenance operations, turn off the device using the remote control then cut off the power supply at the main circuit breaker to avoid any risk of electrocution.



Any intervention on a refrigeration circuit must be carried out by a professional authorized by an accredited body certifying the competence to handle refrigerant fluids.

Maintenance of the cellar evaporator:

1. Switch off the power supply of the evaporator.
2. Open the cabinet and disconnect the drain pipe. Beware of the water reserve accumulated in the tank.
3. Use a hoover and a compressor fitted with a blower to remove dust from the battery and fan. (Be careful not to damage the fins).
4. Wash the tray with clean water, taking care with the electrical connections, and apply an odourless bactericidal disinfectant such as KNET125 (sold separately) to treat biofilm bacteria.
5. Check that the drain hose is not blocked, then reconnect it to the drip tray.
6. Check that the drain is free-flowing and watertight by pouring a glass of water into the drip tray.
7. Check for refrigerant leaks using a leak detector.
8. Close the body.
9. Restore power at the main circuit breaker.

Maintenance logbook

DATE	COMMENTS	TECHNICIAN

NOTES

NOTES

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