



OPERATING AND INSTALLATION MANUAL

CENTRAL EXTRACTION UNIT

XFLAT EXTRACT AC

XFLAT EXTRACT EC

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1. General information

1.1. Introduction

- This "Operating and Installation Manual" document is intended for Xflat Extract central extraction units (hereinafter referred to as the unit). It also prevails over the quick reference guide placed directly on the unit, the so-called "Quick guide".
- **Installation and connection of the unit may only be carried out by a trained person with the appropriate authorisation for the connection of electrical equipment with the appropriate tools and resources at their disposal. All the instructions and recommendations provided in this manual must be observed during installation.**
- Detailed familiarisation with this document is important for the correct and safe installation and functioning of the unit. Failure to comply with the conditions set out in this document can lead to malfunction of the unit.
- After reading the manual thoroughly, please store it for future reference.
- It is forbidden to interfere in any way with the unit's internal connection other than as specified in this manual. Due to the continuous development of our products, we reserve the right to change this manual without prior notice.
- Children and persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, can only use the unit under supervision or if they have been instructed on the unit's safe operation and understand the potential risks.
- Children must not play with the appliance.



1.2. Warnings and Symbols

- The following designations and symbols shall be used in the operating manual, on the packaging and on the product for particularly important information:



Warning, pay attention to all risk and warning notices as well as instructions for preventive measures.



Danger, observe all warnings as there is a risk of electric shock, or a situation that can result in death or serious injury, if not prevented.



Reference to another section of the manual.



Caution – read the operating manual prior to use



Connection of the protective conductor.



Notification of the correct position when handling and storing the packaging.



Notification of the need for protection against moisture. Product – packaging marked with this symbol must not be transported on open vehicles, stored in roofless buildings or on the ground without padding.



Notification of the fragility of the content – product and the need for careful handling of the packaged product.

FRAGILE
KEEP DRY

Notification of the need for protection against moisture and of the fragility of the product inside the packaging.

1.3. Using the Xflat Extract Unit

1.3.1. Purpose of the Unit

- The Xflat Extract unit is an air handling unit designed for central extraction of clean air free of dust and grease
- The unit is offered in two versions:
 - o XF1-Xtract AC – unit with an AC fan, 3 speed settings (the factory setting is speed setting 2), no controller. For smooth remote control over the speed, it is necessary to order an accessory (wireless controller – "XF-AC-RF, wired packet controller XF-AC-CP)
 - o XF1-Xtract EC – unit with an EC fan, possibility of gradual speed adjustment by potentiometer directly on the unit body, without external controller. For remote control of the unit, order the "XF-EC-CP" accessory
 - o Accessories to the units are listed in a separate section 4.3.



The unit is designed to be connected to ducting both on the intake (1x \varnothing 130/ \varnothing 160 + 6x \varnothing 75) and on the exhaust (1x \varnothing 130/ \varnothing 160) side. The unit must not operate without ducting.

- The unit is designed for vertical and horizontal wall and ceiling installation only,.
- The unit features constant pressure technology – the pressure in the air system does not drop with increasing flow requirements.
- The unit is designed for permanent operation in indoor roofed and dry areas with room temperature from +5 °C to +30 °C and max relative humidity of 70% non-condensing.
- The maximum operating altitude of the unit is 2,000 m above sea level.
- **The temperature of the fresh intake air from the outside can be between -20 °C and +40 °C.**



1.3.2. Prohibited Environment, Use, Installation of the Xflat Extract Unit:



- **exhausting burning or glowing substances!**
- **exhausting readily flammable or explosive gases,**
- **exhausting aggressive media,**
- **exhausting liquids of any kind,**
- **in an environment with an increased incidence or risk of explosion, flammable substances, and increased dust content and/or air containing other harmful impurities,**
- **in an environment with higher condensation humidity, such as: bathrooms, swimming pools, saunas, etc.,**
- **the unit must not be installed just below the electrical sockets or junction boxes,**

Neither the manufacturer nor the supplier is liable for damage caused by improper use of the units (e.g.: drying of new buildings). The risk is born by the user.

1.4. Transport, Delivery Inspection, and Storage

1.4.1. Transport

- Keep the product in the position indicated by the symbol on the packaging during transport.
- The packaging must not be subjected to loads with a weight higher than that permitted by the manufacturer.
- The packaging must not be exposed to the effects of weather.
- The air temperature during transport must range between -25 and 55°C.
- The relative humidity during transport must range between 10 % and 90 % non-condensing.
- **Use adequate tools during transport to prevent damage to the goods and damage to the health and safety of persons.**
- In the case of further transport without original packaging or with altered original packaging, it must be ensured that the device is optimally secured and protected against damage.



1.4.2. Delivery inspection

- Before starting the installation and before unpacking the unit from the box, it is necessary to check the packaging for any signs of damage. If the packaging is damaged, please write a record of the damage and contact your carrier.

- Check whether you have received the product you actually ordered. After unpacking, check that the unit and other components are in order. Please report any discrepancy with the order to the supplier immediately.

If a complaint regarding the order is not made immediately after delivery, it will not be accepted later.

1.4.3. Storage

- If you do not plan to install the unit immediately after purchase, it must be stored in an indoor, non-condensing environment at temperatures ranging from +5 to +40°C. If the product is transported at temperatures below 0°C, it must be placed in the operating environment where it will be installed for at least 2 hours after unpacking.

1.5. Xflat 200 unit package contents

- Xflat Extract unit	1x
- Quick reference guide + Safety data sheet	1x
- Energy label	1x
- Washers	4x
- Mounting – drilling template	1x
- Flow reducer Ø75	6x

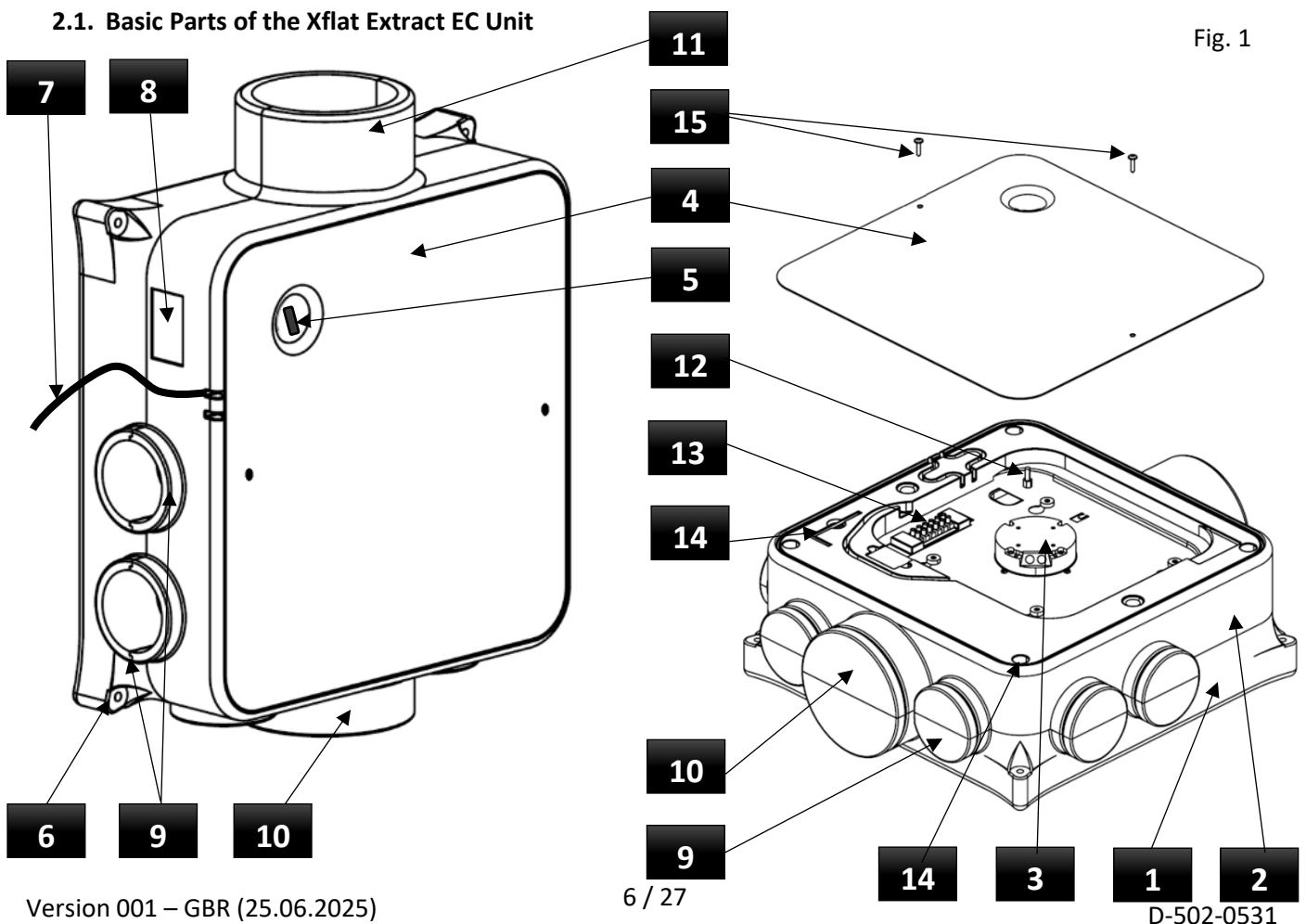
1.6. Before Starting the Installation



- Check that there are no electrical or other lines (e.g., gas, water, etc.) at the point of installation of the unit on the wall that could be damaged during installation.
- Make sure that the installation of the unit, including openings in the wall, wall (depending on the chosen installation position) for the passage of the connection ducting, does not negatively affect the structural integrity of the building and meets all the legislative safety requirements.
- Verify the solution for draining the unit's condensate into the sewer system or another way that ensures smooth removal of condensate

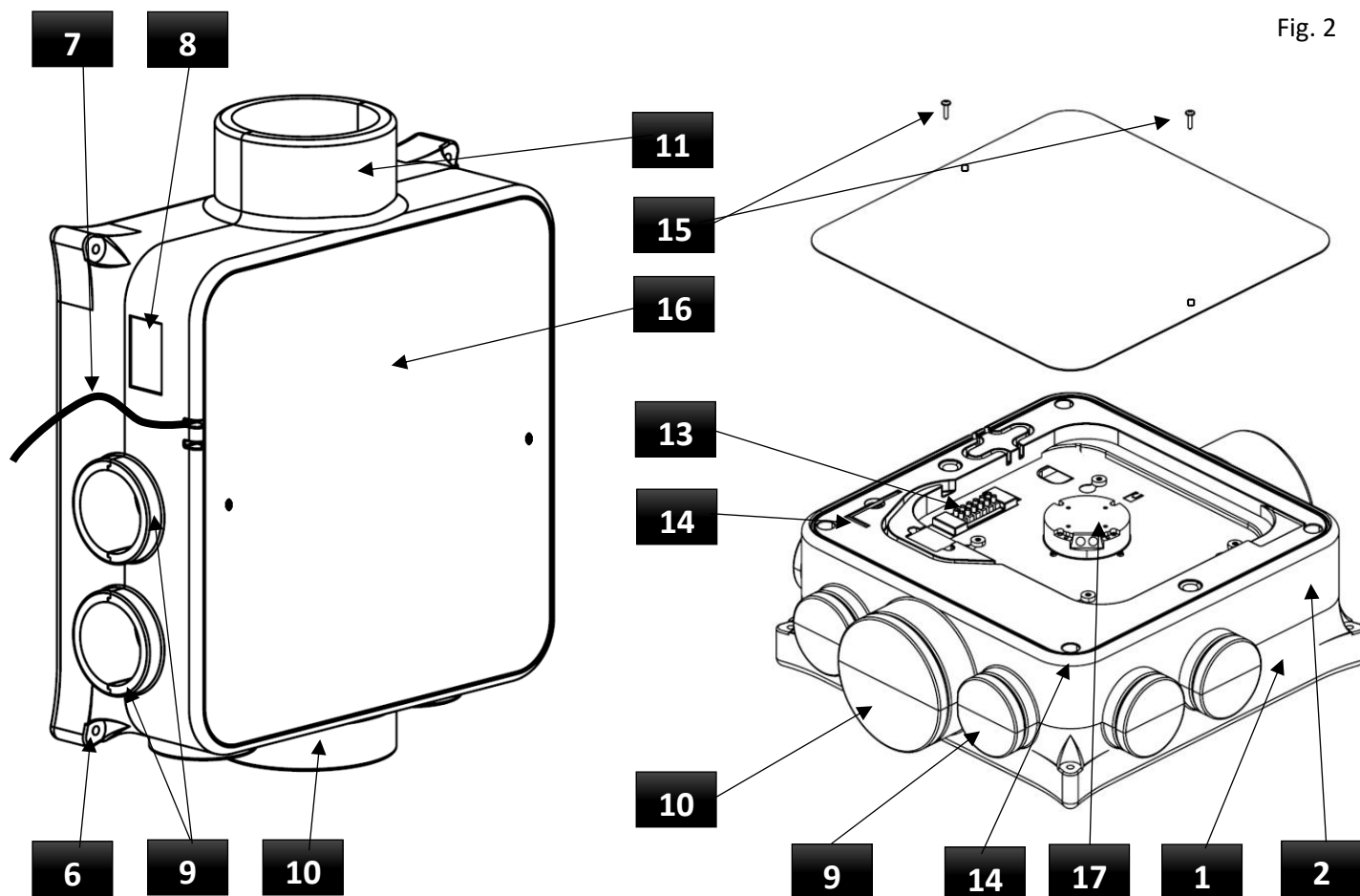
2. Technical Parameters

2.1. Basic Parts of the Xflat Extract EC Unit



2.2. Basic Parts of the Xflat Extract AC Unit

Fig. 2



2.2.1. Bottom Part of the Unit – Fitting (position 1)

- The bottom of the unit is made of black moulded EPP (expanded polypropylene). The material itself is an advanced technical material with a unique combination of properties such as strength while having low weight, rebound resilience, thermal insulation, chemical resistance, sound insulation and recyclability.

2.2.2. Top Part of the Unit (position 2)

- The top of the unit is made of black moulded EPP (expanded polypropylene). The material itself is an advanced technical material with a unique combination of properties such as strength while having low weight, rebound resilience, thermal insulation, chemical resistance, sound insulation and recyclability.

2.2.3. EC Fan (position 3)

- A radial fan with an EC motor from the leading global manufacturers ensures the smooth operation, minimal power consumption and long service life of the unit.

2.2.4. Plastic Cover – EC (position 4)

- Serves as a cover for access to the motor and the supply terminal block.

2.2.5. Rotary Selector (position 5)

- The plastic rotary selector is used to gradually adjust the EC fan speed

2.2.6. Mounting foot of the unit (position 6)

- is used for mounting the unit on the wall, ceiling. The unit must always be attached using the washer included in the package

2.2.7. Supply Cable (position 7)

- Connects the unit and the mains connection point. Cable length approx. 1 m. Cable type CYSY 3x0.75mm² with a grounding conductor with 50 mm stripped and marked ends.

2.2.8. Nameplate (position 8)

- Displays the electrical and other technical parameters of the unit.

2.2.9. Intake – Suction Sockets Small (position 9)

- Used for connection of intake ducting – $\varnothing 75$ mm hoses. The unit allows the connection of up to 6 intake ducts.

2.2.10. Intake – Suction Socket Large (position 10)

- Used for connection of intake ducting with $\varnothing 130$ mm (inner diameter of the socket) and $\varnothing 160$ mm (outer diameter of the socket)

2.2.11. Discharge – Exhaust Socket (position 11)

- Used for connection of discharge ducting with $\varnothing 130$ mm (inner diameter of the socket) and $\varnothing 160$ mm (outer diameter of the socket)

2.2.12. Potentiometer (position 12)

- Used for gradual control of the EC fan, not for shutting down the unit

2.2.13. Supply Terminal Block (position 13)

- The screw terminal block is used to connect the fan, the supply cable and accessories (remote control). In the version with an AC fan, it is also used to switch the fan speed

2.2.14. Tool to Dismantle the Unit (position 14)

- The body of the top part of the unit contains a Torx tool (size T25) for dismantling the fan sub-assembly or even the fitting itself e.g.: for cleaning.

2.2.15. Self-tapping Screw (position 15)

- The 4.2x13 self-tapping screw is used for attaching the plastic cover (positions 4 and 16) Size and type of attachment PH1.

2.2.16. Plastic Cover – AC (position 16)

- Serves as a cover for access to the motor and the supply terminal block.

2.2.17. AC Fan (position 17)

- A fan with an AC motor from the world's leading manufacturers allows switching between three speeds – levels of air output.

2.3. Main Dimensions of Xflat Extract Units

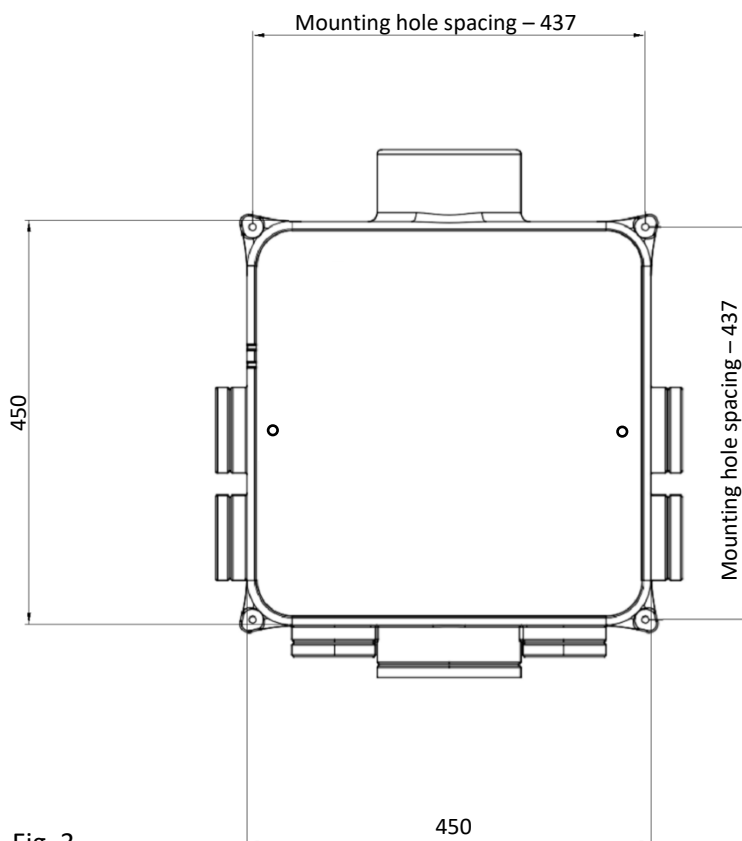
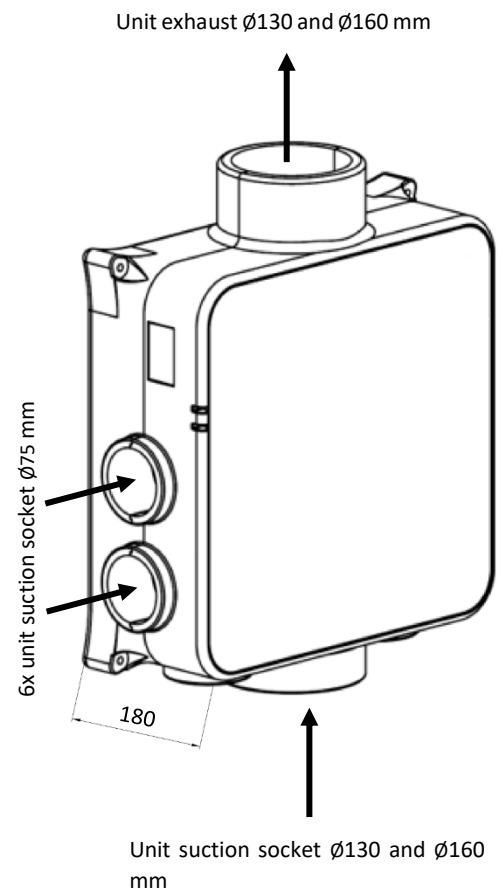


Fig. 3



2.4. Technical Parameters of Xflat Extract Units

Tab. 1

2.4.1. Basic Technical Parameters of XF1-EXTRACT – EC

Type		XF1-EXTRACT- EC				
		1/4 of the range minimum	2/4 of the range	3/4 of the range	4/4 of the range nominal airflow	BOOST maximum
Speed						
Airflow*	m ³ /h / Pa	59 / 20	156 / 50	227 / 100	251 / 200	365 / 200
Acoustic level**	dB(A)	< 20dB	19,2	28,1	31,1	37
Weight***	kg	7				
Power supply	V/Hz	1 ~ 230 / 50				
Nominal input	W	2	12	32	55	121
Nominal current	A	0,07	0,12	0,25	0,43	0,93
Electric safety	IP	20				

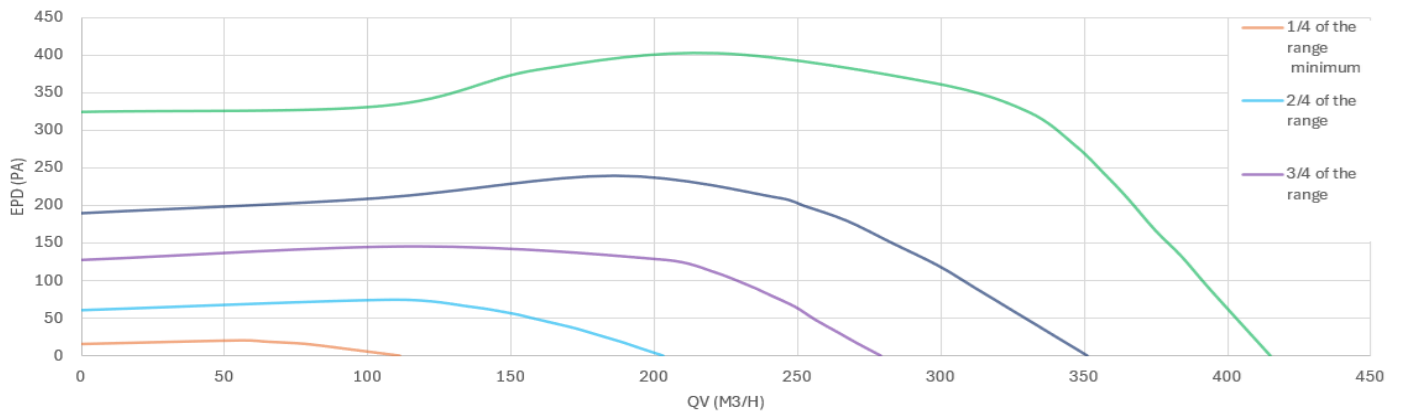
* Airflow (power input, current, sound pressure) / external pressure drop

** Sound pressure level in free space at a distance of 3m (Q2)

*** Unit weight without packaging

Performance characteristics of the JET new - EC

Chart 1



2.4.2. Basic Technical Parameters of XF1-Extract – AC

Tab. 2

Type		XF1-EXTRACT- AC		
		Low	Middle	High
Speed				
Nominal airflow*	m ³ /h / Pa	108 / 100	141 / 150	245 / 200
Acoustic level**	dB(A)	21,1dB	26,5	32,2
Weight***	kg	7		
Power supply	V/Hz	1 ~ 230 / 50		
Nominal input	W	55	61	85
Nominal current	A	0,25	0,27	0,36
Electric safety	IP	30		

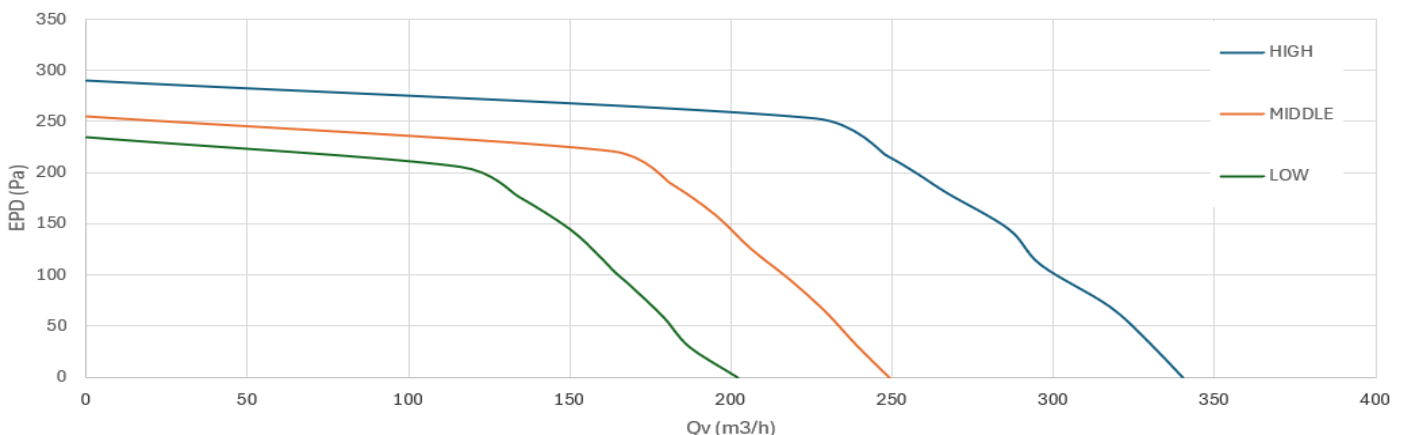
* Nominal airflow (power input, current, sound pressure) / external pressure drop

** Sound pressure level in free space at a distance of 3m (Q2)

*** Unit weight without packaging

Performance characteristics of the JET new - AC

Chart 2



EC Declaration of Conformity – the current and full version of the EC Declaration of Conformity can be found on our website www.xvent.cz in the 'Document downloads' section for the Xflat Extract product

2.4.3. Acoustic Data for XF1-EXTRACT – EC

Tab. 3a

Air output level	Airflow*	Acoustic power to surrounding L _{WA} (dBA)												
		50 Hz	63 Hz	80 Hz	100 Hz	125 kHz	160 kHz	200 kHz	250 kHz	315 kHz	400 kHz	500 kHz	630 kHz	800 kHz
Speed	(m ³ /h / Pa)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)
1/4 of the range minimum	59 / 20													
2/4 of the range	156 / 50	22,6	26,2	22,2	22,9	26,6	26,2	24,7	28,0	26,2	31,9	34,0	30,3	28,2
3/4 of the range	227 / 100	16,8	19,2	26,8	29,2	33,2	34,0	35,1	34,0	36,1	41,8	41,9	39,5	38,5
4/4 of the range nominal airflow	251 / 200	20,4	22,9	27,9	30,5	35,3	36,0	36,8	36,0	39,0	44,7	44,9	42,4	41,7
BOOST maximum	365 / 200	23,3	25,7	32,7	35,4	39,2	40,1	41,4	41,4	45,2	50,9	51,3	48,3	47,0

* Nominal airflow / external pressure drop

- continued

Tab. 3b

Air output level	Airflow*	Acoustic power to surrounding L _{WA} (dBA)												Sound pressure level in the open field on the reflection plane		
		1 k	1,25 k	1,6 k	2 k	2,5 k	3,15 k	4 k	5 k	6,3 k	8 k	10 k	L _{WA}	1	3 m	5
Speed	(m ³ /h / Pa)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	LPA (dBA)	LPA (dBA)	LPA (dBA)
1/4 of the range minimum	59 / 20												< 30dB	< 20dB	< 20dB	< 20dB
2/4 of the range	156 / 50	27,9	23,8	23,8	20,6	18,9	16,7	14,4	10,1	7,8	2,4	0,8	40,1	27,7	19,2	15,0
3/4 of the range	227 / 100	39,2	34,9	34,8	31,3	30,1	28,4	26,6	23,2	20,8	16,4	10,8	49,1	36,6	28,1	23,9
4/4 of the range nominal airflow	251 / 200	42,5	39,4	38,5	34,4	33,1	31,4	29,7	26,8	24,2	20,6	14,7	52,0	39,6	31,1	26,9
BOOST maximum	365 / 200	47,6	44,9	45,2	40,6	39,0	37,9	36,5	33,3	31,1	27,3	22,4	57,9	45,4	37,0	32,8

* Nominal airflow / external pressure drop

2.4.4. Acoustic Data for XF1-EXTRACT – AC

Tab. 4a

Air output level	Airflow*	Acoustic power to surrounding L _{WA} (dBA)												
		50 Hz	63 Hz	80 Hz	100 Hz	125 kHz	160 kHz	200 kHz	250 kHz	315 kHz	400 kHz	500 kHz	630 kHz	800 kHz
Speed	(m ³ /h / Pa)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)
Low	108 / 100	15,3	14,6	19,1	22,2	24,5	23,1	22,3	26,0	28,0	30,3	30,3	39,8	28,5
Middle	141 / 150	20,8	20,7	29,2	29,5	32,3	31,5	31,3	34,8	35,7	38,7	38,5	40,0	36,5
High	245 / 200	22,6	24,8	32,8	35,4	37,0	36,0	37,0	41,1	42,4	45,6	44,4	43,6	42,2

* Nominal airflow / external pressure drop

- continued

Tab. 4b

Air output level	Airflow*	Acoustic power to surrounding L _{WA} (dBA)												Sound pressure level in the open field on the reflection plane		
		1 k	1,25 k	1,6 k	2 k	2,5 k	3,15 k	4 k	5 k	6,3 k	8 k	10 k	L _{WA}	1	3 m	5
Speed	(m ³ /h / Pa)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	LPA (dBA)	LPA (dBA)	LPA (dBA)
Low	108 / 100	27,5	23,9	23,2	21,2	18,6	16,6	15,4	11,8	8,8	3,9	2,1	42,0	29,5	21,1	16,9
Middle	141 / 150	36,7	34,3	34,2	30,6	28,1	26,3	25,2	22,0	19,0	14,6	9,3	47,4	34,9	26,5	22,3
High	245 / 200	42,1	41,4	40,1	37,1	35,1	33,3	32,6	29,7	27,1	23,3	18,2	53,2	40,7	32,2	28,0

* Nominal airflow / external pressure drop

3. Unit Installation

3.1. General Information, Recommendations, and Safety precautions for Installing the Xflat Extract Unit

3.1.1. Electrical Safety before Installing the Unit



- Before starting any installation work, make sure that the junction box or mains socket that you want to use to connect the unit is equipped with a protective (green-yellow) conductor or contact (pin).
- If you use a junction box to connect the unit, you must turn off the power and secure the power supply against being turned on accidentally.



Check that the electrical connection point (junction box, outlet) meets the unit's power supply requirements (voltage, current, etc.) specified on the unit's nameplate. The electrical values necessary for the unit's operation can be found in Section 3.4.3. Designation of Electrical Parameters

3.1.2. Unpacking the Xflat Extract Unit

- Always unpack the unit in a sufficiently large area to allow for removing the unit from the packaging.
- Never unpack the entire unit from the packaging, the unpacking of the unit must be gradual, as specified in this manual, according to the installation work underway (protects the unit from damage and dust generated during installation)
- Cut the box flaps to remove the covering plastic and remove the unit including all accessories from the box

- remove any remaining packing materials

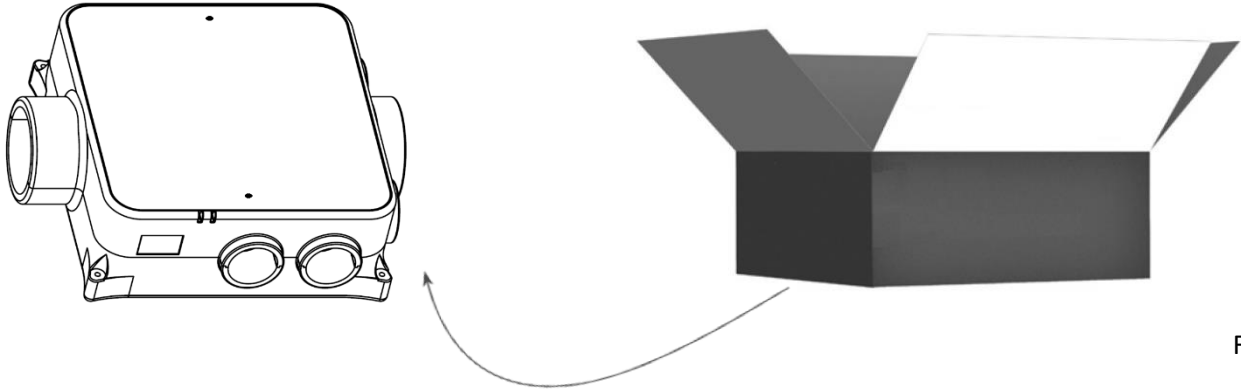
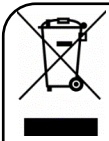


Fig. 4



Please dispose of all products that are no longer needed or at the end of their service life and their packaging at the appropriate collection and recycling points. A professionally recycled product can be reused and contributes to protecting the environment and health. Disposal must be carried out in accordance with Directive 2012/19/EU and applicable national regulations. Do not dispose of the product in municipal waste – use the designated take-back system.



3.1.3. Unit Placement



- **When selecting a location for the installation of the unit, always consider the layout of the building within the overall HVAC system (e.g.: inlet and exhaust ducts, etc.). Consult the proper design of the entire HVAC system with an HVAC designer or a person knowledgeable in the field. The manufacturer is in no way responsible for the design of the HVAC system.**

- The unit should be installed in roofed indoor and dry areas with a room temperature of +5°C to +30°C and with maximum relative humidity of 70% non-condensing.



Consider the placement of the unit in interiors away from surrounding objects with regards to the recommended clearances from the unit (e.g. opening the unit – servicing) as given in Section 3.1.4.

3.1.3.1. Location and Operation of the Unit in an Area with a Hearth (Fireplaces)

- For proper operation of the hearth and the unit, consult the location with a chimney sweep. Otherwise, the unit may malfunction or the natural draft of the chimney may fail.

3.1.4. Minimum Installation Distances

- General clearance distances from fixed objects:

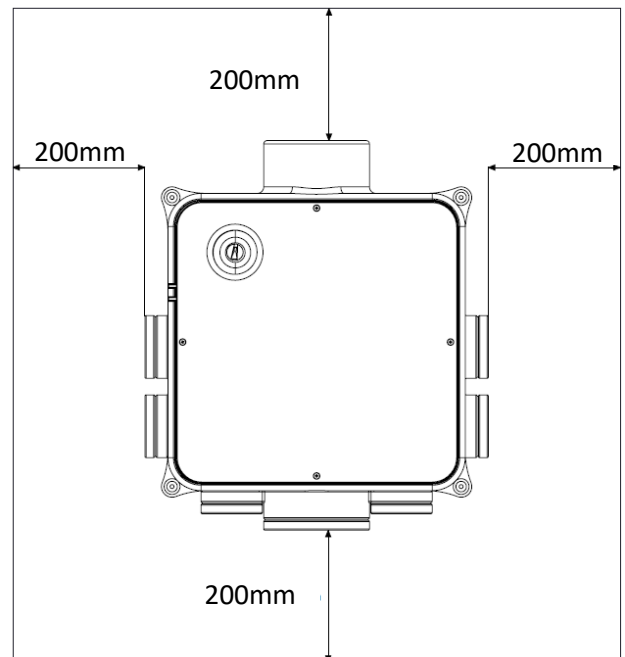
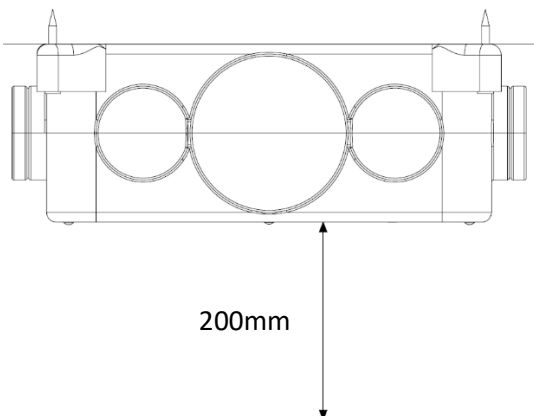


Fig. 5

- The unit must be installed in such a way that the direction of air flow through the unit itself is the same as the air flow in the HVAC system.
- Failure to observe the specified clearances can result in the unit not working properly and can result in damage to the fan, increased noise, or prevent service access to the unit.

3.1.5. Allowed Installation Positions of the Xflat Extract Unit

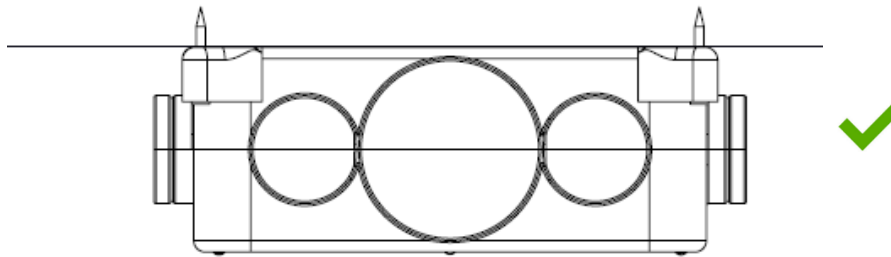


Fig. 6



- Any other position is prohibited
- The unit must always be accessible from the front (cover side) for adjustment and servicing. If the unit is placed under a wall or ceiling (bricked up), the ceiling must be provided with an inspection hole for access to the unit.

3.1.6. Prohibited Installation Positions of the Xflat Extract Unit

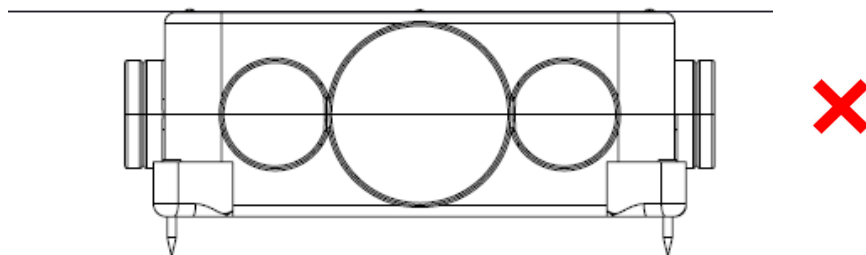


Fig. 7

3.2. Installation of the Xflat Extract Unit

- The unit must be operated in enclosed and dry areas with room temperature ranging from +5 °C to +30 °C.
- The unit must be installed in accordance with the general and local safety regulations.
- The unit may only be installed, connected, commissioned and repaired by a person with adequate education, experience and knowledge of the applicable regulations, standards and potential risks and hazards, or by a properly trained service technician.



- Failure to follow the installation procedure can result in the damage or malfunction of the unit, or potential damage to the health and property of the user.

3.2.1. Installation Materials Required to Install the Xflat Extract Unit – General Requirements

- Prepare the additional installation materials for the installation of the unit (not included):
 - o Anchoring elements (e.g., wall plugs, plug screws) 4 pcs
- Select the anchoring material based on the structure of the wall or ceiling, the weight of the unit, and the weight of the connected peripherals.



The weights of the unit versions are given in Section 2.4. "Technical Parameters of Xflat Extract Units"
The unit dimensions are given in Section 2.3. "Main Dimensions of the Xflat Extract Unit"

3.2.2. Positioning, Installation of the Unit on a Wall or Ceiling

- Select the appropriate anchoring material (not included) based on the structure of the wall, ceiling. To use the unit's suspension system, choose a screw with the max. Ø8 mm



- The wall or ceiling to which you anchor the unit must always be sufficiently strong. If necessary, contact a structural engineer.

- Use the drilling template printed on the bottom of the box packaging or measure the mounting holes.

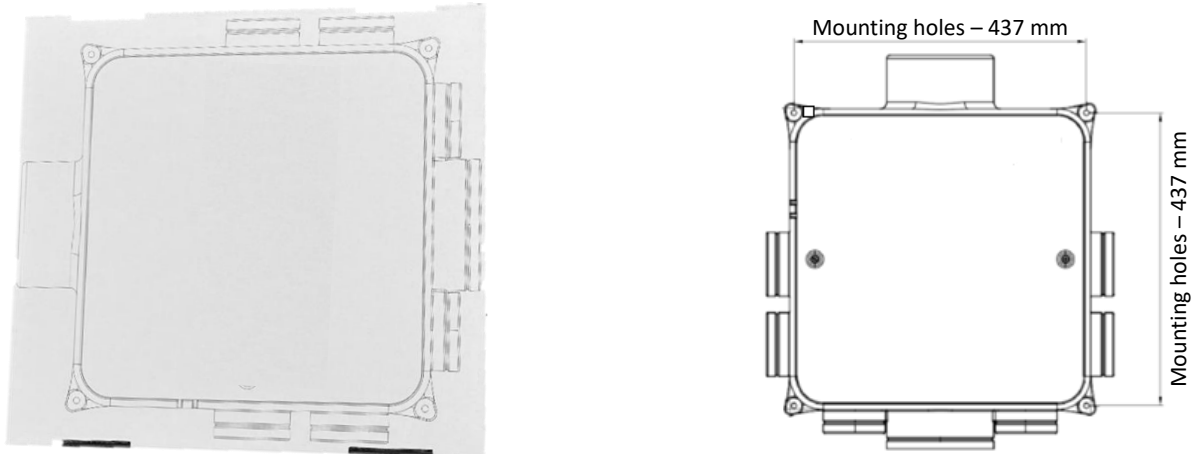


Fig. 8

- Place it the desired installation location
- Use a suitable object to mark the mounting holes for anchoring the unit to the ceiling, wall.
- Drill the anchoring holes, fit with suitable anchoring material (wall plugs) using washers (included) on individual footings and screw the unit on.

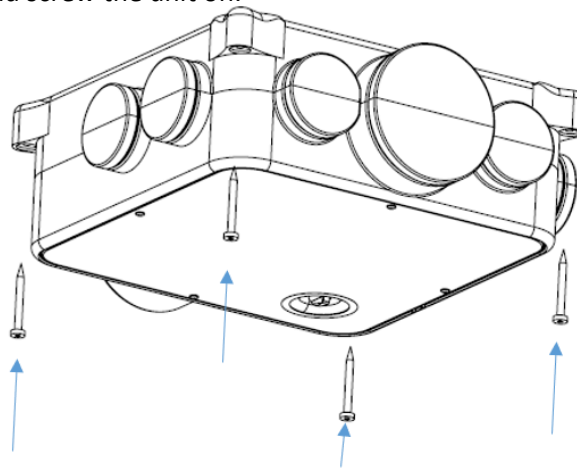


Fig. 9



- Tighten the anchor screws adequately to secure the unit against any undesired movement – falling.
- **Make sure the unit is correctly LEVELLED using a spirit level, NEVER TILT THE UNIT in any direction.**

3.2.3. Connecting the Air Ducting to the Unit

- Use the premade sockets in the unit to connect the air ducts.
- Make sure to observe the direction of air flow and the duct connection dimensions:
 - o Socket 1. – Unit exhaust $\varnothing 130$ / $\varnothing 160$ mm (inner/outer)
 - o Socket 2. – Unit suction $\varnothing 130$ and $\varnothing 160$ mm (inner/outer)
 - o Socket 3. – Unit suction $\varnothing 75$ (inner) – ready for connection of flexi hoses (not included)

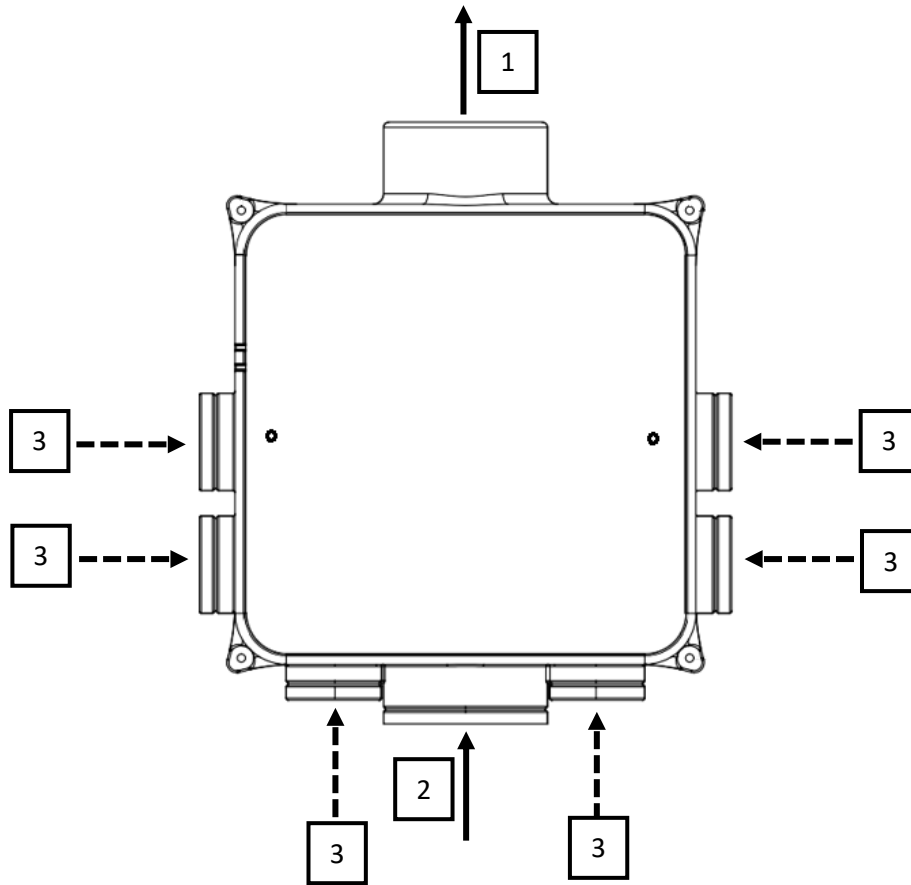


Fig. 10

3.3. Flow Reducers

- The unit also includes flow reducers to adjust the air volume to the needs of each installation.
- To select the correct air flow, break off the inner rings of the reducer

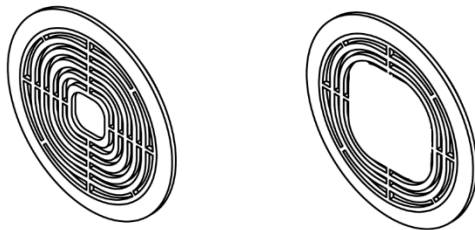


Fig. 11

- The reducers are installed directly into the $\varnothing 75$ intake sockets of the unit. Follow these steps:

1. Insert the modified reducer into

2. Insert the flexible hose into the socket

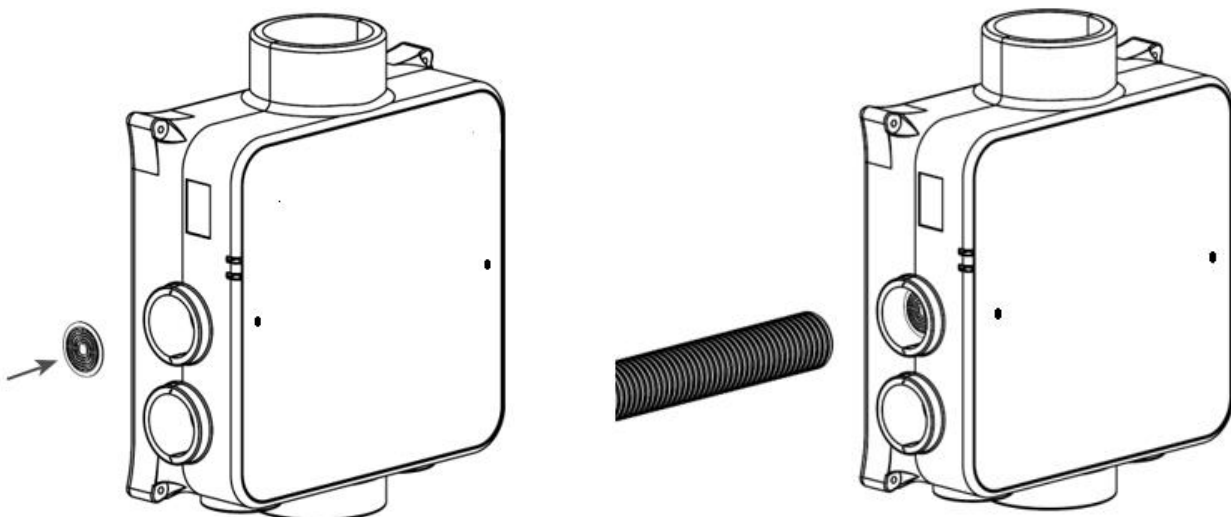


Fig. 12

3.4. Electrical Wiring – Connection to the Mains

3.4.1. General Information – Safety



- Before starting any installation work, make sure that the mains power junction box you wish to use to connect the unit is fitted with a protective (green/yellow) conductor.
- If you use a mains plug to connect the unit, it must always remain accessible so that the unit can be safely disconnected from the mains in the event of danger.



- Check that the power supply meets the requirements for power supply of the unit (voltage, current, frequency, etc.) specified on the unit's nameplate. Section 3.4.3. Designation of the Electrical Parameters.
- The relevant current circuit must be protected in the electric power distribution system up to the maximum of 6 A.
- The electrical cable for connection to the mains must not be broken.
- Local electrical regulations must always be respected.
- Electrical connection of the unit to the mains must only be carried out by persons qualified for this activity with a valid certification and knowledge of relevant standards and regulations in the country.
- This device is an electrical device (according to Directive 2014/35/EU - LVD) and is intended for a fixed connection to an electrical installation. The device does not have an integral main switch. Therefore, it must be connected via an external switching and disconnecting element that meets the following requirements:
 - It must serve as the main switch of the device.
 - It must disconnect all active conductors.
 - It must always be accessible to the operator and clearly marked as the main switch for this unit.
- It must allow for securing against unintentional switching (e.g., lockable "off" position during maintenance).
- Before starting any installation work, it is necessary to switch off the power supply.
- It is forbidden to interfere in any way with the internal connection of the unit, tampering with the unit can lead to loss of eligibility for warranty servicing
- This unit belongs to the Y-connection type product group. If the power supply cable is damaged, it must be replaced by the manufacturer, its service centre, or a person with similar qualification to avoid dangerous situations.
- The unit is classified as class 1 appliance in terms of protection against electric shock.
- The supply voltage for the XF1-EXTRACT-AC 1~230V/50Hz unit and for the XF1-EXTRACT-EC 1~230V/50-60Hz unit must not be adjusted in any way, otherwise the electrical components of the unit may be damaged.

3.4.2. Connection to Mains

- The unit is equipped with a separate strand-type supply cable (stranded wire). The stripping to individual conductors is 50 mm. The individual conductors are fitted with crimped terminals.
- The power supply cable length of 1 m may be shortened by a qualified person as needed.
- The individual conductors are colour-coded
 - brown/black – Phase conductor – L
 - blue – Neutral conductor – N
 - green-yellow – Protective conductor – PE

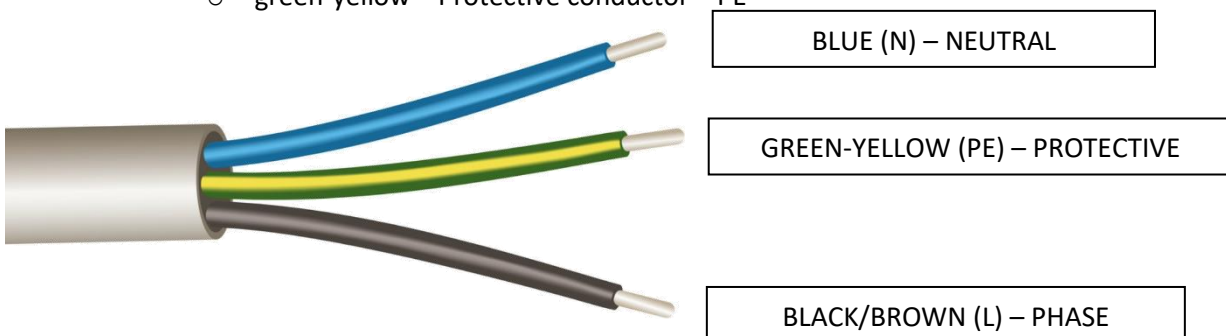


Fig. 13

3.4.2.1. Connecting the Unit to a Junction Box

- The power supply cable is prepared for connection to a junction box by the manufacturer.
- Use adequate connecting elements (e.g., terminal block, spring terminals, etc.) to connect the power supply cable to the mains.
- **The installation of the power supply cable in a junction box and connection to the mains must be carried out by a qualified person who has a valid certification for this activity and knowledge of the relevant standards and regulations in the given country.**



3.4.2.2. Recommendations for Protection of the Xflat 200 Unit

- It is recommended to protect the unit with a single-phase (1x230V) circuit-breaker with the current value of 6 A. The correct value of the protection element must be designed by an electrical engineer taking into account the conditions at the installation site, e.g., cable length

3.4.3. Designation of Electrical Parameters

- all the unit's electrical parameters are provided on the nameplate

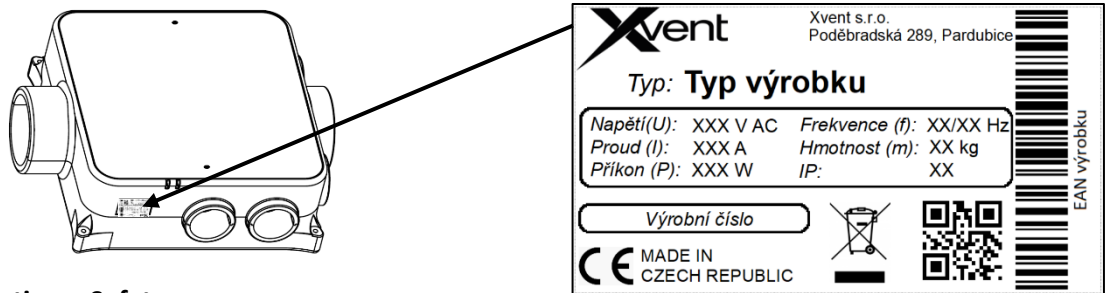


Fig. 14

4. Control

4.1. General Information – Safety

- The unit does not require any other connection for correct operation. It is, therefore, ready for immediate use after installation.
- **Always disconnect the unit from the main power supply before accessing the controls.**



4.2. Controls – Unit Settings

4.2.1. XF1-EXTRACT-AC



- The air output of the unit is factory set to medium speed
- Set the air output according to section 2.4.2.
- To set the speed to a different setting, follow these steps:

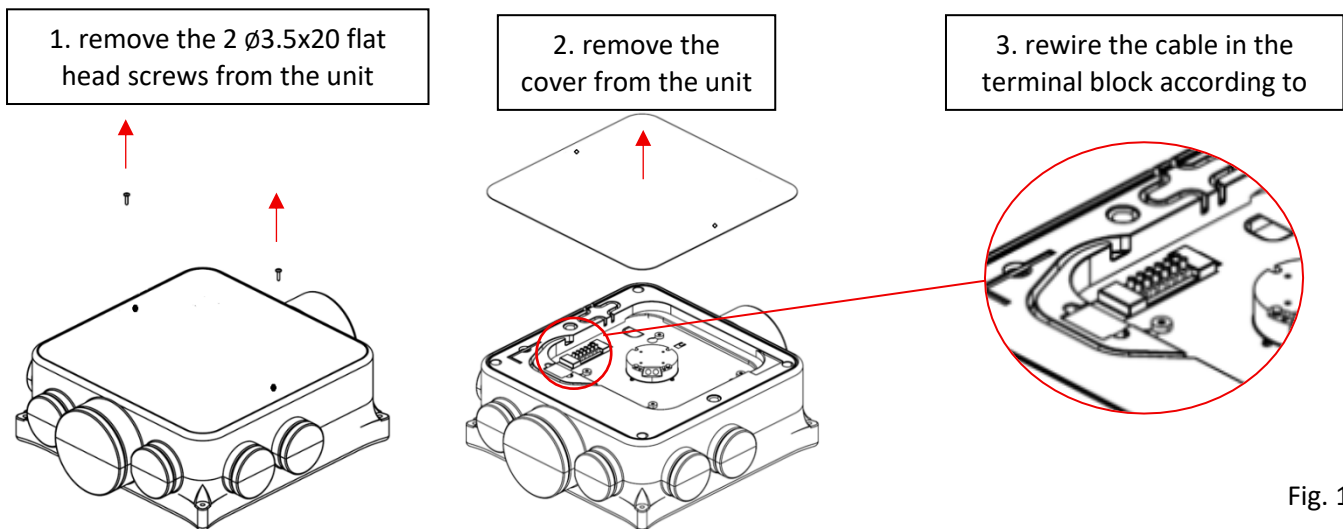


Fig. 15

- unit wiring diagram

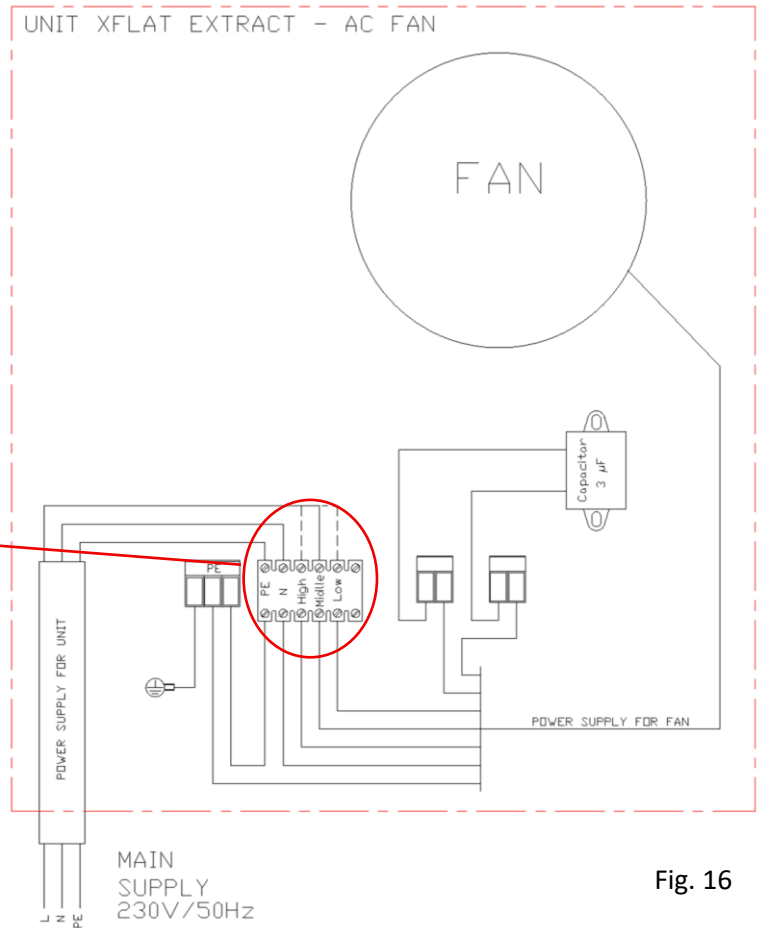
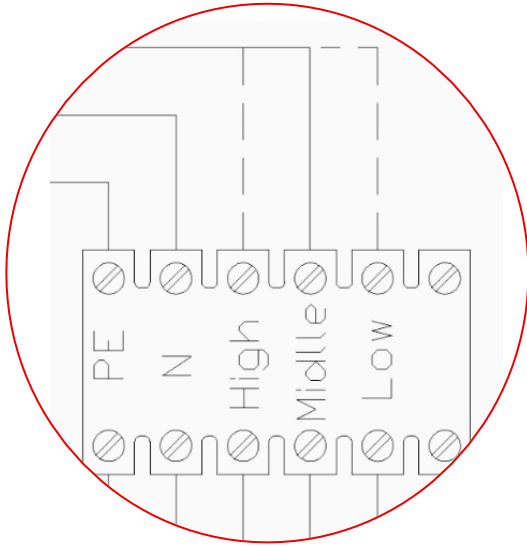


Fig. 16



- All the wires must be connected to terminals with adequate force to prevent damage to them or to the electrical board.

4.2.2. XF1-EXTRACT-EC

- The air output of the unit is adjusted via a built-in potentiometer on the surface of the casing
 - Turn the potentiometer to set the desired air output.
- The air output values are given in section 2.4.1.



Fig. 17

4.3. Connecting Accessories



- Before connecting any accessories, first disconnect the unit from the electrical supply and secure the disconnecting element against accidental switching on.

4.3.1. XF1-EXTRACT-AC

- The unit can be equipped with the XF-AC-CP wired remote controller (accessory).
- The maximum conductor cross-section for connecting the remote control is 1.5 mm², and the length of the connection cable is 20 m.
- The connecting wires between the unit and the wired remote control are not included in the delivery.
- To connect the controller, follow these steps:

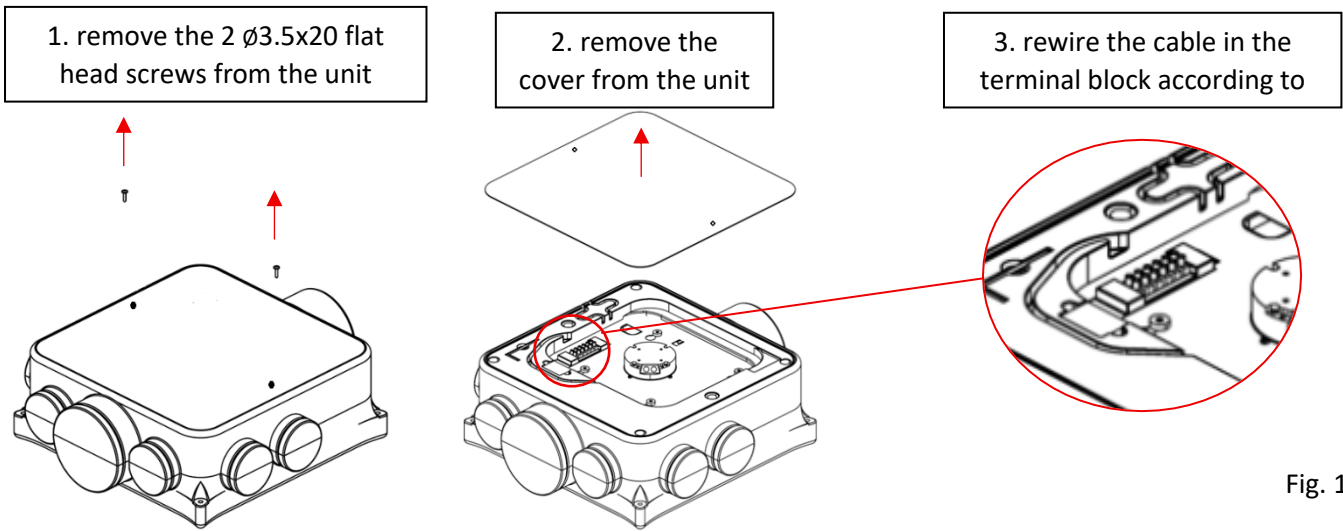


Fig. 18

- Wiring diagram of the unit and the remote control

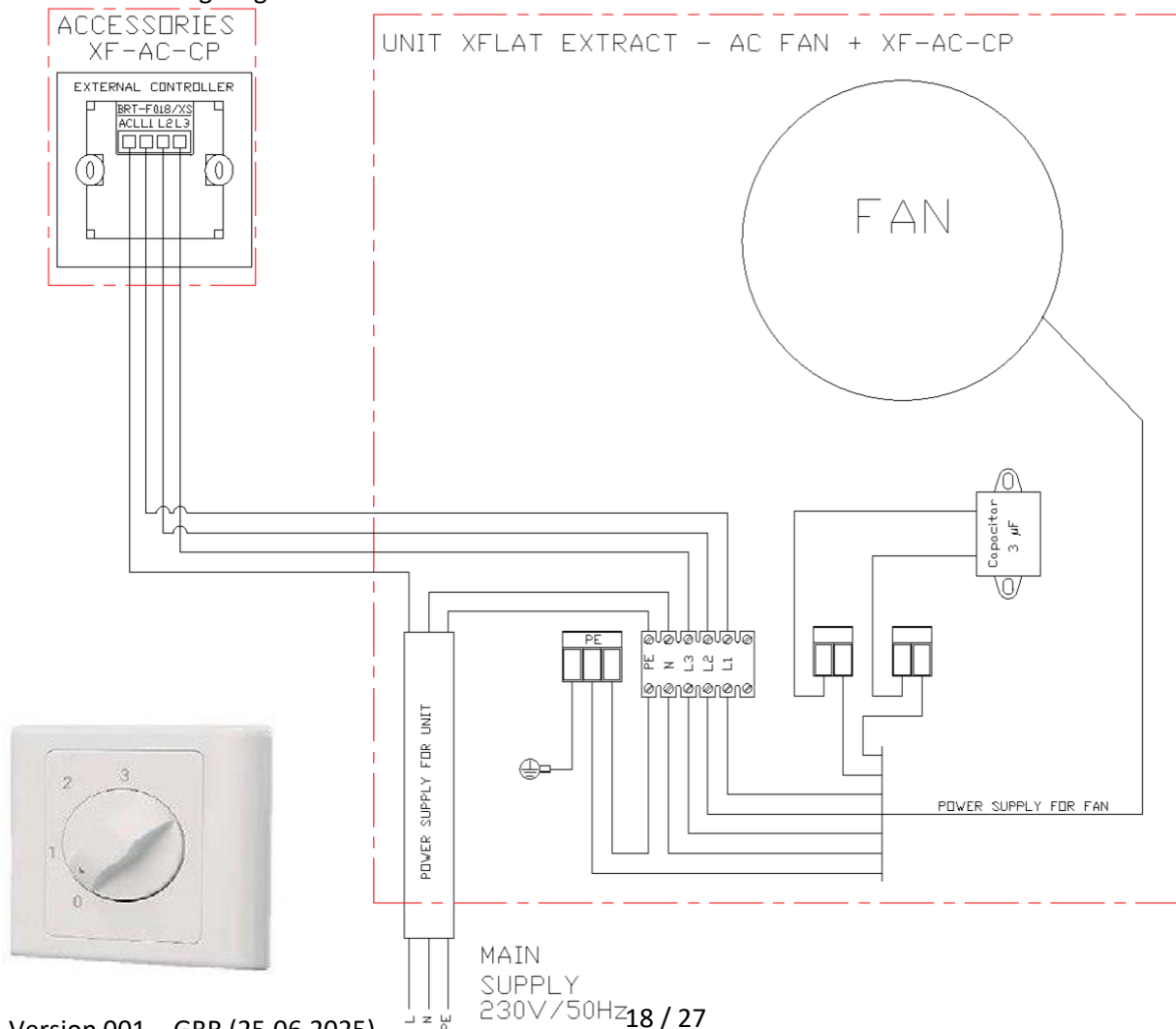


Fig. 19



- All the wires must be connected to terminals with adequate force to prevent damage to them or to the electrical board.

4.3.2. XF1-EXTRACT-AC + XF-AC-RF

- The unit can be equipped with the XF-AC-RF wireless remote controller (accessory). The remote control consists of:
 - o Receiver – wired connection to the unit. Place the receiver box under the cover of the unit.
 - o Transmitter – wireless controller with a range of 50m in open space.
- The maximum conductor cross-section for connecting the remote control is 1.5 mm².
- The connection wires between the unit and the receiver are not included in the delivery.
- To connect the controller, follow these steps:

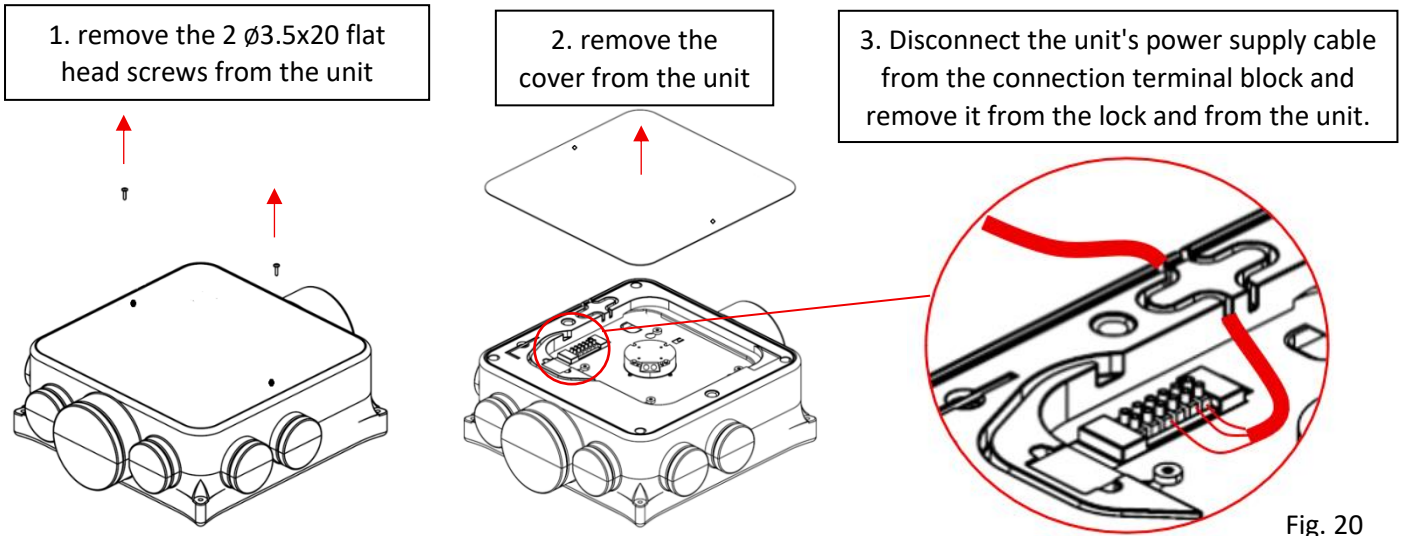


Fig. 20

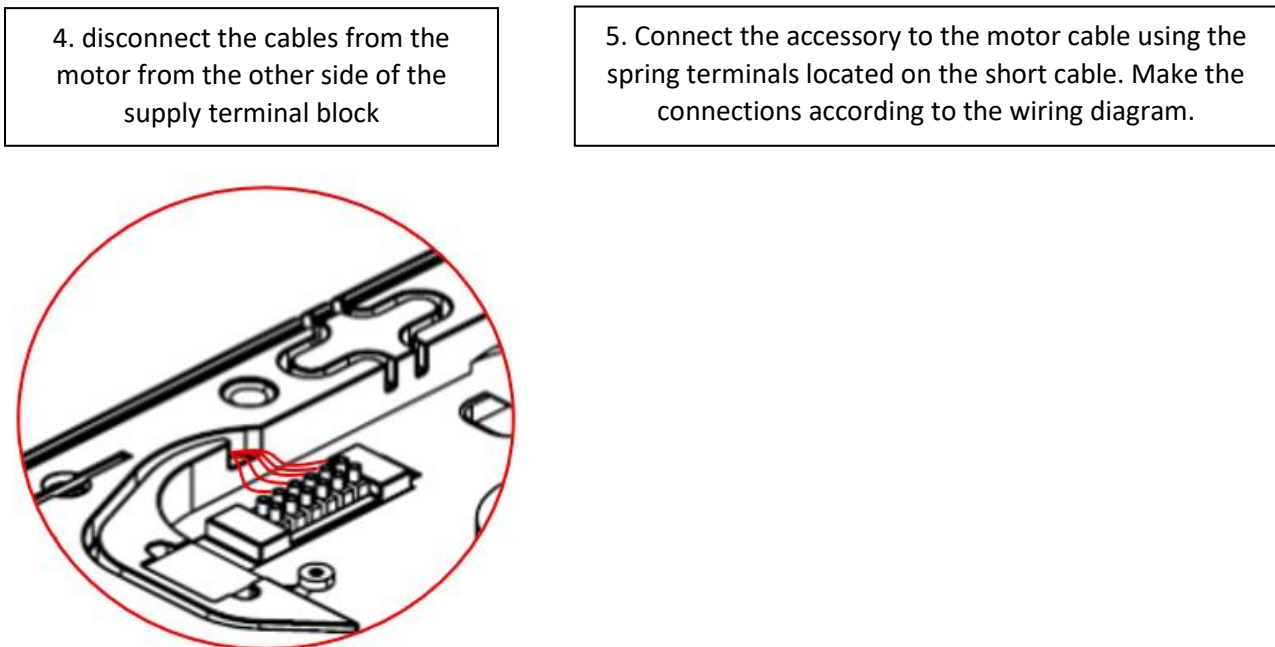


Fig. 21

- Wiring diagram of the unit and the remote control

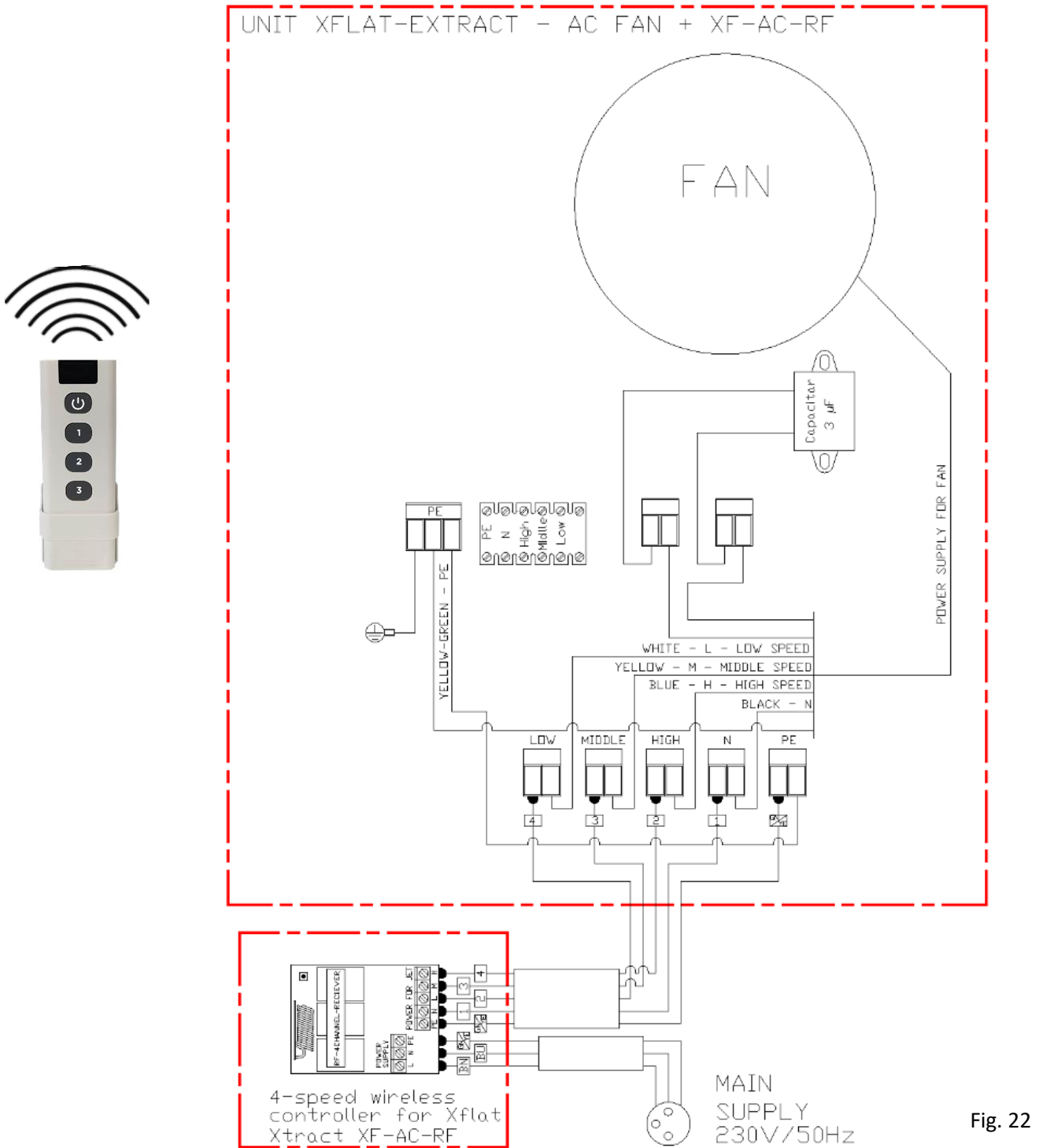


Fig. 22

6. Insert the connected connecting cable from the motor into the locking groove in the unit body.

7. Place the receiver box near the unit

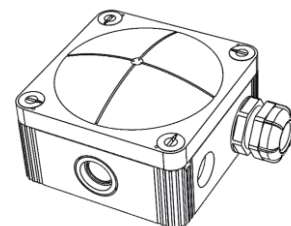
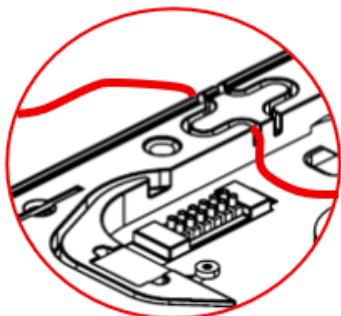


Fig. 23

4.3.3. XF1-EXTRACT-EC + XF-EC-CP

- The unit can be equipped with the XF-EC-CP wired remote controller (accessory).
- The maximum conductor cross-section for connecting the remote control is 1.5 mm², and the length of the connection cable is 20 m.
- The connecting wires between the unit and the wired remote control are not included in the delivery.
- To connect the controller, follow these steps:

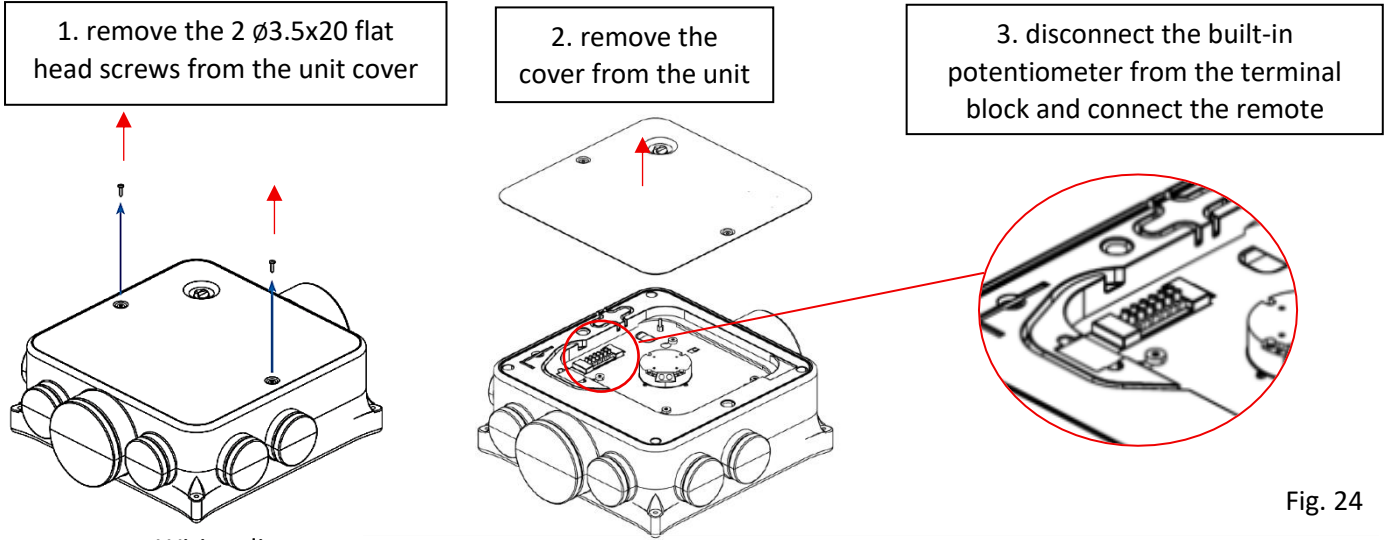


Fig. 24

- Wiring diagram

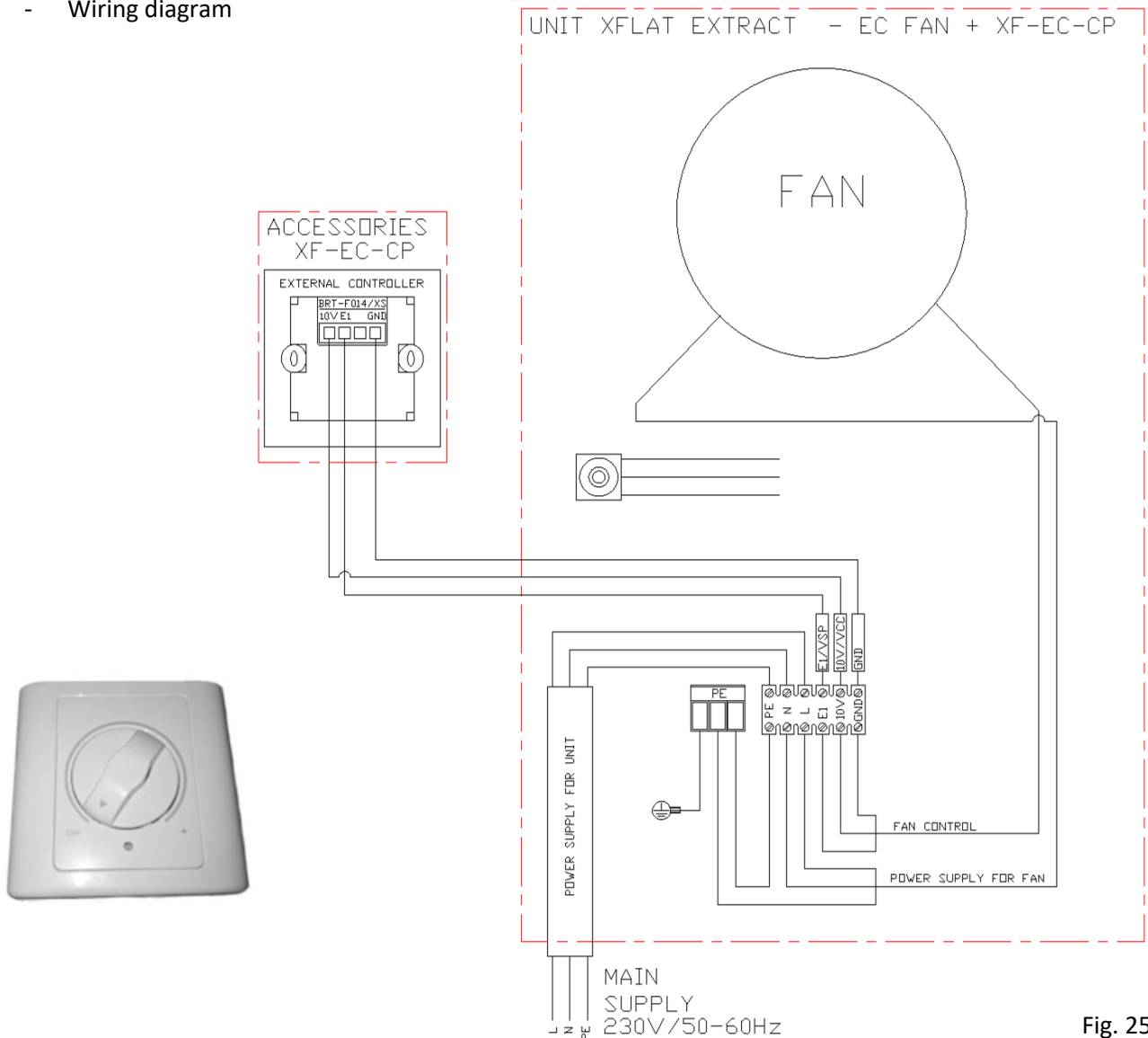


Fig. 25



- All the wires must be connected to terminals with adequate force to prevent damage to them or to the electrical board.



- The manufacturer of the unit is in no way liable for incorrect installation of accessories, any malfunction, or damage caused by accessories.

4.4. Block Connection Diagram of the XFLAT EXTRACT Unit – XF1-EXTRACT-AC

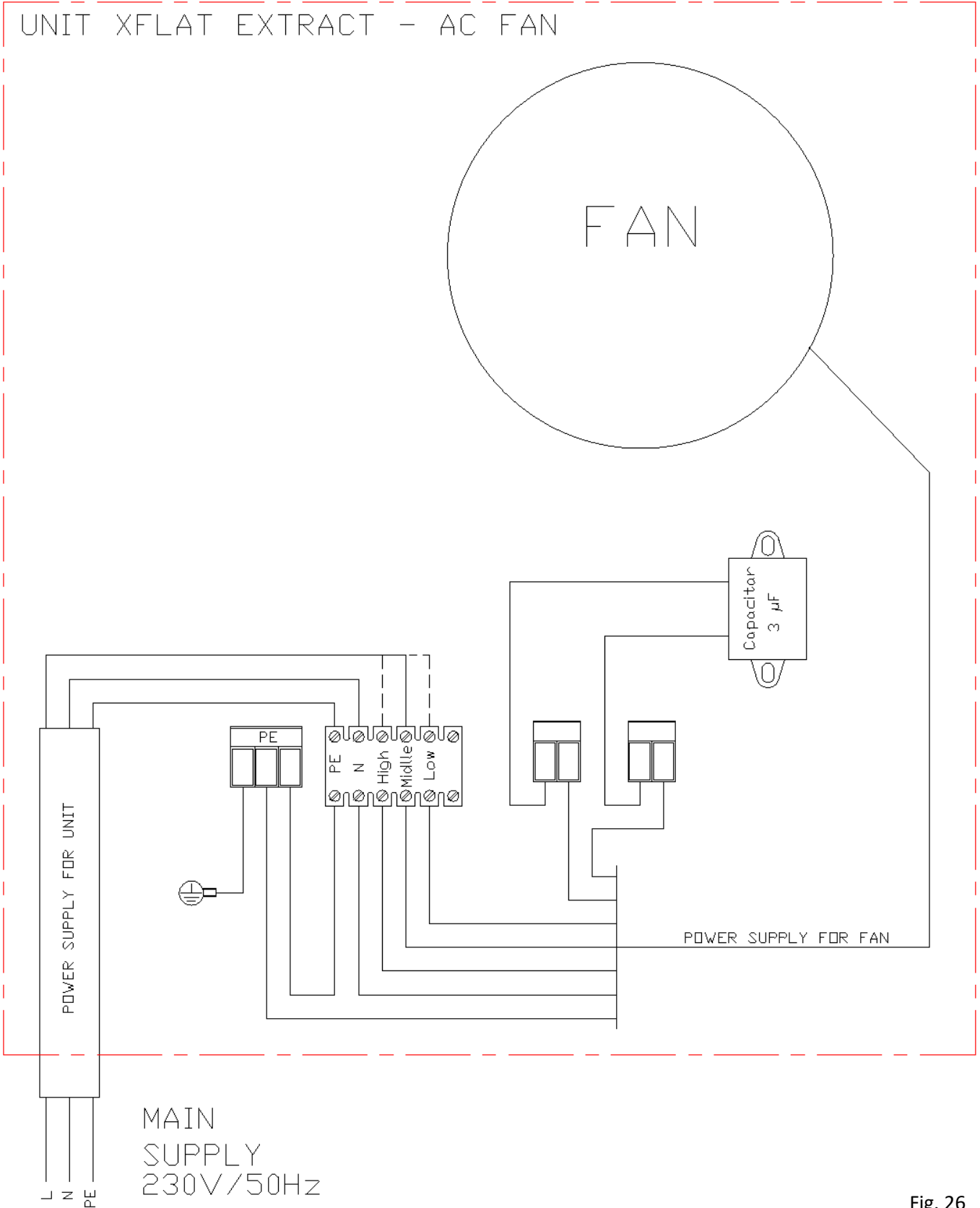


Fig. 26

4.5. Block Connection Diagram of the XFLAT EXTRACT Unit – XF1-EXTRACT-EC

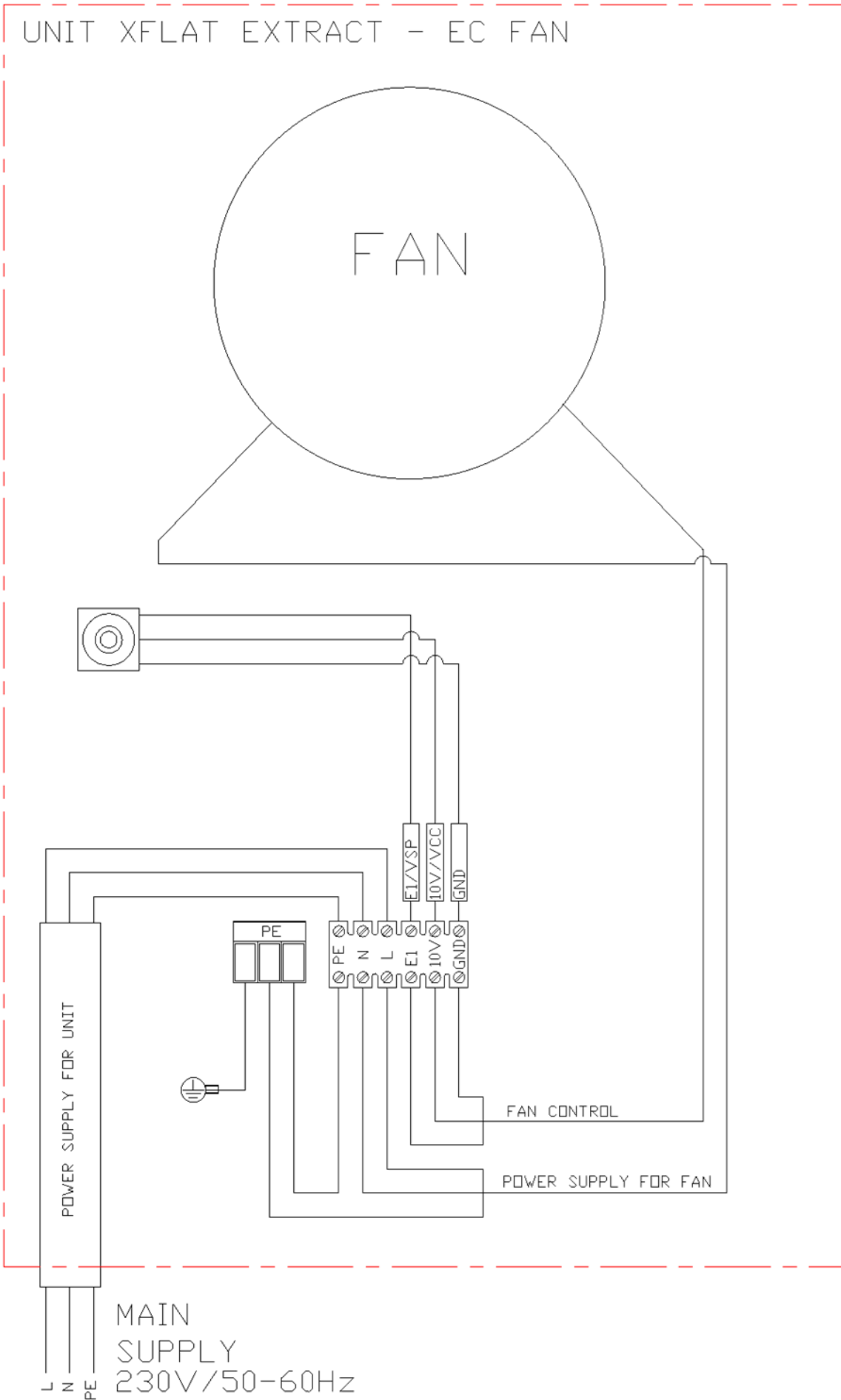


Fig. 27

5. Commissioning

5.1. Prior to the first start, verify:



- that all the installation work has been duly completed as indicated in Section 3,
- whether the power supply cable of the unit is properly connected to the mains;
- whether the connected electrical accessories are connected correctly.

5.2. Turning On – Basic Commissioning of the Unit



- **The basic commissioning of the unit is used to verify the functionality of the unit after completion of the installation.**



- **This device is an electrical device (according to Directive 2014/35/EU - LVD) and is intended for a fixed connection to an electrical installation. The device does not have an integral main switch. Therefore, it must be connected via an external switching and disconnecting element that meets the following requirements:**

- o **It must serve as the main switch of the device.**
- o **It must disconnect all active conductors.**
- o **It must always be accessible to the operator and clearly marked as the main switch for this unit.**
- Switch on the external switching element (e.g.: a circuit breaker) to which the unit is connected
- The unit (without a controller) starts immediately:
 - o XF1-EXTRACT-AC – unit runs at the selected speed (medium speed – factory setting)
 - o XF1-EXTRACT-EC – turn the dial to any position and the unit runs at the selected flow rate. If the dial is turned to the extreme limit position, the unit still runs at minimum flow. The rotary selector cannot be used to turn the unit off.
- To commission the unit with attached accessory – remote control, follow these steps:
 - o XF1-EXTRACT-AC
 - XF-AC-CP – turn the rotary selector from the "0" position to any speed setting 1 to 3 as desired
 - XF-AC-RF – press any of the buttons 1 to 3 on the remote control and the unit will run according to the selected ventilation level. To test the functional connection between the wireless controller and the unit, first use it to control the unit in its immediate vicinity
 - o XF1-EXTRACT-EC
 - XF-EC-CP – turn the rotary selector from the limit position to any position according to the desired flow.

6. Regular Maintenance and Cleaning of the Xflat Extractor Unit



- **Before opening the unit during its maintenance and cleaning, the unit must be disconnected from the power supply**



- **Maintenance and cleaning must be performed at regular intervals, otherwise the functionality of the unit may be impaired.**
- **Children may not perform cleaning and maintenance without supervision.**
- **The unit must not be cleaned using compressed air, steam, solvents, aggressive chemicals, abrasive cleaning agents, or sharp items.**
- Perform maintenance and cleaning of the unit in regular cycles to ensure its hygienic operation.
- If the unit is not used for a prolonged period of time, it is necessary to switch off the power supply to the unit.
- Service work that is beyond the scope of routine maintenance may only be performed by an authorised service centre or the manufacturer.
- Regular maintenance must include:
 - o visual inspection of the unit's casing – section 6.1.1.;
 - o visual inspection of the supply cable – section 6.1.2.;
 - o cleaning of the fan chamber and fans – section 6.2.;
- For cleaning the unit from coarse dirt or dust, use a vacuum cleaner or damp cloth with a common cleaning agent (e.g., soapy water).



6.1. Inspection – Cleaning the Exterior of the Unit

6.1.1. Visual Inspection of the Unit's Casing

- The unit can be cleaned on its entire surface.
- Visually inspect the outer casing of the unit for excessive fouling, damage:
 - o If the smooth surfaces of the casing are dirty, wipe them with a damp cloth with a common cleaning agent (e.g., soapy water).

6.1.2. Visual Inspection of the Supply Cable

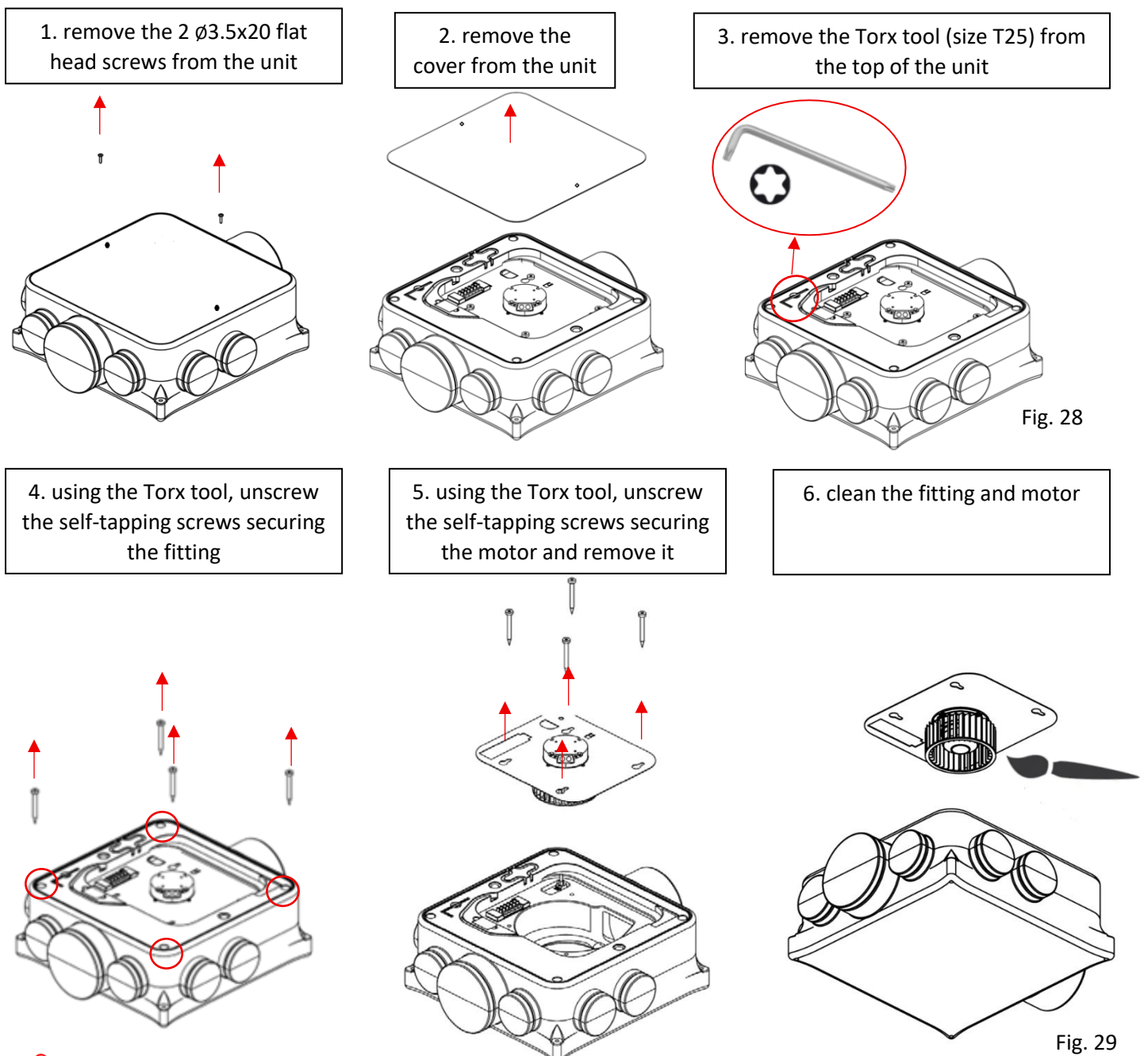
- Visually check that the supply cable is not damaged, loosened or torn from the connecting peripherals.
- **In case of damage, consult with the person competent for this activity with a valid certification and knowledge of the relevant standards and regulations.**



6.2. Inspection – Cleaning of the Unit's Interior



- **Take extra care during the disassembly of the internal components of the unit. Improper disassembly may cause the unit to malfunction or impair its functionality.**
- To dismantle the unit for cleaning, follow these steps:



- **For reassembly, follow the same steps in reverse. Take extra care during reassembly to avoid damaging the unit.**

7. Service



- Warranty and non-warranty servicing may only be performed by a qualified professionally trained worker and only using original spare parts.
- The manufacturer reserves the right to make changes to the device that do not affect the fundamental characteristics of the device.

7.1. Error Messages – Troubleshooting

Table 5

Error No.	Error message, malfunction	Possible cause of the malfunction	Troubleshooting
1.	The unit does not start	The mains cable is not plugged in	- Check the connection to the mains - Check that the external switch is turned on
		Externí spínač (stykač) v pozici 0	- Switch the external switch to position I
4.	No or little ventilation power	Poorly connected motor terminals	- Check the wiring according to the wiring diagram according to Chapter 4.
	The unit became too noisy	Partially or completely clogged duct of the unit or unit	- Clean the pipe or unit according to Chapter 6.
		Defective motor bearing	- Contact the unit supplier

7.2. Malfunction Persists

- Restart the unit – switch off the unit using the external switch (position 15). Wait approx. 30 s and turn the unit back on.
- In the event the malfunction persists, do not attempt to repair the unit yourself.
- Switch the unit off using the external switch and disconnect it from the mains.
- Secure the unit against being restarted or handled by an unauthorised person.
- Contact your seller.

8. Decommissioning, Dismantling, and Disposal

- At the end of the machine's service life, or when it is no longer cost-effective to repair, dismantle the machine completely.
- During the dismantling process, the generally applicable safety regulations must be observed for the safe execution of all the work.
- After the machine has been completely dismantled, the individual parts are to be disposed of in accordance with Directive 2012/19/EU and the applicable regulations of the given country.
- Separate the metal components by the type of metal and hand them over to the relevant organisations dealing with the reusable waste collection.
- The parts made of plastic materials and rubber that are not subject to natural decomposition are to be sorted and sold to an organisation dealing with collection of these secondary raw materials.
- Parts of electrical equipment are to be handed over to the organisation responsible for collection of electrical waste.



Please dispose of all products that are no longer needed or at the end of their service life and their packaging at the appropriate collection and recycling points. A professionally recycled product can be reused and contributes to protecting the environment and health. Disposal must be carried out in accordance with Directive 2012/19/EU and applicable national regulations. Do not dispose of the product in municipal waste – use the designated take-back system.



9. Warranty

The unit warranty is valid according to applicable legislation. The warranty only applies if all the installation and maintenance instructions have been followed. The warranty covers manufacturing defects, material defects and functional defects of the device. We do not guarantee the suitability of the unit for special purposes; determination of suitability is fully within the purview of the customer.

The warranty does not cover defects caused by:

- improper handling;
- transport (damage caused by transport – financial compensation must be resolved with the carrier);
- failing to comply with the installation conditions;
- incorrect electrical connection or protection;
- incorrect operation;
- tampering with the product;
- regular wear and tear;
- natural disaster.

If the warranty is claimed, it is necessary to submit a report (provided in the product documentation) containing:

- complaining party/company information;
- date and number of the proof of sale;
- detailed description of the defect;
- data on socket protection;
- photo of the product's nameplate and, where appropriate, a serial number;
- photo from the installation site of the product;
- measured values of the product: air temperature, voltage, current.

In the case of both warranty and post-warranty service, contact your supplier or the installation company that carried out the installation. The method of handling warranty repairs is carried out at the installation site of the unit or as agreed. The method of resolving warranty repairs is exclusively at the discretion of the company's service centre. The complaining party shall receive a written statement on the result of the complaint – warranty repair. In the case of an unjustified complaint, all the costs relating to such complaint shall be borne by the complaining party.

10. Conclusion

If you have any questions about this product, do not hesitate to contact us.

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Czech Republic
www.xvent.cz

