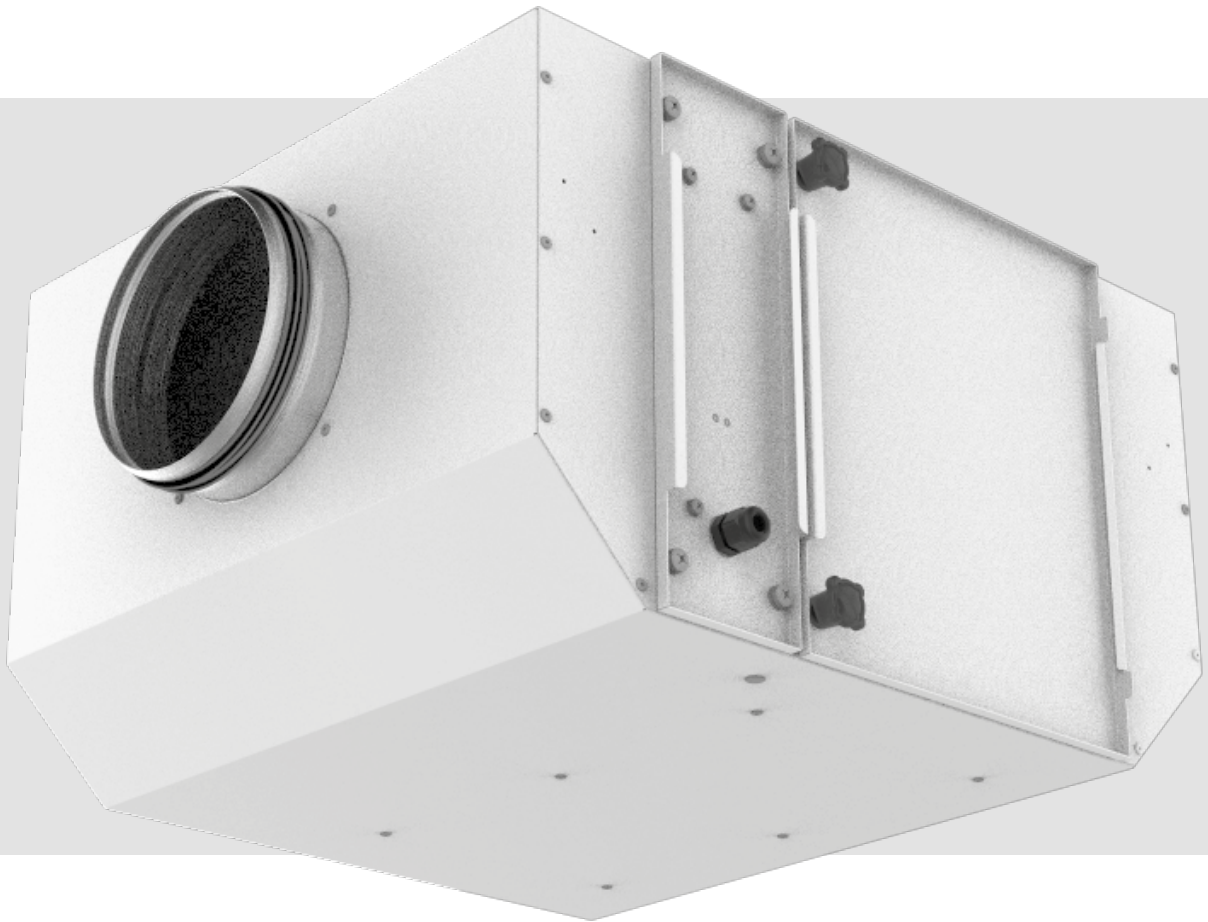


USER'S MANUAL

FB K2 UV



Bactericidal filter box with UV lamp for round air ducts

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This user's manual is a main operating document intended for technical, maintenance, and operating staff.

The manual contains information about purpose, technical details, operating principle, design, and installation of the FB K2 UV unit and all its modifications.

Technical and maintenance staff must have theoretical and practical training in the field of ventilation systems and should be able to work in accordance with workplace safety rules as well as construction norms and standards applicable in the territory of the country.

All user's manual requirements as well as the provisions of all the applicable local and national construction, electrical, and technical norms and standards must be observed when installing and operating the unit.

Disconnect the unit from the power supply prior to any connection, servicing, maintenance, and repair operations.

Only qualified electricians with a work permit for electrical units up to 1000 V are allowed for installation. The present user's manual should be carefully read before beginning works.

Check the unit for any visible damage of the impeller, the casing, and the grille before starting installation. The casing internals must be free of any foreign objects that can damage the impeller blades.

While mounting the unit, avoid compression of the casing! Deformation of the casing may result in motor jam and excessive noise.

Misuse of the unit and any unauthorised modifications are not allowed.

Do not expose the unit to adverse atmospheric agents (rain, sun, etc.).

Transported air must not contain any dust or other solid impurities, sticky substances, or fibrous materials.

Do not use the unit in a hazardous or explosive environment containing spirits, gasoline, insecticides, etc.

Do not close or block the intake or extract vents in order to ensure the efficient air flow.

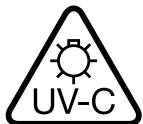
Do not sit on the unit and do not put objects on it.

The information in this user's manual was correct at the time of the document's preparation.

The Company reserves the right to modify the technical characteristics, design, or configuration of its products at any time in order to incorporate the latest technological developments.

Never touch the unit with wet or damp hands.

Never touch the unit when barefoot.



**DO NOT SWITCH ON THE UNIT WITH THE HOUSING REMOVED!
UVC RADIATION IS HARMFUL TO EYES AND SKIN!**



**THE PRODUCT MUST BE DISPOSED SEPARATELY AT THE END OF ITS SERVICE LIFE.
DO NOT DISPOSE THE UNIT AS UNSORTED DOMESTIC WASTE.**

PURPOSE

The unit is a device with bactericidal ultraviolet lamps for quality cleaning and disinfection of air circulating in ventilation systems. The unit is a component part and is not designed for stand-alone operation. It is used for disinfecting the air in rooms with increased risk of spread of infectious agents: in medical, pre-school, school, industrial and public organisations, public catering and other premises with large concentrations of people. The unit is intended for suspended mounting.



THE UNIT SHOULD NOT BE OPERATED BY CHILDREN OR PERSONS WITH REDUCED PHYSICAL, MENTAL, OR SENSORY CAPACITIES, OR THOSE WITHOUT THE APPROPRIATE TRAINING.

THE UNIT MUST BE INSTALLED AND CONNECTED ONLY BY PROPERLY QUALIFIED PERSONNEL AFTER THE APPROPRIATE BRIEFING.

THE CHOICE OF UNIT INSTALLATION LOCATION MUST PREVENT UNAUTHORISED ACCESS BY UNATTENDED CHILDREN.

DELIVERY SET

Name	Number
Filter box	1
User's manual	1
Packing box	1

DESIGNATION KEY

FB K2	150	G4	UV	
				Additional elements
				UV – ultraviolet lamp
				Filter
				G4 – filter of G4 filtration class
				F8 – filter of F8 filtration class
				F7 – filter of F7 filtration class
				H13 – filter of H13 filtration class
				H11 – filter of H11 filtration class
				C - carbon filter
				Connected air ducts diameter [mm]
				150/160/200
				Unit series
				FB K2 – filter box with panel filters for round air ducts

TECHNICAL DATA

The unit is designed for operation in an enclosed area at ambient temperatures from -25 °C to +55 °C at relative humidity of up to 80 % (at +25 °C).

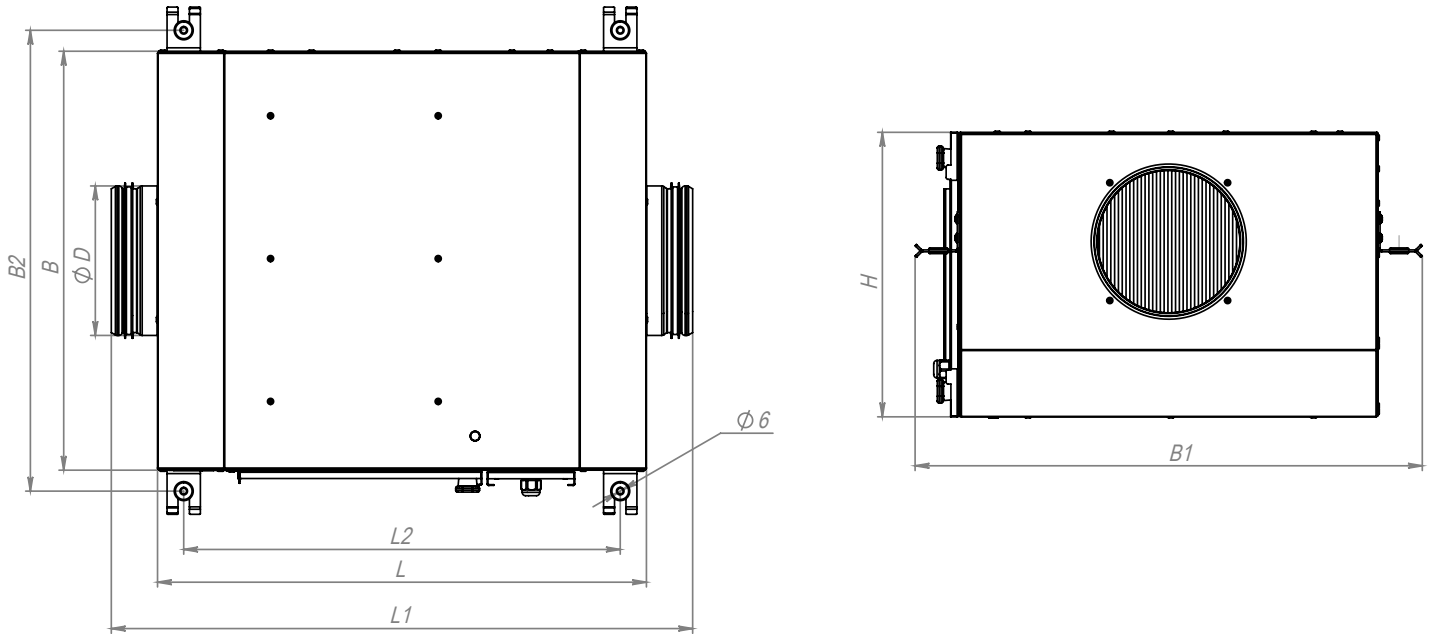
The unit is rated as a Class I electrical appliance.

Ingress protection rating against access to hazardous parts and water ingress is IPX4.

The unit design is constantly being improved, thus some models may be slightly different from those described in this manual.

Parameter	FB K2 150 UV	FB K2 160 UV	FB K2 200 UV
Osram lamp model	HNS L 60 W 2G11		HNS L 95 W 2G11
Supply voltage [V] 50 (60) Hz	1~230		1~230
Current [A]	0.8		0.8
Starting current [A]	40		40
Power [W]	60		95
Radiation power (UVC) [W]	19		27
Lamp dimensions [mm]	408 x 40		533 x 40

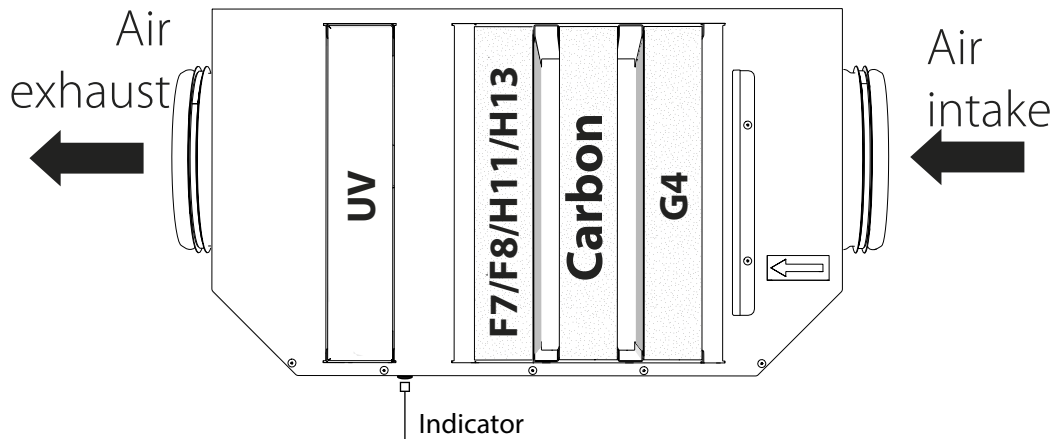
Name	Filter type	Filter size (HxWxT) [mm]					
		G4	Carbon	F7	F8	H11	H13
FB K2 150 G4/F7 UV	G4/F7	270x425x47	-	270x425x47	-	-	-
FB K2 150 G4/C/F7 UV	G4/Carbon/F7		270x425x47	270x425x47	-	-	-
FB K2 150 G4/H11 UV	G4/H11		-	-	-	270x425x47	-
FB K2 150 G4/C/H11 UV	G4/Carbon/H11		270x425x47	-	-	270x425x47	-
FB K2 150 G4/F8 UV	G4/F8		-	-	270x425x47	-	-
FB K2 150 G4/C/F8 UV	G4/Carbon/F8		270x425x47	-	270x425x47	-	-
FB K2 150 G4/H13 UV	G4/H13		-	-	-	-	270x425x47
FB K2 150 G4/C/H13 UV	G4/Carbon/H13		270x425x47	-	-	-	270x425x47
FB K2 160 G4/F7 UV	G4/F7		-	270x425x47	-	-	-
FB K2 160 G4/C/F7 UV	G4/Carbon/F7		270x425x47	270x425x47	-	-	-
FB K2 160 G4/H11 UV	G4/H11		-	-	-	270x425x47	-
FB K2 160 G4/C/H11 UV	G4/Carbon/H11		270x425x47	-	-	270x425x47	-
FB K2 160 G4/F8 UV	G4/F8		-	-	270x425x47	-	-
FB K2 160 G4/C/F8 UV	G4/Carbon/F8		270x425x47	-	270x425x47	-	-
FB K2 160 G4/H13 UV	G4/H13		-	-	-	-	270x425x47
FB K2 160 G4/C/H13 UV	G4/Carbon/H13		270x425x47	-	-	-	270x425x47
FB K2 200 G4/F7 UV	G4/F7	270x590x47	-	270x590x47	-	-	-
FB K2 200 G4/C/F7 UV	G4/Carbon/F7		270x590x47	270x590x47	-	-	-
FB K2 200 G4/H11 UV	G4/H11		-	-	-	270x590x47	-
FB K2 200 G4/C/H11 UV	G4/Carbon/H11		270x590x47	-	-	270x590x47	-
FB K2 200 G4/F8 UV	G4/F8		-	-	270x590x47	-	-
FB K2 200 G4/C/F8 UV	G4/Carbon/F8		270x590x47	-	270x590x47	-	-
FB K2 200 G4/H13 UV	G4/H13		-	-	-	-	270x590x47
FB K2 200 G4/C/H13 UV	G4/Carbon/H13		270x590x47	-	-	-	270x590x47

Overall dimensions of the unit [mm]


Model	D	L	H	B	L1	B1	L2	B2	Weight [kg]
FB K2 150 G4/F7 UV	147	513.5	299	440	611	533	458.5	484	12.4
FB K2 150 G4/C/F7 UV									13.3
FB K2 150 G4/H11 UV									12.4
FB K2 150 G4/C/H11 UV									13.3
FB K2 150 G4/F8 UV									12.4
FB K2 150 G4/C/F8 UV									13.3
FB K2 150 G4/H13 UV									12.4
FB K2 150 G4/C/H13 UV									13.3
FB K2 150 UV									11.9
FB K2 160 G4/F7 UV									157
FB K2 160 G4/C/F7 UV	14.8								
FB K2 160 G4/H11 UV	13.9								
FB K2 160 G4/C/H11 UV	14.8								
FB K2 160 G4/F8 UV	13.9								
FB K2 160 G4/C/F8 UV	14.8								
FB K2 160 G4/H13 UV	13.9								
FB K2 160 G4/C/H13 UV	14.8								
FB K2 160 UV	13.4								
FB K2 200 G4/F7 UV	197	513.5	299	605	611	698	458.5	649	
FB K2 200 G4/C/F7 UV									18.5
FB K2 200 G4-H11 UV									17.2
FB K2 200 G4/C/H11 UV									18.5
FB K2 200 G4/F8 UV									17.2
FB K2 200 G4/C/F8 UV									18.5
FB K2 200 G4/H13 UV									17.2
FB K2 200 G4/C/H13 UV									18.5
FB K2 200 UV									16.6

DESIGN AND OPERATING PRINCIPLE

The unit is a box with a UV lamp installed to clean the air from viruses and bacteria. For additional filtration, the unit includes up to three filters (optional) with different intake air filtration classes (from coarse to fine). The flow of non-disinfected air enters through the casing through the ventilation holes, the UV lamp disinfects the air in its enclosed space, and the disinfected air enters the room. The air flow direction is indicated by the arrow on the fan casing.



MOUNTING AND SET-UP

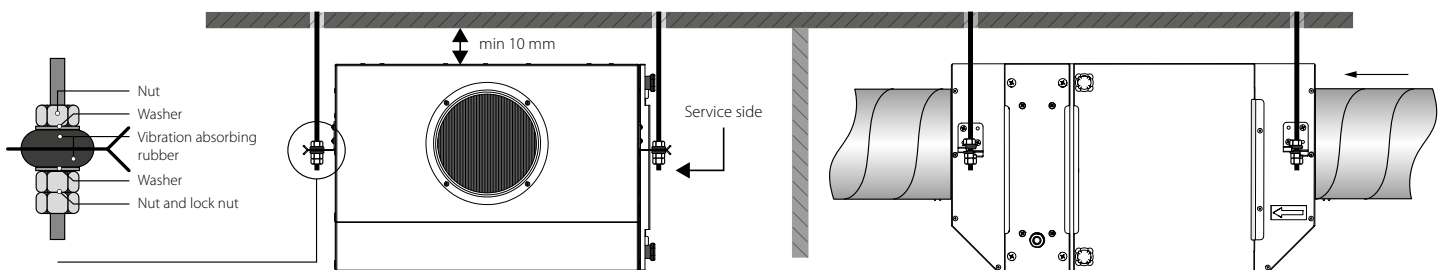


READ THE USER'S MANUAL BEFORE INSTALLING THE UNIT.



WHILE INSTALLING THE UNIT ENSURE CONVENIENT ACCESS FOR SUBSEQUENT MAINTENANCE AND REPAIR.

The unit is suspended to the mounting surface through the threaded rod fixed inside the expansion anchor. While installing the unit, ensure convenient access for subsequent maintenance and repair. Fasteners for ceiling mounting are not included in the delivery set and should be ordered separately. While choosing fasteners consider the material of the mounting surface as well as the weight of the unit, refer to the Technical data section. Fasteners for unit mounting should be selected by the service technician.



To get the best performance of the ventilation system and to minimize turbulence-induced air pressure losses, connect the straight air duct section to the spigots on both sides of the unit while installing.

Minimum straight air duct length:

- equal to 1 air duct diameter on the intake side
- equal to 3 air duct diameters on outlet side

CONNECTION TO POWER MAINS

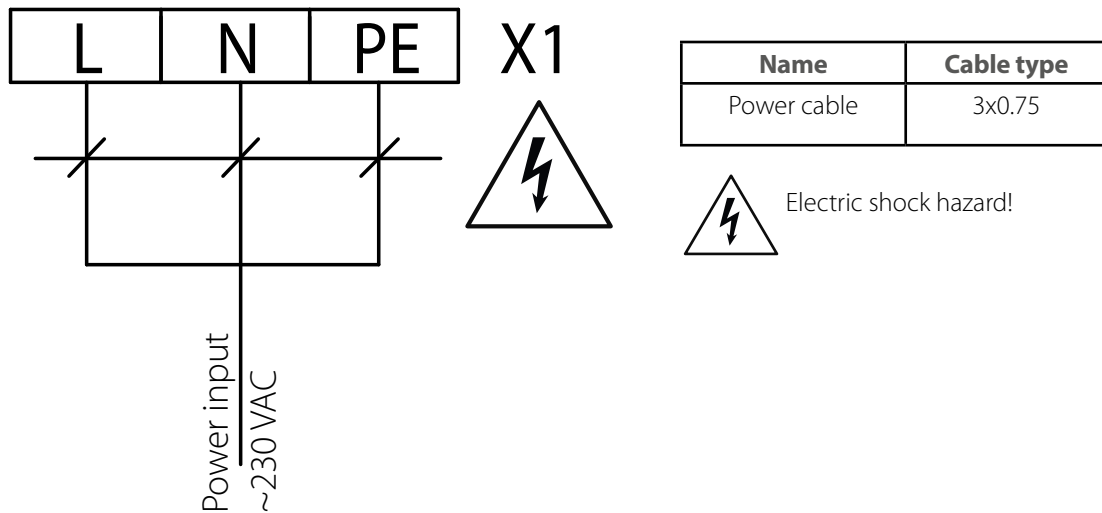


**POWER OFF THE POWER SUPPLY PRIOR TO ANY OPERATIONS WITH THE UNIT.
THE UNIT MUST BE CONNECTED TO POWER SUPPLY BY A QUALIFIED ELECTRICIAN.
THE RATED ELECTRICAL PARAMETERS OF THE UNIT ARE GIVEN ON THE
MANUFACTURER'S LABEL.**



**ANY TAMPERING WITH THE INTERNAL CONNECTIONS IS PROHIBITED
AND WILL VOID THE WARRANTY.**

The unit is designed for connection to power mains with the parameters specified in the "Technical data" section. The connection must be made using durable, insulated and heat-resistant conductors (cables, wires). The unit connections shall be made on the terminal block mounted inside the terminal box in strict accordance with the wiring diagram and terminal designations.



TECHNICAL DATA



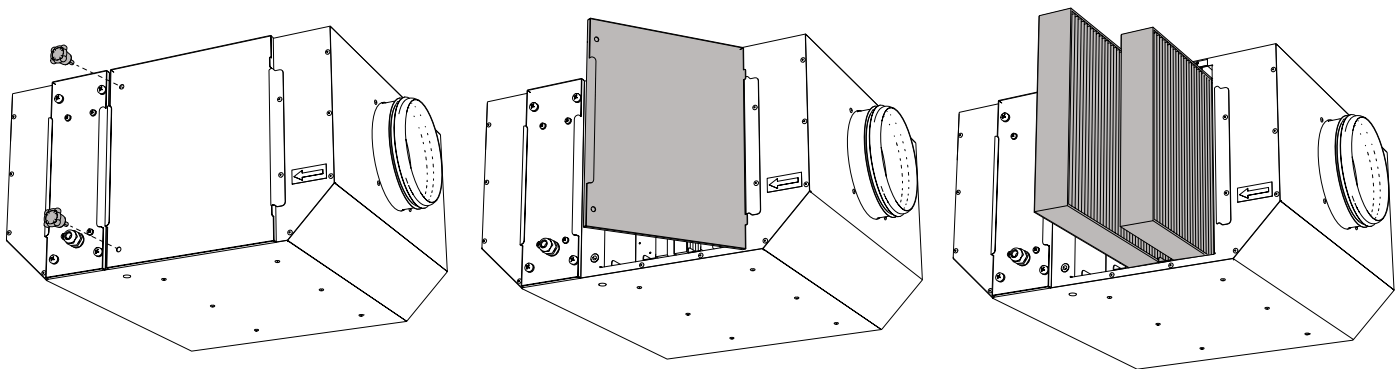
DISCONNECT THE UNIT FROM POWER SUPPLY BEFORE ANY MAINTENANCE OPERATIONS!
MAKE SURE THE UNIT IS DISCONNECTED FROM POWER MAINS BEFORE REMOVING THE PROTECTION

Maintenance operations of the unit are required 3-4 times per year. Technical maintenance includes regular cleaning of the unit and periodic cleaning of filters and UV lamps. Dirty filters increase air resistance. The filters require cleaning not less than 3-4 times per year. Vacuum cleaning is allowed. After two consecutive cleanings filters must be replaced. Replacement of lamps is carried out as required or after the end of their service life ~8000-9000 hours of operation. For new filters and lamps contact the Seller.

Filter replacement sequence:

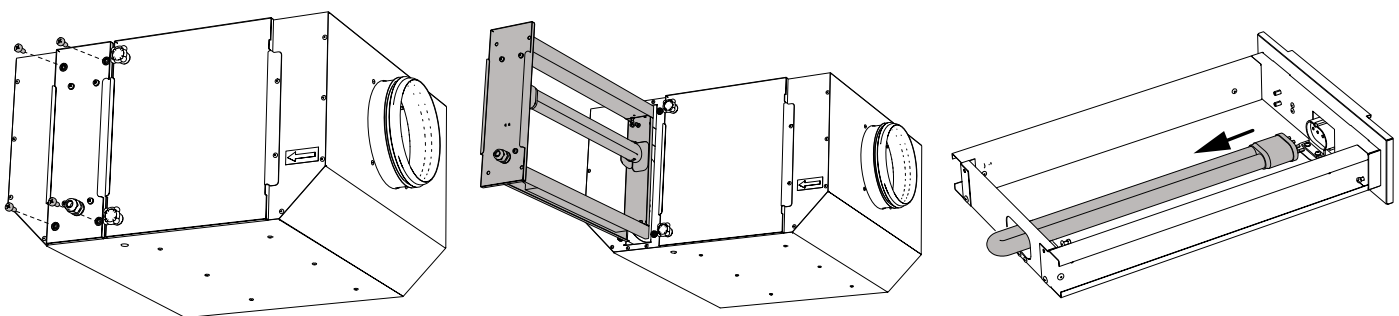
1. Unscrew the two screws with the plastic head holding the service panel.
2. Open the service panel.
3. Pull the filters to remove.
4. Re-assemble the unit in the reverse order.

UV lamp replacement sequence:



1. Undo the four screws securing the service panel.
2. Remove the UV lamp unit by pulling it towards you.
3. Pull the lamp carefully out of the socket.
4. Re-assemble the unit in the reverse order.

WARNING! The UV lamp must be removed and installed using clean cotton gloves to avoid leaving marks on the glass surface that would interfere with lamp performance.



DO NOT DISPOSE OF DEFECTIVE UV LAMPS IN THE HOUSEHOLD WASTE BIN, THEY MUST BE TAKEN TO A RECYCLING POINT
THE PRODUCT IS DISPOSED OF SEPARATELY BY MATERIAL GROUPS IN ACCORDANCE WITH THE RELEVANT REGULATIONS

TROUBLESHOOTING

PROBLEM	POSSIBLE REASONS	TROUBLESHOOTING
When turned on, the UV lamp does not light up.	No power supply.	Make sure the power supply line is connected correctly, otherwise troubleshoot a connection error.
	The plug or cable is damaged.	Contact the Seller.
	The UV lamp is out of order.	Replace the lamp.
	The lamp's control equipment is damaged.	Contact the Seller.
Low air flow.	The filter is clogged.	Clean or replace the filter.

STORAGE AND TRANSPORTATION REGULATIONS

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range +5 °...+40 °C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapors and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures, allow the unit to warm up at operating temperature for at least 3-4 hours.

MANUFACTURER'S WARRANTY

The product is in compliance with EU norms and standards on low voltage guidelines and electromagnetic compatibility. We hereby declare that the product complies with the provisions of Electromagnetic Compatibility (EMC) Directive 2014/30/EU of the European Parliament and of the Council, Low Voltage Directive (LVD) 2014/35/EU of the European Parliament and of the Council and CE-marking Council Directive 93/68/EEC. This certificate is issued following test carried out on samples of the product referred to above.

The manufacturer hereby warrants normal operation of the unit for 24 months after the retail sale date provided the user's observance of the transportation, storage, installation, and operation regulations. Should any malfunctions occur in the course of the unit operation through the Manufacturer's fault during the guaranteed period of operation, the user is entitled to get all the faults eliminated by the manufacturer by means of warranty repair at the factory free of charge. The warranty repair includes work specific to elimination of faults in the unit operation to ensure its intended use by the user within the guaranteed period of operation. The faults are eliminated by means of replacement or repair of the unit components or a specific part of such unit component.

The warranty repair does not include:

- routine technical maintenance
- unit installation/dismantling
- unit setup

To benefit from warranty repair, the user must provide the unit, the user's manual with the purchase date stamp, and the payment paperwork certifying the purchase. The unit model must comply with the one stated in the user's manual. Contact the Seller for warranty service.

The manufacturer's warranty does not apply to the following cases:

- User's failure to submit the unit with the entire delivery package as stated in the user's manual including submission with missing component parts previously dismantled by the user.
- Mismatch of the unit model and the brand name with the information stated on the unit packaging and in the user's manual.
- User's failure to ensure timely technical maintenance of the unit.
- External damage to the unit casing (excluding external modifications as required for installation) and internal components caused by the user.
- Redesign or engineering changes to the unit.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- Unit misuse.
- Violation of the unit installation regulations by the user.
- Violation of the unit control regulations by the user.
- Unit connection to power mains with a voltage different from the one stated in the user's manual.
- Unit breakdown due to voltage surges in power mains.
- Discretionary repair of the unit by the user.
- Unit repair by any persons without the manufacturer's authorization.
- Expiration of the unit warranty period.
- Violation of the unit transportation regulations by the user.
- Violation of the unit storage regulations by the user.
- Wrongful actions against the unit committed by third parties.
- Unit breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, blockades).
- Missing seals if provided by the user's manual.
- Failure to submit the user's manual with the unit purchase date stamp.
- Missing payment paperwork certifying the unit purchase.



FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT.



USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP.

Date	Switch-on time	Shutdown time	Number of operating hours	Responsible person	Signature	Note

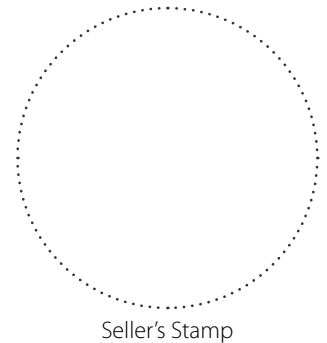
Date	Switch-on time	Shutdown time	Number of operating hours	Responsible person	Signature	Note

CERTIFICATE OF ACCEPTANCE

Unit Type	Bactericidal filter box with UV lamp for round air ducts
Model	
Serial Number	
Manufacture Date	
Quality Inspector's Stamp	

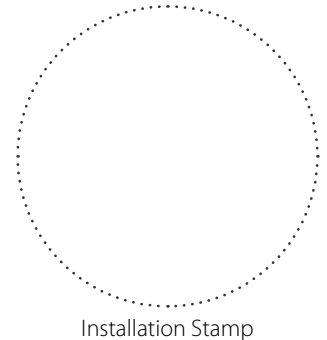
SELLER INFORMATION

Seller	
Address	
Phone Number	
E-mail	
Purchase Date	
This is to certify acceptance of the complete unit delivery with the user's manual. The warranty terms are acknowledged and accepted.	
Customer's Signature	



INSTALLATION CERTIFICATE

The unit _____ is installed pursuant to the requirements stated in the present user's manual.	
Company name	
Address	
Phone Number	
Installation Technician's Full Name	
Installation Date:	Signature:
The unit has been installed in accordance with the provisions of all the applicable local and national construction, electrical and technical codes and standards. The unit operates normally as intended by the manufacturer.	
Signature:	



WARRANTY CARD

Unit Type	Bactericidal filter box with UV lamp for round air ducts
Model	
Serial Number	
Manufacture Date	
Purchase Date	
Warranty Period	
Seller	

