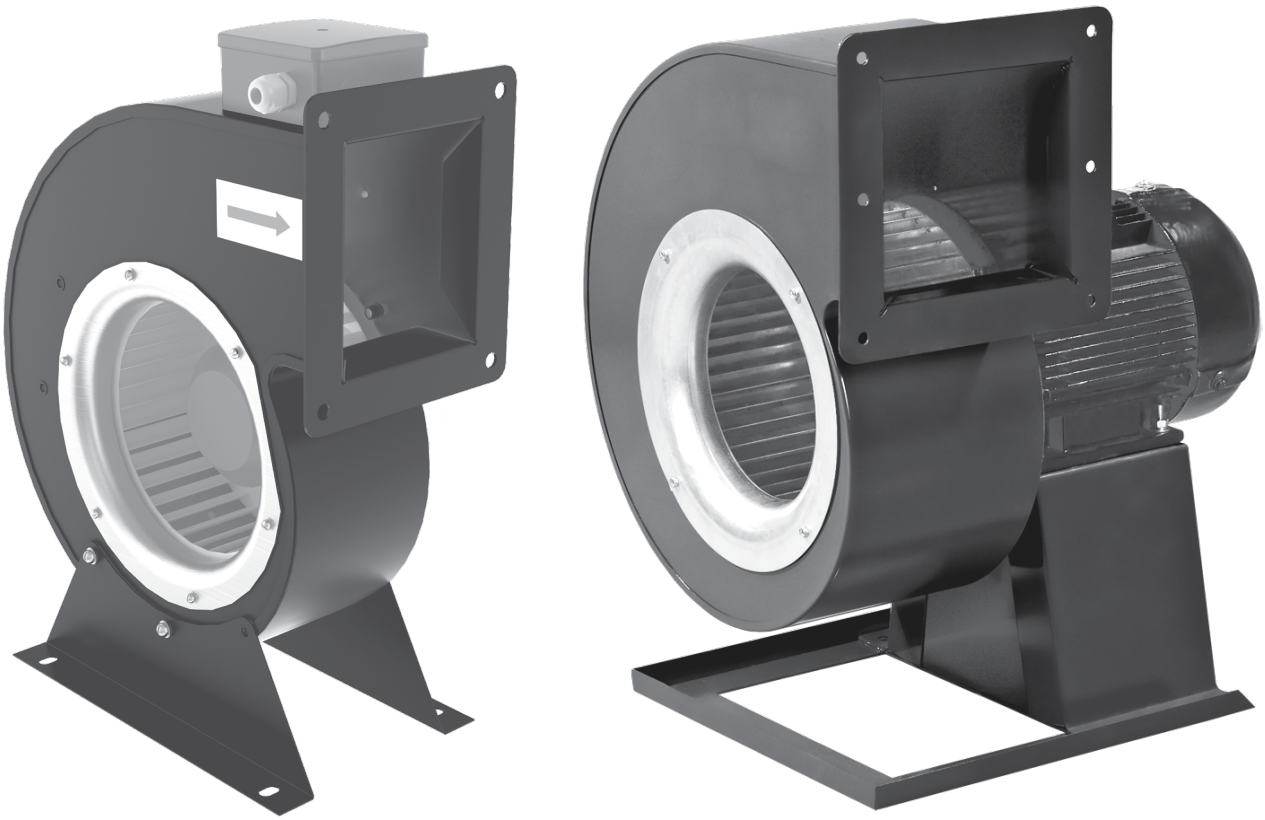

CENTRIFUGAL FAN IN SCROLL CASING

Helix(-z)
S-Vent

EN **USER'S MANUAL**

BLAUBERG

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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 Helix(-z)/S-Vent 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.

SAFETY REQUIREMENTS

This unit is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the unit by a person responsible for their safety.
Children should be supervised to ensure that they do not play with the unit.
This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
Cleaning and user maintenance shall not be done by children without supervision.
Children shall not play with the appliance.

Connection to the mains must be made through a disconnecting device, which is integrated into the fixed wiring system in accordance with the wiring rules for design of electrical units, and has a contact separation in all poles that allows for full disconnection under overvoltage category lll conditions.

Ensure that the unit is switched off from the supply mains before removing the guard.

Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other fuel-burning appliances.

The appliance may adversely affect the safe operation of appliances burning gas or other fuels (including those in other rooms) due to back flow of combustion gases. These gases can potentially result in carbon monoxide poisoning. After installation of the unit the operation of flued gas appliances should be tested by a competent person to ensure that back flow of combustion gases does not occur.

All operations described in this manual must be performed by qualified personnel only, properly trained and qualified to install, make electrical connections and maintain ventilation units.
Do not attempt to install the product, connect it to the mains, or perform maintenance yourself. This is unsafe and impossible without special knowledge.
Disconnect the power supply prior to any operations with the unit.
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.
Connection of the unit to power mains is allowed by a qualified electrician with a work permit for the electric units up to 1000 V after careful reading of the present user's manual.
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.
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 install or use the product until all construction and finishing work has been completed in the room where it is to be installed.
BEFORE INSTALLING ADDITIONAL EXTERNAL DEVICES, READ THE RELEVANT USER MANUALS.

THE PRODUCT MUST BE DISPOSED SEPARATELY AT THE END OF ITS SERVICE LIFE.

DO NOT DISPOSE THE UNIT AS UNSORTED DOMESTIC WASTE.

PURPOSE

Centrifugal fans in scroll casing are designed for supply and extract ventilation of residential, public and industrial premises.
The fan is designed for floor mounting.
The unit is rated for continuous operation.
Transported air must not contain any flammable or explosive mixtures, evaporation of chemicals, sticky substances, fibrous materials, coarse dust, soot and oil particles or environments favourable for the formation of hazardous substances (toxic substances, dust, pathogenic germs).

DELIVERY SET

Name	Quantity
Fan	1 pc.
User's manual	1 pc.
Mounting bracket (for the Helix models)	1 pc.
Packing box	1 pc.

DESIGNATION KEY

S-Vent 120x62 -0.25 -2 E -L 0 T 400 V/50 Hz

Unit voltage
_: 230 V/50 Hz for single-phase motors
400 V/50 Hz: for three-phase motors
230/60 Hz: supply voltage 230 V, power frequency 60 Hz
400/60 Hz: supply voltage 400 V, power frequency 60 Hz
Voltage, V / Frequency, Hz

Options
_: model for temperate climate
T: model for tropical climate
M: model for marine climate

Rotation angle of the casing

Casing design
R – right-hand
L – left-hand

Phases
_ – universal
E – single phase
D – three-phase

Pole number

Motor power [kW]

Impeller width [mm]

Impeller diameter [mm]

Unit designation
S-Vent – centrifugal fan with an external motor

Helix 140x60 2 E max

Options
_: by default
max: high-powered motor

Phases
E: single-phase motor

Number of poles

Impeller width [mm]

Impeller diameter [mm]

Unit name

Helix: centrifugal fan in a scroll casing with an external rotor motor.
Helix-z: centrifugal fan in a scroll casing with an external rotor motor (galvanized steel casing).

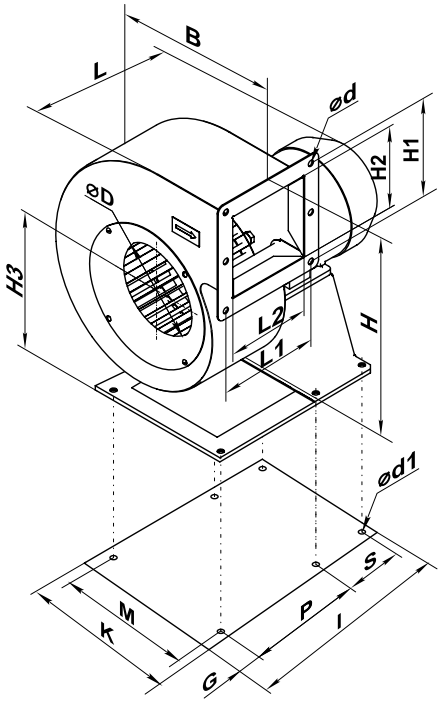
TECHNICAL DATA

The unit is designed for indoor application at ambient temperature from -20 °C up to +40 °C and relative humidity of 80 %.
The unit design is constantly being improved, so some models can slightly differ from those ones described in this manual.
The unit is rated as a Class I electrical appliance.
Ingress protection rating against access to hazardous parts and water ingress:

- IPX4 for Helix models
- IP54 for S-Vent models.

NEVER TEST RUN OR OPERATE THE FAN, WHICH IS NOT CONNECTED TO THE VENTILATION SYSTEM, IF THE AIR FLOW RATE AND THE CURRENT CONSUMPTION EXCEED THE MAXIMUM VALUE FOR THE GIVEN STANDARD SIZE (SEE TECHNICAL PARAMETERS ON THE LABEL), AND IN THE ABSENCE OF THERMAL PROTECTION OF THE MOTOR

OVERALL DIMENSIONS AND VARIANTS OF THE S-Vent FAN CASING POSITIONS



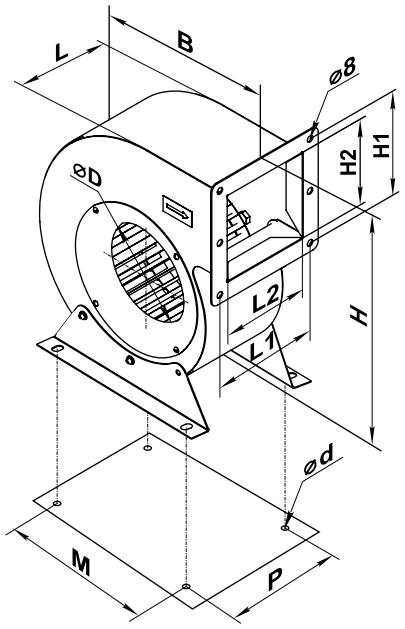
POSSIBLE VARIANTS OF THE S-Vent FAN CASING POSITIONS (View on the supply side)

Impeller rotation rightwards		Impeller rotation leftwards	
R 0°	R 180°	L 0°	L 180°
R 45°	R 225°	L 45°	L 225°
R 90°	R 270°	L 90°	L 270°
R 135°	R 315°	L 135°	L 315°

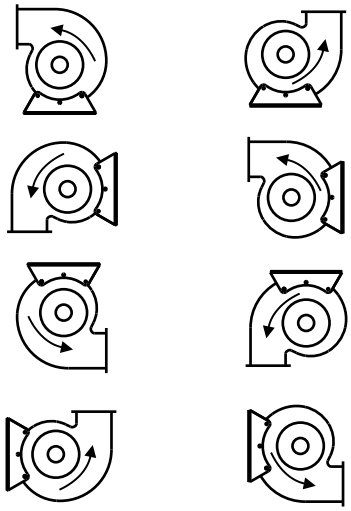
Model	Dimensions [mm]																	Weight [kg]
	Ø D	Ø d	Ø d1	B	H	H1	H2	H3	L	L1	L2	P	M	I	G	K	S	
S-Vent 140x74-0.25-4	140	8	10	242	323	125	92	144	309	125	95	124	220	234	18	253	80	9.3
S-Vent 140x74-0.37-2	140	8	10	242	323	125	92	144	309	125	95	124	220	234	18	253	80	9.3
S-Vent 160x74-0.55-4	160	8	10	277	373	134	106	173	356	134	104	141	220	260	17	252	90	12.7
S-Vent 160x74-0.75-2	160	8	10	277	373	134	106	173	356	134	104	141	220	260	17	252	90	13.0
S-Vent 180x74-0.55-4	180	10	10	311	414	143	120	193	365	143	114	146	270	270	22	314	90	13.5
S-Vent 180x74-1.1-2	180	10	10	311	414	143	120	193	365	143	114	146	270	270	22	314	90	14.5
S-Vent 200x93-0.55-4	200	10	10	345	436	160	134	193	380	160	129	158	270	284	24	315	90	15.2
S-Vent 200x93-1.1-2	200	10	10	345	436	160	134	193	380	160	129	158	270	284	24	315	90	16.2
S-Vent 225x103-1.1-4	225	10	12	388	507	178	151	232	432	172	141	174	275	316	27	330	100	21.2
S-Vent 225x103-2.2-2	225	10	12	388	507	178	151	232	432	172	141	174	275	316	27	330	100	24.2
S-Vent 240x114-2.2-4	240	10	12	414	568	186	161	282	461	186	156	195	275	362	27	330	125	30.5
S-Vent 240x114-3.0-2	240	10	12	414	568	186	161	282	461	186	156	195	275	362	27	330	125	31.4
S-Vent 250x127-1.5-6	250	10	12	431	594	202	168	292	473	202	166	206	300	373	27	355	125	33.0
S-Vent 250x127-2.2-4	250	10	12	431	594	202	168	292	473	202	166	206	300	373	27	355	125	32.2
S-Vent 250x127-5.5-2	250	10	12	431	614	202	168	312	517	202	166	213	300	397	27	355	140	40.0
S-Vent 280x127-1.5-6	280	10	12	483	626	225	189	292	503	231	196	243	300	410	27	355	125	35.1
S-Vent 280x127-2.2-4	280	10	12	483	626	225	189	292	503	231	196	243	300	410	27	355	125	34.2
S-Vent 280x127-5.5-2	280	10	12	483	646	225	189	312	545	231	196	243	300	427	27	355	140	42.4

S-Vent 315x143-2.2-6	315	10	15	543	731	250	213	353	568	255	216	268	350	452	27	405	140	46.8
S-Vent 315x143-4.0-4	315	10	15	543	731	250	213	353	568	255	216	268	350	452	27	405	140	49.8
S-Vent 355x143-2.2-6	355	10	15	611	817	275	241	403	566	255	214	253	350	442	32	405	140	49.0
S-Vent 355x143-4.0-4	355	10	15	611	817	275	241	403	566	255	214	253	350	442	32	405	140	51.0
S-Vent 400x183-1.5-8	400	10	15	689	870	310	272	403	619	310	268	313	400	497	27	455	140	57.1
S-Vent 400x183-2.2-6	400	10	15	689	870	310	272	403	619	310	268	313	400	497	27	455	140	54.1
S-Vent 400x183-5.5-4	400	10	15	689	882	310	272	414	662	330	289	341	400	525	27	455	140	69.5
S-Vent 450x203-3.0-8	450	10	15	774	985	345	306	464	690	352	315	351	450	550	42	530	140	77.8
S-Vent 450x203-4.0-6	450	10	15	774	985	345	306	464	690	352	315	351	450	550	42	530	140	76.5
S-Vent 450x203-11.0-4	450	10	15	774	1005	345	306	484	722	352	315	371	450	608	42	530	178	105.0
S-Vent 500x229-5.5-8	500	11	15	860	1115	390	341	534	761	401	353	408	500	645	42	580	178	85.0
S-Vent 500x229-7.5-6	500	11	15	860	1115	390	341	534	761	401	353	408	500	645	42	580	178	86.0
S-Vent 500x229-11.0-4	500	11	15	860	1115	390	341	534	761	401	353	408	500	645	42	580	178	107.0

OVERALL DIMENSIONS AND VARIANTS OF THE Helix(-z) FAN CASING POSITIONS

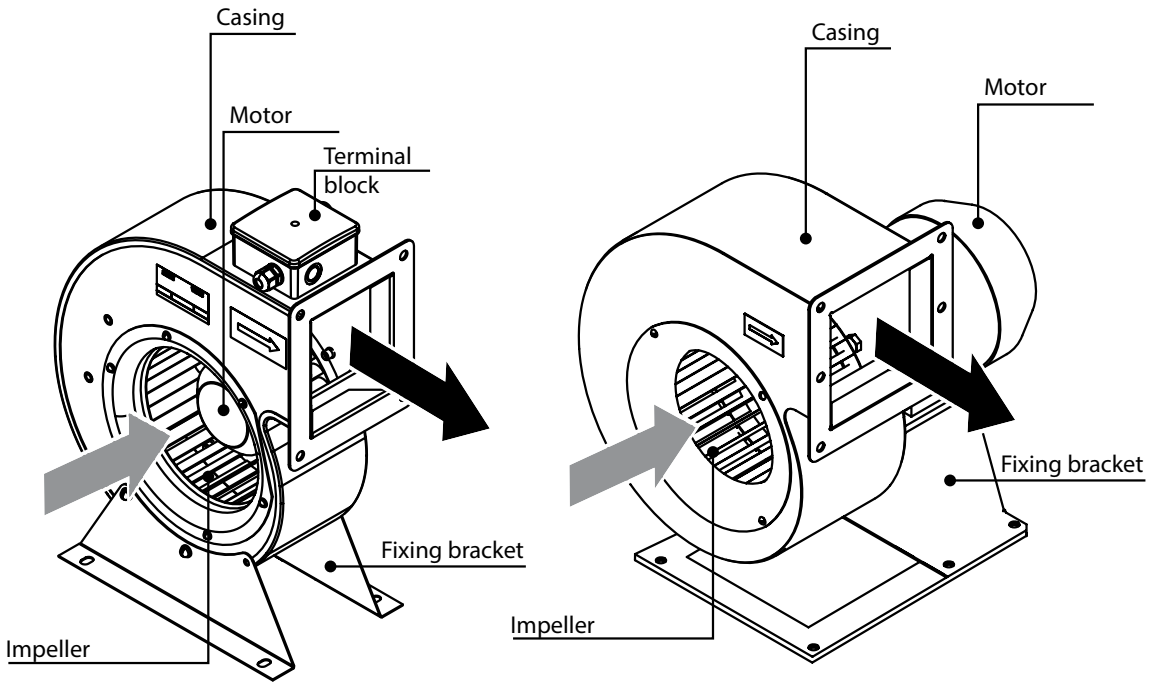


POSSIBLE VARIANTS OF THE Helix(-z) FAN CASING POSITIONS
(View on the supply side)



Model	Dimensions [mm]											Weight [kg]
	Ø D	Ø d	B	H	H1	H2	L	L1	L2	P	M	
Helix(-z) 140x60 2E	140	9	243	287	125	93	85	107	75	116	150	3.5
Helix(-z) 160x62 2E	160	9	277	324	136	106	89	112	82	122	200	4.6
Helix(-z) 160x90 2E	160	9	277	324	136	106	136	158	127	168	200	5.5
Helix(-z) 180x92 4E	180	9	311	360	150	120	145	166	137	181	230	7.1
Helix(-z) 200x80 4E	200	9	345	398	165	134	116	140	108	150	240	7.5
Helix(-z) 200x80 4E max	158	9	345	443	165	133,8	128,6	140	120,1	161,6	240	9,76
Helix(-z) 200x102 4E	200	9	345	398	165	134	152	175	143	185	240	8.0
Helix(-z) 225x102 4E	225	11	365	441	210	171	145	170	137	178	250	11.9
Helix(-z) 250x102 4E	250	11	410	485	230	191	165	190	157	198	270	16.3
Helix(-z) 250x140 4E	250	11	410	485	230	191	205	230	197	238	270	16.3

DESIGN AND OPERATING PRINCIPLE



Helix(-z) **S-Vent**

The **S-Vent** fan is enclosed in a metal casing. The electric motor and the air intake ring are fixed to the casing through the flange.
The impeller is fastened to the drive shaft.
The fixing bracket for the fan mounting is attached to the motor bottom.
The **S-Vent** fans are available in the right- and left-hand modifications.
In the first case the impeller has clockwise rotation and in the second case the impeller has counter-clockwise rotation, view on the supply side.

The **Helix(-z)** fan is enclosed in a metal casing. The impeller and the electric motor are bolted to the flange.
The terminal box for connection to power mains is located on the top of the casing. The capacitor is enclosed in the terminal box.
The fan fixation is performed with fixing brackets.

INSTALLATION AND SET-UP

After the fan unpacking, prior to the mounting:

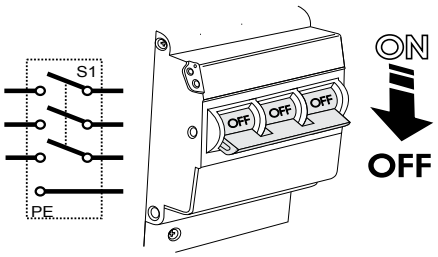
- Read carefully the user's manual and the mounting, start-up, operating and servicing guidelines.
- Make sure that the fan impeller rotates freely.
- Make sure there is no condensate on the motor.
- Check the electrical resistance of insulation between the motor windings and between each winding and the motor casing.

Follow the safety regulations during the make-ready procedures and fan operation.

MOUNTING STEPS FOR THE S-Vent FAN

- Make sure that the motor is disconnected from power supply (Fig. 1).
- Bore holes and fasten the fixing bracket using the appropriate fasteners (i.e. expansion anchors). In case of need, use the vibration dampers SI-G or SI-F (specially ordered accessories), (Fig. 3).
- Provide reliable grounding of the fan (Fig. 4).
- Connect the air ducts to the fan. On the air intake side install the flange FRZ-SV (specially ordered accessories) (Fig. 5) or the protecting grille SG-SV (Fig. 6).

1.



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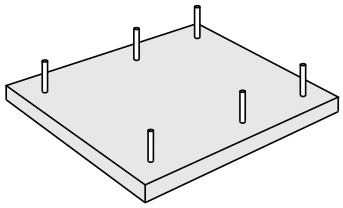

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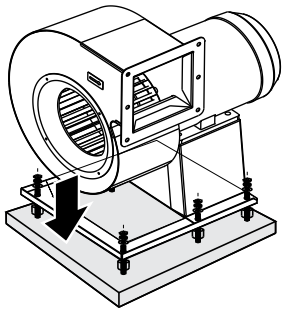

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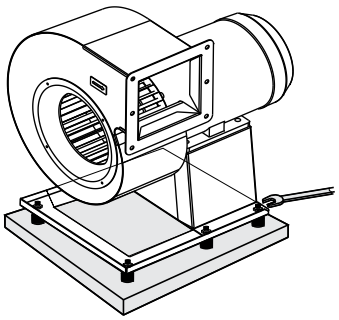

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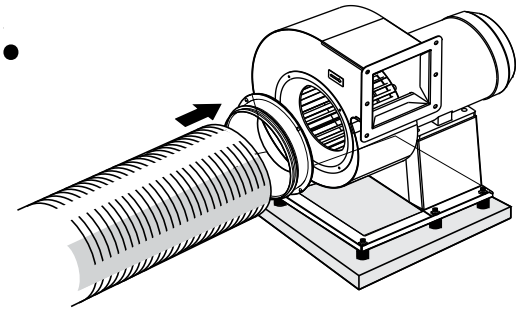

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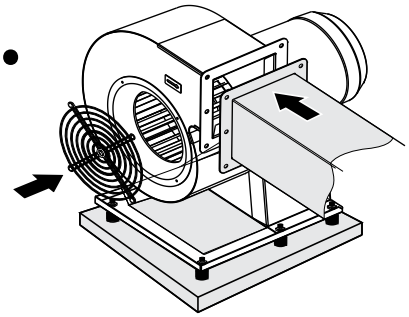
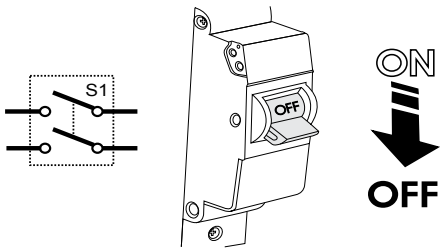


MOUNTING STEPS FOR THE Helix(-z) FAN

- Make sure that the motor is disconnected from power supply (Fig. 1).
- Mark holes on the mounting surface for mounting of the fixing bracket (Fig. 2).
- Bore holes and fasten the fixing bracket using the appropriate fasteners (i.e. expansion anchors). In case of need, use the vibration dampers SI-G or SI-F (specially ordered accessories) (Fig. 3).
- Provide reliable grounding of the fan (Fig. 4).
- Connect the air ducts to the fan. On the air intake side install the flange FRZ-SV (specially ordered accessories) (Fig. 5) or the protecting grille SG-SV (Fig. 6).

1.



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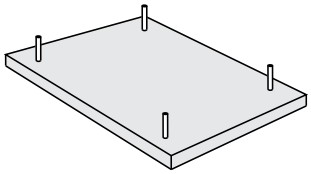

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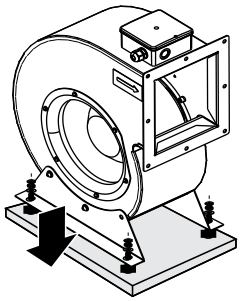

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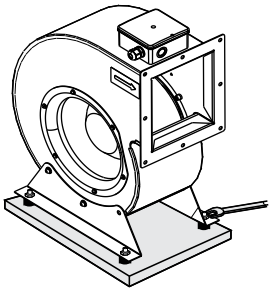

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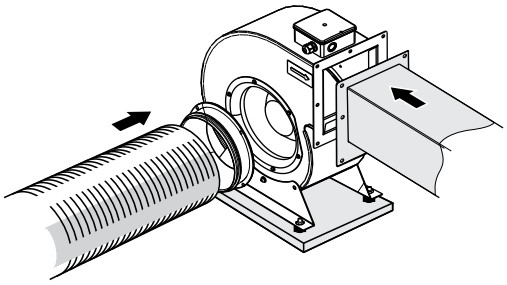

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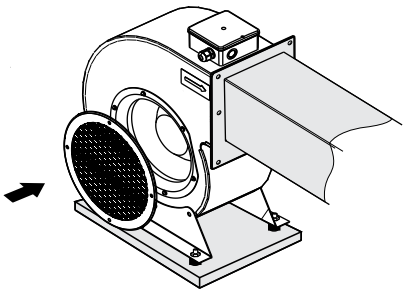


After installing the unit, you need to make sure that the fan impeller rotates freely.

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.

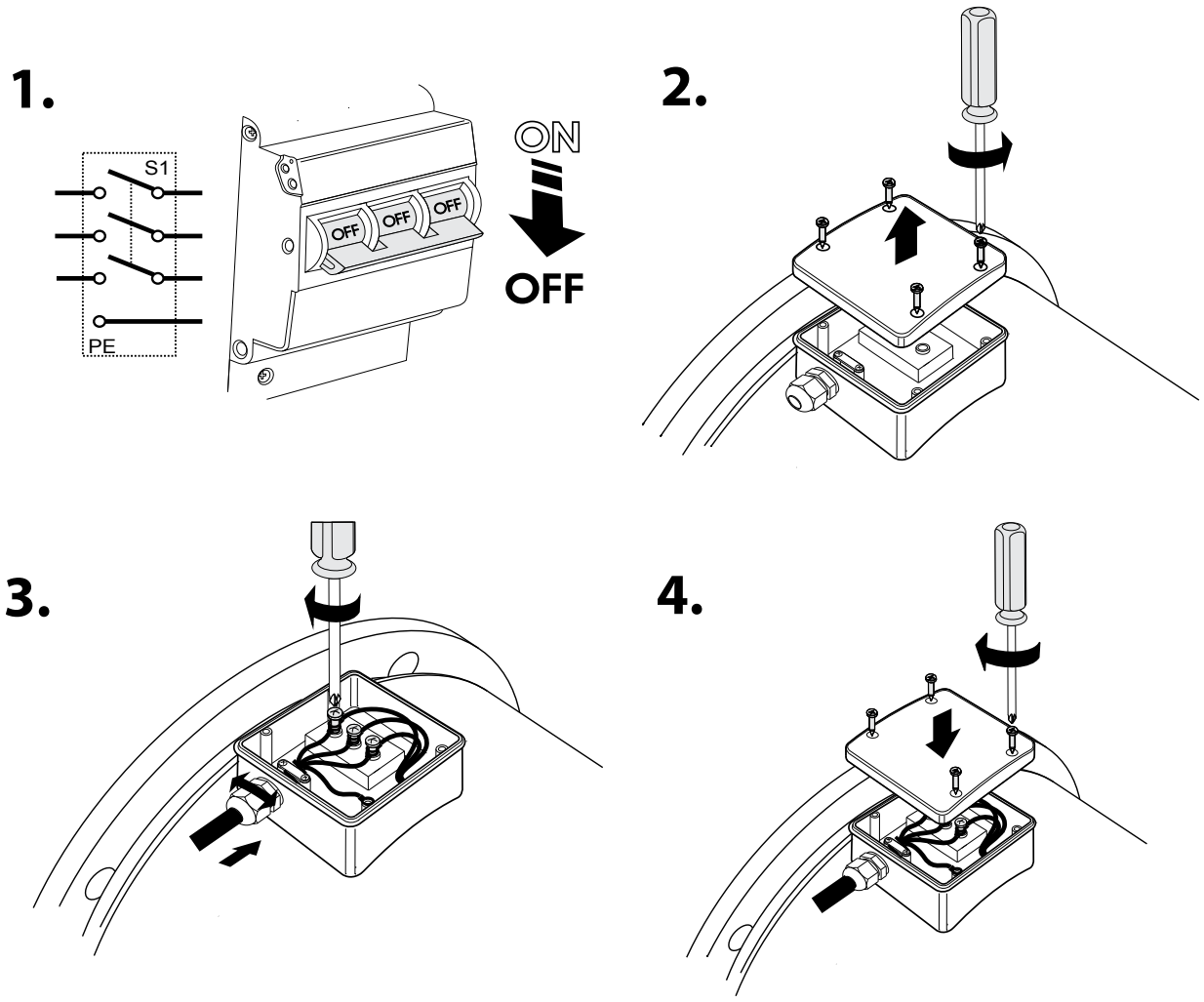
ANY TAMPERING WITH THE INTERNAL CONNECTIONS IS PROHIBITED AND WILL VOID THE WARRANTY.

The Helix(-z) fan is rated for connection to single-phase alternating current 230 V/50 (60) Hz power supply. The S-Vent fan is rated for connection to three-phase alternating current 400 V/50 (60) Hz power supply.
The fan must be connected to power mains using durable, insulated and heat-resistant electric conductors (cables, wires).
Connect the unit to power mains through the external automatic circuit breaker with a magnetic trip integrated into the fixed wiring system.
The installation place of the circuit breaker must provide unhampered access to the unit for its emergency shutdown.
For selection of the rated trip current of the automatic circuit breaker refer to the fan technical data table.
The wire cross section is stated in the table.
The actual conductor cross section selection must be based on the maximum permissible wire temperature depending in the wire type, insulation, length and installation method.

Fan model	Minimum wire cross section [mm^2]
All Helix(-z) models	1.5
S-Vent 140 .. S-Vent 180	1.5
S-Vent 200 .. S-Vent 400	2.5
S-Vent 450 .. S-Vent 500	4

WIRING STEPS FOR THE S-Vent FAN

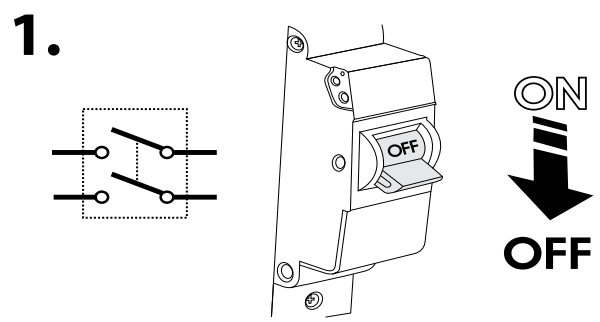
- Make sure the power cable is disconnected from power supply (Fig. 1).
- Take off the lid of the terminal box located on the motor casing (Fig. 2).
- Route the power cable wires through the cable gland on the terminal box, then strip the wires for 7-8 mm (Fig. 3).
- Connect the wires to the terminal box in compliance with the wiring diagram and considering the terminal marking. The three-phase motors must be star-connected (Fig. 3 and 4). For doing that insert the wires into the metal part of the terminals against insulation stop and fix those with the screws.
- Cover the terminal box with the lid (Fig. 4).

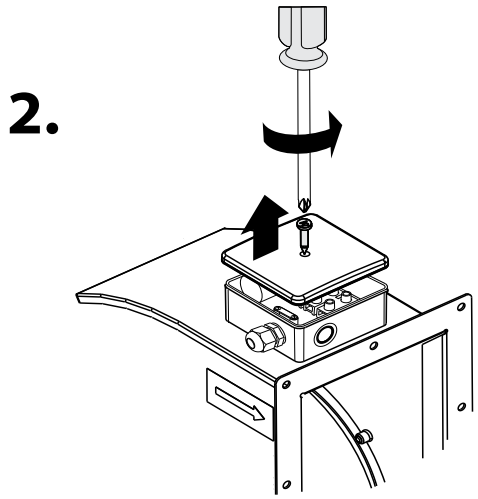


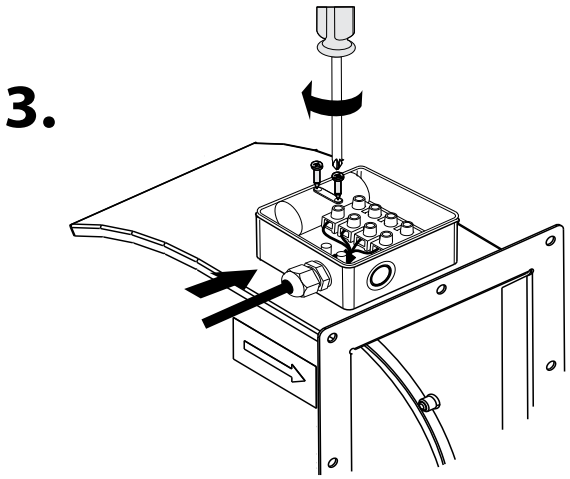
The air direction must match the pointer direction of the fan casing.
To check the impeller rotation direction turn the fan on for a short run.
If the impeller rotation direction is wrong, change any two phase conductors on the motor terminals. For that change the respective wires on the terminal block in the terminal box.

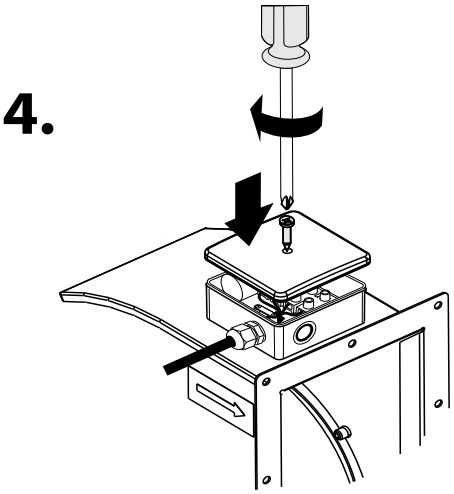
WIRING STEPS FOR THE Helix(-z) FAN

- Make sure the power cable is disconnected from power supply (Fig. 1).
- Take off the lid of the terminal box located on the motor casing (Fig. 2).
- Route the power cable wires through the cable gland on the terminal box, then strip the wires for 7-8 mm (Fig. 3).
- Connect the wires to the terminal box in compliance with the wiring diagram and considering the terminal marking (Fig. 3). For doing that insert the wires into the metal part of the terminals against insulation stop and fix those with the screws.
- Cover the terminal box with the lid (Fig. 4).



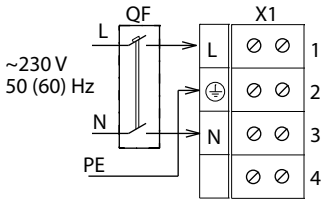






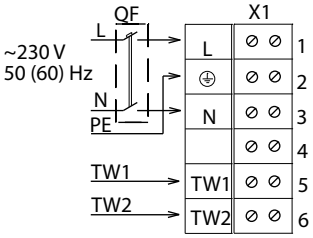
WIRING DIAGRAMS

1. Helix(-z)

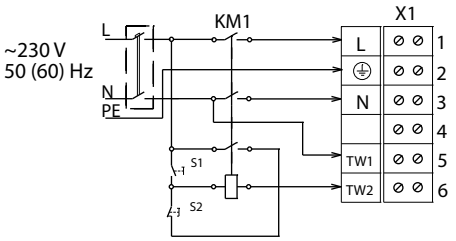


QF: automatic circuit breaker
(not included in the delivery set)
X1: terminal block

2. Helix(-z) with thermal switch

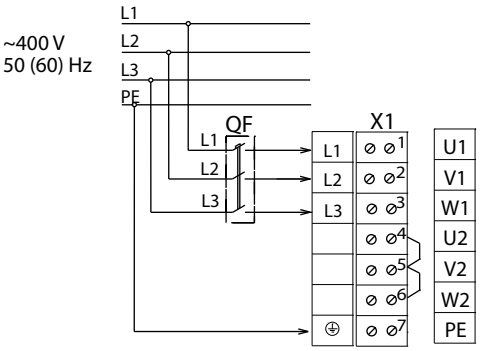


3. Helix(-z) with magnetic starter and a thermal switch



QF: automatic circuit breaker
KM1: magnetic starter
S1, S2: control buttons
(QF, KM1, S1, S2 are not included in the delivery set)
X1: terminal block

4. S-Vent



QF: automatic circuit breaker (not included in the delivery set)
X1: terminal block

Wiring example for the **Helix(-z)** fan with external leads of the motor overheating protection and a magnetic starter is shown in Fig. 3.
The terminals **TW1**, **TW2** are the leads of the normally closed contact of the motor overheating protection.
This contact must be connected in series to the power circuit of the magnetic starter coil that starts the motor.
In case of the motor overheating, the contact is opened and breaks power supply to the starter coil. This way the motor is stopped.

TECHNICAL MAINTENANCE

Disconnect the unit from power supply prior to any maintenance operations. Make sure the rotating parts have come to a full stop.
The fan maintenance includes regular cleaning of the surfaces of dust and dirt.

Clean the impeller blades each 6 months.

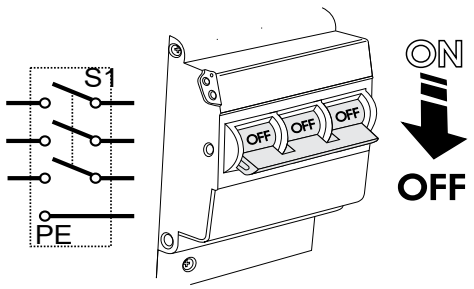
Impeller blades cleaning is as follows:

- Disconnect the fan from power supply.
- Provide access to the impeller blades.
- S-Vent models: loosen the screws and remove the air intake ring.
- Helix(-z) models: loosen the screws and remove the motor-impeller block.
- Clean the impeller blades using a soft dry brush or compressed air.
- In case of high contamination wet cleaning is recommended. Clean the impeller blades with a soft cloth wetted in a neutral detergent solution. Avoid liquid dripping on the motor!

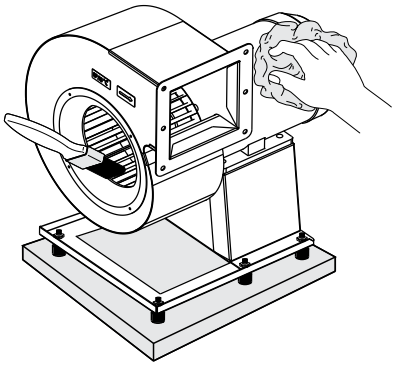
After cleaning perform all the operations in the reverse order.

S-Vent

1.

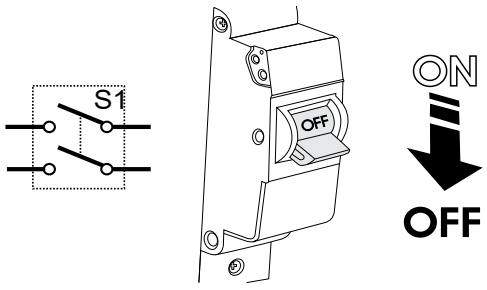


2.

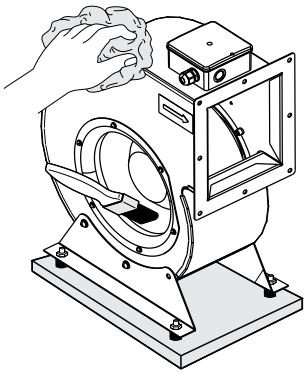


Helix(-z)

1.



2.



MAINTENANCE INSTRUCTIONS

Perform regular maintenance of the fan to ensure its reliable, safe and efficient operation.
General maintenance includes:

- Daily maintenance.
- Maintenance after each 1000 operating hours.
- Current repair and maintenance after each 10 000 operating hours.
- Overhaul repair after 20 000 operating hours.

All the maintenance operations must be carried out according to the schedule above, no matter of the fan operating condition.
Daily maintenance must be performed by a mechanician.
Current repair operations and overhaul repair operations must be performed by a plumber and an electrician responsible for the equipment repair and operation.

Steps for daily maintenance of the fan:

- Check the bolt tightening.
- Check reliability of the earth connection.
- Check the fan for abnormal noise.

Steps for maintenance after each 1000 operating hours:

- Fulfil all the daily maintenance operations.
- Troubleshoot any faults of bolt and welded connections.
- Check the clearance between the impeller and the capacitor.

Steps for current repair:

- Fulfil all the above operations of the maintenance after each 1000 operating hours.
- Clean the casing and the impeller.

Steps for overhaul repair:

- Disconnect the air ducts from the fan.
- Disassemble the fan assembled units.
- Assemble the fan units using the new or repaired parts.
- Check the bearing grease and perform adjustment and test running.

TROUBLES AND TROUBLESHOOTING

TROUBLE	POSSIBLE REASONS	TROUBLESHOOTING
The fan does not start.	No power supply.	Check the electric connections and troubleshoot a connection error, if applicable.
	Motor jam.	Turn the fan off. Troubleshoot clogging of the impeller. Restart the fan.
Automatic circuit breaker tripping during the unit turning on.	Increased consumption of electric current due to a short circuit in the electrical circuit.	Turn the fan off. Contact the seller of the unit.
High noise, vibrations.	Contaminated impeller.	Clean the impeller blades.
	Loose screw connection.	Check the screw connection and tighten the screws if required.
	Resonance with a mounting construction.	Install the matching vibration dampers VVCr and VVCp for the fan model.

STORAGE AND TRANSPORTATION REGULATIONS

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range from +5 ˚C to +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 dismounted 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.
- Damage to the unit casing 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

CERTIFICATE OF ACCEPTANCE

Unit Type	Centrifugal fan in scroll casing
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	

Seller's Stamp

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:		

Installation Stamp

WARRANTY CARD

Unit Type	Centrifugal fan in scroll casing
Model	
Serial Number	
Manufacture Date	
Purchase Date	
Warranty Period	
Seller	

Seller's Stamp

BLAUBERG

Manufacturer: Ventilation Systems LLC,
Ukraine, Kyiv, 1 M. Kotsyubynskoho Street
Address of production facilities:
Ukraine, Kyiv Region, Fastiv District,
Boyarka, 36 Sobornosti Street

www.blaubergventilatoren.de
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