

AXIAL FAN



Sileo DC 100

USER'S MANUAL





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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 Sileo DC 100 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.

The information in this user's manual is 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.

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READ THE USER'S MANUAL CAREFULLY BEFORE PROCEEDING WITH INSTALLATION WORKS.

COMPLIANCE WITH THE MANUAL REQUIREMENTS ENSURES RELIABLE OPERATION AND LONG

SERVICE LIFE OF THE UNIT.

KEEP THE USER'S MANUAL AVAILABLE AS LONG AS YOU USE THE UNIT. YOU MAY NEED TO RE-READ THE INFORMATION ON THE PRODUCT SERVICING.





FOLLOW THE USER'S MANUAL REQUIREMENTS TO ENSURE DURABLE AND TROUBLE-FREE OPERATION OF THE UNIT.

Disconnect the unit from 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 and maintenance. The present user's manual should be carefully read before beginning works.

- Single-phase power mains must comply with the acting local electrical norms and standards.
- Fixed electrical wiring must be equipped with an automatic circuit breaker.
- The unit must be connected to power mains through a QF automatic circuit breaker integrated into the fixed wiring system. The gap between the circuit breaker contacts on all poles must be not less than 3 mm. Check the unit for any visible damages of the impeller and the casing 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 the motor jam and noisy operation. Misuse of the unit and any unauthorised modifications are not allowed.
- Take steps to prevent ingress of smoke, carbon monoxide, and other combustion products into the room through open chimney flues or other fire-protection devices. Sufficient air supply must be provided for proper combustion and exhaust of gases through the chimney of fuel burning



equipment to prevent back drafting. 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 unit is allowed to be used by children aged from 8 years old and above and persons with reduced physical, sensory, or mental capabilities or no experience and knowledge provided that they have been given supervision or instruction regarding safe use of the unit and understand the risks involved.
- Do not allow children to play with the unit.



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

DO NOT DISPOSE THE UNIT AS UNSORTED MUNICIPAL WASTE.



DELIVERY SET

Fan	1 pc.
Screws and dowels	4 pcs
Plastic screwdriver (only for the models with a timer)	1 pc.
User's manual	1 pc.
Packing box	1 pc.

BRIEF DESCRIPTION

Sileo DC 100 is an axial fan for extract ventilation of small and medium-sized domestic spaces heated during the cold season. The fan fits 100 mm air ducts. The fan is equipped with a back valve to prevent back air flow during the fan standby.

OPERATION GUIDELINES

The fan is connected to 220...240 V/50 (60) Hz or 12 V/50 Hz single-phase AC mains depending on the model and is designed for continuous operation without disconnection from the electric mains. The air flow direction must match the arrow on the fan casing.

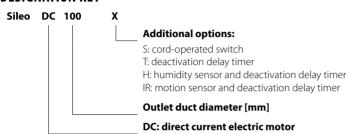
Ingress protection rating against access to hazardous parts and water ingress is IP45.

The fan is suitable for operation at ambient temperatures ranging from +1 °C to +45 °C.

The fan is rated as a Class II electrical appliance (220-240 V/50 (60) Hz).



DESIGNATION KEY



INSTALLATION AND SET-UP

The fan can be mounted to the ceiling or to a wall with air extraction into a ventilation shaft or a matching diameter round air duct (Fig. 2).

Mounting configurations with direct air discharge upwards are not allowed (Fig. 2).

The fan installation steps are as follows:

- **step 1** power off the electric mains and make sure that it is completely de-energised (Fig. 3)
- step 2 run the power cable to the vent hole (Fig. 4)
- **step 3** remove the face panel of the fan. Then remove the lid which protects the circuit board (Fig. 5)
- **step 4** mark and drill fan mounting holes and mount the fan (Fig. 6-8)
- **step 5** connect the fan to the electric mains according to the connections diagram (Fig. 12)
- step 6 replace the lid which protects the circuit board (Fig. 9) and the face panel on the fan casing (Fig. 10)
- **step 7** apply electric power to the fan (Fig. 11)

Connection diagram terminal key:

L — phase (220-240 V only)

S — external switch

N — neutral (220-240 V only)

QF — automatic switch

LT (ST) — timer control circuit



FAN OPTIONS

Sileo DC 100 (S)T — fans are equipped with a deactivation delay timer. The timer activates upon control voltage application to input terminal **LT** by an external switch (e.g. indoor light switch). Upon control voltage removal the fan continues to operate for the period of time set by means of a DIP switch.

ST models are equipped with a cord-operated switch.

Sileo DC 100 IR — fans are equipped with a motion sensor and a deactivation delay timer. The fan operates in one of the four modes set by a DIP switch.

Sileo DC 100 (S)H — fans are equipped with a humidity sensor and a deactivation delay timer. The fan operates in one of the four modes set by a DIP switch.

SH models are equipped with a cord-operated switch.

FAN SETUP



THE TIMER CIRCUIT IS LIVE. MAKE SURE THE FAN IS DISCONNECTED FROM POWER SUPPLY.

The fan is set up by changing the DIP switch position. To access the DIP switch take off the face panel and remove the rubber plug (Fig. 13). The fan is supplied with a special plastic screwdriver to toggle the DIP switch without damaging its components.



DO NOT USE A METAL SCREWDRIVER, KNIFE, ETC. FOR ADJUSTMENT OPERATIONS NOT TO DAMAGE THE CIRCUIT BOARD.



Sileo DC 100 (S)T

Operation mode		Speed	
Operation via an external switch	Continuous fan operation	Low fan speed	High fan speed
ON DIP	ON DIP	ON DIP	ON DIP
Deactivation delay timer			
Timer off	5 minute delay	15 minute delay	30 minute delay
ON DIP 1 2 3 4	ON DIP 1 2 3 4	ON DIP 1 2 3 4	ON DIP 1 2 3 4

Sileo DC 100 (S)H, Sileo DC 100 (S)IR

Operation mode			
Upon sensor actuation or switch operation the fan switches to low speed.	Upon sensor actuation or switch operation the fan switches to high speed.	The fan continuously operates at low speed. Upon sensor actuation or switch operation the fan switches to high speed.	The fan is disabled. Upon sensor actuation the fan switches to low speed. Upon sensor actuation while the fan is enabled the fan switches to high speed.
ON DIP	ON DIP 1 2 3 4	ON DIP	ON DIP
Deactivation delay timer			
Timer off The delay for Sileo DC (S)IR is 30 seconds.	5 minute delay	15 minute delay	30 minute delay
ON DIP	ON DIP 1 2 3 4	ON DIP	ON DIP



Humidity threshold			
60 %	70 %	80 %	90 %
ON DIP 1 2 3 4 5 6	ON DIP 1 2 3 4 5 6	ON DIP	ON DIP 1 2 3 4 5 6

MAINTENANCE

The fan must undergo technical maintenance at least every 6 months.

Maintenance steps:

- power off the fan and make sure that it is completely de-energised (Fig. 14)
- remove the face panel and clean the fan with a soft dry cloth or a brush (Fig. 15)
- rinse the face panel with tap water (Fig. 16)
- wipe the fan surfaces dry
- replace the face panel onto the fan
- · re-connect the electric power (Fig. 17)

WARNING! Avoid water dripping on the electric components.

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 vapours 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 room 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 Council Directive 2014/30/EU, Low Voltage Directive 2014/35/EU and CE-marking 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 60 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.
- 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.

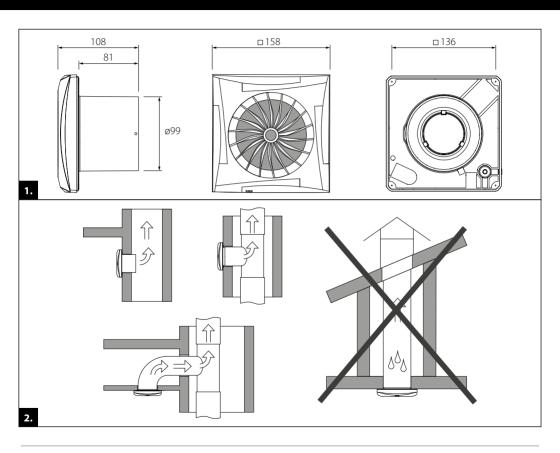


FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT.

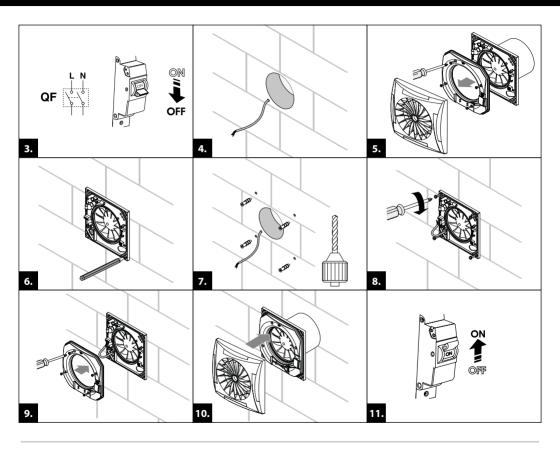


USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP.

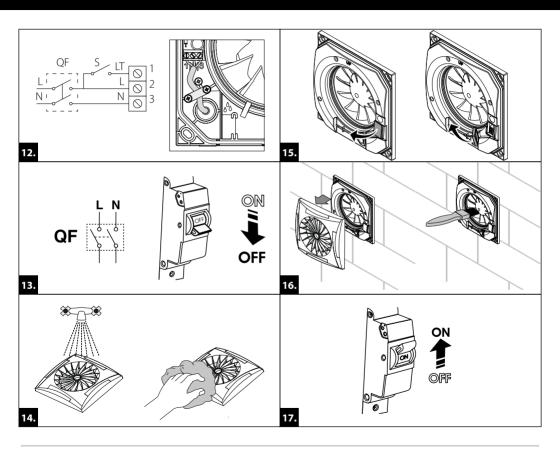




















Approval mark	Sold (name and stamp of the seller)	
Manufacturing date	Sale date	

S T Sileo DC 100 IR H





