

EN

AXIAL FAN
User's manual

www.ventilation-system.com



Quiet-Disc

 **VENTS**

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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 the purpose, technical details, operating principle, design, and installation of the Quiet-Disc unit (-s) and all of its (their) 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

The unit described herein is an axial fan for exhaust ventilation of small to medium-sized premises heated during winter. The fan is designed for connection to \varnothing 100, 125 and 150 mm air ducts. The fans with the connecting diameter 100 and 125 mm are equipped with a single-speed motor and the fan with the connecting diameter 150 mm is equipped with a double-speed motor.

The Quiet-Disc fan is equipped with a high-powered motor.

The fan is equipped with a back valve that prevents air back drafting when the fan is off.

OPERATION GUIDELINES

The fan is rated for connection to single-phase AC 220...240 V, 50/60 Hz power mains.

Air motion direction in the system must match the pointer on the fan casing.

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

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

The unit is rated as a Class II electrical appliance.

FAN OPTIONS

Quiet-Disc V — the fan is turned on and off with a built-in pull cord switch.

Quiet-Disc T

For 100 and 125 models

After turning off the switch, for example, a light switch, the fan keeps operating for a set turn-off delay time period, adjustable from 2 to 30 minutes.

For 150 and 150 Extra models

After turning on the external switch, for example, a light switch, the fan is turned on or is switched to high speed in a set turn-on delay time period, adjustable from 0 to 2 minutes. After the switch is turned off the fan keeps operating for a set turn-off delay time period, adjustable from 2 to 30 minutes.

Quiet-Disc Duo T

For 100 and 125 models

The fan is equipped with a turn-off delay timer and an interval timer.
The operation algorithm is shown in Fig. 20.

Quiet-Disc T1

Only for 100 and 125 models

After turning on the switch, for example, a light switch, the fan is switched on in a set turn-on delay time period, adjustable from 0 to 2 minutes. After the switch is turned off the fan keeps operating for a set turn-off delay time period, adjustable from 2 to 30 minutes.

Quiet-Disc TH

For 100 and 125 models

The fan is switched on as the indoor humidity exceeds set level, adjustable from 60 % up to 90 %.

As the indoor humidity level drops down below the set point, the fan keeps operating for a set turn-off delay time period, adjustable from 2 to 30 minutes. After the switch is turned off the fan keeps operating for a set turn-off delay time period, adjustable from 2 to 30 minutes.

For 150 and 150 Extra models

As the indoor humidity level exceeds the set level, adjustable from 60% up to 90 %, the fan is turned on or is switched to high speed in a set turn-on delay time period, adjustable from 0 to 2 minutes.

As the indoor humidity level drops down the fan keeps operating for a set turn-off delay time period, adjustable from 2 to 30 minutes.

The fan may be manually turned on or switched to high speed with a light switch. The fan is turned on in a set turn-on delay time period, adjustable from 0 to 2 minutes.

After the switch is turned off the fan keeps operating for a set turn-off delay time period, adjustable from 2 to 30 minutes.

Quiet-Disc TP

For 100 and 125 models

Upon activation of the motion sensor the fan is turned on. The motion sensor has a detection range of up to 1-4 m and viewing angle up to 100°. After no more motion is detected the fan keeps operating for a set turn-off delay time period, adjustable from 2 to 30 minutes.

For 150 and 150 Extra models

Upon activation of the motion sensor the fan switches to high speed in a set turn-on delay time period, adjustable from 0 to 2 minutes. The motion sensor has a detection range of up to 1-4 m and viewing angle up to 100°. After no more motion is detected the fan keeps operating for a set turn-off delay time period, adjustable from 2 to 30 minutes.

Quiet-Disc 12

For 100 and 125 models

The fan is rated for connection to safe 12 V/50 Hz power mains.

Possible combination of the fan modifications: **VT, VTH.**

DESIGNATION KEY

Quiet-Disc	Extra	100	Duo	X	X	X	
							Colour
							_ – white
							Red
							Vintage
							Aluminum Lacquer
							Chrome
							Black Sapphire
							Mains parameters
							Additional options:
							V — pull cord switch
							T — turn-off delay timer
							T1 — turn-on and turn-off delay timer
							VT — pull cord switch and turn-off delay timer
							TH — humidity sensor
							VTH — pull cord switch and humidity sensor
							TP — motion sensor
							_ – single-speed motor
							Duo – double-speed motor
							Outlet duct diameter [mm]
							High-powered motor (only for Quiet-Disc 150 models)

MOUNTING AND SET-UP

The fan is designed for vertical or horizontal installation and connection to a ventilation shaft or a round air duct of a matching diameter (Fig. 2).

Caution! In case of vertical mounting the fan must be protected against ingress of rainfalls and condensate inside the fan. Fan installation with direct air discharge upwards is not allowed (Fig. 2). The fan mounting sequence is shown in Fig. 3-11. The fan wiring diagrams and operation algorithm are shown in fig. 12-32.

Caution! Only for Quiet-Disc 150, Quiet-Disc 150 V, Quiet-Disc Extra 150, and Quiet-Disc Extra 150 V models.

Parallel power supply to the terminals 1 and 2 (Fig. 12) is not allowed! That will result in the fan breakdown. The operating mode selection for the Quiet-Disc 150/Quiet-Disc Extra 150 T, TH, VT, VTH, and TP models is shown in Fig. 25.

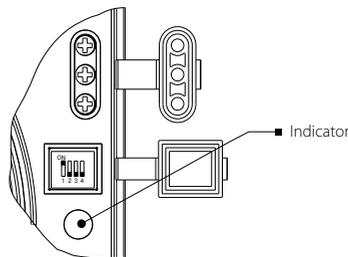
Caution! Only for Quiet-Disc 100/125 T1 and Quiet-Disc 150/Quiet-Disc Extra 150 T, TH, VT, VTH, and TP models.

If the turn-on delay timer was activated by the external switch, light switch, motion sensor or the humidity sensor and during the timer countdown the triggered action is cancelled, the external switch is turned off, the motion is no more detected or the indoor humidity level drops down below the set point then the fan operates in the previous operation mode.

OPERATION INDICATION

Only for Quiet-Disc 150/Quiet-Disc Extra 150 T, TH, VT, VTH, and TP models.

1. The light indicator blinks green once in 5 seconds — the fan operates with minimum speed in standby mode.
2. The light indicator blinks green once in a second — the turn-on delay time is activated (60 seconds).
3. The light indicator glows red — the humidity sensor is activated and the fan runs at high speed.
4. The light indicator glows green — the switch is turned on and the fan runs at high speed.
5. The indicator light blinks green and red once in 1 second — the turn-off delay timer is activated.



FAN SETUP

 T_{on} — interval timer turning on and adjustment is performed with the potentiometer T_{on} . To turn the interval timer off, set the potentiometer T_{on} into the leftmost position. Rotation of the potentiometer for 1/3 clockwise sets the interval timer operation for 6 hours, rotation of the potentiometer for 2/3 clockwise sets the interval timer operation for 12 hours, and rotation of the potentiometer clockwise in the rightmost position sets the interval timer operation for 24 hours.

 T_{off} — To adjust the fan turn-off delay time, turn the control knob T_{off} clockwise to increase and counter-clockwise to decrease the turn-off delay time respectively, adjustable from 2 up to 30 minutes.

 H — To adjust the humidity set point turn the control knob H clockwise to increase and counter-clockwise to decrease the humidity sensor set point, adjustable from 60 % up to 90 %.

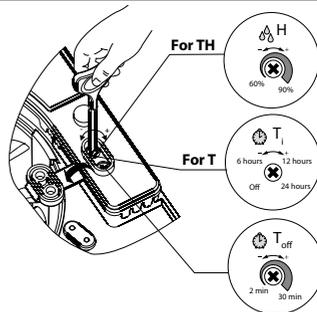
Caution! If the switch is turned off or the indoor humidity falls below the set point within 60 seconds after activation of the switch or the humidity sensor, the fan continues operation at low speed.



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

The fan delivery set includes a specially designed plastic screwdriver for fan settings adjustments.

Use it to change the turn-on and turn-off delay time and the humidity set point.



TECHNICAL MAINTENANCE

The fan maintenance periodicity is at least once per 6 months.

Maintenance steps:

- Disconnect the fan from power supply and make sure electricity has been turned off (Fig. 33).
- Remove the front and the decorative panels, wipe the fan with a dry cloth or a brush (Fig. 34-35).
- Clean the front panel under running water (Fig. 36).
- Wipe the fan surfaces dry.
- Cover the fan with the front panel.
- Connect power supply to the fan (Fig. 38).

WARNING! Do not allow water or liquid come into contact with 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 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 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 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.

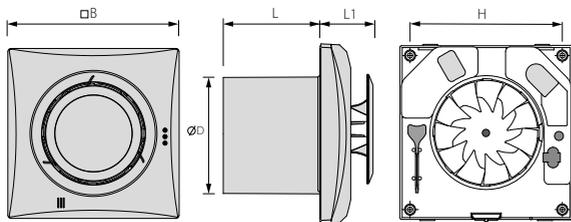
- Redesign or engineering changes to the unit.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- Unit misuse.
- Violation of the unit installation regulations by the user.
- Violation of the unit control regulations by the user.
- Unit connection to power 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.

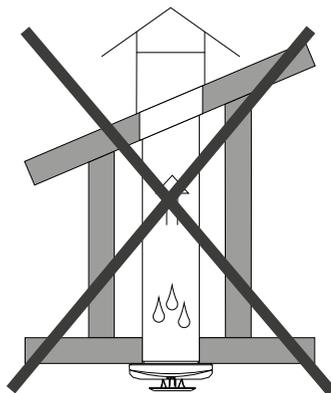
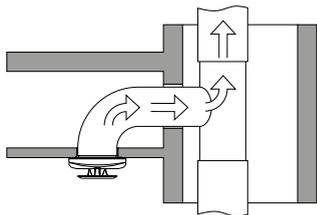
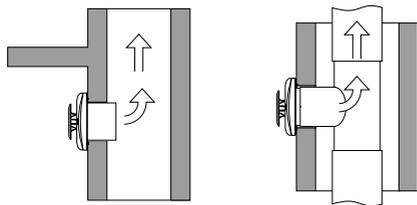


USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP.

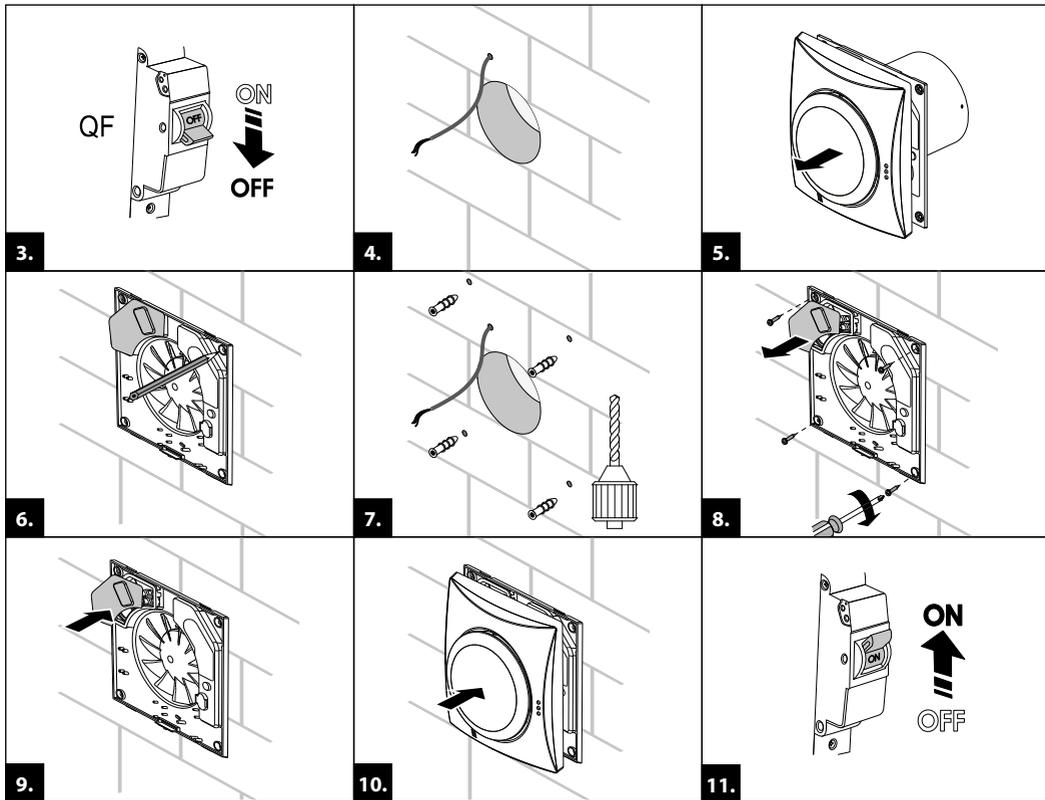


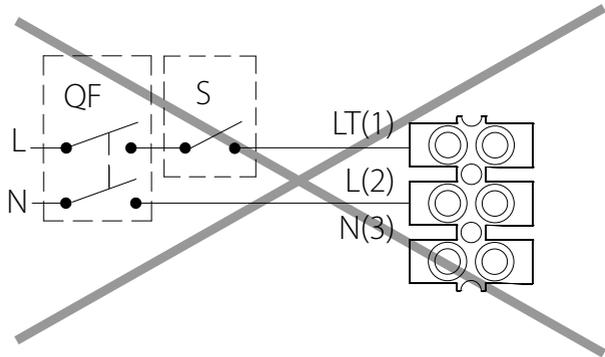
	Dimensions [mm]				
	$\varnothing D$	B	H	L	L1
Quiet-Disc 100	99	158	136	81	26
Quiet-Disc 125	123.5	182	158	91	27
Quiet-Disc 150	147.5	214	190	111	32
Quiet-Disc Extra 150					

1.



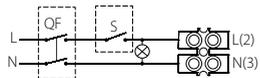
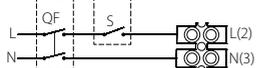
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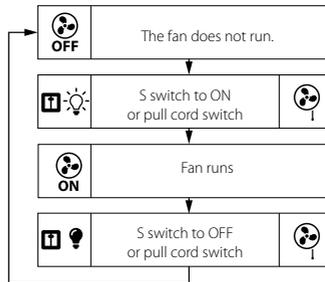
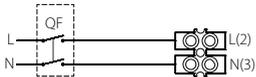


Quiet-Disc 100/125

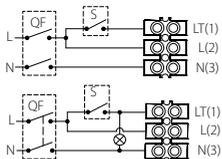
Quiet-Disc 100/125



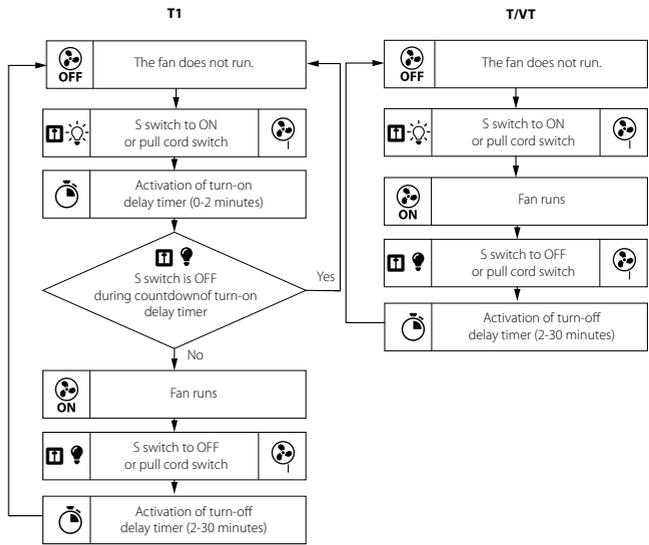
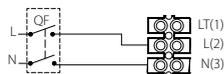
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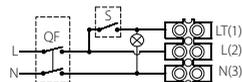
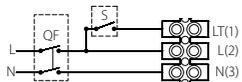
Quiet-Disc 100/125 T/T1



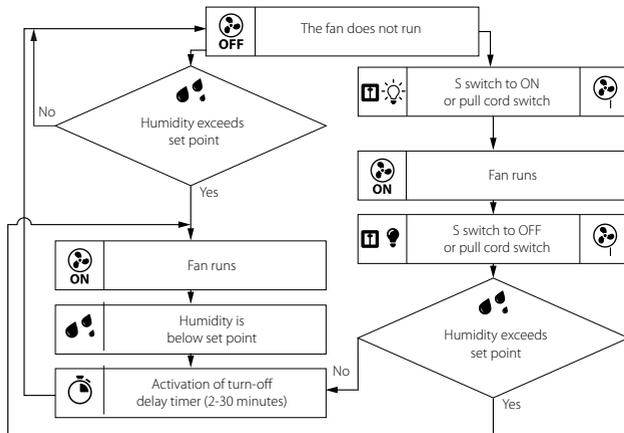
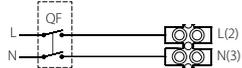
Quiet-Disc 100/125 VT



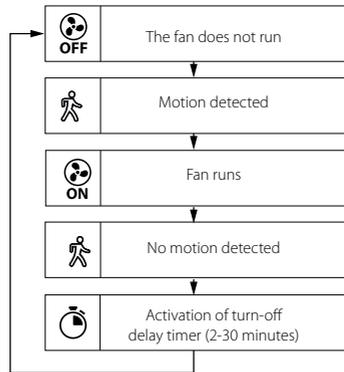
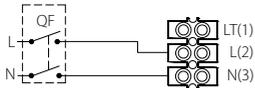
Quiet-Disc 100/125 TH



Quiet-Disc 100/125 VTH

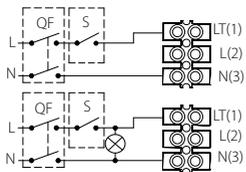


Quiet-Disc 100/125 TP

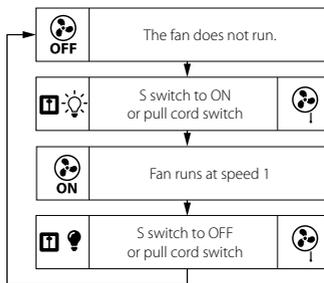
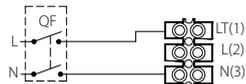


Quiet-Disc 100/125 Duo

Quiet-Disc 100/125 Duo (speed 1)

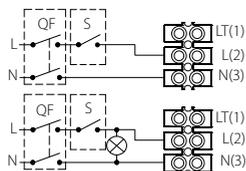


Quiet-Disc 100/125 Duo V (speed 1)

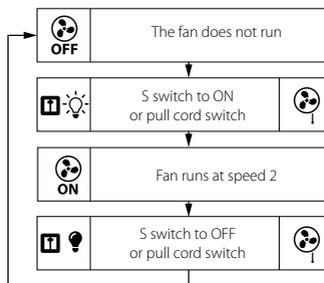
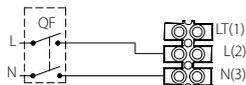


17.

Quiet-Disc 100/125 Duo (speed 2)

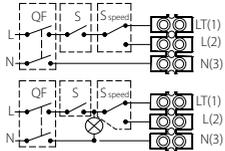


Quiet-Disc 100/125 Duo V (speed 2)

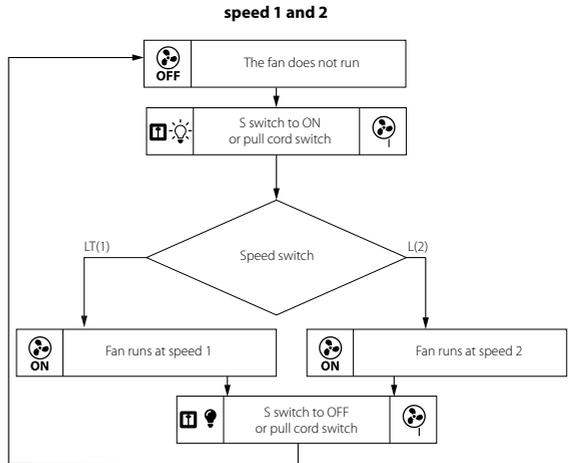
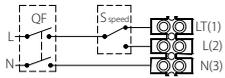


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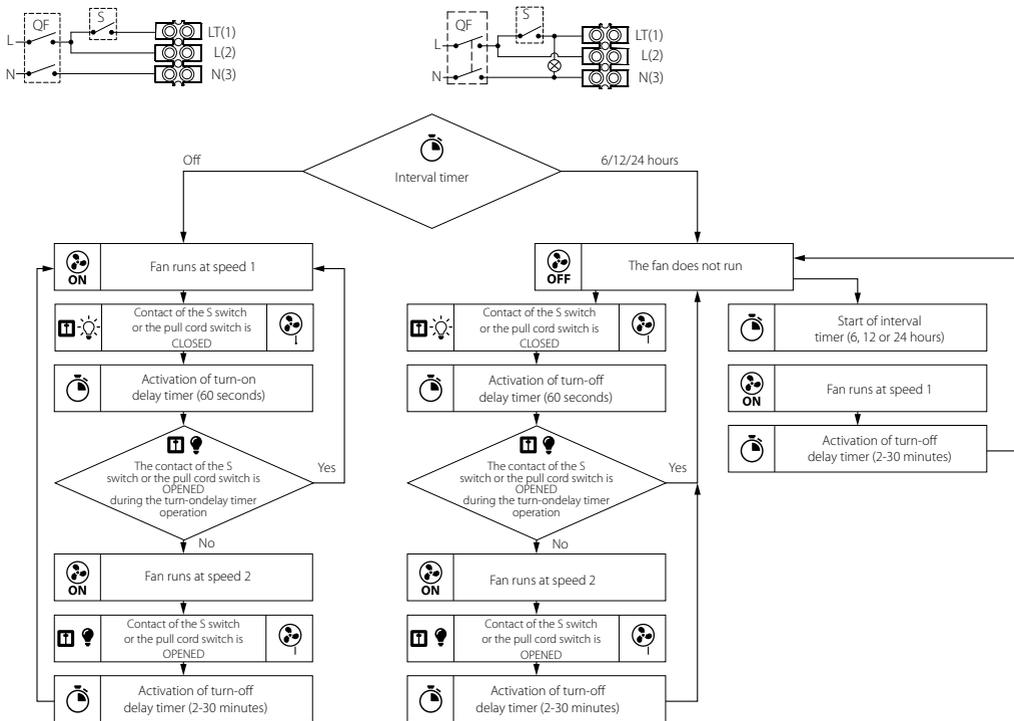
Quiet-Disc 100/125 Duo (speed 1 and 2)



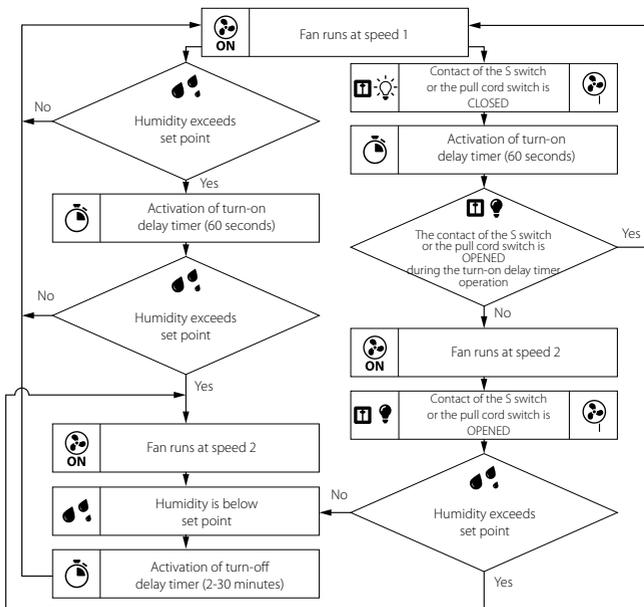
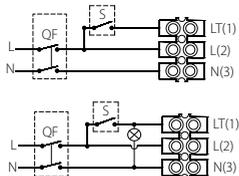
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Quiet-Disc 100/125 Duo T

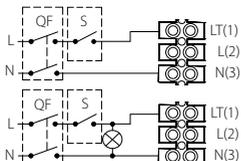


Quiet-Disc 100/125 Duo TH

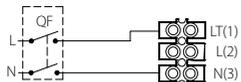


Quiet-Disc 150/Quiet-Disc 150

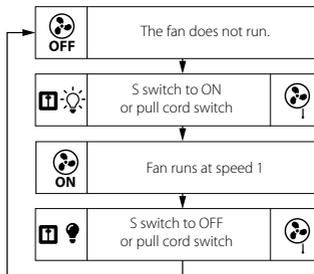
Quiet-Disc 150/Quiet-Disc Extra 150 (speed 1)



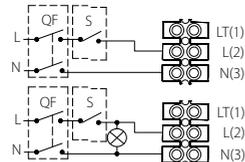
Quiet-Disc 150/Quiet-Disc Extra 150 V (speed 1)



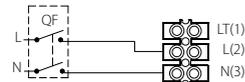
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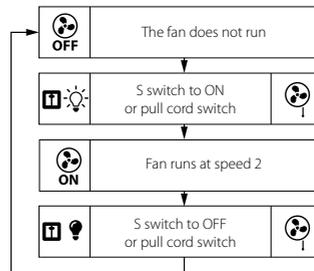
Quiet-Disc 150/Quiet-Disc Extra 150 (speed 2)



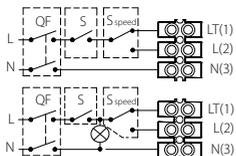
Quiet-Disc 150/Quiet-Disc Extra 150 V (speed 2)



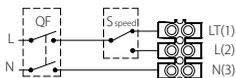
23.



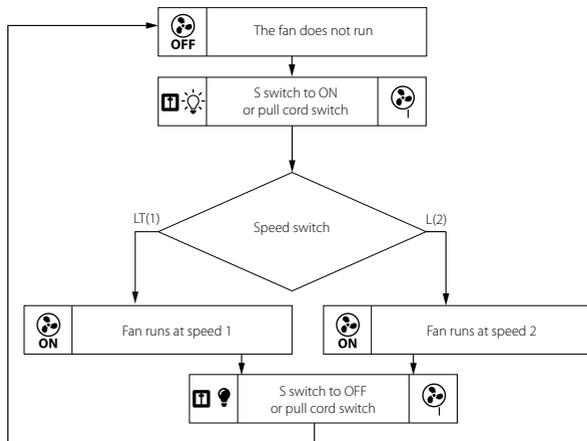
**Quiet-Disc 150/Quiet-Disc Extra ISO
(speed 1 and 2)**



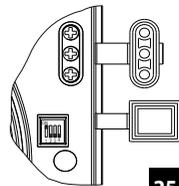
**Quiet-Disc 150/Quiet-Disc Extra ISOB
(speed 1 and 2)**



speed 1 and 2



	Operation mode 1	Operation mode 2	Operation mode 3	Operation mode 4	Operation mode 1
Quiet-Disc 150 T/Quiet-Disc Extra 150 T					
Quiet-Disc 150 VT/Quiet-Disc Extra 150 VT				—	—
Quiet-Disc 150 TP/Quiet-Disc Extra 150 TP					
Quiet-Disc 150 TH/Quiet-Disc Extra 150 TH					
Quiet-Disc 150 VTH/Quiet-Disc Extra 150 VTH					



The choice of operating mode is carried out by setting the DIP switch to a certain position. Use the plastic screwdriver from the delivery set to set the DIP-switch to a required position.

Operation mode 1 (single-speed)

The fan is turned off by default. The fan starts operating at speed 1 when the switch is turned on or one of the sensors is activated.

Operation mode 2 (single-speed)

The fan is turned off by default. The fan starts operating at speed 2 when the switch is turned on or one of the sensors is activated.

Operation mode 3 (two-speed)

The fan operates at speed 1 by default. The fan switches to the speed 2 when the switch is turned on or a sensor is activated.

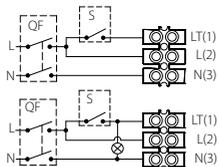
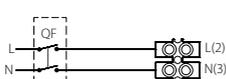
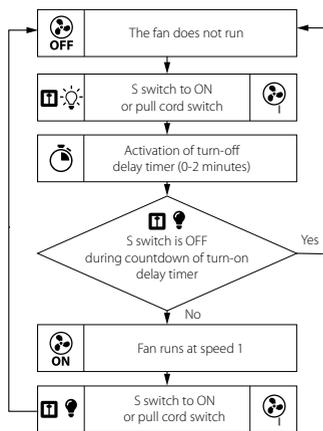
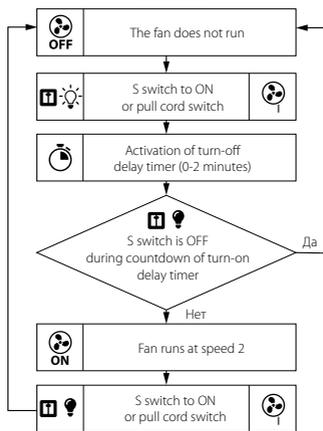
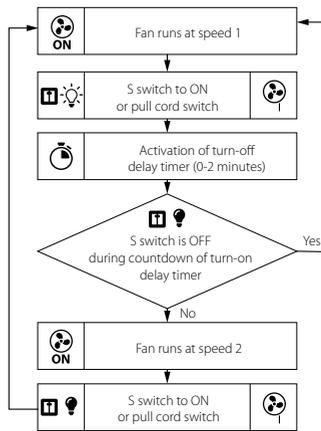
Operation mode 4 (two-speed)

The fan is turned off by default. The fan starts operating at low speed when the humidity sensor is turned on and switches to high speed when the humidity sensor is activated.

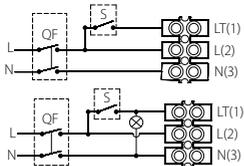
Operation mode 5 (two-speed)

The fan is turned off by default. The fan starts operating at low speed when the switch is turned on. If during the operation at low speed the humidity sensor is activated or the switch is turned on, the fan switches to high speed.

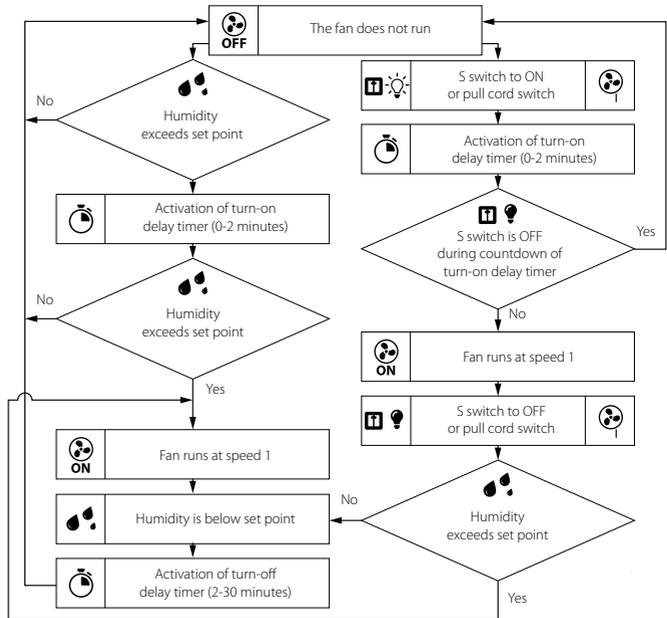
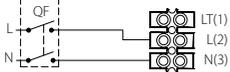
Caution! The operation mode 1 is set by default. The operating mode may be changed during the fan mounting or operation. Setting the DIP switch to any position other than stated in the table results in the emergency mode communicated by the red light indication. In such a case disconnect the fan from power supply and set the DIP switch to a correct position.

Quiet-Disc 150 T/Quiet-Disc Extra 150 T

Quiet-Disc 150 VT/Quiet-Disc Extra 150 VT

Operation mode 1

Operation mode 2

Operation mode 3


Quiet-Disc 150 TH/Quiet-Disc Extra 150 TH



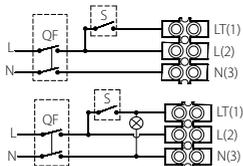
Quiet-Disc 150 VTH/Quiet-Disc Extra 150 VTH



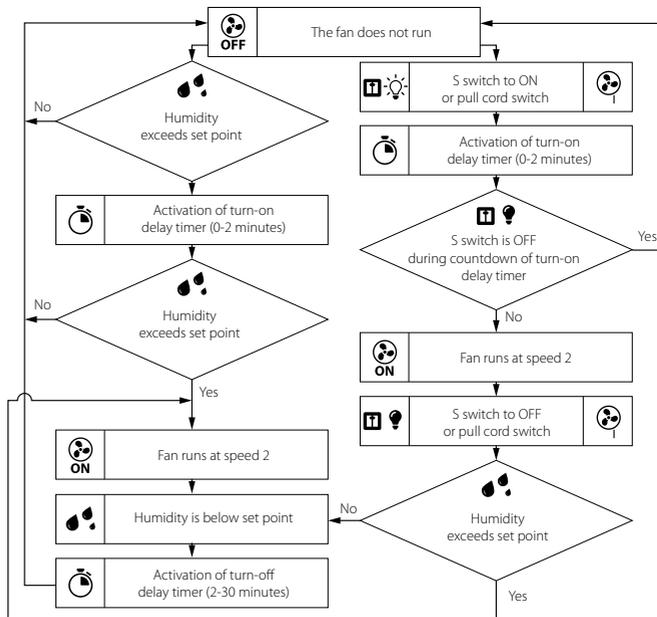
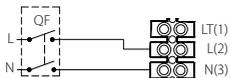
Operation mode 1



Quiet-Disc 150 TH/Quiet-Disc Extra 150 TH



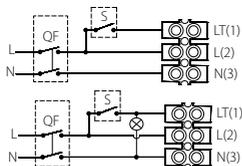
Quiet-Disc 150 VTH/Quiet-Disc Extra 150 VTH



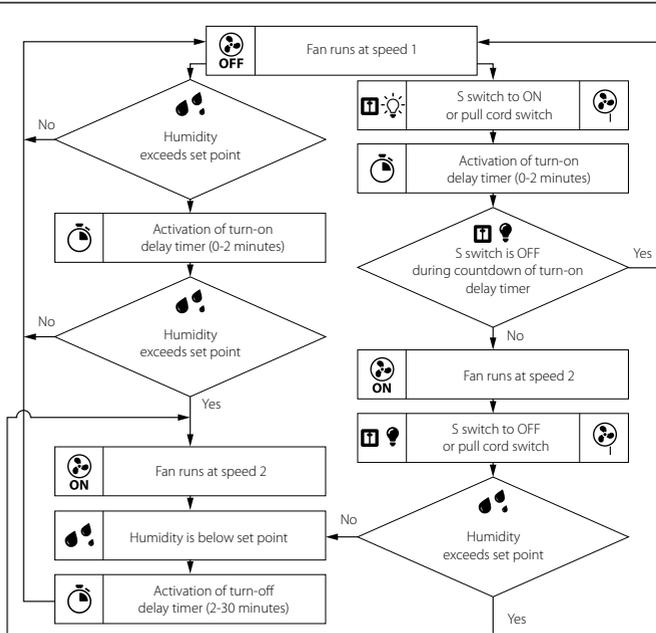
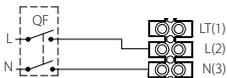
Operation mode 2



Quiet-Disc 150 TH/Quiet-Disc Extra 150 TH



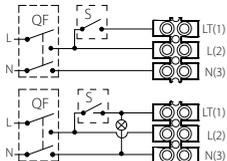
Quiet-Disc 150 VTH/Quiet-Disc Extra 150 VTH



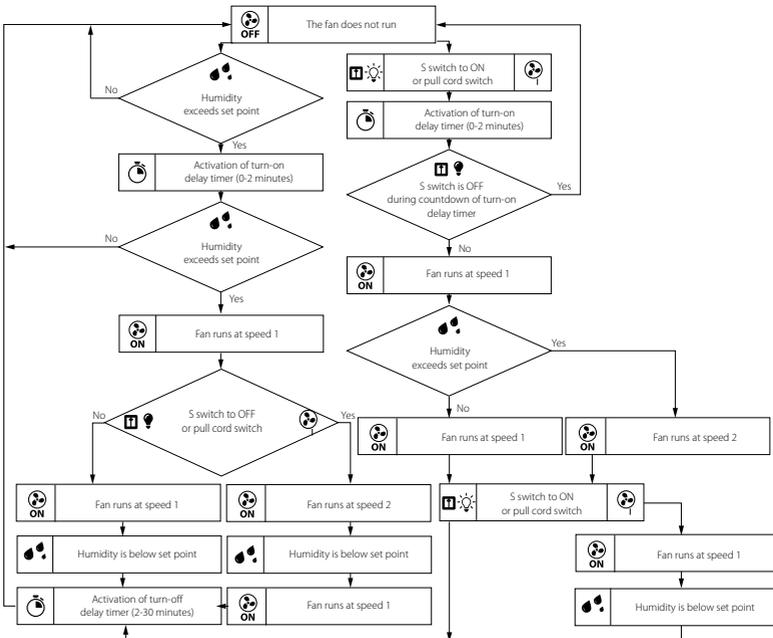
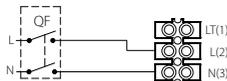
Operation mode 3



Quiet-Disc 150 TH/ Quiet-Disc Extra 150 TH



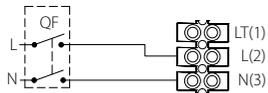
Quiet-Disc 150 VTH/ Quiet-Disc Extra 150 VTH



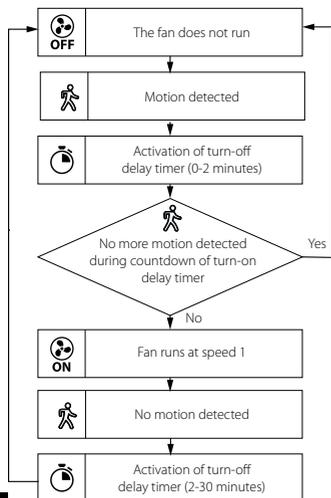
Operation mode 5



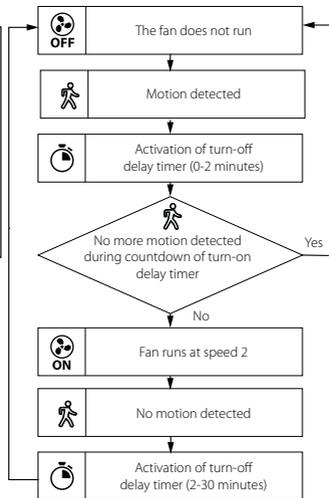
Quiet-Disc 150 TP/Quiet-Disc Extra 150 TP



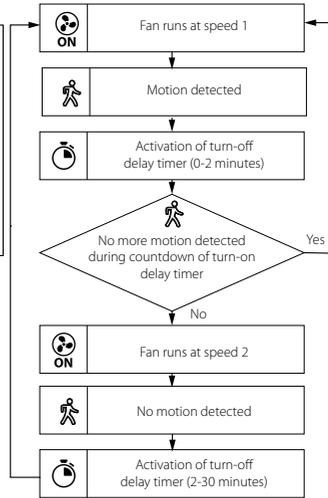
Operation mode 1

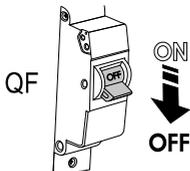


Operation mode 2

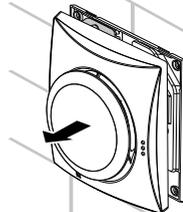


Operation mode 3

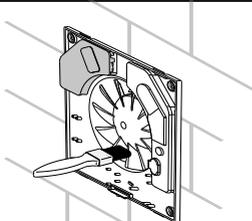




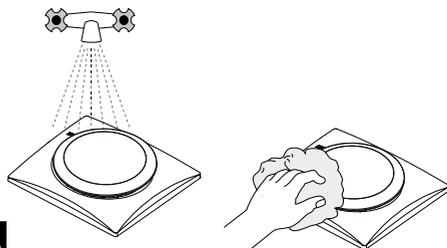
33.



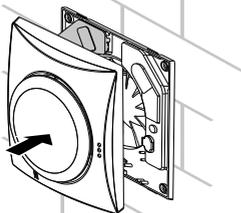
34.



35.



36.

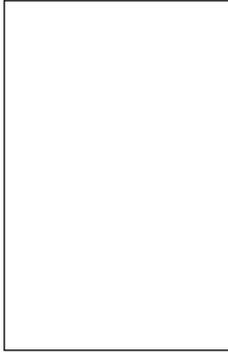


37.

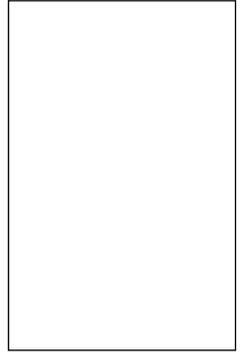


38.

Quality Inspector's Stamp



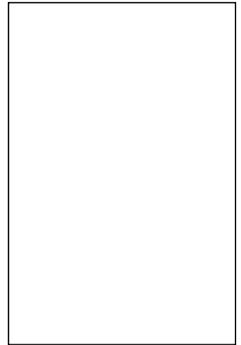
Sold by
(name and stamp of the seller)



Manufacture Date



Purchase Date



Certificate of acceptance

				V	<input type="radio"/>					
		100	<input type="radio"/>	T	<input type="radio"/>	White	<input type="radio"/>			
				T1	<input type="radio"/>	Red	<input type="radio"/>			
Quiet-Disc	Extra	<input type="radio"/>	125	<input type="radio"/>	Duo	<input type="radio"/>	VT	<input type="radio"/>	Vintage	<input type="radio"/>
							TH	<input type="radio"/>	Aluminum Lacquer	<input type="radio"/>
		150	<input type="radio"/>				VTH	<input type="radio"/>	Chrome	<input type="radio"/>
							TP	<input type="radio"/>	Black Sapphire	<input type="radio"/>

The fan is recognized as serviceable