



Calm

EN

Service Instructions



BLAUBERG
Ventilatoren

BLAUBERG VENTILATOREN GmbH is happy to offer you a new generation product, the **BLAUBERG Calm fan**. The solid team of high-qualified professionals with many years of working experience, technological innovations in design and production, high-quality components and materials from the top worldwide producers have become the precondition for the best fan in its class.

BLAUBERG Sileo fan is the combination of design, high performance and silence operation.

INTRODUCTION

The present operation manual contains a technical description, technical data sheets, operation and mounting guidelines, safety precautions and warnings for safe and correct operation of the fan **BLAUBERG Sileo**.

USE

BLAUBERG Sileo fan is designed for ventilation of residential and public premises heated during winter season and is constructed for wall or ceiling mounting, fig. 2-4.

The fan is equipped with a back valve to prevent air backdrafting when the fan is off.

COMPLETE SET

The complete set includes:

Name	Number
Fan	1 item
Screws and dowels	4 item
Plastic screwdriver (for the models with a timer)	1 item
Operation manual	1 item
Packing box	1 item

The fan design is regularly improved, so some models can slightly differ from those ones described in this operation manual.



BASIC CHARACTERISTICS

Table 1. Technical data

Parameters	Model	Calm 100	Calm 125	Calm150		Calm Max 150	
				min	max	min	max
Power voltage and frequency [V/Hz]		230/50	230/50	230/50	230/50	230/50	230/50
Rated power [W]		7.5	17	17	19	19	22
Max. air flow [m ³ /h]		97	187	225	318	283	375
RPM [min ⁻¹]		2165	2115	1540	2070	1780	2300
Noise level, 3 m [dBA]		25	32	28	33	32	38

Table 2. Fan modifications

Option	Fan model																												
	Calm 100	Calm 100 S	Calm 100 T	Calm 100 H	Calm 100 ST	Calm 100 SH	Calm 100 IR	Calm 125	Calm 125 S	Calm 125 T	Calm 125 H	Calm 125 ST	Calm 125 SH	Calm 125 IR	Calm 150	Calm 150 S	Calm 150 T	Calm 150 H	Calm 150 ST	Calm 150 SH	Calm 150 IR	Calm Max 150	Calm Max 150 S	Calm Max 150 T	Calm Max 150 H	Calm Max 150 ST	Calm Max 150 SH	Calm Max 150 IR	
Switch	●				●	●			●			●	●		●				●	●			●			●	●		
Turn-on delay timer																			●	●	●	●			●	●	●	●	●
Turn-off delay timer			●	●	●	●	●			●	●	●	●	●			●	●	●	●	●	●			●	●	●	●	●
Humidity sensor				●		●					●		●					●		●					●		●		
Motion sensor							●							●							●							●	

Switch — integrated pull cord switch.

Timer — turn-on delay timer adjustable from 0 up to 2 minutes (only Calm 150 and Calm Max 150 models) and turn-off delay timer adjustable from 2 up to 30 minutes.

Humidity sensor — humidity control with set point from 60% up to 90%.

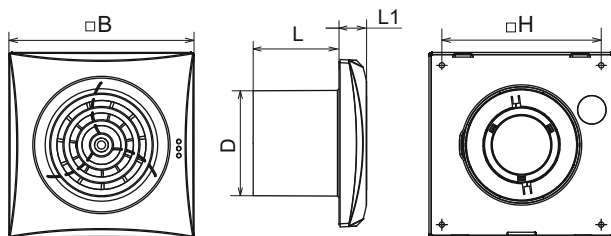
Motion sensor — reach distance from 1 to 4 m and sensor viewing angle up to 100°.

The fan does not cause interference with radio-, TV- or video- equipment.

Table 3. Overall dimensions

Model	Dimensions [mm]				
	a	b	c	d	e
Calm 100	158	136	81	99	26
Calm 125	182	158	91	124	27
Calm 150	214	190	98	148	32
Calm Max 150					

Fig. 1



OPERATION RULES

The fan is rated for connection to 220...240 V / 50 Hz power mains and is designed for continuous operation always connected to power mains.

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

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

The fan does not require grounding.

SAFETY RULES

All operations related to the fan electrical connections, servicing and repair works are allowed only after the fan disconnection from power mains. All mounting and servicing operations are allowed for duly qualified electricians with valid electrical work permit for electric operations at the units up to 1000 V after careful study of the present user's manual. The single-phase power grid must comply with the acting local electrical norms and standards.

The fixed electrical wiring must be equipped with an automatic switch that is used for connection of the fan to power mains with gap on all poles at least 3 mm.

Make sure the impeller, the casing and the grille are not damaged before connecting the fan to power mains.

The casing internals must be free of any foreign objects which can damage the impeller blades.

Misuse of the fan or any unauthorized modification 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.

The maximum permitted pressure difference per living units is 4 Pa.

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

The fan is not rated for operation in a media that contains hazardous or explosive materials and vapours, i.e. spirits, gasoline, insecticides, etc. Do not close or block the fan intake or exhaust vent not to disturb the natural air passage.

Do not sit on the fan and do not put objects on the fan.

Follow the guidelines of this operation manual to ensure durable operation of the product.

MOUNTING AND SETUP

The fan is designed for ceiling or wall mounting and installation into a ventilation shaft or connection to a round air duct of respective diameter, fig. 2-4.

The fan mounting sequence is shown in fig. 5-13.

The wiring diagrams are shown in fig. 14-25.

Fig. 2

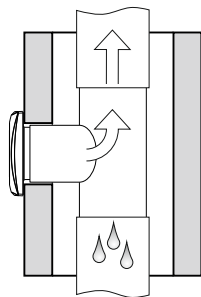


Fig. 3

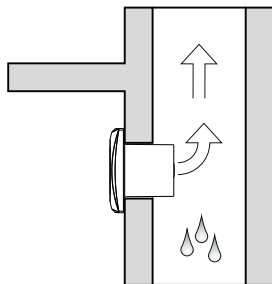


Fig. 4

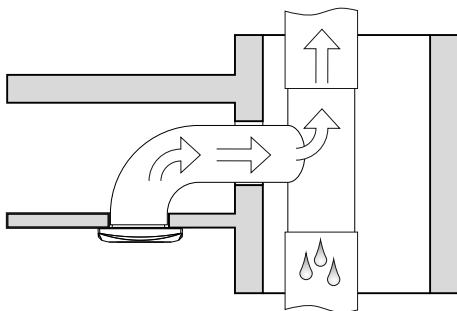


Fig. 5

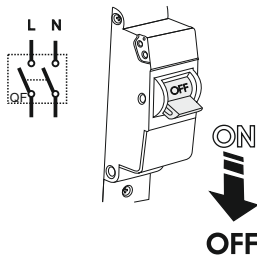


Fig. 6

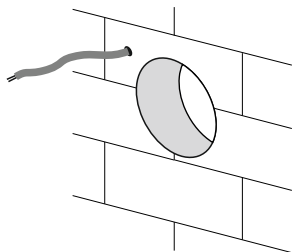


Fig. 7

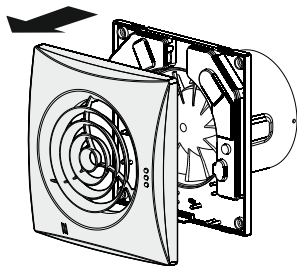


Fig. 8

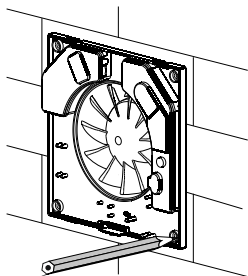


Fig. 9

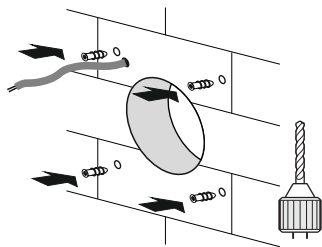


Fig. 10

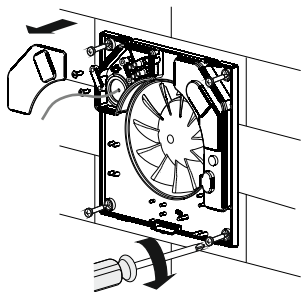


Fig. 11

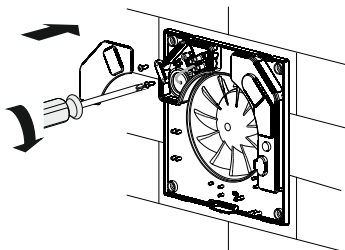


Fig. 12

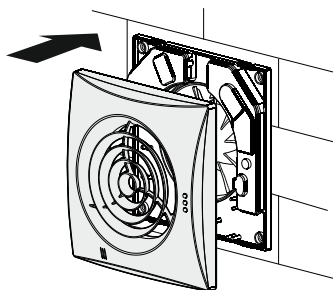
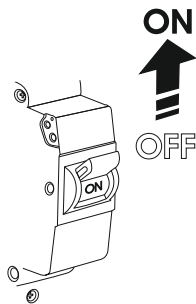


Fig. 13



WIRING DIAGRAMS

Fig. 14

Calm 100/125

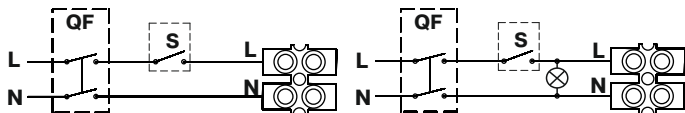


Fig. 15

Calm 100/125 S
Calm 100/125 ST
Calm 100/125 SH
Calm 100/125 IR

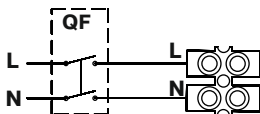


Fig. 16

Calm 100/125 T
Calm 100/125 H

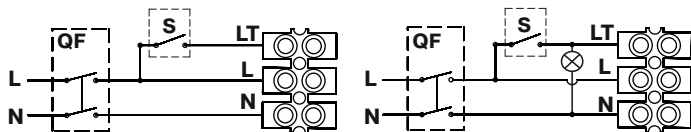


Fig. 17
first speed

Calm 150
Calm MAX 150

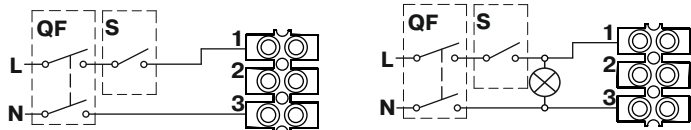
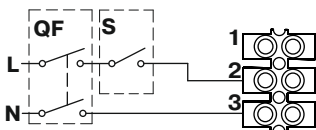


Fig. 18
second speed



Calm 150
Calm MAX 150

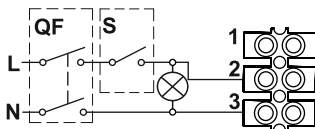
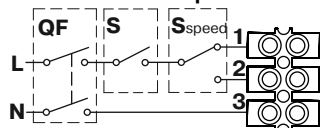


Fig. 19
first and second speed



Calm 150
Calm MAX 150

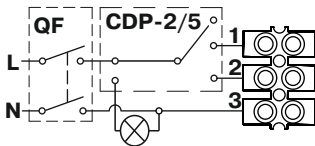
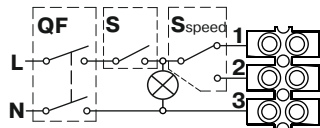
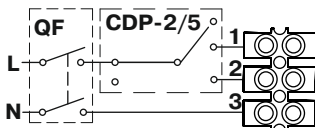


Fig. 20
first speed

Calm 150 S
Calm MAX 150 S

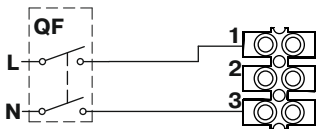


Fig. 21
second speed

Calm 150 S
Calm MAX 150 S

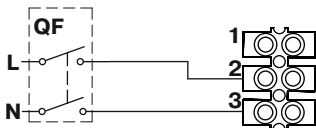


Fig. 22
first and second speed

Calm 150 S
Calm MAX 150 S

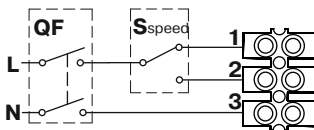


Fig. 23

Calm 150 T
Calm MAX 150 T
Calm 150 H
Calm MAX 150 H

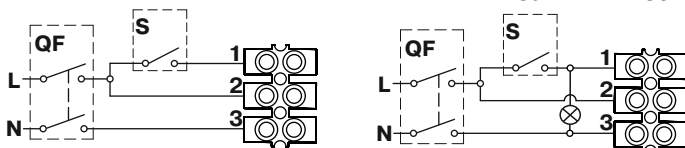


Fig. 24

Calm 150 ST
Calm MAX 150 ST
SILEO 150 SH
Calm MAX 150 SH
SILEO 150 IR
Calm MAX 150 IR

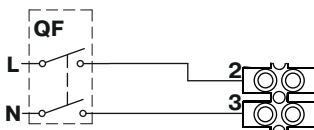
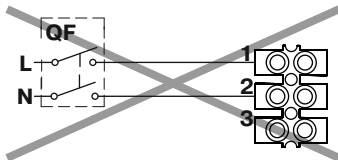


Fig. 25

Calm 150
Calm MAX 150
Calm 150 S
Calm MAX 150 S



TIME AND HUMIDITY SENSOR ADJUSTMENT

The control circuit board is under mains voltage!

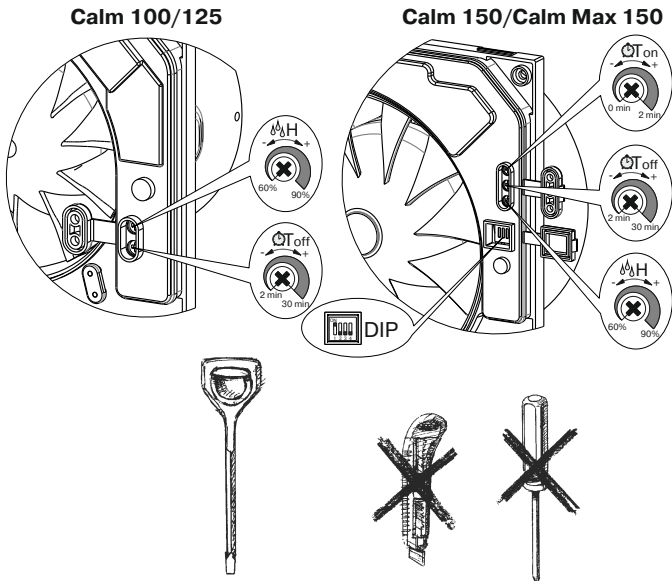
Disconnect the fan from power mains prior to adjustment operations!

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

You can use the screwdriver to change the turn-on (only Calm 150 and Calm Max 150 models) and turn-off delay timer settings and to set the DIP switch into a required position (only Calm 150 and Calm Max 150 models).

Do not use a metal screwdriver, knife, etc. for adjustment operations not to damage the circuit board.

Fig. 26



FAN SPEED SELECTION

The Calm 100 and Calm 125 models are the single-speed fans. The Calm 150 and Calm Max 150 models are the two-speed fans. The required speed for the basic models Calm 150 and Calm Max 150 as well as S model modifications is set during connection to power mains. The required speed for the models 150 T/H/ST/SH/IR is selected by setting the DIP-switch on the electric circuit board into a respective position, fig. 26 and table 4.

Use the plastic screwdriver from the delivery set to change the DIP-switch position.

The fan models Calm 150 T/ST/IR and Calm Max 150 T/ST/IR have three operation modes and the fans Calm 150 H/SH and Calm Max 150 H/SH have five operation modes:

Mode 1 (single-speed mode)

The fan is turned off by default. The fan starts running at the first speed in case of actuation of any sensor or the switch closing.

Mode 2 (two-speed mode)

The fan is turned off by default. The fan starts running at the second speed in case of actuation of any sensor or the switch closing.

Mode 3 (two-speed mode)

The fan runs at the first speed by default. The fan starts running at the second speed in case of actuation of any sensor or the switch closing.

Mode 4 (two-speed mode)

The fan is turned off by default. The fan starts running at the first speed in case of the switch closing and switches to the second speed in case of actuation of the humidity sensor.

Mode 5 (two-speed mode)

The fan is turned off by default. The fan starts running at the first speed in case of the switch closing or the humidity sensor actuation.

If the switch is closed or the humidity sensor is actuated during the fan running at the first speed, the fan switches to the second speed.






ATTENTION! Mode 1 is set by default.

Operation mode is selected during the fan mounting or during the fan operation from three or five operation modes.

Do not set the DIP switch in any other position except those positions that are stated in the table 4. Otherwise it may result in the emergency mode which is confirmed by the light indicator blinking.

In this case disconnect the fan from power supply and set the DIP-switch into required position in compliance with the table 4.

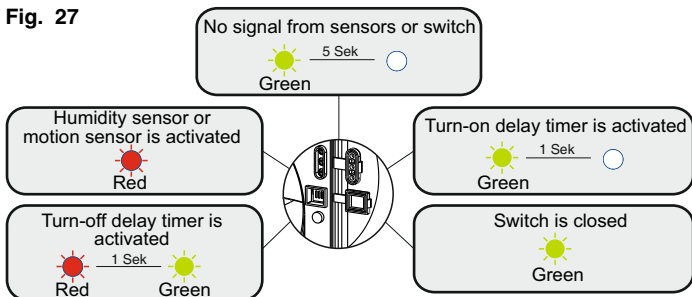
Table 4. Operation mode selection

	Operation mode 1	Operation mode 2	Operation mode 3	Operation mode 4	Operation mode 5
Calm 150 T Calm Max 150 T Calm 150 ST Calm Max 150 ST Calm 150 IR Calm Max 150 IR				—	—
Calm 150 H Calm Max 150 H Calm 150 SH Calm Max 150 SH					

FAN OPERATION MODE INDICATION

The light indicator glows yellow during operation of all the Calm 100, Calm 125 models as well as Calm 150, Calm Max 150 basic and S models. The light indicators glows as shown in fig. 27 during operation of the fan models Calm 150 and Calm Max150 T/ST/H/SH/IR.

Fig. 27



FAN OPERATION LOGIC

Turn-on delay timer - in case of the switch closing or activation of the humidity or motion sensor the timer countdown from 0 up to 2 minutes is activated. Within this time the fan remains in the previous operation mode. If the switch is not opened or the sensor keeps registering high humidity or motion after the timer countdown, the fan switches to the first or to the second speed depending on the selected operation mode.

Turn-off delay timer — in case of the switch opening, indoor humidity drop below the set point or no motion registration the timer countdown from 2 up to 30 minutes is activated. Within this time the fan remains in the previous operation mode. After the timer countdown the fan switches off or switches to the first speed, depending on selected operation mode.

Humidity sensor — if the indoor humidity rises above the set point from 60% up to 90%, the fan either turns on or switches to the second speed depending on the set operation mode, with respect to the turn-on delay timer setting. The fan keeps operating at this speed until the humidity drops to the set point. After that the turn-off delay timer is activated.

Motion sensor — in case of motion detection the fan either turns on or switches to the second speed, depending on the set operation mode, with respect to the turn-on delay timer setting. The fan keeps operating at this speed until the motion sensor keeps detecting movement. After that the turn-off delay timer is activated.

Pull-cord switch or the external switch (models ST and SH) — in case of the switch closing the fan either turns on or switches to the second speed, depending on the set operation mode, with respect to the turn-on delay timer setting. After the switch is opened the turn-off delay timer is activated.

The recommended turn-on delay timer setting for the fan with an built-in switch is 0 minutes (factory setting).

MAINTENANCE

Disconnect the fan from power mains prior to any servicing and maintenance operations.

Maintenance means regular cleaning of the fan surfaces of dirt and dust.

To clean the fan, wipe its surfaces with a cloth wetted in a mild soap solution, then wipe the surfaces dry, fig. 28-33.

Avoid water dripping on the motor and circuit board!

Fig. 28

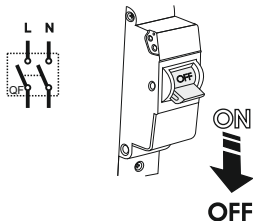


Fig. 29

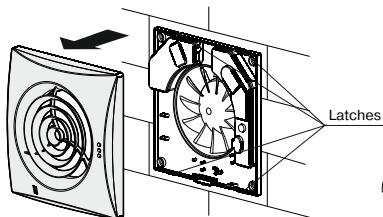


Fig. 30

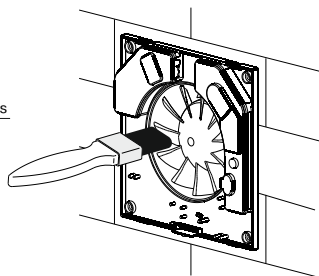


Fig. 31

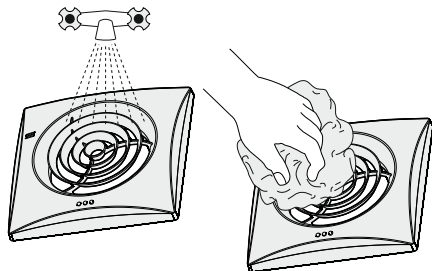


Fig. 32

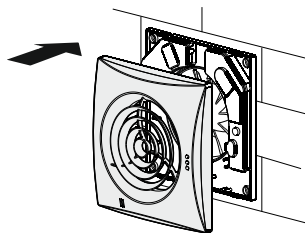
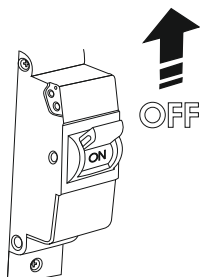


Fig. 33



STORAGE AND TRANSPORTATION RULES

Transportation is allowed by any transportation vehicle provided that the product is in the manufacturer's original package.

Store the delivered product in the manufacturer's original packing box in a dry ventilated premise with the ambient temperature from +5°C up to + 40°C and relative humidity less than 80%.

The storage environment must be free of dust, acid or alkali vapours to prevent corrosion.

MANUFACTURER'S WARRANTY

The fan complies with the requirements according to the EU norms and directives, to the relevant EU-Low Voltage Equipment Directives, EU-Directives on Electromagnetic Compatibility.

We hereby declare that the following product complies with the essential protection requirements of Electromagnetic Council Directive 2004/108/EC, 89/336/EEC and Low Voltage Directive 2006/95/EC, 73/23/EEC and CE-marking Directive 93/68/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

This certificate is issued following test carried out on samples of the product referred to above. Assessment of compliance of the product with the requirements relating to electromagnetic compatibility was based on the following standards.

Protection degree index according to IP rating against access to hazardous parts and water ingress is IP 45 for Calm 100, Calm 125, Calm 150 and IP X5 for Calm Max 150 model. The fan is double insulated and does not require grounding.

The warranty operation period (service life) of the fan is five years from the retail sale date provided observance of the installation and operation regulations.

In case of the product malfunctions caused by a manufacturing fault during the warranty period the consumer is entitled for the fan replacement or its warranty repair.

WARNING!!!

In case of a claim for the product replacement please submit the operation manual with the sales confirmation and/or a payment document that confirms the product sales. If case of no confirmation of the sale date, the warranty term shall be calculated from the manufacturing date.

By purchasing this product the user confirms to have read and accepted the operation manual conditions as well as operation, storage, transportation, mounting, setup, wiring, servicing, repair and warranty rules applicable to the product stated in the attached technical documentation.

Do not dispose in domestic waste. The product contains in part material that can be recycled and in part substances that should not end up as domestic waste. Dispose of the product once it has reached the end of its working life according to the regulations valid where you are.

ACCEPTANCE CERTIFICATE





- | | | | |
|-----------------|--------------------------|-----------|--------------------------|
| | | <i>S</i> | <input type="checkbox"/> |
| | | <i>T</i> | <input type="checkbox"/> |
| <i>Calm</i> | <input type="checkbox"/> | <i>H</i> | <input type="checkbox"/> |
| <i>Calm Max</i> | <input type="checkbox"/> | <i>ST</i> | <input type="checkbox"/> |
| | | <i>SH</i> | <input type="checkbox"/> |
| | | <i>IR</i> | <input type="checkbox"/> |
- 100
- 125
- 150

*Fan is recognized
as serviceable.*

SALES DATE

SOLD

MANUFACTURED ON (DATE):

APPROVAL MARK

