

# **BROOKVENT**<sup>TM</sup>

## **BTP EC**

Duct fan



Installation, maintenance &  
user manual

## CONTENTS

1.	INTRODUCTION .....	3
2.	REMARKS .....	4
3.	TRANSPORT AND PACKAGING .....	5
4.	INSTALLATION GUIDELINES .....	5
5.	ELECTRICAL CONNECTION .....	7
6.	COMMISSIONING .....	9
7.	MAINTENANCE.....	9
8.	DISPOSAL.....	10
9.	GUARANTEE .....	10
10.	DENIAL OF LIABILITY FOR CONSEQUENTIAL DAMAGES .....	10
11.	OPERATIONAL INSPECTIONS: .....	11
12.	ACCEPTANCE CERTIFICATE .....	12
13.	TABLE OF INSPECTIONS.....	13
14.	NOTES .....	14

## 1. INTRODUCTION



Thank you for the trust you placed in **BROOKVENT** by purchasing the **BTP EC** series fan, created in accordance with technical rules that meet the requirements of EU standards. Before installation and commissioning, please read these operating instructions carefully as they contain safety instructions for installing, operating and maintaining this product. When the installation is complete, please pass this manual to the end user. When unpacking, check that the device is in good condition, as damage caused by the manufacturer/supplier is covered by the warranty. Please check that the equipment delivered and the data on the nameplate correspond to your order.

Available models of the BTP EC series: **100, 125, 150/160, 200 and 250**

THE PACKAGING CONTAINS:

1. Fan
2. Instruction manual

## 2. REMARKS

BTP EC series fans are designed for residential/office (domestic) ventilation systems. During transportation the fan unit must be protected from dust and chemicals. the fan unit must be stored at temperatures not exceeding 60°C.

Do not put the ventilation system into operation before the completion of construction work.

For the duration of any building repair work:

- **it is required** to protect all ventilation grates so that construction dust and other impurities do not get into the ventilation duct;
- **it is recommended** to reduce the fan speed to 15-20%, so that the fan works to ensure that the air flow does not raise building dust particles;
- during electrical or fan repair work the fan should be off and isolated from the electrical supply.

Fan designed for continuous operation 24/24 - downtime longer than 14 days can cause damage to the motor.

The motor control board is protected by a seal with the date of manufacture: if the seal is broken, the warranty will be voided.

Non-compliance with these guidelines will result in:

- Change parameters to performance
- Loss of warranty on the ventilation system and its components
- Costs related to system cleaning, fan servicing and control

**NOTE:**

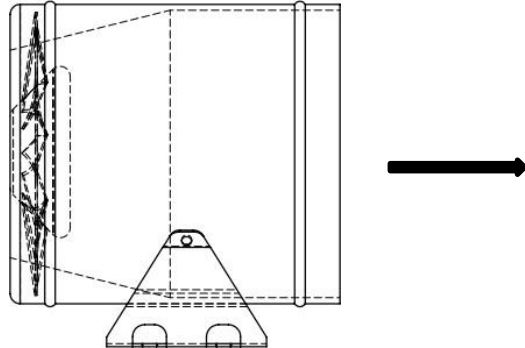
BROOKVENT reserves the right to introduce changes in technical data and modifications to the documentation without the need to inform the user.

**3. TRANSPORT AND PACKAGING**

- The fan is supplied in a package that protects the unit under normal transport conditions. Do not transport the fan without the original packaging.
- Store the fan in a dry place.
- Do not move the fan while holding the supply/control cables, the junction box, the rotor.

**4. INSTALLATION GUIDELINES**

- After commissioning, the device that includes this fan must comply with the following directives:
  - Low Voltage Directive 2014/35/EU
  - Equipment Directive 2006/42/EC
  - Electromagnetic Compatibility Directive 2014/30/EU
- Before commencing the installation, remove any temporary elements protecting the fan against dirt (e.g. cardboard, foil, blanking plugs - do not confuse them with covers). - Leaving them for the time of commissioning may cause damage to the device. Make sure that the unit does not show any signs of damage.
- The fan must be mounted vertically or horizontally. Diagonal installation is possible, but not recommended. Installation other than horizontal or vertical may shorten product life. The device is not designed for external installation.



*\* The direction of airflow is indicated by an arrow on the unit.*

- The structure supporting the device must be capable of supporting it during full power operation (account must also be taken of overloads caused by starting, failure, misuse). Use fasteners that are self-retaining.
- Appropriate protective structures, guards (inlet, outlet, moving parts) must be installed if they were not used by the manufacturer. The open inlet of the fan must be protected with a suitable protective net.
- It is recommended to use measures to minimize the transmission of vibrations from/to the fan.
- It is recommended to provide a distance of 3 fan inlet diameters between the inlet and obstacles such as elbows, reducers, filters, walls.
- After installing the fan, make the electrical connection and check the rotor rotation direction according to the requirements of the points indicated in the "electrical connection" section.
- Ensure that no foreign objects (e.g. mounting elements, tools) are present inside or near the fan, that the rotor is not blocked and that the fan is properly protected after installation (e.g. closed and protected bowl, junction box, tightened fasteners).

## 5. ELECTRICAL CONNECTION

- Make sure that the power supply has been isolated before starting any operation.
- Any electrical connections may only be made by an appropriately qualified person.
- We recommend using service switches with a minimum distance between the contacts of 3 mm.
- We recommend installing the service switch in a visible place within 1 m from the fan and the controller.
- The fan is equipped with a power and control cable.
- Required safeguards:

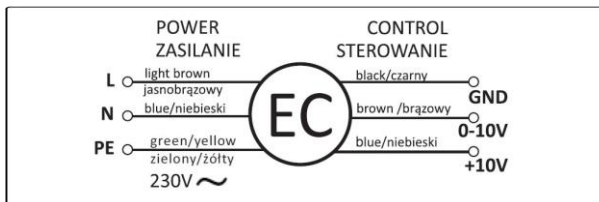
### 2A fused spur.

- 1) BTP EC 100
- 2) BTP EC 125
- 3) BTP EC 150/160

### 4A fused spur.

- 4) BTP EC 200
- 5) BTP EC 250

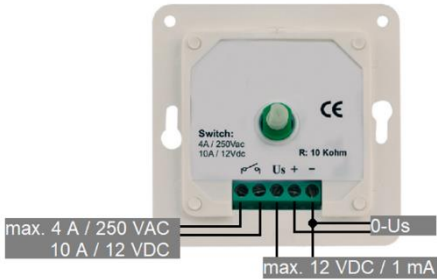
For power supply connection we recommend 3x1.5mm<sup>2</sup> cable.



**NOTE**

Power supply is connected directly to the mains! Do not connect the power supply cables to the controller!

- If the voltage at the control signal is not present, the fan will not work.



To control the fan speed we recommend using BR-2/010 potentiometer

**SUPPLY**

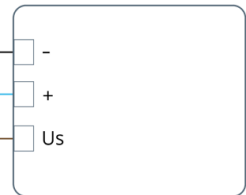
black  
blue  
yellow / green



**BTP EC**  
in line fan

**CONTROL**

black  
blue  
brown



**BR - 2/010**  
fan speed controller



## 6. COMMISSIONING

- Make sure that there are no loose parts in the immediate vicinity of the fan that can be sucked in
- Make sure that nothing jams or blocks the rotor
- Make sure that the device is securely fastened
- Make sure that all cables are correctly installed and secured against tearing out.
- Check that the voltage and frequency values of the mains supply are identical to those indicated on the nameplate.
- On commissioning:
  - check if the rotor blades rotate in the direction marked on the housing
  - Check that there are no undesirable vibrations

## 7. MAINTENANCE

- Before performing any operation, disconnect the device and ensure that no one intentionally or accidentally connects the device!
- Please check:
  - condition of all electrical connections
  - condition of fixings and connections
  - condition of the rotor blades
- It is recommended to carry out a fan inspection:
  - after three months from the commissioning when installed in new constructions
  - after six months from commissioning and every six months
- If the inspection does not reveal any irregularities, clean the rotor blades and housing with a brush or vacuum cleaner every year after commissionin

## **8. DISPOSAL**

Waste equipment should be disposed of in appropriate recycling containers or waste disposal companies.

## **9. GUARANTEE**

These operating instructions contain information necessary for transport, installation and safe operation. Failure to observe the information in this manual or to install the device properly may void the warranty.

Any possible damage, direct or indirect, caused by incorrect installation or damage caused by installation carried out by inexperienced or unauthorized personnel shall not be taken into account by BROOKVENT. At the time of purchase, check that the device is complete and delivered as described. Any disputes that may arise will be dealt with on the basis of the General Purchase Conditions (GPC) and the General Guarantee Conditions (GGC) available at <https://brookvent.co.uk/>

## **10. DENIAL OF LIABILITY FOR CONSEQUENTIAL DAMAGES**

The manufacturer is not responsible for damage to the health of people or to equipment caused by violation of the terms of this manual, as well as the use of the fan in a manner inconsistent with its intended use or in the case of violent mechanical interference. Indirect damage (e.g. reassembly and connection) is not compensated for.

Guarantee obligations in the scope of the quality of assembly, electrical assembly and setting works are borne by the entity which performed given works.

**11. OPERATIONAL INSPECTIONS:**

Commissioning table	
Model	
BTP EC 100	
BTP EC 125	
BTP EC 150	
BTP EC 200	
BTP EC 250	
Installation date	
Commissioning date	
Designation of the vent stack/installation location	
Signature/stamp	

**NOTE!** The guarantee is conditional on the necessity of carrying out operational inspections.

Inspections (from commissioning) must be carried out in the following periods: 3 months, 6 months, 12 months (mandatory) and annually thereafter.

## **12. ACCEPTANCE CERTIFICATE**

With all responsibility, we declare that this product complies with the provisions of the Ecodesign Directive (ErP) as well as with the CE marking requirements.

13. TABLE OF INSPECTIONS

		Mandatory inspections			Additional inspection*						
		Inspection 1.	Inspection 2.	Inspection 3.	Inspection 4.	Inspection 5.	Inspection 6.	Inspection 7.	Inspection 8.	Inspection 9.	Inspection 10.
		3 months from commissioning	6 months from commissioning	12 months from commissioning							
1	Fan contamination:										
2	Dust	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no
3	Construction dust	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no
4	Other:	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no
5	Rotor										
6	Is there any resistance at rotation attempt	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no
7	Does the rotor jam against the body	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no
8	Cleaning performed										
9	with compressed air	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no
10	Cleaning the blades with a brush	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no
11	Remarks										
12	The fan is operational	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no	yes/no
13	Inspection performed by:										
14	Date										
15	Stamp/signature										

**14. NOTES**

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**BROOKVENT**<sup>TM</sup>

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