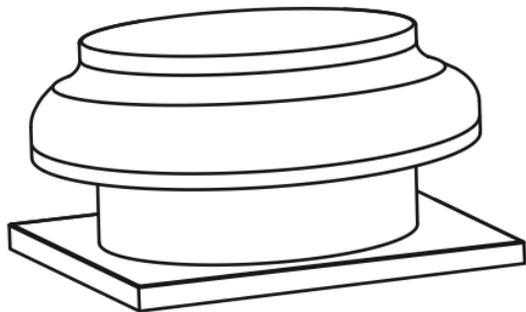


ROOF CENTRIFUGAL FAN



Tower AL

Service Instructions

 **BLAUBERG**
Ventilatoren

APPLICATION

TOWER-AL the roof centrifugal fan enclosed in metal body, (hereinafter named as "the fan") are designed to use in ventilation systems for industrial premises, swimming pools, multi-apartment housing, offices, hospitals, restaurants etc., being heated during winter season.

The air coming out the fan should not contain dust, other solid admixtures, sticky substances, and fibrous materials.

The ambient temperature should not exceed the limits indicated in Table 1.

The fan should be installed vertically on the output air duct shaft and may be used only for exhaust ventilation.

The fan is designed for long-term operation without disconnection with the electricity supply.

By the type of protection against electrical shock the fans belong to Class I devices.

The degree of protection against access to the hazardous parts and water penetration is IPX4.

Type of the climatic modification of the fan is UHL 4.2.

Design of the fans is being constantly perfected, so some models could slightly differ from the ones, described in this certificate.

MAIN SPECIFICATIONS

The fans' designations, their parameters, and connection dimensions are provided in tables 1, 2 and on figs. 1.

FAN CONSTRUCTION

A fan (fig. 1) consists of a body 1 with grating 7 and base 9 and electric motor and impeller 7 fixed therein.

Cover 2 and grating 6 are fastened to the bracket 4 by self-cutting screws.

Junction box 5 is fixed at the left side of the body. It is intended for connecting the fan to one-phase mains and contains operating capacitor.

PACKAGE CONTENTS

The package contains:

- fan: 1 pc
- user's manual;
- packing box.

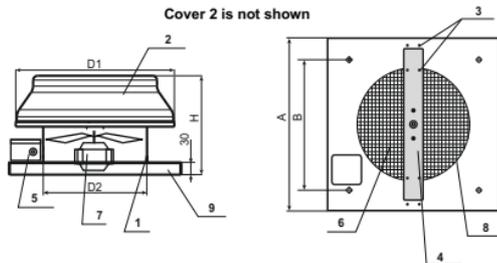


Figure 1

- 1 - body;
- 2 - cover;
- 3 - self-cutting screws;
- 4 - fastening corbel;
- 5 - junction box;
- 6 - grille;
- 7 - impeller;
- 8 - ring;
- 9 - base.

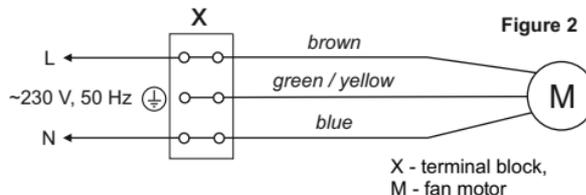
Fan type	Max .capacity (m ³ /hour)	Rotation speed (rpm)	Input current (A)	Power (W)	Noise level (dBA, 3 m)	Mains voltage (V) at 50 Hz	Max. ambient temperature (°C)
Tower AL 200	405	1300	0,28	43	32	230	+40
Tower AL 250	1070	1300	0,48	68	48	230	+40
Tower AL 315	1700	1300	0,75	110	54	230	+40

Table 1

Allowable deviation of mains voltage: $\pm 10\%$ of the rated value.

Fan type	Size (mm)					Weight (kg)
	D1	D2	H	B	A	
Tower AL 200	345	208	280	330	425	6,1
Tower AL 250	405	262	300	330	425	7,2
Tower AL 315	555	314	380	450	585	11,5

Table 2



SAFETY REQUIREMENTS

It is necessary to take measures to prevent penetration of black gases into premises through open smoke ducts or other fire-prevention facilities. Fan installation and connection should be performed by qualified electrician according to effective regulations. Disconnect fan from the mains prior to maintenance and repair.

Before connection of the fan to the mains it is necessary to ensure that there are no visible damages of impeller, body, grating, as well as foreign objects in the blowing part of the body, which can damage impeller vanes.

ATTENTION: Do not use the fan in the explosive or fire-hazardous environment.

CONNECTION TO THE MAINS

Connection of the fan to the single-phase mains should be through the circuit-breaker incorporated into wiring. The gap between contacts of switch at all poles should be not less than 3 mm. A fan should be mounted vertically. Air moving direction should coincide with the direction of the arrow on the fan body. A fan may be equipped with protective grating at the input side. Fan connection diagram is shown on fig. 2.

MAINTENANCE

Maintenance of the fan should be carried out only after disconnecting it off the mains.

Maintenance comprises periodical cleaning of the surfaces from dust and dirt, when the fan is disconnected off the mains. To remove the dust, use a soft dry brush or compressed air. Blades of the impeller require careful cleaning every 6 months. Loosen the self-cutting screws 3, detach cover 2 and grating 6 with ring 8 from the body 1. Using the water solution of detergent, wash the blades of the fan, avoiding fluid penetration onto the electric motor.

KEEPING CONDITIONS

Keep the fan in the manufacturer's packaging in a well vented premise at the temperature from +5°C to + 40°C and relative humidity not exceeding 80 % (at T = 20°C).

The presence of acids, alkalis and other aggressive substances in the air is not allowed.

WARRANTY

The manufacturer guarantees normal operation of the fan during 2 years after the date of its sale through network on condition that the rules for its transportation, storage, installation and operation are followed.

In case of any fan's malfunction occurs during the warranty period through the fault of manufacturer, the respective customer shall be entitled to replacement of the fan at the manufacturer's location.

In case of absence of the entry specifying the date of sale, the warranty period is calculated from the date of manufacture. Warranty replacement is performed by Seller.

The MANUFACTURER cannot be held liable for damages incurred when using the fan for other purposes than specified or caused by careless mechanical intervention. Please keep to the instructions.

ACCEPTANCE CERTIFICATE

TOWER AL 200

TOWER AL 250

TOWER AL 315

(fill as appropriate, delete the rest)

Stamp of the inspector

Manufacture date

Sold

name of the trading company, stamp of the shop

ready for operation.

Date of sale