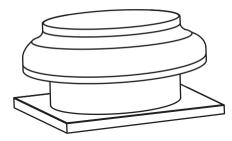
ROOF CENTRIFUGAL FAN



# Tower AM

Service Instructions



# APPLICATION

**TOWER-AM** 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 1 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

The fans (fig. 1) consist of a body 1 with flange 2 in a shape of a box. Electric motor with impeller 4 is fitted inside the body. Cover 3 is fastened to the body by self-cutting screws 6. Junction box 5 is fixed at the top of the body. It is intended for connecting the fan to one-phase or three-phase electricity supply and contains operating capacitor.

# PACKAGE CONTENTS

The package contains:

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

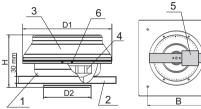


Figure 1

- 1 body;
- 2 flange;

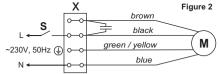
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- 3 cover;
- 4 impeller;
- 5 junction box;
- 6 self-cutting screws.

Туре	Max. capacity (m <sup>3</sup> /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-AM 150	555	2705	0,43	98	47	230	+55
TOWER-AM 200	950	2375	0,67	154	48	230	+50
TOWER-AM 250	1310	2790	0,85	194	52	230	+50
TOWER-AM 315	1880	2720	1,34	256	54	230	+45

Allowable deviation of mains voltage: ±10% of the rated value.

Turne		Weight				
Туре	A	В	н	D1	D2	(kg)
TOWER-AM 150	440	330	230	403	150	7,2
TOWER-AM 200	440	330	238	403	200	8,1
TOWER-AM 250	590	450	249	403	250	10,1
TOWER-AM 315	590	450	269	503	315	10,1



## SAFETY REQUIREMENTS

X - terminal block; M - electric motor; S - switch.

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 electricity supply prior to maintenance and repair.

Before fan connection to the electricity supply 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,

Table 2

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 mains (fig. 2) should be through the circuit-breaker incorporated into wiring.

The gap between contacts of switch at allpoles should not be 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. A fan is fixed on the output shaft by four M10 nuts.

#### MAINTENANCE

Maintenance of the fan should be carried out only after disconnecting it with the mains. Maintenance comprises periodical cleaning of the surfaces from dust and dirt, when the fan is disconnected with the mains.

To remove the dust, use a soft dry brush or compressed air. Blades of the impeller require careful cleaning every 6 months. For this purpose detach cover 3 (fig. 1) from the body. Using the water solution of detergent, clean the blades of the impeller 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  $+5^{\circ}C$  to  $+40^{\circ}C$  and relative humidity not exceeding 80 % (at T = 20^{\circ}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

Stamp of the inspector

TOWER-AM 150	
TOWER-AM 200	
TOWER-AM 250	
TOWER-AM 315	

Manufacture date

Sold name of the trading company, stamp of the shop

(fill as appropriate, delete the rest)

ready for operation.

Date of sale