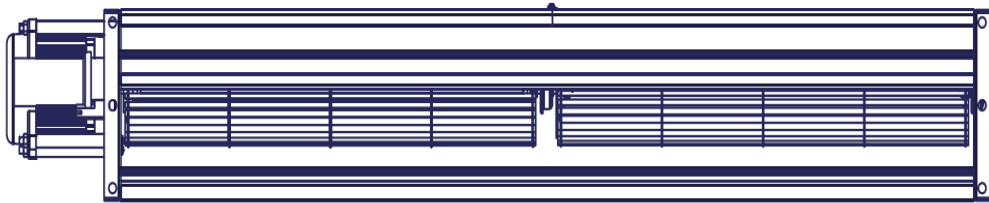


# INSTRUCTION MANUAL

## FAN TG1000



1MN0099Rev 0



**operates with ISO9001 certified quality system**

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R. 1.2 26/11/20

ENGLISH

“Translations of the original instructions”

## INTRODUCTION

First of all thank you for choosing and using TECSYSTEM product, we strongly suggest you to read carefully this instruction manual. It will allow you to understand how to use the system and take full advantage of all its features.

**WARNING! THIS MANUAL IS VALID AND COMPLETE ONLY FOR THE FAN TG1000**

## INDEX

	PAGE
1) SAFETY REGULATIONS .....	3
2) TECHNICAL SPECIFICATIONS .....	4
3) MAIN PARTS .....	—
4) MOUNTING .....	5
• SIZE FAN TG100 .....	—
• EXAMPLE TG1000 ASSEMBLY ON TRANSFORMER .....	6
5) MOUNTING NOTES .....	7
• POWER SUPPLY .....	—
• ENVIRONMENTAL CONDITIONS OF USE .....	—
• MAINTENANCE .....	—
6) DIAGNOSTIC FAULT .....	8
7) RULES FOR THE WARRANTY .....	—
8) DISPOSAL EQUIPMENT .....	—
9) USEFUL CONTACTS .....	—

## SAFETY REGULATIONS



### WARNING:

Carefully read the manual before using the fan. Keep these instructions for future reference.



Do not touch /move fans while they are in operation: **RISK INJURY.**

The product must be installed in a location with limited access to qualified technician. Any work on the appliance must be left to a qualified repair technician.



Do not touch the motor or power cables: contact with a voltage of 230/120 Volts AC can be fatal. To reduce the risk of electric shock, do not disassemble or modify in any way the fan motor. Before connecting the device to make sure that all connections have been made correctly. Always disconnect the fan from power supply before performing any type of maintenance.



Never touch the fan motor burns danger: **RISK INJURY.**

**Failure to follow these instructions can cause damage, fire or electric shock, with possible serious injury!**

### POWER SUPPLY

Before using it make sure that the power supply wires are not damaged, kinked or crushed. Do not tamper with the power supply wires. Never disconnect the power supply by pulling the cable, avoid touching the pins. Do not perform connection/disconnection operations with wet hands. Do not use objects as levers to disconnect the power supply of the system. Disconnect the power immediately if it is evident that the system gives off a burning smell or smoke, please contact technical support Tecsystem.

### LIQUIDS

Do not expose the product to dripping or splashing liquids. Do not allocate in places where humidity is over 90% and never touch with wet hands.

### CLEANING

Before cleaning the fan always disconnect the power supply. To avoid malfunctions, cleaning the fan only using compressed air to remove dust and dirt. Do not use oils or fats of any kind.

### OBJECTS

Never push objects through the air inlet or outlet, if this happens, disconnect the fan and call a technician.

### RESTRICTED USE A COMPETENT PERSON

The product is a sophisticated electromechanical system, absolutely not suitable for use by untrained personnel. All work must be performed by a qualified technician.

### ACCESSORIES

Do not use accessories or replacement parts that are not original, it could cause damage to the fan and put at risk the safety of the user. In case of failure, contact technical support.

### LOCATION

Install the fan indoor protected from splashing water and sunlight. Do not place near heat sources exceed the parameters specified in this manual. Place the fan in a horizontal and stable surface, away from vibration. The product must be installed in a location with limited access to qualified technician.

### REPAIR

Do not repair or adjust the fan. if any fault occurs always contact a qualified technician. Opening the fan tampering involves the automatic invalidation of the warranty.

### PRODUCTION

The date and the batch production of the device are shown on the label attached on the fan. Removing the label implies the automatic invalidation of the warranty.

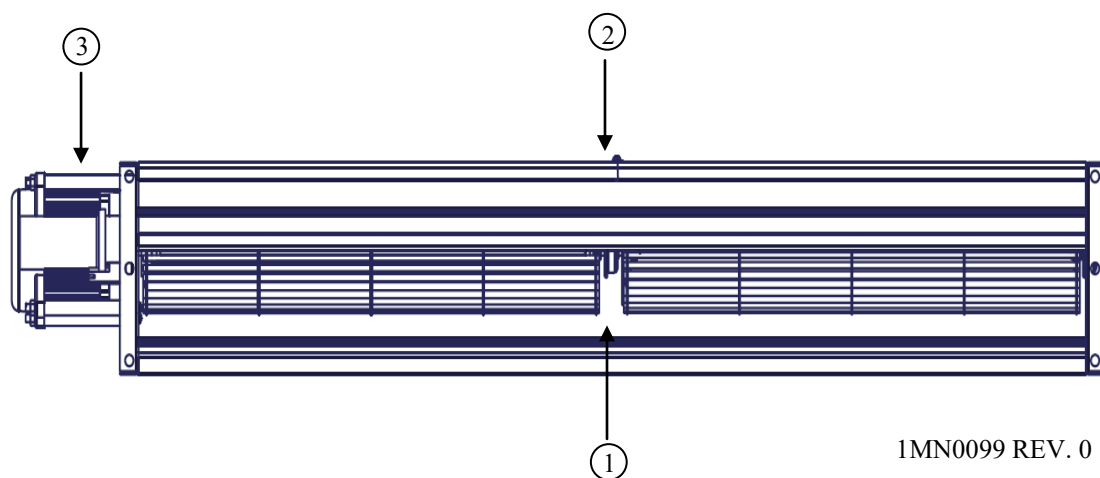
### TECHNICAL SUPPORT

Mail: [ufficiotecnico@tecsystem.it](mailto:ufficiotecnico@tecsystem.it) - tel: +39 024581861

TECHNICAL SPECIFICATIONS	TG1000
POWER SUPPLY AVAILABLE	230Vac ~50Hz
MOTOR MOUNTING	clockwise / counterclockwise
CURRENT	1A
POWER	225W
FLOW	2340m <sup>3</sup> /h
NOISE LEVEL	78,4dB(A)
STATIC PRESSURE	55Pa
DIAMETER IMPELLER	100mm
LENGTH IMPELLER	2X500mm
INSULATION CLASS	B
IP PROTECTION	IP00

(\*) The TG1000 is available in two different versions: with a motor clockwise CW or counterclockwise CCW. Construction in compliance with the EC regulations

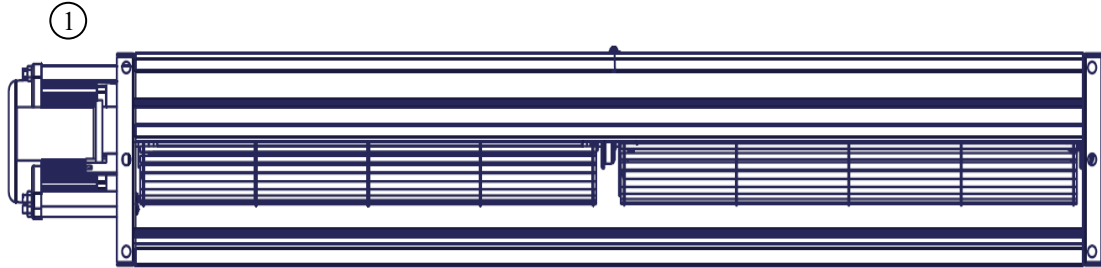
### MAIN PARTS



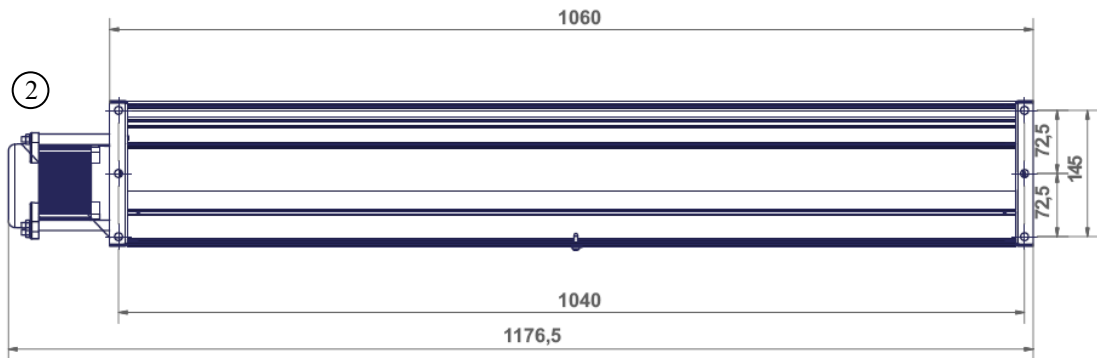
1)	Air outlet	3)	Motor
2)	Air inlet	4)	Power Connection (Cable: Brown-Blue-Green-yellow 230Vac 50Hz.)

# MOUNTING

DIMENSIONS (mm), MOUNTING HOLES AND CONNECTIONS TG1000

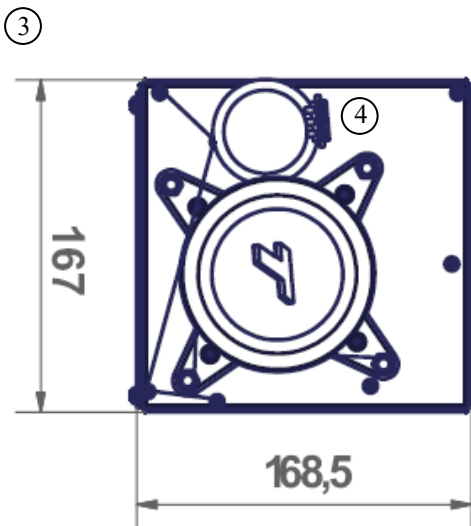


1MN0099 Rev 0



Note: dimensions fixing holes Ø6 diameter (mm)

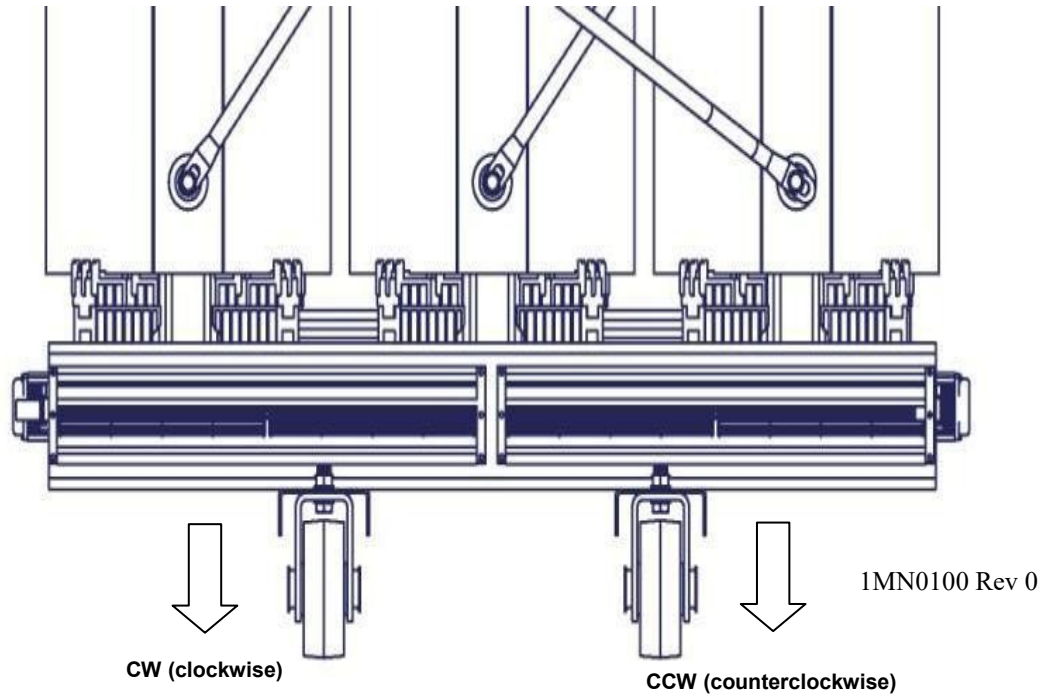
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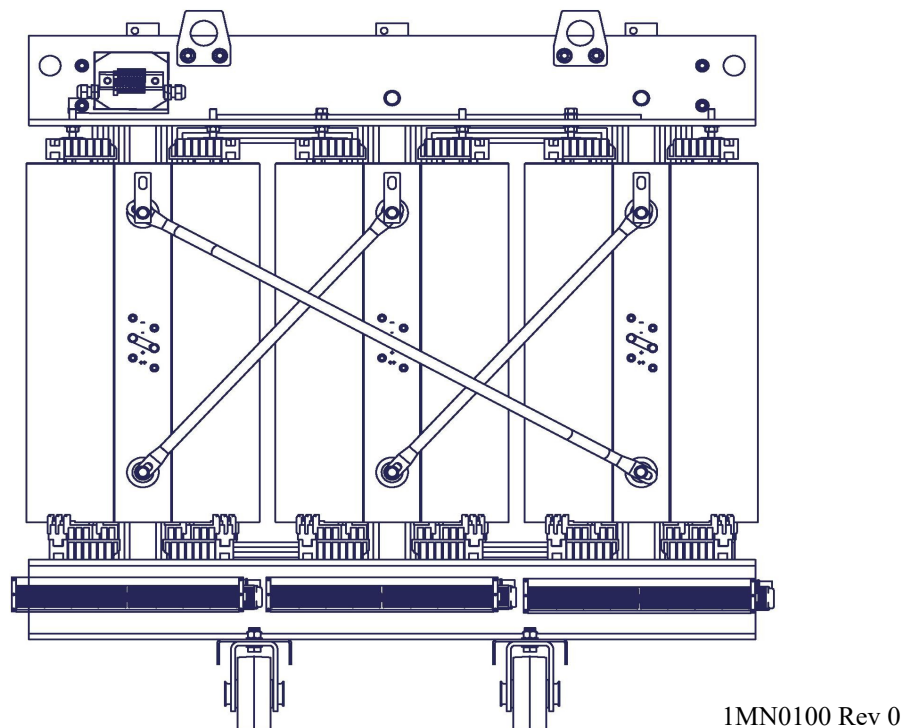
1)	Front view
2)	Rear view with mounting holes
3)	Motor side view
4)	Power Connection (Cable: Brown-Blue-Green-yellow 230Vac 50Hz.)

### EXAMPLES TG1000 ASSEMBLY ON TRANSFORMER

Example of n° 2 pcs of TG1000 application (n° 1 with CW clockwise motor and n° 1 with CCW counterclockwise motor) that allows to have 2 meters of airflow continuously on each transformer side, in order to cool the three coils of the transformer.



Example of n° 3 pcs of TG1000 application for cast resin high power transformers (n° 3 with clockwise motors and n° 3 with counterclockwise motors) that allows to cooling each coil of the transformer.



## MUONTING NOTES

Fix the fans using the holes on the back, do not change the mounting holes of the fan. During the handling of the fans avoid deforming the fins of the impeller. Never change the motor positioning.

If the fan is mounted on board of a transformer the working position of the fan must comply with the safety distance, indicated in the manual of the transformer, on which you are installing the fan. The fan must be positioned in the horizontal plane, always make sure, through the help of a level, that the fan is positioned correctly.

The maximum rate of vibration permitted is 60Hz.



### **WARNING:**

Use the fan trying not obstruct the mouth of the inlet / outlet, whether partial or total occlusion of the air vents can cause malfunction.

### **POWER SUPPLY**

The value of power supply is indicated on the fan label.

Note: do not power the fan with different values of values of voltage and frequency. Always control those indicated on the label.

Maximum permitted harmonic content in accordance with EN 61000-3-2:

5% 3rd,  
6% 5th,  
5% 7th,  
1.5% 9th,  
3.5% 11th,  
3% 13th,  
0.3% 15th,  
2% 17th.

### **ENVIRONMENTAL CONDITIONS OF USE**

Absence of fine particles.

Absence of corrosive or flammable gases.

Relative Humidity: 90% non-condensing (for short periods).

N.B: maximum temperature as prescribed by IEC 60076-11.

It is not recommended to install the fans in marine environment, if not after treatment of metal parts.

NOTE: wrong installation and critical environmental conditions as: long periods of inactivity, high temperature high humidity, excessive dust and excessive vibration can anticipate the deterioration of the mechanical parts of the fans.

### **MAINTENANCE**

In order to maintain the efficiency of the fans, we suggest to perform regularly, every 6 months, a cleaning operation of the fans (do it using only compressed air). Do not use oils or fats of any kind.

Any prolonged shutdown of the fan may be the cause of failure. The installation of the fans combined with thermometric Tecsystem avoids any longer standstill. Enabling the HFN Tecsystem present in the unit can be programmed cycles of activation of fans from 1 to 200 hours, recommended setting every 24 hours (for more information about the HFN check the manual of the unit

When the fans are connected with Tecsystem VRT control unit always remember that reporting a defect by the VRT could be related to the malfunction of the fan. Do not reprogram the VRT without having carried out a verification of the status of the fans and a possible maintenance (cleaning fans with compressed air).

NOTE: periodic maintenance and activation of the HFN function will allow you to extend the efficiency of the fans. The maintenance on the fans must be programmed as a function of environmental conditions in which they operate.

TROUBLE SHOOTING	CAUSES AND REMEDIES
The fan is powered, but the impeller does not turn.	Remove the power supply and check that: the power connectors are properly inserted into their home, the connection wires are tight, there are no obvious signs of burns on the connectors.
The fan runs very slow or too fast.	Check the value of the power, using a multimeter, and check the correspondence of the values with those reported on the identification label of the product purchased.
The impeller is stuck and cause the fan failure.	The critical environmental conditions can anticipate the deterioration of the mechanical parts. Proper planning of cleaning, maintenance and the installation of the VRT control series will allow you to lengthen significantly the efficiency of the fan.
If the problem persists, contact the TECSYSTEM technical department.	

## RULES FOR THE WARRANTY

The Product purchased is covered by manufacturer's warranty or the seller's terms and conditions set forth in the "General Conditions of Sale Tecsystem srl", available at [www.tecsystem.it](http://www.tecsystem.it) and / or purchase agreement.

The warranty is considered valid only when the product will be damaged by causes attributable to TECSYSTEM srl, such as manufacturing or components defects.

The warranty is invalid if the product is tampered / modified, incorrectly connected, because voltages outside the limits, non-compliance with the technical data for use and assembly, as described in this instruction manual.

Any action about warranty is always at our factory in Corsico-MI, Italy as stated in the "General Conditions of Sale Tecsystem srl".

## DISPOSAL EQUIPMENT

The European Directives 2012/19/CE (RAEE) and 2011/65/CE (RoHS) have been approved to reduce the waste of electrical and electronic equipment, encourage recycling, reuse of materials and components of the equipment, reducing this allows the disposal of waste and harmful compounds from electrical and electronic equipment.



All electrical and electronic equipment supplied from August 13, 2005 are marked with this symbol, in accordance with European Directive 2002/96/EC on waste electrical and electronic equipment (WEEE). Any electrical or electronic equipment marked with this label must be disposed of separately from normal household waste.

Restitution electrical equipment used : contact TECSYSTEM or agent TECSYSTEM to receive information on proper disposal of equipment .

TECSYSTEM is aware of the impact of its products on the environment and asks its customers active support for proper disposal and environmentally friendly equipment .

## USEFUL CONTACTS

TECHNICAL INFORMATION: [ufficiotecnico@tecsystem.it](mailto:ufficiotecnico@tecsystem.it)

COMMERCIAL INFORMATION: [info@tecsystem.it](mailto:info@tecsystem.it)

