

Tower TFC Group 9123042

Tower TFC Group Synchronous Replacement Motor for Motorized Valves

Model: 9123042 | Brand: Tower TFC Group

1. PRODUCT OVERVIEW

This document provides instructions for the installation, operation, and maintenance of the Tower TFC Group Synchronous Replacement Motor, Model 9123042. This motor is designed as a direct replacement part for various motorized valves, including those from ACL Honeywell, Landis & Gyr, Satchwell, and Sopec TOWER systems. It is suitable for both 2-port and 3-port valve applications, facilitating DIY repairs for common valve failures in heating and hot water systems.

2. SAFETY INFORMATION

WARNING: Electrical Hazard. Always disconnect power before attempting any installation or maintenance.

- Ensure the heating system's main power supply is completely switched off and isolated (e.g., by removing the fuse) before opening any valve covers or working with electrical components.
- Installation and repair should only be performed by competent and qualified personnel.
- Wear appropriate personal protective equipment (PPE) during installation.
- Verify that the replacement motor specifications match the original motor requirements of your valve system.
- Improper installation can lead to electrical shock, fire, or damage to the heating system.

3. PACKAGE CONTENTS

The package typically includes the following items:

- 1 x Tower TFC Group Synchronous Replacement Motor (Model 9123042)
- 2 x Mounting Screws
- 2 x Wire Connectors



Image 3.1: Synchronous Replacement Motor with included accessories.

4. SETUP AND INSTALLATION

Follow these general steps for replacing the synchronous motor. Always refer to the specific instructions for your valve model if available.

1. **Power Disconnection:** Ensure the main power supply to your heating system is completely disconnected and isolated.
2. **Access the Valve Head:** Carefully remove the cover of the motorized valve head to expose the motor assembly. Note how the existing motor is connected and mounted.
3. **Disconnect Wiring:** Disconnect the electrical wiring from the old motor. Take a photograph or make a diagram of the wiring connections before disconnecting to ensure correct re-connection.
4. **Remove Old Motor:** Unscrew and remove the old synchronous motor from its housing. In some older valve models, this may require removing all four nuts holding the valve head, potentially necessitating a system drain-down. Newer models often allow motor replacement by removing only two screws, maintaining water integrity.
5. **Install New Motor:** Position the new Tower TFC Group synchronous motor into the valve head.

Ensure the gear on the motor shaft aligns correctly with the valve mechanism. Secure the motor using the provided mounting screws.

6. **Connect Wiring:** Reconnect the electrical wiring to the new motor. Use the provided wire connectors or suitable alternatives (e.g., Wago connectors) to ensure secure and safe electrical connections.
7. **Replace Cover:** Carefully replace the valve head cover, ensuring all seals are correctly seated and screws are tightened.
8. **Restore Power:** Once the installation is complete and all connections are secure, restore power to the heating system.
9. **Test Operation:** Test the heating and hot water system to confirm the valve operates correctly and the motor functions as expected.



Image 4.1: Rear view of the motor, indicating electrical specifications.

5. OPERATING INSTRUCTIONS

The Tower TFC Group Synchronous Replacement Motor operates automatically as an integral part of your motorized valve system. There are no direct user controls for the motor itself. Its function is to open and close the valve in response to signals from your central heating programmer or thermostat.

Ensure your heating system's programmer and thermostat are set correctly for desired heating and hot

water operation. The motor will then engage and disengage the valve as required.

6. MAINTENANCE

This synchronous motor is a sealed unit and generally requires no routine maintenance. However, periodic checks of the motorized valve assembly are recommended:

- **Listen for Unusual Noises:** Pay attention to any grinding, buzzing, or clicking noises coming from the valve head, which could indicate wear or an impending motor failure.
- **Check for Free Movement:** If accessible, ensure the manual override lever (if present on your valve) moves freely, indicating the valve mechanism is not seized.
- **Expected Lifespan:** Synchronous motors in constant operation typically have a limited lifespan, often between 2 to 3 years. Consider having a spare motor for quick replacement in case of failure.

7. TROUBLESHOOTING

If your heating or hot water system is not functioning correctly, and you suspect a valve motor issue, consider the following:

Problem	Possible Cause	Solution
No heating but hot water is available (or vice versa)	Defective synchronous motor in the 2-port or 3-port valve.	Replace the synchronous motor. Ensure power is disconnected before replacement.
Valve not opening or closing fully	Motor failure, gear misalignment, or seized valve body.	Check motor for signs of failure (e.g., no movement, unusual noise). Verify gear alignment. If the valve body is seized, professional plumbing assistance may be required.
Motor makes buzzing noise but does not turn	Motor winding issue or mechanical obstruction.	Disconnect power and check for any obstructions. If none, the motor is likely faulty and requires replacement.

If troubleshooting steps do not resolve the issue, it is recommended to contact a qualified heating engineer or plumber.

8. SPECIFICATIONS

Specification	Detail
Manufacturer	Tower
Product Dimensions (L x W x H)	5 x 5 x 3.5 cm
Weight	210 grams
Model Number	9123042
Material	Metal
Voltage	230 Volts

Specification	Detail
Items in Package	1 (Motor)
Speed	5 RPM (Rotations Per Minute)
Country of Origin	China
UPC	791429123042

9. WARRANTY INFORMATION

This Tower TFC Group Synchronous Replacement Motor comes with a 6-month warranty from the date of purchase. The warranty covers manufacturing defects under normal use. It does not cover damage resulting from improper installation, misuse, or unauthorized modifications. Please retain your proof of purchase for warranty claims.

10. SUPPORT

For technical assistance, warranty claims, or further inquiries regarding the Tower TFC Group Synchronous Replacement Motor, please contact your retailer or a qualified heating system technician. Always provide the model number (9123042) and proof of purchase when seeking support.