

Schneider Electric GV2ME10

TeSys GV2ME Motor Circuit Breaker

Model: GV2ME10

Brand: Schneider Electric

1. INTRODUCTION

This manual provides essential information for the safe and effective use of the Schneider Electric TeSys GV2ME10 Motor Circuit Breaker. The GV2ME10 is a thermal-magnetic circuit protector designed for motor control and protection, featuring push-button operation and screw clamp terminals. It offers reliable protection against overloads and short circuits in industrial applications.

2. SAFETY INFORMATION

Always adhere to local and national electrical codes and regulations. Installation, maintenance, and troubleshooting should only be performed by qualified personnel. Disconnect all power before working on the device to prevent electric shock or equipment damage.

- Ensure proper grounding.
- Do not operate the device with wet hands.
- Verify correct wiring connections before applying power.
- Do not exceed the specified current and voltage ratings.

3. PRODUCT OVERVIEW

The TeSys GV2ME10 is a compact motor circuit breaker with integrated control and protection functions. Key components include input and output terminals, control buttons, and a current adjustment dial.



Figure 1: Front view of the TeSys GV2ME10 Motor Circuit Breaker. It shows the input terminals (1L1, 3L2, 5L3) at the top, output terminals (2T1, 4T2, 6T3) at the bottom, and the control panel in the center. The control panel includes a red 'STOP' button, a green 'START' lever, an 'OFF' indicator, a rotary dial for current adjustment (4-6.3A), and a 'TEST' button. The model number GV2ME10 and brand logos (TeSys, Schneider Electric) are also visible.

3.1. Components

- **Input Terminals (1L1, 3L2, 5L3):** Located at the top, these are for connecting the incoming power supply.
- **Output Terminals (2T1, 4T2, 6T3):** Located at the bottom, these are for connecting to the motor or load.
- **Current Adjustment Dial (4-6.3A):** A rotary dial to set the thermal overload protection current, ranging from 4 to 6.3 Amperes.
- **Red STOP Button:** Used to manually stop the motor and trip the circuit breaker.
- **Green START Lever:** Used to manually start the motor and close the circuit.
- **TEST Button:** Allows for testing the tripping mechanism of the circuit breaker.
- **OFF Indicator:** Indicates when the circuit breaker is in the OFF position.

4. SETUP AND INSTALLATION

The GV2ME10 is designed for easy installation. Ensure the mounting surface is stable and free from

vibrations. Use appropriate tools for screw terminal connections.

1. **Mounting:** Securely mount the circuit breaker in an enclosure or on a DIN rail, if applicable, ensuring adequate ventilation.
2. **Wiring:** Connect the incoming power supply to the input terminals (1L1, 3L2, 5L3) and the motor/load to the output terminals (2T1, 4T2, 6T3). Ensure all connections are tight and secure using the screw terminals.
3. **Current Setting:** Rotate the current adjustment dial to set the desired thermal overload protection current, typically matching the motor's full load current. The range is 4 to 6.3 Amperes.
4. **Verification:** Double-check all wiring and settings before applying power.

5. OPERATING INSTRUCTIONS

The GV2ME10 operates with simple push-button controls.

- **Starting the Motor:** Push the green START lever upwards to close the circuit and start the motor.
- **Stopping the Motor:** Push the red STOP button to open the circuit and stop the motor. This also trips the circuit breaker.
- **Resetting After Trip:** If the circuit breaker trips due to an overload or short circuit, identify and resolve the cause. Then, push the red STOP button to reset the mechanism before attempting to restart.
- **Testing the Trip Function:** Periodically press the TEST button to verify the proper operation of the thermal-magnetic tripping mechanism. The breaker should trip when the TEST button is pressed.

6. MAINTENANCE

The TeSys GV2ME10 is designed for minimal maintenance. Regular inspections are recommended to ensure optimal performance and safety.

- **Visual Inspection:** Periodically check for any signs of physical damage, discoloration, or loose connections.
- **Terminal Tightness:** Ensure all screw terminals remain tight to prevent overheating and poor connections.
- **Cleaning:** Keep the device clean and free from dust and debris. Use a dry, non-abrasive cloth for cleaning. Do not use solvents or liquid cleaners.
- **Functional Test:** Perform the TEST button function periodically to confirm the tripping mechanism is operational.

7. TROUBLESHOOTING

If you encounter issues with your GV2ME10, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Breaker trips immediately upon starting.	Short circuit in the motor or wiring; incorrect current setting.	Check motor and wiring for short circuits. Verify current setting matches motor FLA.

Problem	Possible Cause	Solution
Breaker trips after a period of operation.	Overload condition; motor drawing excessive current; high ambient temperature.	Reduce load on motor. Check motor for mechanical issues. Ensure proper ventilation. Adjust current setting if necessary, but do not exceed motor FLA.
Breaker does not reset.	Persistent fault (short circuit/overload); internal damage.	Ensure fault condition is cleared. If still unable to reset, the unit may be damaged and require replacement.
Motor does not start when START lever is engaged.	No power supply; loose connections; motor fault.	Check incoming power. Verify all wiring connections are secure. Inspect motor for issues.

If the problem persists after attempting these solutions, contact qualified technical support.

8. SPECIFICATIONS

Detailed technical specifications for the TeSys GV2ME10 Motor Circuit Breaker:

- **Model Number:** GV2ME10
- **Brand:** Schneider Electric
- **Description:** TeSys Deca Manual Starter and Protector, thermal magnetic circuit protector, push buttons, 4 to 6.3 A, screw clamp
- **Current Rating:** 4 to 6.3 Amperes (Adjustable)
- **Operating Voltage:** Up to 600 Volts
- **Operation Mode:** ON-OFF
- **Actuator Type:** Push Button / Lever
- **Contact Type:** Normally Open (for main contacts, typical for circuit breakers)
- **Connector Type:** Screws
- **Terminal Type:** Screw
- **Circuit Type:** 1-way
- **Product Dimensions (L x W x H):** 19.69 x 19.69 x 19.69 inches
- **Weight:** 3.53 ounces
- **National Stock Number:** 5925-01-541-4758
- **Date First Available:** February 16, 2012

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Schneider Electric website or contact their customer service. Product documentation and additional resources may be available online. You can find more information about TeSys products and support at the official Schneider Electric website:

[Schneider Electric TeSys GV2ME10 Information](#)

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