

Leeson C6T8FB11C

Leeson 1/2HP 850RPM TEFC General Purpose Electric Motor C6T8FB11C Instruction Manual

Model: C6T8FB11C | Brand: Leeson

1. INTRODUCTION

This manual provides essential information for the safe installation, operation, and maintenance of your Leeson 1/2HP 850RPM TEFC General Purpose Electric Motor, model C6T8FB11C. Please read this manual thoroughly before installation or operation to ensure proper use and to prevent injury or damage.

2. SAFETY INFORMATION

WARNING: ELECTRIC SHOCK HAZARD. Always disconnect power before servicing or installing the motor.

Observe all local and national electrical codes. Failure to do so may result in serious injury or death.

- Ensure proper grounding to prevent electrical shock.
- Do not operate the motor in wet conditions or in the presence of flammable gases or liquids.
- Wear appropriate personal protective equipment (PPE) such as safety glasses and gloves.
- Keep hands and clothing clear of moving parts.
- Only qualified personnel should perform installation and maintenance.

3. PRODUCT OVERVIEW

The Leeson C6T8FB11C is a 1/2 horsepower, 850 RPM, Totally Enclosed Fan Cooled (TEFC) general purpose electric motor designed for various industrial and commercial applications. It operates on 208-230/460V, 3-phase, 60Hz power supply.



Figure 1: Front view of the Leeson C6T8FB11C electric motor, showing the main body, shaft, and electrical connection box.



Figure 2: Side view of the Leeson C6T8FB11C electric motor, highlighting the nameplate with electrical specifications and the "Energy Saving Electric Motors" label.

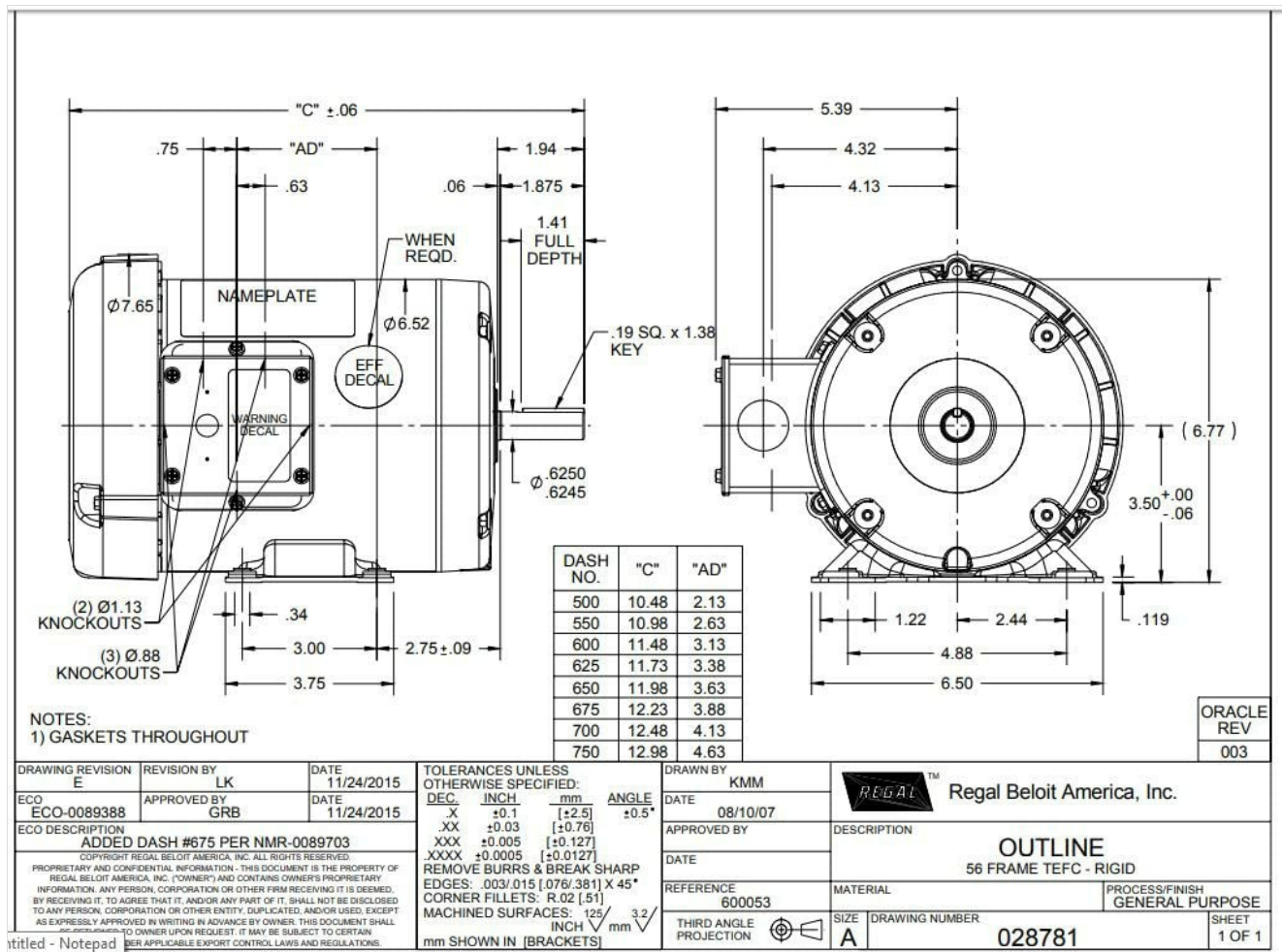


Figure 3: Technical drawing (outline) of the Leeson C6T8FB11C electric motor, providing detailed dimensions and specifications for installation planning.



Figure 4: Rear view of the Leeson C6T8FB11C electric motor, showing the fan cover for cooling.

4. SETUP AND INSTALLATION

Proper installation is crucial for the motor's performance and longevity. Refer to the technical drawing (Figure 3) for mounting dimensions.

4.1 Mounting

- Mount the motor on a rigid, level surface capable of supporting its weight and resisting vibration.
- Ensure adequate ventilation around the motor, especially for the fan-cooled end, to prevent overheating.
- Secure the motor using appropriate bolts and washers through the mounting feet.

4.2 Electrical Connection

CAUTION: All wiring must be performed by a qualified electrician in accordance with local and national electrical codes.

- Verify the power supply voltage (208-230V or 460V, 3-phase, 60Hz) matches the motor's requirements as indicated on the nameplate.

- Connect the motor to a dedicated circuit with appropriate overcurrent protection.
- Ensure proper grounding of the motor frame.
- Refer to the wiring diagram on the motor's nameplate or inside the terminal box for correct connections.

5. OPERATING INSTRUCTIONS

Before initial startup, perform the following checks:

- Confirm all electrical connections are secure and correct.
- Ensure the motor is properly mounted and aligned with the driven equipment.
- Check for any obstructions around the motor or fan.

5.1 Startup

Once all checks are complete, apply power to the motor. Observe the motor during the first few minutes of operation for unusual noises, vibrations, or excessive heat. If any anomalies are detected, immediately shut down the motor and investigate the cause.

5.2 Normal Operation

The motor is designed for continuous duty within its specified ratings. Monitor the motor periodically for signs of wear or malfunction.

6. MAINTENANCE

WARNING: Disconnect all power to the motor before performing any maintenance.

6.1 Routine Inspection

- **Monthly:** Check for excessive vibration, unusual noise, and proper ventilation. Clean any dust or debris from the motor's exterior and fan cover.
- **Quarterly:** Inspect electrical connections for tightness and signs of corrosion. Check mounting bolts for tightness.

6.2 Lubrication

This motor features sealed bearings that are permanently lubricated and generally do not require additional lubrication under normal operating conditions. Refer to the motor's nameplate or manufacturer's specifications for specific lubrication requirements if applicable.

7. TROUBLESHOOTING

This section provides guidance for common issues. For complex problems, contact a qualified service technician.

Problem	Possible Cause	Solution
Motor does not start	No power supply; Incorrect wiring; Overload protection tripped; Seized bearings.	Check power source and circuit breaker; Verify wiring against diagram; Reset overload; Inspect bearings.
Motor runs hot	Overload; Insufficient ventilation; Incorrect voltage; Bearing issues.	Reduce load; Clear obstructions from fan/motor; Verify voltage; Inspect/replace bearings.

Problem	Possible Cause	Solution
Excessive noise or vibration	Loose mounting; Misalignment; Worn bearings; Unbalanced load.	Tighten mounting bolts; Check alignment; Inspect/replace bearings; Balance load.

8. SPECIFICATIONS

Parameter	Value
Brand	Leeson
Model	C6T8FB11C
Horsepower	0.5 HP (1/2 HP)
Speed	850 RPM
Voltage	208-230/460 Volts
Phase	3 Phase (3PH)
Frequency	60 Hz
Enclosure Type	TEFC (Totally Enclosed Fan Cooled)
Service Factor	1.15 SF
Frame Size	56
Mounting	Rigid Base
Item Weight	31 Pounds
Package Dimensions	18 x 12 x 12 inches

9. WARRANTY AND SUPPORT

For warranty information and technical support, please contact Leeson customer service or visit their official website. Keep your purchase receipt as proof of purchase.
Leeson Contact Information: [www.leeson.com](#) (Example link, actual link may vary)

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question