

6FZJ7

Dayton 6FZJ7 Motor Starter Enclosure User Manual

Model: 6FZJ7

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the Dayton 6FZJ7 Motor Starter Enclosure. Please read this manual thoroughly before attempting any installation or operation to ensure proper use and to prevent potential hazards.

2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions may result in serious injury, death, or property damage.

- Installation and maintenance must be performed by qualified personnel only.
- Always disconnect power before performing any work on the motor starter or its enclosure.
- Ensure all local and national electrical codes are followed during installation.
- Do not operate the enclosure if it is damaged or improperly installed.
- Verify correct voltage and current ratings before connecting to power.

3. PRODUCT OVERVIEW

The Dayton 6FZJ7 is a robust motor starter enclosure designed to house and protect motor starter components. It features a compact design with a lift-off cover and is constructed from painted steel, offering NEMA 4 protection against dust, dirt, and water.



Figure 1: Front view of the Dayton 6FZJ7 Motor Starter Enclosure. The enclosure is light gray with a darker gray side. It features a black label indicating "DOL STARTER" and electrical specifications (AC3 Ie 20 A, Ue 415 V 50 Hz, COIL 430 V). On the right side, there is a control panel with a green rectangular 'I' (start) button at the top and a red circular 'O' (stop) button at the bottom.

Key Features:

- Compact, Lift-Off Cover Design
- Durable Painted Steel Construction

- NEMA 4 Enclosure Type for environmental protection
- Designed for use with 32A Dayton IEC Contactors
- Integrated Start (Green) and Stop (Red) Push Buttons

4. SETUP AND INSTALLATION

4.1. Mounting

The enclosure should be mounted on a flat, stable surface using appropriate fasteners. Ensure there is sufficient clearance around the enclosure for ventilation and access for maintenance. The NEMA 4 rating requires proper sealing of all entry points and secure mounting to maintain environmental protection.

4.2. Wiring

IMPORTANT: All wiring must be performed by a qualified electrician in accordance with all applicable electrical codes.

- Disconnect all power sources before beginning wiring.
- Open the enclosure cover.
- Route power and control wiring through designated conduit entries. Ensure proper strain relief and sealing to maintain the NEMA 4 rating.
- Connect the motor starter components (not included with enclosure) according to their specific wiring diagrams.
- The enclosure is designed for AC3 operation with a rated operational current (Ie) of 20A and an operational voltage (Ue) of 415V at 50Hz. The coil voltage is 430V.
- Ensure all connections are tight and secure.
- Close and secure the enclosure cover.

5. OPERATION

5.1. Starting the Motor

To start the motor, press the **green 'I' button** located on the front of the enclosure. This will energize the motor starter and initiate motor operation.

5.2. Stopping the Motor

To stop the motor, press the **red 'O' button** located on the front of the enclosure. This will de-energize the motor starter and stop motor operation.

6. MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of the motor starter enclosure.

- **Periodic Inspection:** Visually inspect the enclosure for any signs of damage, corrosion, or loose components. Check for proper sealing of the cover and conduit entries.
- **Cleaning:** Keep the exterior of the enclosure clean and free from dust and debris. Use a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Electrical Connections:** Periodically check all electrical connections for tightness. Loose connections can lead to overheating and component failure. (Ensure power is disconnected before checking).
- **Gasket Integrity:** Inspect the gasket around the cover for cracks or deterioration. Replace if necessary to maintain the NEMA 4 rating.

7. TROUBLESHOOTING

This section provides solutions to common issues. For problems not listed here, contact qualified service personnel.

Problem	Possible Cause	Solution
Motor does not start when green button is pressed.	No power supply; Loose wiring; Overload tripped; Faulty motor starter.	Check power supply; Inspect and tighten wiring; Reset overload; Inspect motor starter components.
Motor does not stop when red button is pressed.	Stuck stop button; Faulty motor starter contactor.	Check button mechanism; Inspect and replace faulty contactor.
Enclosure shows signs of water ingress.	Damaged gasket; Improperly sealed conduit entries; Loose cover.	Inspect and replace gasket; Re-seal conduit entries; Ensure cover is securely fastened.

8. SPECIFICATIONS

Attribute	Value
Model	6FZJ7
Item Type	Motor Starter Enclosure
Enclosure Type	NEMA 4
Material	Painted Steel
Height	8.48 inches
Width	5.66 inches
Depth	5.31 inches

Attribute	Value
Product Dimensions (L x W x H)	8.9 x 5.9 x 6.6 inches
Item Weight	3 Pounds
Rated Operational Current (AC3 le)	20 A
Rated Operational Voltage (Ue)	415 V, 50 Hz
Coil Voltage	430 V
Compatibility	32A Dayton IEC Contactors

9. WARRANTY AND SUPPORT

For information regarding product warranty, technical support, or service, please refer to the documentation provided with your purchase or contact the manufacturer directly. Keep your purchase receipt for warranty claims.