

2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions could result in serious injury or death.

- **Electrical Hazard:** Always disconnect power before servicing or installing the motor. Ensure proper grounding to prevent electric shock. All wiring must comply with local and national electrical codes.
- **Rotating Parts:** Keep hands, hair, clothing, and tools clear of rotating parts (shaft, fan) during operation. Install appropriate guards.
- **Thermal Hazard:** The motor surface can become hot during operation. Allow the motor to cool before handling.
- **Proper Ventilation:** Ensure adequate ventilation around the motor to prevent overheating. This motor is Open Drip Proof (ODP) and designed for dry indoor environments.
- **Qualified Personnel:** Installation and maintenance should only be performed by qualified electricians or technicians.

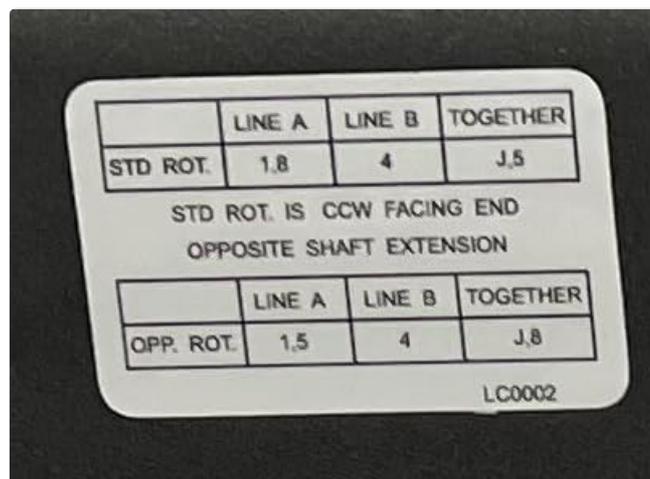
3. SETUP AND INSTALLATION

3.1 Mounting

Mount the motor securely on a flat, stable surface using appropriate bolts and washers. Ensure the mounting surface can support the weight and torque of the motor during operation. Verify that the motor is level to prevent undue stress on bearings.

3.2 Electrical Connection and Wiring

This motor is a single-phase unit designed for 208-230V operation. Refer to the motor's nameplate and the wiring diagram for correct connections. Ensure the power supply matches the motor's voltage and current requirements. The motor has a 1.15 Service Factor and is usable at 208V.



The image shows a nameplate with two tables. The top table is for 'STD ROT.' and the bottom table is for 'OPP. ROT.'. Both tables have columns for 'LINE A', 'LINE B', and 'TOGETHER'. The 'STD ROT.' table shows 1.8 for Line A, 4 for Line B, and J.5 for Together. The 'OPP. ROT.' table shows 1.5 for Line A, 4 for Line B, and J.8 for Together. Below the tables, it says 'STD ROT. IS CCW FACING END OPPOSITE SHAFT EXTENSION'. The part number 'LC0002' is at the bottom right.

	LINE A	LINE B	TOGETHER
STD ROT.	1.8	4	J.5

STD ROT. IS CCW FACING END
OPPOSITE SHAFT EXTENSION

	LINE A	LINE B	TOGETHER
OPP. ROT.	1.5	4	J.8

LC0002

Figure 3.1: Wiring Diagram for Standard and Opposite Rotation. This diagram illustrates the terminal connections for achieving either standard (counter-clockwise) or opposite (clockwise) shaft rotation, crucial for correct motor setup.

Wiring Instructions:

- **Standard Rotation (CCW facing end opposite shaft extension):** Connect Line A to terminals 1 and 8. Connect Line B to terminal 4. Connect terminals 3 and 5 together.

- **Opposite Rotation (CW facing end opposite shaft extension):** Connect Line A to terminals 1 and 5. Connect Line B to terminal 4. Connect terminals 3 and 8 together.

Ensure all connections are tight and insulated. Use appropriate wire gauges for the motor's current draw (21.5 Amps at 230V / 23.5 Amps at 208V).

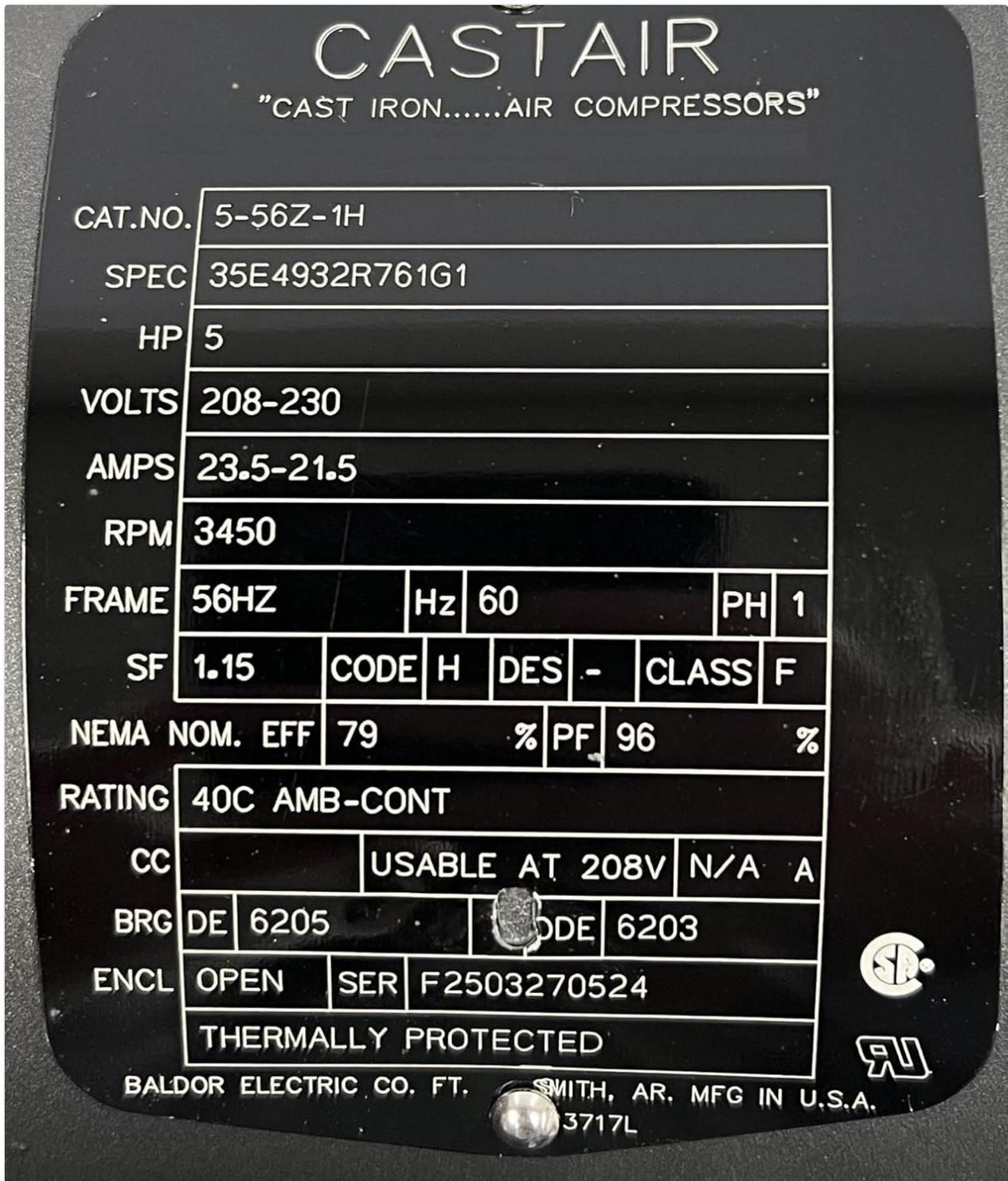


Figure 3.2: Motor Nameplate. This close-up view of the motor's nameplate provides critical operational data including model number, voltage, amperage, RPM, frame size, and thermal protection details.

4. OPERATING INSTRUCTIONS

Once the motor is securely mounted and correctly wired, it is ready for operation. This motor is equipped with a manual reset thermal overload protector.

- **Starting the Motor:** Ensure all safety precautions are in place. Apply power to the motor. The motor

should start smoothly.

- **Thermal Overload Protector:** This motor has a manual reset thermal protector. If the motor overheats due to overload or other issues, the protector will trip, shutting off the motor. Allow the motor to cool down for at least 10 minutes before attempting to reset the protector. To reset, press the red reset button located on the motor's side. If the protector trips frequently, investigate the cause (e.g., overload, insufficient ventilation, low voltage).

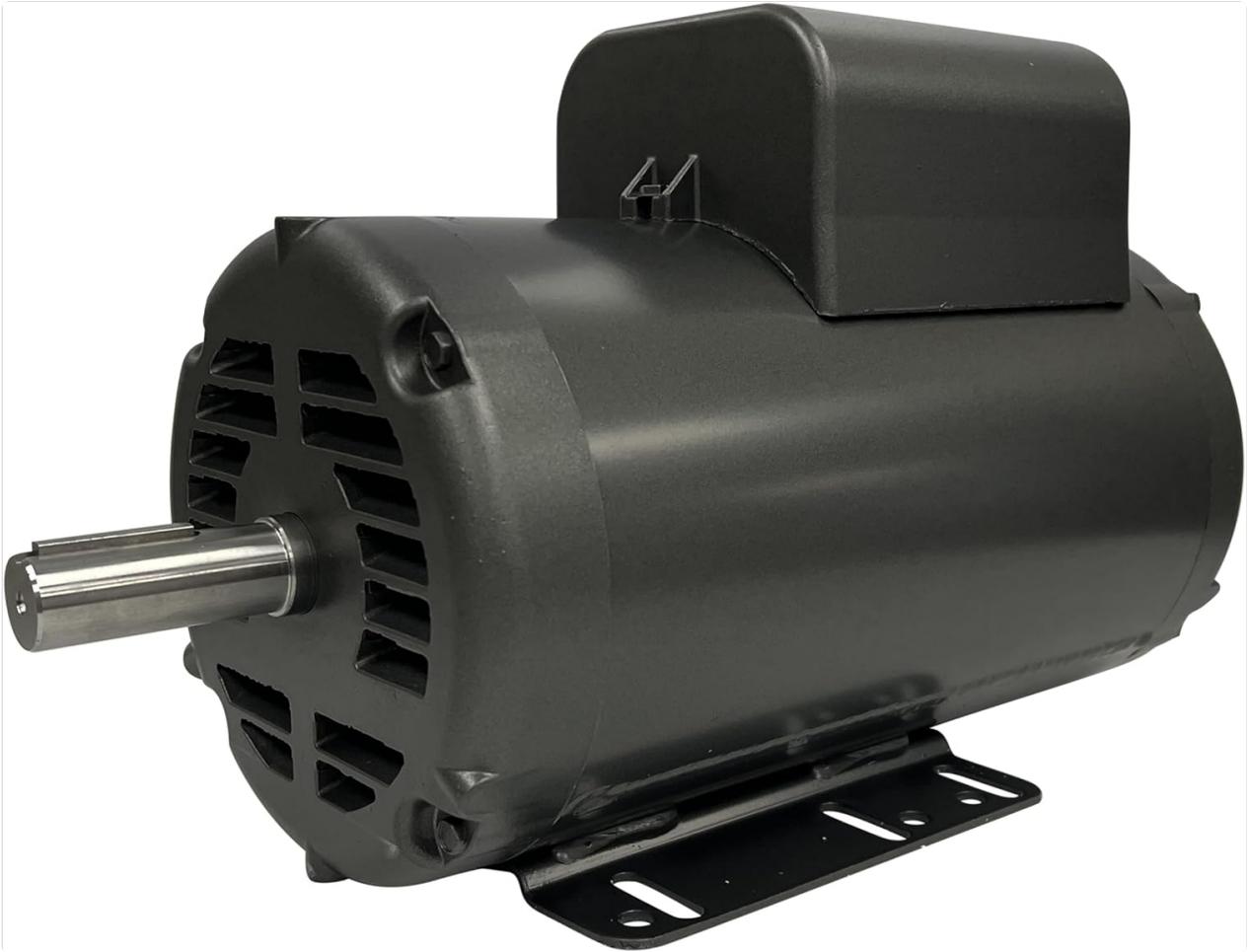


Figure 4.1: Side View of Motor with Shaft. This image shows the motor from a side angle, clearly displaying the output shaft and the general enclosure design.

5. MAINTENANCE

The Baldor 5HP motor is designed for durability and requires minimal maintenance. Regular inspection and cleaning will ensure long service life.

- **Cleaning:** Periodically clean the exterior of the motor to remove dust, dirt, and debris. Ensure the ventilation openings are clear to allow for proper airflow. Use a dry cloth or compressed air. Do not use water or solvents.
- **Inspection:** Regularly inspect the motor for any signs of wear, damage, or loose connections. Check mounting bolts for tightness. Listen for unusual noises during operation.
- **Bearings:** This motor is equipped with sealed bearings (BRG DE 6205, BRG ODE 6203) that typically do not require lubrication under normal operating conditions.

6. TROUBLESHOOTING

This section provides guidance for common issues you might encounter with your motor.

Problem	Possible Cause	Solution
Motor does not start	No power; tripped thermal protector; incorrect wiring; seized load.	Check power supply; reset thermal protector (allow to cool); verify wiring against diagram; disconnect motor from load to check if motor spins freely.
Motor overheats	Overload; insufficient ventilation; low voltage; frequent starts/stops.	Reduce load; clear ventilation openings; check supply voltage; reduce frequency of starts.
Excessive noise or vibration	Loose mounting; worn bearings; unbalanced load; misalignment.	Tighten mounting bolts; inspect bearings (contact service if worn); balance load; check alignment of motor and driven equipment.

7. SPECIFICATIONS

Detailed specifications for the Baldor 5HP Air Compressor Electric Motor:

Specification	Value
Horsepower (HP)	5 HP
Voltage	208-230 Volts
Phase	Single-Phase (PH 1)
Amperage (Amps)	23.5 Amps (208V) / 21.5 Amps (230V)
RPM	3450 RPM
Frame Size	56HZ
Shaft Diameter	7/8 inches
Service Factor (SF)	1.15
Code	H
Insulation Class	F
NEMA Nom. Eff.	79%
%PF	96%
Rating	40C AMB-CONT
Enclosure Type	ODP (Open Drip Proof)
Special Feature	Heavy Duty
Power Source	AC
Manufacturing Location	Made in USA by Baldor / ABB

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact the manufacturer, Baldor Electric Company, or your authorized dealer. Keep your purchase receipt as proof of purchase.

Baldor Electric Company Contact: Please visit the official Baldor website or contact their customer service for the most current support information.