



# MOTOR BASICS SEMINAR

## Wednesday, May 7, 2025

Presented by: Local 399 and



### Topics

#### **I. Basic Principles of Electric Motors**

- Magnetism, Electricity, Work/ Power, AC & DC current

#### **II. Motor Construction**

- Rotor, Stator, End Bells, Bearings, Insulation, Enclosures, Name Plate

#### **III. AC Induction Motors**

- Single and Three phase—Shaded Pole, PSC, Split Phase, Capacitor, Start, ECM

#### **IV. Selecting the proper motor for the job**

- How to determine which motor to use.

#### **V. Motor Replacement - how to identify and replace a motor without a nameplate**

- Determining factors

#### **VI. On-Line Resources**

- Cross Reference, additional technical information, drawings and more

#### **VII. Motor troubleshooting guide and installation checklist**

- Handy card for service techs to keep in their tool box, van or pocket

#### **VIII. Questions and Answers**

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**Date:** Wednesday, May 7, 2025

#### **Time: - Morning Session**

Check-in: 8:30 a.m.

Seminar: 9:00 a.m.- 12:00 p.m.

#### **Place:**

IUOE Local 399 Office and Training Center

2260 S. Grove Street

Chicago, IL 60616 Parking Available

#### **Time: - Afternoon Session**

Check-in: 3:30 p.m.

Seminar: 4:00 p.m.—7: 00 p.m.

#### **Class Fee:**

Contributing Member: No Fee

Non-Contributing Member Fee: \$50

Non-Member Fee: \$100

Any Questions Contact: Education Department at 312-372-9870 Ext. 4000

Seating is Limited, Pre-Registration is Required

Download Registration form at [www.iuoe399.org](http://www.iuoe399.org)