# Permanent Magnet DC Motor Training System



# Model: 417-000

DAC Worldwide's Permanent Magnet DC Motor Training System (417-000) provides a starting point for understanding a common, widely-used industrial induction motor. These small, light, and highly efficient motors are used in applications like electric cars, conveyors, welding equipment, pumping tasks, and tasks where a motor needs to produce high torque at low speeds. The permanent magnets eliminate the need for external field current and for stator field windings found in traditional shunt motors.

### Hands-on Permanent Magnet DC Motor Training & Skill-Building

Learners can practice motor wiring by using banana jack receptacles on this permanent magnet induction motor training device's control enclosure front panel face. They can also study the permanent magnet DC motor's construction, use fault insertion switches for hands-on troubleshooting training and motor maintenance skills, and utilize the system's master circuit breaker with lock-out/tag-out capability for LOTO training. This system also offers an optional motor loading module that attaches using a flexible coupling for more realistic industrial motor training.

This heavy-duty industrial motor training system includes an aluminum control box support structure, welded aluminum mounting baseplate, and steel control enclosure. It also allows learners to practice motor measurement skills using the included voltmeter and ammeter.

## FEATURES & SPECIFICATIONS

- Welded aluminum baseplate
- Provision for bench-top mounting
- Motors mounted on T-slotted rails which accommodate 184T and 56 frame motors (56 frame standard)
- Master circuit breaker with lock-out / tag-out capability
- Silkscreened panel face with identification of line and motor lead numbers
- Color-coded banana-jack patch cord receptacles

- Voltmeter and ammeter
- Permanent internal grounding of all elements
- Enclosure cover safety interlock switch
- Four instructor fault insertion switches (on rear of control enclosure)
- Large emergency stop switch
- Keyed instructor power switch (on rear of control enclosure)
- Large pilot light

PRODUCT DIMENSIONS Approx. 19-in. L x 19-in. W x 25-in. H (480 x 480 x 640 mm)

50lbs. (23kg)

UTILITIES 110 VAC 240 VAC, 3ph, based on individual product

#### **ADDITIONAL REQUIREMENTS**

- #410-001/E Portable Digital Multimeter
- #410-002 Non-Contact Tachometer Kit
- #410-100 Prony Brake Assembly

#### INCLUDES

- Motor
- Circuit Breaker
- Voltmeter
- Ammeter
- Safety Interlock Switch
- Four (4) Instructor Fault Insertion Switches
- E-Stop
- Large Pilot Light
- Keyed Instructor Power Switch
- #410-500 Use/Exercise Guide

#### Address

#### Contacts

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