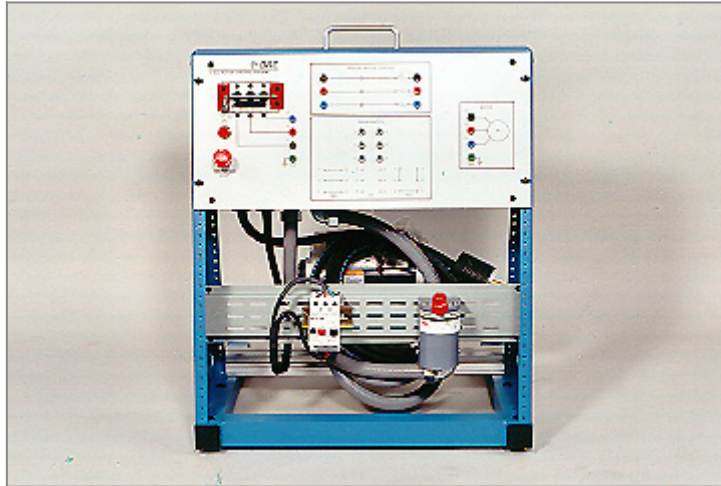


# 3-Phase Motor Control Training System with Manual Starter



Model: 422-000

DAC Worldwide's 3-Phase Motor Control Training System with Manual Starter (422-000) is a task-specific, motor control-related training device that allows for skill-building in the operational principles, circuit design, wiring, fault troubleshooting, and application of industrial three-phase, manual motor starters. Using this trainer, learners will explore the skills that an operator must master in order to confidently operate modern motor control equipment, such as wiring a three-pole pushbutton motor starter as a motor controller and troubleshooting a drum-type reversing switch manual starter.

A fundamental training system within a series of related motor control-focused products, this device is often used independently due to its common use in basic industrial equipment and systems seen in industry, as well as its on-board selection of common piloting components. When used in conjunction with others in the series, DAC Worldwide's 3-Phase Motor Control Training System sequentially introduces the student to control circuit design, development and ultimately implementation, from the most simplistic to the most complex.

## **Practice Hands-On Motor Control Skills for Various Applications**

This 3-Phase Motor Control Training System features a welded aluminum baseplate, steel support structure and enclosure, aluminum motor mounting rails, an applicable industrial single-phase, capacitor-start motor, and a 56-frame, ½ HP three-phase induction motor. Its aluminum t-slotted mounting rails allow for attachment of tethered motor/baseplate assembly and connection to associated devices, while the steel structure allows for attachment to a base assembly, or an alternate mounting bench.

All wiring includes shielded, color-coded banana-jack connections on the front panel face, as opposed to being directly connected to individual components. Four instructor fault switches are programmed to create component faults, which not only simulates failure conditions, but also allows for real-time assessment and troubleshooting skills for learners.

This system also utilizes industry-grade safety components, providing durability to stand up to frequent use, and to aide learners in becoming better prepared for the tasks they will encounter on the job. Some of the on-board safety components include a keyed instructor power switch, circuit breaker with lock-out/tag-out, permanent internal grounding, a large emergency stop switch, and much more. In addition, all of the components used on this training system are UL and CE certified.

## Hands-On Exercises and Learning Activities Lead to Realistic Results

DAC Worldwide's 3-Phase Motor Control Training System also features exercises and learning activities that focus more on results and less on secondary academic background information. This comprehensive training system offers hours of instruction in basic motor control principles, single-phase/three-phase motors, and components, including topics on terminology, operation, troubleshooting, and background theory. The integrated course features 21 activities, all of which include background information on the topic, hands-on experiments, and related review questions. A copy of this course's Use/Exercise Guide is included with the training system. If you would like to inquire about purchasing additional Use/Exercise Guides for your program, please contact your local DAC Worldwide Representative for more information.

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### **FEATURES & SPECIFICATIONS**

- Welded aluminum base assembly using 1-1/2" square, 1/8" wall aluminium tubing
- Aluminum t-slotted mounting rails, allowing for attachment of tethered motor/baseplate assembly and connection to associated devices
- 16-Gauge formed-steel support structure allowing for attachment to base assembly or alternate mounting bench and integration products
- 16-Gauge formed-steel electrical enclosure
- Silk-screened 1/8" aluminum front panel face
- Powder-coated surfaces throughout
- On-board safety components, including:
  - Keyed instructor power switch (*rear of product*)
  - Circuit breaker with provision for representative lock-out/tag-out
  - Permanent, redundant, internal grounding (not dependent on student wiring)
  - Pilot light and large emergency stop switch
  - Internal electrical interlock, de-energizing power when accessing electrical enclosure
  - Industrial-duty, 56-frame, 1/2 HP, 1725 RPM, three-phase induction motor
  - 3-Pole manual motor starter with variable thermal overload
  - On-board reversing drum switch
- Use of UL and CE certified electrical components throughout
- Color-coded, banana-jack receptacles for all motor leads, supply connections and control components
- Four (4) instructor fault switches (rear of device, behind access panel)
- Allows for attachment to optional control and mechanical devices directly and using optional integration bench products
- Packaging for shipment via motor freight

### **INCLUDES**

- Manual Motor Starter
- Circuit Breaker

- Keyed Instructor Power Switch
- Pilot Light and E-Stop Switch
- Electrical Interlock
- Motor
- Four (4) Instructor Fault Switches
- #420-500 Use/Exercise Guide

**PRODUCT DIMENSIONS *DISCLAIMER:*** *Product Dimensions are approximate. Shipping Dimensions and Weights are for directional use only and may change based on manufacturer variables. For the most accurate Shipping Dimensions and Weights, please contact the manufacturer.*

- **Product Dimensions**

(L x W x H)

19in. x 19in. x 25in. (480 x 480 x 670 mm)

50 lbs. (22.5 kg)

- **Shipping Dimensions**

(L x W x H)

20.75" x 23.5" x 30" (525 x 600 x 760 mm)

85 lbs. (32.5 kg)

## **UTILITIES**

- 208V/60Hz/3Ph

### **Address**

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