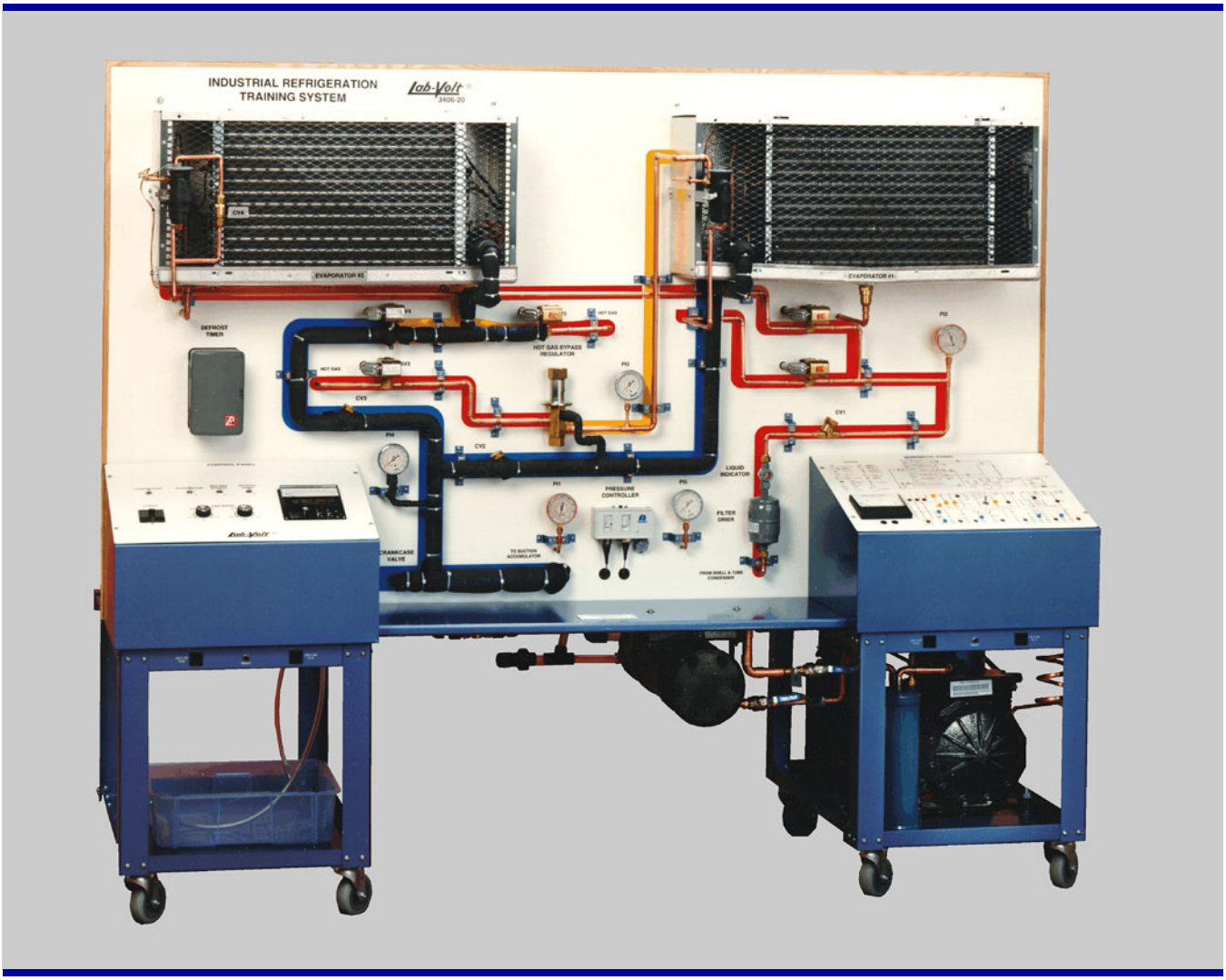
*Refrigeration, Air Conditioning, and Heating*

# INDUSTRIAL REFRIGERATION TRAINING SYSTEM, MODEL 3406




## GENERAL DESCRIPTION

The Lab-Volt Industrial Refrigeration Training System, Model 3406, introduces trainees to the principal components of industrial refrigeration systems through hands-on practice.

It enables students to gain experience with both commercial and industrial equipment that use water-cooled condensers, electric and hot-gas defrost systems, and hot-gas bypass for variable load control. Lockable fault-insertion switches will introduce various electrical faults, allowing students to develop their skills in maintenance and troubleshooting.

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# INDUSTRIAL REFRIGERATION TRAINING SYSTEM
# MODEL 3406

**Features**

- Two evaporators, one with electric defrost, the other with hot-gas defrost.
- A shell and tube water-cooled condenser. Requires a 2 GPM (0.45 $m^3/h$) water supply with temperature ranging from 50 to 65°F (10 to 18°C).
- A 2-HP semihermetic refrigerant-cooled compressor, using R-22 refrigerant.
- Variable-speed evaporator fans.
- Control devices such as high/low pressure controller, thermostatic expansion valves with external equalizer, crankcase pressure regulator, hot-gas bypass pressure regulator, pressure-controlled water valve, solenoid valves and defrost timer.

## TABLE OF CONTENTS OF THE STUDENT MANUALS

**Industrial Refrigeration (76093-00)**



## SPECIFICATIONS

| Model 3406 –Industrial Refrigeration Training System | | 120/208 V – 60 Hz | 220/380 V – 50 Hz | 240/415 V – 50 Hz |
|---|---|---|---|---|
| Power Requirement | | 120/208 V – 15 A – 3~ | 220/380 V – 10 A – 3~ | 240/415 V – 10 A – 3~ |
| Compressor type | | Semihermetic, 2 HP | | |
| Refrigerant | | R22 | | |
| Evaporators | | 1 Forced-air coil with electrical defrost | | |
| | | 1 Forced-air coil with hot-gas defrost | | |
| Condenser | | Water-cooled shell and tube[1] | | |
| Safety Devices | | High pressure controller, Condenser pressure relief valve | | |
| Control Devices | | 2 Thermostatic expansion valves with external equalizer | | |
| | | High/low pressure regulator | | |
| | | Crankcase pressure regulator | | |
| | | Hot-gas bypass pressure regulator | | |
| | | Solenoid valves | | |
| | | Pressure-controlled water valve | | |
| | | Defrost timer | | |
| Fault-Insertion Switches | | 8 | | |
| Physical Characteristics | Dimensions (H x W x D) | 1870 × 2210 × 700 mm (73.6 x 87.0 x 27.4 in) | | |
| | Net Weight | 307 kg (675.4 lb) | | |

[1] Requires a 2 GPM (0.45 $m^3/h$) water supply with temperature ranging from 50 to 65°F (10 to 18°C).

## ORDERING NUMBERS

| 120 V – 60 Hz | | | 220 V – 50 Hz | | | 240 V – 50 Hz |
|---|---|---|---|---|---|---|
| **ENGLISH** | **FRENCH** | **SPANISH** | **ENGLISH** | **FRENCH** | **SPANISH** | **ENGLISH** |
| 3406-20 | TBE | 3406-22 | 3406-25 | TBE | TBE | 3406-2A |

**Table 1. Equipment Ordering Numbers**

| 120 V – 60 Hz | | | 220 V – 50 Hz | | | 240 V – 50 Hz |
|---|---|---|---|---|---|---|
| **ENGLISH** | **FRENCH** | **SPANISH** | **ENGLISH** | **FRENCH** | **SPANISH** | **ENGLISH** |
| 76093-00 | TBE | 76093-02 | 76093-00 | TBE | 76093-02 | 76093-00 |
| 76093-10 | TBE | 76093-12 | 76093-10 | TBE | 76093-12 | 76093-10 |

**Table 2. Courseware Ordering Numbers**

TA91359-00 Rev. C