

# 9.- THERMODYNAMICS & THERMOTECHNICS

## 9.1. FUNDAMENTALS AND BASIC CONCEPTS OF THERMODYNAMICS



TBCF  
**Bomb Calorimeter**

with  
EDIBON  
SCADA



TCESC  
Computer Controlled  
**Separating and  
Throttling Calorimeter**

with  
EDIBON  
SCADA



TECMC  
Computer Controlled  
**Marcet Boiler Unit**

with  
EDIBON  
SCADA



TRLCC  
Computer Controlled  
**Recycle Loops  
Unit**



TMTC  
Computer Controlled  
**Temperature Measurement  
Unit**

with  
EDIBON  
SCADA



TLBGC  
Computer Controlled  
**Gas Laws Unit (Boyle  
and Gay-Lussac Laws)**

with  
EDIBON  
SCADA



HFCC  
Computer Controlled **Flow  
of Compressible  
Fluids Unit**

TEPGC  
Computer  
Controlled  
**Expansion  
Processes  
of a Perfect  
Gas Unit**

**COMPUTER CONTROLLED  
TECHNOLOGY**

**EDIBON SCADA System**



Control Interface



Data  
Acquisition  
Board



Supervisory  
Software





# 9.- THERMODYNAMICS & THERMOTECHNICS

All these units are supplied

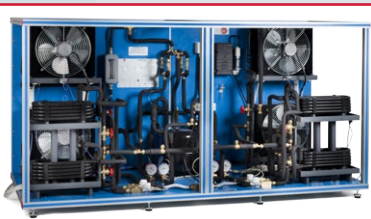
with  
**EDIBON**  
SCADA

## 9.2. HEATING, VENTILATION, AIR CONDITIONING AND HOT WATER



TEHSC  
Computer Controlled  
Unit to **Study the  
Efficiency of a  
Heating System**

## 9.3. HEAT PUMPS



THIBAR44C  
Computer Controlled  
**Heat Pump + Air  
Conditioning +  
Refrigeration with  
4 Condensers and 4  
Evaporators (Water/  
Air)**

## 9.4. REFRIGERATION

TRCVC  
Computer Controlled **Vapour-  
Compression Refrigeration  
Unit**



## 9.5. THERMAL HYDRAULIC PIPING SYSTEM



TEDT  
**Thermal Expansion  
Training Unit**

## 9.6. HEAT TRANSFER



TSTCC  
Computer  
Controlled **Heat  
Transfer Series**  
TXC/CL. **Linear Heat**  
Conduction Module for TSTCC.  
TXC/TE. **Three Axes Heat**  
Transfer Module for TSTCC.  
TXC/TC. **Ceramic Heat** Transfer  
Module for TSTCC.  
...and more.

## 9.7. HEAT EXCHANGERS



TICC  
Computer Controlled **Heat  
Exchangers Training System**

TIAAC  
Computer Controlled **Water-to-  
Air Heat Exchanger Unit**



## 9.8. THERMAL MACHINES



TGFA  
Computer Controlled  
**Axial Flow Gas  
Turbine/ Jet Engine**



TMSC  
Computer Controlled  
**Stirling Motor**

## 9.9. INTERNAL COMBUSTION ENGINES



TBMCI2  
Computer  
Controlled  
**Test Bench  
for Single-  
Cylinder and  
Two-Cylinders  
Engines, 11 kW**



TBMCCG  
Computer Controlled  
**Exhaust Gas Calorimeter**

## 9.10. INSTALLATIONS AND MAINTENANCE



TRAMC  
Computer  
Controlled  
**Refrigeration and  
Air Conditioning  
Modular Unit**