

HEAT CONTROL AND DISTRIBUTION MODULE

Mod. RC/EV

INTRODUCTION

This module has been specifically designed for educational aims and it concerns the study of two types of heating circuits with radiators:

- a central heating system with outdoor reset control of water delivery temperature
- a distributed heating system with room thermostats, zone valves and heat counters.

TRAINING PROGRAM

- Procedures for water filling and air bleeding from the system
- Outdoor reset control: variation of hot water delivery temperature versus outdoor air temperature
- Determining the proportional band of the controller
- Examination of the control circuit hunting
- Determining the control circuit amplification
- ON/OFF control: room thermostat
- Analyzing the operation of the 3-way mixing valve and of the zone valves
- Determination of the characteristic of the 3-way valve
- Plotting the emission curve of a radiator
- Modality for counting and calculating the used thermal energy
- Determining the authority of mixing valve (optional item electronic flowmeter required)

TECHNICAL SPECIFICATIONS

- Steel structure mounted on wheels, painted and treated in the oven
- Colour silk-screen-printed schematic diagram of system hydraulic circuit with warning LEDs
- Central heating system with 2 radiators, 1 flowmeter, 1 flow rate metering device, 1 recirculation pump, 1 check valve, 1 three-way motor-driven valve controlled by outdoor reset controller provided with outdoor air and water delivery temperature sensors, pressure gauges
- Zone heating system with 4 steel radiators, 2 solenoid valves controlled by room thermostats, 1 circulation pump, pressure gauge, 2 heat counters
- Pipes connecting the various components painted with different colours
- Switchboard with controls and 2 digital thermometers
- The equipment also includes 10 quick-connection multi-function flexible pipes, bleed valves, on-off valves, lockshield valves

Dimensions: 200 x 70 x 190 cm

Net weight: 291 kg



REQUIRED

- **MOD. MC/EV - NOT INCLUDED**
Module for the production of hot water
- OR (PROVIDED BY THE CUSTOMER)**
 - Hot water
 - Power supply: 230 Vac 50 Hz single-phase - 200 VA
(Other voltage and frequency on request)

SUPPLIED WITH

THEORETICAL-EXPERIMENTAL HANDBOOK



OPTIONAL (REF. ACCESS. AND INSTRUMENTS)

**ELECTRONIC FLOWMETER
MOD. FLOW-1**

