



## DIGITAL CONTROLLER FOR HEATING SYSTEMS WITH REMOTE CONTROL - DIN RAIL MOUNTING

- Suitable for all types of heating systems in apartment buildings, industrial plants, schools, detached houses, etc.
- The instrument regulates the flow temperature of the heating system as a function of the room temperature required (programmed) and the outside temperature, according to the broken regulation curve set.
- Optimization of switch-on times.
- Large alphanumeric display for scrolling the configuration menus and various parameters.
- Built-in auxiliary controller (domestic hot water)
- RS232 serial port for connection with a GSM modem type EM70 or for fixed line type EM70F.
- The various parameters of the menu can be read and modified via telephone or GSM messages.
- 9 module control unit for DIN rail.
- Consumption 5 VA .
- Switch contact rating 5A- 230Vc.a. (Ohmic load).

CODE	SUPPLY VOLTAGE AND FREQUENCY	MODULES NUMBER	ADMISSIBLE OPERATING TEMPERATURE	PROTECTION LEVEL
EV85	230V~ 50Hz	9 moduli	0 ÷ 50 °C	IP40
<b>DIGITAL CONTROLLER WITHOUT REMOTE MANAGEMENT</b>				
EV85E	230V~ 50Hz	9 moduli	0 ÷ 50 °C	IP40
EV85CA	Code for activating remote management and relative instruction manual.			



## MULTIFUNCTION EXPANDABLE HEATING CONTROLLER

- The EV87 is a multi-function, expandable regulator. It regulates the flow temperature using the following selectable modes:
  - Mixer valve and pump
  - Boiler with multi-stage burner (from 2 to 4)
  - Cascade boiler (from 2 to 4) with choice of main boiler rotation.
  - Two cascade boilers with two-stage burner, and choice of main boiler rotation.
- By using a FANBUS (two-wire communication bus) EV9x series (max 20 units) expansion modules (SLAVE) can be connected to the EV87 regulator in order to manage complex systems.
- The flow temperature is regulated according to the room temperature setting and the external temperature, in relation to a broken regulation curve.
- The broken curve relates four external temperatures values to four delivery temperature values, both of which can be set.
- Timer profile selectable from: two weekly programs with three timescales per day and a daily program with three timescales.
- Optimisation of on cycles
- 4...20mA input, can also be used for piloting the relay.
- 0...10V output with proportional regulation.
- Settable relay (auxiliary sensor 4...20 mA sensor).
- Two digital inputs that can be used as alarms.
- Remote control using SMS messages or in data mode.
- Consumption 5VA
- 4 outlet relays
- Switch contact rating 5A 230V~(Ohmic load).

CODE	SUPPLY VOLTAGE AND FREQUENCY	MODULES NUMBER	ADMISSIBLE OPERATING TEMPERATURE	PROTECTION LEVEL
EV87	230V~ 50Hz	6 modules	0 ÷ 50 °C	IP40



## DIGITAL CONTROLLER FOR COMPLEX TECHNOLOGICAL AND THERMIC SYSTEMS - LOCAL AND REMOTE CONTROL (MASTER)

- The system is composed of a MASTER and one or more SLAVES connected to the MASTER via a communication bus called FANBUS.
- The instrument acts as central controller allowing communication with various types of controllers and therefore, all the parameters of the connected controlling modules can be visualised and modified using a single display and keypad.
- Compliance with law 373, law no. 10 of 9 January 1991 and Presidential Decree 412 of 26 August 1993.
- Compliance with standards CEI EN 60730-1.
- Power supply 230V 50Hz
- Consumption 4 VA
- Switch contact rating 5A - 230Vc.a. (Ohmic load).
- 1 analog input for the external temperature
- 1 analog input for the delivery temperature
- 1 RS232 communication channel for connection to a modem or PC
- 1 FANBUS communication channel

CODE	SUPPLY VOLTAGE AND FREQUENCY	ADMISSIBLE OPERATING TEMPERATURE	PROTECTION LEVEL
EV90	230V~ 50Hz	0 ÷ 50 °C	IP40