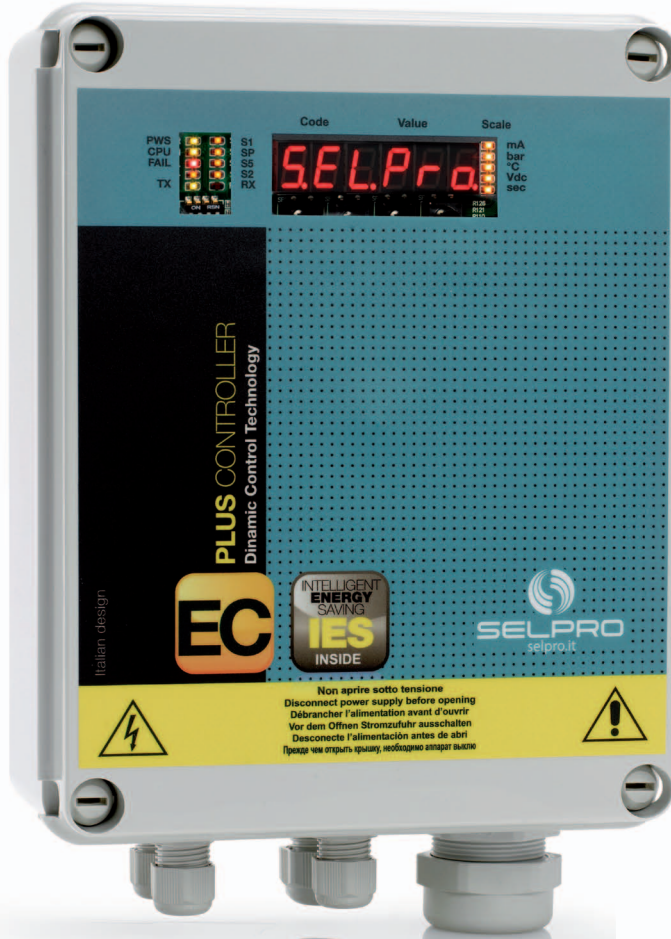




# PLUS CONTROLLER

## Dinamic Control Technology



WARRANTY  
**3**  
YEARS

PLUG&  
PLAY

FULL  
GUARD  
SYSTEM

QUICK  
START-UP

EMC  
CIVIL  
LIMIT

INTELLIGENT  
ENERGY  
SAVING  
**IES**

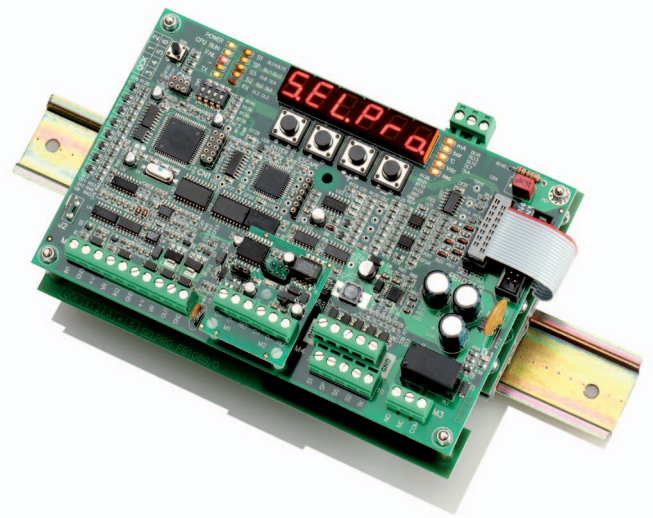
THD  
FREE

ADIABATIC  
MANAGER

EXTRA  
dB  
FREE

MODBUS  
INSIDE

CLIMA  
SINERGY  
**CLS**  
INSIDE



SELPRO



# PLUS CONTROLLER

## Dinamic Control Technology

### MASTER & SLAVE SYSTEM TO CONTROL THE MANAGEMENT OF EC FANS, WITH INSULATED MODBUS SLAVE REMOTE CONNECTION.

EC Plus device is a multifunction digital unit, with 2 transducer inputs, specialized for the regulation of EC fans Motors.

Designed using a "state of art" microcontroller, is suited to have a choice of 12 different default configurations.

EC Plus is ready to drive EC fans through programmable Master 0-10Vdc net connections.

It's optimized with software "IES", the innovative control algorithm for HVAC&R applications.

Using a serial Modbus (RTU) line, it's possible to read & write all the control parameters of the device, testing and adjusting also the state of the machine from a remote sites.

A Selpro software called Clima-Sinergy is already allowable.

Clima-Sinergy allows data collection, analysis with graphs, change of working parameters, optimization of performances, for remote control & service.

### Applications

Used in **HVAC&R** plants to control and regulate:

- ventilation
- suction
- destratificators
- temperature (dry-cooler, heaters)
- pressure (ventilated heaters like condensers, evaporators)
- differential air flow (laminated flow plants, suction hoods)

### Available regulations Mode

#### Master Unit - automatic regulator:

two different modes are selectable:

**PID with "IES"** technology to keep at Set Point the selected transducer value (i.e. temperature, pressure)

**P** (proportional) to keep inside Proportional Band the selected transducer value (i.e. temperature, pressure).

Driving command is selectable direct (DIR) or reverse (REV).

### Keys Points

Digital regulation

Modbus (RTU) connection

PID or Proportional regulation

Direct and Reverse regulation

Direct connection for Pressure & Temperature probes

ALL-round protection system

Wide digital backlighted DISPLAY with keys

Visualization of regulation functions and alarm messages

Visualizations LED for regulation condition

### Technical Characteristics

Power supply	24VAC or 230 VAC or 400 VAC +/-20% (std) - 500 VAC on request
Frequency	50/60 Hz automatic selection
Regulation command output	0-10Vdc programmable
Protection	IP55 – IP00
Standards compliance	Standard EN 50178 (directive 2006/95 CE) Standard EN 61800-3 (directive 2004/108 CE) Standard EN 60204-1 (directive 2006/95 CE)
Regulation SW	n. 12 pre-parameterized HVAC&R Software
Working Inputs	n. 2 inputs (mA-Vdc-NTC) always programmable
Working benches	n. 2 benches of pre-parameterized parameters
Working parameters	n. 50 always programmable
Functional contacts	n. 5 ON-OFF auxiliary contacts
Remotable contact	n. 1 Alarm relay (NO/NC) programmable



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