



# PHASE STEPLESS CONTROLLER

Dinamic Control Technology

# RGM



WARRANTY  
**3**  
YEARS

**PLUG&  
PLAY**

**FULL  
GUARD  
SYSTEM**

**QUICK  
START-UP**

INTELLIGENT  
ENERGY  
SAVING  
**IES**

**EMC  
CIVIL  
LIMIT**

**MODBUS  
INSIDE**

**LOW  
dB  
SYSTEM**

CLIMA  
SINERGY  
**CLS**  
INSIDE

**-0-  
CROSS  
SYSTEM**



# SELPRO



# PHASE STEPLESS CONTROLLER

## Dinamic Control Technology

### CUTTING PHASE TECNIQUE MASTER & SLAVE SYSTEM TO DRIVE 3 PHASE AC MOTORS, WITH SPRAY SYSTEM MANAGEMENT AND MODBUS SERIAL CONNECTION.

RGM300 device is a multifunction digital unit, with 2 transducer inputs, specialized for the speed regulation of 3 phase AC Motors, applied on axial or centrifugal fans.

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

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

The Management of WET&DRY System (adiabatic booster) is included in the firmware, driving an optional Spray system with its own Set-Point and proportional band by 0-10 output.

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 remote sites.

The Selpro software Clima-Sinergy is already allowable.

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

#### Applications

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

- ventilation
- suction
- destratifiers
- 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).

##### Slave Unit - repeater driver:

the driving command is directly related to the input command value, still selectable are direct (DIR) or reverse (REV) modes.

#### 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.

Digital DISPLAY with keys.

Visualization of regulation functions and alarm messages.

LED to display functional conditions.

Terminal blocks for direct connection of 4 or 8 (Three-phase + PE) fans cables.

No shielded cables required.

#### Technical Characteristics

Power supply	400 VAC +/-10% (std) 230/500 VAC on request
Frequency	50/60 Hz automatic selection
Available Range	12A / 20A / 28A / 40A / 60A / 90A
Regulation output	0-100%
Protection BOX	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 & PWM) always programmable
Working benches	n. 2 benches of preconfigured parameters
Working parameters	n. 80 always programmable
Functional input contacts	n. 5 ON-OFF auxiliary contacts
Remotable contact	n. 1 Alarm relay (NO/NC) programmable



**SELPRO**