



applicazioni elettroniche - termoregolazioni
electronic applications - thermoregulation

SY 325



Temperature Controller SY325 for policombustible Boilers/Stoves

PRODUCT COMPOSITION:

A. Temperature controller SY325

B. Temperature probes to read:

- ◆ Smoke Temperature in teflon cable 0 – 260 °C
- ◆ Smoke temperature through K Thermocouple 0 – 550 °C
- ◆ Combustion Temperature through K Thermocouple 0 – 1200 °C
- ◆ Ambient Temperature 0 – 50 °C

C. Photoresistance

D. Other probes (to be defined)

1) HARDWARE CHARACTERISTICS

A. Controller SY325

INPUT: Total LowVoltage available inputs n. 09

To read:

1. Smoke temperature
 2. Temperature K Termocouple
 3. Boiler water temperature
 4. Warm water temperature
 5. Ambient temperature
 6. Fluxstate
 7. Level Pellet Sensor
 8. Input GSM to start\stop the stove through SMS
 9. Flame presence
 10. Boiler water pressure
 11. Number of smoke fan rpm with the use of an encoder
 12. Others:
 - ❖ Boiler stratified temperature
 - ❖ Solar panel temperature for integrated systems
- Other..

Available INPUTS HighVoltage (230Vac) n. 01

To read:

1. PRESSURESTATE (smoke evacuation)
2. SECURITY THERMOSTAT (manually rearmed)
3. Other..

Available OUTPUTS n. 08

To Control:

1. Auger Motor (230 Vac) regulated in ON\OFF modality
2. Combustion/Exhaust Fan with two possible regulations: per cent and rpm(encoder)
3. Pump\Circulator
4. Warm water Pump\Circulator
5. Igniter Resistance
6. Electrical valve for automatic burner cleaning
7. Others:
 - ❖ Second and third auger for multifeeding
 - ❖ 2 secondary combustion fan
 - ❖ Air inlet Control Flap-Valve
 - ❖ Gas Boiler consent
 - ❖ Solar Pump for integrated systems
 - ❖ Automatic external Pellet loading system

Added Modules:

- ◆ 2 Modules 0 ÷ 10 Vdc to INVERTER control or other devices
- ◆ On Line diagnostic module

Communication ports:

- ◆ Serail port RS232 on Board for PC communication
- ◆ On Line diagnostic module

Default components:

- ◆ Bipolar general switch
- ◆ 4 buttons control board
- ◆ 4 digit Displays
- ◆ Up to 14 signalling leds
- ◆ Manually rearmed Thermostat

Default features:

- ◆ Communication with PC on serial port with software **System Evolution**
- ◆ Programmation system **KEY-System** with a key (pen memory) to upload and download firm-ware(functioning)

Mechanical dimensions:

- **Board:** 160 x 95 mm
- **Standard Panel:** 274 x 108 mm

B. Temperature Probes**1) Smoke/Combustion**

- ❖ Teflon cable 0 – 260 °C
- ❖ Thermocouple K 0 – 550 °C
- ❖ Extended Thermocouple 0 – 1200 °C

2) Exchanger Probe

- ❖ Silicon cable 0 – 110 °C
- ❖ Silicon cable 0 – 200 °C
- ❖ Teflon cable 0 – 280 °C

3) Ambient probe

- ❖ PVC cable 0 – 50 °C

C. Other probes to be defined

- ❖ **Photo probe**
- ❖ **Flow Sensor**
- ❖ **Water Pressure sensor**
- ❖ **Pellet Level sensor**
- ❖ **Others. . .**

2) SOFTWARE**A. SYSTEM Evolution**

- ◆ **Software** for database management of functioning programs
- ◆ **Real time Programmation** of 'functioning recipes'
- ◆ **Real time Monitoring** of functioning states
- ◆ **Firmware upload/download** management through **USB_Programmaer**

B. LOGGER:

- ◆ **Monitoring Software** of variables, states and timings
- ◆ **Possibility of database creation for temporal analysis and functioning statistics**

3) FUNCTIONING FEATURES

System functioning features can be developed with the client in order to his requirements and according to control board characteristics.