



INPUT TYPE	DIP-switch	1	2	3
CURRENT 4 - 20 mA				
CURRENT 0 - 20 mA				
VOLTAGE 1 - 5 Vdc				
VOLTAGE 0 - 5 Vdc				
VOLTAGE 2 - 10 Vdc				
VOLTAGE 0 - 10 Vdc				

1 DIP-switch to select input type:

2 green LED “RETE” : on if equipment is powered.

3 red LED “ALLARME” :

- off : if input signal is lower than the threshold;
- on : if input signal is upper than the threshold, during operating delay time, if relays don't work yet.

4 Potentiometer “SOGLIA” : for regulation of the operating value between 1% and 100% of input signal.

5 Potentiometer “RITARDO” : for regulation of the time delay between 0 e 45 seconds.

CONNECTIONS :

1 POWER :

S113 - 1 - ST	Type 110-220 Vac	110 Vac Clamps 17 / 18	220 Vac Clamps 16 / 18
S113 - 2 - ST	Type 24 Vdc	Clamp 16 + Clamp 18 -	
S113 - 3 - ST	Type 24 Vac	Clamps 16 / 18	

2 ANALOG INPUT :

Clamps 1 - 2
negative (-) at clamp 1
positive (+) at clamp 2

ATTENTION : You must control in the table you have select correctly input's type by DIP-switches.

CALIBRATION OF THRESHOLD VALUE :

Calibration of threshold value is easy using a common digital tester that has 10Vdc input and connected by negative to clamp 3 and by positive to clamp 4.

EXAMPLE : To calibrate alarm's threshold to 35% input signal, trim potentiometer "SOGLIA" till 3,5 Vdc.

3 OUTPUT RELAY

Alarm's output gives a SPDT switch 5 A 250 Vac (resistive load).

Output relay's contacts are on clamps :

- 10 Common
- 11 Contact N.C.
- 12 Contact N.O.

Relay is normally excited and it deexcitate when threshold's overflow after the time delay.

FEATURES

- Power : 110 / 220 Vac +/- 10% 50 / 60 Hz adjustable
optional 24 Vdc or 24 Vac
- Consumption : 1,5 VA
- Threshold : adjustable between 1% and 100% of controlling quantity
- Hysteresis : fixed, 2%pprox. of operating value
- Operating delay : adjustable between 0 and 45 seconds
- Temperature : 0° / + 60 °C
- Humidity : 90 % at 40 °C (not condensing)
- Size : 52,5 x 94 x 58,5 mm
- Weight : 290 g approx.
- Box : 3 modules to couple on 35 mm bar

ANALOGUE SIGNALS PROCESSORS

S113S - SINGLE ALARM THRESHOLD FOR ANALOGUE SIGNALS

Single alarm threshold for control of analogue signals.

Widely used as alarm unit in control of temperature, pressure, flow rate, level etc.

The analogue input can be programmed via dip switches for all the standard signals used industrially:

- current 0 - 20 mA and 4 - 20 mA
- voltage 0 - 5 Vdc, 1 - 5 Vdc, 0 - 10 Vdc and 2 - 10 Vdc.

The alarm threshold can be adjusted from 1 % to 100 % of the signal to be controlled via multi-turn trimmers with checking of calibration value by means of an ordinary tester.

The hysteresis at reset is fixed and equal to 2 % of the cut-in value. The cut-in delay can be adjusted by means of trimmers from 0 to 45 seconds.

The output is of the relay type with 1 SPDT changeover with capacity 5 A 250 Vac (resistive load).

Two signaling LED on the front panel indicates power on and threshold exceeded.

The self-extinguishing Noryl case is the width of 3 DIN modules and is designed to fit on a 35 mm mounting rail (DIN 46277).



TECHNICAL DATA

- Power supply : 115 / 230 Vac +/- 10% 50 / 60 Hz
- Power consumption : 1,5 VA
- Current input : selectable via DIP-switches between 0-20 and 4-20 mA
- Voltage input : selectable via DIP-switches between 0-5, 1-5, 0-10 and 2-10 Vdc
- Input impedance :
 - 250 ohm for current input
 - 1 Mohm for voltage input
- Output : 1 relay with 1 SPDT changeover 5 A 250 Vca (resistive load)
- Threshold adjustment : from 1 to 100% of range
- Delay adjustment : from 0 to 45 seconds
- Operating temp. : 0 / + 60 °C
- Humidity : 90 % a 40 °C (non-condensing)
- Dimensions (b x h x d) : 52,5 x 95 x 72 mm
- Weight : approx. 200 g.