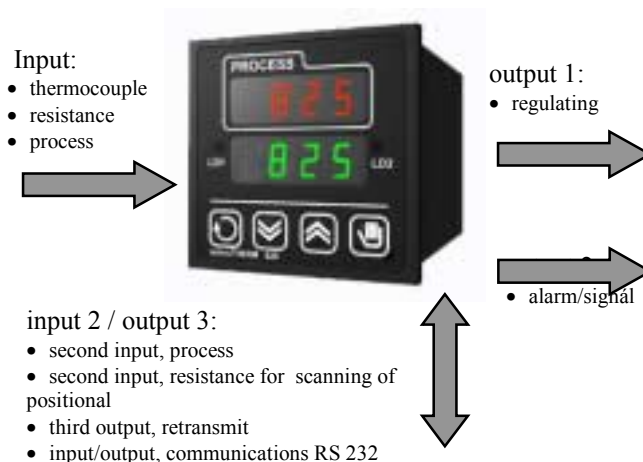


MT825S

- format 1/4 DIN
- accuracy $\pm 0,1$ %
- variable input/output
- thermocouple, resistance (PT100), process voltage or current measuring input
- control heating, cooling, heating/cooling, heating/auxiliary heating
- three-positional output
- retransmit
- communications(protocol ANSI)
- operating temperature 0 to 50 °C
- easy set-up
- warranty 36 month

THERMOPROZESS



MT825S is temperature/process controller format 1/4 DIN with measuring input, 2 outputs and possibility with auxiliary one input or one output or communication line.

To its strong point belongs operating reliability, simple and easy set-up, quality regulating algorithms. Over other controllers in this category predominate by price and decent accuracy 0,1 %.

From the long list of product features, the MT825S has auto-tuning PID constants, measuring absorbed energy, variable alarm functions, limitation output, prompt switching between automatic or manual operation. Control MASTER-SLAVE – is connection more controllers series MT825S by 3 analog output / 2 analog input.

Specifications

Control

- PID, PI, PD, P control, automatic optimization PID constant
- On/Off control
- three-positional control without feedback
- three-positional control with feedback
- control heating
- control cooling
- control heating/cooling
- control heating/auxiliary heating
- ratio control of demanding temperature
- ramp function

Operation interface

- Dual, 4 digit LED displays
- 4 keys
- 3 LED diode

Accuracy

input

- $\pm 0,1$ % of span (min. 540 °C), ± 1 digit 25°C ± 3 °C ambient and rated line voltage ± 10 %
- temperature stability $\pm 0,1$ °C/°C change in ambient
- voltage stability $\pm 0,01$ %/% of span /% of change line voltage

Measuring input

Temperature thermocouple (input impedance 20 M Ω)

type J	-200	to	900 °C
type K	-200	to	1360 °C
type T	-200	to	400 °C
type N	-200	to	1300 °C
type E	-100	to	700 °C
type R	0	to	1760 °C
type S	0	to	1760 °C
type B	300	to	1820 °C
type C	0	to	2320 °C
type D	0	to	2320 °C

Temperature - resistance PT100

resolution 1 °C	-200	to	600 °C
resolution 0,1 °C	-200	to	200 °C

Voltage (input impedance 10 k Ω) Current (input impedance 5 Ω)

0-5 Vdc	-499	to	2499
1-5 Vdc	-499	to	2499
0-10 Vdc	-499	to	2499
0-20 mA	-499	to	2499
4-20 mA	-499	to	2499

Output 1 (regulating - heating or cooling)

- switched(DC) with open collector, without galvanic isolation
- electromechanical relay, 230Vstř/5A or 30Vss/5A, switched, without contact suppression
- direct current 4-20 mA, galvanic isolated, load max. 500 Ohm
- direct voltage 0-5 V, galvanic isolated, load min. 10 kOhm
- direct voltage 0-10 V, galvanic isolated, load min. 10 kOhm
- three-positional, 2 x electromechanical relay 250Vstř/5A, 2 switch contact opened in rest state

Output 2

- switched(DC) with open collector, without galvanic isolation
- electromechanical relay, 230Vstř/5A or 30Vss/5A, switcher, without suppression

Input 2/output 3

- second input - process 0-20, 4-20 mA, 0-5, 0-10, 1-5V
- second input – resistance for scanning position (span /Ω 0-1000)
- third output retransmit, 0-20, 4-20 mA, max. load 100 Ω, without galvanic isolation
- input/output communications RS 232
- input/output communications EIA 485

Supply voltage

- 230 Vac +10%/-15%, 50/60 Hz, internally safety fuse 2 A/250 V
- 12 to 16 Vdc or Vac, 50/60 Hz, internally safety fuse 2 A/250 V
- power input max. 6 VA
- data stored in memory upon power failure

Operating environment

- 0 to 50 °C
- 0 to 90% relative humidity, non-condensing

Storage temperature

- 20 to 70 °C

Dimensions

- width x height x depth, 96 x 96 x 153 mm
- chassis depth 146 mm
- panel cutout 90,0^{+0,5} x 90,0^{+0,5} mm, panel thickness 1,5 to 10 mm

CE

- electrical safety: ČSN EN 61010-1
- electromagnetic compatibility: EN 50081-2 class B, EN 50082-2

Description of model

MT825 – ab – c d e – f g	
a:	modification S = adaptive PID controller, 2 input, 3 output
b:	input 1 T = thermocouple R = resistance Pt100 P = process
c:	output 1, regulating K = open collector (SSR) R = electromechanical relay P = current 4-20 mA N = voltage 0-5 V M = voltage, 0-10 V D = three-positional, 2 x electromechanical relay
d:	output 2, alarm/signal 0 = none K = open collector R = electromechanical relay
e:	output input 2/ output 3 0 = none P = second input, process S = second input, resistance for scanning positional E = third output, retransmit X = communication RS 232 A = communication EIA 485
f:	supply voltage 0 = 230 Vac/50Hz A = 12 to 16 Vac or Vdc
g:	special configuration 0 = basic configuration

Control MASTER-SLAVE

Connecting more controller by help analog output 3 and analog input 2, when one controller is controlling and transmit set point (with help output 3 - analog) and others controllers are receiving (on second input - analog). In subordinate controllers can be offset set point on adjusted difference.