REG401 - DUAL INPUTS COMPENSATED CONTROLLER

REG401 is a single loop, analog microprocessor controller suitable when two inputs standard signals has be on relationship each others in function to calculate the output signal to drive the control variable. Input selection parameters menu: voltage, current, temperature and resistance. The main process variable PV signed at Input 1 (PV1) or input 2 (PV2), inputs 1 and input 2 average mode, input 1 - input 2 subtraction mode, input 1 + input 2 addition mode, unlike input 1 and input 2, remote setpoint at input 1 or input 2. Controlling Output task: 2 relays On/Off or SSR. One analog output PID algorithm, autotuning for continuous adjustment in drive to floating, modulating actuators. RS485 serial communication MBus RTU.

Applications field:

-PID control of physical, chemical, electrical and mechanical variables

-Energy industries, manufacturing, petrochemical

-Textile, food, pharmaceutical, etc.

TECHNICAL SPECIFICATIONS

Power supply	24 ... 230V AC / DC multi-voltage ± 15% 50/60 Hz Power consumption: 5.5 VA
Dimensions:	1/8" DIN 48x96 mm
Protection:	IIP54 on front (IP65 with frontal gasket), IP30 housing and terminals IP20
Material:	Housing: Noryl UL94V1 self-extinguishing; Front: PC ABS UL94V0 self-extinguishing
Temperature/Humidity:	operating 0-45 °C -35..95%RH
Display:	Dual display 4 digit 0.40 inch, 4 digit 0.30 inch
Inputs:	- Thermocouple: K, R, S, J (Tolerance @ 25 ° C +/- 0.2% + / - 1 digit F.S.)
	- Resistance thermometer: PT100-500-1000, Ni100, PTC1K, NTC10K
	- Current: 0/4…20 mA, impedance Ri<5 Ω
	- Voltage: 0-10V impedance Ri>110 KΩ, 0-40 mV impedance Ri>1 MΩ
	- Potentiometric input: 6 KΩ, 150 KΩ
	- T.A. Input: AI2; 50 mA
Setpoint:	2x process setpoint for each input

Outputs configuration:

	CONTROL	ALARM 1	ALARM 2	ALARM 3
C.O1	Q1	Q2	SSR	AO1
C.val	Q1 (3 pos)	Q2	SSR	AO1
C.ssr	SSR	Q1	Q2	AO1
C.420	4…20 mA	Q1	Q2	SSR
C.020	0…20 Ma	Q1	Q2	SSR
C.010	0…10 V	Q1	Q2	SSR

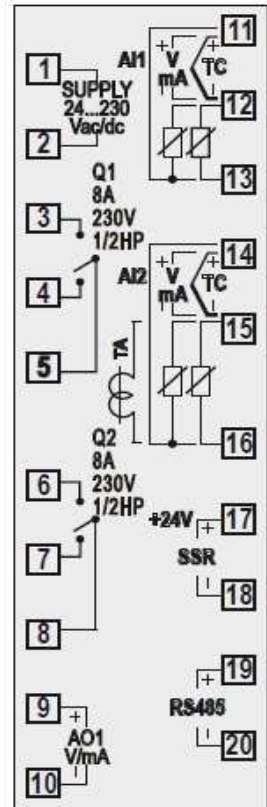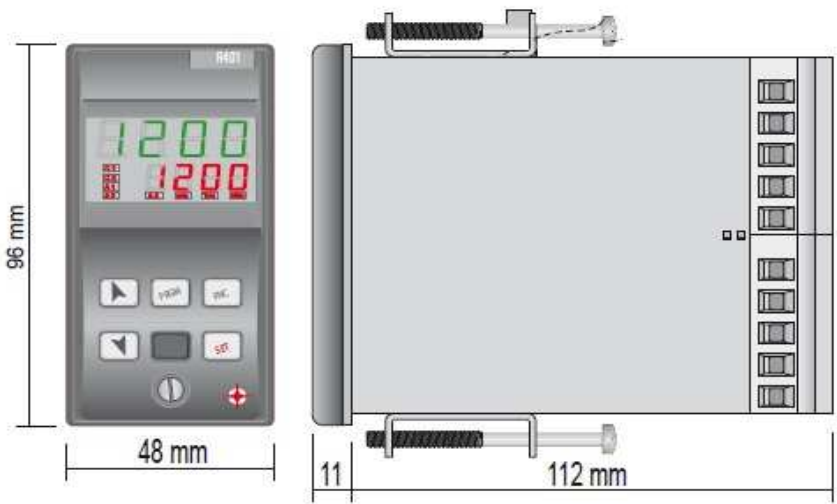|	
Outputs type:	Relay: configurable as control and alarm 8A, 250Vac resistive
	Voltage for SSR: 25mA at 24VDC
	Analog Current: 0 ... 20 mA (with 7500 points +/- 0.2% fs)
	Analog Current: 4…20mA (with 9000 points +/-0.2% f.s.)
	Analog Voltage: 0…10V (with 9500 points +/-0.2% f.s.)
Control algorithms:	ON-OFF with hysteresis; P, PI, PID, PD time proportioning
Setting functions:	Tuning manual or automatic alarm selectable, setting protection control and alarm
Serial communication:	RS485 Modbus RTU (JBUS)

Dima di foratura
46 x 91 mm
Frontal panel cut-out

96 mm

R401

1200
1200

PROM

INC

SET

48 mm

11

112 mm

REG40122ABCT

1 — AI1 SUPPLY 24...230 Vac/dc
2
3 — Q1 8A 230V 1/2HP
4
5
6 — Q2 8A 230V 1/2HP
7
8
9 — AO1 V/mA
10

11 — AI1 + V mA TC +
12
13
14 — AI2 + V mA TC +
15
16
17 — +24V SSR
18
19 — RS485
20