

## Signal controller



### 2286

- Multiple functions
- Programmable from front
- 3-digit LED display
- Analog or Pt100 input
- Relay outputs
- Max. 50% offset



#### Advanced features

- Programmed via the user interface which consists of a 3-digit display and 3 function keys in the front panel.

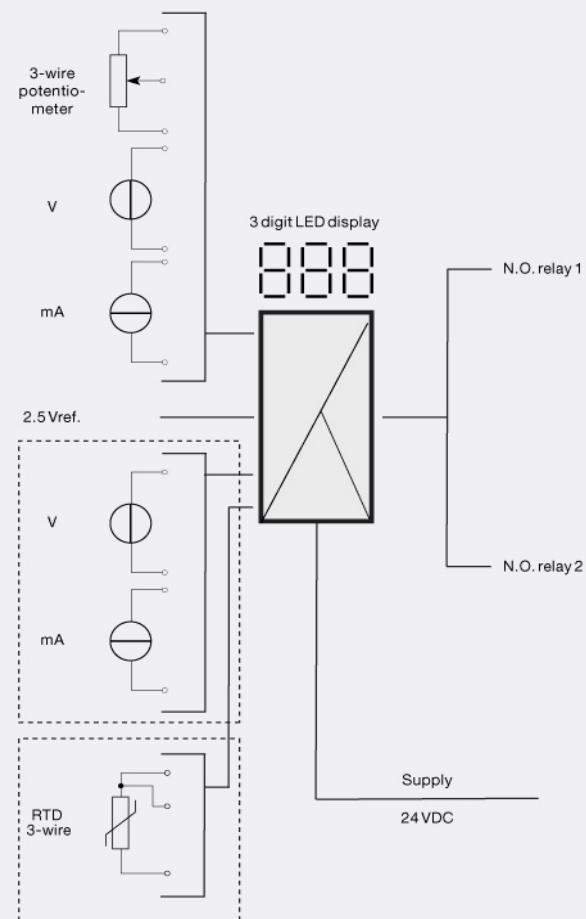
#### Application

- PID on/off controller, PI step controller or 3-band controller with analog or Pt100 input.
- As trip amplifier with setpoint adjustment through external current / voltage signal with neutral zone surrounding the setpoint.

#### Technical characteristics

- The A and B channels can be freely programmed via the front keys and JP1 and JP2 to current in the range 0...20 mA or voltage in the range 0...10 VDC.
- Linearized Pt100 temperature input in the range with 3-wire connection.
- PID on/off controller with accurate setting of the regulation parameters XP (proportional band), TI (integrating time) and TD (differentiating time).
- Functions include PI step and-band controller, dI/dt function and comparator or trip amplifier with an external setpoint.
- 2 relay outputs with a make contact connected to a common point.
- Relay outputs can be installed in PELV/SELV circuits.
- Mounting for a standard 11-pole socket which can be adapted for DIN rail or plate use with PR's 7023 adaptor and 7024 mounting keying.

#### Connections



**Order:**

Type	Input
2286	Voltage / current : A
	Temperature : B

**Environmental Conditions**

Specifications range..... -20°C to +60°C  
 Calibration temperature..... 20...28°C  
 Relative humidity..... < 95% RH (non-cond.)  
 Protection degree..... IP50

**Mechanical specifications**

Dimensions (HxWxD)..... 80.5 x 35.5 x 84.5 mm (D is without pins)  
 Weight approx..... 140 g

**Common specifications**

Supply voltage..... 19.2...28.8 VDC  
 Max. power consumption..... 3 W  
 Internal consumption..... 2.5 W  
 Isolation voltage, test / working..... 3.75 kVAC / 250 VAC  
 Signal / noise ratio..... Min. 60 dB  
 Response time..... < 60 ms  
 Signal dynamics, input..... 20 bit  
 Effect of supply voltage change..... < ±0.002% of span / %V  
 Proportional band (XP)..... 0.01...999%  
 Gain, 1/XP =..... 0.1...10000  
 Integrating time (TI)..... 0...999 s  
 Differentiating time (TD)..... 0...999 s  
 Neutral zone (nEU)..... 0...99.9 %  
 Pulse time (TP)..... 0.01...400 s  
 Min. pulse time (TP)..... 0.01...10 s  
 Auxiliary voltages: Reference voltage..... 2.5 VDC ±0.5% / 15 mA  
 Temperature coefficient..... < ±0.01% of span / °C  
 Linearity error..... < 0.1% of span  
 EMC immunity influence..... < ±0.5%

**Input specifications**

Max. offset..... 50% of selected max. value  
 Current input: Measurement range..... 0...20 mA  
 Min. measurement range (span), current input..... 4 mA  
 Input resistance, current input..... 50 Ω  
 Voltage input: Measurement range..... 0...10 VDC  
 Min. measurement range (span), voltage input..... 200 mV  
 Input resistance, voltage input..... Nom. 10 MΩ  
 RTD input..... Pt100 (2286B)  
 Cable resistance per wire (max.), RTD..... 25 Ω  
 Sensor current, RTD..... Nom. 1.25 mA

**Output specifications**

Relay output: Relay functions..... Setpoint  
 Max. voltage..... 250 VRMS  
 Max. current..... 2 AAC  
 Max. AC power..... 500 VA  
 Max. load at 24 VDC..... 1 A  
 \*of span..... = of the presently selected range

**Approvals**

EMC..... EN 61326-1  
 LVD..... EN 61010-1  
 PELV/SELV..... IEC 364-4-41 and EN 60742  
 GOST R..... Yes