

## 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.

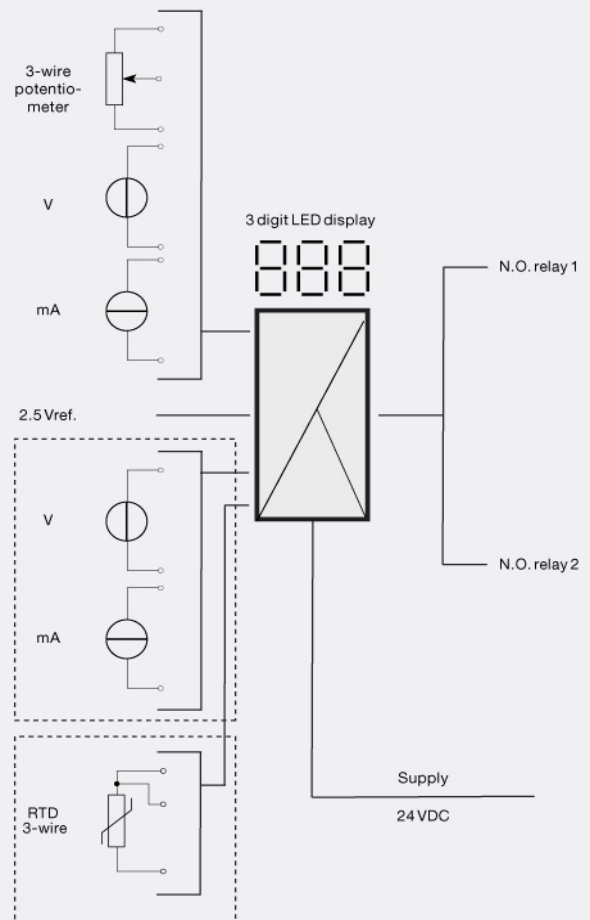
#### Application

- 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 -99...+850°C 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.

#### Applications



**Order:**

Type	Input
2286	Voltage / current : A
	Temperature : B

**Environmental Conditions**

Operating temperature.....	-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**

Supply voltage.....	19.2...28.8 VDC
Max. required power.....	3 W
Internal power dissipation.....	2.5 W

**Isolation voltage**

Isolation voltage, test / working.....	3.75 kVAC / 250 VAC
PELV/SELV.....	IEC 61140

**Response time**

Response time.....	< 60 ms
Signal / noise ratio.....	Min. 60 dB
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****Common input specifications**

Max. offset.....	50% of selected max. value
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**Current input**

Measurement range.....	0...20 mA
Min. measurement range (span).....	4 mA
Input resistance.....	50 Ω

**Voltage input**

Measurement range.....	0...10 VDC
Min. measurement range (span).....	200 mV
Input resistance.....	Nom. 10 MΩ

**RTD input**

RTD type.....	Pt100 (2286B)
Cable resistance per wire.....	25 Ω (max.)
Sensor current.....	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

**Observed authority requirements**

EMC.....	2014/30/EU
LVD.....	2014/35/EU
EAC.....	TR-CU 020/2011