

ZIROX Electronic Unit E713

Properties

The electronic unit E713 records and processes the signals of ZIROX oxygen probes. Based on the NERNST law, the oxygen concentration is calculated and provided, mostly in vol%.

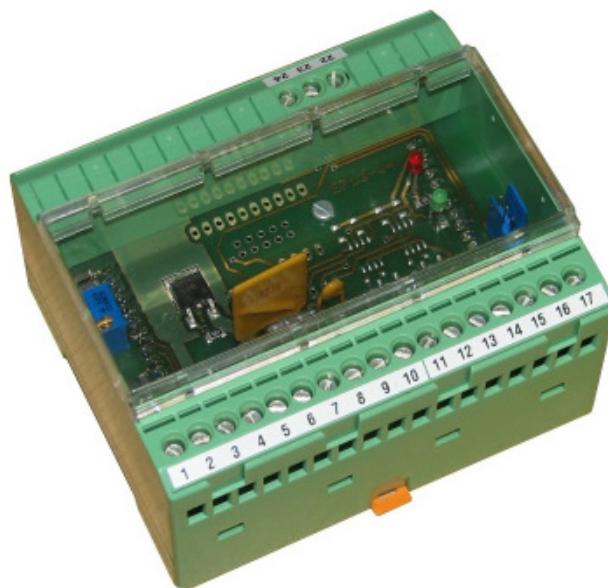
The E713 realizes the power supply and temperature control for heated probes.

The user can program one limit value. An alarm relay provides the output signal. An additional pump module can realize the reference air supply.

The electronic unit is designed for top hat rail mounting.

Features

- Signal processing of ZIROX probes
- Calibration and monitoring functions for ZIROX probes
- Measuring value output via standard interfaces
- Process monitoring via standard interfaces
- Customized solutions



ZIROX Electronic Unit E713

Sensoren und Elektronik GmbH



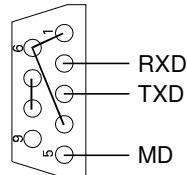
Technical Data

Signal input.....	Sensor and thermal voltage ZIROX probe
Range	0 ... 20.64 Vol.-% O ₂ (up to 100 vol% on request)
Sensor voltage.....	0 ... +/-1500 mV (resolution 16 bit)
Reference gas supply.....	None, but possible with additional pump module
Temperature measurement.....	Thermocouple type B, 0...1500 °C
Digital interface.....	RS232 (option)
Analog output	0/4...20 mA (option 0/2...10 V) 500 V DC, potential-free, apparent ohmic resistance max. 500Ω, O ₂ or U _z freely scalable, alarm relay
Calibration	Via RS232 (option)
Power supply	24 V DC +/- 10 %, approx. 60 mA, add. current probe heater (option)
Heater control	24 V DC, max. 5A
Dimensions.....	90 × 75 × 55 mm ³
Protection degree	IP20
Working temperature	0 ... 50 °C, 0 ... 95 % rH
Storage temperature	-20 ... 60° C, 0 ... 95 % rH
Reference air pump (optional).....	Available as additional module, power supply 24 V DC, flow adjustable via potentiometer

Alarm relay:

Load	Resistive load ($\cos\phi = 1$)
Max. switching voltage	125 VAC, 60 VDC
Max. switching current	1A
Max. switching power	62.5 VA, 30 W
Min. permissible load	1 mA at 5 VDC

RS232:



Block X1:

Pin	Name
1	AINCOM
2	V _Z
3	V _t
4	Hz
5	Hz
6	Shield
7	24 V DC power supply
8	GND power supply
9	+ analog out (I or V)
10	- analog out (I or V)
11	nc
12	nc
13	nc
14	nc
15	nc
16	GND
17	Vpump

Pin	Name
18	nc
19	nc
20	nc
21	nc
22	Alarm RK
23	Alarm MK
24	Alarm AK
25	nc
26	nc
27	nc
28	nc
29	nc
30	nc
31	nc
32	nc
33	nc
34	nc