

CRP 510: Cleanroom Monitoring Panel

Features

- Clean room panel for data capture of temperature, pressure, humidity in clean rooms and safety laboratories as per EN ISO 14644-1, class 1-9 and GMP, class A-D
- Integration via serial RS-485 interface with SLC protocol or 0...10 V signals
- Notification via acoustic alarm and background colour of display
- Ports for zero adjustment of pressure sensor
- Convenient operation and actual value indication via touch display
- USB port for convenient data transfer and configuration
- Very precise temperature and humidity sensor
- Dual-membrane pressure sensor with calibrating valve
- Freely configurable inputs and outputs and display tiles
- Surface resistant to chemicals
- Quick display of measured values with alarm thresholds
- User management



CRP510F010D

Technical data

Power supply

| | |
|-------------------|--|
| Power supply | 24 V~ ± 20%, 50...60 Hz 24 V= ± 20% |
| Power consumption | 15 VA / 8 W |
| Start-up current | 700 mA |

Temperature

| | |
|-----------------|-------------------|
| Measuring range | -40...100 °C |
| Accuracy | ± 0.5 °C at 23 °C |
| Stability | < 0.04 °C/p.a. |

Humidity

| | |
|-----------------|-------------------------------|
| Measuring range | 0...100% rh |
| Accuracy | < 2% rh at 10...90% rh |
| Stability | < 0.3% rh/p.a. at 10...90% rh |

Pressure

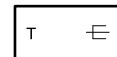
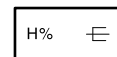
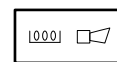
| | |
|--|------------------|
| Measuring range Δp (gain = 1) | -75...75 Pa |
| Linearity error | 2% FS |
| Time constant | 0.1 s |
| Reproducibility | 0.2% FS |
| Zero point stability | 0.2% FS at 20 °C |
| Admissible positive pressure | ± 10 kPa |
| Admissible operating pressure p_{stat} | ± 3 kPa |

Touch colour display, LCD

| | |
|-----------------|------------------|
| Size of display | 3.5" |
| Type | TN TFT |
| Resolution | 320 x 240 pixels |
| Touch | Resistive |

Ambient conditions

| | |
|-----------------------------------|---|
| Ambient temperature | 0...50 °C |
| Ambient humidity | 10...90% rh |
| Storage and transport temperature | -10...70 °C |
| Environment | For use in all clean room classes as per EN ISO 14611-1 and EU GMP guidelines |



| Inputs/outputs | | |
|--|----------------------------------|---|
| | Analogue inputs | 0...10 V |
| | Analogue outputs | 0...10 V, 20 mA |
| Inputs/outputs in combination with ecos500/504/505 | | |
| | Ni1000/Pt1000 | -20...100 °C |
| | Digital outputs | Relay normally-open contact 230 V~/5 A (total max. 10 A) |
| | Analogue outputs | 0...10 V, 2 mA |
| Function | | |
| | Horn | Acoustic, integrated into back |
| Interfaces and communication | | |
| | Interface | RS-485 |
| | Protocol | SLC (SAUTER Local Communication) |
| Construction | | |
| | Weight | 3.1 kg |
| | Dimensions W x H x D | 700 × 200 × 49 mm |
| | Connections | Terminals/plugs |
| | Panel fitting | 6 × hexagon socket screws, M4 |
| | Fitting cut-out | Min. H: 480 (+2) mm Min. B: 138 (+2) mm |
| | Front panel material | V2A |
| Standards and directives | | |
| | Type of protection | IP67 (front, when built-in) IP20 (back cover) |
| | Protection class | II (EN 60730-1) |
| CE conformity according to | EMC Directive 2014/30/EU | EN 61000-6-1, EN 61000-6-3 |
| | Low-Voltage Directive 2014/35/EU | EN 60730-1 |

Overview of types

| Type | Description |
|-------------|---|
| CRP510F010D | Clean room panel with integrated pressure, temperature and humidity sensor (rel.) |
| CRP510F001D | Clean room panel with integrated pressure sensor |

Accessories

| Type | Description |
|------------|------------------------------|
| 0297867001 | Reference pressure container |