

GESTRA Steam Systems

Control, Display & Operating Panel **SPECTOR***control*

Product Range B

SPECTOR control

Description

SPECTOR*control* is designed for the display, parameterisation, monitoring and control of the following components: CANopen equipment, actuators and sensors.

Some control and operating units may not be necessary if SPECTOR control is used.

SPECTOR*control* features various interfaces, which means that not only remote operation but also the integration of a burner control system (MODbus) and process control level (Profibus) are possible.

All devices that can be used with SPECTOR*control* are indicated in the equipment list.

| Bus terminal block (I/O module) | | |
|---|--------------------------|--|
| Max. inputs and outputs | 20 digital, 10 analog | |
| CANopen equipment | | |
| Max. number of sensors | 10 | |
| Max. number of actuators | 10 | |
| Data logs | | |
| Number of data logs | 5 x 2 | |
| Maintenance | | |
| Number of counters (Operating hours / switching cycles) | 5 | |
| Quantity | | |
| Number of quantity signals | 5 | |
| Controller | | |
| Number of controllers (Continuous / 2-position / 3-position controller) | 5 | |
| Number of 3-element controllers (Continuous / 3-position controller) | 1 | |
| Intermittent blowdown control | | |
| Number of controls | 1 | |
| Current and history messages | | |
| Max. number of history messages | 1024 | |
| Password protection | | |
| Number of levels | 3 | |

All data transferred in a CAN bus are received by SPECTOR-control, using the CANopen protocol.

In addition, equipment using Profibus or MODbus can also be connected to SPECTOR control.

If required, further ${\sf SPECTOR}{\it control}$ equipment can be hooked up to ${\sf SPECTOR}{\it control}$.

SPECTOR*control's* user-friendly graphical operator panel with IR touch screen enables direct visualisation and operation. Any PC with internet browser or IDSN router permits remote operation.

SPECTOR*control* offers the following service functions:

- Parameter indication
- Trend indication
- Indication and monitoring of maintenance intervals
- Representation of accumulated quantity
- Indication of the last 1024 alarm messages (history function)
- Remote operation via Intranet (TCP/IP) and ISDN modem
- Multi languages
- Password protection
- Control function

Function

SPECTOR*control* is an operating, indicating and control device for boiler management systems.

The sensors and SPECTOR*control* use the CANopen protocol. At regular intervals the CANopen devices send data telegrams via CAN bus. The data transfer is in accordance with ISO 11898.

All transferred process data are continuously received and evaluated by SPECTOR control. If a connected CANopen device interrupts the data transmitting cycle, an alarm message is given and a visual signal is indicated by the display.

To establish and monitor the available parameters of CANopen devices you can either use the operating panel or a PC or handheld.

The configuration is menu driven. Make sure that you enter only correct parameter settings, since the CANopen devices do not perform checks regarding the consistency of inputs and the range of values.

CAN Bus

All level, temperature and conductivity switches, controllers and electrodes are interconnected by means of a CAN bus. The data exchange is effected by means of a CAN bus according to DIN ISO 11898 using the CANopen protocol. Every item of equipment features an electronic address (node ID). The four-core bus cable serves as power supply and data highway for high-speed data communication. The operating and display unit SPECTOR*control* is preconfigured at our works and ready for service with other GESTRA components.

Design

Case for installation in control cabinet doors. The connectors are accessible from the rear.

Dimensions: 345 x 260 x 109 mm (10.4")

Technical Data

System

CPC / 10.4"

Processor: 650 MHz (up to 1.2 GHZ optional) Memory: 256 MB (512 MB optional)

Input / output

CAN bus to DIN ISO 11898

CANopen

MODbus RTU, OPC, Profibus (optional)

Voltage supply

18.5 - 30.2 V DC

Scope of supply

I/O module with two analog inputs/outputs and 8 digital inputs/outputs

Indicators and adjustors

Graphical display, IR touch screen, resolution 640 x 480, colour TFT 256 k (16 Bit), active surface 10.4"

Protection

Front: IP 65 to EN 60529

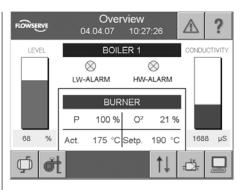
Rear: IP 20 to EN 605229

EMC class

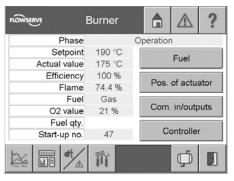
EN 6100-6-2, EN 61-6-3

Design

Case for mounting



SPECTOR control



SPECTOR control

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ATEX (Atmosphère Explosible)

According to the European Directive 94/9/EC the equipment must **not** be used in explosion risk areas.

Important Notes

Connection of CANopen devices via CAN interface. A Sub-D plug connector in accordance with DIN 41652 must be used for the connection. You can use a multi-core flexible control cable as supply line. Note that screened multi-core twisted-pair control cable is required as bus line, e. g.UNITRONIC® BUS CAN 2 x 2 x ...mm² or RE-2YCYV-fl 2 x 2 x ...mm².

| Cable length | Number of pairs and conductor size [mm²] |
|--------------|--|
| 125 m | 2 x 2 x 0.34 |
| 250 m | 2 x 2 x 0.5 |
| 335 m | 2 x 2 x 0.75 |

Other cable lengths available (see installation manual).

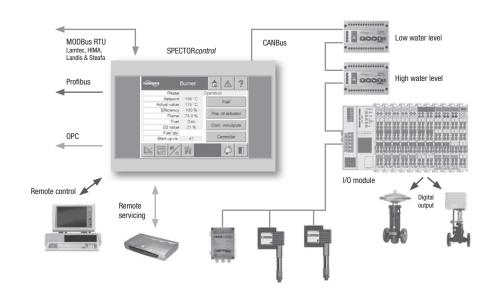
Order and Enquiry Specification

GESTRA Control, operating & display panel SPECTOR control

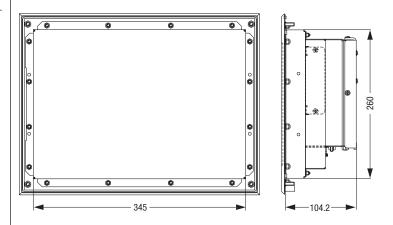
Ancillary Units

- ISDN modem / router
- Stabilised power supply unit
- CAN / Profibus connector

Overview



Dimensions



SPECTOR control CPC/10,4"

Supply in accordance with our general terms of business.

GESTRA AG

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