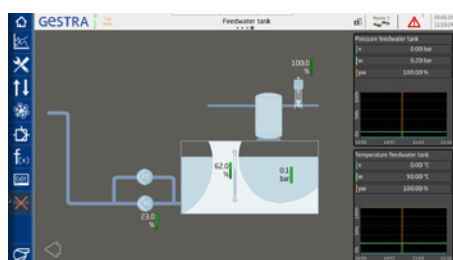


SPECTORcontrol III



SPECTORcontrol III

Measuring, Open- and Closed-loop Control System **SPECTORcontrol III**

System description

The SPECTORcontrol III periodically determines the current parameter settings and values of CANopen devices. These can be viewed on the display immediately after the associated node ID has been set or configured. After this, you can change the settings of the connected devices.

The arrangement of individual inputs for the various CAN bus nodes is flexible. This is not the case for the I/O system, however, where the mechanical layout is fixed.

The system enables digital signals and analogue values to be processed, so that plant-specific switching and control tasks can be carried out. To do this, alarm and switching limits can be set and assigned to the controllers or further processed by logical and calculation functions.

Numerous options are available for the output and display of all signals.

All signals and values can be given unique names, allowing a clear overview of the plant.

The SPECTORcontrol III features the following service functions:

- Displaying parameters
- Open- and closed-loop control functions
- Monitoring SPECTORconnect/bus devices
- Displaying trends
- Displaying and monitoring maintenance intervals
- Calculating and displaying flow rates/steam flow rates
- Alarm history
- Password protection
- Flexible parameter assignment for individual homepages
- Data exchange via bus interfaces
- Burner connection

Function

The SPECTORcontrol III is an open-/closed-loop control, display and operating panel with integrated programmable logic controller (PLC). In addition to GESTRA SPECTORconnect equipment such as conductive and capacitive level electrodes, temperature limiters and conductivity electrodes, many third-party systems can also be connected and incorporated in the overall system.

Area of application

- Pressurised steam/superheated steam plants
- Pressurised hot water plants
- Pressurised flue gas plants/heat exchangers
- Steam regenerators
- Energy data acquisition/analysis
- Turbine control
- Universal controllers
- Electrical pressurised steam/superheated steam plants

Technical data

Measuring, open- and closed-loop control system

SPECTORcontrol III:

Supply voltage

- 24 V DC (+/- 20%)

Power consumption

- Max. 29 W

Current input

- Max. 1.2 A (at 24 V DC)

Data transmission interfaces

- 2 x Ethernet 100/1000 Mbps RJ45 intranet
- Modbus TCP client/server
- OPC UA server (optional)
- Various fieldbuses with gateways can be implemented
- CAN bus interface (galvanically isolated)
- Modbus RTU RS232 (galvanically isolated) for specific burner connection
- 1 x microSD card slot with one microSD card included in the configuration
- 2 x USB ports (type A) for importing and exporting data

Indicators and controls

- 15.6" PCAP colour touchscreen with dimmable backlight
- Front panel cutout 387 mm x 234 mm
- Front dimensions 404 x 251 mm
- Temperature 0 – 50 °C
- Rel. humidity 10 – 85%, non-condensing

Designed to display operating data for maximum:

- 60 digital inputs 24V
- 40 digital outputs
- 40 analogue inputs (4-20 mA, 10-1200 ohms, 0-10 V, Pt100)
- 20 analogue outputs (4-20 mA, 0-10 V)
- 30 CAN sensors

Including software for the functions:

- Display of operating data, incl. dual burner data display via Modbus TCP for Lamtec or Siemens
- Trend log for 30 signals
- 20 cumulated flow rate logs
- 10 steam flow rate calculators (with pressure/temperature compensation)
- 20 calculations, e.g. for multiplying switching values, limit values and setpoints
- 40 logical operators, e.g. for enabling controllers
- 5 weekly timers
- 10 maintenance logs
- Alarm list
- 8 alarm groups
- Flexible signal assignment for individual homepages

20 integrated, freely customisable controllers with the following functions:

- Continuous controller
- Continuous pump controller
- 3-point step controller
- 3-point pump step controller
- 2-point controller
- 2-point pump controller
- 3-component controller
- Intermittent blowdown program controller with pulse repetition
- Metering regulator

With P, PI or PID characteristic, dead zone, soft start, automatic runtime-dependent pump switchover and operating position depending on the type of controller

Controller optimisation via integrated trend logging of the actual value, setpoint, internal settings and manipulated variable

Measuring, Open- and Closed-loop Control System

SPECTORcontrol III

Important notes

CAN devices are connected via the CAN interface. The connector is included with delivery. Use a shielded, multi-core, twisted-pair control cable, e.g. UNITRONIC® BUS CAN 2 x 2 x ...mm² or RE-2YCYV-fl 2 x 2 x ...mm² as the bus line.

Cable length	Number of pairs and conductor size mm ²
125 m	2 x 2 x 0.34
250 m	2 x 2 x 0.5
335 m	2 x 2 x 0.75

See the Installation & Operating Manual for further cable lengths.

How to order

SPECTORcontrol III

Measuring, open- and closed-loop control system SPECTORcontrol III:

- 15.6" PCAP TFT LCD touchscreen
- IP rating of front IP 65
- 2 x Ethernet 100/1000 Mbit RJ45
 - VNC
 - Modbus TCP client/server
 - OPC UA server, optional
- CAN interface, galvanically isolated
- Specific burner connection via Modbus RTU/TCP
- USB ports for backup/upload functions
- Incl. SPECTORcontrol III software for displaying operating data
- I/O terminals available as accessories on request

Directives and standards

You can find information on the conformity of the devices and the applicable standards and directives in the Declaration of Conformity and associated certificates or approvals.

Please note our general terms of business.

Overview

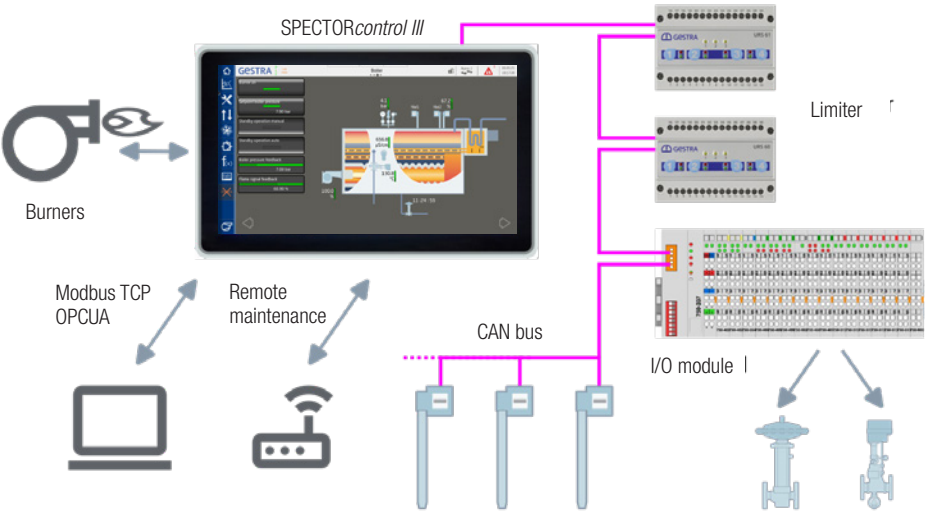


Fig. 1

Dimensions

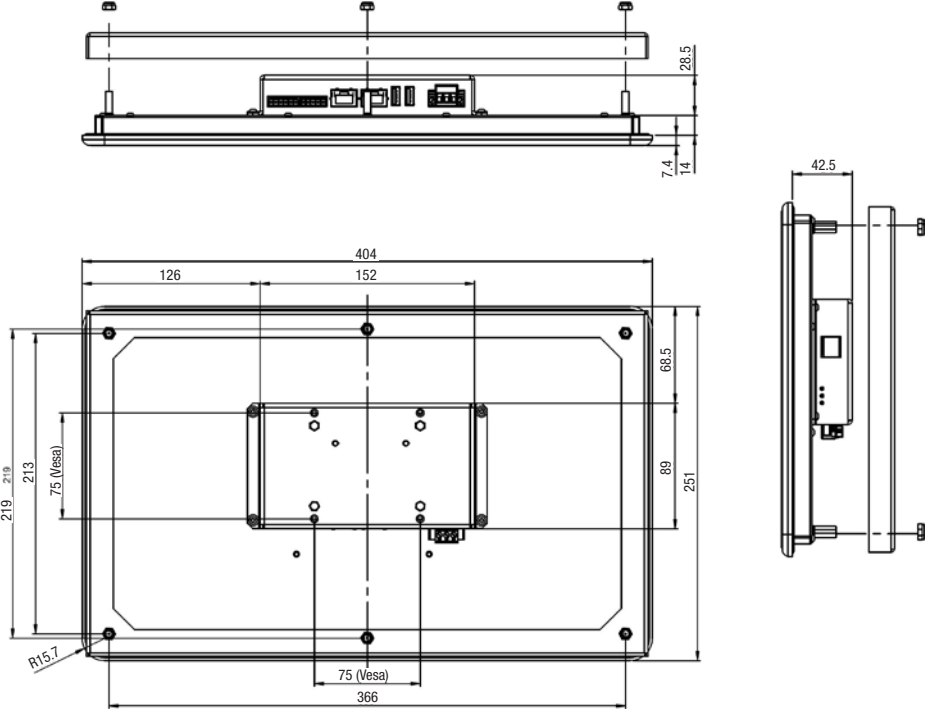


Fig. 2 SPECTORcontrol III 15.6"

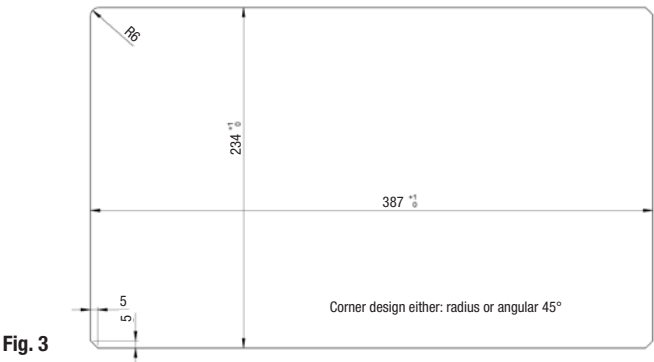


Fig. 3

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