

SCAN-20 serie

Scan-22 → 1 – 2 sensors

Scan-24 → 1 – 4 sensors

General:

The combination of Avaco Systems & Safe Solutions is a service package that includes skilled expert services, design assistance, high-quality equipment deliveries and after-sales marketing consultations.

The Scan-20 Series Gas Detection Controllers are designed both for the rough industry and the normal indoor use. The Scan-22 is up to two sensors and Scan-24 up to four sensors. The processor based SCAN-20 is easy to program. The interface is user-friendly and the display is bright and clear.

A wide variety of sensors can be connected to SCAN-20 controllers. The transmitters with current or voltage output or gas sensors with resistive signal can be directly connected to the controllers. The sensor technologies are

- Electro chemical cells for toxic gases
e.g. CO, H₂S, NH₃, NO, NO₂, SO₂, CL₂, O₃ etc.
- Electro chemical cells for oxygen
- Semi-conductive, catalytic or NDIR sensors for combustible and flammable gases and organic solvents (C₃H₈, CH₄ etc)
- NDIR sensors for carbon dioxide (CO₂) and HC.

Operation:

The AVACO SCAN-20 provides three-level adjustable set points and gives alarm at three levels according to the set gas concentration limits at each input channel. Any of the relays can be activated at any alarm level.

When the gas concentration reaches the set level the system will give audible and visible alarms for each sensor and level. White back lighted 20 x 4 character LCD display shows specific indication for each channel = alarm levels A1, A2 or A3, number or address for the channel, concentration and ppm or % LEL... Common indicators for alarms-off, emergency shut-down of solenoid valve and fault alarm. 48 latest alarm events for each channel will be stored in the history. The systems are also provided with adjustable time delays for the output signals (e.g. to protect ventilation motors from constant and unnecessary start peaks).

Together with Avaco Systems transmitters and sensor units the Scan-20 gas detection controller forms a reliable and efficient system.

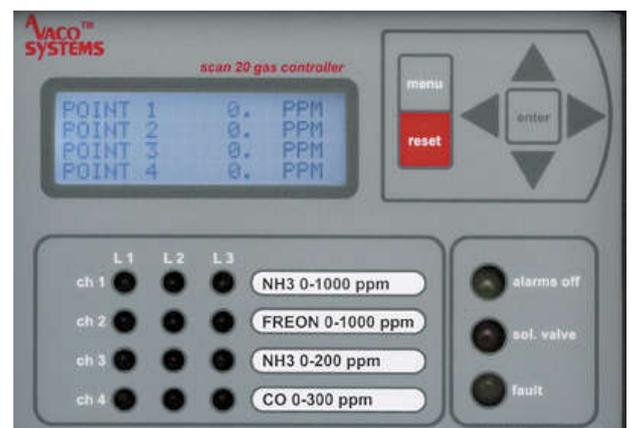
Sensor technologies and cabling:

- SnO₂ Solid State sensors (semiconductor sensors) 4 - wire 2 x (2+1) x 0,5 mm²
- Catalytic (pellistor) sensors 4 - wire 2 x (2+1) x 0,5 mm²
- Electro-Chemical cells 2 - wire 2 x (2+1) x 0,5 mm²
- NDIR (infrared) sensors 4 - wire 2 x (2+1) x 0,5 mm²



Dimensions 259 x 237 x 97 mm (w x h x d) excluding cable glands

Wall installation. Degree of protection IP66



APPLICATIONS:

- Process industry
- Laboratories and hospitals
- Power plants
- Multi-storey parks
- Food industry
- Natural gas stations
- Engine rooms
- Swimming pools

Construction:

Control logics:	Programmable embedded control logic designed for gas detection
Display:	20x4 marks backlit LCD display, indicators for alarm levels I, II and III and fault alarm
Input unit:	Scan-22: 1...2 inputs, Scan-24: 1...4 inputs. Current (0)4...20 mA or voltage signal 0-5 V
Relay unit:	7 relay outputs, relay contacts, 230 V AC 1,0A for resistive load

Alarms:

Alarm levels:	Addressable alarm data for high and / or low concentrations from each channel is shown on the display, the last 48 alarm data are stored in the alarm history Three alarm levels which can be programmed according to environmental demands and the customer's needs
Relay actions:	Relay Actions in Alarm situations
Normal	Controlling function will be released when the gas concentration has recovered to normal
Acknowledged:	Controlling function will be released by acknowledging the alarm
Latched:	Controlling function can be released by acknowledging the alarm when the as concentration has recovered to normal
Wireless alarm data:	Alarm data as SMS message to a mobile phone (option)
Digital output:	modem / service

Environmental:

Temperature:	Operating temperature range -10...+45°C
Humidity:	Operating humidity 10...90 % RH non-condensing
Air pressure:	Normal air pressure

Electrical:

Operating voltage:	230 VAC / 24 VDC
Cable requirements:	Power supply MMJ 3 x 1,5 mm ² or equal Signal /sensors JAMAK 2 x (2+1) x 0,5mm ² or equal Bus: UNITRONIC BUS LD 3 x 2 x 0,22 mm ² + armoured twisted-pair cable, or equal
Power consumption:	50W (maximum load)

Enclosure:

Installation:	Wall mounted
Material:	ABS - Polymer
Colour:	RAL 7035 (light grey)
Degree protection:	IP66
Dimensions:	259mm x 237mm x 97mm (width x height x depth)

Standards:

The software complies with the standard EN 50271:
Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen – Requirements and tests for apparatus using software and / or digital technologies



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