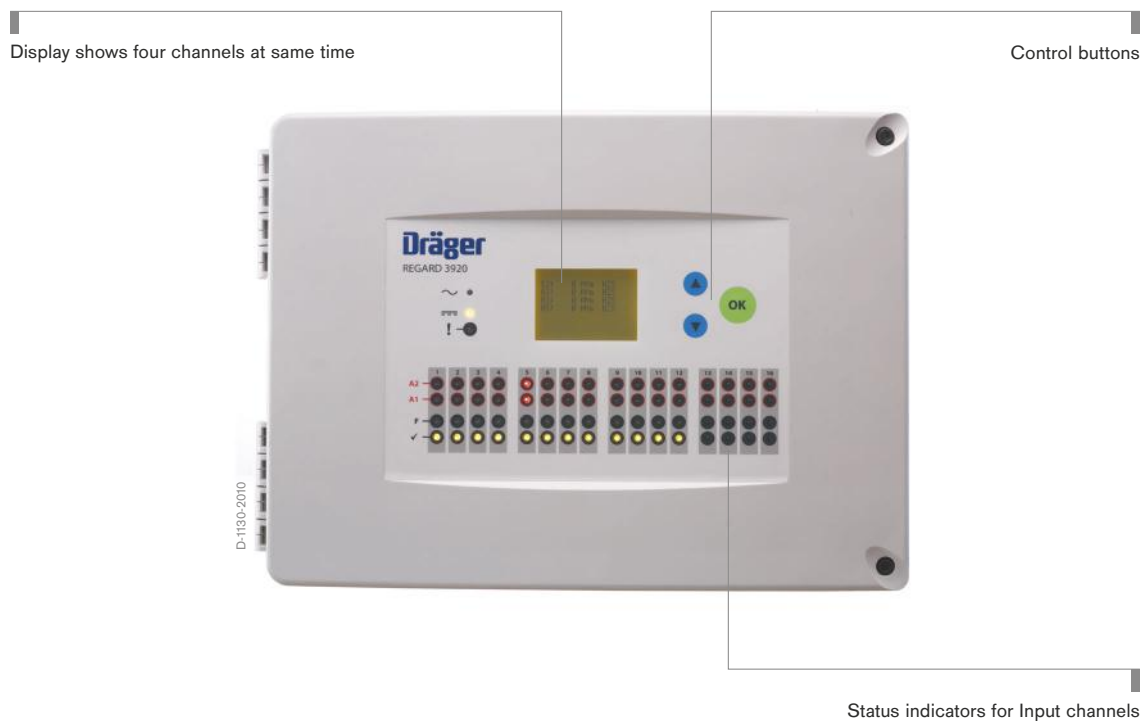


Dräger REGARD® 3900 Series Control System

The devices of the Dräger REGARD® 3900 series can be used as standalone controllers. You can configure up to 16 measuring channels. In addition, the modular setup enables you to customise the control units to the demands of your plant. You can also embed further features to existing alarms.



Benefits

Input modules

You can connect up to four 4 to 20 mA transmitters with 2 or 3-core cables to an input module. Up to a total of four input modules per controller can be installed. Each module is populated with three relays. These relays offer common “Fault”, “Alarm 1” and “Alarm 2” SPOC outputs. In addition, the two alarm levels are fully configurable and can be set as rising or falling and latching or non-latching. A third alarm is possible by using the relay module.

Relay module

You can add two relay modules to the controller of the REGARD 3900 series. Each module is populated with eight relays. The first relay is dedicated as a “Fault” relay and cannot be reconfigured. The remaining seven relays can be configured as “Single”, “Common” or “Voting” alarms. An additional “Alarm 3” is offered by the relay module along with a second fault threshold. You acknowledge the alarm relays via the push buttons on the front panel. The relays work with open-circuit current or close current.

Output module (Repeater module)

Each 4 to 20 mA output repeats the signal of up to eight inputs. This allows indication or recording of gas levels by other control units. You can install up to two analogue output modules.

Configuration

You configure your control unit quickly and easily with the configuration software Config 3900 via laptop or PC. For new installations the configuration is prepared offline and uploaded during the commissioning. For maintenance you can download the system configuration for a check. You can get the necessary cable as an accessory. By using the push buttons on the front panel, the REGARD 3920 can be easily adjusted. The configuration menu is easy to understand.

Mounting and installation

The robust housing of REGARD 3900 and 3920 is dust-tight and protected against water jets (IP 65). Thus these control units can be installed in safe area. The REGARD 3910 is equipped with built-in display and backplane. You can easily mount it into a cabinet. The modules can be installed there as well.

Gateway solution

The REGARD 3900 Modbus Gateway is an interface that converts a CAN bus protocol into a Modbus RTU protocol. Due to this factor, the gateway allows the communication between the control unit of the REGARD 3900 series (CAN bus) with RVP 3900 (Remote Visualisation Panel) or other systems (Modbus RTU). Other possible gateways are: Modbus TCP/IP and PROFIBUS® Gateway. You can use these to transfer data to third party control systems.

Details



D-27777-2009

Dräger REGARD® 3900



D-4258-2010

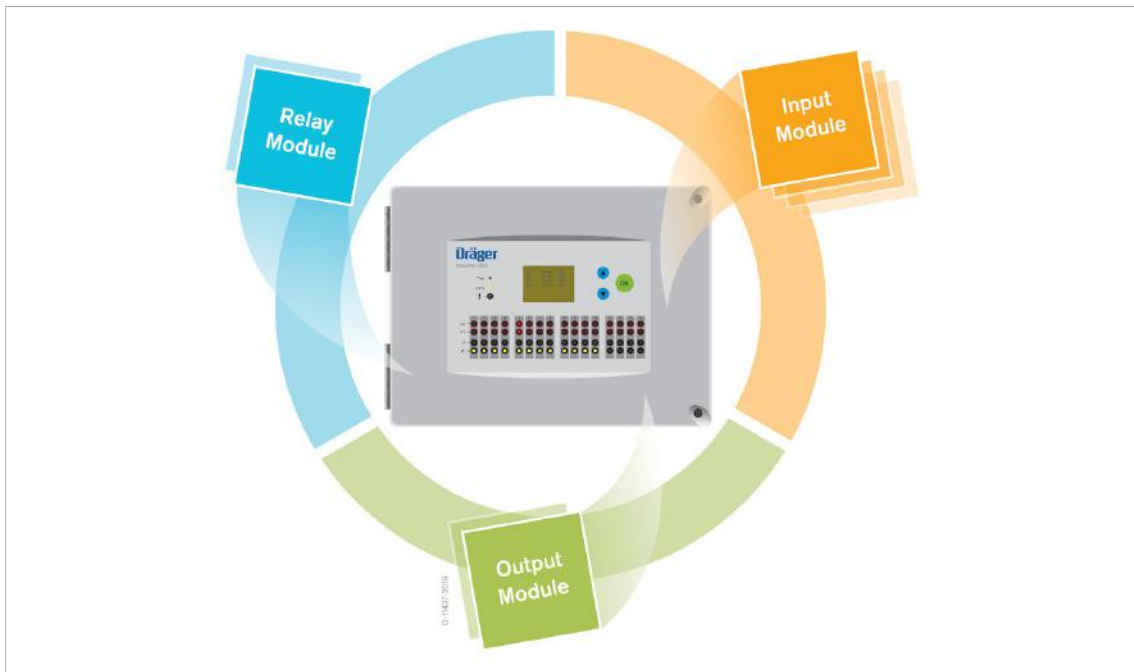
Dräger REGARD® 3910



D-1130-2010

Dräger REGARD® 3920

Dräger REGARD 3900/3910/3920 – Modules



In a Dräger REGARD® 3900/3910/3920 you can use up to four input or relay modules. Up to additional two output modules are possible.

System Components



ST-11859-2007

Dräger PIR 7000

The Dräger PIR 7000 is an explosion proof point infrared gas detector for continuous monitoring of flammable gases and vapours. With its stainless steel SS 316L enclosure and drift-free optics this detector is built for the harshest industrial environments, e.g. offshore installations.



ST-3812-2003

Dräger Polytron® 7000

The Dräger Polytron® 7000 is a gas detector that can satisfy all toxic and oxygen gas measurement applications on a single platform. It is meeting the requirements of the compliance market as well as the high specification requirements of customized solutions.



D-11188-2011

Dräger PEX 3000

The transmitter Dräger PEX 3000 detects flammable gases and vapours in concentrations below their lower explosive limit. Its DD-sensor provides a long-term stable measuring signal and responds to gas within a few seconds.

Related Products

ST-335-2004



Dräger REGARD®-1

The Dräger REGARD®-1 is a standalone, self contained single channel control system for the detection of Toxic, Oxygen and Ex hazards. The control system is fully configurable for a single input from either a 4 to 20 mA transmitter or a Dräger Polytron® SE Ex measuring head.

ST-5647-2006



Dräger REGARD® 2400 and REGARD® 2410

Dräger REGARD® 2400 and 2410 are flexible small control units for detection of toxic gases and oxygen as well as combustible gases and vapours. Combined with the Dräger transmitters or sensing heads Dräger REGARD® 2400 or 2410 forms a low-maintenance gas detection system for reliable protection.

D-6806-2016



Dräger REGARD® 7000

The Dräger REGARD® 7000 is a modular and therefore highly expandable analysis system for monitoring various gases and vapours. Suitable for gas warning systems with various levels of complexity and numbers of transmitters, the Dräger REGARD® 7000 also features exceptional reliability and efficiency. An additional benefit is the backward compatibility with the REGARD®.

Technical Data

| | | |
|------------------------|--|---|
| Type | Control unit for location in a non-hazardous area | |
| Gas and ranges | see transmitter type for gas name, measuring range and units | |
| Inputs | all configuration via PC or laptop | |
| | 4 to 20 mA transmitter with 2- or 3-core cable | |
| Outputs | Alarm 1, Alarm 2 and Fault as standard | |
| | Warning and inhibit relays on optional relay module | |
| | Single, common or voted alarms on optional relay module | |
| | Acknowledgeable relays on optional relay module | |
| Display | Dräger REGARD® 3900 and | 4 lines, 40 characters back-lit LCD |
| | Dräger REGARD® 3910 | 4 LEDs per channel (function, fault, Alarm 1 alarm 2) DC and AC power supply LEDs Inhibit-LED |
| | Dräger REGARD® 3920 | Large graphic display (4 x 62 mm, 64 x 128 pixel) Menu structure and messages in real text 3 push button navigation |
| | | 4 LEDs per channel (function, fault, Alarm 1 alarm 2) DC and AC power supply LEDs Inhibit-LED |
| Power supply | External 24 VDC | |
| | Internal 110 / 240 VAC, 50 / 60 Hz | |
| Dimensions (W x H x D) | Dräger REGARD® 3900 and 3920 | ca. 420 x 300 x 190 mm |
| | Dräger REGARD® 3910 | ca. 300 x 225 x 20 mm |
| Weight | ca. 3 kg, depending upon type and installed power supply | |
| Ambient conditions | Temperature | 0 to 55 °C |
| | Pressure | 700 to 1,300 hPa |
| | Humidity | 0 to 100 % r.F., non-condensating |
| Protection class | IP 65 | |
| Housing material | ABS OV | |
| Approvals | ATEX | II (2) G, TRL 06 ATEX 21099X |
| | SIL | SIL 1 |
| | CE-Zeichen | Electromagnetic Compability (Directive 89/336/EWG) Low Voltage Directive (72/23/EWG, 93/68/EWG) |
| | DNV/GL | only Dräger REGARD® 3910 |
| | MED B+D | only Dräger REGARD® 3910 |

Ordering Information

Dräger REGARD® 3900

| | |
|--|-----------|
| Dräger REGARD® 3900 Basic Unit | 42 08 780 |
| Dräger REGARD® 3900 (1x 4 to 20 mA Input Module + 1x Relay Module) | 42 08 810 |
| Dräger REGARD® 3900 (1x 4 to 20 mA Input Module + 2x Relay Module) | 42 08 811 |
| Dräger REGARD® 3900 (2x 4 to 20 mA Input Module + 0x Relay Module) | 42 08 812 |
| Dräger REGARD® 3900 (2x 4 to 20 mA Input Module + 1x Relay Module) | 42 08 813 |
| Dräger REGARD® 3900 (2x 4 to 20 mA Input Module + 2x Relay Module) | 42 08 814 |
| Dräger REGARD® 3900 (3x 4 to 20 mA Input Module + 0x Relay Module) | 42 08 815 |
| Dräger REGARD® 3900 (3x 4 to 20 mA Input Module + 1x Relay Module) | 42 08 816 |

Ordering Information

| | |
|---|------------|
| Dräger REGARD® 3900 (4x 4 to 20 mA Input Module + 0x Relay Module) | 42 08 817 |
| Dräger REGARD® 3910 | |
| Dräger REGARD® 3910 Display Board | 42 08 830 |
| Dräger REGARD® 3910 Mounting Plate for Modules | 42 08 831 |
| Dräger REGARD® 3920 | |
| Dräger REGARD® 3920 Basic Unit | 42 08 850 |
| Dräger REGARD® 3900/3910/3920 Module | |
| Dräger REGARD® 3900/3910/3920 4 to 20 mA Input Module | 42 08 782 |
| Dräger REGARD® 3900/3910/3920 Relay Module | 42 08 784 |
| Dräger REGARD® 3900/3910/3920 4 to 20 mA Output/Repeater Module | 42 08 797 |
| Dräger REGARD® 3900/3910/3920 Accessories | |
| Dräger REGARD® 3900/3910/3920 Modbus Gateway | SC 00 083 |
| Dräger REGARD® 3900/3910/3920 PROFIBUS® DP Gateway | AG 01 100 |
| Dräger REGARD® 3900/3910/3920 Modbus TCP/IP Gateway | SD 13 037 |
| Dräger REGARD® 3900/3910/3920 PSU 2,5 A | 42 08 745 |
| Dräger REGARD® 3900/3910/3920 PSU 5 A | 42 08 746 |
| Dräger REGARD® 3900/3910/3920 PSU 10 A | 42 08 747 |
| Dräger REGARD® 3900/3910/3920 CAN Interface | 42 08 785 |
| Dräger REGARD® 3900/3910/3920 Modbus RTU | SC 00 083 |
| Dräger REGARD® 3900/3920 Gateway Cable | SC 00 084 |
| Dräger REGARD® 3910 Gateway Cable | SC 00 085 |
| Dräger Config 3900 | on request |
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sales@norrscope.com