

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 neccessary 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 intalled 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 TCPIP and PROFIBUS® Gateway. You can use these to transfer data to third party control systems.

Details







Dräger REGARD® 3910



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



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.



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.



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



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.



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.



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

Control unit for loca	Control unit for location in a non-hazardous area		
see transmitter type	see transmitter type for gas name, measuring range and units		
all configuration via	all configuration via PC or laptop		
4 to 20 mA transmit	4 to 20 mA transmitter with 2- or 3-core cable		
Alarm 1, Alarm 2 and	Alarm 1, Alarm 2 and Fault as standard		
Warning and inhibit	Warning and inhibit relays on optional relay module		
Single, common or	oted alarms on optional rel	ay module	
Acknowledgeable re	lays on optional relay modu	lle	
risplay 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		
External 24 VDC			
Internal 110 / 240 VAC, 50 / 60	Hz		
Dräger REGARD® 3900 and 3920	d ca. 420 x 300 x 190 mm		
Dräger REGARD® 3910	ca. 300 x 225 x 20 mm		
ca. 3 kg, depending upon type	and installed power supply		
Temperature	0 to 55 ℃		
Pressure	700 to 1,300 hPa		
Humidity	0 to 100 % r.F., non-con-	densating	
IP 65			
ABS OV			
ATEX	II	(2) G, TRL 06 ATEX 21099X	
SIL	S	IL 1	
CE-Zeichen		lectromagnetic Compability (Directive 9/336/EWG)	
		· · · · · · · · · · · · · · · · · · ·	
		ow Voltage Directive (72/23/EWG, 3/68/EWG)	
DNV/GL	9	ow Voltage Directive (72/23/EWG, 3/68/EWG) nly Dräger REGARD® 3910	
	see transmitter type all configuration via I 4 to 20 mA transmitt Alarm 1, Alarm 2 and Warning and inhibit Single, common or v Acknowledgeable re Dräger REGARD® 3900 and Dräger REGARD® 3910 External 24 VDC Internal 110 / 240 VAC, 50 / 60 Dräger REGARD® 3900 and 3920 Dräger REGARD® 3910 ca. 3 kg, depending upon type a Temperature Pressure Humidity IP 65 ABS OV ATEX SIL	see transmitter type for gas name, measuring reall configuration via PC or laptop 4 to 20 MA transmitter with 2- or 3-core cable Alarm 1, Alarm 2 and Fault as standard Warning and inhibit relays on optional relay modules of the process of the	

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 TCPIP 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



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

∷ UK Office Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)330 088 0560 Fax: +44 (0)1245 808399

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.