

# Dräger REGARD 3900 Control System

The Dräger REGARD 3900 is a standalone, self contained control system for the detection of Toxic, Oxygen and Ex hazards. The control system is fully configurable between 1 and 16 channels, depending upon the type and quantity of input/output boards installed.



Capable of housing both 4-20mA input boards and relay output boards in a robust IP65 enclosure, the Dräger REGARD 3900 is a modular system suitable for the most stringent of budgets.

#### ANALOG INPUT BOARD

Each analog input board caters for one to four, 2 or 3 wire, 4-20mA transmitters. Each transmitter connects to dedicated field terminals. Up to a total of four analogue input boards can be installed in to a single Dräger REGARD 3900, thus giving a maximum input count of sixteen transmitters. Each individual input board is populated with three relays. These relays offer common Fault, Alarm 1 and Alarm 2 outputs. The two alarm levels are fully configurable and can be set as rising or falling, latching or non-latching. To differentiate between each input board a simple mechanical link is required.

# **RELAY OUTPUT BOARD**

Each relay output board is populated with eight additional SPCO relays. Relay 1 on each relay board is a dedicated Fault relay and cannot be reconfigured. The remaining seven relays can be configured as Single, Common, Voting, Inhibit or Non-operational. An additional Alarm 3 level is offered by the relay board along with a second Fault threshold. All configurable relays can be Rising/Falling, Latching/ Non Latching and normally energised/ energise on alarm. Alarm relays are acknowledged via the push button located on the front panel of the instrument housing. A maximum of two relay boards can be installed in a single Dräger REGARD 3900 control system.

## **REPEAT OUTPUT BOARD**

Each 4-20mA output board repeats the signal of up to eight inputs. This allows indication or recording of gas levels by other units. A maximum of two analog output boards can be installed in a single Drager Regard 3900 control system.

### SYSTEM CONFIGURATION

The Dräger REGARD 3900 is fully configurable via a Laptop PC. The configuration software, Config 3900, allows quick and easy set-up. For new installations the configuration can be performed off-line and then uploaded during commissioning. Or during a Service routine, the system configuration can be downloaded from the Dräger REGARD 3900 to the PC for verification. All calibration routines, zero and span are performed using the Config 3900 configuration software. A simple interface cable is required to connect the PC to the Dräger REGARD 3900 control unit.



Dräger REGARD 3900 Standalone, self contained control system for up to 16 channels.

# **TECHNICAL DATA**

| Туре                 | Control unit for location in a non-hazardous area  |  |  |
|----------------------|--|--|--|
| Gas and ranges       | Toxic, oxygen and combustible gases with user definable measuring ranges. Refer to transmitter type for ranges, name and |  |  |
|                      | engineering units. All configurations by Laptop computer.  |  |  |
| Inputs               | 2 or 3 wire 4-20 mA transmitters   |  |  |
|                      | Remote reset   |  |  |
|                      | 24 VDC supply  |  |  |
| Outputs              | Alarm 1, Alarm 2 and Fault as standard   |  |  |
|                      | Warning and Inhibit relays on optional relay board   |  |  |
|                      | Single, common or voted alarms on optional relay board   |  |  |
|                      | Acknowledgeable relays on optional relay board   |  |  |
|                      | Repeat 4-20 mA via optional Repeat Board   |  |  |
| Display              | 4 line, 40 character back-lit LCD  |  |  |
|                      | Active, Fault, Alarm 1 and Alarm 2 LED's per input   |  |  |
|                      | DC and AC power LED's  |  |  |
|                      | Inhibit LED  |  |  |
| Power supply         | External   | 24 VDC, or   |  |
|                      | Internal   | 2.5 A, 5 A or 10 A power supply @ 110/240 VAC        |  |
| Dimensions (approx.) | 420 x 300 x 190 mm / 16.5" x 11.8" x 7.5" (W x H x D)  |  |  |
| Weight (approx.)     | 3 kg / 6.6 lbs, depending upon installed power supply  |  |  |
| Ambient conditions   | Temperature  | 0 to 55 °C / 32 to 130 °F                            |  |
|                      | Pressure   | 700 to 1300 hPa / 20.6 to 38.3 inch Hg               |  |
|                      | Humidity   | 0 to 100 %RH, non condensing                         |  |
| Ingress Protection   | IP 65, ABS – OV material of construction   |  |  |
| Approvals            | ATEX   | II (2)G Acc. to Directive 94/9/EC                    |  |
|                      | CE-mark  | Electromagnetic compatibility (directive 89/336/EEC) |  |
|                      |  | Low voltage directive (72/23/EEC, 93/68/EEC)         |  |

# ORDER INFORMATION

| Dräger REGARD 3900 Basic Unit                 | 42 08 780 |
|---|-----------|
| Dräger REGARD 3900 4-20 Module                | 42 08 782 |
| Dräger REGARD 3900 Relay Module               | 42 08 784 |
| Dräger REGARD 3900 RS232 Interface            | 42 08 785 |
| Dräger REGARD 3900 4-20mA Repeat Output Board | 42 08 797 |

L

HEADQUARTERS:

Dräger Safety AG & Co. KGaA Revalstrasse 1 23560 Lübeck, Germany

www.draeger.com

## SYSTEM CENTERS:

#### P. R. CHINA

Beijing Fortune Draeger Safety Equipment Co., Ltd. A22 Yu An Rd, B Area, Tianzhu Airport Industrial Zone, Shunyi District, Beijing 101300 Tel +86 10 80 49 80 00 Fax +86 10 80 49 80 05 GERMANY Dräger Safety AG & Co. KGaA Revalstrasse 1 23560 Lübeck Tel +49 451 882-2794 Fax +49 451 882-4991

## FRANCE

Dräger Safety France SAS 3c route de la Fédération, BP 80141 67025 Strasbourg Cedex 1 Tel +33 3 88 40 59 29 Fax +33 3 88 40 76 67

#### SINGAPORE

Draeger Safety Asia Pte Ltd 67 Ayer Rajah Crescent #06-03 Singapore 139950 Tel +65 68 72 92 88 Fax +65 65 12 19 08

## UNITED KINGDOM

Draeger Safety UK Ltd. Blyth Riverside Business Park Blyth, Northumberland NE24 4RG Tel +44 1670 352 891 Fax +44 1670 544 475

#### USA

Draeger Safety, Inc. 505 Julie Rivers, Suite 150 Sugar Land, TX 77478 Tel +1 281 498 10 82 Fax +1 281 498 51 90