

# Dräger Regard-1



ST-481-2004

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. The robust IP 65 housing allows the control system to be installed in almost any location, excluding hazardous, classified areas<sup>1</sup>. Developed with an innovative modular design ensures that the entire system is suitable for the most stringent of budgets.



ST-335-2004

## Dräger Regard-1

For those application where primary protection is required the Dräger Regard-1 control system is fully certified under the ATEX Directive against EN 61779-1/4/5 and EN 50104, for Ex detection and Oxygen detection respectively. Independent testing against EN 45544 is also achieved for Toxic detection.

When installed, the Dräger Regard-1 control system offers three gas alarm thresholds which are fully flexible in the way of rising or falling and latching or non-latching. Supporting the alarm relays are high intensity LEDs on the front panel which either flash to show a new alarm condition, remain steady to show an acknowledged alarm condition or extinguish to show a non alarm condition. The gas concentration is continuously displayed on a large LCD display. An internal buzzer sounds when a gas or fault condition exists to draw the attention of local personnel. To support either a transmitter or control system fault a fail-safe fault relay is

provided. A high intensity LED supports the fault relay and flashes to show a new fault condition, remains steady to show an acknowledged fault condition or extinguishes to show a healthy condition.

The Dräger Regard-1 control system offers additional input/output modules which offer a repeat 4 to 20 mA signal, TWA alarm threshold coupled with a TWA alarm relay and a data/event logger<sup>2</sup>. During a maintenance or service routine an inhibit relay is provided to allow remote indication that the gas detection control system is off-line.

The enclosure of the Dräger Regard-1 control system is designed to house two 1.2 AH batteries which support the control system during a mains power failure. The duration of the battery back-up is dependant on the type of transmitter used and is estimated between 30 minutes and 2 hours in a non-alarm condition.

<sup>1</sup> An area where there is a risk of explosion.

<sup>2</sup> Display board V2.0 is required for data logging

## TECHNICAL DATA

Single channel controller, housed in a rugged ABS enclosure for in- and outdoor applications		
Power supply	110/240 VAC, 50/60 Hz	
Input	2/3-wire 4 to 20 mA transmitter or Dräger Polytron SE Ex measuring head	
Output	3 gas alarm relays, fault relay, inhibit relay	
	Remote acknowledgement	
	4 to 20 mA (optional), RS 232 (optional)	
Operation	One-button operation	
	Large LC-display, status LED's	
	Built-in buzzer	
Battery buffer	2 x 12 VDC, 1.2 Ah (optional)	
Ingress protection	IP 65, NEMA 4	
Dimensions	270 x 270 x 90 mm; 10.7" x 10.7" x 3.6" (H x W x D)	
Weight	2.5 kg; 5.5 lbs.	
Wiring	0.5 to 2.5 mm <sup>2</sup> ; AWG 20 to 14	
Ambient conditions	Temperature	0 to 55 °C; 32 to 130 °F
	Pressure	700 to 1300 hPa; 20.7 to 38.4 inch Hg
	Humidity	0 to 100 % RH, non-condensing
Approvals	CE	Electromagnetic compatibility (directive 89/336/EEC) Low voltage directive (directive 73/23/EEC)
	ATEX	II (2) G

## ORDER INFORMATION

Dräger Regard-1	4 to 20 mA	42 08 585
Dräger Regard-1	SE Ex	42 08 600
Rechargeable battery kit		42 08 586
Options board	(4 to 20 mA repeater, RS 232, TWA alarm relays)	42 08 583
Display board with datalogger		42 08 636

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