



# Modular manifold system alarm module



## IDENTIFICATION

- ▶ LED alarm module with five inputs for signalling of station operating alarms and manifold system alarm module emergency status
- ▶ Facility to interconnect multiple identical modules in master/slave configuration by means of a single twisted pair
- ▶ Transfer of total relay-controlled alarm log (dry contact)
- ▶ Integrated protection fuse
- ▶ No. 2 red LEDs for emergency alarms signalling
- ▶ No. 3 yellow LEDs for operating alarms signalling
- ▶ Visual alarms signalling via flashing high luminosity LEDs
- ▶ Automatically resettable audible alarm signal
- ▶ Audible alarm mute and test buttons
- ▶ Green power-ON LED
- ▶ Alarm supervision via MODBUS-RTU protocol
- ▶ Microprocessor control system

## CE MARKING

Notified body: CE 0476  
 Risk class II B CE marking as prescribed by Legislative Decree n. 46 of 24 February 1997 "Implementation of Directive 93/42/EEC concerning medical devices" and further modifications  
 CE marking in compliance with EMC Directive 108/2004/EC

## REFERENCE STANDARD

**ISO 7396-1:** "Medical gas pipeline systems - Part 1: Pipeline systems for compressed medical gases and vacuum"

**EN 60601-1:** "Medical electrical equipment - General requirements for basic safety and essential performance"

**EN 60601-1-2:** "Medical electrical equipment - Electromagnetic compatibility"

**EN 60601-1-8:** "Alarm systems in medical electrical equipment"

\* Validity of the standards is referred to the current year

## MODULAR ALARM

CODE	DESCRIPTION	ALARM SIGNALS	PACKAGING
<b>AQ-2511-5000</b>	5-input manifold system alarm module	L source empty, R source empty, Low line pressure, High Line pressure 3rd source empty	16 x 8.5 x 11 cm, box, 0.42 Kg
<b>AQ-2511-5010</b>	Manifold supervision alarm module	O <sub>2</sub> manifold, N <sub>2</sub> O manifold, Air manifold, CO <sub>2</sub> manifold, Vacuum system	16 x 8.5 x 11 cm, box, 0.42 Kg
<b>AQ-2511-2000</b>	Left/Right manifold alarm module	Left manifold, Right manifold	16 x 8.5 x 11 cm, box, 0.42 Kg

## ALARM MODULE BOXES

CODE	DESCRIPTION	PACKAGING
<b>AQ-2100-1000</b>	IP 40 flush mount box with plexiglass door for 6-position DIN 43380 rail	20 x 17 x 10 cm, 0.42 Kg
<b>AQ-2100-2000</b>	IP 65 surface mount box with plexiglass door for 6-position DIN 43380 rail	21 x 20 x 10.5 cm, 0.68 Kg



- ▶ Storage temperature: -20 °C ÷ +60 °C
- ▶ Working temperature: +10 °C ÷ +40 °C
- ▶ Power supply: 230 V AC - 50 Hz - 4 VA
- ▶ 5 ON/OFF digital inlets
- ▶ 100 mA Integrated protection fuse
- ▶ Gases: Vacuum, Oxygen, Medical Air, Nitrous Oxide, Carbon Dioxide, Instrument Air
- ▶ Modular box for 6-position DIN 43380 rail
- ▶ Relay 500 mA max 24 V
- ▶ Master / Slave connection via bus RS 485
- ▶ Subject to Directive 2012/19/EU 

