# **BREATHING AIR SYSTEM BRAIRFC PLUS**

## **DESCRIPTION**

BRAIRFC PLUS system has been specifically designed for applications where high quality breathing air and monitoring of breathing air supply are needed. BRAIRFC PLUS is a combination of our BRAIRFC 0106 breathing air filter set combined with gas concentration analysers, fitted with pressure regulator and quick couplings, all packed in a compact and robust casing.

Gas concentration analysers constantly monitor CO,  $CO_2$  and  $O_2$  concentrations and trigger an alarm if concentrations exceed the EN12021 and BS4275:1997 standard compliant values. In this way BRAIRFC PLUS can safely provide high quality breathing air for up to 5 people<sup>(1)</sup>.

Small dimensions and low weight enable the use of BR-AIRFC PLUS in many applications as it can be transported and set up with ease.



#### **FEATURES**

BRAIRFC PLUS has the following features:

- High quality breathing air for up to 5 people<sup>(1)</sup>;
- Air quality monitoring (EN 12021, BS 4275:1997)<sup>(2)</sup>;
- Compact;
- Light weight;
- (1) Inlet air supply 7 bar, 20°C at peak inhalation rate 8,9 cfm (very high peak inhalation rate by BS 4275:1997)
- (2) Monitoring concentrations of CO, CO<sub>2</sub> and O<sub>2</sub> for compliance with EN 12021 and BS 4275:1997

#### **TECHNICAL SPECIFICATION**

Electrical connection	230 VAC / 110 VAC / 9 VDC to 24 VDC
Power consumption	< 10W
Operating pressure range	0 - 16 bar (0 - 232 psi)
Operating temperature range	1,5 – 40°C (35 – 104°F)
Connection (Inlet, Outlet)	Quick coupling DN 7,2 (inlet-male , outlet-female)
Flow rate (7bar, 20°C)	120 Nm³/h (71 scfm)
Outlet quality class – solids (ISO 8573-1)	1
Outlet quality class – oils (ISO 8573-1)	1
Filtration stage S	solid and liquid particle filtration down to 0,01 μm
Filtration stage H <sup>2</sup>	CO removal
Filtration stage A <sup>2</sup>	oil particle filtration down to < 0,005 mg/m <sup>3</sup>
Sensor warm up time	120 s
Response time	90 s
CO monitoring	warning 3 ppm, alarm 5ppm
CO <sub>2</sub> monitoring	alarms (increasing intensity) at 500 ppm/1500 ppm
O <sub>2</sub> monitoring	alarm at O₂ concentration <19,5%
Analyser approvals	EN 50270:1999
	EN 61000-6-3:2001+A11:2004
	BS EN 61010-1:2001
	IEC 61010-1(2ed)
	AS 61610.1-2003 (Australia & New Zealand)
Protection class of analysers	IP65
Weight	12 kg



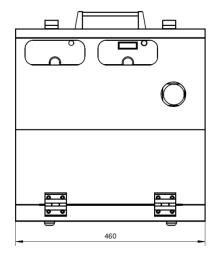
# PRESSURE EQUIPMENT DIRECTIVE PED 97/23/CE (Fluid group 2)

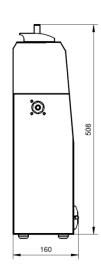
BRAIRFC PLUS is constructed according to PED 97/23/ CE but certification for this product is not required.

#### **MAINTENANCE**

Replace filter element S at least once per year or when pressure drop reaches 350 mbar.

Replace filter elements A<sup>2</sup> and H<sup>2</sup> at least every 3 months or sooner if it is required for a specific application.





Replace CO sensor element every 24 months. Calibrate CO sensor after replacing CO sensor element.

Replace O<sub>2</sub> sensor element every 12 months.

CO<sub>2</sub> sensor element does not need to be replaced.



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Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2008 Reg. number: 200285