



The FAC0709 mobile breathing-air system has been specially designed to provide safe breathing-air supply for operatives working in hazardous atmospheres such as those in the nuclear and petrochemical industries.

The FAC0709 provides a breathing air supply of up to 2,900 litres per minute and in the event of a mains power failure, or failure of the primary compressor will continue to supply this capacity from an HP reserve air system to enable suit wearers to reach a place of safety.

The compressed air is supplied from a variable speed drive Kaeser rotary screw compressor unit that has the advantage of a low electrical starting current requirement and the economy provided by the provision of a variable speed control that responds to changes in air demand.

The compressed air supplied is purified to breathing air standard by a 5-stage filtration and drying system that will provide breathing quality air well in excess of the criteria stated in EN: 12021: 2014, dry to a -40°C pressure dewpoint and provide active suppression of CO and CO₂.

The HP reserve air system consists of 4 off 89 litre capacity 300bar storage cylinders that have a total stored capacity of 106,000 litres. This storage system will be automatically re-charged when the minimum safe set point is reached by a Bauer 250 LPM capacity 300 bar HP charging compressor.



In the event of a mains power failure, or failure of the primary compressor the reserve air supply will be activated by a fully pneumatic control system and an audible/visual alarm will sound within the trailer, additionally the breathing air supply will switch from 7.5 bar to 5.5 bar enabling any pressure sensitive equipment downstream (such as Factair flow distribution panels) to recognise this change in pressure and repeat the alarms locally

The above equipment is housed within a four wheeled enclosed road towable trailer unit with a personnel door to the front and roller shutter door to the rear. The trailer roof is made from translucent material and the walls are constructed from plastic coated ply wood. All trailer metal components are heavily galvanised for protection from the weather. Internally the trailer is fitted with fluorescent lighting.



Above – F2210 Digital Flow Distribution Panel often used for air supplied suit projects.

Right – View of FAC0709 ready to travel

Technical Data

Low pressure Compressor

Type Kaeser
Model ASK 40SFC
Motor 22 kW 380v 3 ph 50Hz

High pressure Compressor

Bauer Mariner 250E
Motor 5.5 kW 380v 3 ph 50Hz
Free air delivered 250 litres per minute (8.8 cfm)
Max operating pressure 330 bar (4785 psi)

Connections.

Power – 380 – 400 volts AC, 50Hz, 3 phase neutral & earth, 125A. Start current max 125amp Total run current 95A
Anti frost heater, auxiliary power outlet, interior lighting. Remote fault reporting by text options

Breathing air – Single outlet fitting includes mass flow meter.

Trailer Dimensions

Length 5350 mm, Width 2300 mm, Height 2300 mm, Weight (all up) 3500 kg

Emergency Reserve

4 x 89 litre high pressure cylinders Total stored capacity 106,000 litres

Capacity

Free air delivered 2900 litres/min (102 cfm) at BA outlet, Max operating pressure 10 bar (145 psi)