### factair

## Containerised Breathing Air System for UKAEA Dounreay MkII

Factair is a specialist in the design and manufacture of containerised breathing-air facilities. These units comprise run/standby low pressure breathing-air compressors with breathing-air filtration (including carbon monoxide and carbon dioxide suppression) and an integrated fail safe emergency HP reserve and alarm system.

An integrated high pressure compressor automatically refills the emergency reserve system as required. This latest unit had an uprated output of 4,410 l/min and a new touch screen control panel interface.





Below: Control panel providing real-time information on the delivery flow and pressure.











Breathing air flow is displayed and monitoring prevents system shut down while it is supporting life.

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#### **Technical Data**

COMPRESSORS LP	-	2 off HPC type BSD75 rotary screw, air compressors				
COMPRESSOR HP	-	Bauer Mariner 320 air-cooled, breathing-air charging compressor				
AFTERCOOLER	-	Outlet temperature within 5°C of ambient				
FILTRATION	-	Purifies air to breathing quality conforming to BS EN 12021				
CONTAINER	-	8' (w) x 8' (h) x 20' (l), thermally-lined and internally-clad steel ISO type container				
CONTAINER		with double plant access doors and side access personnel door				
NOISE LEVEL	-	70dBA @ 1 metre				
	-	Electronic touch screen control panel · Hours run meter · Mass flow meter ·				
STANDARD		Fully automatic 'fail-safe' reserve from high-pressure cylinders with start up				
FEATURES		protection · System shut-down activated by either high temperature compressor				
		oil · GSM connection enables remote monitoring of condition and planning				
		maintenance.				
GAUGES SHOW	-	HP cylinder pressure · Differential pressure · Compressor, System pressure ·				
GAUGES SHOW		Regulated pressure – Reserve supply pressure. Output air flow				
LAMPS SHOW	-	Alarm Type – Compressor Fault, HP alarm, LP alarm				
AUDIBLE ALARMS	-	Primary air supply failure · Reserve pressure low				
VISUAL INDICATOR	-	Shows changeover to HP reserves				
OUTLETS	-	Central connection for mains incoming supply, breathing-air outlet supply and the				
OUTLETS		supervisor's remote status indication panel				
WASTES	-	All discharges from filter autodrains are gathered into an oil water separator, oil is				
VVASTES		collected in a container for proper disposal, water is discharged to drain.				
QUALITY	-	The BA container is manufactured in accordance with our				
QUALITI		Quality Assurance Procedures approved to ISO9001/EN29001				

Compressors Low pressure	Compressor High pressure	FREE AIR DELD. at	WORKING PRESSURE	USEABLE HP RESERVE	DIMENSIONS (approx)			
		8 BAR / 116 psi I/min cfm	Bar psi	CAPACITY LITRES	LENGTH mm	WIDTH	HEIGHT mm	WEIGHT Kg
2 off 37 kW 415V 3ph 50Hz	7.5kW 415V 3ph 50Hz	4,410 155	8 116	115,000 to 150,000	6096	2438	2438	7500