

BA450EX and BA550EX Zone 1 Breathing-Air Compressors



The Factair BA450EX and BA550EX ZONE 1 are electrically powered, breathing-air compressors designed to operate in a hazardous area (designated Zone I Equipment Group II, category 2 G (IIB T4)),

The BA450EX also has a fully integrated automatic fail-safe emergency air reserve and alarm system. In the event a drop in the primary air pressure an audible alarm will be activated and the air will continue to be supplied from two 9-litre 200 bar cylinders (optional 300 bar also available). The control panel has a status indicator which in the event of a failure of the primary air will automatically change from green to red. If the air pressure in the HP cylinders drops below 140 bar this will also activate the alarm and status indicator on the control panel.

The BA550EX does not have an emergency reserve air supply, and operates at slightly lower pressure, consequently it provides a higher flow rate.

They both incorporate a Gardner Denver Hydrovane rotary vane compressor powered by a 5.5kW, 400/480V, 50/60Hz three phase explosion proof electric motor c/w a DOL starter. The compressed air generated is passed through a fan assisted aftercooler before proceeding through a multi-stage filtration system which removes particulates, reduces oil contamination to <0.003 parts per million and also removes hydrocarbon vapours. The air is then passed through a membrane dryer to ensure a 5°C suppression of dewpoint in ambient temperatures >0°C with air quality exceeding the criteria laid down in BS EN12021. Breathing Air is then supplied to 2 flow protected Draeger/Scott compatible outlets.



Pictured above – BA450EX Zone 1 BA Compressor



SPECIFICATION

ATEX CLASSIFICATION	Zone 1, Equipment Group II, category 2 G (IIB T4)
MOTOR COMPRESSOR	Dual voltage input 400V/3PH/50Hz and 460V/3PH/60Hz. ATEX classification II 2 G IIB T4 Hydrovane V04 rotary vane (10 Bar maximum pressure for BA450EX and 7 Bar maximum pressure for BA550EX)
INTAKE FILTER	Heavy duty complete with adaptor for connecting ducting to provide air from safe area.
AFTERCOOLER	Outlet temperature within 5°C of ambient
FILTRATION	Three stage filtration, comprising pre-filter, coalescing and activated carbon filters.
MEMBRANE DRYER	5°C suppression of dewpoint in ambient temperatures >0°C Breathing air quality conforming to EN 12021. Note: CO and CO ₂ suppression is not fitted as standard on these models.
BA OUTPUT CAPACITY	BA450EX – 450 LPM @ 8 Bar BA550EX – 550 LPM @ 7 Bar
TOTAL CYL. CAPACITY	On the BA450EX only emergency reserve air supply is provided in high pressure cylinders that must be refilled elsewhere. The unit cannot be operated without these cylinders in place, at a pressure above the minimum safe condition and they must be turned on while the compressor is in use. Cylinder alternatives are:- 2 off 9 litre 200bar HP cylinders, 3,600 litres storage capacity. or 2 off 9 litre 300 bar HP cylinders, 5,400 litres storage capacity
CHASSIS	Heavy duty includes conductive wheels and earth connection point.
DIMENSIONS	Length 1340mm, Width 720mm, Height 935mm Weight 300Kg - BA450EX, 270Kg – BA550EX
STANDARD FEATURES	Over temperature protection, automatic 'fail-safe' reserve from high pressure cylinders with start up warning (BA450EX only)
CONTROL PANEL	Gauges – Compressor Pressure, Outlet Pressure, HP Cylinder Pressure (BA450EX only) Status Indicators (BA450EX only) – Red/Green Visual Changeover
OUTLETS	2 off Draeger/Scott compatible couplings for positive pressure devices. Alternative constant flow compatible outlets available.
AUDIBLE ALARMS	Primary air supply failure. - Air reserve inadequate (BA450EX only)
NOISE LEVEL	<71 LWA.
WASTES	Discharge from condensate autodrains gathered into a container for proper disposal
QUALITY	BA450EX & BA550EX are manufactured in accordance with our Quality Assurance Procedures approved to ISO9001.