

- Air distribution section

The section enables 16 cables or wave guides to be fed and consists of a special rack that contains all the required electrical and pneumatic connections of a REL control and regulation unit (up to 16, one for every cable connected).

Each connected cable is fed to an individually programmable pressure; the flow absorption and pressure alarm thresholds can be set for each cable.

The section can work independently by prior programming via a data interface or when connected to a control section (CPU) via the same interface.

- Rack

The rack has been purpose-designed to be fitted into the frame of our pressurisation stations, but can be easily fitted to any exchange frame.



- As shown by the photographs, the upper part of the rack has two pneumatic collectors which not only contain 16 rapid outlet-attachments, but also commute to an emergency compressor, should there be one. In the event of a main air-generation system or REL malfunction, 16 manual valves can be used to connect any outlet to the emergency inlet. The central part of the rack has two rows with 8 regulators each. If an REL is inserted into the rack, both the pneumatic and electrical connections are made automatically.

The lower part has a service board with three functions:

- ON switch and fuse for the entire section;
- inlet pressure control with regulator inhibition for values that exceed the limits;
- sectioning point and data line control;

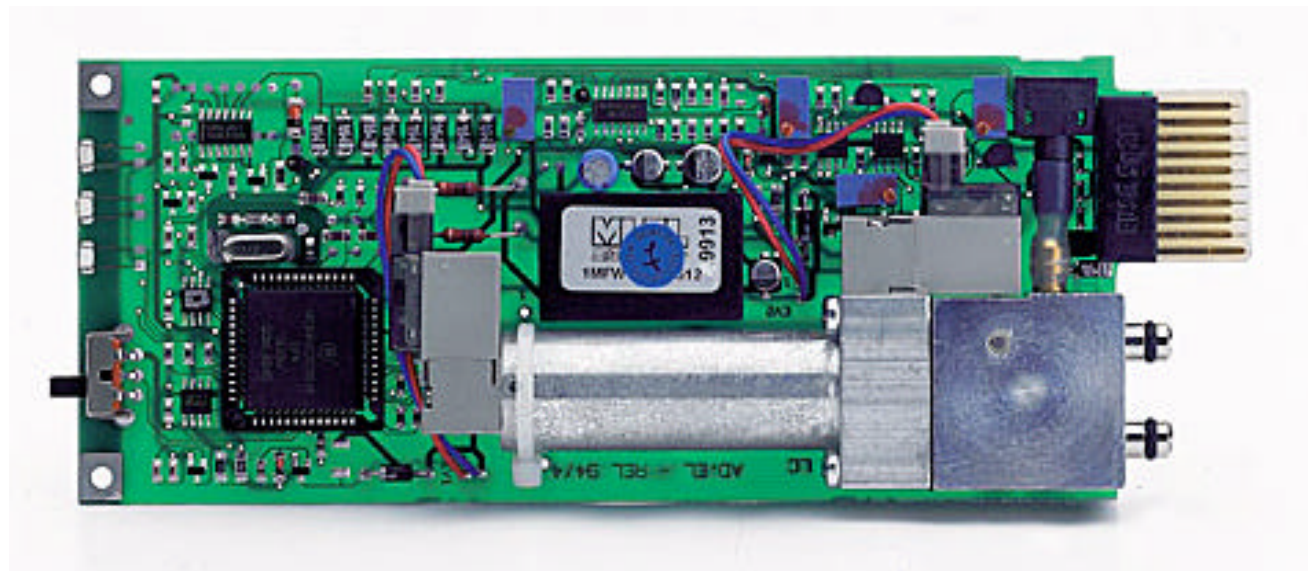
The inputs for the electrical and pneumatic connections are on the rear of the rack.

Main features:

Size: L=240 H=425 P=250

Power-supply: 48/60 V DC 1.6A max

Data interface: RS485 9600 bit/s

- REL

The REL regulation unit is an electric-pneumatic device managed by a microprocessor that feeds the cable (or wave guide) connected to it at a programmable pressure value. The outlet pressure is independent both of inlet pressure variations and of flow absorption variations. Pressure and flow are constantly measured by special sensors in the device and the measurements are compared with the minimum and maximum threshold values in order to generate any alarms.

A switch on the front disables the device while 3 LEDs indicate the operation status. All the functions (threshold programming, outlet enabling/disabling, timed closures, measurement readings etc.) are performed by means of a serial data interface.

Main features:

Power-supply - 48/60 V DC

Air input 1200 to 2000 hPa

Outlet range 0 to 999 hPa

Flow measurement 0 to 400 NL

Data interface RS 485 9600 bit/s

