FIRST STAGE PANEL BOARD, type APR 180, WITH AUTOMATIC SWITCH-OVER SYSTEM

THE FIRST STAGE PANEL BOARD APR 180 WITH AUTOMATIC SWITCH – OVER SYSTEM for central stations in cylinders is conceived and manufactured according with MDD 93/42 EEC and subsequent amendments and harmonized standards ISO EN 7396-1, EN 10524-2, EN 737-3 as well as according with HTM 02-01.



The panel boards are realized with a varnished stainless steel frame integrating:

- . High pressure shut-off valves, double rod type , in order to facilitate opening and closing operations.
- . Pressure gauge with down stream alarm contact set at 20/30 bar according with the supplied medical gas and signaling of empty manifold with a red LED
- . High load pressure reducers realized with hot printed brass body
- .All manometers are equipped with a safety glass
- .All high pressure reducers are equipped with a PFTE membrane
- . Safety valves directly mounted on the reducers
- . Low pressure valves realized in nikel plated brass with stainless steel ball
- . System of automatic flow switch-ovwe by means of a nylon pneumatic variation system
- . Sensor indicating "working manifold "by means of a green LED
- .Terminal switch for wiring distance alarm signaling system

The main structure integrates 2 black bakelite handles for easy installation or transport. The switch-over between the two supplying sources is automatically realized by means of a pneumatic switch-over device placed after the two pressure reducers.

This situation allows the passage from one source to the other source by means of the pneumatic piston sliding in/out according with the variation of the reducer output pressure.





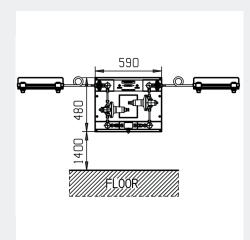
CODE	DESCRIPTION	MAX INLET PRESSURE	OUTLET PRESSURE	LOAD, NORMAL CU.MT/HR	
QRI - 0101	FIRST STAGE PANEL BOARD APR 180, OXYGEN	230 bar	10 bar	180	
QRI - 0107	FIRST STAGE PANEL BOARD APR 180,AIR	230 bar	10 bar	180	
QRI - 0104	FIRST STAGE PANEL BOARD APR 180, NITROUS OXIDE	100 bar	10 bar	180	
QRI - 0110	FIRST STAGE PANEL BOARD APR 180, CARBON DIOXIDE	100 bar	10 bar	180	
QRI-0113	FIRST STAGE PANEL BOARD APR 180, NITROGEN	230 bar	10 bar	180	
20601070	METAL COVER LAQUERED FOR AUTOMATIC PANEL BOARD 180/100 CU.MT./HR				

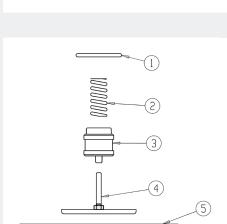
Code 28004002/E REV.2

The first stage panel board APR 180 can be used as a primary and secondary source or, in case of presence of a main source like cryogenic tank, air production system by compressors, etc), they can be used such as secondary source and reserve.

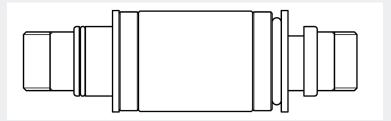
They must be nstalled in a suitable place in hospitals, nursing homes, clinics, etc , they have the the function of supplying distribution networks of medical gases (oxygen, nitrous oxide, Medical Air, Carbon Dioxide, Nitrogen) by reducing the incoming pressure from the cylinders.

Installation guidelines





Main spare parts first stage panel board APR
Reducer Kit O2 – AIR – N2 code 20601060
Reducer Kit CO2 – N20 code 20601075
High pressure contact gauge for 315 bar signals code 26404017
High pressure contact gauge for 100 bar signals code 26404018
Low pressure gauge, 16 bar code 26404016
Pneumatic switch-over device kit code 20602026



DEVICE DESCRIPTION

The first stage central unit consist of:

A) I - PAINTED STEEL WHITE PANEL

B) 2 - IN LINE HIGH PRESSURE VALVE

C) 2 - GAUGE SCALE 0-315 BAR

(the gauge is set for sending a signal of empty manifold when the cylinders pressure is less than 20 bar)

D) 2 - FIRST STAGE brass membrane regulators, 180 cu.mt/hr load each complete with :

- Inlet filter

- Safety valve set at 14 bar

E) 2 - PRESSURE GAUGE SCALE 0-16 BAR to display the supplied pressure

F) 2 - BALL VALVES to intercept the regulator

G) I - PNEUMATIC SWITCH-OVER DEVICE complete of signal sensor of operating manifold

H) I - PANEL DISPLAY showing

NA	O2 – AC – N2 REDUCER KIT COD. 20601060	CO2 - N2O REDUCER KIT COD. 20601075
Ī	OR 3125 VITON	OR 3125 VITON
2	SHUTTER SPRING	shutter spring
3	SHUTTER	SHUTTER
4	MEMBRANE PUSH - PLATE	MEMBRANE PUSH - PLATE
5	TEFLON MEMBRANE	TEFLON MEMBRANE
6	CANVAS RUBBER MEMBRANE	CANVAS RUBBER MEMBRANE

