

Sonimix 3080

Hydrogen generator with optional Zero Air Generator

Description

The **sonimix 3080** is composed of a hydrogen generator and a self regenerable zero air generator (as option). The internal program and processor assure the control of both generators and allow to check on line various functioning's parameters such as : water, pressure outlet (H₂ & air), electrolyses current, CH₄ oven temperature...

The display and the keyboard allow a simple and intuitive use. The functioning parameters and the alarm can be monitored through the RS232 remote command as well as through one dry relay. Using latest membrane technology, the **sonimix 3080** require less maintenance and does not use dangerous caustic solutions.

Security: in case of wrong internal functioning or opening of the H₂ circuit, the production of H₂ is stopped and an alarm is activated (automatic leak check). The suppression of dead volumes (<100ml) as well as an "on demand generation" avoid the stock of large quantity of hydrogen and enable the use of the instrument in area where hydrogen cylinders are restricted.

Functioning principle of hydrogen generator:

The hydrogen is produced with electrolyse of water going through a membrane in polymer. The electrolyse cell is alimeted by distilled water contained in the intermediate internal tank, which is alimeted by the main external tank. The produced hydrogen is dried and the pressure regulated.

Functioning principle of zero air generator:

The ambient airm cleaned of dust, pumped to 8 bar, goes through a cooler and a condenser with automatic drain system. The filtration of various pollutants and non-methane hydrocarbons is made with the help of a self-regenerable system functioning on the pressure swing and reverse flow principle. An optional catalysis oven allow to eliminate the CH₄ and the CO₂. a fine dust filter and an electroni pressure regulator terminate to condition the air.



- Compact / small in size
- No cylinders
- Economical
- Original Swiss Made

Applications



The **sonimix 3080** is the indispensable tool for the alimention in air and hydrogen of all FID, BTEX, VOC and gas chromatographs.

The utilization of the **sonimix 3080** avoid the use of two cumbersome and expensive gas cylinders.

Specifications

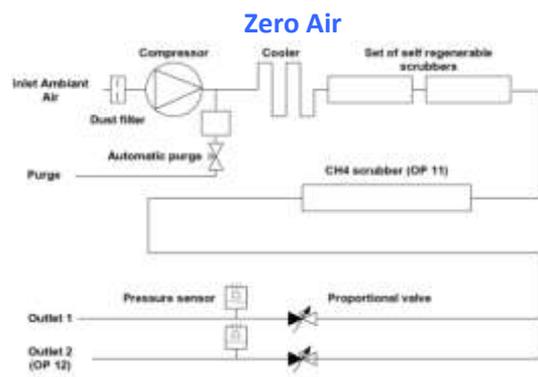
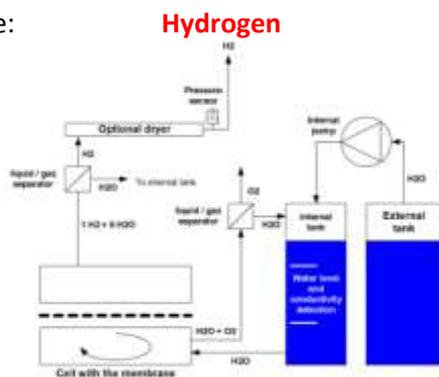
User interface: Vacuum fluorescent display 2x20 lines / 18 keys
 Remote command: RS232

Power consumption: max 150 Watt
 Power requirements: 230V/50-60Hz – 115V/60Hz – 100V/50-60Hz

Dimensions [cm]: 19" 3HE/84 TE, 500mm deep/portable casing in option
 Shipping Dim [cm]: 41 x 51 x 50 (WxDxH)
 Net weight [Kg]: 15 to 30 Kg depending on model
 Shipping weight [Kg]: 17 to 32 Kg depending on model

Hydrogen Generator		Zero Air Generator	
Outflow generated	100 or 160 or 200 Ncc/min according to model	Outflow generated	0 to 5 l/min at atmospheric conditions
Outlet pressure	Adjustable between 0.1 and 6 bar	Outlet pressure	1 outlet adjustable between 1 and 3.5 bar
Purity	>99.99%, >99.999% (if add dryer installed)	Remaining pollutant level	HCnm < 50ppb HCm < 50ppb (if CH4 oven installed) BTEX < 1ppb
Life time of deionizer bag	6 months	Remaining humidity level	H2O < 100ppm
Life time of dryer	Depending on use	Approximate life time of filters	Preventive maintenance once a year

Fuidic scheme:



Options – Accessories – Spare parts

Models:

6800 08 001 Sx 3080-100, 100 Nml/min H₂
 6800 08 002 Sx 3080-160, 160 Nml/min H₂
 6800 08 003 Sx 3080-200, 200 Nml/min H₂

Consumables Air:

3741 40 020 Dust pump filter
 6700 13 872 Kit of diaphragm and valves for the compressor
 3742 49 001 Filter for automatic purge V5

Consumables H₂:

6700 21 040 Deionization bag

Options:

6800 08 010 Additional H₂ dryer dew point <60°, Purity 99.999%, without zero air generator
 6800 08 011 Additional H₂ dryer dew point <60°, Purity 99.999%, with zero air generator
 6800 08 015 Self-regenerable zero air generator
 6800 08 017 Catalyser oven for CH₄
 6800 08 019 Additional zero air outlet
 6800 10 000 Portable casing
 6700 13 867 Voltage 230V/50-60Hz
 6700 13 868 Voltage 117V/50-60Hz
 6700 13 869 Voltage 100V/50-60Hz



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