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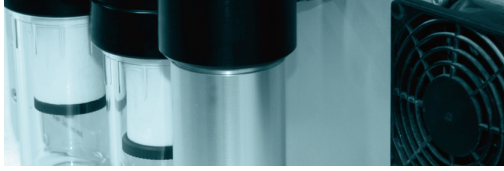

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Zero Gas Generator *Type CAP 15 - CAP 180*

Catalytical Gas Scrubbing for Compressed Air

The zero gas generators CAP 15 up to CAP 180 produce pure from normal compressed air hydrocarbones free zero gas . By catalytic total oxidation Pt/Pd catalyst at 370°C all hydrocarbons incl. methane (CH_4) into carbon dioxide (CO_2) and water (H_2O) are converted at the Pt . Hydrogenes (H_2) and carbone monoxide (CO) can be removed quantitatively . The air quality is constantly produced consistently and better than that of synthetic air from gas cylinders of class 5.0 (based on organic compounds)

Due to the high gas purity, the air purifier CAP 15 up to CAP 180 used for zero gas supply of gas chromatograph with FID and FPD detectors and as calibration for the zero - point adjustment of KW analyzers and CO analyzers (immission). With normal air supply (2-8 bar, oil-free and dry) a THC residual content is achieved < 50 ppb. The typical payback period of the device is less than 1 year.

TECHNICAL DATA *CAP 15 - CAP 180*

Flow rate	0 up to 30 Nl/min	Max value: depending on model
Operat. pressure	2 (3) up to 8 bar	Max value: depending on model
Gas connection	Rp 1/4" (BSP)	INLET and OUTLET on the backside of the housing
THC-residual content	< 0.1 ppm v	measured with methane
Efficiency	> 98.0 % > 99.5 % > 99.9 %	for methane CH_4 for aromates (BTX) and KW up to C_3H_n for CO, H_2, ethylene, propylene
Starting time	ca. 30 min	
Converter	360 - 380 °C	T-control with digital display and SSR-control
Alarm output	free of potential (X2)	Switch at lower and upper temperature
Housing	19" housing	Desktop-version (T) or 19" rack modul (R)
Shipment	completely mounted	single proofed (4 h Burn-IN), plug & play incl. power cable

PROPERTIES

- Catalytic gas scrubbing
- KW free zero gas incl. methane (<0.1 ppm)
- Gas quality is better than synthet. air (5.0)
- 5 standard sizes from 2.5 up to 30 Nl/min
- 19"- housing, insertion or desktop style
- Incl. Flow meter, pressure gauge and T-control with alarm control
- Robust and solid; permant use

DIMENSIONS

Made in Germany

Type	Max. flow rate	Size	Power output	Weight
CAP 15 T; CAP 15 R	2,5 l/min	3 HE, 355 tief	max. 110 W	5,8 kg
CAP 30 T; CAP 30 R	5 l/min	3 HE, 355 tief	max. 110 W	6,2 kg
CAP 60 T; CAP 60 R	10 l/min	4 HE, 355 tief	max. 260 W	8,4 kg
CAP 120 T; CAP 120 R	20 l/min	4 HE, 415 tief	max. 260 W	10 kg
CAP 180 T; CAP 180 R	30 l/min	4 HE, 415 tief	max. 260 W	11 kg

Subject to technical alterations.

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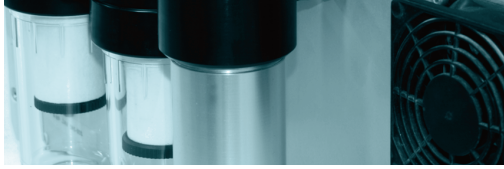
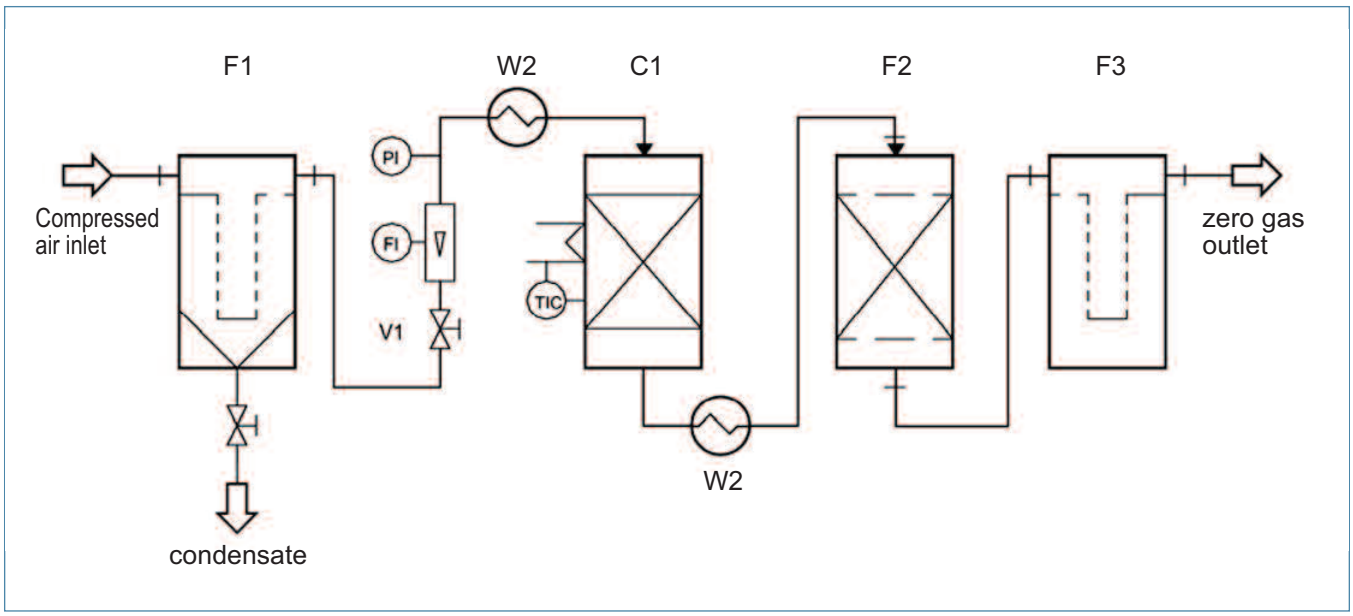


The zero gas generators CAP 15 up to CAP 180 clean the compressed air by filtration, adsorption and catalytic combustion. In the entrance filter (F1) are first removed from the compressed air flow all particles and aerosol shares at >99.99%. The current operating parameters (flow rate and operating pressure) by means of variable area flow meter (FI) and on the pressure gauge (PI) are displayed. A flow restrictor (FR) limits the max. permissible flow. In electrically heated converter (C1), the gaseous hydrocarbons (HC) by catalytic total oxidation at 360 - 380 ° C converted into carbone dioxide (CO_2) and water (H_2O). The converter temperature is automatically regulated constant under all operating conditions and digitally displayed (TIC). By fan cooling (W2) of the exiting hot air flow in the cooling tube (W2) is cooled back to room temperature. For all larger models (from CAP 120), the energy consumption is reduced by heat recovery using gas-gas heat exchanger by more than 30%.

The residual amount of heavy fissionable organic compounds (e.g. FCKW, CKW, SWK) is in the following adsorbtion filter (F2) (standard filling: IAC 400) reduced to a few ppb. To protect the analyzers located at the output a fine dust filter (F3) of pure, porous PTFE (2 µm).
All filters are mounted easily on the back and will be checked every year.

FLOW CHART CAP 15 - CAP 60



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