

EC 2000

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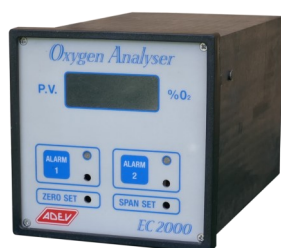
Data sheet

2018

General purpose, cost effective electrochemical Oxygen analyser

Oxygen Transmitter

For O₂ measurement in % range



EC2000 is the entry level of ADEV product range for the measurement of Oxygen in % ranges.

Nevertheless, the cell has a long operative life and high immunity to the presence of CO₂, H₂, HC and many others .

Read out is clearly shown by an high resolution 4 ½ equivalent digits LCD display, thanks to a special configuration in mobile virgule.

Available versions for safe area and Hazardous area Zone 1 & Zone 21 (ATEX certified)

Technical Specification

EC2000 Electrochemical Analyser

Performance Specification

Accuracy:	± 1.5% of span at calibration point
Repeatability:	± 0.03% of full scale (short term)
Stability:	± 1% of full scale
Response Time:	95% of final FS reading: 13 sec.
Resolution:	0.01% O ₂ below 10.00% O ₂
Flow Sensitivity:	General purpose versions: < 0.5% of FS between 100-2000 cc/min. Ex-Proof housings: < 0.5% of FS between 500-1000 cc/min.
Atmospheric pressure effect:	± 1% of reading per 1% change in ambient pressure
Ambient Temp. Influence	< 0.06% of FS per °C
Line Voltage Influence:	± 0.01% of FS per 1% change of voltage
Cell life:	More than 2 years in air
Display:	3 ½ digits LCD display with 14 mm high characters and mobile virgule

Operative Specification

Output:	4-20 mA (non-isolated) proportional to the selected range (max. load 500 Ω)
Alarms:	2 alarms with SPDT contact ratings: 50 Vdc / 250 Vac; 0,5-4 A, 60 W / 1000 VA
Flow Rate:	Sensing safe: 0 ÷ 5000 cc/min. Sensing Ex-Proof: 0 ÷ 1500 cc/min.
Pressure:	Set enough pressure to make sample flow at the specified flow rate. Vent to atmospheric pressure.
Temperature:	Operative & Storage: 0 ÷ +45°C
Relative Humidity:	90% max.
Power Requirements:	220 or 110 Vac; 50/60 Hz; 10 VA 24 Vdc, 5 W
Wiring Connections:	General purpose versions: Terminal board Ex-Proof housings: GK 1/2" holes (for cable grip or conduit)
Pneumatic Connections:	In / Out 1/8" NPT-F (for Ex-Proof versions, flame arrestors are included)
Wetted Parts:	Anticorodal, Tygon, Nylon, Silicon, Nitrile
Weight:	Electronics: 1 kg ; Cell safe: 0,5 Kg. Cell Ex-Proof housing: 3 Kg. Electronics + cell in Ex-Proof housing: 12 Kg.



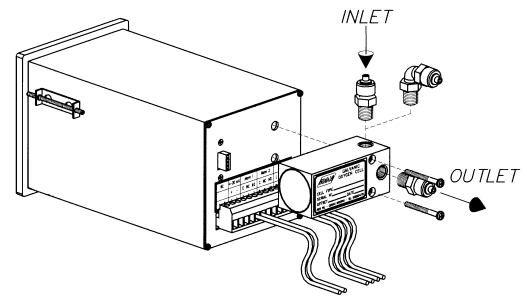
Key Applications

- Nitrogen & Hydrogen Generators
- Air Operation Plants
- Compressed Air
- Biogas & Landfill Gas
- Mixing
- Inerting Control
- Steel & Metal Processing



Cell

In all versions, the cell consists of a rugged metallic block, very easy to replace thanks to the plug-in connection.



Compliance

ATEX

EC2000 is suitable for installation in hazardous area with the highest protection mode:

II 2 G Ex d IIC T6 Gb
II 2 D Ex tb IIIC T85°C Db IP65



European Compliance

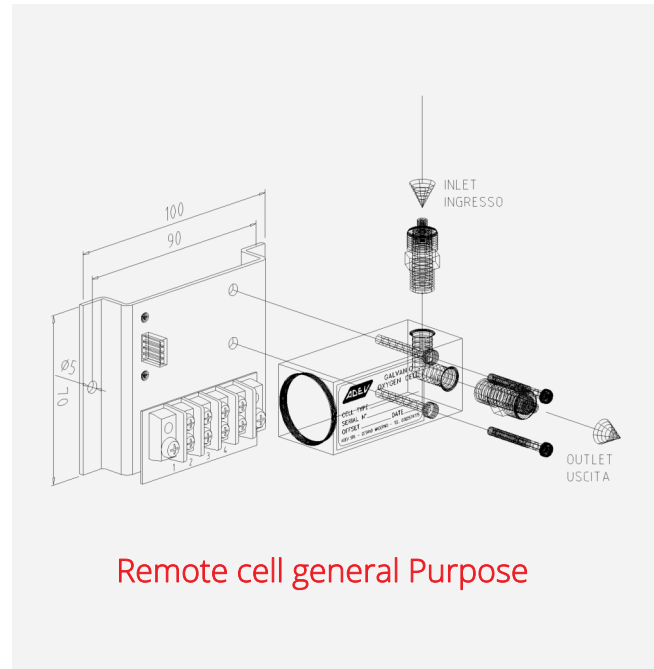
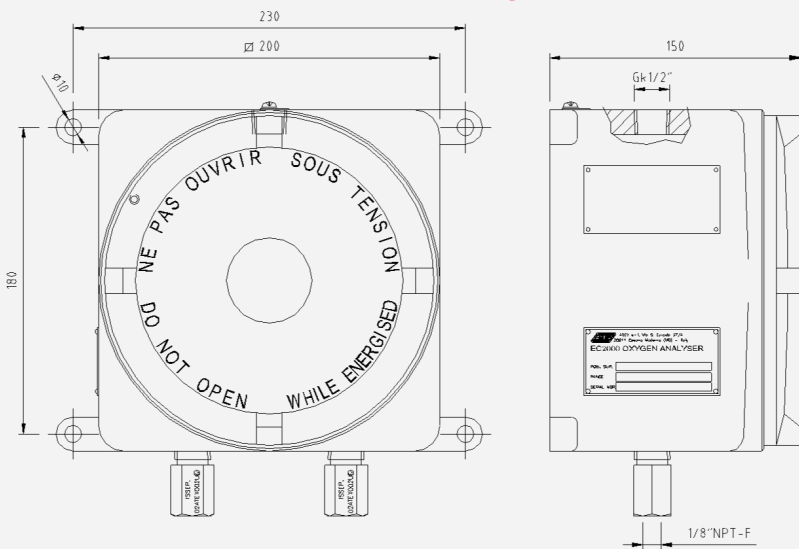
- Low Voltage Directive 2014/35/EU
- EMC Directive 2014/30/EU
- Directive ATEX 2014/34/EU



General purpose version for safe area with integral electronics and cell

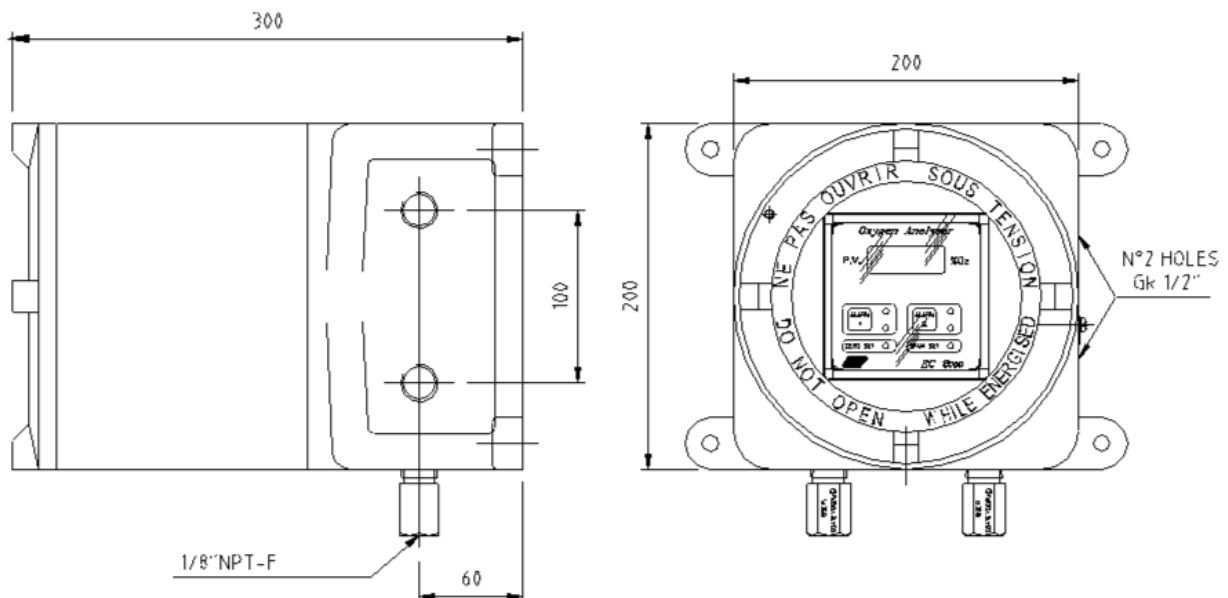


Remote cell in Ex-Proof Housing



Remote cell general Purpose

Ex-Proof version for Hazardous area Zone 1 / 21 with integral electronics and cell



Ordering

Contacts



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Oxygen Analyser	EC2000
Power Voltage					
230 VAC, 50/60Hz., 10VA		1			
110 VAC, 50/60Hz., 10VA		2			
24 VDC, 5W		3			
Range					
0-1%			01		
0-2%			02		
0-5%			03		
0-10%			04		
0-25%			05		
0-100%			06		
On spec.			99		
Alarms					
None				0	
2 alarms with SPDT contacts				1	
On spec.				9	
Configuration					
Electronic + integral cell for safe area					1
Electronic + remote cell for safe area					2
Electronic for safe area + remote Ex-Proof cell					3
Electronic + cell integrated into Ex-Proof housing					4
On spec.					9

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