



CataLite® Burner Series



Catalytic burners for combustion of highly variable concentrations of combustible gases

Catator's innovative **CataLite® Burner Series** enables emission-free, catalytic combustion of off-gas streams across a broad concentration range. The burners have a **turndown ratio of up to 1:50** based on the energy content in the off-gases. The range includes **flameless off-gas combustion systems**, designed to ensure emission-free combustion with varying fuel content and without the need for support fuel.

CataLite® Burners are especially suited for gas streams with **highly variable and transient concentrations** of combustible gases. From **ultra-lean gas compositions**, where a traditional flame burner would need support fuel, to **emission free** combustion of energy rich gases.

As an example, our CataLite® Burners are trusted by leading developers and customers for **electrolysis applications**. This includes **hydrogen production** and the co-electrolysis of hydrogen and CO₂ needed to produce syngas for synthetic fuel production.

The CataLite® Burner Series leverage our patented multi-stage technology **CataLite® Coatings**, which allows catalysts to be applied to virtually any metal surface. This ensures strong adhesion of a highly porous and active catalytic layer, enhancing heat transfer and providing superior combustion.

With over 30 years of in-house application development and design expertise, we offer engineering services with unmatched expertise. From our tailored array of burner systems, we have selected a standard range that suits many applications, enabling faster production and pre-tested functionality.



CataLite® Burner 3000

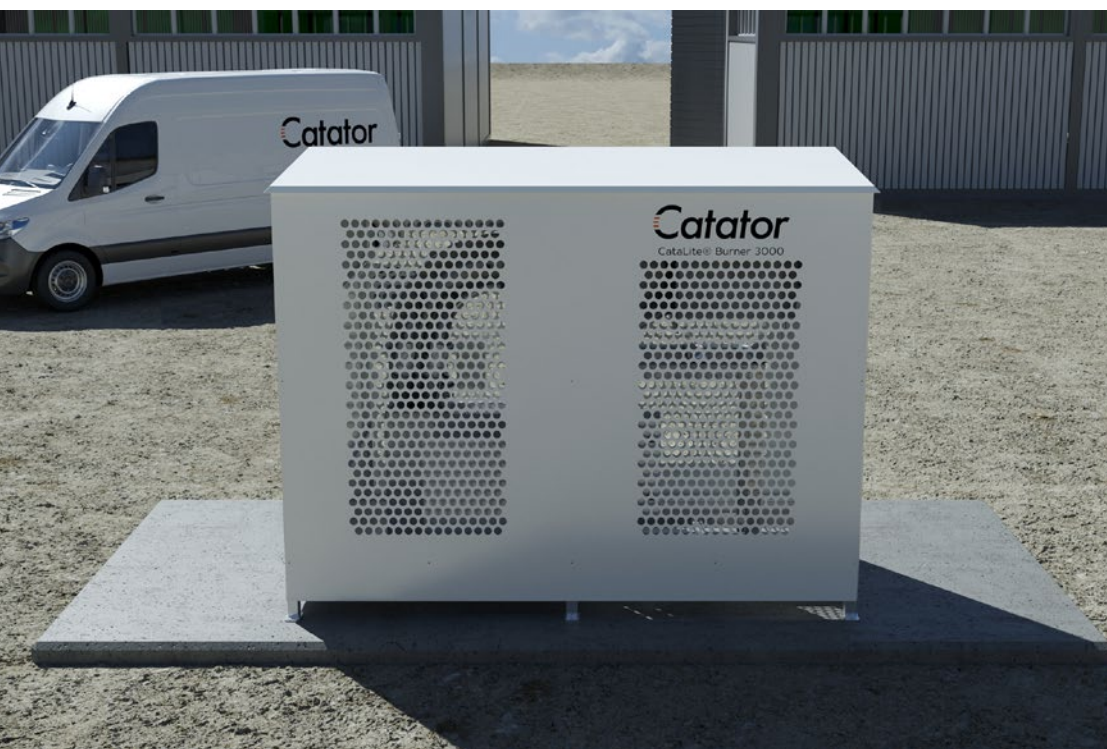
CataLite® Burner 9000

Specifications	Unit	Min	Max	Min	Max
Total Flowrate: Fuel + Air	Nm ³ /h	100	3 000	300	9 000
Operation Temperature	°C	200	800	200	800
Weight	kg	800		2150	
Dimensions (LxWxH)	mm	2920x1300x2307		4300x1810x1851	
Installed Power	kW	Total: 33 kW (electrical heater: 30 kW; fan 3 kW)		Total: 45 kW (electrical heater: 30 kW; fan 15 kW)	
Operating Power	kW	Start-up: 33 kW. Normal operation: up to 3 kW		Start-up: 45 kW. Normal operation: up to 15 kW	
Electrical Supply		3 x 480 VAC TNS , 60 Hz		3 x 480 VAC TNS , 60 Hz	
Back Pressure	mbar	< 30			
Fuel Off-gas Capacity		Turndown ratio 1:50. Actual off-gas capacity determined based on customer's gas composition.			
Noise level		< 80 dBA. Actual noise level depending on flow settings. Noise insulation option available.			
Emissions		Ultra-low. System dimensioned to match regulations or customer requirements.			

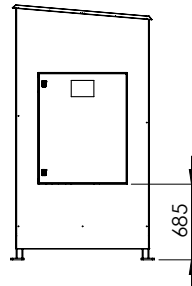
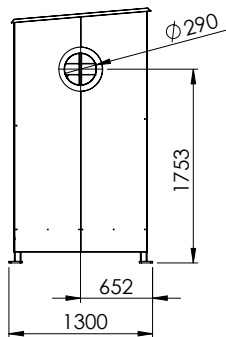
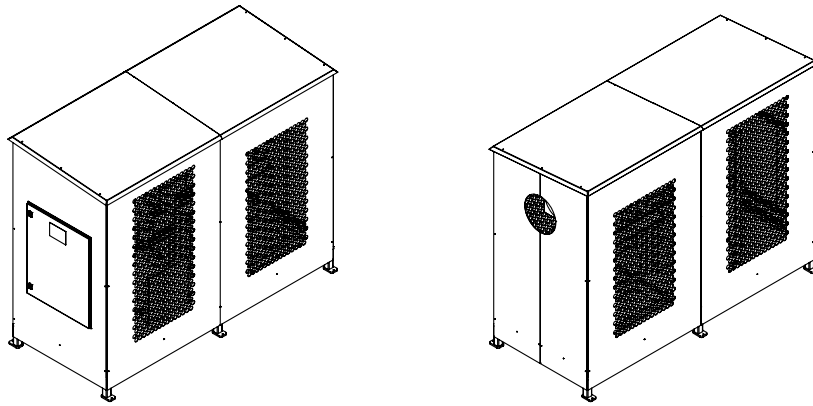
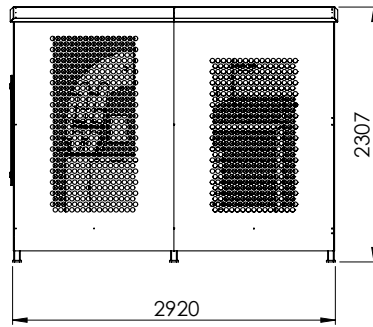
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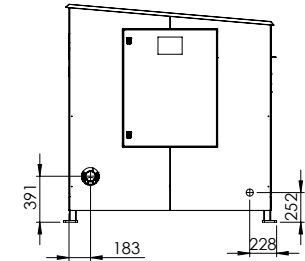
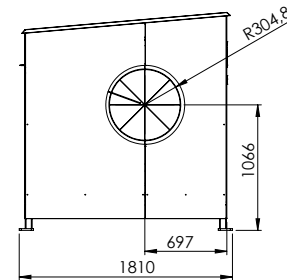
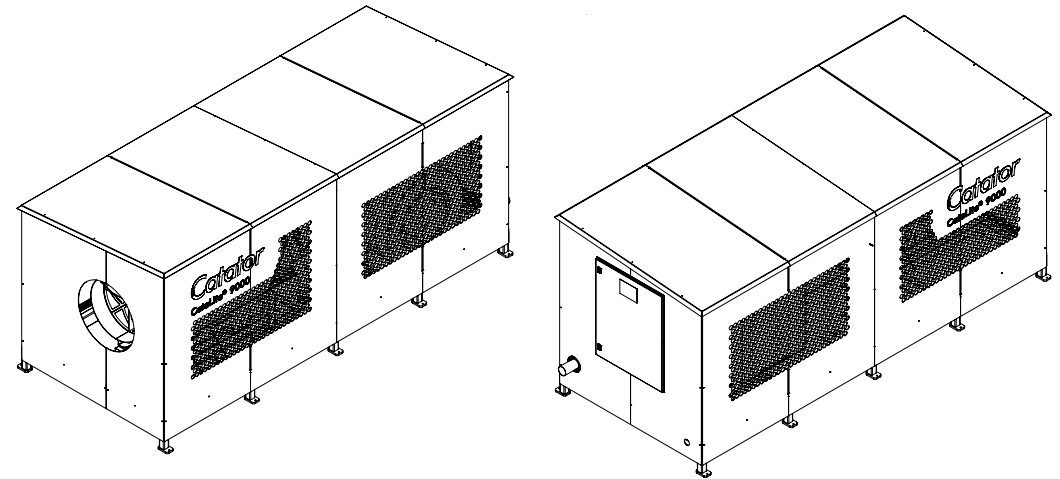
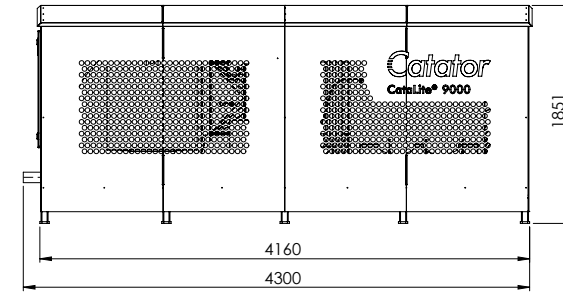
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About Catator

Based in Lund, Sweden, Catator is a world-leading technology development and integration partner for the commercialization of hydrogen and fuel cell technologies. Our mission is to accelerate the transition to a green hydrogen economy by creating the world's most compact, efficient and versatile solutions for hydrogen production, conversion and utilization.

Get in contact with us



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