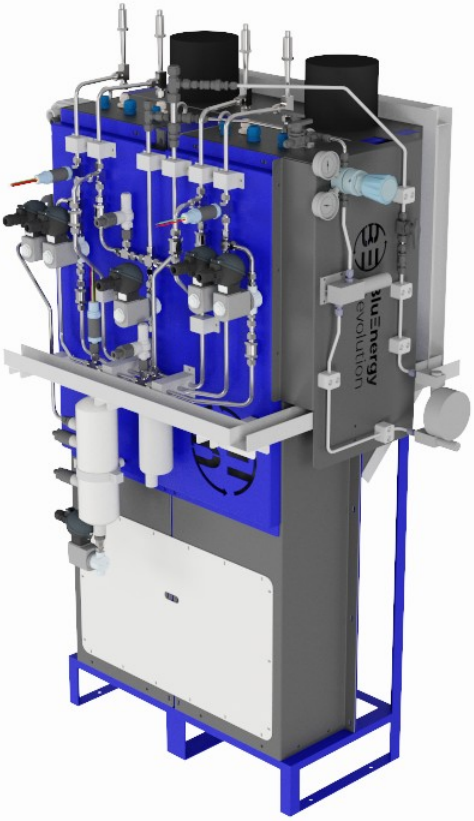
BluEnergy Revolution

DRYBER is the Bluenergy Revolution dryer designed to withstand hydrogen flows up to 2.5 kg/h. The system is ATEX compliant and equipped with an easy integrable control box. A plug-in hydrogen analysis station can be added with moisture and oxygen sensors.

Dryer

DRYBER

2.5 kgH_2/h



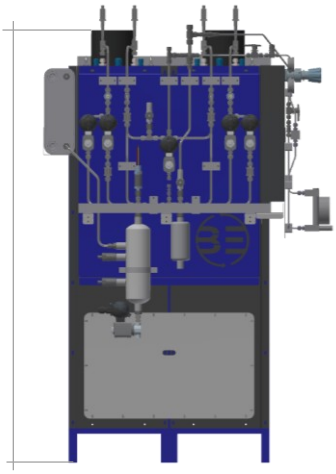
Operating Pressure	bara	30-35
PSV setpoint	bara	38
H_2 outlet purity[*1]	%	99.999%
Delivered pressure	bara	up to 35
Min. H_2 flowrate	kg/h	0.25
Max H_2 flowrate	kg/h	2.5
Max. H_2 inlet T.	°C	60
Required input	g/h	H_2 inlet flow
Admitted $H_2O_{(l)}$ in H_2	l	0 (H_2 liquid free)
Regeneration duration	h	4 - 8
Regeneration T.	°C	Up to 160
Cooling fan	m^3/h	400
Cooling liquid	-	water
IP rating	-	IP23
Power supply	Vac/A	230 Vac 1P+PE 20 A
Weight	kg	180
W x L x H (hardware)	mm	1036x643x1640
W x L x H (ele. cabinet)	mm	1000x600x250
W x L x H (chiller)	mm	755x535x837
H_2 inlet & delivery conn.	Inch	3/8 OD
H_2 vent conn.	inch	1/2 OD
PSV conn.	inch	3/8 OD
Condensate drains	-	NPT ½ F & NPT ¼ F
Remote control by	-	Modbus, HMI

[*1] 5.0 H_2 is achieved at outlet if inlet only contains H_2O as contaminant

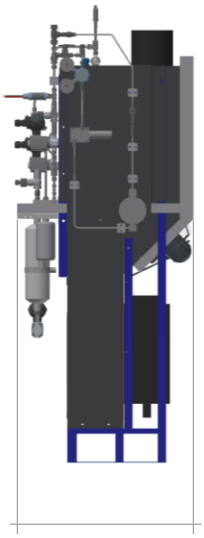
CE 2620 Ex II 3G Ex h IIC T3 Gc

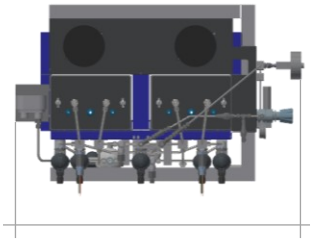
Dryer
DRYBER

www.bluenergyrevolution.com



Weight: ~180 kg

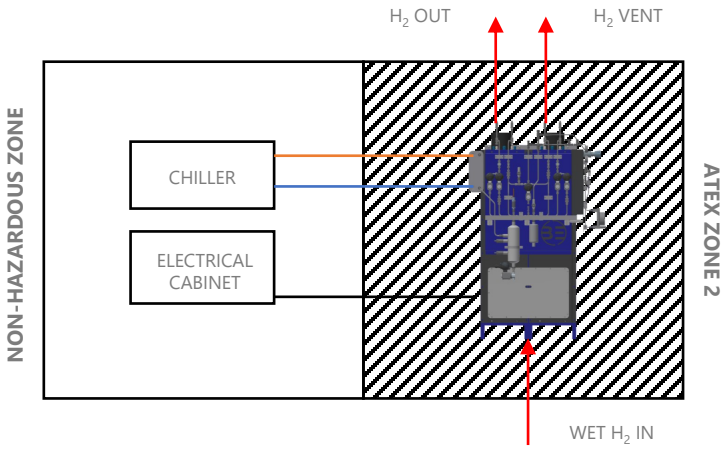




* Chiller and Control board apart

Design

- UNI EN ISO 1227-1:2019
- CEI EN 60204-1:2016
- UNI EN ISO 12100-1:2010
- UNI EN ISO 13849-1:2023
- UNI EN ISO 13850:2015
- UNI EN ISO 14120:2015
- CEI EN IEC 60079-10-2



Applications

- Power-to-gas (from Electrolysers)
- Heat Treatment
- Fuel Industry
- Power Plant

Custom products available

Bluenergy Revolution is able to supply custom version of the Dryber. In order to prepare a quotation, the following information are required:

- Inlet pressure
- Inlet flow rate
- Inlet temperature
- Inlet water content
- Outlet required pressure (dew point)
- Availability of external heating/cooling source

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