



HY.AIR 80

NEXT LEVEL FIRE PREVENTION

01/SUPER SAFE

The HY.AIR Energy System offers preventive fire protection through oxygen reduction and at the same time fail-safe power and heat for your critical infrastructure. Safer is not possible.

02/EMISSION-FREE

We utilise the oxygen-reduced exhaust air from our fuel cell for your fire protection, which is produced during the conversion of regenerative hydrogen into electricity and heat – with outstanding efficiency and no emissions whatsoever.

03/ECONOMICAL

As the first preventive fire protection system, we produce clean electricity and heat "on-site" – which is not only good for your wallet, it also eliminates the need for costly installations for an emergency power supply.

PROTECTING VALUES

HY.AIR 80

TECHNICAL DATA SHEET

LOW-OXYGEN EXHAUST AIR

Volume flow	35 to 250 cbm/h
Composition	5.0 to 8.0 vol. % O ₂
	94.0 to 91.0 vol. % N ₂
	1 vol. % other
Humidity	Dew point from -20 to 30 °C (individually adjustable)

THERMAL

Thermal output (net)	0 to 100 kW _{th} .
Temperature (flow)	60 to 70 °C
Temperature (return)	45 °C or less

DIMENSIONS

Length / width / height	6.055 / 2.435 / 2.900 mm (without H ₂ -blower)
H ₂ -blower	at the front, 350 mm above top edge of container
Maintenance	all-round area 1.5 m
Total weight	8,000 kg (empty)
	10,000 kg (in operation)

MISCELLANEOUS

Outdoor installation	adequate ventilation with fresh air
	level installation surface
	no overbuilding (e.g. through roofs)
Permissible ambient temperature	-20 to +40 °C

HY.AIR Energy GmbH
Königstraße 30
22767 Hamburg
+49 (0) 40 334 60 38-20



ELECTRICAL

Output power (net)	10 to 65 kW _{el} .
Output power (peak)	80 kW for a duration of 30 min
Voltage	400 V(AC) on 3 phases, 50 Hz
Operating mode	Mains parallel operation (VDE-AR-N 4105 compliant)
	Stand-alone operation



HYDROGEN SUPPLY

Inlet pressure	8 to 16 bar
Quality	99,97 % (ISO14687:2019 Type I (Gas), Grade D)
Gas temperature	-30 to +95 °C
Consumption	0,7 to 5,4 kg/h

INTERFACES AND CONNECTIONS

Power connection	125 A CEE connector
Communication cable	RS232, RS422, RS485 or RJ45
Heat extraction	Flow: DN50 / G2" Return flow: DN50 / G2"
Low oxygen Air pipe	DN80
Waste water pipe	DN20

Version 2.0 Subject to change without notice.