Enapter

AEM EL 4.1

Air Cooled AC

Enapter's patented anion exchange membrane (AEM) electrolyzer is a standardised, stackable and flexible system to produce on-site hydrogen. The modular design – paired with advanced software integration – allows set up in minutes and remote control and management. Stack this electrolyzer to achieve the required hydrogen flowrate.

RECOGNIZED COMPONENT

C ETL LISTED US

Intertek

UK CA

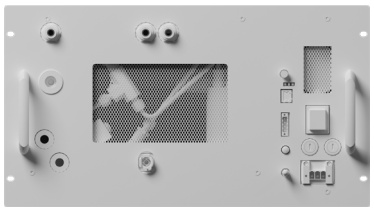
CE

AEM Electrolyzer EL 4.1

www.enapter.com/aem-el-4

Specifications

Enapter AEM Electrolyzer
EL 4.1 Air Cooled AC



482 mm

635 mm

Production rate	Up to 500 NL/h, up to 1.0785 kg/24 h
Hydrogen output purity	35barg (508 psig): 99.90 % (<1000 ppm H2O and <5ppm O2) at 25°C (77°F) 8barg (116 psig): 98,8 % (<12000 ppm H2O and <5ppm O2) at 25°C (77°F)
Output pressure	Up to 35 barg (Up to 507.63 psig)
Nominal power consumption per Nm^3 of H^2 produced (beginning of life)	4.8 kWh/Nm^3, beginning of life
Operative power consumption	2.4 kW, beginning of life
Heat dissipation	0.6 kW, beginning of life
Standby power consumption[1]	0.03 kW
Power supply	208-240 V(AC), 50/60 Hz, both split phase and 3-phase
Water input requirements	- recommended Type II according to ASTM D1193-06 and required acidity < 0.1 meq/l according to ASTM D1067 - minimum conductivity of < 2 µS/cm
Water consumption	~420 mL/h at 25°C (~0.11 gal/h at 77°F)
Water input pressure range	1 – 4 barg (14.5 – 58 psig)
Ambient operative temperature range	5 °C – 45 °C (41 °F – 113 °F)
Ambient operative humidity range	Up to 90% humidity, non-condensing
Storage conditions	2 °C to 55 °C, up to 90 % humidity, non-condensing
IP rating	IP 20
Dimensions (W x D x H in mm)	482 mm × 635 mm × 266 mm (19" × 25" × 10.5")
Weight	42 kg (92.6 lbs)
Space inside cabinet	6 U
Control and monitoring	Fully automatic with Enapter's EMS via 2.4 GHz Wi-Fi and Bluetooth, Modbus TCP over Ethernet
Conformity	CE mark according to the machine directive 2006/42/CE[2] UKCA mark according to Supply Machinery (Safety) Regulations 2008[3] CSA/ANSI B22734:2023 Ed.1 Hydrogen Generators Using Water Electrolysis - Industrial, Commercial, and Residential Applications[4]

[1] Standby refers to the condition in which no hydrogen is being produced and the auxiliar components are not powered.
[2] The Electrolyzer belongs to S.E.P. category according to Pressure Equipment Directive 2014/68/EU
[3] The Electrolyzer belongs to S.E.P. category according to Pressure Equipment (Safety) Regulations 2016
[4] ETL recognized electrolyzer versions only (ELE410535A2AE, ELE410535A2LE)

Note: The product is under continuous improvement and the technical specifications might be subject to change. Please make sure to refer to our website for the most recent specifications.

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