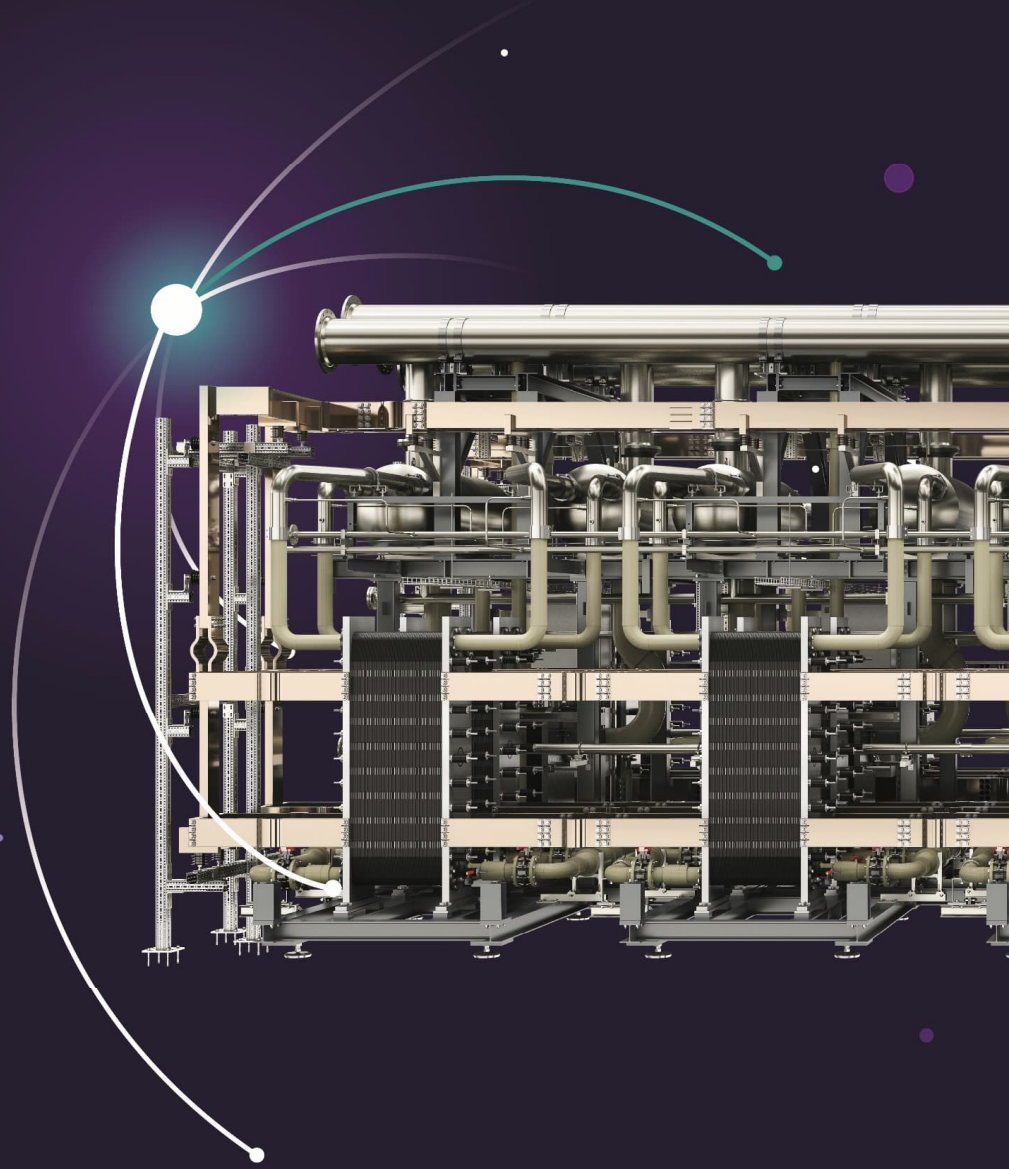


EU product rules for electrolysis systems producing hydrogen

Guidance Note

1st Edition, October 2024



Page

03 Foreword

1. Objective of this document
2. The main components of an electrolysis systems
3. The relation of CE Directives and Regulations to electrolysis systems

04 4. CE Directives and Regulations for electrolyser components

06 5. Relevant CE Directives and Regulations

- 5.1 ATEX-, Low Voltage and Machinery Directive
- 5.2 Machinery and Pressure Equipment Directive
- 5.3 Machinery and Low Voltage Directive
- 5.4 Machinery Directive – “Assembly of Machinery”
- 5.5 EMC Directive
- 5.6 Ecodesign Regulation
- 5.7 RoHS Directive
- 5.8 Other Legislation

08 6. Evidence of Product Safety

7. References

09 8. Revision history

Authors

Berger, Martin

Milanovic, Marco

Risser, Guido

Dolny, Markus

Müller, Ansgar

Stay, Michael

Hoffert, Thomas

Nau, Michael

Winkler, Susanne

Foreword

Regarding the application of EU Harmonisation Legislation¹ to electrolyzers for hydrogen production, there is some uncertainty in the market. Thanks to the joint expertise and experience of Siemens Energy and Siemens AG, the following application notes provide clarity for manufacturers when placing such systems on the market within the European Economic Area (EEA). The CE marking of process plants as a whole, such as an electrolysis plant, is not provided for under CE Legislation². However, the individual components may be subject to such a marking requirement.

1 Objective of this document

Electrolyzers for hydrogen production (Figure 1) are process engineering systems whose design, erection and operation are subject to numerous legal regulations. This guidance note addresses the components of an electrolyzer regarding the EU Harmonisation Legislation, esp. CE Legislation for the placing on the market, which must be observed by component manufacturers in specifications of the scope of supply and services.

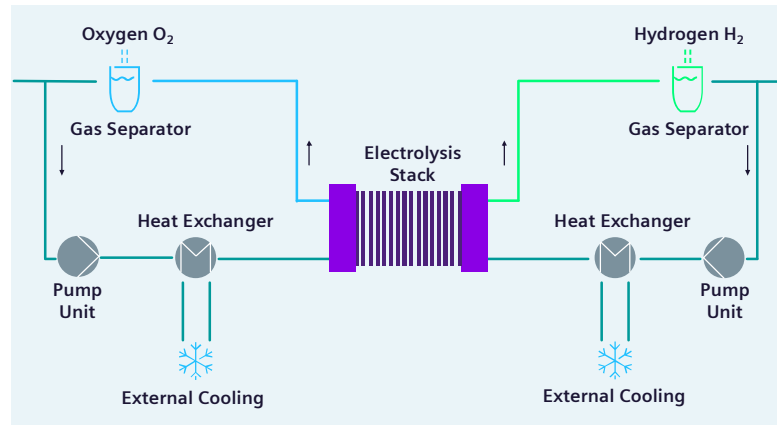


Figure 2 Main components of an electrolyzer (example)

3 The relation of CE Directives and Regulations to electrolysis systems

The purpose of EU Harmonisation Legislation is to establish rules for the **free movement of goods** within the European Union, thus enabling products to be made available on the market or put into service. Product-related legislation on CE marking ensures a **harmonised high level of protection for the safety and health** of persons, especially consumers and professional users, and (where applicable) for the environment.

Since there are numerous legislative regulations that apply to the erection of plant and their commissioning, proof of overall conformity for plants is often asked for by market participants, i.e. to issue an EU Declaration of Conformity and to affix a CE marking for numerous trades as a whole or for complex process plants (plant sections) in their entirety. However, this is not provided for by law and is also **not permitted "voluntarily"**^{4,5}. This is because no CE Directive or Regulation covers complex process plants or plant sections as a whole. Instead, the erection, commissioning and operation of such plants are subject to the respective national legislation, and for this reason no EU conformity assessment is possible in this regard. Therefore, the proof that an electrolyzer – as a process plant – complies with the state of the art and the applicable legal requirements and can be put into service in accordance with the law, consists of a **compilation of individual verifications**.

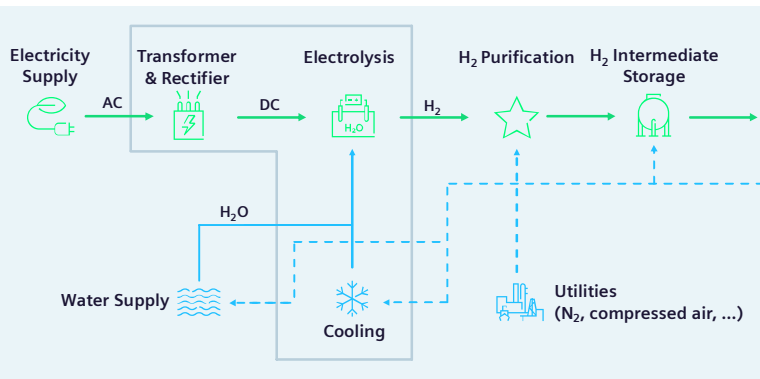


Figure 1 Hydrogen production plant with electrolyzer (example)

This document does not cover requirements and regulations for the erection of complete hydrogen production plants³.

2 The main components of an electrolysis systems

Electrolysis system refers to the part of a hydrogen production plant marked in Figure 1, grey frame.

The main components considered in Figure 2 are: Electrolysis-Stack, Gas Separator, Piping, Transformer and Rectifier*, Pump Unit, Heat Exchanger, External Cooling, Instrumentation and automation components* (*not shown).

¹ EU Harmonisation Legislation: the legislation listed in Annex I of Regulation (EU) 2019/1020 (market surveillance and compliance of products) and any other EU Legislation harmonising the conditions for the marketing of products.

² CE Legislation: the EU Harmonisation Legislation governing the EU Declaration of Conformity and CE marking by Directives and Regulations.

³ Information regarding requirements and regulations for the erection of (process) plants can be found, for example, in [3] ("Recommendations for

Operational safety – Procurement of work equipment") which is currently available in German only.

⁴ "Union Harmonisation Legislation applies to finished products as defined by the scope of each legislation."; [1] § 2.1 Product coverage

⁵ "The CE marking as presented in Annex II shall be affixed only to products to which its affixing is provided for by specific Community harmonisation legislation, and shall not be affixed to any other product."; [2] Article 30 (2)

4 CE Directives and Regulations for electrolyser components

For the components of an electrolyser, the table below shows the CE Directives and Regulations with essential requirements that must be taken into consideration. The list should be **regarded as an example**, as it is not possible to provide a generally binding list of all the regulations to be complied with, as process plants are usually unique and customised to the requirements of the operator. The components may differ in detail depending on the respective design, and thus also the applicable regulations.

Notes on the table:

- Electrolysis stack: The Low Voltage Directive applies to stacks with a nominal DC voltage in the range of 75 V to 1,500 V.
Pressurised stacks ($p > 0.5$ bar) are subject to the Pressure Equipment Directive, independent of the rated voltage.
- The Pressure Equipment Directive only applies to components of pressurised electrolysers (overpressure > 0.5 bar).

CE Directives and Regulations for electrolysis system components

Component	CE Directive or Regulation							
	2014/35/EU Low Voltage [4]	2014/68/EU Pressure Equip. [5]	2006/42/EG Machinery [6]	2014/34/EU ATEX [7]	2014/30/EU EMC [8]	(EU) 2024/1781 Ecodesign [9] ⁶	2011/65/EU RoHS [11]	2014/53/EU Radio [16]
Electrolysis Stack ^{a)}	Not pressurised, $p \leq 0.5$ bar	X						
	pressurised, $p > 0.5$ bar	X	X					
Gas Separator ^{b)}	O ₂ -Separation		X					
	H ₂ -Separation		X					
Piping		X ^{b)}						
MV-/LV Transformer	c)					X ^{d)}		
Rectifier	X				X ^{e)}			
Pump Unit ^{f)}		g)	X	X	X ^{h)}	X ⁱ⁾		
Heat Exchanger		X ^{b)}						
External Cooling			X	X	X	X ^{o)}		
Instrumentation Components ⁷	X ^{j)}	X ^{b)}		X ^{k)}	X		X	(x) ^{l)}
Automation Components (BPCS und SIS) ⁸	X ^{j)}		(x) ^{m) n)}	X ^{k)}	X		X	(x) ^{l)}

X = applicable

X^{x)} = applicable if certain boundary conditions apply; see notes

(x) = only applicable for certain components or constructive designs, see notes

⁶ Framework legislation [9], the application of which is governed by individual implementing regulations for different product groups.

⁷ Process instrumentation and process analysis technology (sensors, actuators, e.g. valves but no mechanical safety devices)

⁸ BPCS: Basic Process Control System, SIS: Safety Instrumented System, including industrial control cabinets

- c) Medium/low-voltage transformers (upper voltage > 1,000 V_{AC}) are not covered by the Low Voltage Directive, as the highest rated voltage is above the voltage limit for application of the Directive; see [12] § 6.
- d) Excluded from the Regulation on energy efficiency [13] are “transformers specifically designed and intended to provide a DC power supply to electronic or rectifier loads”; see [13] Article 1, 2. (b).
- e) Depending on the design, a rectifier may be classified as an apparatus⁹ under the EMC Directive, or, alternatively, it may qualify as “intended for incorporation into a particular fixed installation” under the exemption for fixed installations according to [8] Article 19 (1).
- f) Pump unit¹⁰ = pump (hydraulic moving device) with drive (electric motor/drive system). A pump unit as a whole falls within the scope of the Machinery Directive. Not shown in this overview are supply models with shared manufacturer responsibility, i.e. where the pump and drive are placed on the market by different suppliers and combined by the system installer (or by third parties). In such cases, the drive, for example, may fall under the Low Voltage Directive as a separate supply unit if it consists solely of an electric motor.
- g) The Pressure Equipment Directive does not need to be applied to pumps if
 - either pressure is not a determining design factor,
 - or the pressure equipment category is ≤ 1.

In these cases, pressure-related safety requirements are covered by the Machinery Directive.
- h) Applies to pump units with variable speed drives
- i) Regulations on energy efficiency
 - Regulation (EU) 2019/1781 [14] (incl. Regulation (EU) 2021/341 and (EU) 2023/3) for the drive or drive system;
 - Regulation (EU) Nr. 547/2012 [15] if applicable, for the pump (hydraulic part)
- j) “*Electrical equipment for use in an explosive atmosphere*” is excluded from the Low-Voltage Directive (Annex II [4]); the ATEX Directive applies to this equipment [7]. See also note k).
- k) The ATEX Directive is applicable¹¹ to
 - Components for use in potentially explosive atmospheres.
 - “Safety devices, controlling devices and regulating devices intended for use outside potentially explosive atmospheres but required for or contributing to the safe functioning of equipment and protective systems with respect to the risks of explosion”. If applicable, the Low Voltage Directive also applies to this equipment.
- l) Only applies to instrumentation components or automation components with radio communication or radio interfaces
- m) Applies exclusively to automation components that are placed on the market as safety components in accordance with the Machinery Directive. The Low Voltage Directive does not apply to them.
- n) Functional safety: For machines (e.g. compressors), requirements for safety-related control systems are specified in the EN IEC 62061 or EN ISO 13849-1 standards. Where machines are integrated into a process plant, the requirements for PCT safety devices for the process industry in the EN IEC 61511 series of standards must be met additionally.
- o) Depending on the design and electrical output, the Regulation on energy efficiency (EU) 2024/1834 (motor driven fans) [20] may be applicable.

⁹ [8] Definition (2), Article 3.1

¹⁰ Definition acc. to EN ISO 17769-1:2012, sub-clause 2.1.1

¹¹ Refer to Article 1 (1) (a) and (b), ATEX Directive [7]

5 Relevant CE Directives and Regulations

If a product falls within the scope of more than one CE Directive or Regulation all applicable essential requirements must be fulfilled. It should also be noted that certain products or their use may be excluded from the scope of a CE Directive or Regulation and assigned to another regulation that covers such products or uses more precisely regarding the (safety) requirements. In the case of the components of an electrolyser, such interrelationships between the scopes of the regulations must be observed in particular regarding

- Low Voltage Directive
- ATEX Directive
- Machinery Directive
- Pressure Equipment Directive

5.1 ATEX, Low Voltage and Machinery Directive

For some products, particularly electromechanical (machine) components, the question may arise as to whether they formally fall under the Machinery Directive or the Low Voltage Directive. The reason for this is that conformity can only be declared under one of the two Directives.

Article 1, 2. (k) of the Machinery Directive conclusively lists the products that are excluded from this Directive¹² and instead fall under the Low Voltage Directive (LVD), provided they fall within its scope, i.e. whose rated voltages are in the range 50 – 1,000 V_{AC}. or 75 – 1,500 V_{DC}; see Figure 3.

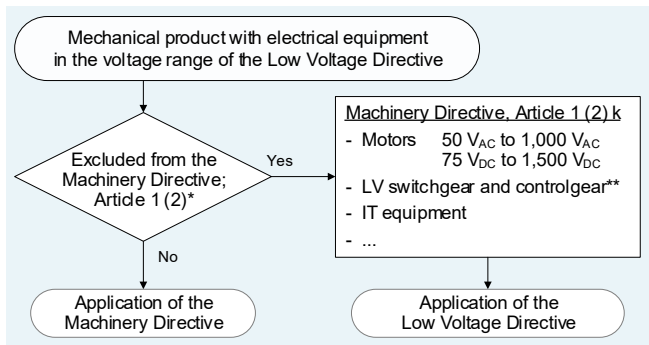


Figure 3 Classification of products under the Machinery or Low Voltage Directive

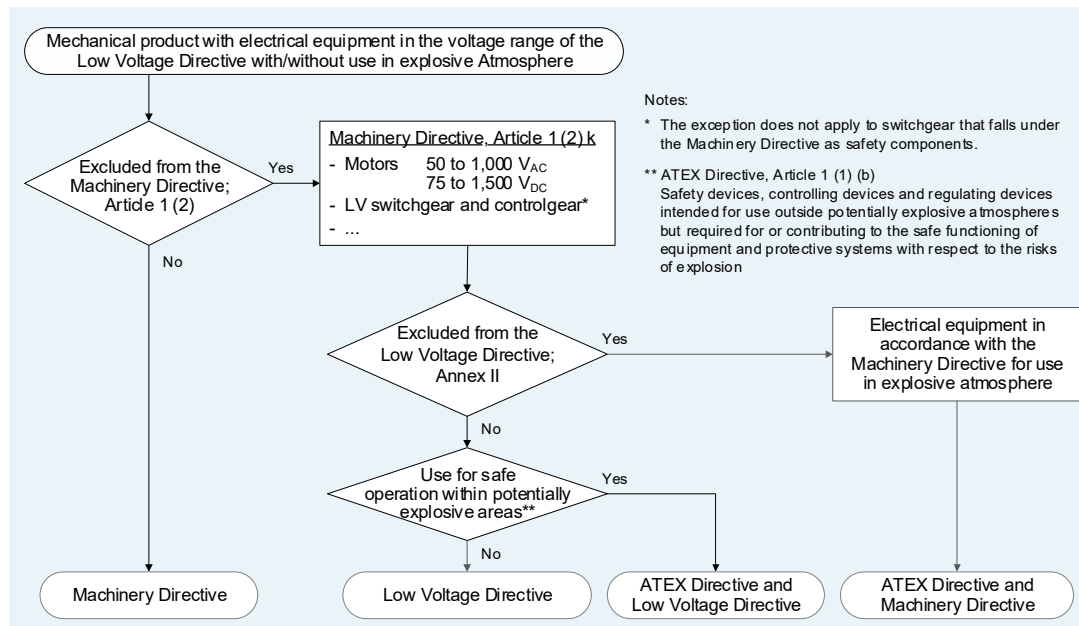
¹² The exceptions are partly based on a political decision and therefore have no specific technical reason.

Notes:

*If there is also an exemption from the Low Voltage Directive (LVD Annex II), the product remains subject to the Machinery Directive, example: equipment for the use in explosive atmosphere.

**The exception does not apply to switchgear that falls under the Machinery Directive as "safety component".

In addition, it must be checked whether the product in question is also fundamentally excluded from the Low Voltage Directive (Annex II). This is particularly the case for products that are covered by a more specific Directive. In connection with machinery, this usually applies to electrical equipment that falls under the ATEX Directive and is intended for use in potentially explosive atmospheres, e.g. explosion-proof motors; see Figure 4.



Notes:

* The exception does not apply to switchgear that falls under the Machinery Directive as safety components.

** ATEX Directive, Article 1 (1) (b) Safety devices, controlling devices and regulating devices intended for use outside potentially explosive atmospheres but required for or contributing to the safe functioning of equipment and protective systems with respect to the risks of explosion

Figure 4 Classification of products under the Machinery or Low Voltage and ATEX Directive

Equipment for use in explosive atmospheres is subject to the ATEX Directive. The Low Voltage Directive excludes such equipment from its scope in accordance with Annex II. By way of exception, both the ATEX and Low Voltage Directives apply if products (in the voltage range of the Low Voltage Directive) are intended for explosion protection for use outside potentially explosive atmospheres; see ATEX Directive, Article 1, 1. (b). This includes "safety devices, controlling devices and regulating devices intended for use outside potentially explosive atmospheres but required for or contributing to the safe functioning of equipment and protective systems with respect to the risks of explosion". The Machinery and ATEX Directives apply to mechanical products unless they are explicitly excluded from the Machinery Directive in accordance with Article 1 (2).

5.2 Machinery and Pressure Equipment Directive

As the Machinery Directive basically also covers hazards due to pressure, the Pressure Equipment Directive is only applicable in addition to the Machinery Directive if pressure is a significant (substantial) factor for the design of the machine and pressurised parts are classified in category 2 or higher according to the Pressure Equipment Directive (Figure 5).

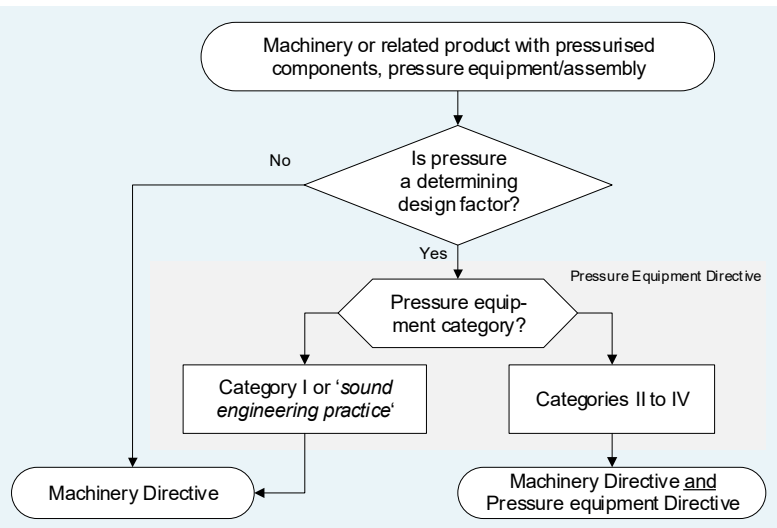


Figure 5 Classification of products under the Machinery and Pressure Equipment Directive

5.3 Machinery and Low Voltage Directive

The essential safety requirements of the Machinery Directive (Annex I; 1.5.1) also include the protection objectives of the Low Voltage Directive regarding electrical hazards. However, conformity assessment and declaration of conformity are carried out exclusively under the Machinery Directive. The protection objectives of the Low Voltage Directive apply to machines without restriction of the voltage range, i.e. from 0 V and without the upper limit of 1,000 V_{AC} (1,500 V_{DC}).

5.4 Machinery Directive – “Assembly of Machinery”

An electrolyser may contain several machines (e.g. pumps) or other components, each of which as such is covered by the Machinery Directive. However, this does not mean that the electrolyser is to be categorised as an “assembly of machinery” within the meaning of the Machinery Directive. This is because none of the decisive characteristics apply, neither the characteristics of a machine (Article 2 a) nor those of an

assembly of machinery; see § 38 Guide to the application of the Machinery Directive 2006/42/EC [18] and interpretation paper of the BMAS [17]¹³.

An electrolyser may also contain “safety components” in accordance with the Machinery Directive (Article 2 c). As mentioned in the previous point, the mere use of such safety components does not mean that the electrolyser as a whole is covered by the Machinery Directive.

The determining factor for the application of the Machinery Directive is whether the respective product falls within the scope of application (Article 1 [6]) of the Directive. It should be noted that the Machinery Directive covers the requirements for the design and construction of machinery, associated products and partly completed machinery. However, the Directive does not apply to other products.

The definitions help to categorise a product (see Machinery Directive, Article 2). If the product characteristics do not correspond to the definition of machinery or partly completed machinery, the product is not covered by the Machinery Directive. The same applies to other products which are classified as machinery within the meaning of the Directive (Article 1 (1) b to g). The statements described for the Machinery Directive 2006/42/EC can be applied in the same way to the Machinery Regulation (EU) 2023/1230 applicable from January 20th, 2027.

5.5 EMC Directive

The EMC Directive applies (where applicable) to the components and to the electrolyser as a whole, which is considered a “fixed installation” within the meaning of the Directive; [8] Article 19: A fixed installation must fulfil the protection objectives of the Directive (emitted interference, immunity), but the EU Declaration of Conformity and CE marking are not required.

5.6 Ecodesign Regulation

The Framework Regulation (EU) 2024/1781 laying down ecodesign requirements for sustainable products [9] replaced (since 18 July 2024) the ErP Framework Directive [10]. Irrespective of this, the regulations on energy issued under the ErP Directive will continue to apply (see Article 79 of the Ecodesign Regulation).

5.7 RoHS Directive

According to Article 2 (3) e), the RoHS¹⁴ Directive (EU) 2011/65/EU does not apply to stacks and other components that fulfil the definition of “large-scale fixed installation” (Article 3 No. 4) of the Directive. The EU FAQ guide defines – among other criteria – a rated output > 375 kW as decisive for “large-scale installation”; see Q3.1, RoHS 2 FAQ¹⁵.

¹³ [17] is available in German language only

¹⁴ Restriction of Hazardous Substances

¹⁵ https://environment.ec.europa.eu/topics/waste-and-recycling/rohs-directive_en

5.8 Other Legislation

In principle, it must be checked in each individual case whether further CE Directives or Regulations to the product under consideration.

This guidance document does not cover legislation on cyber security.

6 Evidence of Product Safety

The documentation proving that the respective components of the electrolyser fulfil the applicable CE Legislation consists of the **compilation of the technical documentation**, including in particular the risk assessment and, if necessary, the examinations or certificates of notified bodies to be involved as well as the **EU Declaration of Conformity of the individual components**.

If, in addition, confirmation is required that the electrolyser as a whole, including its assembly, testing, etc., complies with the applicable standards and contractually agreed specifications and is safe, the manufacturer can also issue a so-called **Supplier's Declaration of Conformity**¹⁶. With this declaration, the manufacturer declares conformity with standards and, if applicable, other specifications and regulations or applicable essential requirements from applicable CE Legislation, but not conformity with one or more EU Directive or EU Regulation per se, as these do not apply to a process electrolysis plant as a whole.

7 References

Note: EU Directives and EU Regulations can be amended, updated or corrected by further legal acts as required. A subsequently published consolidated version, which summarises the original legal act with amendments in one document, is for information purposes only. Consolidated versions, however, have no legal effect. Only the legal acts and the publications in the Official Journal (L series) are legally binding. In this list of references, consolidated versions are listed (if available) in order to simplify the use of the sources. The original, legally binding texts are referenced in the consolidated versions.

[1] The 'Blue Guide' on the implementation of EU product rules 2022; Official Journal of the European Union C 247 of 29 June 2022;

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2022:247:FULL>

[2] Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and repealing Regulation (EEC) No 339/93; consolidated text, 16 July 2021

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02008R0765-20210716&qid=1712837062456>

[3] Empfehlungen für Betriebssicherheit EmpfBS 1113 (Januar 2023) – Beschaffung von Arbeitsmitteln

<https://www.baua.de/DE/Angebote/Regelwerk/TRBS/EmpfBS-1113.html>

[4] Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits; Official Journal of the European Union L 96, 29 March 2014

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0035&qid=1725871560066>

[5] Directive 2014/68/EU of the European Parliament and of the Council of 15 May 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of pressure equipment; Official Journal of the European Union L 189; consolidated text, 27 June 2014

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02014L0068-20140717&qid=1725871672000>

[6] Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC; consolidated text, 26 July 2019

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02006L0042-20190726&qid=1725871787784>

[7] Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres; Official Journal of the European Union L 96, 29 March 2014

<https://eur-lex.europa.eu/search.html?scope=EURLEX&text=2014%2F34&lang=en&type=quick&qid=1725871880756>

[8] Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility;

Official Journal of the European Union L 96, 29 March 2014; consolidated text of 11 Sep 2018

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02014L0030-20180911&qid=1725871970177>

[9] Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1781&qid=1725872077739>

¹⁶ EN ISO/IEC 17050 Conformity assessment - Supplier's Declaration of Conformity

[10] Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products; consolidated text, 4 May 2023

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009L0125-20121204&qid=1725872187009>

[11] Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment;

consolidated text, 01 August 2024
<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02011L0065-20240801&qid=1725872278455>

[12] LVD 2014/35/EU – Guidelines on the application of the directive;

<https://ec.europa.eu/docsroom/documents/31221>

[13] Commission Regulation (EU) No 548/2014 of 21 May 2014 on implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers; consolidated text¹⁷, 14 November 2019

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02014R0548-20191114&qid=1725881887045>

[14] Commission Regulation (EU) 2019/1781 of 1 October 2019 laying down ecodesign requirements for electric motors and variable speed drives pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Regulation (EC) No 641/2009 with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products and repealing Commission Regulation (EC) No 640/2009; consolidated text, 24 January 2023

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02019R1781-20230124&qid=1725882022910>

[15] Commission Regulation (EU) No 547/2012 of 25 June 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water pumps; consolidated text, 09 January 2017

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02012R0547-20170109&qid=1725882102779>

[16] Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC; consolidated text, 01 October 2023

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02014L0053-20231001&qid=1725882186792>

[17] Interpretationspapier "Gesamtheit von Maschinen"; Bekanntmachung des BMAS vom 5.5.2011, IIIb5 39607 3) im Gemeinsamen Ministerialblatt GMBI 2011, S. 233

<https://www.bmas.de/DE/Arbeit/Arbeitsschutz/interpretationspapier-gesamtheit-von-maschinen.html>

[18] Guide to application of the Machinery Directive 2006/42/EC;

Edition 2.3 – April 2024

<https://ec.europa.eu/docsroom/documents/60145>

[19] Regulation (EU) 2023/1230 of the European Parliament and of the Council of 14 June 2023 on machinery and repealing Directive 2006/42/EC of the European Parliament and of the Council and Council Directive 73/361/EEC; consolidated text, 29 June 2023

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02023R1230-20230629&qid=1725882248165>

[20] Commission Regulation (EU) 2024/1834 of 3 July 2024 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW and repealing Commission Regulation (EU) No 327/2011

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1834&qid=1725882318165>

8 Revision history

Version	Date	Comments
1.0	01.10.2024	First issue

The content of this document has been compiled with the greatest possible care. However, the authors and publishers do not assume any liability for its correctness, completeness or up-to-date status.

¹⁷ Including amendments (EU) 2016/2282 and (EU) 2019/1783

Published by

Siemens Energy Global GmbH & Co. KG

Transformation of Industry
Sustainable Energy Systems
Siemenspromenade 9,
91058 Erlangen, Germany

For more information, please visit our website:
siemens-energy.com/electrolyzer

© Siemens Energy, 2024

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

All product designations may be trademarks or product names of Siemens Energy Global GmbH & Co. KG or other companies whose use by third parties for their own purposes could violate the rights of the owners.

Siemens Energy is a trademark licensed by Siemens AG.