



ENVIRONMENTAL PRODUCT DECLARATION

# **SIPART PS2**

## 2/4 Wire w/o Ex

Type II according to ISO 14021 including life cycle impact assessment (LCIA)



**SIEMENS**

# General information

<b>Product</b>	6DR5010-ONG00-0AA0 – SIPART PS2 2 wire without HART SA
<b>Represented by</b>	6DR5010-ONG00-0{A,B,K}{A,B,E,K,N,W}0 - SIPART PS2 2 wire without HART SA 6DR5110-ONG00-0{A,B,K}{A,B,E,K,N,W}0 - SIPART PS2 2 wire with Hart SA 6DR5310-ONG00-0{A,B,K}{A,B,E,K,N,W}0 - SIPART PS2 4 wire without HART SA
<b>Product Description</b>	Valve positioner for linear and part-turn actuators with 2/4 wire connection with and without HART communication w/o explosion protection
<b>Functional Unit</b>	Control unit for pneumatic armatures, consisting of actuator and valve, over the reference service lifetime of 10 years.

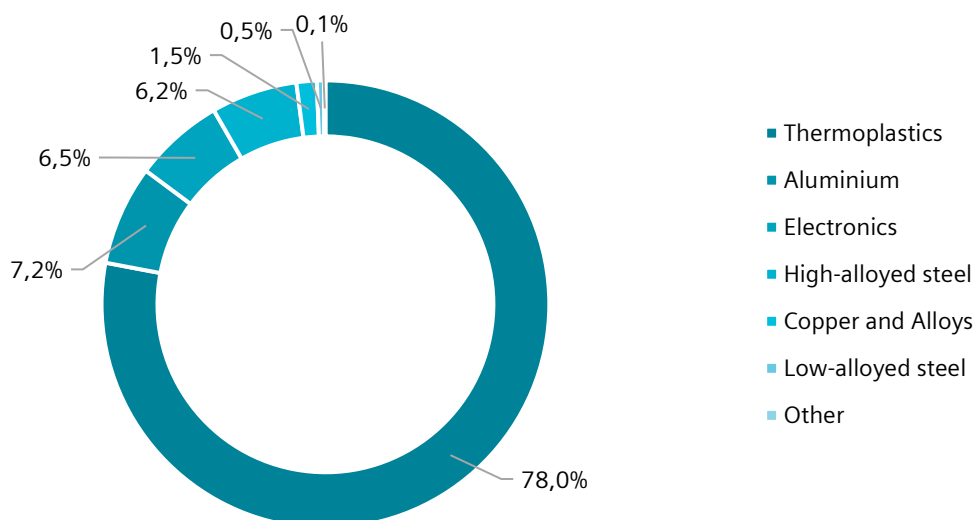
This environmental product declaration (EPD) is based on the international standard ISO 14021 ("Environmental labels and declarations – Self declared environmental claims – Type II"). The data in this EPD has been evaluated on a full-scale life cycle assessment (LCA) study according to ISO 14040/44, taking into account the product category rules (PCR) for electronic and electrotechnical products and systems defined in EN 50693.

Siemens is dedicated to an environmentally conscious design of its products in line with IEC 62430 and has implemented an integrated management system according to ISO 9001, ISO 14001 and ISO 45001.

## Material composition

The following chart outlines the overall material composition of the calculated reference product. Product weight of about 900 g adds up with packaging weight of 156 g to a total weight of 1156 g. Packaging consists of cardboard (Corrugated Fiber Board ~108 g), expanded Polyethylene (36 g) and leaflet (Graphic-Paper ~12 g).

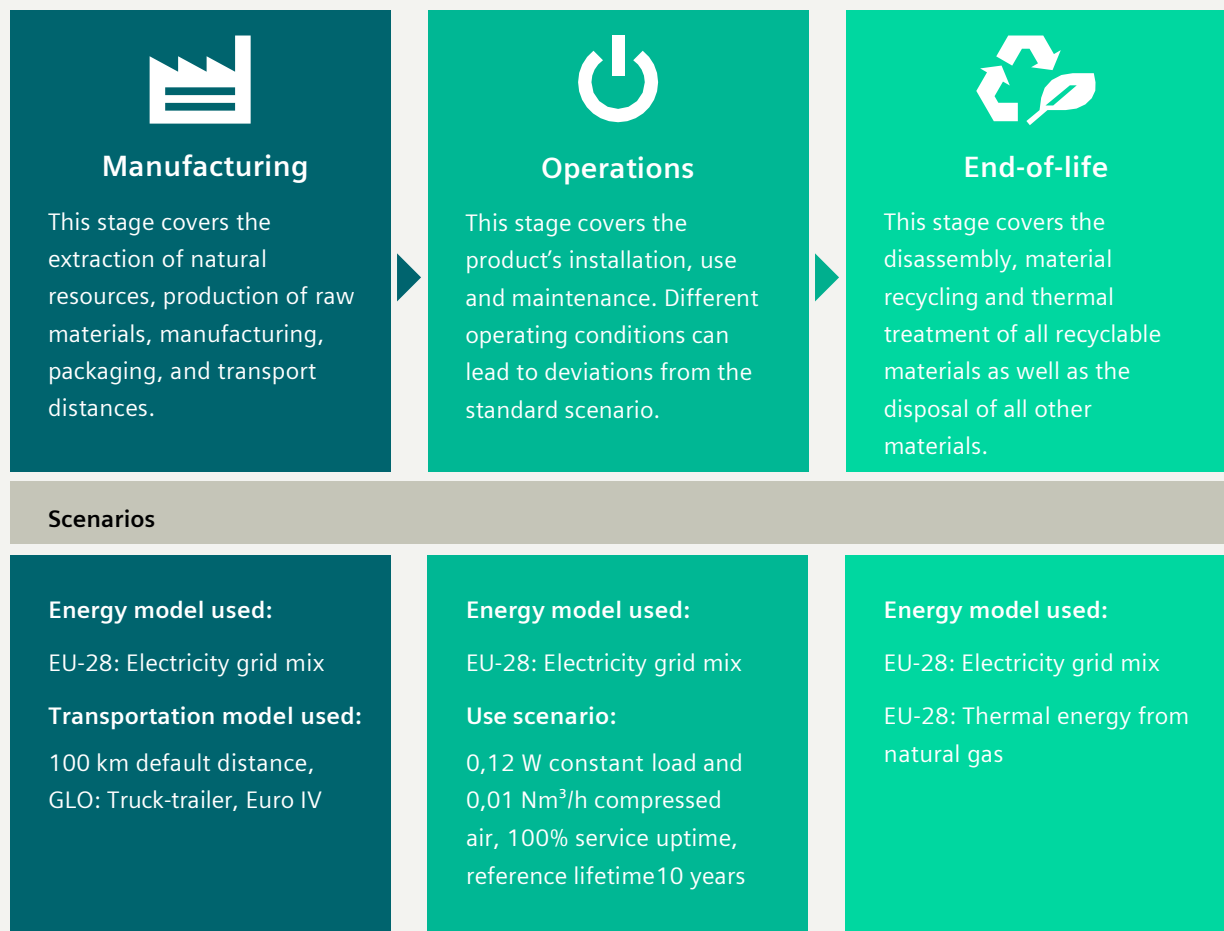
### Product Weight 900 g



## Substance assessment

At Siemens, we are committed to the development and production of environmentally sound and sustainably produced equipment. This includes avoiding hazardous substances in our products without compromising their benefits for our customers. Please visit the following website to learn more about how we comply with product-related environmental regulations like RoHS, REACH, WEEE and others: [Product Related Environmental Protection](#)

# Life cycle stages and reference scenarios



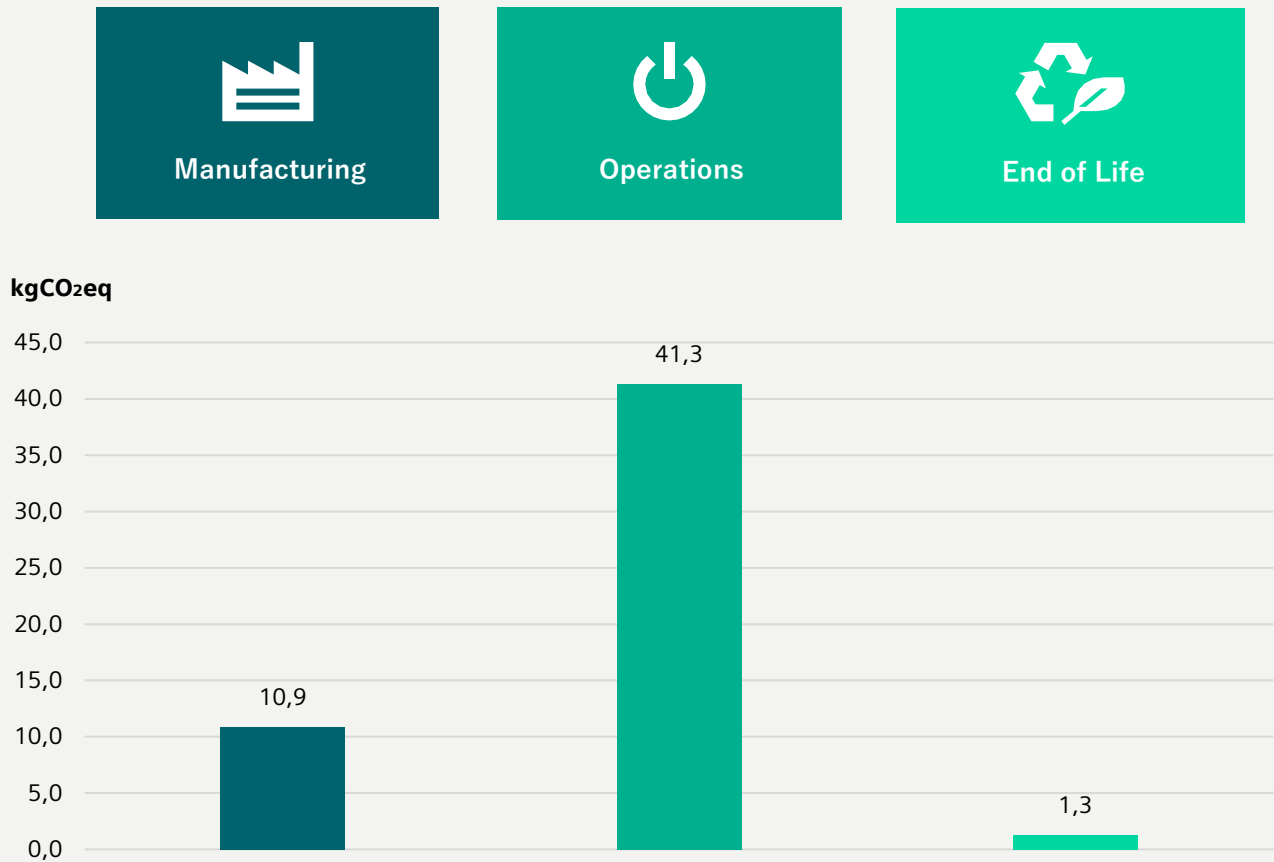
## Key environmental performance indicators

The following impact categories characterize the product's environmental footprint. They have been calculated with LCIA methodology EF 3.0, GWP incl. Biogenic Carbon according to EN 15804 + A2; LCA tool: GaBi 10.6, Database: GaBi Professional & Extensions, Content update package 2022.2.

Impact category	Unit	Total	Manufacturing	Operation	End of Life
Acidification	Mole of H+ eq	1,56E-01	6,72E-02	8,96E-02	-7,10E-04
Global warming potential	kg CO <sub>2</sub> eq	5,35E+01	1,09E+01	4,13E+01	1,31E+00
Ecotoxicity, freshwater – total	CTUe	5,09E+02	1,88E+02	3,24E+02	-2,73E+00
Eutrophication, freshwater	kg P eq	6,31E-04	5,12E-04	1,20E-04	-1,04E-06
Eutrophication, marine	kg N eq	3,07E-02	1,07E-02	2,01E-02	-1,69E-04
Eutrophication, terrestrial	Mole of N eq	3,08E-01	9,86E-02	2,11E-01	-1,38E-03
Human toxicity, cancer – total	CTUh	4,22E-08	3,30E-08	9,33E-09	-1,20E-10
Human toxicity, non-cancer – total	CTUh	6,37E-07	3,00E-07	3,42E-07	-4,56E-09
Ionising radiation, human health	kBq U235 eq	2,06E+01	7,93E-01	2,00E+01	-1,72E-01
Land Use	Pt	2,99E+02	3,34E+01	2,68E+02	-2,26E+00
Ozone depletion	kg CFC-11 eq	6,94E-08	6,88E-08	6,00E-10	-5,13E-12
Particulate matter	Disease incidences	1,41E-06	6,77E-07	7,43E-07	-6,85E-09
Photochemical ozone formation, human health	kg NMVOC eq	8,19E-02	2,80E-02	5,44E-02	-4,86E-04
Resource use, fossils	MJ	9,00E+02	1,72E+02	7,41E+02	-1,31E+01
Resource use, mineral and metals	kg Sb eq	1,38E-03	1,36E-03	1,12E-05	-1,15E-07
Water use	m³ world eq	1,17E+01	2,36E+00	9,20E+00	1,07E-01

# Global warming potential

This chart shows the global warming potential of the product. The production and operation phase are the lifecycle phase with the biggest overall impact. Different operating conditions can lead to deviations from the standard scenario.



## End-of-life scenario

The end-of-life stage was disassembling of the device, followed by sorting and material separation process. Plastic and electronic parts have been incinerated including electric (EU-28) and thermal (EU-28 Natural Gas) energy recovery. Cut-Off has been used for metal parts.

**Note:** The device should not be disposed of as unsorted municipal waste. Special treatment for specific components may be mandated by law or recommended for environmental reasons. Observe all local and applicable laws.

# Legal Disclaimer

This Environmental Product Declaration (EPD) is for information purposes only. It is based upon the standards mentioned above.

This EPD does not warrant or guarantee the composition of a product or that the product will retain a particular composition for a particular period. Therefore, all warranties, representations, conditions, and all other terms of any kind whatsoever implied by statute or common law are – to the fullest extent permitted by applicable law – excluded.

**Siemens therefore does not assume any liability for any error or for any consequence which may arise from the use of this information to the maximum extent under the law.**

Please be aware that the data of this EPD cannot be compared with data calculated based upon product category rules (PCRs) other than the standards mentioned above. The values given are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

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