

# ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2



Owner of the Declaration	dormakaba International Holding GmbH
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-DOR-20220205-CBA1-EN
Issue date	18.10.2022
Valid to	17.10.2027

## Charon 20 - Half Height Swing Doors **dormakaba**

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## General Information

<p><b>dormakaba</b></p>	<p><b>Charon 20 - Half Height Swing Doors</b></p>
<p><b>Programme holder</b> IBU – Institut Bauen und Umwelt e.V. Hegelplatz 1 10117 Berlin Germany</p>	<p><b>Owner of the declaration</b> dormakaba International Holding GmbH DORMA Platz 1 58256 Ennepetal Deutschland</p>
<p><b>Declaration number</b> EPD-DOR-20220205-CBA1-EN</p>	<p><b>Declared product / declared unit</b> 1 dormakaba Charon 20 - Half Height Swing Door, consisting of the following items: - control system Charon 20 - power supply unit - power supply accessories - profile - profile covers - engine - door leaf ESG - packaging material</p>
<p><b>This declaration is based on the product category rules:</b> Electronic and physical Access Control Systems, 07.2019 (PCR checked and approved by the SVR)</p>	<p><b>Scope:</b> This EPD is a specific product declaration for the Charon 20 - Half Height Swing Door. The underlying life cycle assessment is based on the entire life cycle of this specific Charon 20 swing door. The products are manufactured at the dormakaba production facility in Bühl (Germany). Green electricity is being used at this production site.</p>
<p><b>Issue date</b> 18.10.2022</p>	<p>Data represents the year 2022.</p>
<p><b>Valid to</b> 17.10.2027</p>	<p>The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences. The EPD was created according to the specifications of EN 15804+A2. In the following, the standard will be simplified as EN 15804.</p>
	<p><b>Verification</b></p> <p>The standard EN 15804 serves as the core PCR</p> <p>Independent verification of the declaration and data according to ISO 14025:2011</p> <p><input type="checkbox"/> internally <input checked="" type="checkbox"/> externally</p>
<p>Dipl. Ing. Hans Peters (chairman of Institut Bauen und Umwelt e.V.)</p>	
<p>Dr. Alexander Röder (Managing Director Institut Bauen und Umwelt e.V.)</p>	<p>Dr.-Ing. Wolfram Trinius (Independent verifier)</p>

## Product

**Product description/Product definition**  
**Charon 20 - Half Height Swing Doors**

Opening on demand with the Charon 20 swing door. The Charon swing door can be installed directly on the housing of the Argus sensor barrier. It provides extended passage width with a clear opening of up to

900 mm to accommodate wheelchairs or material trolleys.

The shape, surface and colour of the Charon 20 swing door precisely matches that of the sensor barrier to which it is bolted.

This solution enables a visually appealing and easy-to-implement opening, as electrical components are integrated into the housing of the Argus sensor barrier and the cables are routed through it. No additional cable bores and cable routing are therefore required in the installation area.

For the placing on the market in the European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland) the following legal provisions apply:

- Machinery Directive 2006/42/EC
- 2014/30/EU Electromagnetic Compatibility Directive
- 2011/65/EU ROHS2 Directive
- DIN EN ISO 12100:2011-03 Safety of machinery
- DIN EN 16005: 2013-01 and Amendment 2015-10 Power operated pedestrian doorsets
- DIN EN ISO 13849- 1:2016-06 Safety of machinery
- DIN EN ISO 13849- 2:2013-02 Safety of machinery
- DIN EN 60335-2-103: 2016-05 Household and similar electrical appliances
- DIN EN 61000-3-2:2015-03 Electromagnetic compatibility (EMC)
- DIN EN 61000-6-2: 2005 and Amendment:2011 Electromagnetic Compatibility (EMC)
- DIN EN 61000-6-3:2007 and A1:2011 Electromagnetic Compatibility (EMC)

The CE-marking takes into account the proof of conformity with the respective harmonized standards based on the legal provisions above. For the application and use the respective national provisions apply.

### Application

Charon 20 - Half Height Swing Doors can be used for convenient entry into:

- Office and administrative buildings
- Ministries and government buildings
- Banks and financial institutions
- Industrial buildings
- Schools and universities

### Technical Data

#### Dimensions of Charon 20 - Half Height Swing Doors

Name	Value	Unit
Power supply max.	240	V
Drive unit Diameter	75	mm
Upper edge of the drive unit Dimension	850	mm
Door leaf radius Dimension	900	mm
Upper edge of the door leaf Dimension	990	mm

#### The Charon 20 - Half Height Swing Door includes the following components:

- control unit
- power back
- cover profile
- glass door leaves ESG
- drive unit

The total weight of all components is 26,10 kg including packaging 32,31 kg.

Product not harmonised in accordance with the CPR but in accordance with other provisions for harmonisation of the EU:

- Machinery Directive 2006/42/EC
- 2014/30/EU Electromagnetic Compatibility Directive
- 2011/65/EU ROHS2 Directive
- DIN EN ISO 12100:2011-03 Safety of machinery
- DIN EN 16005: 2013-01 and Amendment 2015-10 Power operated pedestrian doorsets
- DIN EN ISO 13849- 1:2016-06 Safety of machinery
- DIN EN ISO 13849- 2:2013-02 Safety of machinery
- DIN EN 60335-2-103: 2016-05 Household and similar electrical appliances
- DIN EN 61000-3-2:2015-03 Electromagnetic compatibility (EMC)
- DIN EN 61000-6-2: 2005 and Amendment:2011 Electromagnetic Compatibility (EMC)
- DIN EN 61000-6-3:2007 and A1:2011 Electromagnetic Compatibility (EMC)

### Base materials/Ancillary materials

For the main Charon 20 swing door product components the composition is the following.

The composition is listed in the following table:

Material	Value	Unit
Glass	52,62	%
Aluminium	11,34	%
Steel	0,33	%
Stainless steel	2,63	%
Plastic	5,69	%
Electronic components	8,17	%
Paper	19,22	%

The product contains partial articles which contain substances

listed in the *Candidate List of REACH* Regulation 1907/2006/EC (date: 10.06.2022) exceeding 0.1 percentage by mass: yes

- Lead (Pb): 7439921(CAS No.) is included in some of the alloys used. The concentration of

lead in each individual alloy does not exceed 0,35 % (by mass).

The candidate list can be found on the *IECHA* website address: <https://echa.europa.eu/de/home>.

#### Reference service life

The life cycle of an Charon 20 - Half Height Swing Door is about 15 years, depending on the application and frequency of use. The Charon 20 swing door is tested according to *EN 16005*.

## LCA: Calculation rules

#### Declared Unit

The declared unit is 1 piece of product: 26.10 kg

#### Declared unit

Name	Value	Unit
Declared unit	1	pce.
Mass (total system excluding packaging)	26.1	kg

#### System boundary

Type of EPD: cradle to gate with options, modules C1–C4, and module D (A1–A3 + C + D and additional modules: A4 + A5 + B6)

#### Production - Module A1-A3

The product stage includes:

- A1, raw material extraction, processing and mechanical treatments, processing of secondary material input (e.g. recycling processes),
- A2, transport to the manufacturer,
- A3, manufacturing and assembly including provision of all materials, products and energy, as well as waste processing up to the end-of waste state.

#### Construction stage - Modules A4-A5

The construction process stage includes:

- A4, transport to the building site;

— A5, installation into the building; including provision of all materials, products and energy, as well as waste processing up to the end of waste state or disposal of final residues during the construction process stage.

#### Use stage - Module B6

The use stage related to the operation of the building includes:

- B6, operational energy use

#### End-of-life stage– Modules C1-C4 and D

The end-of-life stage includes:

- C1, de-construction, demolition;
- C2, transport to waste processing;
- C3, waste processing for reuse, recovery and/or recycling;
- C4, disposal; including provision and all transport, provision of all materials, products and related energy and water use.
- D, (Benefits and loads beyond the system boundary) includes: recycling potentials, expressed as net impacts and benefits.

#### Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to *EN 15804* and the building context, respectively the product-specific characteristics of performance, are taken into account.

Background database: *GaBi SP40*.

## LCA: Scenarios and additional technical information

#### Characteristic product properties

##### Information on biogenic Carbon

#### Information on describing the biogenic Carbon Content at factory gate

Name	Value	Unit
Biogenic Carbon Content in accompanying packaging	2.29	kg C

The following technical scenario information is required for the declared modules

#### Transport to the building site (A4)

Name	Value	Unit
Litres of fuel (per 1 kg)	0.00276	l/100km
Capacity utilisation (including empty runs)	55	%
Transport distance via medium truck	100	km

#### Reference service life

Name	Value	Unit
Life Span according to the manufacturer	15	a

#### Operational energy use (B6)

The use stage is declared for 15 years

Name	Value	Unit
Days per year in use	365	days
On mode per day	1	hours
Idle mode per day	23	hours
On mode power	20	W
Idle mode power	3	W
Electricity consumption (per 1 year)	32,485	kWh

#### End of life (C1-C4)

Name	Value	Unit
Collected separately	29.1	kg
Recycling	4.8	kg
Energy recovery	0.838	kg
Landfilling	23.5	kg
Transport to waste management	50	km

The product is disassembled in a recycling process. Material recycling is then assumed for the metals and electronics. The plastic components are assumed to be incinerated with energy recovery. Glass and electro mechanics (e.g. cable, connector) are landfilled. Region for the End of Life is: Global.

**Reuse, recovery and/or recycling potentials (D), relevant scenario information**

Collection rate is 100%.

## LCA: Results

### DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; ND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	ND	X	MNR	MNR	MNR	X	ND	X	X	X	X	X

### RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 piece Charon 20 Half-Height Swing Door

Core Indicator	Unit	A1-A3	A4	A5	B2	B6	C1	C2	C3	C4	D
GWP-total	[kg CO <sub>2</sub> -Eq.]	8.80E+1	2.83E-1	8.81E+0	0.00E+0	1.97E+2	0.00E+0	1.28E-1	2.13E+0	4.84E-9	-3.09E+1
GWP-fossil	[kg CO <sub>2</sub> -Eq.]	9.76E+1	2.70E-1	2.21E-1	0.00E+0	1.96E+2	0.00E+0	1.23E-1	2.13E+0	3.00E-3	-3.08E+1
GWP-biogenic	[kg CO <sub>2</sub> -Eq.]	-9.63E+0	1.20E-2	8.58E+0	0.00E+0	6.54E-1	0.00E+0	6.00E-3	4.96E-5	3.71E-1	-6.20E-2
GWP-luluc	[kg CO <sub>2</sub> -Eq.]	8.41E-2	6.43E-6	1.45E-4	0.00E+0	2.84E-1	0.00E+0	2.92E-6	1.20E-4	3.21E-11	-1.40E-2
ODP	[kg CFC11-Eq.]	1.78E-9	2.85E-17	1.59E-15	0.00E+0	4.32E-12	0.00E+0	1.29E-17	1.07E-15	3.25E-9	-1.81E-10
AP	[mol H <sup>+</sup> -Eq.]	6.11E-1	2.70E-4	2.00E-3	0.00E+0	4.33E-1	0.00E+0	1.23E-4	3.79E-4	2.96E-1	-1.33E-1
EP-freshwater	[kg P-Eq.]	3.27E-4	5.78E-8	3.10E-7	0.00E+0	5.24E-4	0.00E+0	2.62E-8	1.71E-7	6.11E-7	-1.94E-5
EP-marine	[kg N-Eq.]	1.01E-1	8.60E-5	8.90E-4	0.00E+0	9.60E-2	0.00E+0	3.90E-5	8.55E-5	6.57E-4	-1.70E-2
EP-terrestrial	[mol N-Eq.]	1.11E+0	9.56E-4	1.10E-2	0.00E+0	1.01E+0	0.00E+0	4.34E-4	2.00E-3	7.00E-3	-1.82E-1
POCP	[kg NMVOC-Eq.]	2.67E-1	2.43E-4	2.00E-3	0.00E+0	2.64E-1	0.00E+0	1.10E-4	2.37E-4	2.00E-3	-5.20E-2
ADPE	[kg Sb-Eq.]	5.01E-3	8.10E-9	2.51E-8	0.00E+0	5.68E-5	0.00E+0	3.67E-9	1.47E-8	3.20E-8	-7.41E-4
ADPF	[MJ]	1.25E+3	3.83E+0	2.78E+0	0.00E+0	3.45E+3	0.00E+0	1.74E+0	9.87E-1	4.67E+0	-4.44E+2
WDP	[m <sup>3</sup> world-Eq deprived]	1.80E+1	5.29E-4	1.09E+0	0.00E+0	4.28E+1	0.00E+0	2.40E-4	2.18E-1	3.70E-2	-3.11E+0

Caption: GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; WDP = Water (user) deprivation potential

### RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 piece Charon 20 Half-Height Swing Door

Indicator	Unit	A1-A3	A4	A5	B2	B6	C1	C2	C3	C4	D
PERE	[MJ]	6.39E+2	1.20E-2	7.50E+1	0.00E+0	1.53E+3	0.00E+0	5.00E-3	2.57E-1	6.12E-1	-1.80E+2
PERM	[MJ]	7.45E+1	0.00E+0	-7.45E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PERT	[MJ]	7.14E+2	1.20E-2	5.05E-1	0.00E+0	1.53E+3	0.00E+0	5.00E-3	2.57E-1	6.12E-1	-1.80E+2
PENRE	[MJ]	1.22E+3	3.83E+0	2.78E+0	0.00E+0	3.45E+3	0.00E+0	1.74E+0	3.06E+1	4.67E+0	-4.44E+2
PENRM	[MJ]	2.96E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-2.96E+1	0.00E+0	0.00E+0
PENRT	[MJ]	1.25E+3	3.83E+0	2.78E+0	0.00E+0	3.45E+3	0.00E+0	1.74E+0	9.88E-1	4.67E+0	-4.44E+2
SM	[kg]	4.52E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
RSF	[MJ]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NRSF	[MJ]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
FW	[m <sup>3</sup> ]	8.65E-1	2.17E-5	2.60E-2	0.00E+0	1.77E+0	0.00E+0	9.83E-6	5.00E-3	1.00E-3	-3.51E-1

Caption: PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

### RESULTS OF THE LCA - WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 piece Charon 20 Half-Height Swing Door

Indicator	Unit	A1-A3	A4	A5	B2	B6	C1	C2	C3	C4	D
HWD	[kg]	1.76E-5	3.72E-10	4.10E-9	0.00E+0	1.43E-6	0.00E+0	1.69E-10	3.76E-9	7.12E-8	-1.83E-7
NHWD	[kg]	1.50E+1	3.92E-4	2.76E-1	0.00E+0	2.45E+0	0.00E+0	1.78E-4	2.21E-1	2.35E+1	-6.64E+0
RWD	[kg]	5.20E-2	4.12E-6	1.46E-4	0.00E+0	5.23E-1	0.00E+0	1.87E-6	3.66E-5	5.32E-5	-4.20E-2
CRU	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.01E+0	0.00E+0	0.00E+0
MER	[kg]	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EEE	[MJ]	0.00E+0	0.00E+0	1.33E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EET	[MJ]	0.00E+0	0.00E+0	2.42E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0

Caption: HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy

**RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional:  
1 piece Charon 20 Half-Height Swing Door**

Indicator	Unit	A1-A3	A4	A5	B2	B6	C1	C2	C3	C4	D
PM	[Disease Incidence]	5.48E-6	1.42E-9	1.37E-8	0.00E+0	3.63E-6	0.00E+0	6.45E-10	4.84E-9	3.16E-8	-1.97E-6
IRP	[kBq U235-Eq]	8.76E+0	5.88E-4	2.30E-2	0.00E+0	8.59E+1	0.00E+0	2.67E-4	3.00E-3	5.00E-3	-8.31E+0
ETP-fw	[CTUe]	9.52E+2	2.72E+0	1.32E+0	0.00E+0	1.48E+3	0.00E+0	1.23E+0	3.71E-1	2.67E+0	-1.65E+2
HTP-c	[CTUh]	1.28E-6	5.11E-11	6.98E-11	0.00E+0	4.08E-8	0.00E+0	2.32E-11	3.21E-11	3.95E-10	-1.48E-8
HTP-nc	[CTUh]	3.72E-6	2.18E-9	3.02E-9	0.00E+0	1.50E-6	0.00E+0	9.91E-10	3.25E-9	4.36E-8	-2.26E-7
SQP	[-]	1.46E+3	1.00E-2	7.37E-1	0.00E+0	1.10E+3	0.00E+0	4.00E-3	2.96E-1	9.73E-1	-2.86E+1
Caption	PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = Potential soil quality index										

Disclaimer 1 – for the indicator “Potential Human exposure efficiency relative to U235”. This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure or radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – for the indicators “abiotic depletion potential for non-fossil resources”, “abiotic depletion potential for fossil resources”, “water (user) deprivation potential, deprivation-weighted water consumption”, “potential comparative toxic unit for ecosystems”, “potential comparative toxic unit for humans – cancerogenic”, “Potential comparative toxic unit for humans - not cancerogenic”, “potential soil quality index”. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high as there is limited experience with the indicator.

## References

### Machinery Directive 2006/42/EC

DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 May 2006 on machinery, and amending Directive 95/16/EC

### Electromagnetic Compatibility Directive 2014/30/EU

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

### ROHS2 Directive

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

### DIN EN ISO 12100

DIN EN ISO 12100:2011-03 Safety of machinery

### DIN EN ISO 13849- 1

DIN EN ISO 13849- 1:2016-06 Safety of machinery

### DIN EN ISO 13849- 2

DIN EN ISO 13849- 2:2013-02 Safety of machinery

### ISO 14025

DIN EN ISO 14025:2011-10, Environmental labels and declarations — Type III environmental declarations — Principles and procedures.

### EN 15804

EN 15804+A2: 2019+AC:2021, Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

### DIN EN 16005

DIN EN 16005: 2013-01 and Amendment 2015-10 Power operated pedestrian doorsets

### DIN EN 60335-2

DIN EN 60335-2-103: 2016-05 Household and similar electrical appliances

### DIN EN 61000-3-2

DIN EN 61000-3-2:2015-03 Electromagnetic compatibility (EMC)

### DIN EN 61000-6-2

DIN EN 61000-6-2: 2005 and Amendment:2011 Electromagnetic Compatibility (EMC)

### DIN EN 61000-6-3

DIN EN 61000-6-3:2007 and A1:2011 Electromagnetic Compatibility (EMC)

### REACH

Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

### ISO 9001

ISO 9001:2015-09 Quality management systems - Requirements

## **European Waste Catalogue (EWC)**

COMMISSION DECISION of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council

## **Further References**

### **IBU 2021**

General Instructions for the EPD programme of Institut Bauen und Umwelt e.V. Version 2.0, Berlin: Institut Bauen und Umwelt e.V., 2021. [www.ibu-epd.com](http://www.ibu-epd.com)

### **GaBi ts software**

Sphera Solutions GmbH Gabi Software System and Database for Life Cycle Engineering 1992-2020 Version 10.0.0.71 University of Stuttgart Leinfelden-Echterdingen

## **GaBi ts documentation**

GaBi life cycle inventory data documentation ([https://www.gabisoftware.com/support/gabi/gabidatabase\[1\]2020-lci-documentation/](https://www.gabisoftware.com/support/gabi/gabidatabase[1]2020-lci-documentation/)).

## **LCA-tool dormakaba**

LCA tool, ESC (Entrance System Control)  
Tool No.: IBU-DOR-202109-LT1-EN  
Developed by Sphera Solutions GmbH

## **PCR Part A**

PCR – Part A: Calculation Rules for the Life Cycle Assessment and Requirements on the Project Report according to EN 15804+A2:2019, Version 1.0, Institut Bauen und Umwelt e.V., [www.ibu-epd.com](http://www.ibu-epd.com), 2020.

## **PCR Part B**

PCR – Part B: Requirements on the EPD for electronic and physical Access Control Systems, version 1.2, Institut Bauen und Umwelt e.V., [www.ibu-epd.com](http://www.ibu-epd.com), 2019.



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