BUILDING PRODUCT DECLARATION BPD 3

in compliance with the guidelines of the Ecocycle Council, June 2007

1 Basic data

Product identification			Document
Product name Flex-Geko	Product no/ID designation Fan Coil Units Flex-Geko**:**		Product group **Fan-coils**
☒ New declaration ☐ Revised declaration	**In the case of a revised declaration**		
	Has the product been changed?		The change relates to
	☒ No	☐ Yes	Changed product can be identified by
Drawn up/revised on (date) 09/2018			Inspected without revision on (date)

Other information:

Flex-Geko are air-conditioning units, size 1 to 8 with MATRIX 500, 2000, 3000, 4000 regulation and CMS, CMT, CET controls, type designation GFXX.XXXX.XXXXX including electro/water/casing/air accessories, type designation DX.XXX.XX / VGF.XXXXXXX.XX / ZGF.XXXXX. Flex-Geko are chilled water/hot water fan-coils for offices, residential applications and general civil use.

Units are equipped with one water coil (2-pipes pattern) or two water coils (4-pipes pattern) for the purpose of full recirculated air conditioning. Air is mechanically blown towards occupied space by the mean of a centrifugal fan. Unit is enclosed into a metal casing which is normally exposed and laid on floor against perimetral walls. Fan is provided with a 3 or 5 steps velocity motor which modifies fan speed and flowrate according to the actual space needs. Motor can be controlled by a BMS or a direct control loop in response to temperature signal emitted by space thermostat.

2 Supplier information

Company name Fläktgroup			Company reg. no/DUNS no : 366931699	
Address Fläktgroup Czech Republic a.s. Slovanská 781, 463 12 Liberec XXV Czech Rep.			Contact person Marcel Grumann Telephone +49 2325 468 312	
Website: www.dencohappel.com			E-mail Marcel.Grumann@flakgroup.com	
Does the company have an environmental management system?			☒Yes	☐ No
The company possesses certification in compliance with	☒ISO 9000	☒ISO 14000	☒ Other	If "other", please specify: AQAP 2110
Other information:				

3 Product information

Country of final manufacture Czech Rep.			If country cannot be stated, please state why		
Area of use **Air conditioning of offices, residential and general civil use**					
Is there a Safety Data Sheet for this product?			☐ Not relevant	☒ Yes	☐ No
In accordance with the regulations of the Swedish Chemicals Agency, please state:		Classification Labelling		☒ Not relevant	
Is the product registered in BASTA?				☐ Yes	☒ No
Has the product been eco-labelled?	☒ Criteria not found	☐ Yes	☐ No	If "yes", please specify:	
Is there a Type III environmental declaration for the product?				☐ Yes	☒ No
Other information: **In relation to Safety Data Sheet, please see the enclosed Installation and Use and Maintenance Manual** **Fan-coils are Compliant to applicable UE Directives (see References)**					

4 Contents

At the time of delivery, the product comprises the following parts/components, with the chemical composition stated:

Constituent materials/ components	Constituent substances	Weight %	EC no/CAS number (or alloy)	Classification	Comment
CASING	ABS	4%	9003-56-9		
	Carbon Steel	<1%	68467-81-2		
	Galvanized Steel	28%	UNI EN 10327-DX51D		
	Plastic PVC coated Steel	20%	UNI EN 10346-DX51D		
	Polyammide PA6 GF15	<1%	63428-83-1		
	Polypropilene	<1%	9003-07-0		
	Polycarbonate	<1%	9002-88-4		
	Polythene Foam Closed Cells	<1%	9009-54-5		
	Polycarbonate+ ABS	<1%	9002-88-4		
COILS	Galvanized Steel	2%	UNI EN 10327 DX51D		
	Aluminum	4%	7429-90-5		
	Copper	5%	7440-50-8		
	Nylon	<1%	32131-17-2		
	Stainless Steel	2%	65997-19-5 AISI 430		
ELECTRICAL ELEMENTS	Polyammide PA6 GF15	<1%	63428-83-1		
	Polyammide PA66	<1%	63428-83-1		
FAN & MOTOR	Aluminum	6%	7429-90-5		
	Carbon Steel	8%	68467-81-2		
	Copper	6%	7440-50-8		
	Plastic	5%	9003-07-0		
FILTER	Galvanized Steel	1%	UNI EN 10327 DX51D		
	Polypropilene	1%	9003-07-0		

SCREWS AND NUTS	**Brass**	<1%	**86376-49-0**		
	Galvanized Steel	<1%	**68467-81-2**		
TOT WEIGHT		**17 – 62 kg**			

Other information: **All intermediate goods and raw materials suppliers are compliant to RoHS Directive**

If the chemical composition of the product after it is built in differs from that at the time of delivery, the content of the **finished built in product** should be given here. If the content is unchanged, no data need be given in the following table.

Constituent materials/ components	Constituent substances	Weight % or g	EG no/ CAS no (or alloy)	Classifi-cation	Comments

Other information:

5 Production phase

Resource utilisation and environmental impact during production of the item is reported in one of the following ways:

☒ 1) Inflows (goods, intermediate goods, energy etc) for the registered product into the **manufacturing unit**, and the outflows (emissions and residual products) from it, i.e. from "gate-to-gate".

☐ 2) All inflows and outflows from the extraction of raw materials to finished products i.e. "cradle-to-gate".

☐ 3) Other limitation. State what:

The report relates to unit of product	☐ Reported product	☒ The product's product group	☐ The product's production unit

Indicate **raw materials and intermediate goods** used in the manufacture of the product		☐ Not relevant
Raw material/intermediate goods	Quantity and unit	Comments

Indicate **recycled materials** used in the manufacture of the product		☐ Not relevant
Type of material	Quantity and unit	Comments
Aluminum	**26%**	**Weighted average between values declared by suppliers**
Steel	**48%**	**Weighted average between values declared by suppliers**

Enter the **energy** used in the manufacture of the product or its component parts		☐ Not relevant
Type of energy	Quantity and unit	Comments
Electricity	**4 to 5 kWh**	**Motorized Assembly**

Enter the **transportation** used in the manufacture of the product or its component parts		☐ Not relevant
Type of transportation	Proportion %	Comments
TRUCKS	100%	

Enter the **emissions to air, water or soil** from the manufacture of the product or its component parts		☒ Not relevant
Type of emission	Quantity and unit	Comments

Enter the **residual products** from the manufacture of the product or its component parts	☐ Not relevant

Residual product	Waste code	Quantity	Proportion recycled		Comments
			Material recycled %	Energy recycled %	
COPPER	**17 04 01**	**0,06-0,1 kg**	**100%**		**Scraps**
ALUMINUM	**17 04 02**	**0,3-0,5 kg**	**100%**		**Scraps**
Is there a description of the data accuracy for the manufacturing data?	☐ Yes	☒ No	If "yes", please specify:		
Other information: **Metal scraps are sold to recycling companies. It is under recycling companies discretion whether material is re-melted only or even energy is recovered.**					

6 Distribution of finished product

Does the supplier put into practice a system for returning load carriers for the product?	☐ Not relevant	☒ Yes	☐ No
Does the supplier put into practice any systems involving multi-use packaging for the product?	☐ Not relevant	☐ Yes	☒ No
Does the supplier take back packaging for the product?	☐ Not relevant	☒ Yes	☐ No
Is the supplier affiliated to REPA?	☒ Not relevant	☐ Yes	☐ No
Other information:			

7 Construction phase

Are there any special requirements for the product during storage?	☐ Not relevant	☒ Yes	☐ No	If "yes", please specify: **Indoor storage, room temperature, protect against humidity. Leave product into original package until it is going to be installed**
Are there any special requirements for adjacent building products because of this product?	☐ Not relevant	☐ Yes	☒ No	If "yes", please specify:
Other information:				

8 Usage phase

Does the product involve any special requirements for intermediate goods regarding operation and maintenance?		☒ Yes	☐ No	If "yes", please specify: **See Installation and User Manual**		
Does the product have any special energy supply requirements for operation?		☒ Yes	☐ No	If "yes", please specify: **HW/CW and electricity**		
Estimated technical service life for the product is to be entered according to one of the following options, a) or b):						
a) Reference service life estimated as being approx.	☐ 5 years	☒ 10 years	☐ 15 years	☐ 25 years	☐ >50 years	Comments: **See "Other information"**
b) Reference service life estimated to be in the interval of 8 years.						
Other information: **Low voltage electric input for single-phase electric motor** **Life duration is based on experience under reference conditions such as allowable operative maximum fluid temperature/pressure and ambient conditions specified into Installation and User Manual**						

9 Demolition

Is the product ready for disassembly (taking apart)?	☐ Not relevant	☒ Yes	☐ No	If "yes", please specify: **Product can be easily disassembled into major components**
Does the product require any special measures to protect health and environment during demolition/disassembly?	☒ Not relevant	☐ Yes	☐ No	If "yes", please specify:
Other information:				

10 Waste management

Is it possible to re-use all or parts of the product?	☐ Not relevant	☒ Yes	☐ No	If "yes", please specify: **Unit can be dismounted and re-used elsewhere.**
Is it possible to recycle materials for all or parts of the product?	☐ Not relevant	☒ Yes	☐ No	If "yes", please specify: **Steel, Aluminum, Plastics, Copper**
Is it possible to recycle energy for all or parts of the product?	☒ Not relevant	☐ Yes	☐ No	If "yes", please specify:
Does the supplier have any restrictions and recommendations for re-use, materials or energy recycling or waste disposal?	☒ Not relevant	☐ Yes	☐ No	If "yes", please specify:

Enter the waste code for the **supplied** product : **Mixed Waste (non-hazardous) 20 03 01**

Whatever disassembled:

Water heater elements 17 04 01 - 17 04 05

Mechanical Parts 16 01 17

Plastic 20 01 39

Electric Motors 16 01 22

Is the **supplied** product classed as hazardous waste?	☐ Yes	☒ No

If the chemical composition of the product differs after having been built in from that which it had at the time of delivery, meaning that another waste code is given to the finished **built in** product, then this should be entered here. If it is unchanged, the following details can be omitted.

Enter the waste code for the **built in** product

Is the **built in** product classed as hazardous waste?	☐ Yes	☒ No

Data in fields highlighted in green are requriements in compliance with the Ecocycle Council guidelines.

Other information:

11 Indoor environment (To add a new green row, select and copy an entire empty row and paste it in)

When used as intended, the product gives off the following emissions:			☒ The product does not have any emissions	
Type of emission	**Quantity [µg/m²h] or [mg/m³h]**		**Method of measurement**	**Comments**
	4 weeks	**26 weeks**		
Can the product itself give rise to any noise?			☐ Not relevant	☒ Yes ☐ No
Value **Lp Range:** **53(max speed,max size)** **21(min speed, min size)**	Unit **dB (A)**		Method of measurement: **Reverberation acoustic chamber**	
Can the product give rise to electrical fields?			☐ Not relevant	☐ Yes ☒ No
Value	Unit		Method of measurement **EMC Compliant**	
Can the product give rise to magnetic fields?			☐ Not relevant	☐ Yes ☒ No
Value	Unit		Method of measurement **EMC Compliant**	
Other information:				

References

Declared Compliances: EN ISO 14120:2016, EN 1037+A1:2009, EN ISO 13732-1:2009, EN ISO 13857:2008, EN ISO 12100:2011, EN 307:1999, ISO 5149:1998, EN 60335-1 ed.2:2003, EN 60335-2-30 ed.2:2004, EN 60335-2-40 ed.2:2004, EN 55014-1, EN61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3, EN 55014-2, Directives: 2006/42/EC, 2009/125/EC, 2011/65/EU, 2014/35/EU, 2014/30/EU

Appendices

See instruction for installation, use and maintenance