



Environmental Product Declaration

Product	Type of equipment / Product No.	GDB131.1E(lowest fire load)	Damper Actuator; 5Nm, 24V
		GDE164.1P (DA-044N024PA2XP) (highest fire load)	Damper Actuator; 44lb-in, NSR, 24V, 0-10V, Adj, 2 Sw
		GLB111.1E/MO	Damper Actuator; 10Nm w/ Modbus Cable Adapter
		GDB181.1E/KN	Damper Actuator; 5Nm, 24V; VAV, KONNEX bus
	Product line, Product range	Damper Actuator / OpenAirTM	
Process control	Siemens Schweiz AG		
	Building Technologies Division		
	Theilerstrasse 1a		
	CH-6300 Zug		
	Management System	since	by
	ISO 9001 (Quality)	22-July-1986	SQS
	ISO 14001 (Environment)	20-October-1998	SQS
Environmentally compatible product design	Product responsibility of Siemens covers the entire product life cycle. Siemens already assesses, avoids and minimizes the environmental impact of its products with respect to production, procurement, sales, use, services and disposal during the product and process planning phases by complying with Siemens EP Standard (former SN 36350) "Specifications on Environmentally Compatible Product and System Design".		
Product use	Typical energy consumption	variant *) see below Energy consumption is between 1 and 3 kWh/a (depending mainly on running time of the actuator)	
	Maintenance	Not necessary None	
Risk of fire	Fire protection according to	EN 60730 & UL 873	
	Fire load	variant *) see below	
Packaging	20-PAP Corrugated fibreboard	Cardboard & Paper	variant
	22-PAP Paper	Mounting instruction	variant
	Notes on disposal	One-way, recyclable	
Materials	Total weight of device	variant *) see below The total weight of a device may deviate from the total of the weights of all individual components due to rounding.	
	Plastics	POM; low-halogen	Various plastic parts variant

	ABS+PC; GF 10%; halogenated	Housing	variant
	ABS; low-halogen	Cover; Fork Manual Adjustment	variant
	PA66; AF 20%; low-halogen	Various plastic parts	variant
	TPC-ET; low-halogen	Gear Wheel 8/9	variant
	PC; halogenated	Various plastic parts	variant
	PC; GF 10%; low-halogen	Various plastic parts	variant
	TPV-(EPDM+PP); low-halogen	Various plastic parts	variant
	PA6; GF 30%; low-halogen	Connection Nipple VAV	variant
	PA6; GF 15%; low-halogen	Clutch Sensor VAV	variant
	Q Silicone rubber	Silicone tubes	variant
	NBR	O-rings	variant
Metals	Steel	Various steel parts	variant
Others	Steel, Copper, Plastics	Motors	variant
	PVC	Cable	variant
	Copper, Plastic, Steel, Silver	Microswitch	variant
PCBAs (Printed Circuit Board assembled)	FR4; TBBA; solder SnAgCu	PCBA	variant

***Variant parts list**

	GDB131.1E (lowest fire load)	GDE164.1P (DA-044N024PA2XP) (highest fire load)	GLB111.1E/MO	GDB181.1E/KN
[g]				
Total weight of device	599.2	704.5	651.9	685.6
Various plastic parts	12.1	24.9	11.6	14.8
Housing	66.9	67.4	66.9	66.9
Cover; Fork Manual Adjustment	46.4	47.2	40.7	40.1
Various plastic parts	9.4	9.4	10.6	9.4
Various plastic parts			0.6	0.6
Various plastic parts		13.8	0.5	0.5
Various plastic parts		0.3	0.5	0.5
Connection Nipple VAV				3.6
Clutch Sensor VAV				2.3
Silicone tubes				1.6
O-rings				0.1
Various steel parts	303.0	300.4	305.1	310.9
Motors	83.0	80.5	83.0	83.0
Cable	71.0	130.4	104.0	113.0
Microswitch		4.5		
PCBA	6.0	24.4	27.0	37.0
Fire load [MJ]	7	9	8	8
Typical energy consumption [kWh/a]	0.88	1.76	2.19	2.19
Packaging				
Cardboard & Paper [g]	56.0	147.8	56.0	56.0
Mounting instruction		18.5		

Disposal



The symbol or any other national label indicates the product, its packaging and where applicable, any removed batteries may not be disposed as part of normal waste. Delete any personal data and dispose of the item via separate collection and recycling facilities in accordance with local and national regulations. For additional details, refer to www.siemens.com/bt/disposal.

For country-specific requirements regarding further disposal information:
<http://www.siemens.com/download?A6V13734633>

Comments

EU-directive 2011/65/EU (RoHS)

The device does not contain substances in concentrations and applications banned under the EU RoHS Directive, including the 4 phthalates added to Annex II in 2015.

Regulation (EC) No. 1907/2006 (REACH)

The device contains the following substances of the candidate list according to Article 59 (1, 10) of the regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) in concentrations above 0.1 % w/w. Contained REACH candidate substances, including those which will become known at a later date, are listed on the delivery note.

Lead, CAS-Nr.7439-92-1; Silicic acid (H₂SiO₅), barium salt (1:1), lead-doped, CAS-Nr. 68784-75-8; Diboron trioxide, CAS-Nr.1303-86-2; 4,4'-isopropylidenediphenol (Bisphenol A, BPA), CAS-Nr.80-05-7; Lead titanium trioxide, CAS-Nr.12060-00-3; Cobalt dichloride, CAS-Nr.7646-79-9; 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol, CAS-Nr.119-47-1

(Status according to the creation date of this document.)

The device is low-halogen with exception of:

PVC cable; PCB (TBBA); Housing; Various plastic parts (below 1g)

Further notes and comments:

SPECIAL COMPONENTS:

PVC POWER CABLE: 1.5m => +35g / 2.5m => +105g / 5m => +280g

PVC OPT. POTENTIOMETER CABLE: 1.5m => +35g / 2.5m => +105g / 5m => +280g

PVC SWITCHES CABLE: 1.5m => +50g / 2.5m => +150g / 5m => +400g

Legal Disclaimer: This declaration is for information purpose only.

This Environmental Product Declaration does not constitute a guarantee of the composition of a product, neither does it guarantee that the product will retain a particular composition for a particular period.

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

Please contact your local Siemens branch office to get further information on environmental aspects and disposal.