

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

## Natural smoke and heat exhaust ventilator

for fire safety use in natural smoke and heat exhaust systems, with specification and performance as specified on page 2 in this certificate.

### Product name: GGL -K-- ----40, GGU -K-- ----40

placed on the market under the name or trademark of

#### Velux A/S

Ådalsvej 99

DK-2970 Hørsholm, Denmark

and produced in the manufacturing plants

A/S Østbirk Bygningsindustri, Ryvej 21, DK-8752 Østbirk, Denmark

JTJ Sonnerborn Industrie GmbH, Am Arzbach 13, DE-99869 Sonnerborn, Germany

Thyregod Bygningsindustri A/S, Nordre Ringvej 9, DK-7323 Give, Denmark

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in annex ZA of the standard

### EN 12101-2:2003

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

### constancy of performance of the construction product.

This certificate was first issued on 2015-03-12 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Issued by notified body 0402

The validity of this certificate can be verified on our website.

Johan Åkesson  
Product Certification Manager

Martin Tillander  
Project Manager

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## Specification

Dual purpose smoke and heat exhaust ventilator, intended for comfort ventilation as well as smoke and heat exhaust ventilation under fire conditions. The opening is type B.

The frame and sash of the NSHEV is a normal roof window, the sash have up to 13 mm glass in total. The flap has a pivot action and is horizontally pivoted. The NSHEV can be equipped with and without wind deflectors.

The NSHEV is for roof and wall mounting and is tested with and without side wind.

Length and width (throat):	See values in size specifications table below
Installation angle:	15° - 90°
Wind deflector (if equipped):	KFD 0100
Opening angle (fire opening):	85°
Opening mechanism:	Electrical chain actuator and two gas jacks
Opening mechanism, supplier and type:	Velux A/S, 3FM FK04 WW, 3FM FK06 WW, 3FM FK08 WW

Necessary characteristics of the external energy source: 24V, 1,8A

## Size specification

Size (GGL and GGU)			Geometric area, $A_v$  $m^2$	Aerodynamic free area, $A_a$			
Size code	Height m	Width m		Roof mounted with KFD 0100 $m^2$	Roof mounted without KFD 0100 $m^2$	Wall mounted with KFD 0100 $m^2$	Wall mounted without KFD 0100 $m^2$
MK04	0.90	0.70	0.63	0.36	0.19	0.42	0.41
MK06	1.10	0.70	0.77	0.46	0.29	0.51	0.52
MK08	1.32	0.70	0.92	0.59	0.43	0.61	0.63
PK04	0.90	0.86	0.77	0.42	0.20	0.51	0.52
PK06	1.10	0.86	0.95	0.53	0.30	0.61	0.62
PK08	1.32	0.86	1.14	0.68	0.46	0.73	0.70
SK04	0.90	1.06	0.95	0.49	0.19	0.62	0.62
SK06	1.10	1.06	1.17	0.61	0.28	0.75	0.72
SK08	1.32	1.06	1.40	0.77	0.44	0.88	0.88
UK04	0.90	1.26	1.13	0.54	0.16	0.73	0.70
UK06	1.10	1.26	1.39	0.68	0.25	0.87	0.87
UK08	1.32	1.26	1.67	0.83	0.38	1.05	1.06

## Performance

Aerodynamic free area	See values in size specifications table above
Reliability	Re 1000
Snow load	SL 800
Low ambient temperature	T(-15)
Wind load	WL 3000
Wind load GGU 40 - UK08	WL 1500
Resistance to heat	B 300
Reaction to fire	E



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