# 2022 09:47:18 VRW Roof windows INTEGRA en-HQ - Approved

# VELUX INTEGRA® electric roof window GGU



**Glazing 76F** 







The VELUX INTEGRA® electric, centre-pivot roof window GGU is a wired solution that operates remotely using a wall switch – perfect for both in- and out-of-reach installations. The roof window has an integrated motor and a rain sensor that automatically closes the window if it rains. Moisture-resistance makes it ideal for kitchens and bathrooms.

- Rain sensor automatically closes the window in the event of rain.
- Mains-powered to allow for complete, seamless integration of your roof window into your home.
- The motor is hidden in the top cover and totally invisible from view.
- Easily control your roof window with the wireless wall switch that offers simple open/close/stop functionality.
- Entrapment control detects objects in the path of the window.
- Silent motor keeps rooms quiet for sleeping children or simply for improved well-being.
- Compatible with VELUX ACTIVE with NETATMO for a better indoor climate with sensor-based ventilation. Remote controlled via smartphone or voice.







# Application guidance

The window can be installed in roof pitches between 15° and 90° to the horizontal.



VELUX INTEGRA® remote-controlled roof windows are easily operated by a wireless wall switch, providing fresh air at the touch of a button. Perfect for both within-reach and out-of-reach applications where extra comfort and convenient operation is required. Available in mains- and solar-powered versions. For optimum daylight, choose larger windows for lower roof pitches.

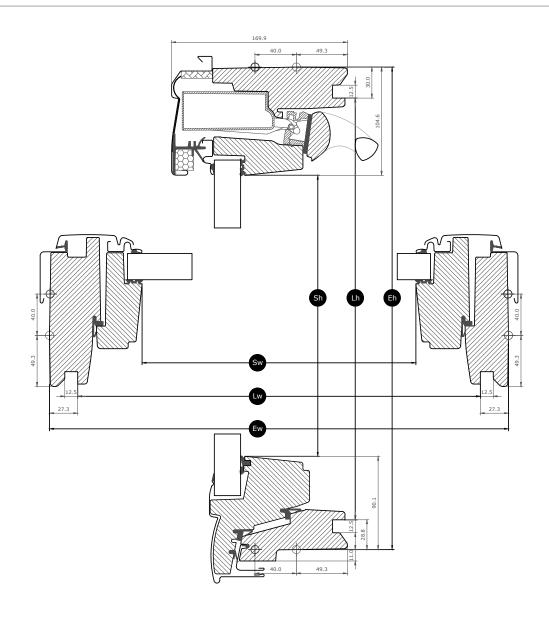
# Available sizes and daylight area

	550	780	1140	1340
778	GGU CK02 (0.22)			
826	GGU CK04 (0.29)	GGU MK04 (0.47)		GGU UKO4 (0.91)
1178		GGU MK06 (0.59)	GGU SK06 (0.95)	
1398		GGU MK08 (0.72)	GGU SK08 (1.16)	GGU UK08 (1.40)

All measurements are in mm.  $\,$  ( ) = Effective daylight area,  $m^2$ 



# Cross section dimensions



Width	1	CK	MK	SK	UK
Sw	Sash aperture width	371	601	961	1161
Lw	Distance between lining grooves, width	495	725	1085	1285
Ew	Exterior frame width	550	780	1140	1340

Height		02	04	06	08
Sh	Sash aperture height	584	784	984	1204
Lh	Distance between lining grooves, height	719	919	1119	1339
Eh	Exterior frame height	778	978	1178	1398



# Glazing features

#### Glazing 76F



*.	<b>Heat insulation</b> The low energy glazing unit reduces heat loss through the window and enhanced indoor comfort.	U <sub>g</sub> = 1.0
-%°C	Solar gain In colder climates and in rooms with large window areas, solar gain provides a better indoor climate during winter periods.	g = 0.30
-\\\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\	<b>Solar protection</b> In warm climates and in rooms with large window areas, a sun protective glazing unit provides a better indoor climate during summer periods.	***
\$\frac{1}{2}\right	Security Thicker laminated inner glass increases resistance to manual attack (burglary).	N/A
/::O	Safety lamination Prevents glass from falling into the room in case of accidental breakage.	J
	<b>Toughened glass</b> Adds strength to the outer glass surface to protect from wayward balls and extreme weather such as heavy storms and hail.	J
-\\\\-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	UV filter Protects your interior furnishings from fading due to the sun's harmful UV rays.	J

#### Glazing structure

Glazing unit	Composition (from inside to outside)
Double-glazed	6.4 mm laminated float glass - 16 mm Argon - 4 mm toughened glass

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# Technical values for the window

Overview of technical values for the product, covering among other, CE marking in accordance with EN 14351-2.

Window characteristics	Performance
Thermal transmittance (U-value)	1.3 W/(m2K)
Light transmittance (τ,ν)	0.62
Total solar energy transmittance (g-value)	0.30
Sound insulation	35(-1;-3)
Air permeability	4 (PK10: 3)
External fire performance - British	AC
External fire performance - European	npd
Impact resistance	3
Load-bearing capacity of safety devices	V
Reaction to fire	D-s2,d2
Resistance to snow load	See glazing composition
Resistance to wind load	C3 (>SK08: NPD)
Water tightness	E900

NPD: No Performance Determined



#### Visible features



#### Window operator, electric

Fully-integrated mains-powered motor is hidden from view in the top of the frame and is operated by remote control.



#### Integrated rain sensor

The window closes automatically in the event of rain or is prevented from opening thanks to the rain sensor.



#### Ventilation flap, polyurethane

The full-width ventilation flap can be used for ventilation even with a closed window.



#### Blind bracket, electric

Easily install electric blinds on the window without the need for extra tools. Simply click on the blinds in the pre-fitted brackets and they are connected for remote control.



#### Frame hinge, centre-pivot, side

Durable hinge design allows for reliable operation and enables the sash to be rotated for easy cleaning of the outer glass.



#### Barrel bolt

The barrel bolt can be placed into the integrated barrel bolt bushing to secure the window for cleaning of outer glass surface or for safe ventilation.



#### **Excellent insulation**

High performance insulation materials in the window construction and thermally modified timber core incease the energy efficiency of the window.



VELUX | GGU MK08 | 0070 | 49BB12

#### Data plate

Every VELUX roof window has a unique data plate with information that can be used to look up CE marking documentation, when purchasing accessories or in case of service or replacement.



# Interior finish

Material Description	White maintenance-free Finished with polyurethane lacquer.
Colour code NCS, inner surface	S 0500-N
Colour code nearest RAL, inner surface	9003

# Exterior covers

Material Description	Aluminium, dark grey Dark grey
Colour code NCS, outer surface	S 7500-N
Colour code nearest RAL, outer surface	7043

# Cleaning and maintenance



To clean the outer glass surface from the inside, rotate sash manually and secure in cleaning position with barrel bolts.



VELUX repair and maintenance kits are

# Guarantee period



# Flashings and installation products



#### **Flashings**

Install the VELUX roof window in virtually any roofing material by using genuine VELUX flashing solutions. Our flashings are designed specifically for the exact size and shape of the roof windows to create perfect, watertight fit. Flashings can also be used to combine multiple roof windows.

#### **Installation products**

Ensure a proper installation and an air- and watertight connection between the window and roof with VELUX installation products. All installation products are designed to perfectly fit the roof window for a reliable and durable result.

### Blinds, awnings and shutters

Complete the VELUX roof window installation with roller shutters and awning blinds for heat protection and interior blinds for light dimming, blackout and insect protection. Choose from a wide range of manually operated or remote-controlled products that are made to fit the particular window type and size. Please contact your local VELUX sales company for more details about compatibility.

# VELUX ACTIVE with NETATMO compatible



Compatible with VELUX ACTIVE with NETATMO for a better indoor climate with sensor-based ventilation. Remote controlled via smartphone or voice.



# Further information

We reserve the right to make technical changes.

For more information on our products, please visit https://velux.com.



#### Technical information

**VELUX INTEGRA® electric** roof window GGU

Installation and use

The window is classified in protection class IP44. The window operator is hidden in the top cover and functions at temperatures between -10 °C and +60 °C. Installation in rooms with a high level of humidity must comply with relevant

regulations (contact a qualified electrician if necessary).

The window operator permits a maximum opening of 200 mm within 35 seconds. Window opening

Due to a shorter chain, small/special window sizes have a different window opening. Window opening for sizes --K01 and --K02 = 135 mm. Window opening for sizes -K25 and -K27 = 38 mm. The chain engages and disengages automatically when

the window is closed.

Compatibility The roof window is based on radio frequency (RF) technology, 868 MHz range, and is

compatible with other VELUX products with the io-homecontrol® logo. The roof window is prepared for subsequent installation of mains-powered VELUX INTEGRA® interior and exterior decoration and sunscreening products. It is compatible with all VELUX INTEGRA® decoration and sunscreening products but we

recommend using the mains-powered ones.

Connection to non-compatible products may cause damage or malfunction.

Connection The window is equipped with a 4 m 2-core cable (H05VV-F) with a standard mains

plug for connection to the mains supply (2.5 m for the UK).

Pre-paired wall switch **Materials** 

> Size and weight description

Installation and use

ABS plastic, white (NCS S 1000-N) 8.2 cm x 8.2 cm x 1.7 cm, 0.125 kg.

The wall switch is for indoor use only, between a minimum ambient temperature 5 °C and a maximum ambient temperature 45 °C.

It can be used in a dry or humid environment (such as a living room or a bathroom).

Radio frequency range: 300 m range open field. Depending on the building

construction, the indoor range is approximately 30 m.

2 x alkaline AAA (1.5V) batteries **Power consumption** 

Expected battery lifetime: Up to 1 year.

Integrated rain sensor

**Materials** Gold-coated sensor, Grey (RAL 7022)

Window operator, electric **Materials** 

Motor casing of polybutulene terephthalate (PBT) with glass fibre, black (NCS S 9000-N). Stainless steel chain.

Size and weight description

362 x 50 x 110 mm (W x H x D), 0.987 kg

**Power consumption** 230/240 V a.c. - 50 Hz / 40 VA.

Stand-by power consumption (including rain sensor): max 0.5 W.

Additional stand-by power consumption for MML, SML or DML: 0.6 W. The operation of window and sunscreening product (3 cycles per day) will increase the

energy consumption by approx 2 kWh/year.

Traction capacity: Min 225 N Motor capacity

Pressure capacity: Min 150 N