

WFL **Air Supply Unit**

Technical specifications and installation instructions



Exterior view



1. Description

The **Air Supply Unit WFL** is installed in the skirting area instead of the normal glazing. The **WFL** allows fresh air to flow into the conservatory. The integrated temperature sensor allows for a summer and winter set-up: The supply air flap remains closed if supply air temperature exceeds room temperature (summer) or if the air flowing in is too cold (winter).

The **WFL** communicates wireless with the control systems WS1 Color, WS1000 Color and KNX WS1000 Color. The ventilation unit may be operated directly with the Remo 8 Remote Control.

Functions:

- Wireless control without additional device, only the power supply has to be connected
- Fresh air flows into the conservatory without the help of a blower because of pressure difference
- Highly heat insulating housing consists of integral skin foam
- Extremely tight closing flap (spur gear, worm drive) with self-locking drive and load limit switch
- The installation panel is powder-coated on both sides and has an extremely high compressive strength
- May be installed together with self-cleaning panes bacause of the silicon-free manufacture
- Manual operation with Remo 8 Remote Control possible (available separately)

1.0.1. Scope of delivery

 Installation panel with air supply unit and 10 m connection lead for voltage supply

1.1. Technical specifications

Mains voltage	230 VAC, 50 Hz
Length connectiong lead power supply	10 m
Power consumption	Maximum: approx. 5 VA
	Standby: approx. 1 VA
Radio frequency	868,2 MHz
Air volume	based on passive flow, according to DIN
Cross-sectional airflow	approx 6 120 mm²
U-value	insulating panel: 1,03 W/m²K. ventilator total: approx. 1,8 W/m²K, calculated (presup- position: area ventilator = area panel)

Volumetric weight of insulating panel	60 kg
Compressive strength of panel	350 kPa

The following standards have been considered for the evaluation of the product in terms of electro magnetic compatibility:

- EN 610000-3-2:2006 + A1:2009 + A2:2009
- EN 610000-3-3:2008
- EN 301 489-1 V1.8.1
- EN 300 220-2 V2.1.2

The product has been tested for the above mentioned standards by an accredited EMV laboratory.

1.1.1. Dimensions

Installation height of ventilator	Outer: approx. 45 mm Inner: approx. 20 mm
Width of ventilator	approx. 634 mm
Depth of ventilator	approx. 170 mm
Standard panel	approx. 1050 mm x 700 mm (W x D), thickness approx. 30 mm. The standard panel can be trimmed on the side (see Fig. 1, page 4)

For an additional charge, the panel can be delivered already in the dimensions you need. A different panel thickness is also possible upon request (panel thickness 24-40 mm).

Minimal dimensions for panel:

(shortening or special panel)

Minimum width	approx. 714 mm (Width of ventilator approx. 634 mm plus 40 mm on both sides)
Minimum depth special panel	approx. 250 mm (Depth of ventilator approx. 170 mm plus 40 mm at the top/bottom)



Fig. 1
Trimming of the standard panel. The power supply can be led outwards through a groove in the panel.

1.1.2. Colours

Standard colours for ventilator and panel (included in price):

- RAL 9016 Traffic White
- RAL 9006 White Aluminium
- RAL 9007 Grey Aluminium

All other RAL colours are also available at an additional charge (also two-coloured inside – ouside).

Note: The delivered colour tones are similar to the RAL colours specified. Deviations due to technical reasons are possible. Due to the different nature of the surface of the panel and ventilator housing, slightly different degrees of lustre can occur.

2. Installation and commissioning

2.1. Notes on installation



Warning, mains voltage!

National legal regulations are to be observed.

Disconnect all lines to be assembled, and take safety precautions against accidental switch-on.

The device is exclusively intended for appropriate use. With each inappropriate change or non-observance of the instructions for use, any warranty or guarantee claim will be void.

After unpacking the device, check immediately for any mechanical damages. In case of transport damage, this must immediately notified to the supplier.



If damaged, the device must not be put into operation.

If an operation without risk may supposedly not be guaranteed, the device must be put out of operation and be secured against accidental operation.

The device must only be operated as stationary system, i.e. only in a fitted state and after completion of all installation and start-up works, and only in the environment intended for this purpose.

Elsner Elektronik does not assume any liability for changes in standards after publication of this instruction manual.

2.2. Notes on wireless equipment

When planning facilities with devices that communicate via radio, adequate radio reception must be guaranteed. The range of wireless control will be limited by legal regulation and structural circumstances. Avoid sources of interference and obstacles between receiver and transmitter, that could disturb the wireless communication. Those would be for example:

- Walls and ceilings (especially concrete).
- Metal surfaces next to the wireless participants (e. g. aluminium construction of a conservatory).
- Other wireless devices and powerful local transmitters (e.g. wireless headphones), which transmit on the same frequency (868,2 MHz). Please maintain a minimum distance of 30 cm between wireless transmitters for that reason.

2.3. Notes on mounting

The ventilator panel with the ventilator must be mounted such that the cover hood with the ventilation slats faces inwards.

The inner cover hood is fastened by special snaps to the ventilator panel and can thus be removed without needing tools. The electronic control of the ventilator is mounted under the cover hood.

When mounting the inner cover hood, you must make sure the snap connections snap in firmly. When mounting and before first use, make sure the cover hood is firmly fastened to the ventilator panel.

So that no water can penetrate through the air intake on the outside when it is raining, or due to other weather influences, the panel must be mounted such that the outlet faces downwards.

2.4. Device construction

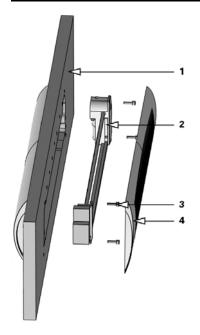


Fig. 2

- 1 Panel with outside cover hood
- 2 Unit with flap and drive
- 3 Screws M5/Allen
- 4 Inside cover hood

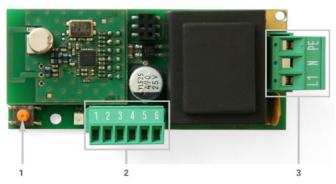


Fig. 3: Printed circuit board

- 1 Programming key for teaching in
- 3 Terminals:
 - 1 Flap drive -
 - 2 Flap drive +
 - 3, 4 Temperature sensor
 - 5, 6 Not in use
- 2 Terminals power supply L / N / PE

3. Maintenance

The device must be checked for dirt and function annually by the retailer/installer and cleaned if necessary. For this purpose, the inner cover hood may be detached. No abrasive cleaning agents should be used for cleaning.



Maintenance and cleaning inside the device must only be carried out by a competent electrician. The device must be separated from power supply then (e.g. deactivate or remove fuse).