



Ventilation & Sun Control

User Manual

Duco**Sun**

# 1. Function

Architectural solar shading for external use was specially designed to create shade on rear/lower glass surfaces in order to realise an optimum interior climate. Depending on the chosen type of louvre there are different values for light transparency and heat resistance. If the system is adjustable and/or driven, the angle of the louvre can be adjusted according to the desired light transparency and heat resistance.

## 2. Conditions of use

- Temp. : withstands normal environmental temperatures (-25°C to +60°C)  
For movable systems: Do not use the solar shading in frosty conditions.
- Humidity: resistant to 100% humidity (rain)  
Do NOT use high-pressure hose.
- Snow: DucoSun products can withstand normal snow loads when they are installed as prescribed in the installation manual.
- Impact resistance: DucoSun products are resistant to impacts as prescribed in EN13330
- Wind: System meets the Eurocode 9 (strength requirement of aluminium structures) and Eurocode 1 (wind load) on the condition that the maximum span between two points is not exceeded. [see calculation note per project]

### For movable systems:

- Do not use the solar shading with wind speeds greater than 60km/hour.
- Obstacles : When rotating the solar shading there must be no obstacles that may hinder this movement. (Ensure that no branches are growing or stuck between the louvres.)
- Power supply : With electric operation 230V AC;50 Hz

**FOR YOUR SAFETY IT IS IMPORTANT THAT THE ATTACHED INSTRUCTIONS ARE FOLLOWED.**

**KEEP THESE INSTRUCTIONS.**

## 3. Safety measures

### Mechanical

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- It is important that the system is used only for the functions for which it is intended.
- Never stand or climb on the system.
- Always remain attentive during the installation and maintenance of the product.
- Carry out maintenance on the system at regular times and only use original replacement parts from the manufacturer.
- Clean the system at regular times.
- Never put your hand between moving parts

### Electrical (if applicable)

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- Avoid electrocution during maintenance by placing a card or isolating switch near the system (disconnect the system from the power supply during inspection)  
With automatic operation the general switchboard of a switch would have to be secured with key protection.
- In the event of successive operations the motor can become overheated. The internal thermal protection will make the system temporarily inoperable.
- Do NOT allow children to play with the control
- Regularly inspect the cables for damage
- Changes to the electrical part can only be carried out after approval of the manufacturer.

## 4. Installation

### 4.1 Opening the packaging

- During storage and transport the system was protected by solid packaging
- Storage must always be under dry conditions
- Transport and handling must be carried out with the necessary care
- Check to see if there is any major damage to the packaging
- Open the packaging with the necessary care
- When using sharp objects ensure that the paint is not damaged
- Take the system out of the packaging with the necessary care

### 4.2 Installing the system

See the installation instructions on the website. It is recommended that any hoisting, lifting and installation activities are carried out using several people and a crane/elevating truck.

### 4.3 Electrical connection (if applicable)

See assembly instructions

### 4.4 Commissioning

Check whether the necessary fastenings are in good condition in accordance with the installation instructions

Check whether the electrical connections are in good condition and whether any cables can turn in the system (if applicable).

Have the system lean all the way to the maximum and minimum angle. Adjust if necessary.

make an abnormally loud noise. Consult the installer if you cannot find out the cause yourself.

- If the final adjustment of the motor is no longer sufficient (e.g. if the louvres no longer open up completely), do not touch the motor and consult your installer.
- If your solar shading is under automatic control, it is advisable to set the machine to manual under the following conditions:
  - **Operating under freezing conditions can cause damage**
  - **If no one is in the building for a long period of time.**

### 5.2 Maintenance

The system requires little maintenance, but due to the guarantee conditions and to ensure you can use your system for many years, we prescribe the following:

- At least 2 times per year, or 4 times per year if in an area with aggressive atmospheric conditions, or if there are non-spraying parts: the proof of cleaning must always be able to be submitted in connection with the guarantee of the surface treatment of the product.
- Before cleaning, first remove loose dirt using a soft brush or vacuum cleaner. Afterwards you can remove the rest of the dirt with a cleaning agent and warm water (special cleaning products are available from the installer). Always rinse after cleaning.
- Avoid cleaning in direct sunlight: if water with surfactants dries quickly it can leave stains behind. Never use solvents such as petrol, acetone, etc., nor strongly alkaline or acidic products, nor aggressive abrasives such as sandpaper, scouring sponges etc.
- Hinged or moving parts must be lubricated annually. Use a dry lubricant for this (teflon or silicone)

**ONLY USE ORIGINAL COMPONENTS OF THE MANUFACTURER.**

## 5. Use and maintenance

### 5.1 Correct operation

**With electrical operation:**

- Set the switch to neutral if the motor starts to

## 6. Resolving problems

In the event of problems you can contact the installer of your DucoSun. His contact details can be found at the back of this manual.

Fault/problem	Cause	Resolving the fault
System is hanging loose	Poor installation	Check all fastenings
Louvres are hanging loose / not aligned	Poor assembly	Check the louvres and louvre holders/attachment points
Angle does not reach the end position	Obstruction in the system	Ensure that the system is clear in order to adjust the angle.
Motor does not work	Connection is not correct	Check the electrical connection
	Motor is defective	Replace the motor
Motor stops without warning	Motor is overheated	Wait a few minutes
	Fuse is defective	Replace fuse
	Connection is not correct	Check the electrical connection
	Motor is defective	Replace the motor
	System is mechanically blocked	Remove blockage or points of friction



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EXTERNAL SOLAR SHADING  
EN13561:2015  
Resistance to wind load class 6

- |  |                              |                                       |
|--|------------------------------|---------------------------------------|
| <input type="checkbox"/> DUCOSUN <b>C</b>      | <input type="checkbox"/> 100 | <input type="checkbox"/> FRAMED       |
| <input type="checkbox"/> DUCOSUN <b>CF</b>     | <input type="checkbox"/> 150 | <input type="checkbox"/> LOWER/TOP    |
| <input type="checkbox"/> DUCOSUN <b>D</b>      | <input type="checkbox"/> 200 | <input type="checkbox"/> INTERMEDIATE |
| <input type="checkbox"/> DUCOSUN <b>ELLIPS</b> | <input type="checkbox"/> 250 | <input type="checkbox"/> UNIFIT       |
| <input type="checkbox"/> DUCOSUN <b>CUBIC</b>  | <input type="checkbox"/> 300 | <input type="checkbox"/> UNIFIT 45°   |
| <input type="checkbox"/> DUCOSUN <b>LINEAR</b> | <input type="checkbox"/> 350 | <input type="checkbox"/> MULTIFIT     |
| <input type="checkbox"/> DUCOSUN <b>WING</b>   | <input type="checkbox"/> 400 | <input type="checkbox"/> ADJUSTABLE   |
|  | <input type="checkbox"/> 500 |                                       |
|  | <input type="checkbox"/> 600 |                                       |

INTENDED USE OF THE CONSTRUCTION PRODUCT: SOLAR SHADING

Identification number:

□ □ □ □ □ □ □ □ □ □

Date:

□ □ □ □ □ □ □ □ □ □

Company stamp of manufacturer

Company stamp of Installer/Fitter

Company stamp of Electrical Fitter

**DUCO**  
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