Solar shading controls

Griesser BiLine
Griesser gBUS
Griesser KNX

GRIESSER

Griesser.
Your specialist for blinds and solar shading controls.

Griesser is numbered among the leading manufacturers of solar shading in Europe. As a family company in Switzerland, rich in traditions, we offer you convenient and energy-efficient solutions at the window and on the patio.

We apply our entire collective experience to the manufacture of innovative and high-quality solar shading products. The pioneering spirit and the entrepreneurship of our company founder have been accompanying the Griesser brand for more than 130 years and live on in its philosophy and its products.

Our promise to you is our program:
We don't leave you out baking in the sun.

One company.
Two brands.

With his purchase of a workshop in Aadorf (Switzerland) in 1882, Anton Griesser established the foundation for the tradition-rich company of today. At the start of the Nineties, Griesser acquired weinor, a German manufacturer of awnings based in Cologne. With two plants in Cologne and Möckern (Magdeburg), it is the awning specialist (sun blinds). Ever since its founding, Griesser has continue to be a family-owned company that has maintained its independence down to the present day.

It is currently managed by Walter Strässle who is leading the craft of the Griesser Group into its fourth generation of business. With dedication and enthusiasm, Griesser's approximately 1,300 employees ensure that the outstanding reputation of the two independent brands, Griesser and weinor, are constantly reaffirmed. Griesser and weinor each maintains its own, independent market presence. But the common goal of providing customers with better quality of life unites them.

Griesser fabricates its wide assortment of solar shading products not only in Switzerland (Aadorf), but also in Austria (Nenzing) and in France (Nice and Wolschwiller). Griesser is active with its own companies in six countries and is represented by partners in other countries. weinor manufactures its products for solar and weather protection on the patio at its main plant in Cologne and in Möckern and is represented by its partners in a total of 32 countries.

With over 40 years experience in the area of solar shading controls, Griesser is the competent and reliable partner for energy efficiency, living convenience and well-being.

40° C

In the absence of proper solar shading, temperatures inside a building with large window surfaces can become as high as 40°C.

Light and Temperature – Well-being Climate in the Room.

Daylight and the correct room temperature at the workstation promote the well-being, stamina and performance capability of the employees. In addition, they contribute to health. Advantages become cumulative when building owners include solar, heat and glare protection in their planning at an early date.

Well-being

In office buildings, computer monitor work involves maximum requirements with respect to the combination of daylight, illumination and glare protection. Selection of the correct automatic solar shading ensures high user comfort, good protection against heat and glare-free computer workstations.

Advantages

A daylight comfort system also ensures at all times a well-being climate in the room. Last but not least, an atmosphere arises thereby that contributes to error minimization and efficiency. Even in the summer, no one need go without daylight, as is used without the disruptive effects of increasing heat.

Thermal Advantages

The correct solar shading in front of the windows shields interior spaces against unwanted heat radiation. An optimal daylight concept makes artificial air conditioning superfluous in the summer. You save on energy costs and, as a pleasant side effect, you also protect yourself and your employees at the same time from unwanted summer colds. If it is cold outside, then it lets in the correct amount of desired thermal radiation. 82 % of the sun's rays can pass through windows with double glazing. Floors, walls and furnishings absorb this energy and release it again back into the environment as heat.

Saving money and energy: Daylight for double comfort.

Systems with intelligent use of daylight enable the people in a room to have a visual connection with the outer world at all times. The progression of the day and thus also the weather are recognizable, and only as much artificial light as necessary is used. Disruptive glare is eliminated. This means that the preservation of health is ensured.

Visual advantages

Optimum solar shading automatically combines natural and artificial light. A wide array of possibilities allows us to structure the light in a room in such a way that the comfort of daylight is maintained while at the same time the unpleasant effects of direct sunlight are avoided. Griesser solar shading systems measure the brightness outdoors, calculate the sun's position and the optimum solar shading angle for the respective facade and move the binds automatically into the right position to ensure optimum use of the daylight.

Energy

Each building owner must be willing to take on a certain amount of environmental responsibility at the time of the construction or renovation of a building. At the time of the ratification of the Kyoto Protocol, we committed ourselves to a careful handling of energy resources. Energy can be used very efficiently with a daylight comfort system. No air conditioning system is required and you can work with daylight instead of artificial light – and even save money as a result.

Costs

The associated increase of productivity by up to 10 % and reduction of employee downtimes mean that you, depending on the product and situation, can as a rule amortize the investment in daylight comfort within five years. This means that you not only increase the comfort of the users, but also protect your budget.

Impressive facts.

Daylight has significant effects on the productivity, health and well-being of everyone who spends time in closed rooms. The Report 2013 of the World Green Business Council (WGBC) established the following numbers:

Facts with a view outdoors:

10–15 %

improvement of memory and mental state

8.5 %

reduction in time spent during hospital stays

6–12 %

increase in speed of telephone call processing

Facts with utilization of daylight:

18 %

increase in work productivity

5–14 %

higher grades achieved by schoolchildren; learning speed increased by 20 to 26 %

15–40 %

increase in retail turnovers

This is what the automatic controls from Griesser provide.

Griesser provides automatic control solutions for all sizes of building, from a single-family house to building complexes. Our products range from simple wireless systems to sophisticated complete systems offering a comprehensive selection of functions. The Griesser app means that these systems are intuitive and easy to operate – even without an Internet connection.

Functions

Limit of travel detection for blinds without operating position*

The blind moves downward with the slats closed and closes completely, the room is darkened briefly. Thanks to limit of travel detection, the slats luff open once again immediately after closing; it becomes light again in the room more rapidly than with conventional controls.

Limit of travel detection for blinds with operating position*

The function with the best possible convenience. The blind moves downward with the slats open, the slats are already positioned for optimum shading. No darkness phase occurs, the blind goes directly into its shading position. This means: Minimum travel time of the blinds, minimum noise development.

Automatic block

Local operation with automatic commands and defined settings can be suppressed at any time. While it is true that the shading products are always first brought into their optimum position, if this does not however match the individual requirements of a single person, then the automatic control can be overridden manually so that each workstation can be shaded according to preference.

Local operation with limitation

The blind can be moved manually only to the extent that no direct solar radiation can find its way into the room. This ensures that the room will not be overheated by user interventions. This function can also be implemented in combination with solar tracking.

* The working position is approximately 48 degrees and prevents darkening when the blinds are being lowered.

Automatic timer

You determine what the blinds are to do on which day and at which time. In the event of deviations from the usual daily routine, the standard settings can be changed without difficulty for a defined time period. The vacation function enables the opening and closing of the shading at different times so that the house appears to be occupied, and the astro function enables the products to be controlled according to the position of the sun.

Automatic sun control

Sensors measure the outside brightness. If the sun shines too strongly on a window or a patio, the solar shading products move automatically into a defined position. The control also recognizes which parts of the building are exposed to the sun and shades only them. Thanks to a time-delay reaction, it remains pleasantly quiet, even with rapidly changing light conditions, and optimum shading is guaranteed at all times.

Solar tracking

The external venetian blinds adjust their angle of inclination automatically to the sun's position. This means that no solar radiation falls directly onto the workstation, and the formation of alternating strips of light and shade on documents or monitor screens which is so unfavorable for working does not occur. Nonetheless, the rooms are supplied with natural light at all times thanks to the half-open slats.

Shadow calculation

Not all of the window areas of many buildings with large-surface facades are always exposed to sunlight (e.g. due to shadows cast by neighboring buildings). The shadow calculation ensures that the only facade segments to be shaded are those which are actually exposed to the sun.

Wind automatic system

Thanks to reliable wind sensors, the shading products move to a position that is safe for both the blinds and the house when strong wind comes up

Precipitation

A precipitation sensor recognizes rain and snow and the control automatically closes the solar shading. The scope of application ranges from the protection of textile solar shading systems to closing glass domes.

Protection against hail

In the event of a hail warning based on SRF Meteo radar data, the blinds are automatically raised; once the bad weather has passed, a second signal returns the blinds to the predefined position.

Protection against frost

In low temperatures, the automatic frost protection recognizes the risk of the blinds icing up and the control automatically moves them to a safe position.

How Griesser gBUS works.

Methodical automation

The Griesser gBUS is a closed BUS system offering comprehensive functions for all sizes of building. Precise solar shading is achieved thanks to product settings tailored exactly to Griesser facade products. If the customer so desires, the settings can be adapted to other products; looking forward, existing systems can be extended at any time without any problem.

How Griesser KNX works.

For the very highest standards

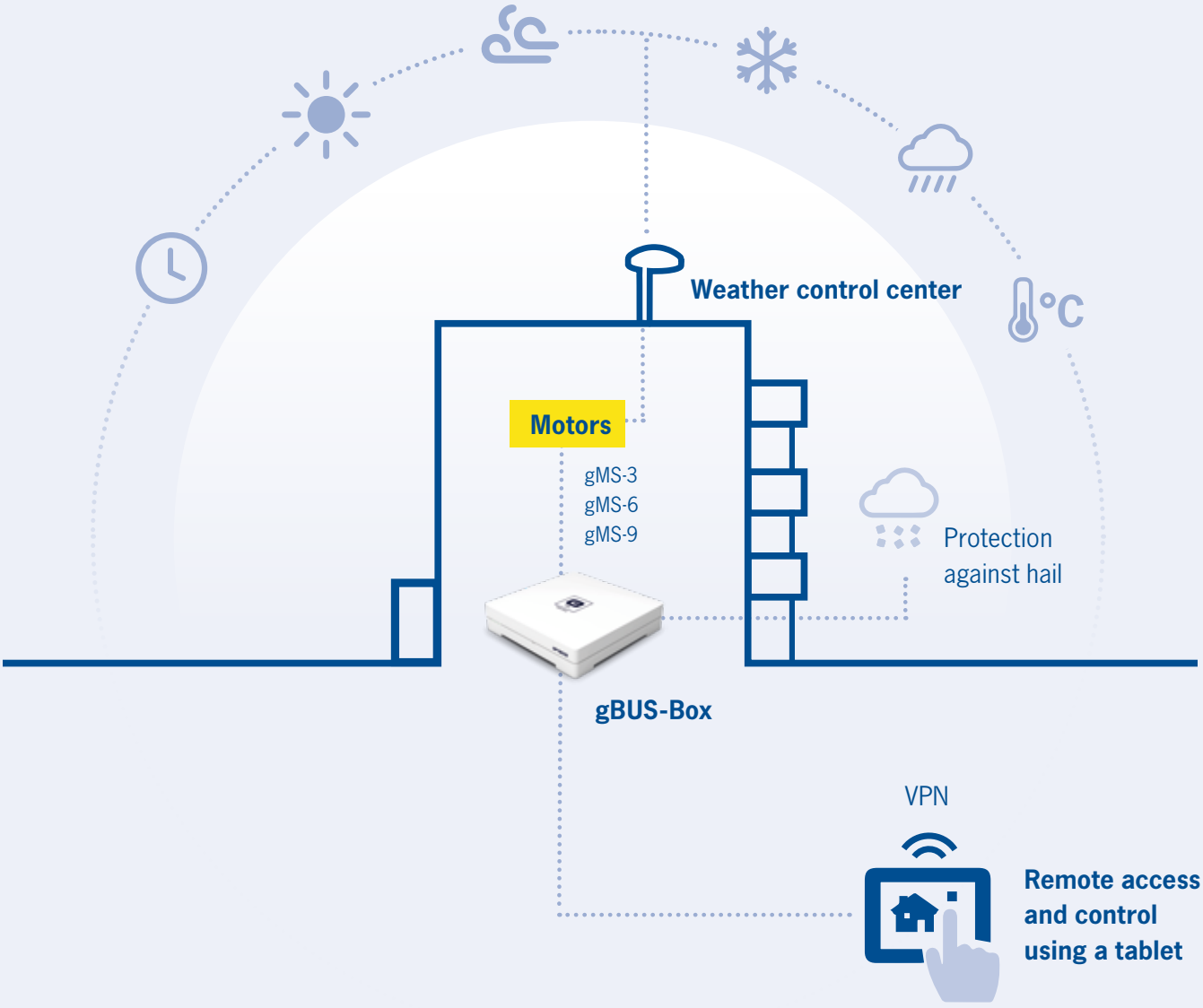
Griesser KNX offers a sophisticated, integrated system that can easily be extended at any time, boasting a wide range of functions for all sizes and types of building. It ensures optimum solar shading and meets the very highest standards in solar shading control. If desired, the settings can be adapted to other products such as heating, lighting, garage doors and surveillance systems.

Additional functions


Heating


Alarm


Light


Weather control center
°C
Motors
gMS-3
gMS-6
gMS-9
Protection
against hail
gBUS-Box
VPN
Remote access
and control
using a tablet

How Griesser BiLine works.

Simple wireless blind control

Griesser BiLine offers reliable radio transmission combined with an attractive, contemporary design and an esthetic that fits unobtrusively into any surroundings. The system can be installed quickly, both in new buildings and when retrofitting existing buildings. With an additional radio receiver, a light source can also be controlled directly by means of a hand-held transmitter.

Services in and round intelligent glare protection and solar shading.

As a Member of the Facility Management Switzerland professional society, we are able to provide comprehensive supervision of solar shading systems on buildings of any and all types and size throughout their entire periods of utilization. Furthermore, it is primarily also expert support that we provide in cases of renovations and adapt existing buildings to the current state-of-the-art technology and comfort. Particularly as well with respect to energy savings with automatic solar shading systems.

Our service offering

- Support of electrical planners and building owners in the project planning and request for quotation stages
- Testing your existing system
- Checking the compatibility of blinds motors and Griesser control
- Creation of a remodeling plan
- Study for the placement of wind sensors
- Shade management with building simulation
- Energy optimization with horizon limitation
- Support for commissioning with integrators
- Pre-programming and labeling ex-factory of the ID KNX
- Preparation of general object-specific diagrams

Range overview.

	BiLine	gBUS[2]	KNX
Utilization			
Number of motors (max.)	18 (50)	540	> 10,000
External venetian blinds, awnings, rolling shutters	X	X	X
Sliding shutters	X	X	X
Pivot-hung windows, roof windows		X	X
Residential construction	X	X	X
Schoolhouse / administration building		X	X
Large buildings			X
Technology			
Number of facade sectors	1	32	320
Number of motor controls (max.)	18	60	> 1000
Communications media	Radio	Wire	Wire
Communications protocol	Griesser	Griesser	KNX
Bus feed		X	X
Router / coupler			X
Gateway Ethernet / IP	X	X	X
Gateway Modbus		X	X
Product protection functions			
Wind protection (1 sensor)	X	X	X
Wind protection (more than one sensor)		X	X
Protection against rainfall	X	X	X
Protection against frost		X	X
Protection against hail		X	X
Personal safety functions			
Fire protection function		X	X
Cleaning function (windows/blinds)		X	X
Comfort enhancement functions			
Time command (weekly program)	X	X	X
Time command (yearly calendar)		X	X
Automatic solar shading	X	X	X
Shadow calculation		X	X
Solar tracking / guide for shade edge		X	X
Automatic block		X	X
Scenes (with light and other crafts)			X
Energy optimization functions			
Automatic protection against heat		X	X
Automatic temperature feature		X	X
Limited operation		X	X
Room control (presence, HVAC)			X
Operation			
Radio operation	X	X	X
Operation via Web browser/App	X	X	X
Operation via button direct on actuator		X	X
Operation via touch panel		X	X
Operation via KNX button			X
Hardware properties of blind motor control/venetian blind actuator			
Installation in blinds box	X		
Installation in hollow floor/hollow ceiling (EB)		X	X
Installation in current distribution board (REG)		X	X
Installation of AP U-box, prefabricated		X	X
For motors with 2 end switches	X	X	X
For motors with 3 end switches	X[2]	X	X
For electronics motors [1]	X	X	X
For "Griesser ECM" motor [2]	X	X	X
Limit of travel detection	X	X	X
Test button on device / status display		X	X

[1] Motors with integrated electronics upon request
[2] starting 2018

www.griesser.ch

Market leader for sun protection since 1882 –
the automatic choice.

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