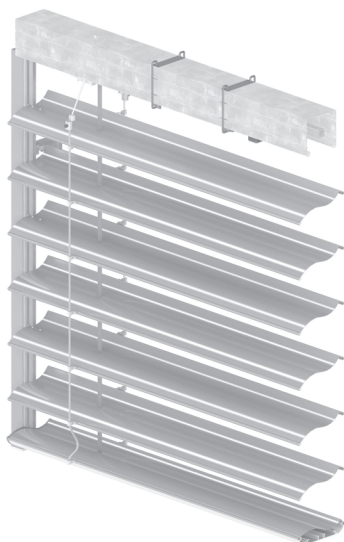




These instructions must be read prior to installation and use!



HELLA

Outdoor blinds / exterior venetian blinds

Operating guidelines

Preliminary remarks HELLA Outdoor blinds / exterior venetian blinds

(Also valid for systems with wind-resistant design.)

With this HELLA product you have opted for a high-quality product with a most up-to-date technology that can nevertheless be easily installed and operated. In these instructions we describe the basic installation, commissioning and use.

- ➔ For authorized specialist staff
- ➔ For the consumer (user)

The following notes and tips for outdoor blinds are also valid for exterior Venetian blinds.

The following symbols will assist you with the installation or use and require a safety-conscious conduct:



Attention!

This symbol indicates instructions that, if disregarded, can put the user in danger.



Attention!

This symbol indicates instructions that, if disregarded, can potentially result in damage to the product.



This symbol indicates instructions for use or helpful information.



This symbol requires you to act.



Attention!

This symbol indicates a risk of injury or danger to life due to an electric shock.



This symbol indicates parts of the product, for which you will find important information in these installation instructions.



Attention!

This symbol indicates possible risk of injury by crushing.



This symbol indicates the cleaning of the product.



This symbol indicates the maintenance and repair of the product.

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General notes

➔ **Questions**

In case of questions concerning the installation or the use of your product, please consult your authorized specialist shop.

➔ **Spare parts/repairs**

Spare parts are available at your HELLA specialist shop. Only spare parts that are approved by HELLA are allowed to be used.

➔ **Warranty/guarantee**

Precondition for warranty and guarantee is a correct and regular maintenance of the sun protection device (at least once a year).

Warranty claims are subject to statutory limitation periods. Service parts are excluded from the warranty; the same applies for changes in color and changes in characteristics caused by UV radiation.

As the composition or the chemical and physical properties of the plasters used are beyond our control, the resistance of our systems to corrosion cannot be guaranteed.

➔ **Liability**

In case of non-observance of the directions and information given in these instructions and in case of improper operation or unintended use, the manufacturer shall not accept any warranty claims concerning any damage to the product. In these cases, the liability for consequential damage to any parts or persons is ruled out as well.

➔ **Legal notes**

The graphs and texts of these instructions were carefully prepared. We cannot be held liable for any errors and their potential consequences! Subject to technical modifications to the product and to these instructions! These instructions include copyrighted information. All rights reserved! The listed product or brand names are trademarks of the respective owners.

➔ **Installation Instructions**

Detailed instructions for installing the product are available in the download section at <https://www.hella.info>.

CE marking

The HELLA outdoor blinds / exterior Venetian blinds, also in the wind resistant design, are in compliance with the declaration of performance according to the Construction Products Regulation; if the products are operated with a motor drive they are additionally in compliance with the Machinery Directive and the Guideline for Electromagnetic Compatibility; in case of proper use, the products correspond to the basic requirements of the harmonised standard EN 13659. The respective declarations are deposited with the manufacturers.

	
HELLA Sonnen- und Wetterschutztechnik GmbH A-9913 Abfaltersbach 125 13 LE-RSAJ-01-001 EN 13659:2004+A1:2008 Outdoor Blind / Exterior Venetian Blind AF 50, AF 60, AF 80, ARO 65, ARB 80, AR 63 ECN-S+Z, ARE 92 ECN-S+Z Exterior sun protection Wind resistance class 0*	HELLA Sonnen- und Wetterschutztechnik GmbH A-9913 Abfaltersbach 125 13 LE-RSWS-01-001 EN 13659:2004+A1:2008 Wind-resistant outdoor blind ARB 80 WS, ARE 92 ECN-S WS, ARE 92 ECN-Z WS Exterior sun protection Wind resistance class 0*

* ... A class 0 wind protection per EN 13561 is indicated, because the standard test procedure does not allow a conclusion to be drawn about the wind resistance with real wind load. Depending on the design and the type of installation, the outdoor blinds / exterior Venetian blinds are suitable up to the maximum wind limit values recommended – see chapter "Designated use".

The CE identification applies for the delivery status of the product. The product mounted meets the requirements of the specified standard only, if

- ➔ during installation the information and instructions given in these instructions as well as the information and instructions of the manufacturers of the screws have been observed,
- ➔ the product is installed with the recommended type and number of fasteners/screws.

No changes, rebuildings or extensions, with the exception of those described in these instructions, are allowed with this product. The fixed CE-label expires with any change, rebuilding or extension.

Safety instructions



These installation instructions refer to prefabricated elements, that (1) for 100% are made from parts, which are defined by us, and (2) which are made in manufacturing processes, which are defined by us too; in all other cases we do not provide any guarantee!

The safety instructions as well as the appropriate instructions must be read carefully before installation and use. In case of non-observance of the directions and information given in these instructions and in case of improper installation and operation or unintended use, the manufacturer shall not accept any warranty claims concerning any damage to the product. In these cases, the liability for consequential damage to any parts or persons is ruled out as well.



- Follow the described installation steps and pay attention to recommendations and notes.
- Keep these instructions in a safe place.
- All installation and removal works, as well as maintenance and repair works are only allowed to be carried out by authorised and qualified specialist staff.
- If switching, automatic or radio control devices are used to operate the units, the information given in the enclosed instructions of the manufacturer must be observed.
- During operation do not put your hand into or touch movable parts.
- Ensure that clothing or body parts cannot get caught on the unit.
- Observe the regulations for prevention of accidents of the employer's liability insurance association!
- Before operation check the unit for visible damage. If the unit is damaged, it should not be used; please consult authorized specialist staff immediately.
- Risk of injury and accident due to the weight of the product!
- Take safety measures against the danger of squashing, especially when operating the unit with automatic devices.
- Place the operating switch within sight of the unit, but not near any of the moving parts.
- Never let children play with the unit.



A sun protection device with electric drive cannot be retracted without current. We therefore recommend the use of an emergency power generating unit or a motor with an emergency crank handle, especially in regions with frequent power failures.

Safety instructions



Danger of suffocation!

Ensure that the foil cannot get into the hands of children. Keep the foil in a safe place.



NOTE!

For children / adults a lowered blind is **no protection against a fall out of the window!**



Attention! Risk of injury or danger to life due to an electric shock!

- Set-up, examination, commissioning and error correction of the unit must only be performed by authorised or trained expert staff (as per VDE 0100).
- Switch off the current to the connecting lines when working at the unit. There is danger to life! Take safety precautions against unintentional switching on!
- Check the electrical wires regularly for damage. Do not use the unit if any damage is found.
- Our electrically driven units are in accordance with the regulations for power plants acc. to VDE 0100. We cannot guarantee for the operational reliability of the unit with non-approved modifications.
- White motor cables are not UV-resistant and must therefore be routed in empty conduits, cable ducts, or similar.
- The enclosed installation instructions of the electrical devices supplied must be observed.



Units with motor drive:

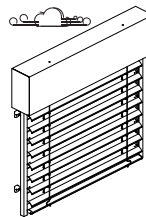
The drives used are operated with a voltage of AC 230V/50Hz. Please check the power supply provided by your utility company before connecting. Any other voltage can destroy the drives.



Units with crank handle drive:

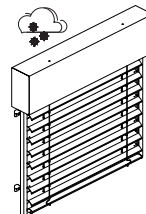
Fold the crank handle only into the specified direction. Operate the unit steadily, avoid using force. Do not continue to raise or lower the roller shutter curtain, when the limit stop is reached. The limit stops protect your units.

Safety instructions



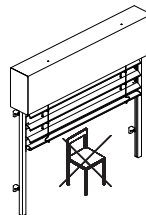
Operation of the outdoor blind in case of storm:

During strong winds close the window or pull the roudoor blind to the upper end position. Take care, that no draught can arise, even during your absence. If the window is open, the closed outdoor blind cannot withstand all wind loads. The given wind class is only guaranteed with a closed window.



Operation of the outdoor blind in case of frost:

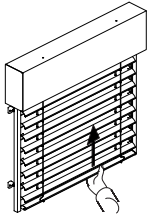
In case of frost the outdoor blind can freeze shut. Avoid using force to operate the outdoor blind and do not use it, if there is snow or ice in the guide rails. Do not operate the outdoor blind if it is frozen solid. Switch automatic control devices off, if there is a risk of freezing.



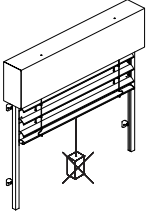
Positioning range of the outdoor blind:

Please make sure that no obstacles block the guide rails of the outdoor blind.

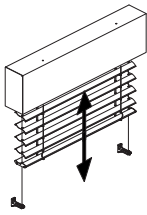
Safety instructions



Incorrect operation:
Never push up the blind or pull it down, this could cause malfunctions. Do not put your hand between movable parts. There is risk of injury.

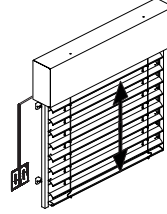


Using the product for the wrong purpose:
Use the unit solely for the given purpose. Any wrong use can endanger the user and result in damage to the product. Do not overload the outdoor blind, e.g. with additional weights. If the product is used for a different purpose, the right to claim under guarantee is forfeited.

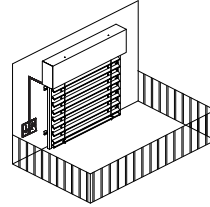


Correct position of the bottom rail (with cable guiding):
Always open or close the outdoor blind completely; otherwise the bottom rail is unstable and may strike against the facade.

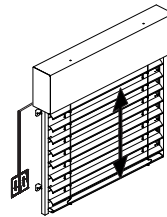
Safety instructions



Accessibility of the operating devices:
Place the operating switch within sight of the unit, but not near any of the moving parts. Never let children play with the operating devices such as hand-held radio transmitter, switches or automatic devices. There is danger of squashing, especially when operating the unit with automatic devices.
Fix the operating switch at a point where the disabled also have access.



Automatic outdoor blinds in front of balcony or terrace doors:
If there is a motor-driven outdoor blind that is connected to an automatic control system in front of the only access to your balcony or your terrace, you could lock yourself out. Please switch off the automatic device, if you enter the balcony or the terrace.



Observe the motor runtime:
The motors used are not suitable for a non-stop operation. The integrated thermo protection switches the motor off after approx. 4 minutes. After approx. 10 to 15 minutes the product is ready for use again.

Storage and protection of the product during the construction phase

Tips for plastering EPS:

- Protect the product from moisture during construction or storage
- Cover the boxes with materials that are impervious to light
- Do not use transparent foils, because this can cause the EPS to melt due to the possible lens effect.
- Plastering of the EPS within 2-3 months
- For certain installation situations, cover the top of the box located outdoors (do not use transparent foil!).

HELLA recommends carrying out the plastering work on the EPS within 2-3 months, depending on the local conditions and the prevailing season. Otherwise, apply a suitable rendering base from an ETICS manufacturer to the polystyrene surface for protection. If the polystyrene component has already yellowed due to UV exposure as a result of the delayed construction process, this floury substance must be removed without residue in accordance with the processing guidelines of the ETICS manufacturers and plastering work must be started immediately.

Designated use

- ☞ Sun protection
- ☞ Thermal protection
- ☞ Sight screen
- ☞ Anti-glare blind

Do not use the units or retract the blinds with strong wind (see the tables below), continuous rain, snowfall or frost. If a wind control device is used, please observe the building geometry, and set the wind control device to the lowest value.

Recommendations for the use of outdoor blinds/venetian blinds according to IVRSA

Bordered slats

with guide rail

Height [mm]	Width [mm]								
	1000	1500	2000	2500	3000	3500	4000	4500	5000
1000	17	17	17	17	17	17	17	17	17
1500	17	17	17	17	17	13	13	13	13
2000	17	17	17	17	17	13	13	13	13
2500	17	17	17	17	17	13	13	13	13
3000	17	17	17	17	17	13	13	13	13
3500	17	17	17	13	13	13	13	13	10
4000	17	17	17	13	13	13	13	10	10
4500	17	17	17	13	13	13	10	10	10
5000	13	13	13	13	13	10	10	10	10

Specification in m/s

Source: IVRSA (Industrievereinigung Rolladen-Sonnenschutz-Automat e.V.)

Designated use

Flat slats

with guide rail

Height [mm]	Width [mm]								
	1000	1500	2000	2500	3000	3500	4000	4500	5000
1000	17	17	13	13	10	10	10	10	
1500	17	17	13	13	13	10	10	10	10
2000	17	17	13	13	13	10	10	10	10
2500	17	17	13	13	13	10	10	10	10
3000	17	17	13	13	13	10	10	10	8
3500	17	17	13	13	13	10	10	10	8
4000	17	13	13	13	10	10	10	8	8

Specification in m/s

AR 63 ECN, AR 92 ECN

Height [mm]	Width [mm]								
	1000	1500	2000	2500	3000	3500	4000	4500	5000
1000	17	17	17	17	17	17	17	17	17
1500	17	17	17	17	17	17	17	17	17
2000	17	17	17	17	17	17	17	17	17
2500	17	17	17	17	17	17	17	17	17
3000	17	17	17	17	17	17	17	17	17
3500	17	17	17	17	17	17	17	17	13
4000	17	17	17	17	17	17	17	13	13
4500	17	17	17	17	17	17	13	13	13
5000	17	17	17	17	17	13	13	13	13

Specification in m/s

Source: IVRSA (Industrievereinigung Rolladen-Sonnenschutz-Automat e. V.)

Designated use

Wind resistance of wind-resistant units – ARB 80 wind-resistant



The maximum wind resistance of wind resistant outdoor blinds with a complete width of up to 2400 mm is 20 m/s (72 km/h). For a complete width of 2400 mm, the maximum wind resistance value is 17 m/s (61.2 km/h). These limiting values apply for a facade distance of ≤ 100 mm. These values are limiting values; to avoid damage the unit must be retracted when these values are attained! Wind warning systems in combination with the appropriate control devices must be used to retract the sun protection devices, when the specified wind forces have been attained.

Wind resistance of wind-resistant units – AR 92 ECN wind-resistant



The maximum wind resistance of wind resistant outdoor blinds with a complete width of up to 2400 mm is 22 m/s (79.2 km/h). For a complete width of 2400 mm, the maximum wind resistance value is 18 m/s (64.8 km/h). These limiting values apply for a facade distance of ≤ 100 mm. These values are threshold values; to avoid damage, the unit must be retracted when these values have been reached. Wind warning systems in combination with the appropriate control devices must be used to retract the sun protection devices, when the specified wind forces have been attained.

Reduce the recommended maximum wind limits in case of:	Reduction of the value by:
AF 50	1 bft (0.3 - 1.5 m/s)
cable guided outdoor blinds / venetian blinds: Complete height > 2400 - 4000 mm Complete height > 4000 mm	1 bft (0.3 - 1.5 m/s) 2 bft (1.6 - 3.3 m/s)
Distance to the mounting base: Facade distance > 100 - 300 mm Facade distance > 300 - 500 mm	1 bft (0.3 - 1.5 m/s) 2 bft (1.6 - 3.3 m/s)



Fix the wind controller to wind-exposed positions



With critical corner and border situations, we recommend to reduce both the rise-delay time value to 2 seconds and the limiting value to 8 m/s.



The maximum complete width including the guide rail insert silent is 3000 mm. A use above this is not admissible.

Legend

bft Beaufort (unit of wind strength after Beaufort)

Designated use

Bordered slats

with cable guiding

Height [mm]	Width [mm]								
	1000	1500	2000	2500	3000	3500	4000	4500	5000
1000	17	17	17	13	13	13	13	13	13
1500	17	17	17	13	13	13	13	13	10
2000	17	17	17	13	13	13	13	13	10
2500	17	17	13	13	10	10	10	10	10
3000	13	13	13	10	10	10	8	8	8
3500	13	13	10	10	10	8	8	8	8
4000	13	10	10	10	8	8	8	8	8

Specification in m/s

Flat slats

with cable guiding

Height [mm]	Width [mm]								
	1000	1500	2000	2500	3000	3500	4000	4500	5000
1000	17	17	13	13	13	10	10	10	10
1500	17	17	13	13	13	10	10	10	10
2000	17	17	13	13	13	10	10	10	10
2500	17	13	13	13	10	10	10	10	10
3000	13	13	13	10	10	10	8	8	8
3500	13	13	10	10	10	8	8	8	8
4000	13	10	10	10	8	8	8	8	8

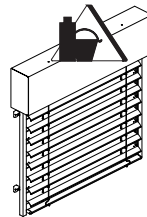
Specification in m/s

Source: IVRSA (Industrievereinigung Rolladen-Sonnenschutz-Automat e. V.)

Servicing, maintenance and repair



An unintentional switching on of units with motor drive is possible. Make sure that the automatic control device is switched off and that the current supply is interrupted during cleaning or maintenance work. If the unit is operated manually, the operating crank handle must be unhooked and kept in a safe place.



Cleaning:

As an externally installed sun protection, your units can get soiled over time. This will not reduce the usability of your unit. The powder-coated parts will remain presentable for longer, if they are cleaned regularly with a soft woollen cloth.



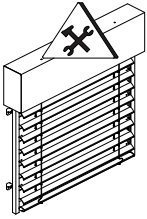
Do not use solvents, alcohol (rubbing alcohol) or scouring cleansing agents! Use a mild household cleaner and a soft cloth to wash down fingerprints and light grease- or oil patches. Rinse off with clear water and dry with a soft cloth.



Never press the slats sharply, there is risk of snapping. Never use a high-pressure cleaner. There is a risk that the surface of the slats is affected by the pressure and the heat.

Remove regularly dirt or objects from the guide rails.

Servicing, maintenance and repair



Maintenance:

All inspection and maintenance works must be carried out by a HELLA specialised company or a HELLA partner. Regularly check the electrical wires of motor driven units for damage. Check the mechanical parts of your outdoor blind for visible damage. After exceptional events such as storm, hail, sleet, maloperation or the like, the unit must be checked for noticeable damage prior to operating it. If the unit is damaged, it must not be used; consult authorized specialist staff immediately. It is recommended to have the unit maintained by specialist staff on an annual basis. This way wear is detected at an early stage and damage to the unit is prevented.

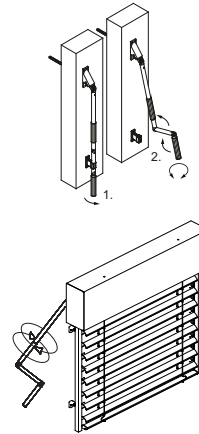


Repair:

Improper repair works may cause both risk of injury to persons or damage to the units.

Repair works must be carried out by a HELLA specialist company or a partner company of HELLA. Only use original spare parts from HELLA.

Operating guidelines



Crank handle drive:

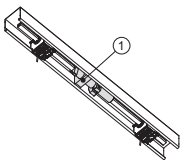
Opening / closing the outdoor blind by turning the crank rod. Slow down the turning motion of the crank handle before the blind is opened completely. Slow down the turning motion of the crank handle before the blind is closed completely.



Avoid excessive bending of the crank rod. This results in stiffness and augmented wear. The blind should not be allowed to smash into the top.

Do not continue turning the crank handle with force when the outdoor blind is completely opened. If the outdoor blind is completely closed, do not carry on turning the crank handle into the downwards direction

Operating guidelines



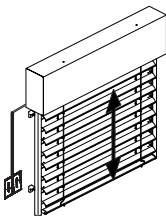
Outdoor blind **without spindle lock:** (not possible for AR 63 ECN and AR 92 ECN) If the outdoor blind is completely lowered, do not carry on turning the crank handle into the downwards direction (no lower limit stop).



Outdoor blind **with spindle lock:** (standard for all units) If the assembly is done in the factory, the upper as well as the lower limit stop of the outdoor blind & exterior venetian blind are adjusted via the spindle lock.

Legend

① Spindle lock



Motor drive:

By activating a switch, a remote control or an automatic device, the blind moves "up" or "down". The end points of the drive are adjusted ex works. Please observe the enclosed instructions of the manufacturer of the drive, if any modification is required. The outdoor blind stops by releasing a touch contact switch or - if a locking pushbutton is used - by pushing the counter or stop button.



Please refer to the enclosed instructions of the manufacturer for operating possibilities via control devices.



Thermal protection:

The drives used are not suitable for a non-stop operation. The integrated thermal protection switches the drive off after approx. 4 minutes. After approx. 10 to 15 minutes, the drive is ready for use again.



HELLA Interior Venetian Blinds

regulate the lighting in a room very comfortably, immediately gracing it with much more atmosphere.

HELLA Insect screens and you decide who is allowed to come in and who isn't.

HELLA Pleated Blind folds up very compactly and protects very well against the sun and nosey glances where only little space is available.



HELLA Outdoor Blinds serve for the light regulation, as view protection, anti-glare blind and heat protection.



HELLA Front-mounted Roller Shutter for more safety and protection against rain, wind, heat, the cold, noise, incident light and nosey glances, also available for subsequent installation.



HELLA Vertical awning With toggle catch mechanism for a lovely façade design with perfect heat and glare protection.

For questions, wishes and ideas:
HELLA Infoline +43/(0)4846/6555-0

HELLA Sonnen- und Wetterschutztechnik GmbH

A-9913 Abfaltersbach, No. 125
Phone: +43/(0)4846/6555-0
Fax: +43/(0)4846/6555-134
e-mail: office@hella.info
Internet: http://www.hella.info