



WAREMA black-out blinds

Type VDA 13

Operating instructions

For handing out to users

Valid from 23. February 2005
Document no. [B866108_0.fm] - EN

General information

Regarding the following instruction manual

These instructions describe the operation of correctly installed black-out blinds of type VDA 13 in the following versions:

- Crank handle operated
- Motor operated

Other versions or alternative solutions are not dealt with in these instructions.

These instructions also do not cover the following parts and accessories. Instead, you will be referred to the respective instruction manuals.

- Black-out blinds type VDA 13 with emergency open feature
- Black-out blinds type VDA 13, electrically operated via external control devices (Wisotronic, Quatronic.net, LONWORKS® Control, remote controls).

This brochure is an integral part of the product and therefore should

- always be kept in a safe place until the product is disposed of.
- be included with the product when it is sold.

In order to provide a clear overview, not all details, installation options and operating methods can be covered here for all versions of your specific black-out blinds. If you need further information, please contact your dealer (address on the last page) or WAREMA.

Please read the instructions carefully **before** operating your blinds, adhere to the operating steps and keep in mind the helpful hints and recommendations.

In addition to the information regarding operation of the blinds, these instructions also contain important maintenance and care tips.

The black-out blinds were developed, manufactured, tested and documented according to relevant safety standards.

When used properly, they do not represent a danger or risk to people or objects.

Familiarity with the applicable safety instructions and warnings and their technically correct implementation is a prerequisite for the safe operation of the product. Therefore, please read these instructions, paying particular attention to the safety information. It must be understood and adhered to. Lack of knowledge of how to operate the product can lead to the loss of all liability claims against WAREMA.

The system should only be **installed** by qualified professionals. The steps required for installation are summarised in separate installation instructions.

It is important that you contact WAREMA if you do not understand an item of information in this brochure. We are grateful for any suggestions and criticism you may have and ask that you inform us in writing. This will assist us in creating an even more user-friendly instruction manual that reflects all of your wishes and requirements.

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Identification

Black-out blind type VDA 13

Identification

The factory order number and item number are printed on the drop rod and box (position of components see Fig. 1 on page 5) of every WAREMA black-out blind type VDA 13. This allows the manufacturer to clearly identify each individual product.

Product description

Black-out blind type VDA 13



General functions and application areas (intended use)

The black-out blind type VDA 13 is designed as a vertical black-out element for interiors. It consists of continuous light-proof material that can be rolled up and that completely darkens the interior. Guide rails prevent light from entering the room on the sides of the blind.

The black-out blind type VDA 13 can be supplied as a left or right roller, crank operated or motor operated, and individually or as a group system. The blind is installed in or on the soffit or in the drop ceiling.

Crank operation: The blind is operated using an aluminium crank.

Motor operation: The maintenance-free motor lowers and raises the blind after a pushbutton switch or snap-in switch is activated (or using a control unit). The equipment is electrically connected to the connector provided on-site by a qualified electrician.

The curtain is completely impermeable to light, resistant to infrared radiation, hardly inflammable (textile fabric) or not inflammable, and can be delivered in 5 colours (depending on

the version). The box and guide rails are available in all RAL colours.

The black-out blind type VDA 13 is especially suitable for rooms that must be completely darkened – e.g. lecture halls and auditoriums, meeting rooms, photo labs, x-ray rooms and operating theatres.

The room is darkened by lowering the blind to the required position. Total darkness can only be achieved by completely lowering the blind (sealing strip on drop rod completely closes with window sill and is light-proof).

The use of black-out blind type VDA 13 in escape routes (emergency exit doors or windows) or in front of windows with an SWE control unit is only permissible with special accessories.

Only use black-out blind type VDA 13 for visual privacy and light protection and for darkening interiors – never as an all-weather protection or as lifting or pulling equipment.

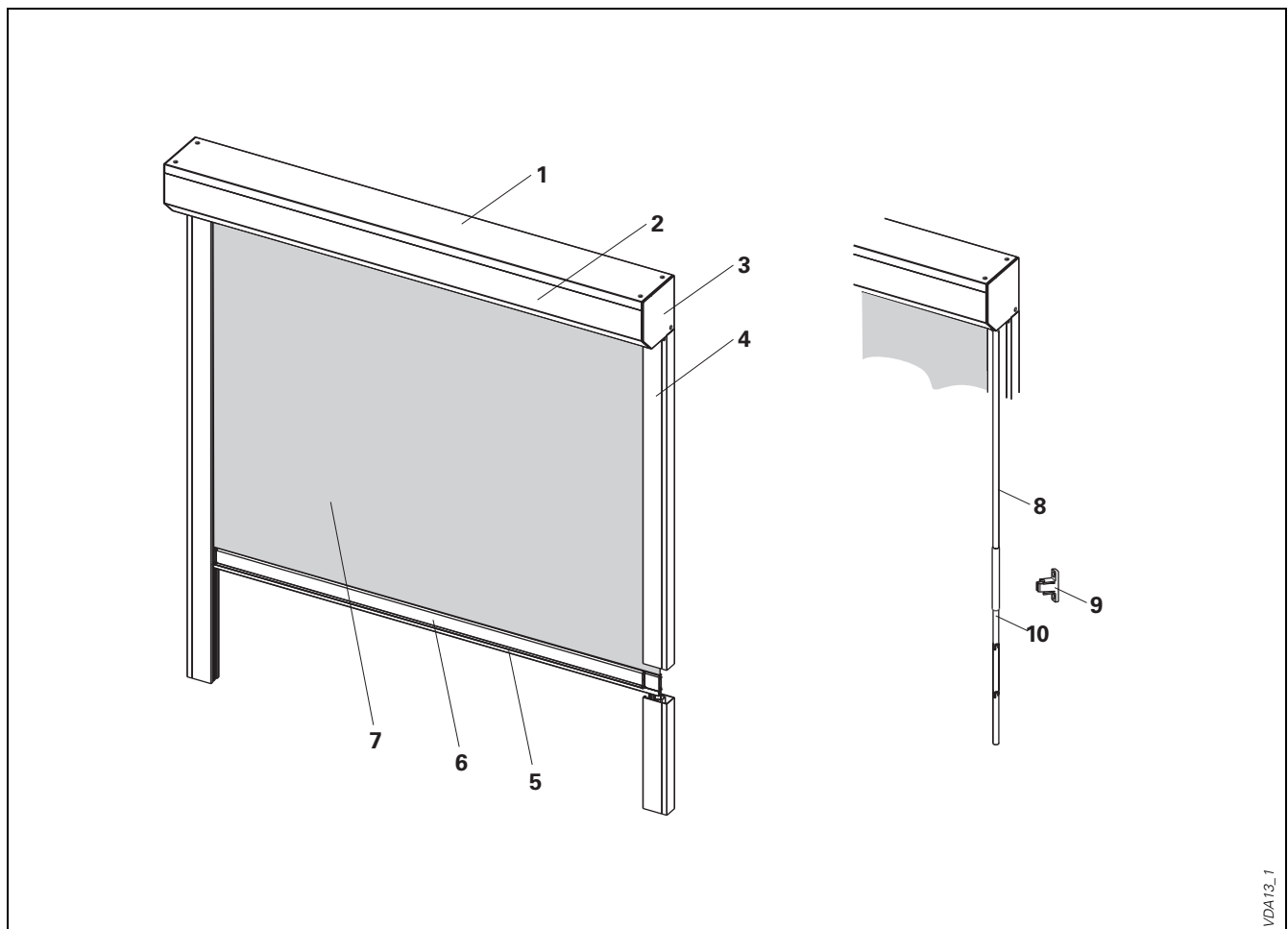


Fig. 1: Black-out blind type VDA 13

1 Box cover

2 Inspection cover

3 Side cover

4 Guide rail

5 Sealing strip

6 Drop rod

7 Fabric

8 Crank rod (only with crank operation)

9 Crank holder (only with crank operation)

10 Crank handle (only with crank operation)

Product description

Black-out blind type VDA 13

Technical data

Motor operation

Power supply 230 V AC

Current consumption depends on motor: 0.3 to 1 A

Power consumption depends on motor: 75 to 230 W

Motor protection class IP44

Size/weight

max. dimensions (W×H) 2 m x 6 m (individual units) or
4.5 m x 2.7 m (individual unit), max.
two slave elements

Fabric weight depending on type, 0.54 kg/m² to
0.57 kg/m²

Crank operation

Crank rod Crank handle, aluminium

Long crank rod according to customer requirement

max. torque 3.7 Nm

Size/weight

max. dimensions (W×H) 1 m x 6 m (individual units) or
4.5 m x 1.3 m (individual unit), max.
two slave elements

Fabric weight depending on type, 0.54 kg/m² to
0.57 kg/m²

Operating class 2 in accordance with EN 13527

Noise level/sound level Sound level <70 dB (A)

Motor data and further technical data

See the separate technical documentation on black-out blinds.

Please note: The motors are only suitable for short-term operation.



in accordance with EN 60335-2-97 and DIN EN 13120

Symbol legend

Safety instructions are located at the relevant locations in the text. They are indicated by a symbol and a signal word. Read these instructions carefully before operating the product. This is to protect yourself and to prevent damage to the black-out blind type VDA 13 (product).



Danger

means that death or serious injury may occur if the appropriate safety measures are not taken.

Warning

means that death, serious injury or major damage may occur if the appropriate safety measures are not taken.

Caution

means that light injury or product damage may occur if the appropriate safety measures are not taken.

! Failure to comply with the instructions identified by this symbol may result in damage to the product.

? What to do if...

+ Indicates specific application tips or useful information.

■ This symbol indicates step-by-step instructions.

Important safety information

Warning – It is important for personal safety to follow these instructions. Keep these instructions.

Aside from the activities described in this operating manual, no alterations, additions or maintenance work are permitted on the product. Any other use may result in dangerous situations and shall be deemed as unintended use.

If the product malfunctions, you will find a description of possible causes in section „Malfunction“ on page 10.

+ **The system should only be installed by qualified technicians.**



Warning

Follow the instructions and warnings below to protect yourself and the product.

- Electrical work may be carried out by authorised electricians only.
- Check the product for signs of wear and damage. Products in need of repair should not be used.
- Do not attempt to disassemble the product or to alter parts thereof. This may lead to personal injury and/or product

damage. Internal tests, modifications, etc., may only be performed by qualified technicians.

- Do not touch any internal parts of the device that are exposed due to damage (e.g. electrical cables/lines). If this is the case, please contact your WAREMA dealer.
- Immediately stop operating your electrical product if smoke emerges from it. If this is the case, please contact your WAREMA dealer.
- Never let children play with the control elements. If your unit is equipped with a remote control unit, keep it out of reach of children. Unintentional activation of the control unit may lead to injury/product damage.
- Electrical/electronic devices are not failsafe (e.g. in case of power failure). Ensure that this does not pose a potential hazard for persons and product.
- Products with electrical control units may start moving at any time and without prior notice. Ensure that this does not pose a potential hazard for persons and product.
- No persons or obstacles should be located in the projection area during normal operation. Keep persons at a distance until the product has reached its final position.
- Do not reach into moving parts when extending or retracting the blind.
- Make sure that clothing or body parts cannot become caught and pulled into the device.
- In sunlight, heat will develop between the blind and the glass window pane. To avoid the risk of glass breaking in full sunlight, retract the blind.
- Never install the product in escape routes or in front of windows with a smoke/heat extraction unit. This would lead to a risk of fatal injury in an emergency.
- Disconnect electrical products from the power supply during activities such as cleaning windows and maintenance work.
- Never throw batteries into a fire. The batteries may explode. When replacing batteries, always use the same type. Dispose of used batteries in compliance with disposal regulations.

Operation

Black-out blind type VDA 13

Safety information



Warning

Risk of fatal injury from blocking of escape routes and/or windows with smoke/heat extraction control units.

Inform your dealer or the safety officer responsible for this area.

Warning

Risk of pinching.

Ensure that no persons or objects are located in the extension area of the black-out blind.

Keep persons at a distance until the product has reached its final position.



Caution

Danger from broken glass.

In direct sunlight, the blind should always be extended to the end position to avoid large temperature gradients in the glass panes. This lowers the risk of glass breakage due to shadows.

To avoid the risk of glass breaking, retract the blind when exposed to strong sunlight.

Crank operation

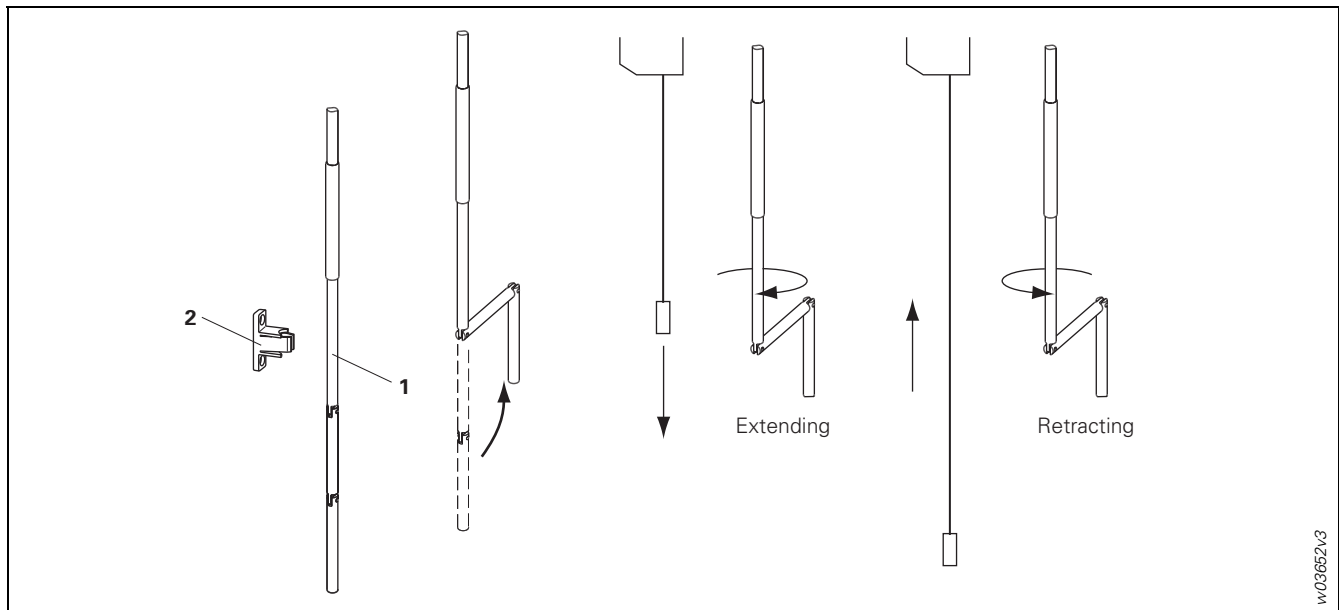


Fig. 2: Crank operation

1 Crank

2 Crank holder

! The maximum extension and retraction of the blind is electronically limited. Do not attempt to advance the blind beyond this point of resistance.



Caution

Risk of injury from spinning crank.

After use, always press the crank back into its holder.

■ After use, always press the crank back into its holder.

Operation with switch

The motor drive makes it very convenient to operate the black-out blind. The drive is an AC asynchronous motor for short-term operation. It is equipped with a thermal protection switch that switches off the motor if it becomes overloaded (e.g. too frequent extension and retraction of the blind). After a brief cooling phase (approx. 10 – 15 minutes), the motor is again ready for operation and your blind can be operated as usual.

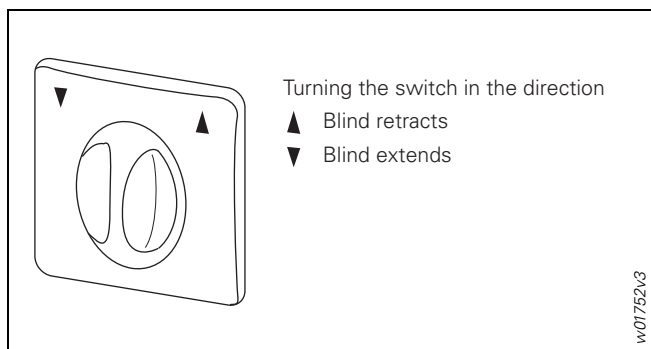


Fig. 3: Switch operation in units with motor drive



Warning

Risk of fatal or serious injury from electric shock.

Electrical equipment should be connected by qualified electricians only. A connection that is not carried out properly may result in considerable danger to the user (e.g. from electrical shock).

This product meets the relevant safety regulations for electrical devices. Changes, especially in the vicinity of or relating to the motor and connection cables, require our approval. If changes are made without our approval, we cannot guarantee the operating safety of the unit.

- + The maximum extension and retraction of the blind is electronically limited. The blind will stop automatically at these positions.

Operation with motor and external control device



Warning

Risk of personal injury or property damage during automatic operation.

A unit operated via a control unit will move even when it is not being monitored. If using higher-level or central automatic controls, ensure that wind sensors, photo cells, timers, etc., cannot trigger a movement that will impair the unit.

If your black-out blind is equipped with a motor and a control unit, please read the separate instructions for the control unit.

Follow the relevant instructions under „Safety information“ on page 7.

Irregular situations/functions

Black-out blind type VDA 13

Malfunction

n What to do if...

Fault	Cause	Elimination
Motor is not operating	- No power	Check the power fuse (electricians only)
	- Existing connector is incorrectly connected	Reconnect the connector according to the circuit diagram (electricians only)
	- Motor is overheated	Wait 10 to 15 minutes, then try again
	- Motor is malfunctioning	Motor change (qualified technicians only)
	- Higher-level control command is present	Await switch on/off delay
Sealing strip does not close completely with the window sill and is not light-proof.	- Guide rails are installed too high	Correct the position of the guide rails as shown in the installation diagram (qualified technicians only)
	- Limit switch is incorrectly adjusted	Readjust the limit switch (qualified technicians only)
	- Window sill is too uneven	Insert an angular piece (qualified technicians only)
Coupled blind does not move with master blind	- Hexagonal coupling bolt is missing or not locked	Insert the hexagonal coupling bolt or fixing screw and tighten (qualified technicians only)
Crank cannot be operated	- Gear is malfunctioning	Gear change (qualified technicians only)
	- Crank or pivot bearing is malfunctioning	Replace the crank or angular piece (qualified technicians only)
Blind extends at a "slant"	- Diverse	Retract the blind a short distance and extend it again. If the problem repeats, retract the blind fully and inform your dealer.
Sides of the blind are "hanging" out of the guide rails	- Blind was accidentally pulled out of the guide rails or was forced out by the wind.	Carefully retract the blind a short distance. It will pull back into the guide rails by itself. If the reinforcement rods have been pulled out of the guide rail, slide them back into the guide rail before retracting the blind.
Blind will not let itself be lowered	- Guide rails have not been mounted in parallel	Realign the guide rails (qualified technicians only)
Coupled blinds extend and retract unevenly	- Diverse	Readjust coupling disk (qualified technicians only)

Maintenance/service

The black-out blind must be serviced at least once a year according to manufacturer instructions and with the product switched off.

If a blind needs to be replaced, please contact your WAREMA dealer or the manufacturer.

Tip

Sign a service contract with a WAREMA dealer.

Accessories

For accessories (e.g. to reconfigure the blind for motor operation), please contact your WAREMA dealer or the manufacturer.

Cleaning



Warning

Risk of falling.

Use appropriate climbing equipment. Switch off the control unit or automatic system when cleaning or caring for the unit.



Caution

Risk of property damage.

Do not hold on to the unit/blind. Do not pull or push too hard on the blind.

Whether or not the unit needs to be cleaned depends strongly on environmental factors (traffic, air pollution, dust, etc.) and on slat colour and surface quality. Regular cleaning may be advisable depending on the degree of soiling. Remove heavy soiling immediately.

If the first cleaning takes place years after initial installation, the blinds cannot be returned to their original condition.

! A high-pressure washer should not be used to clean the product as the pressure and heat may damage the unit and the surrounding wall.

- n Extend the unit completely.
- n Deactivate the higher-level control (if present).
- n Use suitable climbing aids and do not hold on to the unit.
- n Remove dust with a soft brush.
- n Only clean the product with commercially available mild household cleaners for delicate surfaces and wipe off the cleaned parts with clear water.
- n Rub dry the blind and the metal parts with a cloth.

! The blind must be dry before it is retracted.

Important note:

Replacement claims based on these cleaning and care instructions cannot be honoured because the effectiveness of these measures depends on a large number of factors that vary from case to case. Do not use abrasive cleansers, abrasive sponges or solvents such as alcohol or benzine.

Spare parts/warranty/repair/dismantling/liability

Black-out blind type VDA 13

Spare parts



Caution

Risk of personal injury or property damage from the use of incorrect spare parts.

Only use spare parts approved by WAREMA. Please contact your WAREMA dealer or the manufacturer.

The manufacturer guarantees the deliverability of spare parts until 2010.

Warranty

Allowable warranty in accordance with German Construction Contract Procedures (VOB).

Repair



Caution

Risk of personal injury or property damage from incorrect repairs.

If there is a need for repair, please contact your WAREMA dealer or the manufacturer.

Dismantling/disposal



Caution

Risk of personal injury or property damage from improper dismantling/disposal.

If you wish to dismantle/dispose of the blind, please contact your WAREMA dealer or the manufacturer.

Liability

Failure to comply with the product information in these instructions and use of the unit in a manner that contravenes its intended use and purpose may result in the manufacturer refusing to honour warranty claims for product damage. In this case, liability for consequential harm to persons or damage to property will also be excluded. Follow the instructions in the operating manual of your sun shading system. Liability cannot be accepted for damage to the sun shading system due to operation in icy conditions.

Single unit	The black-out system consists of only one system with a drive
Technically correct	Work performed in a technically correct manner
Coupled unit	The black-out system consists of several blinds with a drive
Light-proof	Light will not enter into the room if the blind is closed, i.e. the blind is impervious to light, or light-proof
Left rolling blind	The left rolling blind unwinds the curtain towards the interior.
Not inflammable	Inflammability of the blind according to DIN 4102
Qualified technicians	Qualified technicians are persons familiar with the transport, erection, installation, startup and operation of the product and who have the necessary qualifications for their tasks. The technicians must know and comply with the applicable standards and regulations.
Right rolling blind	The right rolling blind unwinds the curtain towards the window.
SHE	SHE: Smoke/heat extraction system. In case of a fire, SHE systems automatically open windows, doors, skylights and similar and directs dangerous fumes and heated air to the outside of the building.
Hardly inflammable	Inflammability of the blind according to DIN 4102
Infrared safe	Impervious to infrared radiation
VOB	German Construction Contract Procedures

Notes

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Company stamp

