

Translation of the original



# Operating Manual

## Hot Vario



## NOTES REGARDING THE OPERATING MANUAL

This operating manual is valid for **Hot Vario** type built-in units and individual built-in units regardless of the various possible versions with regard to special designs.

The possibilities shown in this operating manual represent the majority of versions. However, many other versions of our products are available through special designs.

### NOTE

Please observe any supplementary sheets to this operating manual and declaration of conformity!  
For more information, contact our customer service department.

## OPERATING AND INSTALLATION MANUAL

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# 1 GENERAL INFORMATION AND SAFETY

## 1.1 FOREWORD

Thank you for choosing one of our units. These products meet the highest technical requirements with practical ease of use. Your unit is a state of the art product regarding health and safety for the commissioning staff, operators and users. Improper use could cause the unit to pose hazards. We will point out dangers in **section 1** and using safety instructions in the entire document.

The safety information and instructions in this document must be complied with! Anyone who installs, starts up or operates the unit must have this document available and must have read and understood it.

Our unit requires proper installation, commissioning, operation and care. A failure to comply with the aforementioned points can void guarantee, warranty and product liability claims, but also cause damage and a lack of safety.

Always keep this document complete and in a legible condition. If required, request it from your supplier or owner, or download it from the manufacturer's website at [www.ideal-ake.at](http://www.ideal-ake.at).

### NOTE

The manufacturer is not liable for technical or printing errors in this document and will also not accept liability for any damages caused directly or indirectly by delivery, performance or usage of this document

### NOTE

The manufacturer reserves the right to change specifications and designs as part of continuous product improvement process.

### NOTE

Please observe any supplementary sheets to this operating manual and the corresponding declaration of conformity!

For more information, contact the manufacturer!

## 1.2 VERSION NOTES

Version:	Compiled:	Remarks:
23A	01/2023	Translated version of the original description in German

## 1.3 SCOPE OF APPLICATION

This operating manual applies to the following models and attributable special models:

### Model designation:

Hot Vario aaa-bbb series

### Abbreviations:

**aaa:** Number between 50 and 200 (unit width) or blank

**bbb:** Number between 1 and 4 (number of modules), number between 50 and 200 (unit width) or blank

### NOTE

Dimensions and weight specifications for the units are specified in the order and vary according to requirements.  
For detailed information, contact the owner, your supplier or our support department (see [section 1.5](#)).

### NOTE

Note that lifting the unit requires at least two people and, from a certain weight (>60kg), at least four people are required. Call a second person as a marshaller for installation.

## 1.4 WARRANTY AND LIABILITY

Our "General terms and conditions" (T&C), as well as customer specific payment and delivery conditions apply. Warranty and liability claims for personal injury and damage to property are not possible if they are attributable to one of the following reasons:

- Improper use of the unit;
- Transport damage;
- Operating the unit with faulty safety components or safety components that have not been installed properly and are not functional;
- A failure to comply with the instructions in this operating manual regarding installing, commissioning, operating, maintaining and assembling the unit correctly;
- Unauthorised mechanical or technical modifications to the unit;
- Deficient maintenance of consumables and wear parts;
- Unauthorised repairs;
- Using aggressive or corrosive cleaning agents;
- Natural disasters or force majeure;

Furthermore, liability is also rejected for:

- Glass breakages;
- Faults on plastic components, seals or lighting;
- Any damage that can be proven to be caused by an unqualified person adjusting the heat controller incorrectly;
- Damage or malfunctions due to assembling the unit incorrectly after cleaning, maintenance or servicing.

### NOTE

A failure to comply with the specified instructions can void the warranty!

### NOTE

If malfunctions occur, switch the unit off and report this to your supplier or the manufacturer immediately.

## 1.5 MANUFACTURER / SUPPORT

Contact your supplier or the manufacturer in the event of technical queries:

**AKE Ausseer Kälte- und Edelstahltechnik GmbH**

Pichl 66

A-8984 Bad Mitterndorf, Austria

T: +43 3624 21100 - 0

F: +43 3624 21100 - 33

E: [office@ake.at](mailto:office@ake.at)

W: [www.ideal-ake.at](http://www.ideal-ake.at)



### NOTE

Always have your unit's serial number available when contacting the support department. You can find this on the type plate or the "AKE checked" sign (see [section 1.7](#)).

### 1.5.1 FURTHER CONTACT DATA FOR QUERIES/REPAIRS

Technical support (phone)	+43 3624 21100 – 0
Technical support (e-mail)	<a href="mailto:office@ake.at">office@ake.at</a>
Orders / spare parts (e-mail)	<a href="mailto:webshop@ake.at">webshop@ake.at</a>
Web shop / spare parts (online catalogue)	<a href="https://shop.ideal-ake.at/ersatzteilshop/">https://shop.ideal-ake.at/ersatzteilshop/</a>
Minimum warranty duration	See the contractual agreement / AKE T&C



## 1.6 SYMBOLS AND SIGNAL WORDS USED



### **DANGER**

**Immediate danger of death for people**

A safety instruction with the **DANGER** signal word indicates an immediate danger of death and health damage.

A failure to comply with these safety instructions can cause death or serious injuries.

---



### **WARNING**

**Danger of personal injury (serious injuries) and potential further damage to property**

A safety instruction with the **WARNING** signal word indicates a dangerous situation that may affect people's health.

A failure to comply with these safety instructions can cause serious injuries.

---



### **CAUTION**

**Danger of personal injury (minor injuries) and potential further damage to property**

A safety instruction with the **CAUTION** signal word indicates a potentially dangerous situation. A failure to comply with these safety instructions can cause minor injuries.

---

### **NOTE**

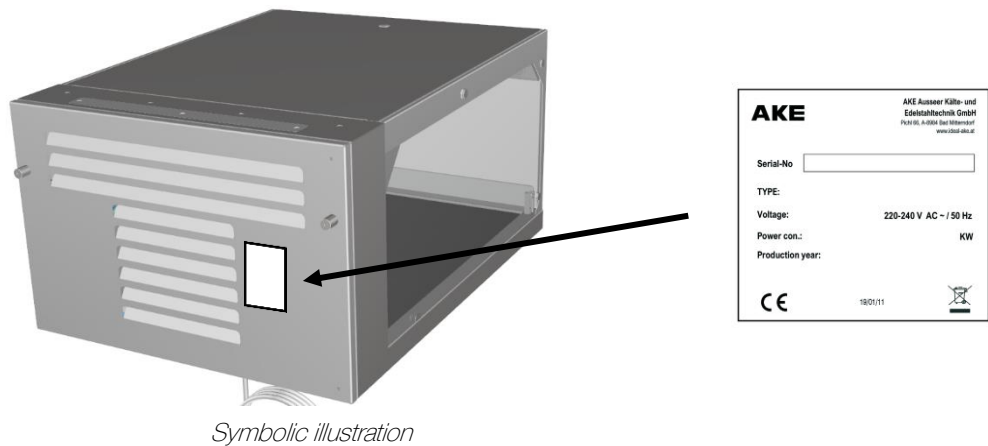
This symbol with the Note remark refers to supplementary information for installation, operation, maintenance and servicing. A failure to comply with these instructions can cause damage to property.

---

## 1.7 LABELLING

The type plate is located on the unit's backside.

Furthermore, there are QR codes to access the operating manual and further helpful documents here.



The unit is also marked with the AKE inspection label. This is applied close to the type plate.



### NOTE

General technical specifications are provided in [section 2.2](#). Due to the wide range of models, further technical data is provided on the type plate and in the order specification.

## 1.8 GENERAL SAFETY INSTRUCTIONS

The following safety regulations and obligations apply to handling the unit in general:

- Covers with warning notices may only be opened by authorised specialists.
- The unit must not be cleaned using a water jet.
- Protective covers and safety devices must not be removed, as there is otherwise a risk of injuries.
- The controller may only be opened by authorised specialists.
- Flowing air in the unit's vicinity due to improperly installed ventilation (e.g. air conditioning units) or draughts must be prevented in order to ensure that the unit functions properly.
- The ambient temperature is not permitted to exceed +25 °C and the relative ambient humidity must not exceed 60 %.
- The unit is not suitable for operation in entrances and outdoors.
- Protect the unit from direct sunlight.
- The products brought to presentation must be pre-heated to a core temperature of at least +75°C up to +85°C (depending on the product).
- Sharp items must not be stored loose in the unit, as there is otherwise a risk of injuries.
- All glass attachments must be handled with appropriate care in order to prevent injuries due to glass breakages.
- Components and materials may only be replaced with original spare parts.
- Do not store any flammable or explosive products in the unit or in its vicinity.
- The unit must be clad sufficiently during assembly or installation in order to ensure that live parts cannot be touched (depending on the model).
- The installation vicinity (installation location) must be stable in order to withstand unit strain.
- All cladding that is installed during installation must not be able to be removed without tools.
- The unit must be inspected for loose connections, shearing points and damage after cleaning, maintenance and servicing. Any faults found must be rectified immediately!
- Do not use the unit for unintended purposes!
- Pushing and moving the unit (during operation) is not permitted. Units must be lifted for transport or relocation.
- Ensure that there is enough distance between packaged foodstuffs and heat radiators (supplementary heat) – there is a risk of fire.
- Only use suitable packaging materials (heat resistance, etc.) for food.
- Pay attention to hot surfaces on the unit – there is a risk of burns. They remain hot for a time after switching off.
- If a risk of burns is to be expected when removing products, a suitable removal device (e.g. tongs) must be used.
- The unit may only be operated with the specified voltage (see the order specification, type plate).

### NOTE

Technical modifications to the unit may only be made by authorised specialists! This applies particularly to work on heating installations, the electrical installation and the mechanical system.

**All modifications must be authorised by your supplier or the manufacturer!**

## 1.9 INTENDED USE

The units are designed specially for use in food and serving counters, as standalone units or for multi-unit installation (unit tower).

They are to keep packaged foodstuffs warm and to display them (up to a product temperature of around 70°C depending on the foodstuff, the packaging and the ambient conditions) at controlled temperature ranges of up to 95°C air temperature (temperature at the exhaust opening) in the cabinet. The units are used to keep foodstuffs warm, not to warm them up or cook them, and are also not intended for mass storage of foodstuffs.

- Only suitable packaging may be used to store the products. For more information, contact our your specialist dealer or the manufacturer.
- The hot air curtain must not be impeded / interrupted / blocked with products.
- Pay attention to the maximum filling height of 150 mm for the cabinet (measured from the black glass plate → the base).
- Only place pre-heated products into the cabinet.
- If cold and hot ingredients are to be combined, as is the case with hamburgers for example, temperature fluctuations may occur in the product – the prescribed product core temperature may therefore no longer be attainable.
- The owner is obliged to ensure that products are stored correctly.

### 1.9.1 MANUFACTURER'S RECOMMENDATION

- Foodstuffs that dry out quickly (e.g. baked breads, baguettes, etc.) should not be stored for more than 2 hours after being placed in the cabinet.
- If the optional accessories are being used (snack waves, etc.), only products for which no excessively high temperatures are prescribed to keep them warm should be placed in the cabinet.
- The optimum operating ambient temperature is between + 18°C to +20°C. The lower the ambient temperature, the lower the product temperature may be.

#### Ensure the following prior to switching on and switching off:

The units must be complete. The unit is a built-in unit or a standalone unit and must be closed or built in on all sides. Unit stability must be guaranteed and tipping prevented by correct installation in accordance with [section 2.4](#).

In order to save energy, we recommend switching the units off when not in use (when empty) outside of opening hours. Wait until the required temperature has been reached before filling the units.

#### NOTE

All of the manufacturer's specifications must be complied with. These specifications include the ambient temperature, conditions in the installation environment and connections to be used.

Proper use also includes observing the installation and operating manual, as well as complying with inspection and maintenance conditions. Any other use requires written approval from the manufacturer.

Improper use can pose risks to people and cause the unit to be damaged.

A control is used to set the cabinet temperature, and this control may only be used after reading and understanding the documentation. If the unit is stopped or taken out of service, the points in [section 1.8](#) must be complied with.

Furthermore, a failure to comply with the proper use renders liability and warranty claims void. The unit may only be operated under the usage conditions prescribed in the operating manual.

## 1.10 REASONABLY FORESEEABLE MISUSE

The units may not be used as follows:

- No foodstuffs may be warmed up or cooked. The unit may only be filled with packaged foodstuffs that have prescribed core temperature (of +75°C to +85 °C – depending on the foodstuff placed in the unit).
- Only suitable packaging may be used. For more information, contact our your specialist dealer or the manufacturer.
- Operating the unit outside the specified temperature range (ambient temperature and product temperature) is not possible safely.
- No ventilation slots are permitted to be blocked or covered. Foodstuffs may not touch the unit's walls or block the air flow (on both sides).
- The unit must not be used outside buildings. Protect the unit from direct sunlight and environmental influences such as rain, etc.
- The units may not be used as climbing aids or storage.

## 1.11 TARGET GROUP AND PRIOR KNOWLEDGE

This documentation is aimed at operating staff in gastronomy (e.g.: hotel chains, restaurants, catering), as well as the installation staff. The unit is only operated by trained staff that must be designated by the owner.

Ensure that the operating staff meet the following prerequisites:

- The operators must not have any vision impairments, as they must be able to read the safety instructions on the unit and the instructions in the documentation without problems.
- Reading and understanding this documentation is a prerequisite. The current applicable regulations regarding occupational health and safety, and accident prevention must be complied with.
- Only trained staff may operate and clean the unit. Only specialist staff authorised by the manufacturer may perform maintenance and repair work.
- Always observe the locally applicable commercial and safety-related regulations.

The owner must take the following measures to acquire the knowledge required to operate the unit:

- Product training
- Regular safety training

## 1.12 INFORMATION REQUIREMENTS (EU) 2019/2015

The following specifications are used for the information requirements in accordance with Directive (EU) 2019/2015 – Annex V.2.:

The products listed in [section 1.3](#) contain the following light sources:

LED bulbs (2050K): Energy efficiency class G

LED bulbs (2700K): Energy efficiency class F

## 1.13 RESIDUAL RISKS

Despite taking extreme care when designing and building the units and even if all safety-relevant circumstances are considered, there may still be residual risks that are evaluated in a risk assessment. This section lists all residual risks and safety instructions from the risk assessment.



### DANGER

#### **Danger due to electrical voltage on live components.**

Cleaning, assembly, commissioning, dismantling and repair work on electrical components may only be performed by trained specialists when the unit has been de-energised. To do this, unplug the unit or disconnect it from the mains at all poles.



### WARNING

#### **Risk of crushing when setting the units up**

Pay attention to the risk of crushing, also for third parties, when setting the units up. The units may only be lifted manually by at least 2 people (depending on the unit size). These people must be strong enough to carry the units. Pushing or moving the unit is not permitted! Call a second person as a marshaller if necessary. Wear protective gloves and safety shoes when performing assembly and loading work.



### WARNING

#### **Risk of crushing and danger due to falling objects when handling/adjusting/positioning heavy individual components**

Pay attention to potential risks of crushing, also for third parties, when handling heavy objects. Use both hands if possible when handling heavy objects. Call a second person to assist if necessary. Wear protective gloves and safety shoes when handling/adjusting/positioning heavy individual components.



### WARNING

#### **Various dangers when disposing of damaged parts/components**

Wear protective gloves when disposing of damaged parts/components. Dispose of damaged parts/components properly and in an environmentally friendly manner. Country-specific laws must be observed.



### WARNING

#### **Electrical hazards**

Ensure that the mains connection line to the units is not damaged. In the event of damage, have this replaced by authorised specialists in order to prevent hazards.



## WARNING

### Risk of tipping on uneven or unstable foundations

The base/foundation onto which the unit is installed must have sufficient stability and be able to bear the unit's weight at all times.



## WARNING

### Risk of crushing and falling parts when moving the unit

Pay attention to moving parts such as doors, discs, etc. when handling the unit. This applies particularly to the larger versions of the unit.



## WARNING

### Risk of burns on heating elements or cabinet inner walls

Switch the unit off and allow it to cool for at least 45 minutes before you start cleaning work.



## CAUTION

### Impact hazard on the units during assembly, cleaning and servicing work

Pay attention to possible impact hazards on the unit.

## 1.14 PERSONAL PROTECTIVE EQUIPMENT

The following personal protective equipment must be worn during all assembly, dismantling and servicing work:



Wear safety shoes when performing assembly and loading work.



Wear protective gloves when performing assembly and loading work.



Wear safety goggles when disposing of damaged parts/components.



Wear a hard hat when performing assembly, lifting and loading work.

## NOTE

Wear appropriate protective equipment when cleaning the unit. This must comply with that prescribed by the manufacturer of the cleaning agent used.

## 1.15 TRANSPORT AND PACKAGING

### NOTE

All units may only be transported and stored in the usage position (horizontally). All safety instructions according to [section 1.8](#) must be complied with.

The packaging design depends on the quotation and the packaging is designed individually according to the agreements. Units are transported in wooden cladding as standard. This cladding protects the units from serious damage. Glass components are wrapped in additional packaging material. All parts are position and stuck in place inside this wooden cladding to ensure that they are secure for transport.



### WARNING

#### **Danger due to falling objects and suspended loads when transporting the units and their components**

Use sufficiently-sized lashing and clamping gear. Pay attention to the permissible vehicle regulations when securing the load. Legal, country-specific traffic regulations must be complied with. Load lifting equipment used, such as forklifts must be sufficiently dimensioned. When performing lifting work, ensure that no other people remain below loads transported at heights. The unit may only be transported upright (in the usage position).



### WARNING

#### **Risk of crushing on fixed components (walls, other machines) when positioning the devices and risk of crushing between the pallet and the foundation when setting down**

Keep yourself and other people away from hazard points. Call a second person as a marshaller if necessary. Pay attention to the risk of crushing for third parties when setting the units down. Wear protective gloves, safety shoes and a hard hat when performing assembly and loading work.



### WARNING

#### **Danger due to falling objects when lifting and unpacking the units**

Pay attention to potential risks due to wooden parts folding out when removing the wooden cladding. Call a second person to assist if necessary. The unit must be lifted using a suitable load lifting device such as a forklift. The unit may only be lifted manually by at least two people (depending on the unit size). These people must be strong enough. Wear protective gloves, safety shoes and a hard hat when performing assembly and loading work.

If the unit is to be returned, it must be returned in the original packaging or packed properly for transport in a similar way. Furthermore, the unit must be returned unused, undamaged and complete. The customer must request and pay for the return. For information on proper disposal of the packaging material, see [section 1.16](#).

### NOTE

All units may only be transported and stored in the usage position (horizontally). In order to be able trace damage during loading, transport and unloading, all units are equipped with a "Shockwatch ® 2". This tool enables the point in the supply chain at which a product has been damaged to be determined in order to clarify transport damage. For information on the ShockWatch ® concept, see the website.



## 1.16 DISPOSAL



### WARNING

#### **Various dangers when disposing of damaged parts/components**

Wear protective gloves when disposing of damaged parts/components. Dispose of damaged parts/components properly and in an environmentally friendly manner. Country-specific laws must be observed.

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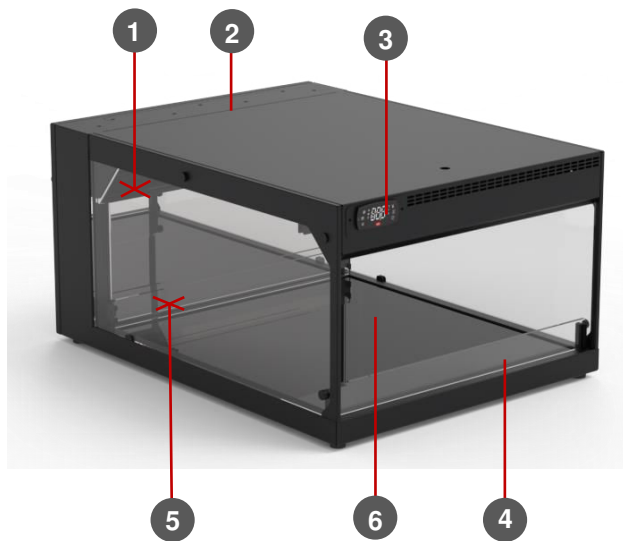
### NOTE



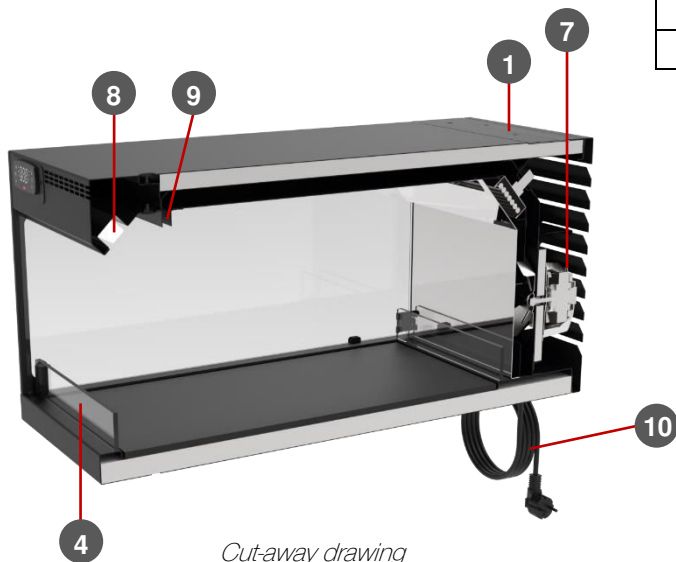
Please note that some of the unit's components are electronic parts. Disposal through public waste disposal authorities is therefore not possible. Check your obligations in accordance with the national WEEE regulations. Correctly sorted disposal is always obligatory. This also applies to packaging, films, glass, plastics, etc.

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## 2 TECHNOLOGY



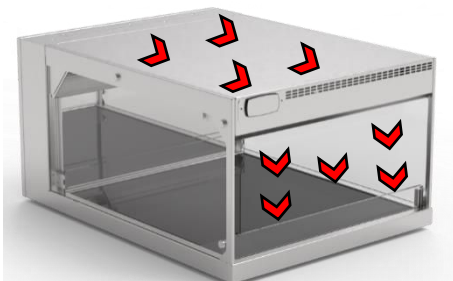
NO.	DESIGNATION
1	Heat radiator (not installed visibly)
2	Cover plate (multi-installation)
3	Control unit
4	Front deflector glass
5	Rear deflector glass
6	Black glass plate
7	Rear wall area: <ul style="list-style-type: none"> <li>- Fan</li> <li>- LED transformer</li> <li>- Connection for mains cable</li> </ul>
8	LED light
9	Air exhaust opening with deflector glass
10	Mains connection cable
-	Base with adjustable feet (not shown, optional accessory)
-	"Module tower" assembly set (not shown)



*Cut-away drawing*

### 2.1 HEATING FUNCTION NOTES

A heat radiator generates the required heat that is conveyed into the cabinet through the air shaft that is at the top. The air must be able to circulate without hindrances.



*Symbolic illustration*



#### WARNING

##### Hot surfaces (glass panes, covers, unit components)

The circulation makes some surrounding components very warm and this may cause injuries (burns) if they are touched without appropriate protective equipment.

## 2.2 TECHNICAL SPECIFICATIONS




Protection class	Protection class I, earthing	IEC 60335-2-49
Power data	Per module: ~0.73 kW; 220-240 VAC; ~ 50Hz	
Device dimensions	Hot Vario: 56x79x39cm (WxDxH) Hot Vario 2 (tabletop variant): 56x79x77cm (WxDxH) Hot Vario 3 (with base): 56x79x166cm (WxDxH) Hot Vario 4 (with base): 56x79x204cm (WxDxH)	
Weight	Hot Vario: approx. 50 kg Hot Vario 2 (tabletop variant): approx. 100 kg Hot Vario 3 (with base): approx. 165 kg Hot Vario 4 (with base): approx. 215 kg	
Noise levels	< 70 dB(A)	IEC 60335-1 IEC 60335-2-49
Materials	<ul style="list-style-type: none"> <li>Stainless steel <ul style="list-style-type: none"> <li>1.4301</li> <li>1.4016</li> </ul> </li> </ul>	
Supplier components	<ul style="list-style-type: none"> <li>Control unit</li> <li>Lighting (LED)</li> <li>Fan</li> <li>Heat radiator</li> <li>Glass</li> <li>Electrical cables and assembly materials (cables, cable ties, etc.)</li> </ul>	
Insulation material	Heat-proof insulation material: INSULFRAX® mat	
Glass	<ul style="list-style-type: none"> <li>Single-glazed safety glass (6mm, 8mm)</li> <li>Insulation glass (16mm)</li> </ul>	EN12150-2:2004

### NOTE

Thanks to the use of high quality materials and components with a long service life, regular care and maintenance ensures a long unit service life.

## 2.3 SAFETY INSTRUCTIONS ON THE UNIT

Safety instructions are installed on the unit, which must be followed at all times. If the safety signs fade or get damaged over the unit's lifetime, they must be replaced with new signs immediately. The owner must check them on a regular basis for legibility and completeness.

Pictogram	Description	Pictogram	Description
	Warning of electrical hazards		Warning of hot surfaces
	Protection class I, earthing		

### 2.3.1 ELECTRICAL NOTES

All devices have complete electrical equipment and are tested when delivered.



#### **DANGER**

##### **Danger due to electrical voltage on live components**

The electrical connection must be established by authorised specialists and comply with the applicable standards, regulations and safety regulations.

#### **Connecting the unit**

The units are delivered with a 3 metre connection cable with safety plug as standard.

The unit is connected to an alternating current mains with a rated alternate current of 230 volts and a frequency of 50 Hz. Every electrical supply line must be fused to 16 A (tripping characteristic C).

#### **The owner must ensure the following electrical connections at all times:**

Units with 230 V, 50 Hz (single phase): 1 x 16 A

#### **Ability to disconnect from the mains**

The socket (in which the unit is connected to the mains) must be easily accessible in order to be able to disconnect the unit from the mains if required (e.g. for cleaning, maintenance work). If direct wiring is used, the ability to disconnect the unit from the mains if required must be provided.



#### **DANGER**

##### **Danger due to electrical voltage on live components**

The mains voltage and mains frequency must comply with the values specified on the type plate. Connection to different voltage, current type or frequency is not permitted. The applicable local safety regulations must be observed.

The unit manufacturer is not liable for damage caused by improper connection.

## 2.4 ASSEMBLY MANUAL

Hot Vario units can be installed at the destination in various versions, as a standalone module on serving counters to the "heating tower" with a maximum of 4 modules on top of one another.

A standalone module is completely assembled upon delivery and must be connected to the mains using the mains cable provided.

Standalone modules must be laid out for the intended use.



Symbolic illustration

### NOTE

The required connection data is provided in [section 2.3.1](#) "Electrical notes" and must always be complied with for correct operation.

### 2.4.1 UNPACKING THE UNIT

Check the unit for transport damage and note any damage / faults discovered on the handover documents from the carrier, as well as on their form, and have all damage confirmed.

### NOTE

In order to be able trace damage during loading, transport and unloading, all units are equipped with a "Shockwatch@2". This tool enables the point in the supply chain at which a product has been damaged to be determined in order to clarify transport damage. For information about the ShockWatch® concept, contact the manufacturer.

If the damage only becomes visible after unpacking the unit, you are obliged to declare this immediately in writing. Advanced notice to your supplier by phone is advisable. You require the following to remove the transport packaging:

At least two people (depending on the model size)	An electric screwdriver with the corresponding bit or a screwdriver	Cutting tools (e.g. a knife)
--	---	------------------------------

### NOTE

If you do not report transport damage in good time, your claims for damages are void (in accordance with the T&C).

### 2.4.2 INFORMATION REGARDING THE INSTALLATION LOCATION

All installation location requirements in accordance with [section 1.8](#) must be followed in order to guarantee efficient and safe operation.

### NOTE

Correct installation and fault-free functions are the prerequisite for starting the unit up. Installation must comply with the local electrical, safety and hygiene regulations.



### WARNING

#### Risk of the unit tipping on uneven and unstable foundations

Ensure that you only set the unit up on level and sufficiently stable foundations. Otherwise, the unit may topple or parts of the unit could fall down.

### 2.4.3 ASSEMBLING THE UNIT

The assembly staff are responsible for the unit's stability. Ensure that the installation location is prepared according to the technical specifications. Protect the unit and base surfaces from any damage during assembly.

The units may only be installed by specialist staff. Electrical connections may only be established by authorised specialists. You must ensure that suitable staff and tools are used in order to prevent damage and injuries during assembly.

### 2.4.4 REQUIRED TOOLS

#### Required tools depend on the unit variant!

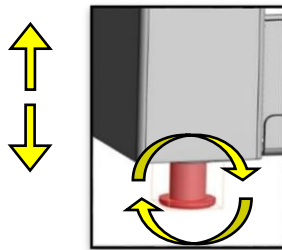
Set of Allen keys	Screwdriver (flat head / Phillips head / Torx)	Spirit level
Set of socket spanners (1/4 inch)	Set of open-ended spanners	

Note the following information before starting assembly:

- Safety and process-related training must be provided to all employees / fitters / operators.
- Inspect the complete units.
- Inspect each unit for any (transport) damage.
- Select a suitable installation location.
- Call a second person to assist with assembly.

Observe or implement the following points when positioning the unit with a base:

- The foundation / ground must be able to bear the unit's loads and have the required stability!
- Access to the adjustable feet must be provided → units must be levelled if required (the owner must ensure this).



*Symbolic illustration*

#### NOTE

The base is equipped with levelling adjustable feet. They can be used to adjust the unit so that it is absolutely horizontal. Turning in the relevant direction enables the required adjustable foot height to be reached. Use suitable tools for this.

### INSTALLING THE UNIT AT MORE THAN 1500 METRES ABOVE SEA LEVEL

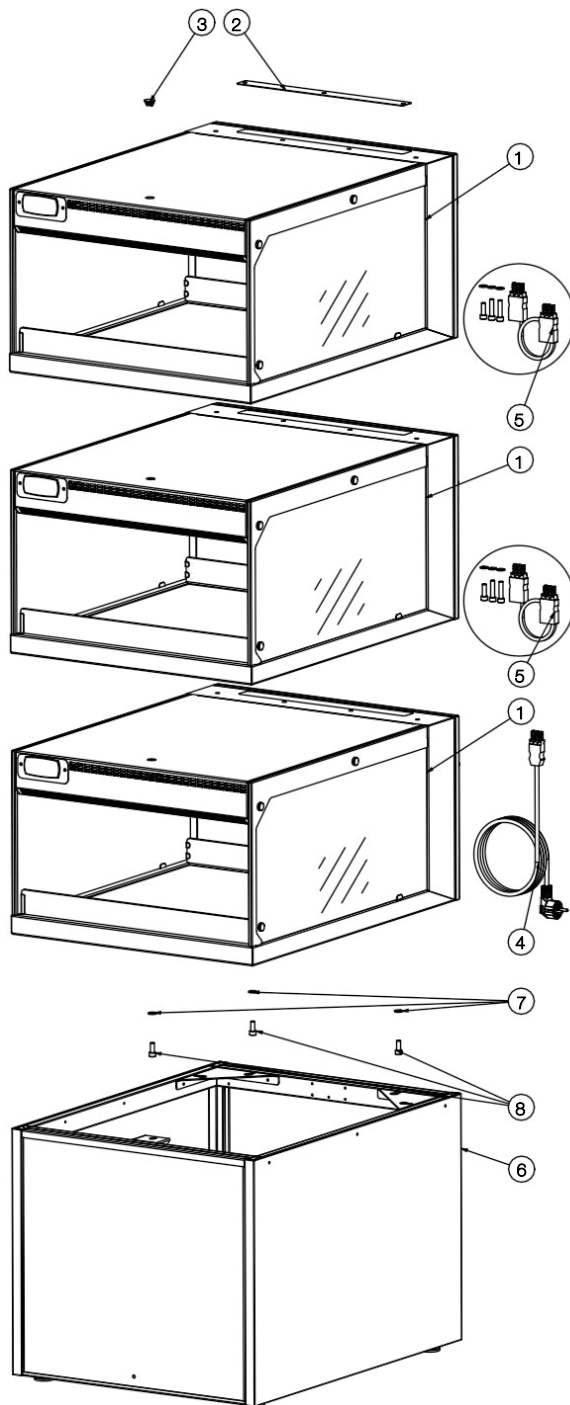
If the unit is being used at more than 1500 metres above sea level, pressure relief must be provided for insulating glass in order to prevent damage to the glass! All insulation glass is delivered WITHOUT pressure relief as standard. For more information, contact your service partner or the manufacturer.

#### NOTE

The manufacturer is not liable for any damage to the unit or components (e.g. glass breakages, etc.) if assembled incorrectly or in the event of additional changes required (e.g. pressure relief) due to specific ambient parameters for the unit.

## 2.4.5 MODULE ASSEMBLY

Assembly steps for the Hot Vario tower using the example of a triple module (with base):



Symbolic illustration

NO.	DESIGNATION
1	Hot Vario standalone module
2	Cover plate (multi-installation)
3	Hole blanking plug, Ø16mm
4	3 metre connection cable
5	Assembly kit (connection kit)
6	Base
7	Spacer, Ø8mm
8	M8x20 screw
9	Mains connection cable

### Assembly steps:

#### Step 1:

Remove the rear cladding (rear wall) from the modules (No.1). **ATTENTION: De-energise the unit – pull the mains plug out.**

#### Step 2:

Screw the bottom module (No.1) to the base (No.6). Use the screws (No.8) and the spacers (No.7) to fasten.

Pay attention to the base assembly direction – the key holes are positioned on the rear of the bottom module (No.1).

Note: The cover plate (No.2) and the perforated plate plug (No.3) must be removed from the bottom modules.

#### Step 3:

Plug the mains cable into the rear of the bottom module depending on the assembly layout.

#### Step 4:

Screw the modules (No.1) together using screws and spacers (No. 5).

The connection cable (No. 5) must be connected to the modules (No.1) properly.

#### Step 5:

Attach the rear cover to each module properly.

## NOTE

The manufacturer is not liable for any damage to the unit or components (e.g. glass breakages, etc.) if assembled incorrectly. For more information regarding assembly, see [section 2.5](#).

## 2.5 ACCESS TO DOCUMENTS / VIDEOS

Further information is provided on the manufacturer's website under "Hot Vario":



WEB: <https://shop.ideal-ake.at/produktkatalog/vitrinen-mit-trockener-waerme/hot-vario/>

Further useful videos regarding cleaning and assembly are provided at:

**Operation / stocking / cleaning**



**Assembling the unit modules**



Note: only for authorised specialists!

**Maintenance / repair**



Note: only for authorised specialists!



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## 3 OPERATION AND CONTROL

This section describes starting up and operating the unit properly.

### 3.1 STARTING UP FOR THE FIRST TIME

The unit is pre-cleaned prior to delivery. However, we recommend using a suitable cleaning agent (see [section 4.1.2](#)) to clean the unit completely in order to remove any dirt.



#### DANGER

##### **Danger due to electrical voltage on live components**

Check the cable connections and the power supply once more before starting up to ensure that they are correct and have contact.

#### NOTE

Wait until the required temperature has been reached after switching the unit on before stocking.

### 3.2 STOCKING THE UNIT / LOAD LIMITS

Stock the unit to no more than 150 mm above the black glass plate. When using the relevant accessories, ensure that the load limit is not exceeded.

The stocked products must have a core temperature of at least +75°C to +85°C (depending on the product).



#### WARNING

##### **Risk of burns when stocking the unit**

When stocking or removing the products, ensure that you do not come into direct contact with hot components. Use suitable aids (e.g. tongs, protective gloves, etc.)

#### NOTE

Observe the maximum load limit. If this load limit is exceeded (unit overfilled), optimum heat distribution over the stocked products can no longer be guaranteed.

The hot air curtain on the unit must not be impeded or interrupted by stocked products. Air slots must not be blocked.

The manufacturer is not liable for any product losses caused by overfilling.

#### NOTE

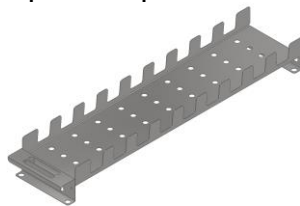
Maximum load on the black glass base: max. 15 kg (including accessories).

Ceramic plates can scratch powder-coated metals and glass sheets.

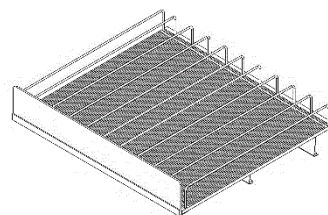
Optional accessories can be used to improve the products' presentation:



Snack waves



Snack holders



Product slide (Flexroller)

For more information on optional accessories, contact the manufacturer or visit the manufacturer's website.

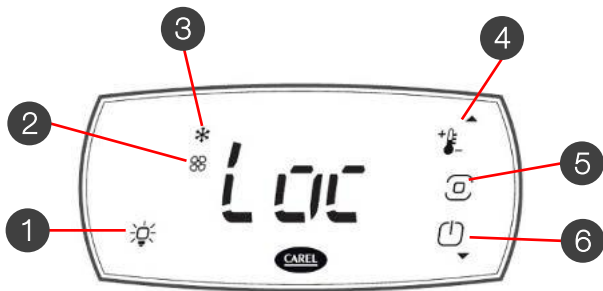
## 3.3 OPERATING THE UNIT

### 3.3.1 BUTTON ALLOCATION

The following table describes the button allocation and their functions. The controller's digital display indicates additional information (see [section 3.6](#)).

#### NOTE

Wait until the required (set) temperature has been reached before filling the units with products. The TARGET temperature is always shown on the display. The heat-up time can be up to 40 min depending on the temperature.



*Symbolic illustration*

NO.	DESIGNATION	FUNCTION
1	LIGHT button	Lighting ON/OFF
2	Fan LED	Red indicator = active
3	Heating mode	Red indicator = active
4	Target value, Arrow pointing upwards	-Increase value, -Go through the menu -Direct access to target value adjustment
5	Program button	<u>Short press:</u> -Access to the menu branch -Save the value -Return to the parameter code  <u>Long press (3 sec):</u> -Access to programming mode -Return to the previous level
6	ON/OFF button, Arrow pointing downwards	ON/OFF, unit ON -Value reduction -Go through the menu -Switch the device on/off
-	Display	Display for target temperature; Error messages

#### NOTE

If nothing is shown on the display, check whether the unit is connected to the power supply.

#### NOTE

A separate programming manual with detailed handling information is enclosed with the unit. Follow the instructions contained there.

## 3.4 TEMPERATURE SETTING

The interior temperature is regulated using the control display for the electronic temperature controller. This is located in the upper part of the housing. The target temperature value set in the factory is shown on the display. The required temperature can be set by a long press of the programming button and subsequently pressing the UP button for higher temperatures or the DOWN button for lower temperatures. The exact button allocation is provided in [section 3.3](#).

### NOTE

The target value (temperature) set in the factory is shown when the unit is switched on.

After you change the temperature settings, it takes some time until the required temperature is reached in the unit and stabilises (we recommend using a suitable testing device to check the set temperature). The temperature should be set by the supplier or specialist dealer during installation. When selecting the product cabinet temperature, pay attention to the products to be stocked and the local ambient conditions.



### CAUTION

**Changes to the temperature settings can cause the stocked products to spoil.**

The temperature for each unit was set in the factory in accordance with the specified technical requirements so that optimum food storage is guaranteed. This temperature setting can be changed according to the specifications for the stocked products. The manufacturer does not accept any liability for temperatures set incorrectly by the operator or owner and the resulting spoiled products.

### NOTE

Proper functions can only be guaranteed if the supply and return air openings (deflector glass) are kept clear and the hot air curtain is not impeded.

### NOTE

Adjust the temperature according to your product. An excessively high temperature causes the product to dry out or burn but too low a temperature causes the product to cool and potentially spoil.



### CAUTION

**Distance between the products and heat sources**

In the heat area, the stocked products must be a **minimum distance of 80 mm** from the supporting heat (radiator, quartz radiator) in order to prevent the stocked products burning or drying out. The containers / packaging must be temperature-resistant.

## 3.5 FAULTS AND CAUSES

### NOTE

Switch the unit off if malfunctions occur. Contact your supplier or the manufacturer immediately.



### WARNING

#### Dangers due to working on / handling the unit

Some inspections can pose a high level of danger (electric shock, etc.). Trained, authorised specialists must be commissioned to perform this work!

Check the points listed below or contact your supplier or specialist dealer if you cannot find the solution to the problem.

FAULT	POSSIBLE CAUSE	REMEDY
The unit does not work.	Power supply interrupted.	Check that the protective contact plug is tight (at the socket and the unit connection).
	No voltage to the socket.	Check whether fuses (in the circuit) are intact.
	Electronics are set incorrectly or the display is dark.	Contact an authorised service technician / customer support.
	The excess temperature switch has disconnected the power supply.	Contact an authorised service technician / customer support.
The lighting does not work.	The LED lighting is not switched on.	Switch the lighting on (see section 3.3).
	The bulbs or cable connection are faulty.	Contact an authorised service technician / customer support.
The products do not reach the required temperature.	The unit is in heat-up mode.	Wait until the unit has reached the set temperature. (approx. 40 min.)
	Too much food in the cabinet or food too cold.	Remove and/or pre-heat the products.
	Temperature is set incorrectly.	Change the target temperature (see section 3.4).
	External draughts cause interruptions.	The installation location must be free of draughts, follow the specifications in section 1.8.
	Heating element fault, the unit is faulty.	Contact an authorised service technician / customer support.
	The ambient temperature in the room is too low.	Adjust the room air conditioning. (Ambient conditions, see section 1.8).
The cabinet does not get warm, the temperature cannot be regulated.	The unit is not switched on.	Switch the unit on.
	Controller / probe or fuse is faulty.	Contact an authorised service technician / customer support.
Food is too hot.	The temperature level is too high.	Set a lower temperature level.
The food cools down.	The stored foodstuffs are cold or not at the required temperature.	Check whether the food was stored with the required core temperature (at least +75°C). Contact an authorised service technician / customer support.

### NOTE

The manufacturer is not liable for spoiled products even if the unit is still under warranty. We recommend checking the unit temperature technically every six months.

## 3.6 STATUS INDICATORS AND ERROR MESSAGES ON THE DISPLAY



### DANGER

#### Danger due to electrical voltage on live components

The power supply must be disconnected before all cleaning, servicing and maintenance work! To do this, unplug the unit or disconnect it from the mains at all poles. Repair work may only be performed by authorised specialists.

### NOTE

The tables listed do not apply to special controllers (see the applicable operating manual for the controller). Observe the instructions in the relevant programming manual – contact your supplier or the manufacturer.

### 3.6.1 MESSAGES AND ALARMS

Messages are display messages that inform the user of controller operating processes (e.g. fan active) or confirm key commands.

DISPLAY	DESCRIPTION
<b>Ble</b>	Bluetooth <sup>TM</sup> – connection being established
<b>Loc</b>	Display locked
<b>OFF</b>	Switch to the OFF state
<b>ON</b>	Switch to the ON state

If an alarm occurs, the buzzer is activated and the "Service icon" flashes. The display shows the alarm code. Press any button to switch the buzzer off.

### NOTE

Switch the unit off if malfunctions occur. Contact your supplier or the manufacturer immediately.

DISPLAY	DESCRIPTION
<b>CE</b>	Error when writing the configuration
<b>DA</b>	Delayed alarm via external contact
<b>EHI</b>	Alarm for high supply voltage
<b>ELO</b>	Alarm for low supply voltage
<b>Etc</b>	Clock error
<b>GHI</b>	General alarm, upper threshold
<b>GLO</b>	General alarm, lower threshold
<b>HA</b>	HACCP alarm
<b>HALLO</b>	High temperature
<b>IA</b>	Immediate alarm via external contact
<b>LO</b>	Low temperature
<b>HI</b>	High temperature

DISPLAY	DESCRIPTION
S1	Control probe
St	Target value
AL	Alarm threshold for low temperature
AH	Alarm threshold for high temperature

## 4 CLEANING/MAINTENANCE/SERVICING

Switch the unit off and disconnect from the mains before performing cleaning work. We recommend performing the daily cleaning at the end of the working day. Wait until the unit has cooled down.

### 4.1 CLEANING AND CARE

In order to guarantee that the products are presented well, daily cleaning must be performed in accordance with the hygiene regulations.



#### DANGER

##### **Danger due to electrical voltage on live components**

The power supply must be disconnected before all cleaning work! To do this, unplug the unit or disconnect it from the mains at all poles.



#### WARNING

##### **Risk of burns on hot surfaces**

Allow the unit to cool down complete before starting the cleaning work. Waiting time approx. 45 min.



#### WARNING

##### **Impact hazard on the unit during assembly, cleaning and servicing work**

Pay attention to possible impact hazards on the unit.

### 4.1.1 CLEANING INTERVALS

The following cleaning intervals are recommended to guarantee that the unit works as well as possible:

CLEANING WORK	DAILY	WEEKLY	MONTHLY
Cabinet (glass surfaces), optional accessories	X		
All glass	X		
All remaining components on the unit (bases, frames, etc.)		X	

#### NOTE

The cleaning interval may vary depending on the stocked, packaged products.

After cleaning, all parts must be rinsed with clear water and then dried in order to prevent residues.

The following points are important for keeping stainless steel on the unit in perfect condition:

- Keep stainless steel surfaces clean at all times.
- Ensure sufficient air circulation on the surfaces.
- Never touch the unit's component with rusty materials.

#### NOTE

People who perform cleaning work must also comply with the prescribed measures for the applicable cleaning agents (e.g. wearing gloves when cleaning, wearing safety goggles, etc.)!



## 4.1.2 CLEANING AGENTS

### NOTE

Only the cleaning agents specified in this section are permissible for cleaning the unit. Do not use any cleaning agents containing chlorine or vinegar.

COMPONENTS / MATERIALS	CLEANING AGENTS	REMARK
Surfaces that come into contact with products	Lukewarm, soapy water	Rinse with clear water.
Glass surfaces	Glass cleaner	Do not use any scouring or rough cleaning utensils. Deflector glass can be removed from the unit for easier cleaning.
Stainless steel surfaces	Stainless steel cleaner	Ensure that the stainless steel cleaner that you use is food-safe.
Inserted parts (stainless steel)	Washing up liquid and brush	Stainless steel components such as snack waves are easy to remove (see section 2.1). Only use brushes with plastic or natural bristles.
Powder-coated surfaces, components	Soft cloth, lukewarm, soapy water	Do not use any <ul style="list-style-type: none"> <li>• scouring or rough cleaning utensils</li> <li>• Glass cleaner</li> <li>• Solvent</li> </ul>
Acrylic glass (deflector glass)	Soft cloth, lukewarm, soapy water	Do not use any <ul style="list-style-type: none"> <li>• scouring or rough cleaning utensils</li> <li>• Glass cleaner</li> <li>• Solvent</li> </ul>
LED lighting	Soft cloth	Only clean dry.

### NOTE

First check that the cleaning agent is compatible in an invisible location on the unit.

## 4.2 MAINTENANCE INSTRUCTIONS

To ensure that the unit functions properly and provides the best possible presentation area, the unit must be inspected and maintained on a regular basis. Each unit was tested in accordance with the "Routine test, EN 60335-1 Annex A" in the factory. Manufacturer recommendation: annual subsequent test by the owner in accordance with VDE 0701-0702.



### DANGER

#### **Danger due to electrical voltage on live components**

The unit must be disconnected from the mains supply (using the main switch or by disconnecting at all poles) until the maintenance, inspection and repairs are complete. Inadvertent restarts must be prevented.

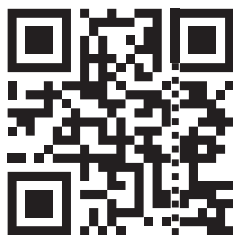
### NOTE

Maintenance work to be performed by the operating staff or owner only applies to the work listed in [section 4.3](#).

### NOTE

Technical modifications to the unit may only be made by authorised specialists after consulting the manufacturer! This applies particularly to work on heating installations, the electrical installation and the mechanical system. **All modifications must be authorised by the manufacturer!**

Repair and maintenance manuals are available by scanning the following QR code:



<https://shop.ideal-ake.at/>

If you do not have a QR code reader (scanner), all documents are available in the downloads area on the manufacturer's website or you can contact your supplier or specialist dealer.

### 4.3 MAINTENANCE AND SERVICING INTERVALS

Always comply with the listed maintenance work in order to ensure that your unit continues to function and expand this work if necessary!

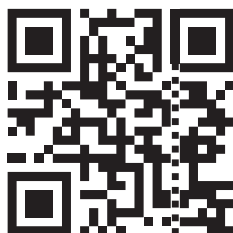
COMPONENT / ASSEMBLY	WORK	INTERVAL
All glass (black glass plate, side glass, etc.)	Visual inspection	Daily
Mechanical damage to all other components on the unit	Visual and functional inspection	Daily
LED lighting	Visual and functional inspection	Weekly

**Repair and servicing manuals are available from the manufacturer on request.**

### 4.4 SPARE PART PROCUREMENT

Each unit is provided with a type plate (see [section 1.7](#)). To ensure that you order the correct spare part for your unit, inform your supplier or specialist dealer of the unit data listed or order the required spare parts directly from the manufacturer's online catalogue. The type, serial number and date of manufacture details are required for allocation.

Spare parts are available at:



<https://shop.ideal-ake.at/>

## 5 DECLARATION OF CONFORMITY



### EC Declaration of Conformity

in accordance with EU Directive 2006/42/EC and 2014/30/EU

Manufacturer: Ausseer Kälte- und Edelstahltechnik GmbH  
Pichl 66, 8984 Bad Mitterndorf, AUSTRIA

Product: Hot Vario\*  
\* 1 – 4 (module size) or number 50 - 200 (unit width) or special design specification

Year of construction: As of 2023

We hereby confirm that the aforementioned products comply with the Machinery Directive 2006/42/EC and the EMC Directive 2014/30/EU. It complies with the basic requirements of the Machinery Directive 2006/42/EC and the significant requirements of the EMC Directive 2014/30/EU, RoHS 2011/65/EU. The required technical documents were compiled and archived. The versions of the following harmonised standards that were valid at the time were applied:

#### EN 60335-1:2012

Household and similar electrical appliances - Safety - Part 1: General requirements  
EN 60335-1:2012 + AC:2014 + A11:2014 + A13:2017  
(IEC 60335-1:2010, modified)

#### EN 60335-2-49:2003

Household and similar electrical appliances - Safety - Part 2-49: Particular requirements for commercial electric appliances for keeping food and crockery warm  
EN 60335-2-49:2003/AC:2007 + EN 60335-2-49:2003/A11:2012 + A2:2019  
(IEC 60335-2-49:2002 + A1:2008 + A2:2017)

#### EN ISO 12100:2011

Safety of machinery - General principles for design - Risk assessment and risk reduction

In the event of technical modifications to the above-mentioned product, which were not approved by the manufacturer, this EC Declaration of Conformity becomes invalid.

Bad Mitterndorf, 2023

Andreas Pilz (CTO)

### NOTE

Please observe any supplementary sheets to this operating manual and the corresponding declaration of conformity!

For more information, contact the manufacturer!

