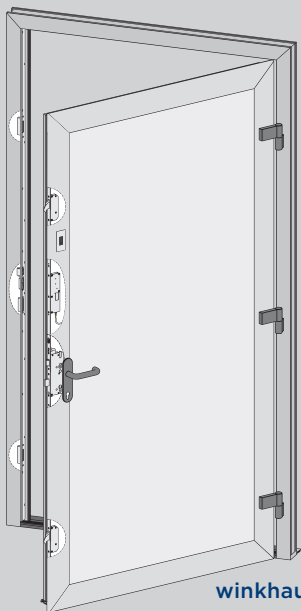
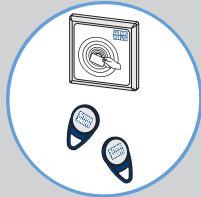
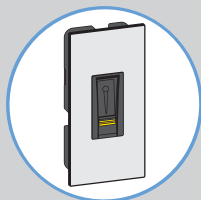


Installation, Operating and Maintenance Instructions
03/2026

blueMatic EAV

Automatic locking system with motorised opening function
(12V DC)



1

This security door locking system complies with the requirements and directives established and stipulated by the Council on the Harmonization of Legal Regulations of Member States regarding Electromagnetic Compatibility (2014/30/EU).

2

3

The product is intended exclusively for use in building and room doors. It is not intended as a safety component to prevent access to machines within the meaning of Regulation (EU) 2023/1230 (Machinery Regulation). Use as a safety component to prevent access to hazardous areas of machines is not permitted. Only certified safety components may be used for this purpose.

4

5

6

The manufacturer shall hereby certify the conformity of this product and document such by the CE marking according to the CPR EN 14846, the EU declaration of conformity according to EN 62368-1 and the EMC directive (see chapter 9).

7

8

9

The following information and graphic images provided correspond to the current status of the development and manufacture of this product. For the purpose of customer satisfaction and operational reliability of the blueMatic EAV (Automatic locking system with motorised opening function), we reserve the right to make changes to this product without notice.

10

All information and specifications given in this operating manual have been compiled and reviewed with the utmost care.

Due to the nature of advances in technology, or amendments to legal regulations and other compulsory changes we do not guarantee the accuracy and completeness of the contents' statements. We always appreciate suggestions or comments.

The blueMatic EAV (Automatic locking system with motorised opening function) can be easily installed, if these operating instructions and the door specifications indicated have been adhered to.

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1 Important information

1.1 General information

Dear Customer!

We would like to thank you for your confidence you have put in us by purchasing our high-quality product.

Please read this installation, operating and maintenance instruction carefully to become acquainted with the installation and use of this security door locking system and to avoid malfunctions and safety hazards.

1.2 Intended use

The automatic locking system blueMatic EAV (Automatic locking system with motorised opening function) and the Winkhaus components recommended are suitable for the following areas of application:

- relative air humidity of max. 95%
- ambient air temperature of between -20°C ... +60°C.

The components/motor housings described here are, in the sense of blueMatic EAV, suitable for autoLock AV3/AV3 OR + AP179 AV3 OR each with EAV3 motor and also backwards compatible for autoLock AV2.

The complete door fittings are designed to be used in conjunction with genuine Winkhaus parts. Other parts which are not recommended by Winkhaus can adversely affect the default properties of this locking system. It is assumed that the lock will be used as intended.

The proper functions of the access control systems and the accessories included in the scope of delivery of the Winkhaus company have been tested. If you use components made by other companies and if you have any doubts about the suitability of these components, you will have to contact the respective manufacturer to ensure their fitness for use.

To ensure the intended use:

- the information and instructions required for this purpose have to be passed on to the respective persons,
- only trained professionals should install the door furniture, locking units and accessory parts according to the installation instructions. Applicable DIN, EN standards and BauPVO are about to follow.

The stipulations for use as intended have been met, once the Winkhaus fittings are:

- installed according to their defined function and the installation specifications,
- not used in any other way than described,
- maintained and cared for at regular intervals as instructed, and/or defined sliding places oil at least 1 x annually (like e.g. chamfer of latch ...) if necessary more frequently,
- not used if signs of wear are detected,
- repaired by trained professionals in the event of malfunctions.

The supplier/manufacturer does not accept any liability for personal injury or material damage caused by incorrect operation or improper use.

1.3 Use contrary to the intended purpose

The locking systems are not designed to absorb or compensate for any movement changes or in the closing mechanism of the door caused by changes in temperature or in the structure of the building.

The installation or design of door elements must be such that direct weathering of the locking elements is excluded, either through the profile design and/or other protection (e.g. canopy, etc.).

Doors which are used in damp rooms and in environments with aggressive corrosion related air conditions require special door furniture.

The locking systems are incorrectly used – that is used contrary to the terms described above – in evident in particular, if:

- the instructions on the intended use are not being followed;
- the problem-free operation is hindered due to the installation of external objects and/or objects that are not purpose-conformant in the opening zone, the locking system or within the keeps;
- the locking system or the center keep is manipulated in such a way that its design, mode of operation or function is changed;
- the door is drilled through in the area of the lock housings or of the lock rod once the lock has been installed;
- the dead bolt projection or other locking components are employed contrary to their intended purpose, as a means to hold the door opened or attempts are made with excluded locking element to close the door element;
- the handle's pin is driven through the spindle with force;
- the locking elements are wrongly installed or are tampered with, e.g. by overpainting movable parts like the latch bolt;
- loads exceeding those of normal manual force are transmitted via the safety key onto the lock system;
- perform a manual or mechanical locking or unlocking during the motor is working;
- the handle is turned counterclockwise or if a force greater than 150 N is exerted on the handle;
- the clearance between the door frame and sash is increased or decreased, which would for instance result from readjusting the hinge plates or from lowering the door;
- if auxiliary lifting tools or other tools are used to open or close the lock;
- the handle and key are used at the same time;
- the lock is locked/unlocked by using improper objects;
- the size of the door opening deviates from the specifications prescribed.

1.4 Explanation of symbols

Flags are used to identify important information in this operating manual. Flags such as DANGER or CAUTION indicate the degree of hazard.

It is imperative that you do follow the measures listed to avoid safety hazards!



DANGER!

Danger to life or danger of serious injuries.



Caution!

Danger of material damage.



Notice:

Useful information and tips.



Eco-Watch:

Notices on complying with regulations on environmental protection.



Disposal!

Environmental damage due to incorrect disposal of batteries and electronic components!

The electronic hardware must be disposed of correctly.

Disposal as domestic waste is prohibited.

The electronic hardware must therefore be disposed of in accordance with the European directive 2012/19/EU at a municipal collection centre for electronic waste or via a specialist company.



Caution fragile!

Handle with care!



Never throw!

Do not stack or drop.

1.5 Important safety information

Safety information described in this section is to be diligently adhered to regarding the installation and use of this security lock blueMatic EAV!

You must heed to the safety information provided without exceptions!

- Read the installation, operating and maintenance instructions it easily accessible for future reference. After installing the door pass it on to the end customer.
- The manufacturer shall not be held liable for damage caused by use contrary to the intended purpose of the product.
- For security reasons, the lock has been designed to be used in conjunction with genuine Winkhaus parts. Using other parts may adversely affect the given properties of the security lock.
- It must be ensured that the door can be closed/unlocked without any problems by the key.
- Installation/repair of electrical equipment requires expertise, thus such work should only be carried out by a qualified electrician.
- Arbitrary modifications, changes or makeshift repairs are not permitted due to concerns for safety. You must only use genuine Winkhaus parts for replacements.
- The manufacturer shall only be held liable for security related properties of the locking system as stipulated within the bounds of statutory regulations, if the manufacturer himself or another instructed, authorized agent has carried out the maintenance and service work or made the changes.
- Winkhaus does not accept liability for any type of damage caused by inadequate repair, modification or maintenance works made.



Caution! The wiring/cable transitions must be installed in the safe area (e.g. installed concealed in the airgap) and protected against manipulation.

1.6 Abbreviations/Explanations

The following terms and abbreviations are used in this manual:

T-	Product area security door lock
AV2	autoLock AV2 (Automatic locking system) 2. generation
AV3	autoLock AV3 (Automatic locking system) 3. generation
EAV	blueMatic EAV (Automatic locking system with motorised opening function)
Handle	Door handle
Grt.	Set
SB FRA	Center keep - latch/dead bolt/adjustment plate
M2	with 2 hooks
MV	means "upper adjustment"
UMV	means "lower adjustment"
RS	DIN-right-handed
LS	DIN-left-handed
GR	Surface grey powder coated
EST	Surface stainless steel
MC	Surface matt chrome-plated
Reader	Reader /control unit of the transponder set
ZKS (ACS)	Access control system
UP-socket	Flush-type box
LED	Light emitting diode
ANT/GND	Auxiliary antenna/ground
PE	Ground wire
N	Neutral wire
L	Phase
AC	Alternating current
DC	Direct current
NO	Make contact
NC	Break contact
NO-NC	Changer contact

2 Product description

2

The blueMatic EAV (Automatic locking system with motorised opening function) is a state-of-the-art locking unit for securing and locking entry doors in a contact-free manner. The hooks can be retracted electrically so as to open the door.

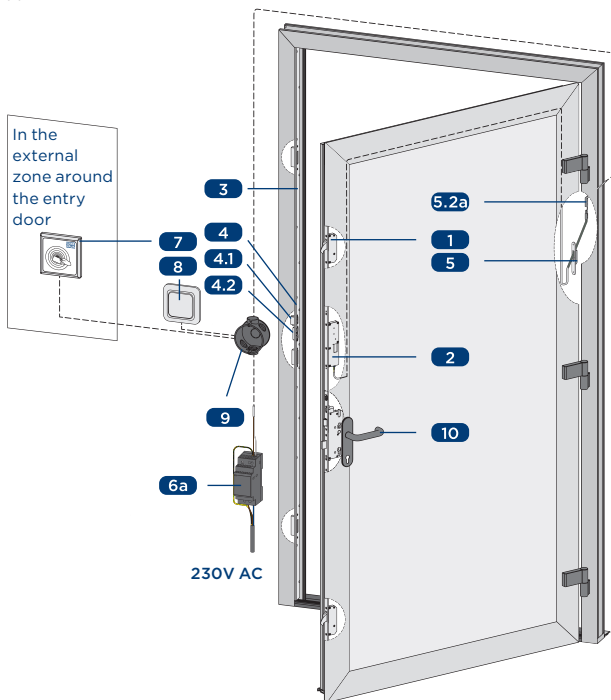


Figure 2-1: blueMatic EAV with accessories and external power supply

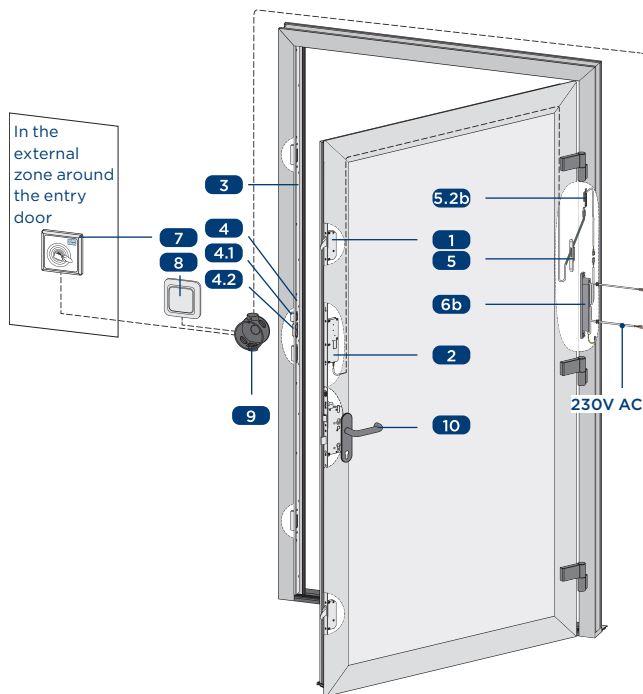


Figure 2-2: blueMatic EAV with accessories and frame power supply
T-NETZTEIL RAHM. 12V DC 1,5A

No.	Name	MUST! Manda- tory *	Available as an accessory or as an option	Supplied by customer/ not included in standard delivery
1	autoLock AV3 (Automatic locking system STV- AV3...)	X		
2	Motor housing EAV3			
3	Keep rail T-SL.../Extension keep set T-Grt. SL.../Single keeps T-SB...	X	X	
4	Center keep T-SB FRA ... AV ...	X	X	
4.1	Magnetic trigger	X	X	
4.2	Daytime latch TaFa		X	
5	Cable transition		X	
5.1	Cable transition sash part T-KÜ-T1 FT e.g. T-KÜ-T1 FT 2M/3,5M/4,5M Cable at the sash side 2 m, 3,5 m or 4,5 m long, plug for motor housing included as well as cable transition sets for connection of external access controls		X	
5.2	Cable transition frame part (suitable the sash part T-KÜ-T1 FT ...)		X	
5.2a	Figure 2-1: T-KÜ-T1 RT KABEL 4M including cable 4 m for connection of external access controls, e.g. inter- com, potential-free contact			
5.2b	Figure 2-2: T-KÜ-T1 RT KABEL 0,6M RNT with plug connection to the fra- me power supply 24V DC (optional)			

No.	Name	MUST! Mandatory*	Available as an accessory or as an option	Supplied by customer/ not included in standard delivery
6	Power supply		X	
6a	Figure 2-1: Power supply T-HT NETZTEIL 12V DC / 2A mounting on DIN rail			
6b	Figure 2-2: Frame power supply T-NETZTEILRAHM.12V DC 1,5A (2A / 2S) (optional) including cable for connection of ex- ternal access controls, e.g. intercom, potential-free contact			
7	Access control system: (shown: antenna of the transponder set) Notice: Only install the antenna of the transponder set in the external zone around the entry door! **		X	
8	"Open" button			X
9	Flush-type box			X
10	Handle			X

* remaining components recommended for use, or should be used
alternatively

** not extend cable

1 Automatic locking system autoLock AV3

2



The autoLock AV3 from Winkhaus is an automatic multipoint locking system with independently acting security hooks for claw action and sealing elements for a dynamic contact pressure.

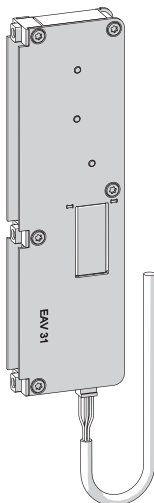
This is prepared for installation of the profile cylinder corresponding to EN 1303 (corrosion class C) with closed position of $\pm 45^\circ$, in each case with smooth-running free-to-turn function or stationary cam position.

1 Automatic locking system autoLock AV3

Part Description	Backset	Part-no.
T-AV3-F1660 ...	35 - 65	 Weitere Informationen zur Artikelbezeichnung und Artikel-Nummer siehe Produktkatalog. (z.B. "T-autoLock AV3 blueMatic EAV3 KT. pdf")
T-AV3-F1662 ...	35 - 55	
T-AV3-F1669 ...	35 - 65	
T-AV3-F2060 ...	35 - 80	
T-AV3-F2062 ...	40 - 65	
T-AV3-F2069 ...	45 - 65	
T-AV3-F2460 ...	35 - 65	
T-AV3-F2462 ...	35 - 55	
T-AV3-F2469 ...	35 - 55	
T-AV3-U2460 ...	35 - 65	
T-AV3-U2462 ...	35 - 50	
T-AV3-U2469 ...	35 - 50	
T-AV3-U2471 ...	35 - 55	
T-AV3-U2488 ...	45	
T-AV3OR-F1660 ...	35, 45	
T-AV3OR-F2060 ...	45 - 65	
T-AV3OR-F2062 ...	65	
T-AV3OR-F2069 ...	65	
T-AV3OR-U2460 ...	35 - 50	
T-AV3OR-U2462 ...	40	
T-AV3OR-U2471 ...	35	

2 Motor housing

2



Motor housing for powered unlocking, with integrated control unit, but without cable

- for transponder or wireless remote control and potential-free contact
- optional for activation for control of swing door opener with potential-free contact
- only available unmounted (for retrofitting mechanical locks autoLock AV3 and autoLock AV2)

Motor housings are suitable for locks autoLock AV3 and also downward compatible for autoLock AV2.

T-MOTORKASTEN EAV3 (12V) BL ¹⁾	5009320
T-MOTORKASTEN EAV3 (12V) DREHTÜR BL ^{1) 2)}	5009324

- ¹⁾ to retrofit simply screw to the autoLock AV (Automatic locking system)



Caution!

Pay attention to left-handed thread!

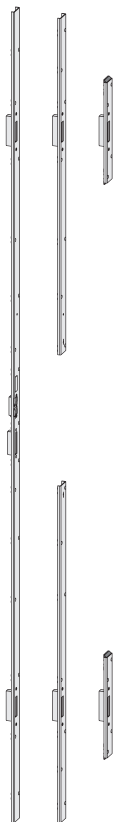
- ²⁾ incl. signal (potential-free contact) for activation for control of swing door opener



Notice: Please observe the following instructions when using a swing door opener:

- Ensure that the motor can open the closing leaf at any time.
- After unlocking, the control unit sends a signal to the swing door opener which must then open out immediately.
- If the automatic door drive is triggered at another point of time, malfunctions can be caused.
- If the main dead bolt is unlocked manually, the door may not be actuated electrically.

3 Keep rail / Extension keep set / Single keeps



Select the corresponding standard frame parts in the online STV configurator.

Example: profile Deceuninck Elegant Infinity 76

→ **T-Grt. SL U26-76 ...**

When ordering always indicate the DIN direction RS or LS.

4 Center keep FRA ... AV ...

2



Center keep for latch and deadbolt for retrofitting of magnetic trigger and daytime latch "TAFA". Designed for use with PVCu, Aluminum and Timber/composite entrance doors.

Select the respective keeps according to the profile systems in the online STV configurator.

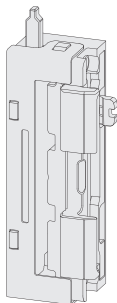
4.1 Magnetic trigger for center keep FRA ... AV ...



Magnetic trigger for contact-free magnetic release for autoLock AV3. Can be retrofitted in center keeps FRA ... AV ... with magnet hole.

T-G1 MAGNETAUSLÖSER 9 MV AV3	5014379
T-G1 MAGNETAUSLÖSER 13 MV AV3	5009111
T-G1 MAGNETAUSLÖSER 9 UMV AV3	5009109
T-G1 MAGNETAUSLÖSER 13 UMV AV3	5009110

4.2 Daytime latch "TAFE"



Fold-down daytime latch with mechanical adjustability by means via integrated switching lever.

2

Part description

Standard Daytime latch 9-91

T-TAGESFALLE 9/91 TAFE FA RS	5006561
T-TAGESFALLE 9/91 TAFE FA LS	5006562
T-TAGESFALLE 9/91 TAFE FA STARK RS	5015109
T-TAGESFALLE 9/91 TAFE FA STARK LS	5015108

Daytime latch with lower contact pressure 10-9 (can be used with standard - T-SB FRA or FAB1, not with FAB)

T-TAGESFALLE 10/9 TAFE FA RS	5006563
T-TAGESFALLE 10/9 TAFE FA LS	5006564
T-TAGESFALLE 10/9 TAFE FA STARK RS	5015111
T-TAGESFALLE 10/9 TAFE FA STARK LS	5015110

Daytime latch with higher contact pressure 9-92.5

T-TAGESFALLE 9/92,5 TAFE FA RS	5030586
T-TAGESFALLE 9/92,5 TAFE FA LS	5030587
T-TAGESFALLE 9/92,5 TAFE FA STARK RS	5041969
T-TAGESFALLE 9/92,5 TAFE FA STARK LS	5041970

Daytime latch O, »Permanently open« (replace- ment for roller latch)

T-TAGESFALLE-O 9/91 TAFE FA STARK	5042652
T-TAGESFALLE-O 10/9 TAFE FA STARK	5042651

STRONG = design with strong spring for higher
sealing pressure

5 Cable transition

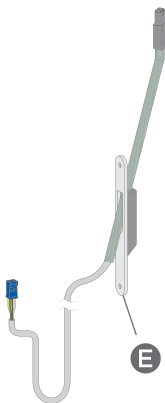
2

To transmit the current from the frame to the sash, so-called cable transitions (details in the following text) or so-called tappet contacts (see separate installation, operating and maintenance instructions for tappet contact) can be used.



Caution! The wiring/cable transitions must be installed in the safe area (e.g. installed concealed in the airgap) and protected against manipulation.

5.1 Cable transition sash part T-KÜ-T1 FT ...



Plug-in and concealed cable transition

- Inserted by plug-in function, with retaining screws (3 x 20 mm)
- Sash part with spring sleeve in different versions (see table)
- Order frame part separately (see 5.2)
- Order cover plate separately **E**
- Installed concealed in the airgap
- Electric interface between sash and frame with 6 wires (max. 48 V DC/2 A each wire)
- color silver/grey
- No routing for > 11 mm airgap needed, suitable for PVCu and aluminium entrance doors (depends on the system), with appropriate routing it is suitable for timber doors

Recommendation: It is recommended that the cover plate (depends on the faceplate and the material type of timber, PVCu/plastic or aluminum) conceals the routing for the required cable reserves to prevent possible cable damage.

Part Description (see also Figure 3.2)		Part-no.
A	T-KÜ-T1 FT 2M	5040501
	plug-in and lying buried, sash part with cable 2 m + plug for motor housing	
	T-KÜ-T1 FT 3,5M	5040505
	plug-in and lying buried, sash part with cable 3.5 m + plug for motor housing	
	T-KÜ-T1 FT 4,5M	5071245
	plug-in and lying buried, sash part with cable 4.5 m + plug for motor housing	
	T-SET KÜ-T1 FT ZK-EAV 3,5 + Y 0,5M	5040508
	Sash part with 3.5 m cable + 5-pole plug for connection with Y-cable + Y-Kabel INSIDE EAV 0.5 m (e.g. Fingerprint IDENCOM BioKey INSIDE or ekey home SE micro)	
	T-SET KÜ-T1 FT ZK-EAV 1,5 M + Y 0,5 M	5085768
	Sash part with 1.5 m cable + 5-pole plug for connection with Y-cable + Y-Kabel INSIDE EAV 0.5 m, e.g. for timber entrance doors (e.g. Fingerprint IDENCOM BioKey INSIDE or ekey home SE micro)	
	T-SET KÜ-T1 FT ZK-SO ENTRA+ EAV 1,5 + 3M	5082032
	Set with KÜ-T1-SOMMER ENTRA+ EAV sash part including connection cable T-LE ANSCHLUSSKAB EAV SOMMER ENTRA+ 3M for motor (e.g. for fingerprint SOMMER ENTRAsys+ FD)	
	T-LE ANSCHLUSSKAB EAV SOMMER ENTRA+ 3M	5082030
	Use with SOMMER ENTRAsys + FD fingerprint, alternatively when used without Winkhaus cable transition	
	T-LE ANSCHLUSSKAB EAV SOMMER ENTRA+ 6M	5082031
	Use with SOMMER ENTRAsys + FD fingerprint, alternatively to 3 m cable/5082030 or when used without Winkhaus cable transition	
	T-KÜ-T1 FT EKEY MICRO (PLUS) 1,5M	5057683
	Sash part with cable 1.5 m + end of the cable with 5-pole plug to connect with ekey micro respectively ekey micro plus (ready to plug in)	
	T-KABEL EAV EKEY DLINE + KÜ 3M 3 ADRIG	5101826
	Cable from ekey dLine controller to Winkhaus motor housing, cable 3 m long, 3-wire cable end (ready to plug in), when used with ekey cable transition	
B	T-KÜ-T1 RT KABEL 4M	5040503
Frame part with 4 m cable and cable end sleeves (6 wires)		
C	T-KÜ-T1 RT KABEL 0,6M RNT	5040504
Frame part with 0.6 m cable and plug for frame power supply inclusive cover strip STV-KÜ-T1 RT R8		

Part Description (see also Figure 3.2)	Part-no.
E T-ABDECKBLECH KÜ-T1 FT F16 R8 MC Cover plate for sash, flat faceplate 16 mm, round ends R8, length 126 mm, suitable for PVCu (timber if necessary)	4990670
T-ABDECKBLECH KÜ-T1 FT F20 R10 MC Cover plate for sash, flat faceplate 20 mm, round ends R10, length 130 mm, suitable for timber (PVCu if necessary)	4990671
T-ABDECKBLECH KÜ-T1 FT F24 KANT MC Cover plate for sash, flat faceplate 24 mm, square, length 134 mm, suitable for ALU (PVCu if necessary)	5018556
T-ABDECKBLECH KÜ-T1 RT F24 X 350 MC Cover plate for frame, flat faceplate 24 mm, angulate, square, length 350 mm, suitable for ALU (with fitting groove 24 mm), suitable for example for heroal D92 UD	5028782

5.2 Cable transition frame part for T-KÜ-T1

5.2a Cable transition frame part for external power supply

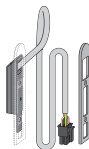


Frame part with 4 m cable and cable end sleeves (6 wires)

T-KÜ-T1 RT KABEL 4M

5040503

5.2b Cable transition frame part for frame power supply



Frame part with 0.6 m cable and plug for frame power supply inclusive cover strip STV-KÜ-T1 RT R8, to cover the profile hole on the frame side

T-KÜ-T1 RT KABEL 0,6M RNT

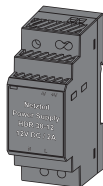
5040504



Notice: If no separable cable transition (e.g. T-HT KÜ M1188) or no Winkhaus cable transition is used, then the cable "T-HT ANSCHLUSSKABEL 6M/5ADRIG FÜR MOTOR" for motor housing (2522881) must be used.

6 Power supply

6a External power supply



Power supply unit for blueMatic EAV 100 - 240V, 50/60Hz, 12V DC/2A, mounting on DIN rail, includes connection diagram

T-HT NETZTEIL 12V DC/2A

2469777



Notice: The Winkhaus power supply 12V is designed for the operation with Winkhaus locks. In exceptional cases small consumers (eg. fingerprint in the door element) can be used with this power supply - up to an additional current requirement of max. 0.5A and the voltage requirement must match the power supply (12V DC).

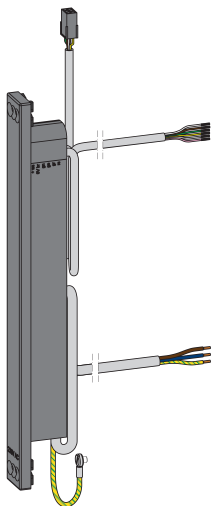
Notice: Operation of a second EAV with the same power supply is not possible. A separate power supply must be used for each lock.



Unless you are using a Winkhaus power supply unit, please keep in mind the following information:

- exclusively for blueMatic EAV, 12V DC (direct current), stabilized
- min. 1,5A continuous current
- tested according to EN62368
- with LPS (Limited Power Source = power source with limited power)
- for further external loads (e.g. intercom, LED lighting, video systems etc.), separate or designed power supplies must be used.

6b Frame power supply (optional)



The Winkhaus frame power supply is a switching power supply (single-phase, primary pulsed installation current supply, high pulse load capacity, short-circuit proof, open-circuit proof, high efficiency, thermal overload protection). The power supply is suitable for mounting in the frame, on the construction site only the principal voltage (230V) has to be made.

- 4 m cable for connection 230V AC with cable end sleeves
- 0.4 m cable with eyelet (M4) for earthing the door profile
- 0.2 m cable with plug for connection with cable transition frame part T-KÜ-T1 RT KABEL 0,6M RNT
- 4 m cable (6-wire) for external signal (potential-free contact - switching time min. 0.5 seconds) from external access control systems including voltage supply (output)

T-NETZTEILRAHM. 12V DC
1,5A (2A/2S)

5038587



Caution! Cable for external signal at frame power supply is current (12V DC), do not connect external voltage!

Insulated in condition as delivered; insulation is MANDATORY when shortened (e.g. adaptation to the installation situation), if not necessary!



DANGER! Power supply must be properly grounded (secure the eyelet for earthing securely to the metal profile).

Use cable grommet at 230V cable (2 x included)!
No external voltage on output for external signals.



Caution! With the combination blueMatic EAV + access control, the Winkhaus power supply T-HT NETZTEIL 12V DC / 2A requirement must not be loaded with more than 2A!

With the combination with frame power supply T-NETZTEIL RAHM. 12V DC the power supply should be charged max. permanently with 1.5A and max. 2A will be charged for 2s!

7 Access control systems

From the outside the door is opened via the access control system (transponder, wireless remote control).

Transponder set EAV

2

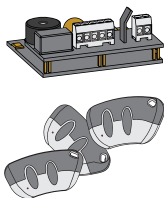


- 1 Reader/control unit (for flush-type box)
 - mounting of the reader on the inside
- 1 antenna for exposed installation (90 x 90 x 13 mm, color white), cable of 2.5 m fixed at the antenna (not extend cable)
 - mounting of the antenna on the outside
- 1 antenna sticker, weatherproof, resistant to UV light
- 3 transponder chips (key fob, color blue, are unprogrammed)
- 2 programming cards transponder (programming card = green; delete-all card = red)

T-HT TRANSPONDERSET T02
EAV BL

2410265

Wireless remote control set



- 1 wireless receiver
(to be inserted in the flush-type box)
 - mounting of the remote control receiver on the inside
- 3 remote controls (programmed, color: dark grey/grey)
- programming instruction + connection diagram

T-HT FUNK-FERNB. F02 ANTHR.
SET 3 + 1

2410273



Notice: You have to connect the following parts directly with the door opener when using/connecting a door opener: varistor at AC/free-wheeling diode at DC.

Reason: Protection of the relay from wear.

3 Installation

3.1 Routing details

3

For installing the blueMatic EAV it is required to rout out for standard three-point locking system and additionally the motor housing, as shown in the following diagrams.



Notice: After the door elements have been installed, an initial functional check should be carried out on site in the presence of the client or his representative and a visual/functional acceptance report should be created.

The cables included in the scope of services should be laid at this point in time to the intended transfer point (e.g. junction box). They should be protected from damage and from other trades (plaster, drywall, ...) for the subsequent construction period.

Loose/bundled cables hanging freely should be avoided.

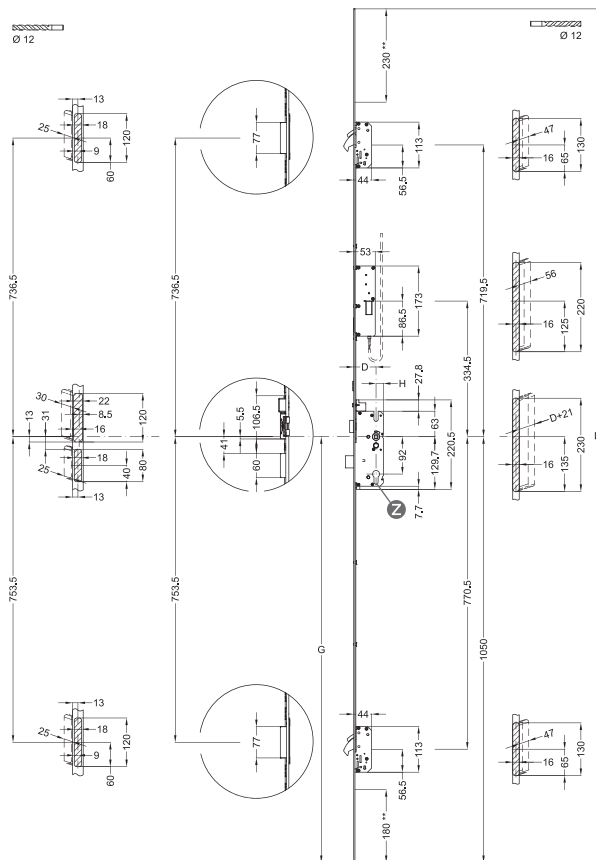
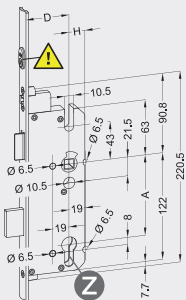


Figure 3.1-1: Dimensions for blueMatic EAV

Lock housing information



Rear backset:

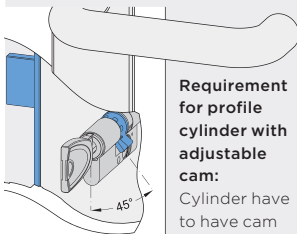
key operated lock boxes
H = 18 mm

! The rebate clearance limiter is important for the correct airgap and thus the function of the day-time latch → do not remove!

! Caution! Requirement for profile cylinder:

Cylinder with
not adjustable
cam have to
have cam

position max. 45° left / righthand
in key removal position.

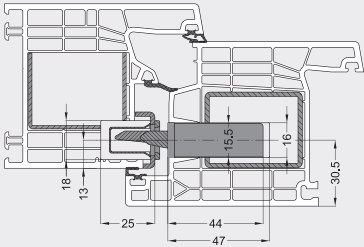
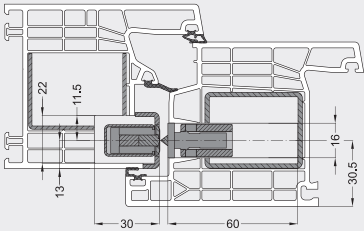


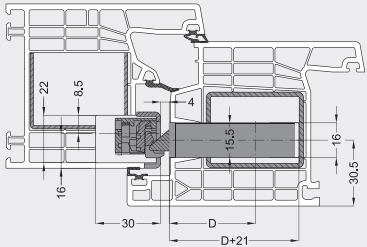
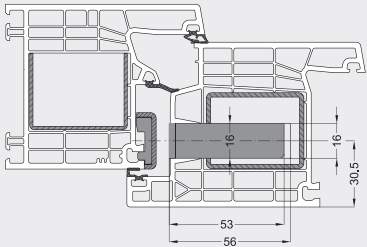
Requirement for profile cylinder with adjustable cam:

Cylinder have
to have cam
position max.

45° or 4-o'clock-position to the
hinge side in key removal position.

A	Distance	G	Handle position	L	Length STV (T)
D	Backset	H	Rear backset	**	croppable

Description	Installation situation
Situation hook AV3	
Situation magnetic trigger	

Description	Installation situation
Situation latch with daytime latch TaFa	
Situation motor housing	



Notice:

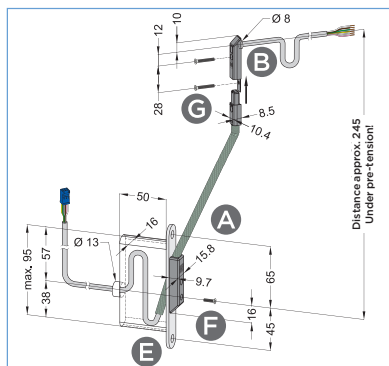
- a) The routing for the main lock housing must be 16 mm as minimum to provide for free motion of the drive rod! Check the door eurogroove for sprue so that the free motion of the rod is not impeded!
- b) It is imperative to use always with a lever/fixed pad handle set (lever inside, door knob outside)

3.2 Cable transition T-KÜ-T1 ... (sash- & frame part)

Recommendation: It is recommended always that the cover plate **E** (depends on the faceplate and the material type of timber, PVCu/plastic or aluminum) conceals the routing for the required cable reserves to prevent possible cable damage.

For hollow chamber/cable reserve in timber front doors, mill out pocket of approx. 50 mm x 95 mm.

Installation sequence



- A** Sash part
- B** Frame part 1
- C** Frame part 2
- D** Cover strip
T-ABDECKUNG
KÜ-T1 RT R8
- E** Cover plate
(F16 = L 126 mm R8;
F20 = L 130 mm R10;
F24 = L 134 mm square)
- F** Screw M3 x 12
(includet in delivery
from cover plate)
- G** Fitting screw
(includet in delivery
T-KÜ ... sash part)

Figure 3.2-1: T-KÜ-T1 FT with cover plate and frame part 1

Frame part 1 **B** (Figure 3.2-1):

- Drill a hole with a $\varnothing$ 8 mm for cable through the door frame
- Pass the cable through the door frame (including cable reserves in frame!)
- Fasten the frame part 1 **B** with the fitting screw **G** $\varnothing$ 3 x 20 mm

Frame part 2 **C** (Figure 3.2-2):

- Drill a hole with a $\varnothing$ 13 mm for cable / plug through the door frame
- Pass the cable with plug for frame power supply through the door frame (including cable reserves in frame!) use T-ABDECKUNG KÜ-T1 RT R8
- Fasten the frame part 2 **C** with the fitting screw **G** $\varnothing$ 3 x 20 mm

Sash part **A** with cover plate **E** (Figure 3.2-1):

- Mill slotted hole max. 95 mm and approx. 50 mm deep

Sash part **A** without cover plate (Figure 3.2-3):

- Drill a hole 2 x $\varnothing$ 13 mm resp. oblong hole through the euro groove (approx. 245 mm vertical under the frame part drill hole of $\varnothing$ 8 mm, depends on the profile/hinge rotation point) and for screw **F** pre-drill ($\varnothing$ 2,5 mm)



Caution! The drillings must be burr-free. The spring must be kept under a slight pre-tension even with the door being closed (approx. 10 mm).

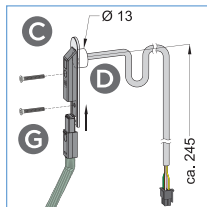


Figure 3.2-2: Detail
frame part 2

- Attach necessary drillings ($\varnothing$ 13 mm) in the sash (e.g. in the glazing chamber)
- Pass the cable with the plug for the motor through the door sash
- Insert the end of the spring into the sash part **A** into the drilling / routing into the door sash / cover plate are.
- And/or alternatively to the cover plate **E** with screw **F** M3 x 12 mm fasten the sash part **A** with fitting screw **G** $\varnothing$ 3 x 20 mm in the fitting groove.

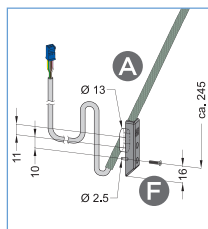


Figure 3.2-3: Detail
T-KÜ-T1 FT without
cover plate

- Install the cable for example within the glazing chamber towards the motor housing; install the rest of the cable for example within the hollow section.

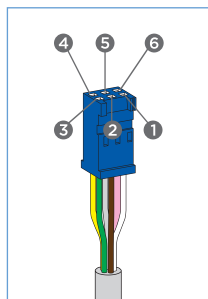


Caution! Provide cable reserve of about 3 - 5 cm for the spring tension behind the sash part **A** of the cable transition!

- Complete the plug-in connection after putting the door on its hinges
- Fix the sash part **A** with the fitting screw **G** Ø 3 x 20 mm (Figure 3.2-1)



Caution! Release the second retaining screw **G** (e.g. during the installation of the door frame into the reveal) when unhinge the door sash! Insulate the wires not used!



Wire	Cable assignment when used with blueMatic EAV	Necessary
1 white	+ 12V DC	yes
2 brown	0V (ground)	yes
3 green	Release signal	yes
4 yellow	optional, for swing door opener	yes
5 grey	optional, for swing door opener	yes
6 pink	not assigned	no

Figure 3.2-4: Cable assignment when used with blueMatic EAV

Cover plate for T-KÜ-T1 FT

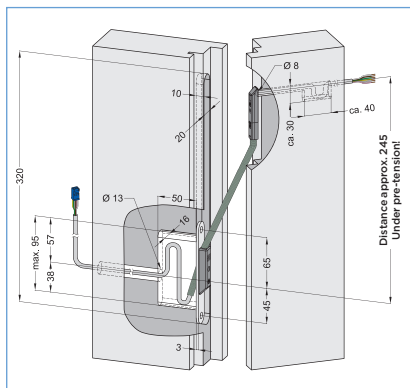


Figure 3.2-5:
Routing dimensions
T-KÜ-T1 FT + RT and
cover plate F20 in
Timber

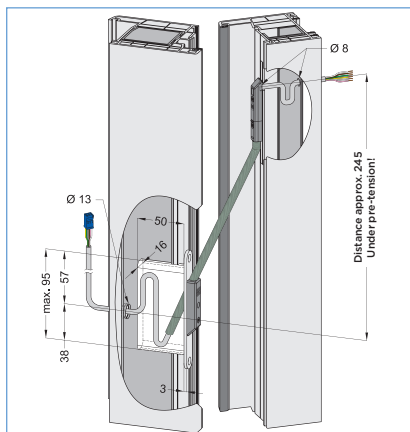


Figure 3.2-6:
Routing dimensions
T-KÜ-T1 FT + RT and
cover plate F16 in plastic

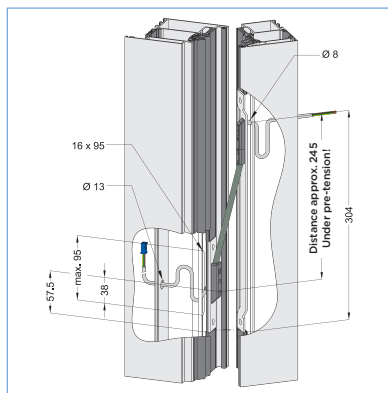


Figure 3.2-7:
Routing dimensions
T-KÜ-T1 FT + RT and
cover plate F24 in ALU

3.3 Installations



DANGER! The installation of electrical equipment requires expertise, thus such work should only be carried out by an electrician.

Generally assemble and install always only with the power off!

DANGER! IMPORTANT ADVICE!

In order to prevent blockage of the lock, no key or key ring may be inserted in the locking cylinder!



Caution! First the door has to close easily, then you can test electrical performance!

If you connect an intercom system take care that the button of this system is designed as a potential free contact!

External voltage must not be transmitted from the intercom system to the lock!

By impressing the working voltage (start of operation), the motor brings the locking points into the neutral position.

3.3.1 General connection diagram

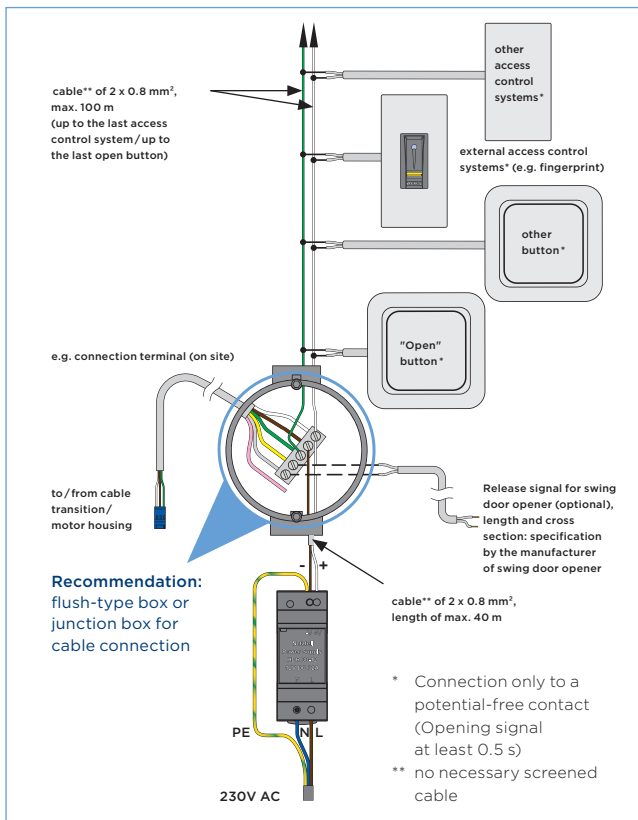


Figure 3.3.1-1: General connection diagram

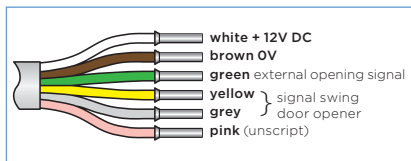


Figure 3.3.1-2: Detail of terminal assignment

3.4 Access control system transponder set

Prerequisites for installation

- The transponder signal is processed in the reader/control unit.
- This unit has to be installed in a standard flush-type box inside the building (close to the door).



Notice: If the reader and button are accommodated in the flush-type box at the same time, this must have a depth of 65 mm!

- If no button is used next to the door, a flush-type box with a blind cover can be provided for the reader.



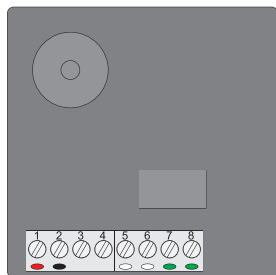
DANGER! For safety reasons, do not install it in a flush-type box with a 230V switch or socket outlet!

- The transponder antenna is located in a housing for exposed installations and is to be installed in a weatherproof zone outside the entrance door.
- Do not install the antenna directly on metal as its range could be decreased drastically.
- Do not install any other antenna within a radius of 1 m!



Notice: If you plan installations on a metal substructure, you will have to use a timber board and spacer bolts, if applicable, or large bore holes to ensure the proper function of the antenna! To test the scanning performance, you may have to tentatively install it on site, if applicable!

- Connect the cable of the antenna (fixed in the antenna) to the reader /control unit.
- Recommendation: Lay a reserve pipe from the antenna to the reader unit.



No.	Terminals
1 red	"12V DC"
2 black	"0V DC"
3	serial interface
4	serial interface
5 white	Antenna
6 white	Antenna
7 green	potential free contact C
8 green	potential free contact NO

Figure 3.4-1: Terminal assignment of the transponder reader

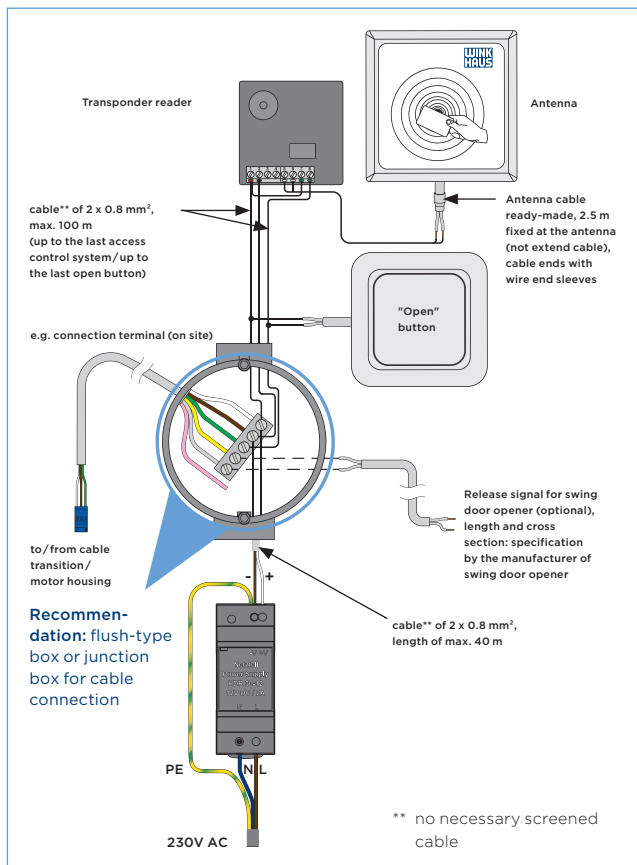


Figure 3.4-2: Installation of the transponder reader

3.5 Access control system wireless remote control

Prerequisites for installation

- To ensure the reliable performance, the position of the wireless receiver is of utmost importance for the received power.
- Do not install it at or nearby sources of possible interference (e.g. EDP / high-performance power distributor).
- To prevent manipulation of the receiver we recommend installing the receiver on the inner side of the door!

3

3.5.1 Wireless remote control set

Installation sequence

- The wireless receiver should preferably be installed in a 65 mm deep flush-type box on the inside.



Notice: If you use the flush-type box of the button, the box will have to be 65 mm deep!

- If no switch or button is used next to the door, a flush-type box with a blind cover can be provided for the wireless receiver.



Notice: For safety reasons, you are not permitted to install it in a flush-type box with a 230V AC switch or socket outlet.

- Connect the terminals 2 through 5 of the wireless receiver as described in the table below.

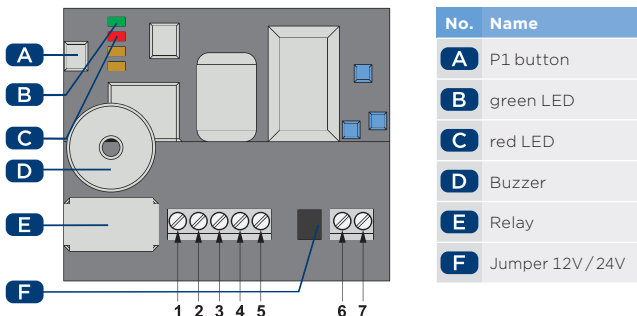


Figure 3.5.1-1: Terminal assignment of the wireless receiver

No.	Terminals wireless receiver
1	"Break contact (NC)", is not required
2	"Contact (C)", connect with a green wire from the cable transition
3	"Make contact (NO)", connect to terminal 4 of the wireless receiver (+ 12V DC)
4	"12V DC or 24V DC", Power supply, e.g. from the Winkhaus power supply (connect with white wire from the cable transition + terminal 2 from the wireless receiver)
5	"0V DC", Power supply, e.g. from the Winkhaus power supply (connect with brown wire from the cable transition)
6	"Auxiliary antenna / ANT" (not required)
7	"Auxiliary antenna / GND" (not required)

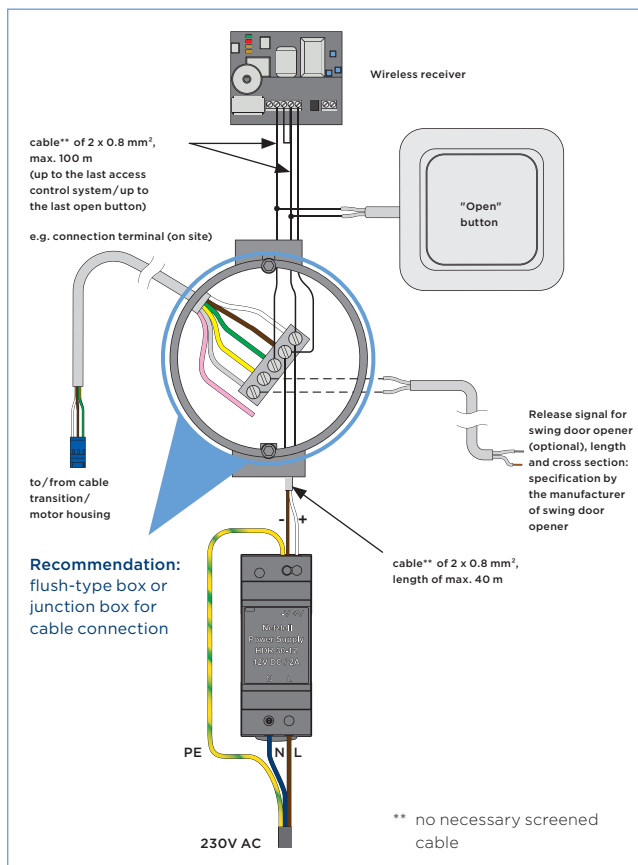


Figure 3.5.1-2: Installing the wireless receiver

**Caution!**

blueMatic EAV must
be operated with 12V.

12V = Delivery status



24V

Figure 3.5.1-3: Adjustment of the jumper for voltage selection

- The default setting of the jumper is 12V.
- The wireless receiver can be adjusted from 12V to 24V via the jumper.



Notice: Check the proper position of the jumper before starting operation!

3.5.2 Wireless receiver (separate)

Separate wireless receiver for additional applications, such as garage door control units.

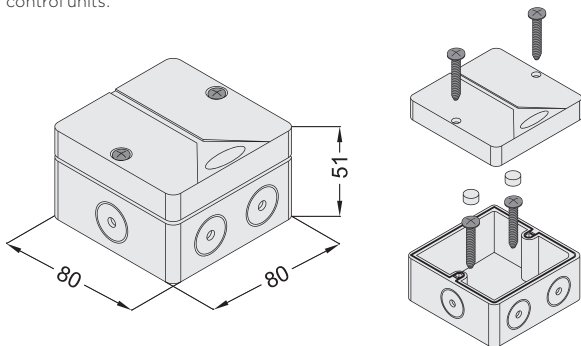


Figure 3.5.2-1: Installing the wireless receiver (dimensions in mm)

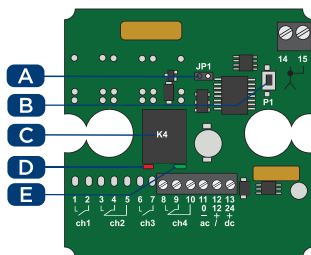
Installation sequence

- Remove the cover of the housing.
- Fasten the housing with screws.
- Push in the rubber plug (see figure 3.5.2-1).
- Insert the circuit board of the remote according to figure 3.5.2-2 and connect it to the control of the additional application (for example to the garage door control unit).



Notice: Do follow the relevant installation instructions of the additional applications!

- Put the cover back on the housing and lock and screw it down.



No.	Name
A	JP1 jumper
B	P1 button
C	K4 relay
D	red LED
E	green LED

Figure 3.5.2-2: Installation of the circuit board of the receiver

No.	Terminals circuit board of the receiver
8, 9	NO relay K4 - non-operated contact is open, it closes by activating per remote control
9, 10	NC relay K4 - non-operated contact is close, it opens by activating per remote control
11, 12	"12V AC/DC"
11, 13	"24V AC/DC"
14	Antenna
15	Screen

- * You can set the K4 relay as ON/OFF or as an impulse via the JP1 jumper (see figure 3.5.2-3). The setting depends on the control unit which is to be triggered by the receiver.



JP1 = ON
K4 ON/OFF

- Relay remains active after being activated by remote control.
- Deactivation by actuating the remote control once more.



JP1 = OFF
K4 Impuls

- Relay becomes briefly active after being activated by remote control and after about 1 sec. it will be deactivated automatically.

Figure 3.5.2-3: Setting the K4 relay

3.6 Non Winkhaus access control system (ACS)

3.6.1 Non Winkhaus access control system ACS general (frame- and sash side)

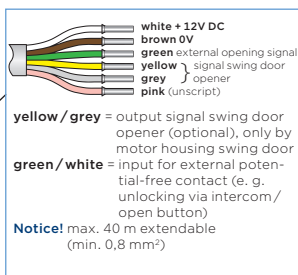
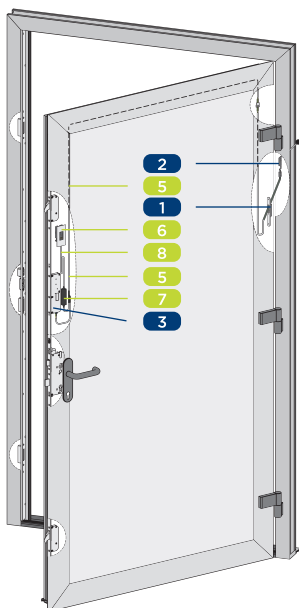
Please observe the following instructions when using other than the precalled systems to control the blueMatic EAV with motor operated opening (e.g. transponder set, wireless remote control):

- Is recommended the Winkhaus power supply T-HT NETZTEIL 12V DC/2A (Mat.-No. 2469777) or the frame power supply T-NETZTEIL RAHM. 12V DC 1,5A (2A/2S) (Mat.-No. 5038587) to use.
- For details on the voltage supply see also chapter 2, power supply **6**
- Ensure that the decontrol signal takes place over a potential-free contact when using non-Winkhaus access control systems.
- If required use a coupling relay for realizing this.

3.6.2 Non Winkhaus access control system ACS fingerprint (sash side)

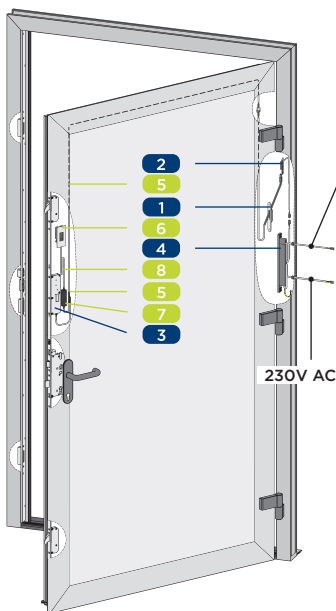
Prerequisites for installation

- The applied access control system have to be installed into the door sash.
- If parallel to the access control "fingerprint" further access controls (potential-free signal: e.g. "Open" button, intercom ...) should be used for unlocking, this is possible via the frame part T-KÜ-T1 RT KABEL 4 M or frame part T-KÜ-T1 RT KABEL 0,6M RNT + frame power supply T-NETZTEIL RAHM. 12V DC 1,5A (2A/2S).



Description	Part-no.
1 Sash part cable transition T-KÜ-T1 FT EKEY MICRO (PLUS) 1,5M	5057683
2 Frame part cable transition T-KÜ-T1 RT Kabel 4M , for external power supply "mounting on DIN rail"	5040503
3 Motor housing EAV , for retrofitting mechanical locking system AV3, standard	5009320
5 to 8 ekey WH-EAV Set, Integra micro with App	ekey 101950
5 ekey Adapter micro WH EAV WH KÜ, Y-connection from cable transition to motor housing and control unit SE micro, plug'n'play	
6 Fingerprint ekey home FS IN 2.0 T BT + Decor element FS IN ED	
7 Control unit ekey home SE micro 1	
8 ekey KAB A 1,2 m / 4 x 0,14 RJ / CP, Connection between fingerprint and control unit	

Figure 3.6.2-1: Installation blueMatic EAV with *Fingerprint ekey home micro "Micro-Control unit, installed in the profile"* (sash side)



Do not connect external voltage!

white + 12V DC
brown 0V
green external opening signal
yellow } signal swing door
grey } opener
pink (unscript)

yellow / grey = output signal swing door opener (optional), only by motor housing swing door
green / white = input for external potential-free contact (e.g. unlocking via intercom / open button)

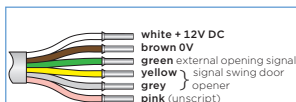
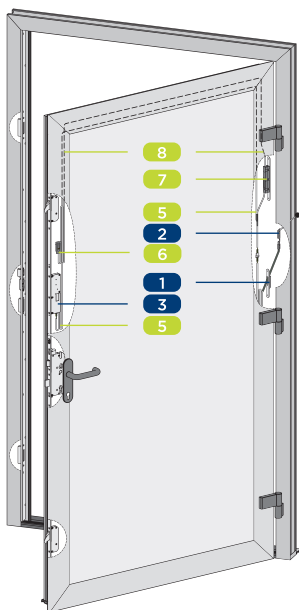
Notice! max. 40 m extendable (min. 0,8 mm²)

Description	Part-no.
1 Sash part cable transition T-KÜ-T1 FT EKEY MICRO (PLUS) 1,5M	5057683
2 Frame part cable transition T-KÜ-T1 RT KABEL 0,6M RNT , for frame power supply	5040504
3 Motor housing EAV , for retrofitting mechanical locking system AV3, standard	5009320
4 Frame power supply T-NETZTEILRAHM. 12V DC 1,5A (2A/2S)	5038587
5 to 8 ekey WH-EAV Set, Integra micro with App	ekey 101950
5 ekey Adapter micro WH EAV WH KÜ, Y-connection from cable transition to motor housing and control unit SE micro, plug'n'play	
6 Fingerprint ekey home FS IN 2.0 T BT + Decor element FS IN ED	
7 Control unit ekey home SE micro 1	
8 ekey KAB A 1,2 m / 4 x 0,14 RJ / CP, Connection between fingerprint and control unit	



Notice: The positioning of frame power supply and cable transition on the hinge side is recommended, either between lower/middle door hinge or in each case approx. 10 cm above/below the middle door hinge.

Figure 3.6.2-2: Installation blueMatic EAV with *Fingerprint ekey home micro "Micro-Control unit, installed in the profile" and frame power supply* (sash side)



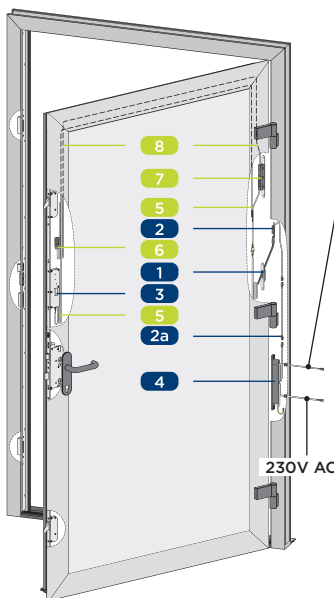
yellow / grey = output signal swing door opener (optional), only by motor housing swing door

green / white = input for external potential-free contact (e.g. unlocking via intercom / open button)

Notice! max. 40 m extendable (min. 0,8 mm²)

Description	Part-no.
1 Sash part cable transition T-KÜ-T1 FT EKEY MICRO (PLUS) 1,5M	5057683
2 Frame part cable transition T-KÜ-T1 RT Kabel 4M , for external power supply "mounting on DIN rail"	5040503
3 Motor housing EAV , for retrofitting mechanical locking system AV3, standard	5009320
5 to 8 ekey WH-EAV Set, Arte micro plus with App round face plate 20 mm square face plate 24 mm	ekey 101955 101958
5 ekey Adapter micro plus WH EAV WH KÜ, Y-connection from cable transition to control unit SE micro plus (Arte) and motor housing, plug'n'play	
6 Fingerprint Arte, ekey FS AR ED V SV 52 x 25	
7 Control unit ekey home SE micro plus 1 (is milled, 18 mm)	
8 ekey KAB AA 4 m/5 x 0,14 SH/CP35, Connection between ekey fingerprint Arte and control unit SE micro plus 1	

Figure 3.6.2-3: Installation blueMatic EAV with *Fingerprint ekey home micro plus "Control unit, milled on the hinge side"* (sash side)



Do not connect external voltage!

white + 12V DC
brown 0V
green external opening signal
yellow signal swing door opener
grey }
pink (unscript)

yellow / grey = output signal swing door opener (optional), only by motor housing swing door
green / white = input for external potential-free contact (e.g. unlocking via intercom / open button)

Notice! max. 40 m extendable (min. 0,8 mm²)

Description	Part-no.
1 Sash part cable transition T-KÜ-T1 FT EKEY MICRO (PLUS) 1,5M	5057683
2 Frame part cable transition T-KÜ-T1 RT KABEL 0,6M RNT, for frame power supply	5040504
2a Extension cable T-LB VERL.KABEL 0,25M RNT ZU KÜ-T1	5066122
3 Motor housing EAV, for retrofitting mechanical locking system AV3, standard	5009320
4 Frame power supply T-NETZTEILRAHM. 12V DC 1,5A (2A/2S)	5038587
5 to 8 ekey WH-EAV Set, Arte micro plus with App round face plate 20 mm square face plate 24 mm	ekey 101955 101958
5 ekey Adapter micro plus WH EAV WH KÜ, Y-connection from cable transition to control unit SE micro plus (Arte) and motor housing, plug'n'play	
6 Fingerprint Arte ekey FS AR ED V SV 52 x 25	
7 Control unit ekey home SE micro plus 1 (is milled, 18 mm)	
8 ekey KAB AA 4 m/5 x 0,14 SH/CP35, Connection between ekey fingerprint Arte and control unit SE micro plus 1	



Notice: The positioning of frame power supply and cable transition on the hinge side is recommended, either between lower / middle door hinge or in each case approx. 10 cm above / below the middle door hinge.

Figure 3.6.2-4: Installation blueMatic EAV with *Fingerprint ekey home micro plus "Control unit, milled on the hinge side" and frame power supply* (sash side)

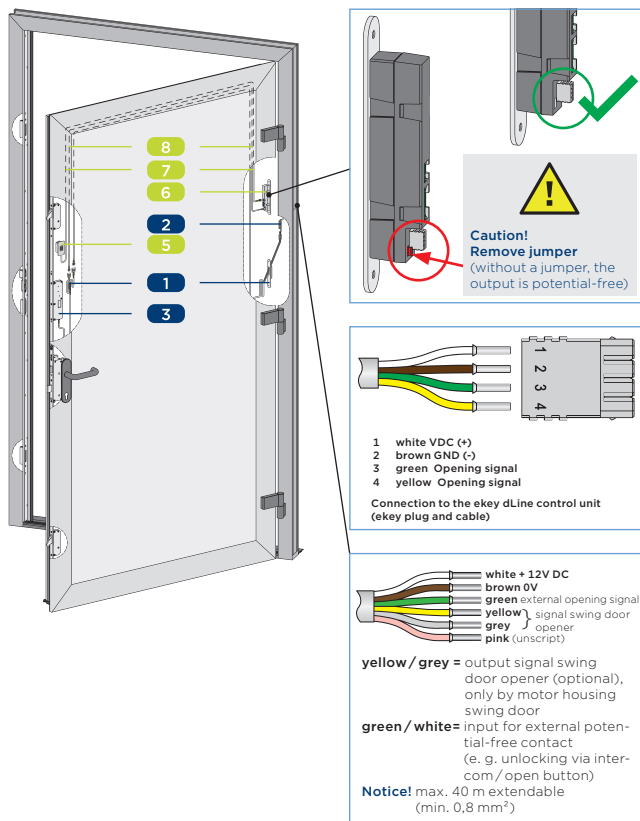
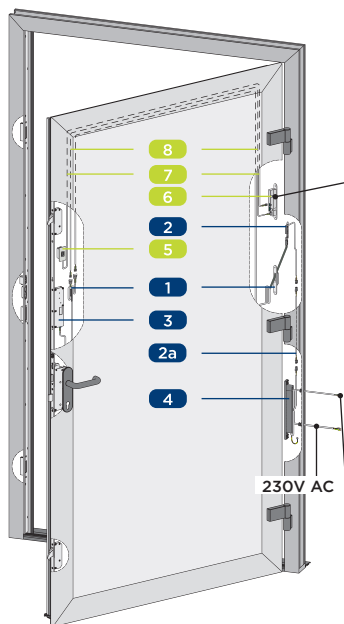


Figure 3.6.2-5: Installation blueMatic EAV with "Fingerprint ekey dLine" (sash side)

Description	Part-no.
1 Set of cable transition T-SET KÜ-T1 FT ZK-EAV 3,5 + Y 0,5 M (cable from sash part to Y-cable 3.5 m length + cable end with 5-pole plug) including Y-KABEL ZK FLÜGEL-EAV 0.5 m plus cover plate (de- pends on the faceplate/ material type), plug-in	5040508
alternatively set of cable transition T-SET KÜ-T1 FT ZK-EAV 1,5 M + Y 0,5 M (cable from sash part to Y-cable 1.5 m length + cable end with 5-pole plug) including Y-KABEL ZK FLÜGEL-EAV 0.5 m plus cover plate (depends on the faceplate/ material type), plug-in	5085768
2 Frame part cable transition T-KÜ-T1 RT Kabel 4M, for external power supply "mounting on DIN rail"	5040503
3 Motor housing EAV, for retrofitting mechanical locking system AV3, standard	5009320
5 bis 8 ekey dLine set TB Winkhaus EAV3/EAV4/EAV4+/BM+	ekey 201712
ekey dLine set TG Winkhaus EAV3/EAV4/EAV4+/BM+	201711
5 ekey dLine fingerprint including cover	
6 ekey dLine controller including mounting plate	
7 ekey dLine cable FP	
8 ekey dLine cable MT 3,5 m Winkhaus EAV3/ EAV4/EAV4+/BM+	



230V AC



Notice: The positioning of frame power supply and cable transition on the hinge side is recommended, either between lower/middle door hinge or in each case approx. 10 cm above/below the middle door hinge.

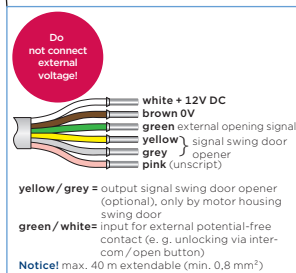
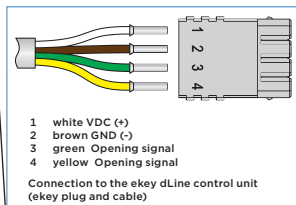
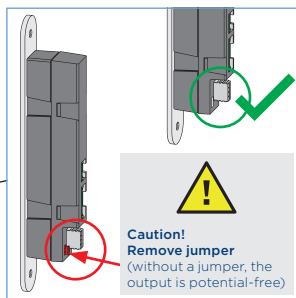


Figure 3.6.2-6: Installation blueMatic EAV with *"Fingerprint ekey dLine and frame power supply"* (sash side)

Description	Part-no.
1 Set of cable transition T-SET KÜ-T1 FT ZK-EAV 3,5 + Y 0,5 M (cable from sash part to Y-cable 3.5 m length + cable end with 5-pole plug) including Y-KABEL ZK FLÜGEL-EAV 0.5 m plus cover plate (depends on the faceplate/ material type), plug-in	5040508
alternatively set of cable transition T-SET KÜ-T1 FT ZK-EAV 1,5 M + Y 0,5 M (cable from sash part to Y-cable 1.5 m length + cable end with 5-pole plug) including Y-KABEL ZK FLÜGEL-EAV 0.5 m plus cover plate (depends on the faceplate/ material type), plug-in	5085768
2 Frame part cable transition T-KÜ-T1 RT KABEL 0,6M RNT for frame power supplyl	5040504
2a optional extension cable T-LB VERL. KABEL 0,25M RNT ZU KÜ-T1	5066122
3 Motor housing EAV , for retrofitting mechanical locking system AV3, standard	5009320
4 Frame power supply T-NETZTEILRAHM. 12V DC 1,5A (2A/2S)	5038587
5 bis 8 ekey dLine set TB Winkhaus EAV3/EAV4/EAV4+/BM+	ekey 201712
ekey dLine set TG Winkhaus EAV3/EAV4/EAV4+/BM+	201711
5 ekey dLine fingerprint including cover	
6 ekey dLine controller including mounting plate	
7 ekey dLine cable FP	
8 ekey dLine cable MT 3,5 m Winkhaus EAV3/EAV4/EAV4+/BM+	

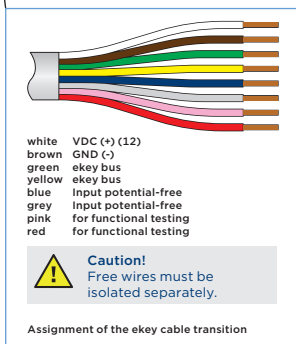
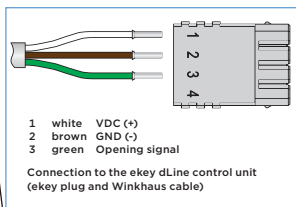
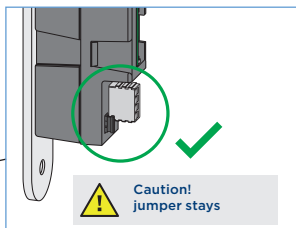
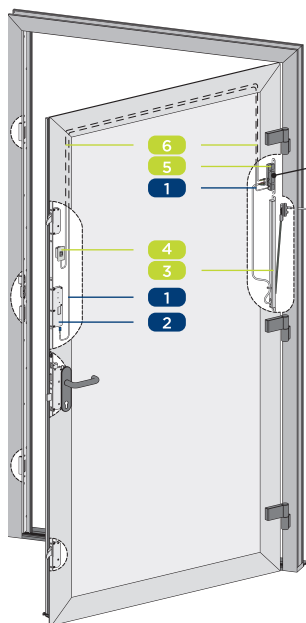
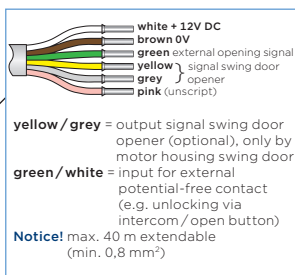
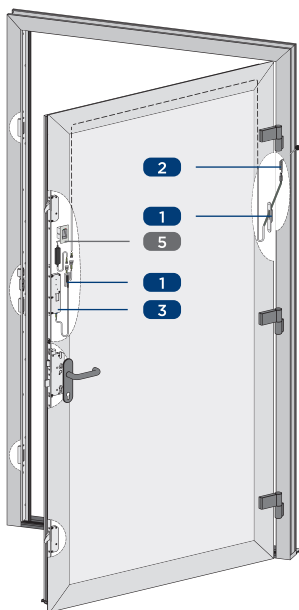


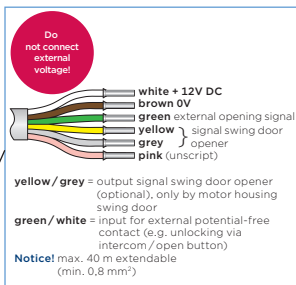
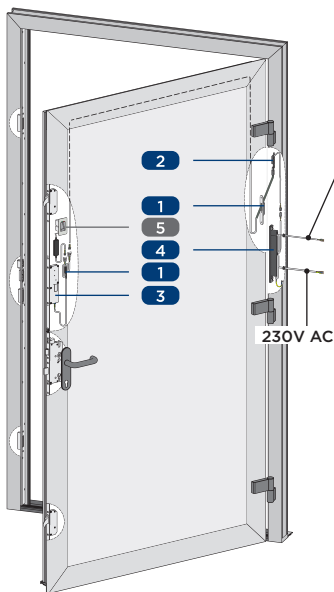
Figure 3.6.2-7: Installation blueMatic EAV with *"Fingerprint ekey dLine and cable transition ekey"* (sash side)

Description	Part-no.
1 T-KABEL EAV EKEY DLINE + KÜ 3M 3 ADRIG (cable from ekey dLine controller to Winkhaus motor housing, cable 3 m length + cable end with 3-wires), plug-in	5101826
2 Motor housing EAV , for retrofitting mechanical locking system AV3, standard	5009320
3 to 6	ekey
3 ekey cable transition including cable to the ekey dLine controller	
4 ekey dLine fingerprint including cover	
5 ekey dLine controller including mounting plate	
6 ekey dLine cable FP	



Description	Part-no.
1 Sash part cable transition T-SET KÜ-T1 FT ZK-EAV 3,5 + Y 0,5 M including Y-KABEL ZK FLÜGEL-EAV	5040508
2 Frame part cable transition T-KÜ-T1 RT Kabel 4M , for external power supply "mounting on DIN rail"	5040503
3 Motor housing EAV , for retrofitting mechanical locking system AV3, standard	5009320
5 Access control systems	
ekey WH-EAV Set, Integra micro with App	ekey 101950
Fingerprint IDENCOM BioKey INSIDE Basic without App	IDENCOM 680 805
Fingerprint IDENCOM BioKey INSIDE with App	IDENCOM 692 815

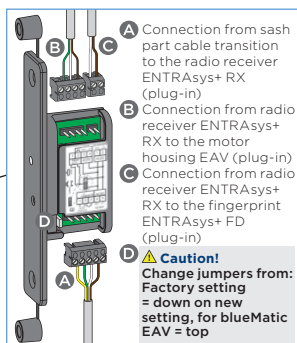
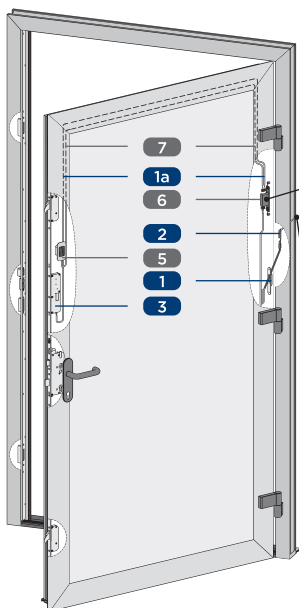
Figure 3.6.2-8: Installation blueMatic EAV with *"Fingerprint IDENCOM BioKey INSIDE"* (sash side)



Notice: The positioning of frame power supply and cable transition on the hinge side is recommended, either between lower/middle door hinge or in each case approx. 10 cm above/below the middle door hinge.

Description	Part-no.
1 Sash part cable transition T-SET KÜ-T1 FT ZK-EAV 3,5 + Y 0,5 M including Y-KABEL ZK FLÜGEL-EAV	5040508
2 Frame part cable transition T-KÜ-T1 RT KABEL 0,6M RNT , for frame power supply	5040504
3 Motor housing EAV , for retrofitting mechanical locking system AV3, standard	5009320
4 Frame power supply T-NETZTEILRAHM. 12V DC 1,5A (2A/2S)	5038587
5 Access control systems	
ekey WH-EAV Set, Integra micro with App	ekey 101950
Fingerprint IDENCOM BioKey INSIDE Basic without App	IDENCOM 680 805
Fingerprint IDENCOM BioKey INSIDE with App	IDENCOM 692 815

Figure 3.6.2-9: Installation blueMatic EAV with *"Fingerprint IDENCOM BioKey INSIDE and frame power supply"* (sash side)



i **Notice:** In the combination of the SOMMER ENTRAsys+ FD fingerprint with Winkhaus blueMatic EAV MANDATORY: do not change the specified assignment of the Winkhaus screw terminal (white = + 12V, brown = 0V)/mount the Winkhaus screw terminal as shown in the illustration.



green / yellow = input for external potential-free contact (e.g. unlocking via intercom / open button)

Notice! max. 40 m extendable (min. 0,8 mm²)

Figure 3.6.2-10: Installation blueMatic EAV with "Fingerprint SOMMER ENTRAsys+ FD" (sash side)

Description	Part-no.
1 Set of cable transition T-SET KÜ-T1-FT ZK-SO ENTRA+ EAV 1,5 + 3M (with 5-pole plug for radio receiver ENTRASys+ RX) plug-in	5082032
1a T-LE ANSCHLUSSKAB EAV SOMMER ENTR+ 3M , 3-wires for motor (with 4-pole plug for radio receiver ENTRASys+ RX)	
i Notice: included in the set 1	
2 Frame part cable transition T-KÜ-T1 RT Kabel 4M , for external power supply "mounting on DIN rail"	5040503
3 Motor housing EAV , for retrofitting mechanical locking system AV3, standard	5009320
5 to 7 Set SOMMER	SOMMER
5 Fingerprint ENTRASys+ FD	
6 Radio receiver ENTRASys+ RX	
7 Connection cable from radio receiver to fingerprint ENTRASys+ FD	
Optional parts	Part-no.
T-LE ANSCHLUSSKAB EAV SOMMER ENTR+ 3M , Length 3 m, 3-wires for motor (with 4-pole plug for radio receiver ENTRASys+ RX) separate	5082030
T-LE ANSCHLUSSKAB EAV SOMMER ENTR+ 6M , Length 6 m, 3-wires for motor (with 4-pole plug for radio receiver ENTRASys+ RX) separate	5082031

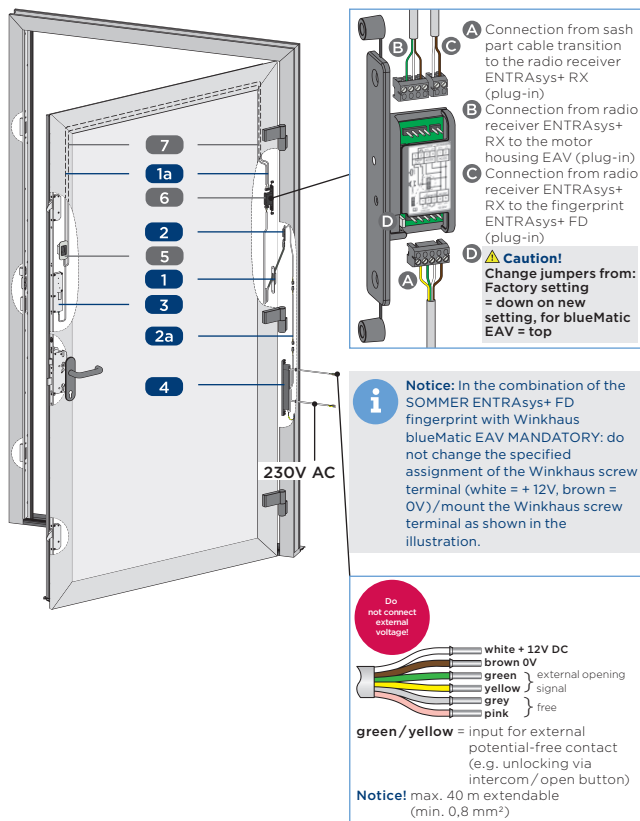
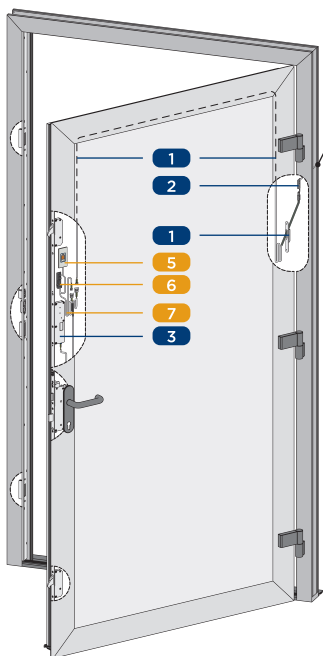


Figure 3.6.2-11: Installation blueMatic EAV with "Fingerpint SOMMER ENTRAsys+ FD and frame power supply" (sash side)

Description	Part-no.
1 Set of cable transition T-SET KÜ-T1-FT ZK-SO ENTRA+ EAV 1,5 + 3M (with 5-pole plug for radio receiver ENTRASys+ RX) plug-in	5082032
1a T-LE ANSCHLUSSKAB EAV SOMMER ENTR+ 3M , 3-wires for motor (with 4-pole plug for radio receiver ENTRASys+ RX)	
i Notice: included in the set 1	
2 Frame part cable transition T-KÜ-T1 RT KABEL 0,6M RNT , for frame power supply	5040504
2a Extension cable T-LB VERL.KABEL 0,25M RNT ZU KÜ-T1	5066122
3 Motor housing EAV , for re- trofitting mechanical locking system AV3, standard	5009320
4 Frame power supply T-NETZTEILRAHM. 12V DC 1,5A (2A/2S)	5038587
5 to 7 Set SOMMER	SOMMER
5 Fingerprint ENTRASys+ FD	
6 Radio receiver ENTRASys+ RX	
7 Connection cable from radio receiver to fingerprint ENTRASys+ FD	
Optional parts	Part-no.
T-LE ANSCHLUSSKAB EAV SOMMER ENTR+ 3M , Length 3 m, 3-wires for motor (with 4-pole plug for radio receiver ENTRASys+ RX) separate	5082030
T-LE ANSCHLUSSKAB EAV SOMMER ENTR+ 6M , Length 6 m, 3-wires for motor (with 4-pole plug for radio receiver ENTRASys+ RX) separate	5082031



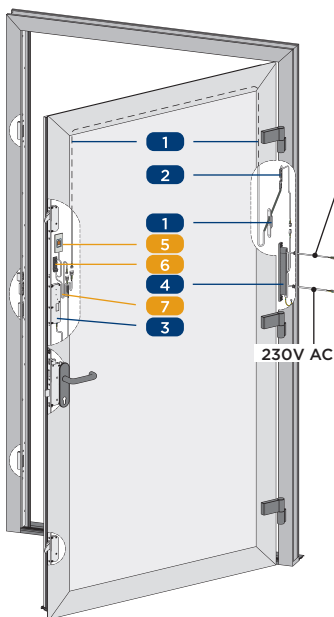
green / white = input for external potential-free contact (e.g. unlocking via intercom / open button)

yellow / grey = output signal swing door opener (optional), only by motor housing "swing door"

Notice! max. 40 m extendable (min. 0,8 mm²)

Description	Part-no.
1 Set of cable transition T-SET KÜ-T1 FT ZK-EAV 3,5 + Y 0,5 M including Y-KABEL ZK FLÜGEL-EAV 0.5 m	5040508
alternatively set of cable transition T-SET KÜ-T1 FT ZK-EAV 1,5 M + Y 0,5 M including Y-KABEL ZK FLÜGEL-EAV 0.5 m	5085768
2 Frame part cable transition T-KÜ-T1 RT Kabel 4M , for external power supply "mounting on DIN rail"	5040503
3 Motor housing EAV , for retrofitting mechanical locking system AV3, standard	5009320
5 to 7 Order directly via Navkom	Navkom
5 Bioreader Navkom Fingerprint in the door sash/ silver or black	R7-BR-S or BR-B
6 Control unit in shrink tube	R7-CU-BBX
7 Cable connection to WH Y cable	C-BBX-0120-W-STV Set Y

Figure 3.6.2-12: Installation blueMatic EAV with "Fingerprint Navkom" (sash side)



Do not connect external voltage!

white + 12V DC
brown 0V
green external opening signal
yellow } signal swing door
grey } opener
pink (unscript)

green / white = input for external potential-free contact (e.g. unlocking via intercom / open button)
yellow / grey = output signal swing door opener (optional), only by motor housing "swing door"

Notice! max. 40 m extendable (min. 0,8 mm²)

i Notice: The positioning of frame power supply and cable transition on the hinge side is recommended, either between lower / middle door hinge or in each case approx. 10 cm above / below the middle door hinge.

Description	Part-no.
1 Set of cable transition T-SET KÜ-T1 FT ZK-EAV 3,5 + Y 0,5 M including Y-KABEL ZK FLÜGEL-EAV 0.5 m	5040508
alternatively set of cable transition T-SET KÜ-T1 FT ZK-EAV 1,5 M + Y 0,5 M including Y-KABEL ZK FLÜGEL-EAV 0.5 m	5085768
2 Frame part cable transition T-KÜ-T1 RT KABEL 0,6M RNT , for frame power supply	5040504
3 Motor housing EAV , for retrofitting mechanical locking system AV3, standard	5009320
4 Frame power supply T-NETZTEILRAHM. 12VDC 1,5A (2A/2S)	5038587
5 to 7 Order directly via Navkom	Navkom
5 Bioreader Navkom Fingerprint in the door sash / silver or black	R7-BR-S or BR-B
6 Control unit in shrink tube	R7-CU-BBX
7 Cable connection to WH Y cable	C-BBX-0120-W-STV Set Y

Figure 3.6.2-13: Installation blueMatic EAV with *"Fingerprint Navkom and frame power supply"* (sash side)

4 Operation/Programming

4.1 blueMatic EAV

4.1.1 Locking and unlocking

Locking

- Even when closing the door it is automatically locked by two massive hooks and the latch in the main lock housing.
- Additional protection is provided by manual locking: one rotation of the key (1 x 360°) causes the deadbolt in the main lock housing to be thrown.

Opening the door from outside

- Unlocking via the connected access control system (e.g. Transponder chip, wireless remote control) or with a key.

Daytime function

- Temporary unlock of the door by a mechanical daytime function TaFa. Operation similar to an electric striker with mechanical daytime function. (articles see chapter 2)



Notice: The main deadbolt for additional protection must be unlocked by keys in any case.

Opening the door from inside, e.g. via

- the push-button
- the intercom (potential free button!)
- the handle or key (even possible in case of power failure)

4.2 blueMatic EAV with Transponder

4.2.1 Operation

The reader unit controls and monitors the access to the door.

- It is operated by means of transponder chips that work contactless.
- Hold a programmed transponder chip within (0 - 5 cm) of the antenna.
- Once the transponder chip is close enough to where it can read the information, communication is established contact free.
- The transponder data is transmitted to the reader unit via the antenna.
- An acoustic signal at the reader unit will acknowledge the data transfer.
- The reader checks whether this transponder chip is authorized to access and allows or denies access.

4

Action	Acoustic Signal	Result
Door with transponder chip "Open"	■ ■ short, short	authorized

- After the enable time has elapsed, another fob can be recognized and evaluated.
- If a transponder chip is unknown to the reader, it does not have access rights and access will be denied.

Action	Acoustic Signal	Result
Door with transponder chip "Open"	■ ■■■■ short, long	not authorized

4.2.2 Programming

Each transponder set is supplied with 2 programming cards.
(programming card = green; delete-all card = red)
These cards are programmed to this reader/control unit.

Teach-in mode

4



Programming card:
Set teach-in mode →
teach transponder chip

Action	Acoustic Signal	Result
Pass the programmable card over the antenna	■ ■ short, every 0.5 seconds	Teach-in mode active



Notice: If you do not swipe the transponder chip across the antenna for a period of 5 seconds, the teach-in mode will be stopped. The reader unit returns to operating mode.

Action	Acoustic Signal	Result
Pass all the transponder chips to be authorised in succession over the antenna	■■■■■ for about 1 second	Transponder chips authorised
Pass all the transponder chips to be authorised in succession over the antenna	no acoustic signal (no more transponder chips can be authorised max. 250)	no acoustic signal (no more transponder chips can be authorised max. 250)

Delete mode



Delete-all card:
Delete mode "All
transponder chips" →
Deletes all transponder
chips (key fob)

4



Caution! By using the delete-all card all the transponder chips stored in the system will be deleted!
The action of deleting all transponder chips is irrevocable once the process has been completed!
You have to teach up to 250 new transponder chips from the start!
The programming cards cannot open the door!

Action	Acoustic Signal	Result
Pass the delete-all card over the antenna	 for about 1 second	end of delete mode All transponder chips



Notice: All transponder chips have been deleted and the reader unit is at delivery status.
The delete-all card and the programming card are saved, a transponder chip is not saved. In this state you cannot open the door via transponder chip or card; rather you will have to re-programm the transponder chip.
Keep the programming cards at a safe place to prevent any kind of misuse.
If you lose the cards, the reader unit will have to be exchanged in its entirety! Please contact customer service in such a case.

4.3 blueMatic EAV with wireless remote control

4.3.1 Operation

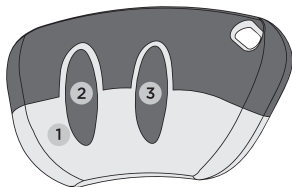
- It is operated via the wireless remote controls working contactless.
- The set of 3 wireless remote controls delivered have already been programmed (button A).
- To trigger a signal, press the A button of a programmed remote control. The red LED will turn on and the door will be unlocked.

4.3.2 Programming

You can program the wireless remote control via the wireless remote control or the wireless receiver. We recommend programming it by using the wireless remote control. (max. 85 remote control buttons).

The programming per remote control is not possible for the wireless receiver for additional applications.

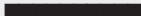
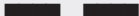
Teaching a wireless remote control directly at the remote control (recommended)



- 1 LED red
- 2 Button A
- 3 Button B



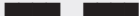
Notice: Keep the buttons pressed until you hear the acoustic signal at the receiver!

Action	Acoustic Signal	Result
1) Press buttons A and B (of a programmed remote control) simultaneously*	 short	Teach-in mode started
2) Press A button (of the same remote control)	 continuous signal (as long as teach-in mode is active)	Teach-in mode active
3) Press all buttons to be taught in succession, as long as the teach-in mode is active	 continuous signal is briefly interrupted	pressed button(s) is / are authorised

* If no remote control has been taught (e.g. after delete-all function), it would apply to all remote control. The teach-in mode can be started with any remote control.

Deleting wireless remote controls directly via the remote control

Partial deletion

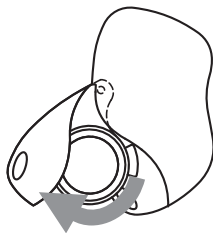
Action	Acoustic Signal	Result
1) Press buttons A and B (of a programmed remote control) simultaneously*	 short	Teach-in mode started
2) Press A button (of the same remote control)	 continuous signal (as long as delete mode is active)	Teach-in mode active
3) Press all buttons to be deleted in succession, as long as the delete mode is active	 continuous signal is briefly interrupted	pressed button(s) is / are deleted

Delete-all

Action	Acoustic Signal	Result
1) Press buttons A and B (of a programmed remote control) simultaneously*	■ short	Teach-in mode started
2) Press A button (of the same remote control)	■■■■■■■■■■ continuous signal (as long as delete mode is active)	Teach-in mode active
3) Press buttons A and B (of a programmed remote control) simultaneously	■ ■ ■ short, 3 times	Memory of the receiver is completely deleted (non programmed remote control)

Changing the batteries of the wireless remote control

- At the key ring opening, pull the colored battery cover from the underside of the remote control outwards.
- The battery compartment swings out.
- Replace the batteries.
- Insert two Lithium CR 2016 batteries.



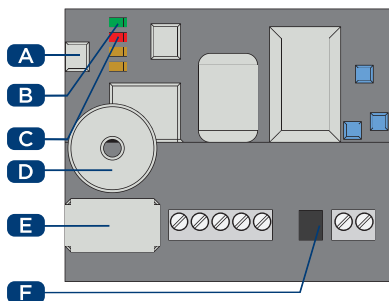
Notice:

Pay attention to the correct polarity!

Eco-Watch:

Properly dispose of the batteries!

Teaching wireless remote controls directly via the receiver



No.	Name
A	P1 button
B	green LED
C	red LED
D	Buzzer
E	Relay
F	Jumper 12V / 24V

4

- If the programming is performed via the receiver, this will have to be freely accessible.
- Press the P1 button of the receiver until the green LED lights up.
- Release the button.
- Activate the desired button of the remote control while the LED is lit up
- As long as the LED is lit, you can program additional remote control buttons.

Display memory full: The memory has been filled to capacity (max. 85 buttons), if the teach-in button of a new wireless remote control is used and both LED displays of the receiver flash simultaneously.

Deleting wireless remote controls directly via the receiver

Partial deletion

- Press and hold the P1 button of the receiver until the green LED lights up.
- Release the button.
- Press the button of the wireless remote control while the LED is lit up.
- A programmed wireless remote control will be deleted automatically.
- A wireless remote control that has not been programmed by this method will need a programming (analogue "Teaching-in of wireless remote controls directly via the remote control").

Delete-all

- Press and hold the P1 button of the receiver until the green LED lights up.
- Release the button.
- Press the button again until the green and the red LED flash three times.
- Now, all remote controls are deleted.

ON/OFF mode

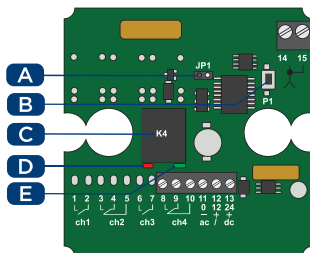
- The default setting of the relay of the receiver is "Pulse".
- You can program it as an ON/OFF relay for additional applications (specified by the respective application).
- For this purpose, press the P1 button of the receiver until the green LED lights up.
- Release the button again.
- Press the P1 button once more.
- The LED flashes and the relay is switched to the ON/OFF mode.
- Use the same procedure to get to the pulse mode.
- Then, the LED will be lit continuously.

Displaying the occupied memory units

- Press and hold the P1 button of the receiver until the green LED lights up.
- Keep the button pressed until the LED goes off.
- Then release the button immediately.

The display is a binary code: LED green = 1, LED red = 0

4.4 Wireless receiver for additional applications (e.g. garage door control units)



No.	Name
A	JP1 jumper
B	P1 button
C	K4 relay
D	red LED
E	green LED

Teaching-in via the wireless receiver (Part-no. 2142897)



Notice: The programming of remote controls via this receiver is not possible.

The wireless receiver saves the button of the wireless remote control in the sequence entered.

- To program, press the P1 button of the circuit board of the wireless receiver.
- The green LED lights up.
- Release the P1 button.
- Then, press the button of the wireless remote control you would like to save.
- The LED turns off.
- The desired button of the wireless remote control has been programmed.

Deleting via the wireless receiver

Partial deletion

- Press and hold the P1 button for about 2 seconds.
- When the green LED lights up, release the P1 button.
- Press the button of the wireless remote control you would like to delete.
- The deletion of the button is signaled by the flashing LED.

Delete-all

- Press and hold the P1 button until the green LED lights up.
- Release the P1 button.
- When the LED lights, press the P1 button again until both LED flash three times.

The memory is full once 85 buttons have been saved in the wireless remote control. Now it is not possible to save additional wireless remote controls. This condition is indicated in the teach-in mode by both LED displays flashing simultaneously three times.

5 Maintenance and care

- Components of the door furniture relevant to security have to be checked for tight-ness and wear at regular intervals. If required, the retaining screws should be re-tightened and any defective parts should be replaced.
- Maintenance, care and cleaning of the cylinder are to be carried out according to the guidance of the cylinder manufacturer. Lock cylinders and keys must be replaced, when despite proper maintenance, malfunctions occur, especially during the insertion or extraction of the key.
- At least once every year, and depending on the frequency of use, all movable parts and all externally accessible sliding points of the Winkhaus fitting must be greased with technical vaseline and checked for proper functionality. Heavily stressed sliding parts, such as chamfer of latch and automatic tracer pins, should be greased or oiled more frequently where necessary (e.g. quarterly).
- The fittings may only be cleaned with mild, pH-neutral cleaning and care products in diluted form that do not impair the corrosion protection of the fitting parts. Under no circumstances should aggressive, acidic or corrosive cleaning agents, abrasive cleaners or sharp objects be used.

Example for lubricant to be used:

T-Polfett 10 GR Stößel

Alternative*:

a) Klüber, Klüberelectric KR 44-22

b) Divinol, Profilube MP

c) Divinol F14 EP

d) Shell Gadus S2 V100

*) recommended are greases containing lithium soap and max. NLGI class 2

Part description	Part-no.
T-POLFETT 10 GR STÖßEL	5040239



Greases must be compatible with non-ferrous metals and plastics.

Cleaning

- Use a soft cloth for cleaning.
- Use neutral cleaning and care agents which do not contain any abrasives.
- Electronic components may only be cleaned dry.

Care

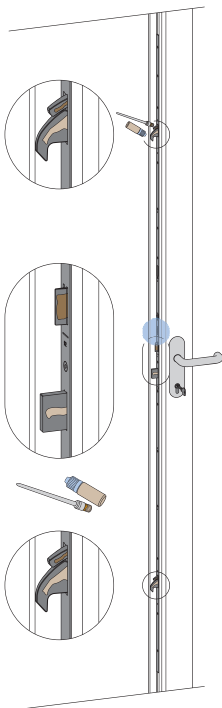
- lubricate all moving parts and externally accessible sliding parts on both sides at least once a year or at most every 20,000 operating cycles
- Heavily stressed sliding parts, such as latch bevels, should be greased more frequently if necessary (e.g. quarterly).
- Interior lock housing and secondary locking mechanisms are supplied with permanent lubrication using quality greases and should not be relubricated!

Explanation

Lightly grease

Heavily grease

Tracer pin



6 Errors/Causes/Troubleshooting

Errors	Indication	Possible cause	Troubleshooting
the door does not lock automatically	Hooks not engaged	- the door is warped - the contact pressure is too high - the door has not been installed properly	- check the installation, and the keep adjustment and alignment - adjust the hinge plates
the latch is "blocked"	the door is not latched in the center location	the routing in the area of the main lock housing is possibly not sufficient (chapter 3)	rework the milling if necessary
the door cannot be closed	the tracer pin is "blocked" in the center keep	the door sash has not been mounted properly	at the center keep → change the height of the door keep (by using a screw driver)
the motor does not function although voltage is applied at the door	the door cannot be opened	no voltage supply via the cable transition	check the cable transition (e.g. contacts, screwed joint for T-KÜ-T1 FT)
the door cannot be opened by the motor	the motor does not function	power failure	unlock mechanically via profile cylinder/handle or lock via profile cylinder
		power supply failure	check main power supply to transformer
		power supply is interrupted, e.g. at the cable transition	check KÜ, correct the plugin connection
		system not wired correctly	check entire system against wiring diagram

Errors	Indication	Possible cause	Troubleshooting
	the motor stops	- the door is warped - the contact pressure is too high - the lock is too tight	- adjust the door - check the operation via profile cylinder / handle
	the motor functions but the door cannot be opened	- the main bolt is unlocked via profile cylinder - Operating forces too high, faulty installation	- draw the main bolt back again via the profile cylinder - check installation (keep alignment, air gap, etc.)
Power failure when/during:			
a) the door is locked			the door can be operated mechanically (profile cylinder / handle)
b) the door is open, lock is unlocked	the door is possibly not held by the latch	the motor is not in starting position	close the door by pre-locking the main bolt, if necessary
c) the unlocking procedure	when the door is locked again, possibly the hook, main bolt do not lock completely	the motor is not in starting position	door can be operated mechanically (profile cylinder / handle), if motor has returned to starting position → completely functions
EAV does not operate with remote but LED is illuminating.	door doesn't open	- remote battery dead - out of range to the remote control - remote control not authorized	- replace battery in remote control - operate remote control within 30 mtrs. (unobstructed) - check remote control programmed

Errors	Indication	Possible cause	Troubleshooting
Does not operate with remote control, red LED is not illuminating.		remote battery dead	replace battery in remote control
the lock works correctly when the door is open, but no longer works after locking	the door closes, but cannot be opened electrically	- a cable in the door frame is damaged and has contact with the frame profile - when locking the door (contact latch/dead bolt center keep) there is a short circuit	find damaged area, replace/repair cable

7 Technical specifications

7.1 Motor housing EAV3

Voltage:	12V DC stabilized, $\pm 1,0V$
Power consumption (on standby):	0,4W Immediately after each motorized locking/unlocking, the WH lock is in standby mode (<1s). An additional standby mode is not possible depending on the type of device. - Wired network ports are not available - Wireless network ports are always active and cannot be deactivated
max. current:	approx. 1500mA
Dimensions:	173 x 50 x 16 mm
Weight:	approx. 380 g
Connection:	Plug, 6-pole, from Winkhaus premanufactures
Configuration of wire:	white - voltage, +12V DC brown - earth, 0V green - opening signal yellow/grey - output signal for swing door opener, only with motor housing EAV3 swing door opener
Opening signal:	min. 0,5s

7.2 Power supply (mounting on DIN rail)

Input:	100 - 240V AC; 50/60Hz
Output:	12V DC stabilized
Current:	2A
Power:	24W
Dimensions (H x B x T):	90 x 35 (= 2 TE) x 54,5 mm
Weight:	approx. 0,3 kg

7.3 Frame power supply

Input:	230V AC, 47-63Hz, 0,6A
Output:	12V DC 1,5A (2A for 2s)
Protection rating:	IP 20
Temperature range:	-20 °C bis +60 °C
Earthing of the door frame:	Eyelet, screw connection with 4 x 15 mm
Dimensions:	Frame part approx. 24 x 260 x 33 mm (B x H x T)
Screw connection:	max. 4 x 20 mm screws (max. length due to cable routing!)

7.4 Antenna/Reader

Dimensions (Antenna):	antenna housing: 90 x 90 x 13 mm, for exposed installation, cable is permanently installed (not extend cable)
Dimensions (Reader):	45 x 45 x 22 mm
Reading distance:	between 0 - 5 cm (depending on the installation environment)
Signalization:	piezo-buzzer
Data memory:	max. 250 transponder chips
Reader technique:	Prox reader (EM4102/EM4202)
Power consumption:	max. 100mA
Voltage:	12V DC

7.5 Wireless remote control

Receiver type:	Superheterodyne
Modulation:	AM/ASK
Frequency:	433,92MHz
Number of code combinations:	2 to the power of 64 ("Rolling Code")
Frequency of the local oscillator:	6,6128MHz
Intermediate frequency:	10,7MHz
Sensitivity (to receive signals):	-115dB
Eingangsimpedanz:	50ohm
Maximum memory capacity:	max. 85 buttons
Power supply:	12/24V AC/DC
Closed-circuit current:	10mA
On-load current:	23mA
Number of relays:	1 (NO-NC), output 24VA

Dimensions (receiver):	44 x 33 x 17 mm
Weight:	130 g
Range:	max. 30 meters (unobstructed area) 200 meters with antenna

Remote control

Number of operations:	2 channel
Power supply:	battery Lithium, 2 x CR 2016.31
Service life of batteries:	18 - 24 months
Power consumption:	13mA
Frequency:	433,92MHz
Number of code combinations:	2 to the power of 64 ("Rolling Code")
Modulation:	AM/ASK
Rated output E.R.P.:	50 - 100µW
Range in an unobstructed area:	max. 30 m
Dimensions:	61 x 36 x 16 mm

Wireless receiver (separate)

Receiver type:	Superheterodyne
Modulation:	AM/ASK
Frequency:	433,92MHz
Frequency of the local oscillator:	6,6128MHz
Intermediate frequency:	10,7MHz
Sensitivity (to receive signals):	-115dB
Input impedance:	50Ohm
Maximum memory capacity:	85 codes for remote control
Power supply:	12/24V AC/DC
Closed-circuit current:	15mA
On-load current:	33/48mA
Number of relays:	(1 NO-NC)
Power:	24W
Dimensions:	80 x 80 x 50 mm

7.6 Cable transition T-KÜ-T1 FT

General Specifications

Dimensions:	Overall length approx. 260 mm
Cross section of wires:	6 x 0.25 mm ²
Max. voltage:	48V DC
Max. switching current:	2A per connection line/wire
Screw fixing:	3 piece 3 x 20 mm, 1 piece 2.9 x 32 mm (included in set sash part)

Cable transition T-KÜ-T1 FT sash part

Sash part:

- T-KÜ-T1 FT 2 M with 2 m cable + plug for motor housing
- T-KÜ-T1 FT 3,5 M with 3.5 m cable + plug for motor housing
- T-KÜ-T1 FT 4,5 M with 4.5 m cable + plug for motor housing

T-SET KÜ-T1 FT ZK-EAV 3,5 + Y 0,5 M

(alternatively T-SET KÜ-T1 FT ZK-EAV 1,5 M + Y0,5 M)

Plug'n'play solution for fingerprint ekey dLine, ekey home SE micro or IDEN-COM BioKey INSIDE (sash side)

Sash part:

- KÜ-T1 ZK-FT EAV FT 3,5 m
Cable at the sash side 3.5 m (5 x 0.25 mm²),
- alternatively KÜ-T1 ZK-FT EAV FT 1,5 m
Cable at the sash side 1.5 m (5 x 0.25 mm²),
e.g. for timber entrance doors
Cable ends each with 5-pole plug for connection with Y-cable

Accessories/included in the set:

- Y-CABLE ZK FLÜGEL-EAV 0.5 m (0.25 mm²)
- 1st Cable end with plug for motor housing EAV
- 2nd Cable end with plug for cable transition KÜ-T1 ZK-FT EAV FT
- 3rd Cable end with plug for sash side access control systems

Max. voltage: 48V DC

Max. switching current: 2A per connection line/wire

T-KABEL EAV EKEY DLINE + KÜ 3M 3 ADRIG

Plug'n'play solution for fingerprint ekey dLine (sash side) with cable transition ekey

Sash part:

- Connection cable 3 m 3-wire for motor (3 x 0,25 mm²)
- 1st Cable end with plug for motor housing EAV
- 2nd cable end with 3 wires and cable end sleeves for connection to the ekey dLine controller (ready to plug in)

Max. voltage: 48V DC
Max. switching current: 2A per connection line/wire

T-SET KÜ-T1 FT ZK-SO ENTRAs+ EAV 1,5 + 3M

Plug'n'play solution for fingerprint SOMMER ENTRAsys+ FD (sash side)

Sash part: Cable transition KÜ-T1 SOMMER-ENTRA+ FT
Cable at the sash side 1.5 m (6 x 0.25 mm²),
Cable ends with 5-pole plug for radio receiver
ENTRAsys+ RX

Accessories/included in the set: • Connecting cable ANSCHLUSSKAB. EAV
SOMMER ENTRAsys+ 3 m (3 x 0.25 mm²)
- 1st Cable end with plug for motor housing EAV
- 2nd Cable end with plug for radio receiver
ENTRAsys+ RX

Max. voltage: 48V DC
Max. switching current: 2A per connection line/wire

T-KÜ-T1 FT EKEY MICRO (PLUS) 1,5 M

Plug'n'play solution for fingerprint ekey micro or ekey micro plus (sash side)

Sash part: KÜ-T1-EV-G FLÜGELTEIL 1,5 M
cable at the sash side 1.5 m (6 x 0.25 mm²),
cable ends with 5-pole plug connection with
ekey micro or ekey micro plus (plug in)

Max. voltage: 48V DC
Max. switching current: 2A per connection line/wire

Cable transition frame part (order separately)

Frame part: • T-KÜ-T1 RT KABEL 4 M with 4 m cable and
cable end sleeves
• T-KÜ-T1 RT KABEL 0,6 M RNT with 0.6 m
cable and plug for frame power supply

8 Accessories

Transponder chip



T-HT TRANSPONDERCHIP T01 BLAU BL (2126766)

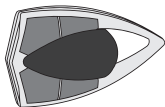
- i** Transponder chip (separate) as an extension to transponder set T-HT TRANSPONDE SET T02 EAV BL (2410265), form key fob, color blue

Wireless remote control



T-HT FUNK-HANDESENDER F01 ANTHAZIT (2126782)

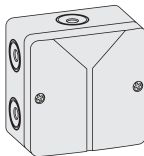
- i** 2-channel wireless remote control (separate) as an extension to set T-HT FUNK-FERNB. F02 ANTHR. SET 3 + 1 (2410273), color dark grey/grey



T-HT FUNK-HANDESENDER F01 4-KANAL SL/SW (5003295)

- i** 4-channel wireless remote control (separate) as an extension to set T-HT FUNK-FERNB. F02 ANTHR. SET 3 + 1 (2410273), color silver/black

Wireless receiver



T-HT FUNK-EMPFÄNGER F01 (2142897)

- i** Wireless receiver (separate); e.g. for coupling with the garage door control unit (the second button at the remote control can be used for this purpose)

**Connection cable 6 m
6-wire for motor**



**T-HT ANSCHLUSSKABEL 6M/6ADRIG FÜR
MOTOR (5104567)**

- i** Cable 6 m (6 x 0,25 mm²)
1st Cable end with plug for motor housing
2nd Cable end with wire end sleeve
Use as an alternative to cable transition
T-KÜ-T1 FT 2/3,5/4,5 M.

Cover STK/RNT



**T-LB ENDKAPPE STK/RNT HOLZ H4 R12 SW
(5035742)**

- i** Cover for frame power supply and tappet contact (frame side) with 12 mm radius, e.g. for timber, 4 mm air gap, in packages of 10 pieces in a plastic bag

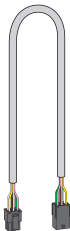
Cover Strip



**T-ABDECKUNG KÜ-T1 RT R8 RAL 7035
(5040517)**

- i** Cover Strip T-KÜ-T1 RT R8 (separate), serves to cover the profile hole on the frame side, when using the frame part T-KÜ-T1 RT KABEL 0,6M RNT

Extension cable



**T-LB VERL.KABEL 0,25 M RNT ZU KÜ-T1
(5066122)**

- i** plug-in extension between frame power supply RNT and frame part cable transition
T-KÜ-T1 RT KABEL 0,6M RNT

9 Classification/Declaration of performance

9.1 Electromechanical locks according to EN 14846

Artikel No.	Backset	Centre distance	Faceplate	Classification
T-EAV	35 - 65 mm	92 mm PZ 94 mm RZ	Flat ≥ 16 mm U ≥ 22 x 5 mm	UK CA C € 2 S 5 C 0 G 3 0 2
T-EAV3	35 - 85 mm	92 mm PZ 94 mm RZ	Flat ≥ 16 mm U ≥ 22 x 5 mm	UK CA C € 2 S 5 C 0 G 3 0 2
T-AV2B	35 - 65 mm	92 mm PZ 94 mm RZ	Flat ≥ 16 mm U ≥ 22 x 5 mm	UK CA C € 2 S 5 C 0 G 3 0 2
T-AV4 with motor housing EAV3	35 - 80 mm	92 mm PZ 94 mm RZ	Flat ≥ 16 mm U ≥ 22 x 5 mm	UK CA C € 2 S 5 C 0 G 3 0 2
T-AV4D with motor housing EAV3	35 - 80 mm	92 mm PZ 94 mm RZ	Flat ≥ 16 mm U ≥ 22 x 5 mm	UK CA C € 2 S 5 C 0 G 3 0 2
T-AV4 with motor housing EAV4	35 - 80 mm	92 mm PZ 94 mm RZ	Flat ≥ 16 mm U ≥ 22 x 5 mm	UK CA C € 2 S 5 C 0 G 3 0 2
T-AV4D with motor housing EAV4	35 - 80 mm	92 mm PZ 94 mm RZ	Flat ≥ 16 mm U ≥ 22 x 5 mm	UK CA C € 2 S 5 C 0 G 3 0 2



Notice: Suitable for fire and smoke protection doors
(Special version = with steel latch).

9.2 Certificat DIN 18251-3

The company Aug. Winkhaus SE is certified, that it has fulfilled the requirements of DIN 18251 "Safety-relevant characteristics according to Table 3, Class 4 according to DIN 18251-3: 2002-11".

Leistungserklärung Nr. 008.6 BauPVo

- Eindeutiger Kenncode des Produkttyps:
blueMatic EAV/EAV3, blueMatic AV2B, Elektromotorische Verschlüsse nach EN 14846
- Typen-, Chargen- oder Seriennummer oder ein anderes Kennzeichen zur Identifikation des Bauprodukts gemäß Artikel 11 Absatz 4, BauPVo:
STV-AV4 + Motorkasten EAV3 (montiert/unmontiert), STV-AV4 + Motorkasten EAV4 (montiert/unmontiert), STV-AV4D + Motorkasten EAV3 (montiert/unmontiert), STV-AV4D + Motorkasten EAV4 (montiert/unmontiert), STV-AV3 + Motorkasten EAV3 (montiert/unmontiert), STV-AV2 + Motorkasten EAV3 (montiert/unmontiert), STV-AV2B, STV-API79 AV2 OR
- Vom Hersteller vorgesehener Verwendungszweck oder vorgesehene Verwendungszwecke des Bauprodukts gemäß der anwendbaren harmonisierten technischen Spezifikation:
**Für die Verwendung an Feuerschutz- und/oder Rauchschutztüren die mit einer geeigneten Türschließvorrichtung ausgestattet sind, um die Anforderungen an solche Türen hinsichtlich des selbsttätigen Schließens zu erfüllen und anschließend sicherzustellen, dass die Türen geschlossen bleiben.
Für die Verwendung an Feuerschutztüren, um den Feuerschutz der Türanlage zu erhalten.**
- Name, eingetragener Handelsname oder eingetragene Marke und Kontaktanschrift des Herstellers gemäß Artikel 11 Absatz 5, BauPVo:
**Aug. Winkhaus SE
August-Winkhaus-Straße 31, 48291 Telgte, Germany**
- Name und Kontaktanschrift des ggf. Bevollmächtigten, der mit den Aufgaben gemäß Artikel 12 Absatz 2 beauftragt ist:
N.N.
- System oder Systeme zur Bewertung und Überprüfung der Leistungsbeständigkeit des Bauprodukts gemäß Anhang V BauPVo:
System 1
- Das MPA NRW mit der Kennnummer der notifizierten Stelle 0432-MPA-NRW hat gemäß den Vorgaben der EN 14846:2008 die Typprüfung vorgenommen und die Leistungsbeständigkeit nach System 1 bewertet und überprüft sowie den Prüfbericht ausgestellt.
**Zertifikat 0432-CPR-00107-04
(Version: 02)**
- Erklärte Leistung:

Harmonisierte technische Spezifikation EN 14846:2008

Wesentliche Eigenschaft	Leistung
Fähigkeit zum selbsttätigen Schließen	
5.4 Türmasse und Schließkraft	Klasse 5: Türmasse bis 200 kg, Schließkraft max. 25N
Anhang A (5.12 DIN EN 12209) Rückstellkraft der Falle	≥ 2,5N
Dauerhaftigkeit der Fähigkeit zum Selbsttätigem Schließen	
5.3.2 Dauerfunktionstüchtigkeit des Fallenmechanismus	Klasse 5: 200.000 Zyklen bei 50N Last auf der Falle
Eignung für Brand-/Rauchschutztüren	
5.5 Eignung für Brand-/Rauchschutztüren	Klasse C: Für die Verwendung an Feuer-/Rauchschutztüren bis zur Brandschutzklasse 30 min geeignet
5.12 Kontrolle gefährlicher Stoffe	Produkte bestehen aus verschiedenen Einzelzeugnissen. Einige dieser Einzelzeugnisse enthalten in ihrer Zusammensetzung auch Schadstoffe. Diese sind im Werkstoff gebunden. Bei bestimmungsgemäßem Kontakt mit dem Werkstoff sind keine Einwirkungen zu erwarten und eine sichere Verwendung ist insoweit gegeben.

- Das unter den Abschnitten 1 und 2 beschriebene Produkt erfüllt die unter Abschnitt 8 gelisteten Leistungen.
Verantwortlich für die Erstellung dieser Leistungserklärung ist allein der Hersteller gemäß Nummer 4.
Unterzeichnet für bzw. im Namen des Herstellers von:

Meiningen, den 06.03.2023

ppa. Dr. D. Warnow,
Technischer Leiter Türverriegelungen

ppa. A. Dinkelborg,
Leiter Produktmanagement Winkhaus Gruppe

EU Declaration of Conformity

1. Document number/day.month.year:

002/01.08.2025

2. The sole responsibility for issuing the declaration of conformity with regard to the fulfillment of essential requirements and the preparation of the technical documentation is borne by:
Manufacturer:

**Aug. Winkhaus SE
August-Winkhaus-Straße 31, 48291 Telgte, Germany**

3. The subject of the declaration are the following products:
Designation, model number:

Motor lock blueMatic EAV / EAV3, T-EAV M... (Look with motor housing), T-MOTORKASTEN EAV3 BL, T-MOTORKASTEN EAV3 DREHTÜR BL, T-HT NETZTEIL 12V DC/2A, T-LE HT NETZTEIL 12V DC/2A SK, T-NETZTEILRAHM.12VDC 1,5A (2A/2S)

4. It is hereby declared for the above-mentioned products that they meet the basic requirements set out in the belowmentioned harmonization provisions are laid down:

DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the restriction of the use of certain dangerous substances in electrical and electronic equipment (recast) - in short: RoHS Directive

DIRECTIVE 2014/30/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the harmonization of the laws of the Member States relating to electromagnetic compatibility - in short: EMC Directive

DIRECTIVE 2014/35/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment for use within certain voltage limits. - short: Low Voltage Directive

DIRECTIVE 2009/125/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for establishing requirements for the environmentally friendly design of energy-related products - in short: Ecodesign Directive

5. Indication of the relevant harmonized standards taken as a basis, or indication of the specifications for which conformity is declared:

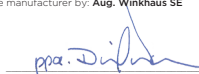
Norm	Date of issue	Titel	Harmonized norm
EN IEC 63000	2018	Technical documentation for assessing electrical and electronic devices with regard to the restriction of hazardous substances	RoHS directive
EN IEC 61000-6-3	2021	Electromagnetic compatibility (EMC) -Part 6-3: Generic standards - Interference emissions for residential areas, business and commercial areas as well as small businesses	RED Directive
EN IEC 61000-6-2	2019	Electromagnetic compatibility (EMC)-Part 6-2: Generic standards - Interference immunity for industrial areas	RED Directive
EN IEC 62368-1	2014+All:2017	Facilities for audio video, information and communication technology - Part 1: Security requirements	RED Directive
Ecodesign Regulation 2023/826	2023-04	Laying down ecodesign requirements for off mode, standby mode, and networked standby energy consumption of electrical and electronic household and office equipment pursuant to Directive 2009/125/EC of the European Parliament and of the Council (EC) No 1275/2008 and (EC) No 107/2009	Ecodesign Directive

6. Additional Information:

This declaration applies to all products that are manufactured according to the corresponding production drawings, which are part of the technical documentation.

Signed for and on behalf of the manufacturer by: **Aug. Winkhaus SE**

Meiningen, 01.08.2025


ppa. Dr. D. Warnow,
Technical Director Door Locking Systems


ppa. A. Dinkelborg,
Director of Product Management
Winkhaus Group

UKCA Declaration of Conformity

1. Document number/day.month.year:

002/01.08.2025

2. The sole responsibility for issuing the declaration of conformity with regard to the fulfillment of essential requirements and the preparation of the technical documentation is borne by:
Manufacturer:

**Aug. Winkhaus SE
August-Winkhaus-Straße 31, 48291 Telgte, Germany**

3. This declaration is made responsible for:
Manufacturer:

**Winkhaus UK Ltd.
2950 Kettering Parkway, NN15 6XZ Kettering, Great Britain**

4. The subject of the declaration are the following products:
Designation, model number:

**Motor lock blueMatic EAV / EAV3, T-EAV ... /.../... M... (Look with motor housing),
T-MOTORKASTEN EAV3 BL, T-MOTORKASTEN EAV3 DREHTÜR BL, T-HT NETZTEIL
12V DC/2A, T-LE HT NETZTEIL 12V DC/2A SK, T-NETZTEILRAHM.12VDC 1,5A (2A/2S)**

5. It is hereby declared for the above-mentioned products that they meet the basic requirements set out in the belowmentioned harmonization provisions are laid down:

DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the restriction of the use of certain dangerous substances in electrical and electronic equipment (recast) - in short: RoHS Directive

DIRECTIVE 2014/30/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the harmonization of the laws of the Member States relating to electromagnetic compatibility - in short: EMC Directive

DIRECTIVE 2014/35/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment for use within certain voltage limits - in short: Low Voltage Directive

DIRECTIVE 2009/125/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for establishing requirements for the environmentally friendly design of energy-related products - in short: Ecodesign Directive

6. Indication of the relevant harmonized standards taken as a basis, or indication of the specifications for which conformity is declared:

Norm	Date of Issue	Titel	Harmonized norm
EN IEC 63000	2018	Technical documentation for assessing electrical and electronic devices with regard to the restriction of hazardous substances	RoHS directive
EN IEC 61000-6-3	2021	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Interference emissions for residential areas, business and commercial areas as well as small businesses	RED Directive
EN IEC 61000-6-2	2019	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Interference immunity for industrial areas	RED Directive
EN IEC 62368-1	2014+A11:2017	Facilities for audio video, information and communication technology - Part 1: Security requirements	RED Directive
Ecodesign Regulation 2023/826	2023-04	Laying down ecodesign requirements for off mode, standby mode, and networked standby energy consumption of electrical and electronic household and office equipment pursuant to Directive 2009/125/EC of the European Parliament and of the Council (EC) No 1275/2008 and (EC) No 107/2009	Ecodesign Directive

7. Additional Information:

This declaration applies to all products that are manufactured according to the corresponding production drawings, which are part of the technical documentation.

Signed for and on behalf of the manufacturer by: **Aug. Winkhaus SE**

Meiningen, 01.08.2025


ppa. Dr. D. Warnow,
Technical Director Door Locking Systems


ppa. A. Dinkelborg,
Director of Product Management
Winkhaus Group

10 Disposal



Disposal!

Environmental damage due to incorrect disposal of batteries and electronic components!

The electronic hardware must be disposed of correctly.

Disposal as domestic waste is prohibited.

The electronic hardware must therefore be disposed of in accordance with the European directive 2012/19/EU at a municipal collection centre for electronic waste or via a specialist company.



Notice:

The packaging must be recycled separately in accordance with the separation regulations for packaging.

Manufactured and distributed by:

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