

HazardControl

HC520

en

Assembly and Operating Instructions

Escape route control unit for the second emergency route

Important information for:

- Fitters / • Electricians / • Users

Please forward accordingly!

These instructions must be kept safe for future reference.

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General

The control unit, delivered ex works, controls a DC tubular drive automatically or via external drive commands. The control unit offers the opportunity of automatically raising the shading solution in the event of power failure, due to a fire, for example.

Explanation of pictograms

	CAUTION	CAUTION indicates a hazardous situation which, if not avoided, could result in injury.
	ATTENTION	ATTENTION indicates measures that must be taken to avoid damage to property.
		Denotes user tips and other useful information.

Warranty

Structural modifications and incorrect installation which are not in accordance with these and our other instructions can result in serious injuries, e.g., crushing of limbs. Therefore, structural modifications may only be carried out with our prior approval and strictly in accordance with our instructions, particularly the information contained in these Assembly and Operating Instructions.

Any further processing of the products which does not comply with their intended use is not permitted.

The end product manufacturer and fitter have to ensure that all the relevant current statutory, official and, in particular, EMC regulations are adhered to during utilisation of our products, especially with regard to end product manufacture, installation and customer advice.

Safety instructions

The following safety instructions and warnings are intended to avert hazards and to prevent property damage and personal injury.

General information

- Always comply with the regulations of local energy supply companies as well as the VDE 100 provisions for wet and damp rooms during installation.
- Only use in dry rooms.
- Observe the signal tone for the battery's change interval
- Only use unmodified original parts from the control unit manufacturer.
- Observe all pertinent country-specific regulations.
- Keep people out of the system's range of travel.
- If the system is controlled by one or more devices, the system's range of travel must always be visible during operation.
- Keep children away from control units.



Caution

- **Risk of injury due to electric shock.**
- **The mains connection must be established by a trained electrician.**
- **Disconnect the connecting cable from the power supply prior to assembly.**
- **When connecting the control cables (protected extra-low voltages), only use cables with sufficient electric strength.**
- **Following commissioning, check that the system is working correctly in the event of power failure according to the handover report.**

Intended use

The escape route control unit for the second emergency route described in these instructions is intended for the supply and operation of an M19 model DC tubular drive from Becker-Antriebe, which can be activated even in the event of power failure.

Use of the control unit is only permissible for the second escape route and it must only be used for roller shutters and venetian blind systems.

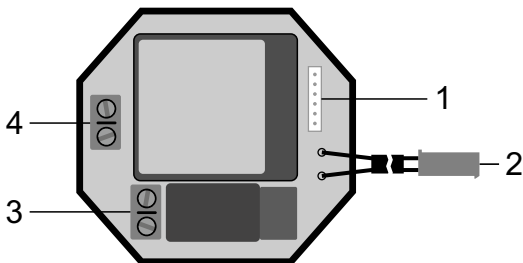
The use of a two-pole changeover switch as a safety switch is absolutely essential.

The connection of external devices must be carried out in consultation with specialist retailers.

There are no clear legal requirements regarding the use of battery-buffered control units in the second emergency route. The manufacturer cannot, therefore, grant generally valid or project-related product approvals for the aforementioned use. The final decision is taken by the respective fire safety authority.

Country-specific special regulations as well as local regulations and guidelines concerning this matter must be observed and applied under all circumstances.

Device overview



1	Connection for individual and central operation	3	Connection for the safety switch and drive
2	Connection for the battery and the safety switch	4	Mains connection

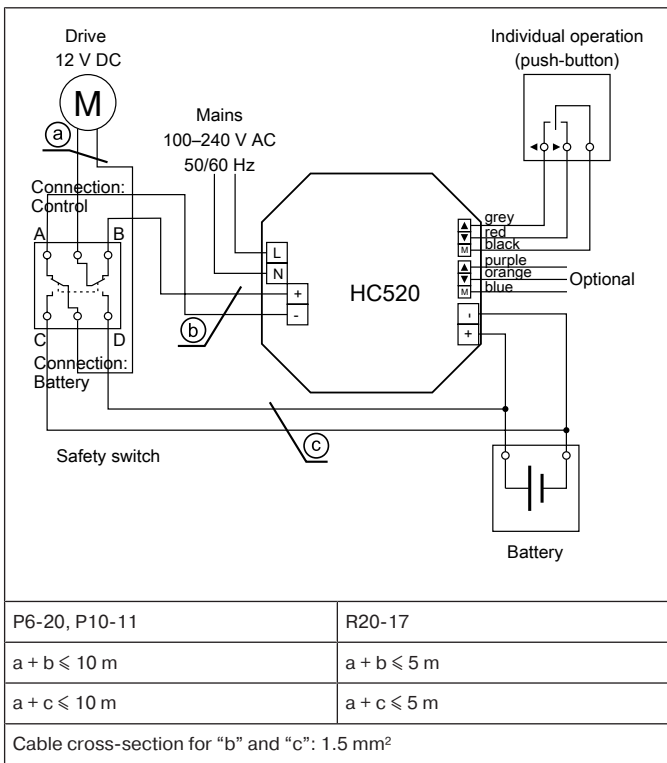
Wiring



Caution

- Risk of injury due to electric shock.
- Connection may only be performed by a qualified electrician!
- The device only offers back-of-hand protection, not touch protection.
- Always take into account the device switching current.
- Always take into account the cable lengths and the cable cross-sections

Connect the device as follows:



After connecting, check that the running direction of the drive is correct. It is irrelevant whether the safety switch is set "up" or "down". The lettering ("A, B, C, D") in the connection diagram is not shown on the switch and is only used for reasons of clarity in the figure.

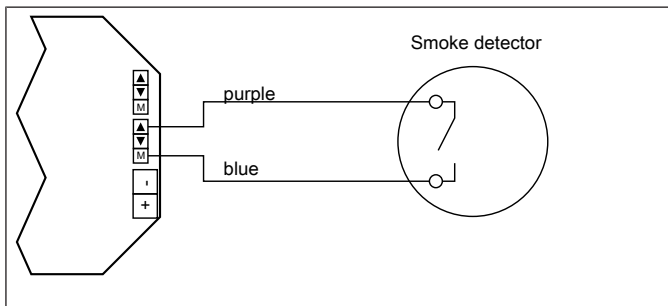


If the shading solution rotates in the incorrect direction, the safety switch connections will need to be swapped around as follows:

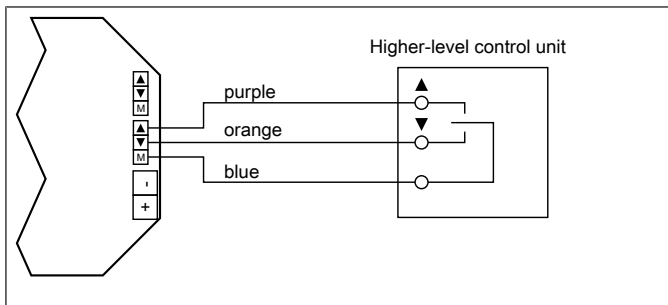
- Connections "A" and "B" with incorrect implementation of the function selected with DIP switch 5 in the event of power failure.
- Connections "C" and "D" with forced opening of the shading solution when the safety switch is actuated.

Optional possible connection points (central input)

Smoke detector



Higher-level control unit, radio, etc.



Explanation of functions

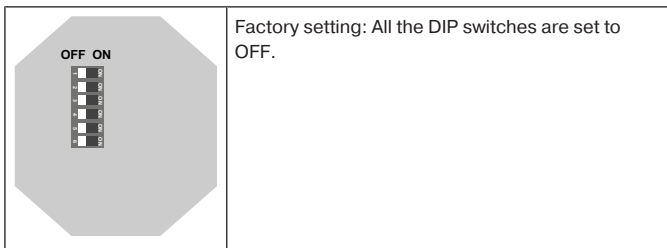
Automatic opening movement in the event of power failure

In the event of power failure, the drive automatically raises the shading solution with a battery buffer (can be set using DIP switches). This function is switched on upon delivery.

Safety switch

If the control unit is no longer functional due to a fire, the escape route can still be opened in spite of this. When pressed, the safety switch bridges the control unit, connects the battery directly to the motor and starts the shading solution's opening movement.

Setting and function of the DIP switches



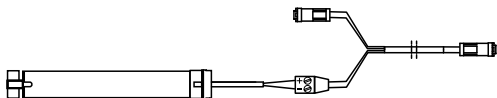
Switch	Position	Function
DIP 1	ON	Individual operation preferred over central input
	OFF	Central input preferred over individual operation
DIP 2	ON	No alarm message (signal tone)
	OFF	Alarm message (signal tone) after 1,000 travel cycles or two years
DIP 3	ON	Travel mode until battery discharged in the event of low battery voltage
	OFF	Only opening movement possible in the event of low battery voltage
DIP 4	ON	Venetian blind operation (touch mode possible)
	OFF	Roller shutter operation
DIP 5	ON	No action in the event of power failure
	OFF	The shading solution's opening movement takes place in the event of power failure

Switch	Position	Function
DIP 6	ON	No blockage detection
	OFF	Blockage detection in the DOWN direction with reversal

Setting the limit positions without connecting to the control unit

If the limit positions are to be set before the controller is installed, proceed as follows:

Connect the tubular drive to the Y plug.

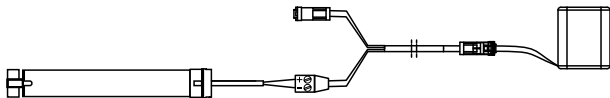


Attention

The tubular drive moves off immediately after connecting to the battery. Stopping is only possible by disconnecting the battery.

Connect the battery to the Y plug.

Extend or reduce the range of travel by turning the corresponding set screw on the tubular drive.



The direction of rotation of the tubular drive can be changed by swapping the wires at "+" and "-".

Maintenance

We advise replacing the battery and having the system maintained by a specialist company according to the information contained in the handover report at regular intervals, at the latest every 1,000 travel cycles or every two years.



On delivery, the escape route control unit is set using the DIP switch 2 so that an alarm message (signal tone) sounds when the battery has to be replaced.

Disposal



The crossed-out bin symbol on the product indicates that the device is subject to mandatory disposal separate from household waste. This product must be handed over to a collection point for electrical and electronic equipment at the end of its service life.

The packaging material must be disposed of properly.

Technical data

Type	HC520-2600 mAh	HC520-3000 mAh
Rated voltage	100-240 V AC 50/60 Hz	
Switching current	5 A / 12 V DC	6.3 A / 12 V DC
Power consumption	1.1 VA	
Degree of protection	IP 20	
Class of protection (dependent on correct assembly)	0	
Permissible ambient temperature	0 to +60 °C	
Type of mounting	Flush mounted	
For rechargeable battery	2600 mAh	3000 mAh
For tubular drive	up to 10 Nm	20 Nm



What to do if...?

Problem	Remedy
Drive is not functioning.	Check connection.
	Check position of safety switch.
Drive is running in the wrong direction.	Replace stranded wires for ▲ and ▼.
The control unit does not carry out the automatic opening movement.	Check DIP switch setting.
	Check connection.
	Check battery voltage.
A signal tone sounds.	Have battery replaced by a qualified electrician.
Drive does not reach the lower limit position.	Check system for an obstacle or sluggish running.
Drive only runs in UP direction.	Check position of safety switch.
	Check battery voltage.
The drive does not carry out the drive command correctly.	Check whether a switch has been used for individual operation instead of the stipulated push-button.
Drive does not stop after detecting a blockage.	

Simplified EU declaration of conformity

Becker-Antriebe GmbH hereby declares that this control unit complies with Directives 2014/30/EU and 2014/35/EU.

The full text of the EU declaration of conformity is available at the following web address:

www.becker-antriebe.com/ce



Subject to technical changes without notice.



Handover report for the customer

The installing company hereby confirms that the following work and functions have been carried out and checked.

- Connection of the escape route control unit according to these instructions.
- Two-pole changeover switch installed as a safety switch.
- Drive's running direction for individual operation and, if necessary, optionally connected devices checked.
- Drive's battery mode checked in the event of power failure.
- Correct execution of the function selected with DIP switch 5 checked in the event of power failure.
- Shading solution's forced opening movement checked when the safety switch is pressed.
- The system was installed in a proper and functional manner. All the functions, particularly the safety opening movement, were performed by the customer.
- By way of their signature, the user confirms that the system is working correctly and was handed over properly.
- DIP switch settings upon handover. Please indicate the position of the DIP switches with a tick:

ON	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6

Date, name, address and signature: Specialist company

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Handover report for the installing company

The installing company hereby confirms that the following work and functions have been carried out and checked.

- Connection of the escape route control unit according to these instructions.
- Two-pole changeover switch installed as a safety switch.
- Drive's running direction for individual operation and, if necessary, optionally connected devices checked.
- Drive's battery mode checked in the event of power failure.
- Correct execution of the function selected with DIP switch 5 checked in the event of power failure.
- Shading solution's forced opening movement checked when the safety switch is pressed.
- The system was installed in a proper and functional manner. All the functions, particularly the safety opening movement, were performed by the customer.
- By way of their signature, the user confirms that the system is working correctly and was handed over properly.
- DIP switch settings upon handover. Please indicate the position of the DIP switches with a tick:



Date, name, address and signature: Customer

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