

WALLBOX basicEVO | basicEVO PRO



INSTRUCTION MANUAL



walther-werke.de/service



English 15







basicEVO PRO





basicEVO

1 x Wallbox-Cover



 \rightarrow \land



4 x M4x10 T20



1 x ESKV25

1 x EADR25















basicEVO PRO





basicEVO











VIII







































Ì









5 MMM 6 MMMM 7 MMMM



 $\begin{array}{c} \text{IV-B} \\ \text{basicEVO} \end{array} \xrightarrow{(\mathbf{V} + \mathbf{I})} \xrightarrow{(\mathbf{V} +$











Contents

1.	SAFETY INFORMATION	16
1.1	Information for the operator and users of the charging system	16
1.2	Intended use	16
1.3	Information for people with a pacemaker (PM) or implantable cardioverter defibrillator (ICD)	17
1.4	Safe working on the charging system	17
1.5	Installation and tests	18
1.6 1.7	Information about signs, symbols and labelling Protective devices	19 19
1.8	Front illumination / control elements and blocking device	19
1.8.1	basicEVO PRO display elements	19
1.8.2	basicEVO display and control elements	19
1.8.3	Blocking device	20
1.8.4	Configurable basicEVO PRO blocking device	20
1.9	Environment	20
1.10	Declaration of Conformity	20
2.	OPERATING INSTRUCTIONS	22
2.1	Cleaning the Wallbox	22
2.2	Operating the Wallbox basicEVO PRO	22
2.2.1	Charging a vehicle	22
2.2.2	Wallbox basicEVO PRO diagnostics	22
2.2.3	Load management (optional)	23
2.3	Operating the Wallbox basicEVO	23
2.3.1	Charging a vehicle	23
2.3.2	basicEVO diagnostics	24



Designation	Technical Specifications
Regulations	EN 61851-1; DIN EN 61439-7 (AEVSC)
Charging capacity type 3	up to 11 kW
Nominal voltage	230 V / 400 V / 1/3 AC
Nominal current	up to 16 A adjustable from 6 A to 16 A in 2 A increments
Nominal frequency	50 Hz
Connection method	Spring clip method
Charging connection/charging coupler	Type 2
Length of charging cable	5 m
Operation/status information	LED Front Panel (basicEVO PRO)
	Pushbutton with LED (basicEVO)
Protection rating	IP54
Mechanical impact protection	IK08
Residual current detection	DC 6 mA (IEC62955)
Ambient temperature	-25 °C to +40 °C 💑
External Design	Wall mounted Stele mounted
Protection class	1
Overvoltage category	III
Pollution degree	3
Weight	approx. 8 kg

1. SAFETY INFORMATION

Please observe the following information for safe set-up and operation of the Wallbox.

1.1 Information for the operator and users of the charging system

- Read the operating instructions before putting the charging system into operation.
- Ensure that all persons working on or using this charging system have read the operating instructions.
- Make sure to follow the regulations and instructions for safe working.
- Keep the device documentation in a safe place where it is always accessible to charging system users.
- Ensure that unauthorised persons cannot access the charging system.

1.2 Intended use

The charging system is intended to be used in the private and semi-public sector, e.g. on private property, company parking areas or machinery and equipment yards. Do not use the charging system in places where potentially explosive or combustible substances (such as gases, liquids or dusts) are stored or present. The charging system is intended exclusively for charging electric vehicles.

- Mode 3 charging according to IEC 61851-1
- Plug and socket connections according to IEC 62196

- The charging system is only intended for operation in TT, TNC and TNCS networks. The charging system must not be operated in IT networks.
- The charging system is not suitable for charging vehicles with batteries which produce gas (such as lead-acid batteries).
- The charging system is intended exclusively for stationary installation. The charging system is suitable for outdoor installation.
- Only persons who have read the operating instructions may operate and use the charging system.
- The electrical installation, start-up, and maintenance of the charging system may only be performed by qualified electricians who have been correspondingly authorised by the operator.
- The qualified electricians must have read and understood the device documentation and must comply with its instructions.

Requirements regarding the qualification of electricians

Knowledge of and compliance with the five safety rules for working with electrical installations:

- 1. Isolate.
- 2. Secure against reactivation.
- 3. Check absence of voltage.
- 4. Earth and short-circuit.
- 5. Cover up or block off live parts in the vicinity.



Reactivation is carried out in reverse order.

- Knowledge of the general and special safety regulations and accident prevention regulations.
- Knowledge of the relevant electrotechnical regulations, e.g. checks associated with start-up and the requirements for operating facilities, premises, and special types of equipment – power supply for electric vehicles.
- Ability to recognise risks and to avoid potential hazards.

When installing and handling the charging system, the operator, users, and the electrician must comply with the national regulations on safety and accident prevention. Improper use and non-compliance with the operating instructions may jeopardise:

- your life,
- your health,
- the charging system and the vehicle.

Safety devices on the charging system

- Do not remove.
- Do not tamper with.
- Do not bypass.
- Check before each use that the equipment (e.g. housing, connecting cable, charging coupler) is undamaged.
- Repair or replace as necessary in order to preserve the functional properties.

Ensure that:

- Safety identifications such as yellow markings,
- warning signs and
- safety lights remain easily recognisable and retain their effectiveness.
- Do not use extension cables, cable reels, multisocket power strips or adapters when operating the charging system.
- Do not insert any foreign objects into the charging system's charging coupler.
- Prevent moisture, water or other liquids entering sockets or plug connections.
- Never immerse the charging system or charging coupler in water or other liquids.

Do not disconnect the charging coupler from the vehicle during the charging process.

Special operating conditions for the Netherlands and Italy

Connect a remote tripping device for the upstream RCD or a contactor, for example, to the digital output SW (Fig. IX no. 1).

U_{max} = 24 V I_{max} = 3 A The manufacturer shall only bear responsibility for the as-delivered condition of the charging system and for all work performed by skilled personnel from the manufacturer.

1.3 Information for people with a pacemaker (PM) or implantable cardioverter defibrillator (ICD)

When operated as intended, charging systems from this manufacturer comply with the European Electromagnetic Compatibility Directive regarding radiated interference. If people with a pacemaker or implantable cardioverter defibrillator wish to perform work on charging systems and their equipment in the intended manner, the charging system manufacturer is not in a position to make any statement regarding the suitability of such medical devices. The charging system manufacturer cannot assess the corresponding pacemakers or implantable cardioverter defibrillators with regard to their susceptibility to electromagnetic radiation. Only the manufacturer of the respective pacemaker or implantable cardioverter defibrillator can do this. The charging system manufacturer therefore recommends allowing the people in question to work on our charging systems only after consultation with the manufacturer of the pacemaker or implantable cardioverter defibrillator and the relevant insurance company. In any event, always ensure that there are no risks to health or safety.

NOTE

PEOPLE WITH A PACEMAKER OR AN IMPLANTABLE CARDIOVERTER DEFIBRIL-LATOR MAY NOT WORK ON OR STAND NEAR THE CHARGING SYSTEMS OR THEIR EQUIP-MENT, E.G. TO PERFORM MAINTENANCE OPERATIONS OR RECTIFY ANY FAULTS.

1.4 Safe working on the charging system

Before the charging coupler is plugged into the vehicle

- The charging system's connecting cable must be completely unwound.
- Check whether the charging system housing, the connecting cable, the charging coupler and the connections are undamaged.
- Hold the plug connection of the charging system only by the charging coupler, not by the charging cable.
- Make sure that there are no tripping hazards, e.g. due to the charging cable.

During the charging process

- Keep unauthorised persons away from the charging system.
- Never clean or wash the vehicle using high-pressure cleaning equipment while it is connected to the charging system, because the plug connection is not resistant to pressurised water.

In case of malfunctions or failure of the charging system

- Disconnect the charging system from the power supply by switching off the respective circuit breaker in the building's electrical cabinet. Affix a sign with the name of the person authorised to switch the circuit breaker back on.
- Notify a qualified electrician without delay.

Electrical equipment

Keep the charging system housing closed at all times.

1.5 Installation and tests

Information for selecting the protective devices for basic and fault protection with respect to direct and indirect contact:

Electrical circuit breakers

The charging system must be protected with circuit breakers in compliance with the respective national regulations. The required protection depends on factors such as the required switch-off time, internal network resistance, conductor cross-section, cable length and the set power of the charging system. The cable short-circuit protection must feature a characteristic which permits a current eight to ten times the value of I_{nom} and does not exceed a maximum rated current of 16 A, depending on the set power of the charging system.

Use exclusively circuit breakers with a rated breaking capacity of 6 kA. The circuit breaker's I²t value must not exceed 80 kA²s.

· Residual current device

For reasons of personal safety, connect a dedicated RCD in series with each Wallbox. For this purpose, use at minimum an RCD type A with an I_{AN} value of 30 mA AC.

- DC residual current detection (IEC 62955)
 The charging system features 6 mA DC residual current detection. The charging system will switch off if the residual current reaches or exceeds 6 mA DC. Please refer to the Diagnostics chapter for more information.
- Information about initial tests after installation and repeat tests

National regulations could require testing the charging system before start-up and at regular intervals. Perform these tests in compliance

with the applicable regulations. Instructions on performing these tests are provided below.

ALTHER-WERKE

· PE conductor test

Measure the PE conductor continuity after installation and before switching the device on for the first time. To do this, connect the charging coupler to a test adapter for vehicle simulation according to EN 61851-1. Measure the PE conductor socket of the adapter and the connection point for the PE conductor in the building's electrical cabinet. For a total cable length (connecting cable of the charging system and vehicle charging cable) of up to 5 m, the PE conductor resistance must not exceed 300 m Ω . If the cables are longer, allowances must be added in accordance with the applicable national regulations. In any case, the resistance must never exceed 1 Ω .

Insulation test

The charging system is equipped with a disconnecting relay and therefore requires two insulation measurements. The charging system must be disconnected from the mains for this purpose. Therefore, switch off the mains voltage at the circuit breaker in the building's electrical cabinet before performing the measurement.

» First measurement on the primary side of the charging system

On the primary side of the charging system, measure the insulation resistance at the connection point of the charging system's supply cable in the building's electrical cabinet. The value must not be less than 1 M Ω .



The Wallbox is equipped with an overvoltage protection device. This must be taken into account when performing the measurement.

» Second measurement on the secondary side of the charging system

To do this, connect the charging coupler to a test adapter for vehicle simulation according to EN 61851-1. Perform the insulation measurement via the measuring sockets on the test adapter. The value must not be less than 1 MΩ. Alternatively, the differential-current method in combination with measuring the PE conductor current can be used. A value of 3.5 mA must not be exceeded in either case. To perform these measurements, connect the charging coupler to a test adapter for vehicle simulation according to EN 61851-1. The measurements must be performed in adapter state C. The differential-current measurement must be



performed at the connection point of the charging system's supply cable in the building's electrical cabinet.



Depending on the measuring instrument used, it might not be possible to perform the following measurement on the adapter. In this case, perform the test at the connection terminals.

 Testing the switch-off condition in the event of a short circuit (Z_{1.N})

To perform these measurements, connect the charging coupler to a test adapter for vehicle simulation according to EN 61851-1. The measurements must be performed in adapter state C. Perform the measurements at the test adapter's measuring sockets. The values in accordance with the selected circuit breaker must be observed.

Testing the switch-off condition in the event of the RCD tripping

To perform these measurements, connect the charging coupler to a test adapter for vehicle simulation according to EN 61851-1. The measurement must be performed in adapter state C. Perform the measurement at the measuring sockets of the test adapter using a suitable measuring instrument. The values in accordance with the selected RCD and the network must be observed.

 Testing the integrated DC residual current detection

To perform these measurements, connect the charging coupler to a test adapter for vehicle simulation according to EN 61851-1. The measurements must be performed in adapter state C. Perform the measurements at the test adapter's measuring sockets using a suitable measuring instrument. The charging system must disconnect the charging coupler from the mains when the residual current exceeds 6 mA DC. The fault display on the charging system must respond.

1.6 Information about signs, symbols and labelling



Hazard warning:

Information about a possibly hazardous situation that could be fatal or result in severe injuries if the safety measures are not observed. All work is to be performed by skilled personnel only.



Note:

More information is available in the operating instructions.



supplementary information.

1.7 Protective devices

Note:

The following components (Fig. XVI) are protective devices:

1 housing, 2 charging cable, 3 protective cover, 4 charging coupler

Checking the protective devices

- » 1. Visually inspect the protective devices for damage before every charging process.
- » 2. Have a qualified electrician perform the electrical function tests at regular intervals in compliance with the national regulations.

1.8 Front illumination / control elements and blocking device

The control elements and the function of the blocking device differ on the two Wallbox models basicEVO PRO and basicEVO. You can find the type plate of the Wallbox as shown in Fig. XVI-A no. 2 and XVI-B no. 2.

1.8.1 basicEVO PRO display elements

- The front illumination (Fig. XVI-A no. 1) indicates the operating state of the charging system. Refer to the operating instructions for details of the operating states.
- · The charging process starts automatically as
- soon as the the charging coupler is inserted and the
- · vehicle requests the charging process.

1.8.2 basicEVO display and control elements

- The charging system can be operated using a pushbutton/LED combination (Fig. XVI-B no. 1).
- Functions of the LED
 The LED indicates the charging system's operating state. Refer to the operating instructions
 for details of the operating states.
- Functions of the pushbutton The functions of the pushbutton are described in the operating instructions.



1.8.3 Blocking device

- An optional external blocking device (e.g. key-operated switch) can be connected to the internal interface. Fig. X shows the blocking device interface.
- If an external blocking device (e.g. key-operated switch) is connected, the charging process is not started until the external blocking device enables it.

1.8.4 Configurable basicEVO PRO blocking device

- The basicEVO PRO offers the option of configuring two different operating modes for the blocking device.
- The mode allows the charging power to be reduced by remote access if necessary.
- Block factory setting for charging Factory setting (switch S5/2) to OFF.
 Opening the switching contact will block the Wallbox (charging not possible).
- Configuration for reduced charging Set switch S5/2 to ON.
 Opening the switching contact will reduce the charging current (to 8 A).

1.9 Environment

This device is used for charging electric vehicles and is accordingly subject to EU Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE). It must be disposed of in accordance with the national and regional provisions for electrical and electronic devices. Old devices and batteries must not be disposed of via the domestic waste or bulky waste disposal system. The device should be rendered non-functional before it is disposed of. Dispose of the packaging material in the common collection containers for cardboard, paper and plastic in your region.

1.10 Declaration of Conformity

The conformity declaration and the CE marking on the product are applicable in the EU member states.



EU DECLARATION OF CONFORMITY

Manufacturer: WALTHER-WERKE Ferdinand Walther GmbH Ramsener Str. 6, DE-67304 Eisenberg

Product: basicEVO basicEVO PRO

We, WALTHER-WERKE Ferdinand Walther GmbH, declare under our sole responsibility that the above referenced product complies with the following:

Directives:	2014/35/EU 2014/30/EU	Low Voltage Directive (LVD) Electromagnetic compatibility (EMCD)
	2011/65/EU	RoHS Directive

The following standards have been applied:

EMCD EN 61000-6-2:2019 EN 61000-6-3:2007/A1:2011/AC:2012

CE

The CE symbol confirms that this product conforms with the above mentioned standards and regulations.

This declaration applies to all specimens that are manufactured according to the corresponding production drawings - which are part of the technical documentation

If other component parts are used, or operation software not approved for release by WALTHER-WERKE Ferdinand Walther GmbH, conformity with the above mentioned directives cannot be guaranteed.

Eisenberg (Place) 22.04.2022

(Date)

Kai Kalthoff, CEO

Ust-IdNr.: DE 148 640 659 Steuer-Nr.: 19/664/40214 Zertifiziert nach: ISO 9001:2015 | Reg.-Nr. 01 100 1302739 ISO 50001:2011 | Reg.-Nr. 01 407 1302739 WEEE-Reg.-Nr. DE 22131895 Waste Electrical + Electronic Equipment

2. OPERATING INSTRUCTIONS

Operating the two Wallboxes, basicEVO PRO and basicEVO, is described in detail below.

2.1 Cleaning the Wallbox

Never use aggressive cleaning agents (e.g. petroleum ether, acetone, ethanol or methylated spirit-based glass cleaner) when cleaning the Wallbox and particularly the plastic window. These agents could attack or damage the surface. Use mild detergent solutions (washing-up liquid, neutral cleaner) and a soft, dampened cloth for cleaning.

2.2 Operating the Wallbox basicEVO PRO

2.2.1 Charging a vehicle

Charging process

- 1. Fully unwind the charging cable from the Wallbox.
- 2. Remove the cover cap from the charging cable coupler.
- 3. Plug the charging cable into the vehicle.

As soon as you have plugged the charging cable into the vehicle, the Wallbox switches to "ready for operation" and the front illumination lights up white. When the vehicle has requested the charging process, the front illumination pulsates and charging takes place. When the vehicle ends the charging process, the Wallbox completes the charging process. The front illumination lights up white. These two operating states can repeat several times during a complete charging cycle.



If an external blocking device is used, the system checks whether an external block (due to a key-operated switch or similar device, for example) is active when the vehicle is connected. The front illumination lights up white with brief interruptions (95% on / 5% off) and charging does not take place until external enabling has been issued. Once external enabling has been issued, the front illumination lights up with a steady white light until the vehicle requests the charging process.

End of charging

When the charging process has ended, unplug the charging cable from the vehicle and close the charging cable coupler with the cover cap. Then wind the charging cable onto the Wallbox. The Wallbox switches to standby mode after 12 minutes to save energy.



The charging cable could pose a tripping hazard if is not wound up and is lying loosely on the ground. Be sure not to pull on the cable with too much force or wind it too tightly. The cable can break if it is repeatedly pulled with too much force or wrapped too tightly.

ALTHER-WERKE

Interrupting charging

There are three options for stopping the charging process:

- End the charging process using the vehicle's control elements. Refer to the vehicle's driver's manual for this purpose.
- Disconnect the Wallbox from the power supply by switching off the building's circuit breakers.
- If the Wallbox is fitted with an external blocking device, you can use it to stop the charging process.

2.2.2 Wallbox basicEVO PRO diagnostics

The lighting behaviour can be defined during initial installation.

- · The front illumination goes out after 5 minutes.
- · The front illumination is always active.

The lighting behaviour only affects status messages. Fault messages are always permanently illuminated. The procedure for selecting the lighting behaviour is described in **Fig. XII**.

Front illumination off

No vehicle connected.

· Plug the charging cable into the vehicle.

The front illumination lights up white. The vehicle can request the charging process. If the Wallbox does not react when the charging cable is plugged in, please check the building's power supply (circuit breakers, residual current device).

White illumination with brief interruptions (95% on, 5% off) (Fig. XI)

External enabling (optional) not issued yet. No charging.

Release the external blocking device.

Once external enabling has been issued, the front illumination lights up with a steady white light. The vehicle can request the charging process.

Steady white light

Vehicle connected. Vehicle has not requested the charging process yet.

 The vehicle must request the charging process.
 The vehicle is being charged; the front illumination pulsates white.



White pulsation (rapid increase from 0 to 100%, then slow decrease from 100% to 0%) (Fig. XIV no. 1) The vehicle is being charged.

White pulsation with pause (rapid increase from 0 to 100%, then slow decrease from 100% to 0%, followed by a pause) (Fig. XIV no. 2) The vehicle is being charged at reduced power. This type of indication occurs only when the optional load management system is used (operation of several Wallboxes in an integrated network).

Six white flashes, pause, blue illumination (3 s), pause (Fig. XIV no. 3)

The residual current device in the Wallbox has tripped.

- Visually inspect the Wallbox, the charging cable and the vehicle.
- You must disconnect the charging cable from the vehicle for approx. 4 s to reset the residual current device.

Once you have reconnected the charging cable to the vehicle, the vehicle can request the charging process.

Six white flashes, pause, three blue flashes (50% on, 50% off), pause (Fig. XIV no. 4)

Possible fault cause: overtemperature.

You do not have to intervene.

After a self-test has been performed and the fault has been corrected, the front illumination lights up white. The vehicle can request the charging process.

Six white flashes, pause, three blue flashes (90% on, 10% off), pause (Fig. XIV no. 5)

Possible fault cause: overvoltage or undervoltage of the power supply. During operation in load management mode, this flashing sequence indicates that there is a communication error between the external control system and the Wallbox or between the leader Wallbox and the follower Wallbox.

- In case of overvoltage or undervoltage: no intervention necessary.
- If there is a communication error, the fitter must check whether the communication line is properly installed.

After a self-test has been performed and the fault has been corrected, the front illumination lights up white. The vehicle can request the charging process.

Six white flashes, pause, three blue flashes (10% on, 90% off), pause (Fig. XIV no. 6)

Communication with the vehicle disrupted or maximum set current exceeded.

• Check whether the charging cable is plugged into the vehicle correctly.

After a self-test has been performed and the fault has been corrected, the front illumination lights up white. The vehicle can request the charging process.

Six white flashes, pause, six rapid blue flashes, pause (Fig. XIV no. 7)

Internal fault in the Wallbox.

- · Unplug the charging cable from the vehicle.
- Disconnect the Wallbox from the power supply by switching off the respective circuit breakers in the building. Wait approx. 1 minute and then switch the circuit breaker back on.
- · Re-connect the charging cable to the vehicle.

After a self-test has been performed and the fault has been corrected, the front illumination lights up white. The vehicle can request the charging process.

Troubleshooting

If one of the faults listed persists, please contact our Customer Support team.

2.2.3 Load management (optional)

The Wallbox basicEVO PRO can be operated with a load management system. This enables the Wallbox to operate in various modes such as:

- Operation of several Wallboxes in an integrated network with monitored power distribution (load management).
- Operation of the Wallbox with different energy sources such as solar energy or the normal electrical mains.

More information is available on-line, in the instructions "basicEVO PRO, Local Load Management and External Load Management":

www.walther-werke.de/downloads

2.3 Operating the Wallbox basicEVO

2.3.1 Charging a vehicle

- 1. Fully unwind the charging cable from the Wallbox.
- 2. Remove the cover cap from the charging cable coupler.
- 3. Plug the charging cable into the vehicle.

As soon as you have plugged the charging cable into the vehicle, the Wallbox switches to "ready for operation" and the LED lights up green. After approx. 12 minutes in the ready for operation state without a connected vehicle, the Wallbox enters standby state and the LED goes out (Fig. XIV-B).



Wake-up option 1:

 When the charging cable is connected to the vehicle in the standby state, the Wallbox will automatically switch to the ready for operation state.

Wake-up option 2:

 Pressing the pushbutton (without connected vehicle) will cause the Wallbox to switch from the standby state to the ready for operation state. The LED lights up green, and the charging cable can be connected to the vehicle.



If an external blocking device is used, the system checks whether an external block (due to a key-operated switch or similar device, for example) is active when the vehicle is connected. The LED lights up yellow and charging does not take place until external enabling has been issued. The LED lights up green when external enabling has been issued.

Charging process

The vehicle can start the charging process as soon as you have inserted the charging cable. The LED flashes green during the charging process. When the vehicle ends the charging process, the Wallbox completes the charging process. The LED lights up green. These two operating states can repeat several times during a complete charging cycle.

End of charging

When the charging process has ended, unplug the charging cable from the vehicle and close the charging cable coupler with the cover cap. Then wind the charging cable onto the Wallbox.



The charging cable could pose a tripping hazard if is not wound up and is lying loosely on the ground. Be sure not to pull on the cable with too much force or wind it too tightly. The cable can break if it is repeatedly pulled with too much force or wrapped too tightly.

Interrupting charging

The charging process cannot be cancelled using the pushbutton (Fig. XVI-B no. 1). There are three options for stopping the charging process:

- End the charging process using the vehicle's control elements. Refer to the vehicle's driver's manual for this purpose.
- Disconnect the Wallbox from the power supply by switching off the building's circuit breakers.
- If the Wallbox is fitted with an external blocking device, you can use it to stop the charging process.

2.3.2 basicEVO diagnostics

No reaction of the Wallbox

If the Wallbox does not react when the charging cable is plugged in or the pushbutton is pressed (Fig. XVI-B no. 1), please check the building power supply (circuit breakers, earth fault circuit interrupter).

LED lights up yellow

If an external blocking device is used, the system checks whether an external block (due to a key-operated switch or similar device, for example) is active when the vehicle is connected. The LED lights up yellow and charging does not take place until external enabling has been issued (Fig. XI-B).

Release the external blocking device.

The LED lights up green when external enabling has been issued.

LED flashes alternately yellow/red

The residual current device in the Wallbox has tripped.

- Visually inspect the Wallbox, the charging cable and the vehicle.
- Press the pushbutton (Fig. XVI-B no. 1) for longer than 3 seconds to reset the residual current device. The LED flickers green. The Wallbox is ready for operation and the LED lights up green after approx. 4 seconds.

LED flashes yellow (flashing behaviour 50% on / 50% off)

Possible fault cause: overtemperature.

 You do not have to intervene. After a self-test has been performed and the fault has been corrected, the LED lights up green.

LED flashes yellow (flashing behaviour 90% on / 10% off)

Possible fault cause: overvoltage or undervoltage of the power supply.

 No intervention necessary. After a self-test has been performed and the fault has been corrected, the LED lights up green.

LED flashes yellow (flashing behaviour 10% on / 90% off)

Communication with the vehicle disrupted or maximum set current exceeded.

 Check whether the charging cable is plugged into the vehicle correctly. After a self-test has been performed and the fault has been corrected, the LED lights up green.



LED lights up with a steady red light:

Internal fault in the Wallbox.

- Unplug the charging cable from the vehicle.
- Disconnect the Wallbox from the power supply by switching off the respective circuit breakers in the building. Wait approx. 1 minute and then switch the circuit breaker back on. After a selftest has been performed and the fault has been corrected, the LED lights up green.
- · Re-connect the charging cable to the vehicle.

Troubleshooting

If one of the faults listed persists, please contact our Customer Support team.

Table Modbus Register – Wallbox basicEVO PRO

Status 22 February 2022

0 0	Bus-Adr.	R/W	ModBut	is-Function	Type	Description	Range		Values / examples	Default Value	Available at
0 1 0.000 </td <td>4</td> <td>ч</td> <td>04 - read</td> <td>InputRegister</td> <td>uint16</td> <td>Modbus Register-Layouts Version</td> <td>0.65536</td> <td></td> <td>0X100 -> V1.0.0</td> <td></td> <td>V 10.0</td>	4	ч	04 - read	InputRegister	uint16	Modbus Register-Layouts Version	0.65536		0X100 -> V1.0.0		V 10.0
0 0	S	α	04 - read	In put Register	uintl6	Charging State *	L	6	2=A1, 3=A2, 4=B1,5=B2,6=C1, 1=C2, 8=derating, 9=E, 10=F, 11=ERR	,	V1.0.0
1 1 0	9	α	04 - read	InputRegister	uintl6	L] - Current RMS **	0350		1 = 0.1 Arms		V 1.0.0
1 0	4	α	04 - readl	InputRegister	uintl6	L2 - Current RMS **	0350		1 = 0.1 Arms		V 10.0
1 1 0	8	α	04 - readlt	InputRegister	uintl6	L3 - Current RMS **	0350		1 = 0.1 Arms		V 10.0
10 10 0.00000 0.0000	6	α	04 - readlr	InputRegister	int16	PCB-Temperatur in 0.1 °C	-200°C/200°C		325 = +32.5 °C / -145 = -14.5 °C		V 10.0
1 1 0	10	α	04 - readir	InputRegister	uint16	Voltage L] - N rms in Volt **	065536		238 = 238 Vrms		V1.0.0
1 1 0	F	α	04 - readir	nputRegister	uint16	Voltage L2 - N rms in Volt **	065536		8 = 8 Vrms		V 1.0.0
1 1 0	12	α	04 - readin	nputRegister	uint16	Voltage L3 - N rms in Volt **	065536		258 = 258 Vrms		V 1.0.0
1 1 0.00000000000000000000000000000000000	13	α	04 - readir	nputRegister	uint16	extern lock state	ψo		0 = locked / 1 = unlocked		V 1.0.0
1 0	14	α	04 - readir	nputRegister	uint16	Power (L1+L2+L3) in VA **	065536		1000> 1kVA		V1.0.4
10 10 0.00000000000000000000000000000000000	15	α	04 - readir	nputRegister	uintl6	Energy since PowerOn [High byte] **	0.65536		1> 2 ¹⁶ VAh		VI.0.4
11 1 0.4000 0.4000 Energyttime Powerbinghingen 0.40000 0.40000 0.40000	16	α	04 - readir	nputRegister	uintl6	Energy since PowerOn [Low byte] **	065536		1000> 1000VAh		VI.0.4
10 10 0.00000000000000000000000000000000000	17	α	04 - readin	nputRegister	uint16	Energy since PowerOn [High byte] **	065536		1> 2 ¹⁶ VAh		V1.0.7
00 0 0.00000000000000000000000000000000000	18	α	04 - readir	nputRegister	uint16	Energy since Installation [Low byte] **	065536		1000> 1000VAh		VI.0.7
101 10 0.00	100	α	04 - readir	nputRegister	uint16	Hardware configuration maximal currer	nt 016		10 = 10A		V1.0.0
02 8 0-reacting/namestation classification classification <thclassification< th=""> classification <</thclassification<>	101	α	04 - readir	nputRegister	uint16	Hardware configuration minimal currer	nt 016		7 = 7 A		V1.0.0
Image: Construction of the construction of	102	æ	04 - readir	nputRegister	char[2]	Logistic - String [0,1]	ASCCI				VI.0.4
133 13 0.4 reatingationer Cardital controllegies Controllegies <thcontrollegies< t<="" td=""><td>1</td><td>۵</td><td>04 - readir</td><td>nputRegister</td><td>char[2]</td><td>Logistic - String []</td><td>ASCCI</td><td></td><td>reserved manufacturer</td><td></td><td>VI.0.4</td></thcontrollegies<>	1	۵	04 - readir	nputRegister	char[2]	Logistic - String []	ASCCI		reserved manufacturer		VI.0.4
200 R 0.0.continuotrigatar until Application Software servenuo instruction instruction instruction 200 R 0.0.continuotrigatar until application Software servenuo instruction <	133	α	04 - readir	nputRegister	char[2]	Logistic - String [62,63]	ASCCI				V1.0.4
xxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	200	α	04 - readir	nputRegister	uint16	Hardware-Variant					V1.0.3
X00 R Out-reactinuatinguister Until intit Support Disposibility Intit Current Control Current Contro Current Control Curr	203	α	04 - readir	nputRegister	uint16	Application Software svn-revNo			reserved manufacturer		V1.0.5
····································	300	α	04 - readir	nputRegister	uint16						V1.0.4
38 R 0.4. realingute/enertie until of 4 of 4 </td <td>:</td> <td>α</td> <td>04 - readir</td> <td>nputRegister</td> <td>uint16</td> <td>Support Diagnostic Data</td> <td></td> <td></td> <td>reserved manufacturer</td> <td></td> <td>V1.0.4</td>	:	α	04 - readir	nputRegister	uint16	Support Diagnostic Data			reserved manufacturer		V1.0.4
00 R 0.4.readmutdlegister ink 6.6.08/sE for Memory ink 6.6.08/sE for Memory ink instance instance <td>318</td> <td>α</td> <td>04 - readin</td> <td>nputRegister</td> <td>uint16</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>V1.0.4</td>	318	α	04 - readin	nputRegister	uint16						V1.0.4
····································	500	۵	04 - readir	nputRegister	int16						V1.0.4
08 R 0.4. readmathinglegiter Intic Modelanderstatur Intic Intic Modelanderstatur Intic Modelanderstatur Intic Modelanderstatur Intic In	:	:		:	:	640 Bytes Error Memory	:		reserved manufacturer	:	V1.0.4
第 0.00000000000000000000000000000000000	618	α	04 - readir	nputRegister	int16						V1.0.4
W Oc.emabe Sandby Funktion Oc.emabe Sandby Funktion Co.emabe Co.emabe Co.emabe Co.emabe Co.emabe Co.emabe Co.emabe Co.emabe Co.emabe Co.emable	257	R/W	03 - readHo 06 - writeHol	oldingRegister *** bldingRegister ***	uint16	ModBus-Master WatchDog Timeout in r	ns 065536		10000 = 10 sec. 0 = Off	15000	V1.0.1
28 R/W C.6536 4-detable standy function 0 = number 29 R/W 06 -unterknoling/legister*** untid Power Saving in car plogged - c6536 - c6536 - c66358 - c66358 - c66404 function 0 = number 29 R/W 06 -unterknoling/legister*** untid Rower Saving in car plogged 0		w	06 - writeHc	oldingRegister ***		Standby Function Control			0-> enable StandBy Funktion	:	V10.4 - V1.0.7
328 R /W 0.0. MatcheldingRegister untik Remote book (only freatern lock untocled) 0.1 0.1 0.1 0.1 0.1 1 = untocled 1 = untocled 1 = untocled 1 1 = untocled 1 = untocled 1 = untocled 1 = untocled 1 1 = untocled 1 = untocled <th1< td=""><td>258</td><td>R/W</td><td>03 - readHol 06 - writeHol</td><td>blding Register *** IdingRegister ***</td><td>uint16</td><td>(Power Saving if no car plugged)</td><td>065536</td><td></td><td>4.⇒ disable StandBy Funktion x -> reserved development</td><td>0 = enable</td><td>VI.0.8</td></th1<>	258	R/W	03 - readHol 06 - writeHol	blding Register *** IdingRegister ***	uint16	(Power Saving if no car plugged)	065536		4.⇒ disable StandBy Funktion x -> reserved development	0 = enable	VI.0.8
301 R /W 00 - reacholdrogRegitarit*** units Maximal current command (00 = 10)A 00 = 10A 00	259	R/W	06 - writeHoi	bldingRegister	uintl6	Remote lock (only if extern lock unlocked)	1.0		0 = locked / 1= unlocked	1 = unlocked	V1.0.4
262 R / W 05- reactivity/teg/segister **** Initial Fails/file Current configuration (0; 60 to 160) 0 = error state 0 Modeo Changing States 06- writeHoldingRegister **** Unitial (1) case las soft Modu accommunication 0, error state 0 0 60 6A 60 6A 60 6A 60 6A	261	R/W	03 - readHok 06 - writeHok	ldingRegister *** dingRegister ***	uint16	Maximal current command	[0; 60 to 160]		100 = 10A	0	V 10.7
Houties Charging States An Worlds Montion	262	R/W	03 - readHok 06 - writeHolo	ldingRegister *** dingRegister ***	uint%	FailSafe Current configuration (in case loss of Modbus communication)	[0;60 to 160]		0 = error state 60 = 6 A	0	V1.0.7
Cat Wallbox Wallbox State AJ No vehicle plugged Wallbox state AD Up to and including vession 107 after Power On or State AJ State AJ No vehicle plugged Wallbox state AD Wallbox state AD State AJ No vehicle plugged without changing request Wallbox state AD Wallbox state AD State AJ No vehicle plugged without changing request Wallbox state AD Wallbox state AD State AJ Vehicle plugged without changing request Wallbox state AD Wallbox state AD State AJ Vehicle plugged with changing request Wallbox state AD Wallbox state AD	*Notice Cha	arging States				**Notice Internal Values	***Notice Holding Register				
State A2 State A2 State A2 State A2 Vehicle plugged with charging request Woldsche plugged Weiter plugged with charging request Woldsche plugged with charging request Woldsche plugged with charging request Weiter plugged with charging request Woldsche plugged with charging request Woldsche plugged with charging request Woldsche plugged with charging request Weiter plugged with charging request Woldsche plugged with charging request<			Car	Wallbox		These set is a set for interest accordence and should		4			
State El Whicke plugged without charging request Willing constrained State El Whicke plugged without charging request Willing constrained State El/2 State El/2 Whicke plugged with charging request Willing constrained State El/2 State El/2 Whicke plugged with charging request Willing constrained State El/2 State Cl Whicke plugged with charging request Willing constrained State El/2	State Al State A2	ž	o vehicle plugged	Wallbox allows charg in	Ę.	more values are for mittering purposes and should not be used for accurate billing.	Up to and including version LOU Standby default values are valid. From coming 10 8 in Decimate 267	atter Hower On or			
Castler Of Wardse plugged with changing request Wandse description Xunar CP Places check Acobian register layout ensoin by Places check acoming	State B1 State B2	Vehicle plug	gged without charging request	Wallbox doesn't allow chai Wallbox allows chargin	rg ing		values are retained and only in R	sgister 261 default values			
	State CI State C2	Vehicle plu	ugged with charging request	Wallbox doesn't allow char Wallbox allows chargin	rging		Plese check Modbus register lay	ut version by Register 4.			

Information on returning electrical equipment

The German law on the market placement, recovery and environmentally-sound disposal of electrical equipment waste (ElektroG) implemented the WEEE Directive (Waste from Electrical and Electronic Equipment) in German law. The ElektroG or the Directive applies to all electrical equipment used to convert, conduct or transmit electrical energy.

Objective of the ElektroG

The purpose of the ElektroG is to protect health and the environment. It is intended to help conserve natural resources. Proper disposal and efficient utilisation of old equipment is a basic prerequisite for this purpose.

Consumer's obligation

- As part of your legal obligation, please collect old electrical and electronic equipment separately from domestic waste.
- Bring this equipment to disposal points such as recycling centres or the companies' collection points.
- Affected devices are marked with the following symbol.



Walther-Werke is affiliated with a disposal system. Private consumers can dispose of the affected products free of charge in their regional collection system. Statistics regarding implementation of the ElektroG are available on the website of the German Environment Agency.

Note on data privacy

Remove all data before disposing of your old equipment.

Remove any SIM cards and delete internal data memories.

Walther-Werke is not liable for data on your equipment.

Packaging

The German law on the market placement, takeback and high-quality recycling of packaging (VerpackG) implemented Directive 94/62/EC on packaging and packaging waste in German law.

Note on the packaging law

The VerpackG is intended to prevent or reduce the negative effects of packaging waste on the environment and ensure that such waste is recycled.

Commercial customers

Walther-Werke fulfils the obligations from the VerpackG and has contractually obligated all of its suppliers to comply with the corresponding requirements as well. Walther-Werke takes packaging back under the legal requirements.

Private consumers

- Walther-Werke is affiliated with the German 'Duales System' waste management scheme.
 Private consumers can collect and dispose of affected packaging materials at their regional collection system, e.g. paper bin or yellow bag.
- Padded envelopes and air cushions can be disposed of by recycling.
- Never dispose of sales packaging as residual waste.





Contact WALTHER-WERKE Ferdinand Walther GmbH Ramsener Straße 6 D-67304 Eisenberg Germany Fon + (49) 6351 / 475 – 0 Fax + (49) 6351 / 475 – 227





40.020.0552/