



Operating Instructions

Counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24

**for attachment to an OKTOPUS[®] GLASS-Jack
GL-RN-B 400/600/800 or
GL-RN-F 400/600/800**

Serial no.: A 810 637

Technical Documentation

BA 000 285

03/2017

This technical documentation corresponds to the status as of the issue date.

**WIRTH GMBH
INSTALLATION SYSTEMS DIVISION**

Brehnaer Straße 1

D-06188 Landsberg

Telephone +49 (0) 34 602 / 70 88 - 0

Fax +49 (0) 34 602 / 70 88 - 111

www.wirth-gmbh.com

Table of contents		Page
		2
1	General information on the Counterweight balancer	4
1.1	Manufacturer's information	4
1.2	Service workshop	4
1.3	Scope of application	4
2	Proper use of the counterweight balancer	5
2.1	Functional principle, use and safety concept	5
2.2	Safety instructions	5
2.3	Symbols and markings	6
2.4	Structure of the counterweight balancer	8
2.5	Functional dimensions of the counterweight balancer	9
2.6	Operating conditions and restrictions	9
2.7	Transport and storage	10
3	Instructions for using the Counterweight balancer	11
3.1	Electrical power supply	11
3.2	Control of the counterweight balancer	12
3.3	Preparation of the counterweight balancer	12
3.4	Inclination of the counterweight balancer	14
3.5	Start-up	14
3.6	Handling of glass and façade elements	15
4	Service and maintenance	17
4.1	General remarks	17
4.2	Mechanical system	17
4.3	Electrical and electronic components	18
5	Handling incidents	20
6	Disposal and recycling	20
Annex 1:	EC Declaration of Conformity	
Annex 2:	Inspection tag according to directive 2006/42/EC	
Annex 3:	Electrical Circuit Diagram	

	Page
Table of figures	3
Fig. 1: Counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24	8
Fig. 2: Attachment GGA-E-FB 800/26/2,0/4,8 B24	9
Fig. 3: Functional dimensions of the counterweight balancer	9
Fig. 4: Transport and storage of the counterweight balancer	10
Fig. 5: Charge indicator	11
Fig. 6: Transmitter radio remote control	12
Fig. 7: Counterweight balancer mounted to the OKTOPUS®	13
Fig. 8: Inclination of the counterweight balancer	14
Fig. 9: Handling of glass and façade elements	16
Fig. 10: Battery charger (example)	18

1 General information on the counterweight balancer

1.1 Manufacturer's information

Manufacturer's name and registered office:

WIRTH GMBH
Installation Systems Division
Brehnaer Straße 1
D-06188 Landsberg

Device characteristics:

Product description:	Counterweight balancer
Type:	GGA-E-FB 800/26/2,0/4,8 B24
Serial number:	(see type plate)
Year of manufacture:	(see type plate)
Weight:	approx. 1020 kg (including 24 pieces counterweights) 1 piece counterweight = 26.5 kg
Working Load Limit:	OKTOPUS® GLASS-Jack GL-RN-B 400/600/800 resp. OKTOPUS® GLASS-Jack GL-RN-F 400/600/800 + Live weight of the OKTOPUS®
CE mark:	according to EC Declaration of Conformity Annex 1
Inspection tag according to Annex 2 attached to the device.	

1.2 Service workshop

WIRTH GMBH
Brehnaer Str. 1
D-06188 Landsberg

Telephone: +49 (0) 34 602 / 70 88 - 0
Fax no.: +49 (0) 34 602 / 70 88 - 111
E-mail: info@wirth-gmbh.com

1.3 Scope of application

The operating instructions on hand represent the state-of-the-art and the safety measures defined by the European Machinery Directive valid at the editing date of the manual.
Diverging or amending national regulations may not have been taken into consideration.
The user is exclusively responsible to observe such supplementary or deviating regulations.

2 Proper use of the counterweight balancer

2.1 Functional principle, use and safety concept

The counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24 is designed as an attachment for an OKTOPUS® GLASS-Jack GL-RN-B 400/600/800 resp. OKTOPUS® GLASS-Jack GL-RN-F 400/ 600/800. Together with the OKTOPUS® it enables the installation of large-sized glass and façade elements in difficult to access areas (e.g. façade openings, eaves, sloped glazings). Furthermore, motor-driven counterweights enable to equilibrate the OKTOPUS® including load.

Specific safety requirements, which have been taken into account during construction, execution, technical documentation and in drawing up the operating instructions, result from the function of the combination counterweight balancer/OKTOPUS® being a “load lifting attachment”.

Therefore, strict adherence to the instructions and information for proper and safe use given in the operating manual is a prerequisite for the manufacturer's warranty during the stipulated warranty period.

Combining the counterweight balancer/OKTOPUS® with a hoist is the responsibility of the OKTOPUS® user. The user himself is responsible for proper implementation of the relevant guidelines and instructions. The instructions given in this operating manual by the manufacturer of the counterweight balancer and the OKTOPUS® are considered to be additional support.

Prior to initial start-up of the machine, the suitability of the combination counterweight balancer/OKTOPUS®/hoist in operating conditions has to be checked by skilled personnel.

Furthermore, the counterweight balancer has to undergo regular inspections by an expert (see point 4.1). An expert is a person that due to his technical training and experience has sufficient knowledge in the area of load lifting attachments and is familiar with relevant occupational and safety instructions, regulations and generally recognized codes of practice which enables him to assess operational safety of load lifting attachments.

The initial inspection of the combination hoist/counterweight balancer/OKTOPUS® as well as the successful performance of the annual inspection of the counterweight balancer® by an expert has to be documented.

The counterweight balancer's manufacturer offers expert inspections as a service and documents the inspections on the counterweight balancer by placing the inspection tag on the inspection card according to Annex 2 indicating the next inspection date.




For further information please contact us or visit our website at www.wirth-gmbh.com.

2.2 Safety instructions

- (1) **Exclusively** use the counterweight balancer in combination **with an OKTOPUS® GLASS-Jack GL-RN-B 400/600/800 or OKTOPUS® GLASS-Jack GL-RN-F 400/600/800!**
- (2) Only employ **cranes** that **have a sufficient Working Load Limit** in all possible working positions. Please take into account that the load to be lifted consists of the weight of the counterweight balancer, the weight of the OKTOPUS®, the weight of the suctioned element and, if applicable, the weight of the lifting accessory.
- (3) **Never use a** damaged, not fully functional or not complete counterweight balancer!

- (4) Prior to initial start-up **have an expert check and document** the combination counterweight balancer/OKTOPUS[®]/crane!
- (5) Only operate the crane with an **operating license!**
- (6) Only operate the combination counterweight balancer/OKTOPUS[®] and crane if you are familiar with **the control and display elements as well as the operating manuals**. You have to know how the functions affect the entire installation!
- (7) **Prior to using** counterweight balancer, OKTOPUS[®] and crane check the function of the **control and display elements** as well as **the warning devices!**
- (8) **Never** stand or walk **under the suspended load!**
- (9) Make sure that **nobody climbs** the counterweight balancer, OKTOPUS[®] and the suspended load and **tries to ride along**.
- (10) In case of **malfunctioning** and maintenance work turn off the counterweight balancer.
- (11) Never employ the counterweight balancer in **explosive areas or in the area of aggressive media!**
- (12) Only work at wind speeds **less than 30 km/h**, otherwise you risk uncontrollable swinging of the load!
- (13) **Do not lift** the load **higher than necessary!**
- (14) **Always** wear suitable protective clothing, helmets, gloves and safety shoes!
- (15) **Never** leave the lifted load unsupervised!
- (16) Comply with the stipulated **maintenance information**:
 - **daily visual and functional inspection** of the control elements!
 - depending on the operating conditions, **but at least annually**, inspection by an expert!
- (17) Never modify the OKTOPUS[®] in a way that its safety is impaired. **Otherwise the manufacturer's warranty will be void!**
- (18) Do not remove information signs, safety signs and inspection tags and plates from the OKTOPUS[®]! **Otherwise the manufacturer's warranty will be void!**

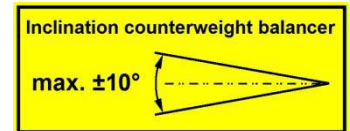
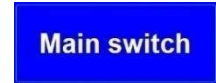
2.3 Symbols and markings

Signal word	Meaning	Consequences of non-compliance
	Warns of imminent threat of danger	Death or serious injury or substantial material damage as consequence.
	Warns of potential threat of danger	Death or serious injury or substantial material damages are possible.
	Warns of possibly dangerous situation	Light injury or material damages are possible.

Next to the type plate the following safety-related signs and pictographs are attached to the counterweight balancer:



(Working Load Limit)



(General information)



(Before operating, read and comply with the operating manual as well as safety instructions!)



(Attachment point crane hook)



(Beware of hand injury)



(Warning of hazardous electrical voltage)



(Beware of hand injury)



(Inspection card)

2.4 Structure of the counterweight balancer

The functional main assemblies of the counterweight balancer are (s. fig. 1):

- the crane eye (1) for connecting the combination counterweight balancer/OKTOPUS® to the crane,
- the adapter OKTOPUS® (12) for connecting the OKTOPUS® to the counterweight balancer,
- the travelling cage (18) for equilibrating the load and
- the main switch (8) for switching the counterweight balancer on and off.

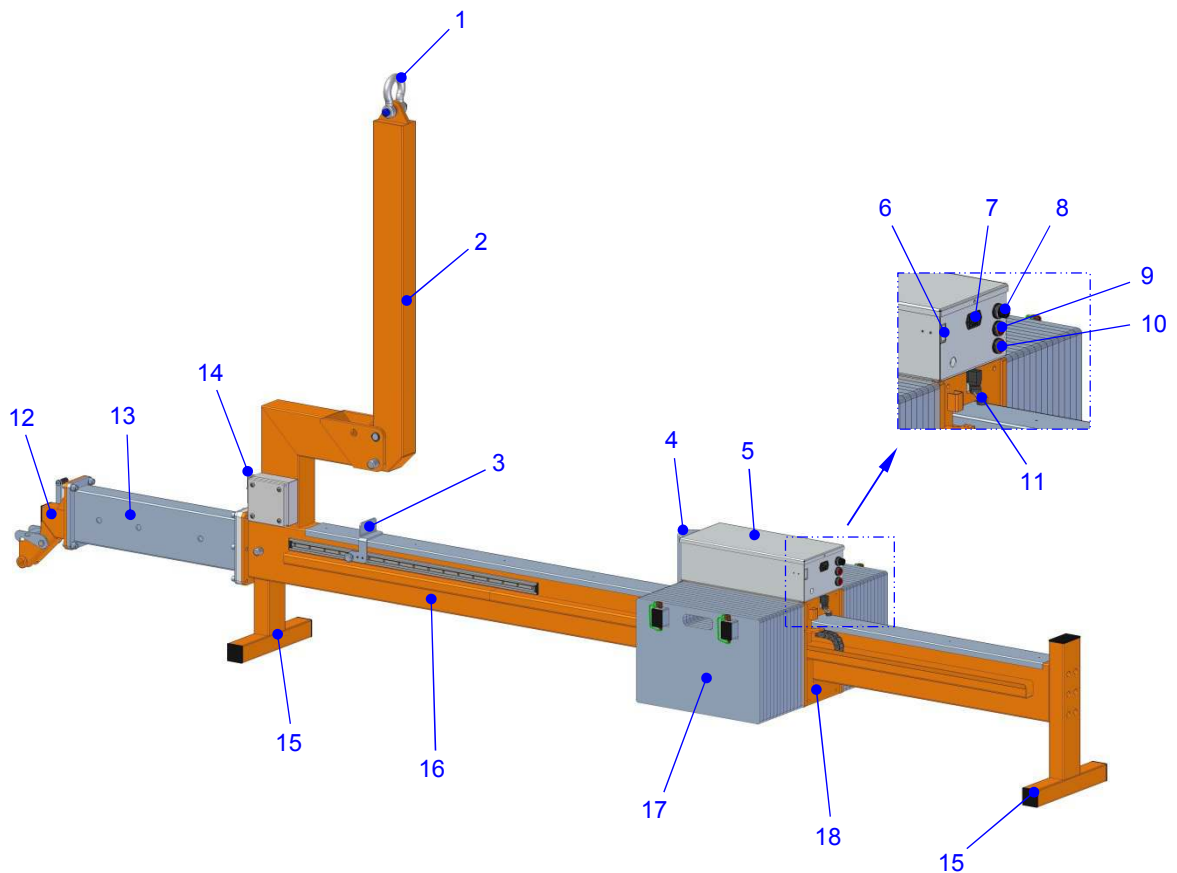


Fig. 1: Counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24

- | | |
|-------------------------------------|---------------------------------------|
| 1 Crane eye (shackle) | 10 Button "Travelling cage backwards" |
| 2 Crane arm | 11 Limit switch |
| 3 Stop plate | 12 Adapter OKTOPUS® |
| 4 Travelling drive counterweights | 13 Overhang |
| 5 Cover | 14 Connector plug |
| 6 Battery charging socket | 15 Base |
| 7 Charge indicator | 16 Main girder |
| 8 Main switch | 17 Counterweight |
| 9 Button "Travelling cage forwards" | 18 Travelling cage |

The counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24 is designed as an attachment for an OKTOPUS® GLASS-Jack GL-RN-B 400/600/800 or OKTOPUS® GLASS-Jack GL-RN-F 400/ 600/800 and is mounted to a crane according to fig. 2.

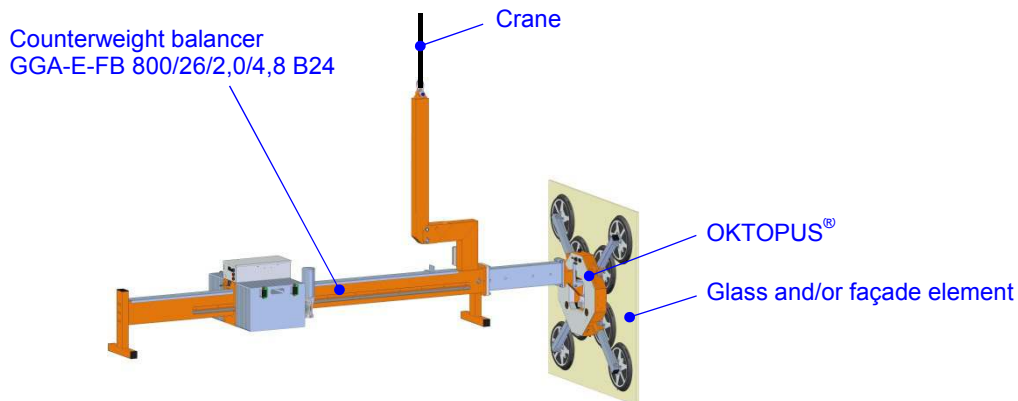


Fig. 2: Attachment GGA-E-FB 800/26/2,0/4,8 B24

2.5 Functional dimensions of the counterweight balancer

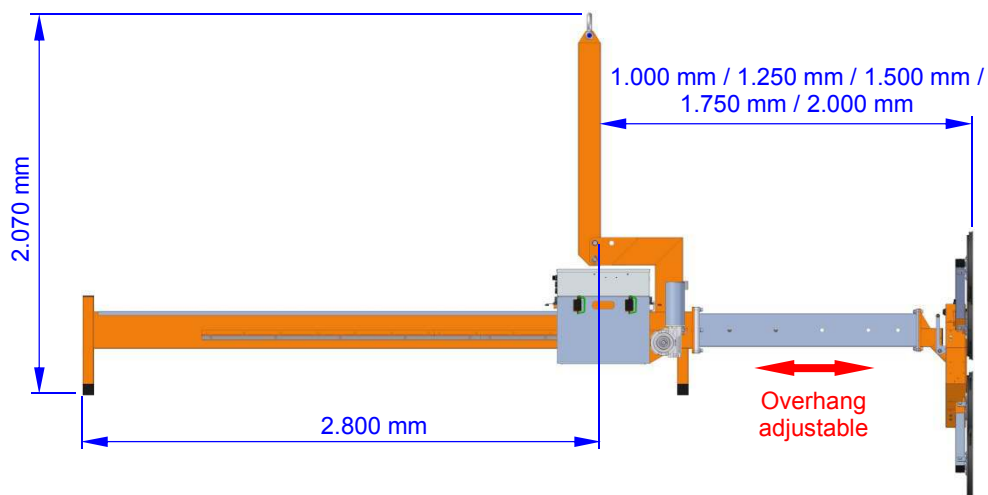


Fig. 3: Functional dimensions of the counterweight balancer

2.6 Operating conditions and restrictions

The counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24 may only be operated in combination with an OKTOPUS® GLASS-Jack GL-RN-B 400/600/800 (device with cable remote control) and/or an OKTOPUS® GLASS-Jack GL-RN-F 400/ 600/800 (device with radio remote control) by instructed personnel.

Ambient temperature has to be at least 0 °C and must not exceed 40 °C (applies only to 1013 mbar and sea level). The capacity of the installed batteries is reduced with low temperatures. The airborne sound emitted by the counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24 is less than 70 dB(A), so that no special protective measures are required.

Operating restrictions result from the Working Load Limit of the counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24 (s. section 1.1 Manufacturer's information) as well as the performance data of the crane used and the construction site conditions.



The counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24 is exclusively authorized for use in combination with an OKTOPUS® GLASS-Jack GL-RN-B 400/600/800 and/or OKTOPUS® GLASS-Jack GL-RN-F 400/ 600/800!

2.7 Transport and storage

The counterweight balancer may be moved only by a suitable hoisting device/means of transport of appropriate Working Load Limit.



For transport purposes put the counterweight balancer out of operation! To this end turn the main switch to position OFF!



In order to avoid damage due to deep discharge of the batteries during storage, the counterweight balancer has to be charged at least every two weeks.



If necessary, conserve the counterweight balancer in order to prevent damages to the device when storing it for a longer period of time.

For transport and storage purposes, the height of the counterweight balancer can be reduced to approx. 850 mm and the length to approx. 3.620 mm (incl. adapter OKTOPUS®) resp. approx. 3.400 mm (without adapter OKTOPUS®). Perform the following steps successively in order to reduce the height of the counterweight balancer:

- Place the counterweight balancer on a flat, solid ground (remove OKTOPUS® GLASS-Jack GL-RN-B 400/600/800 resp. OKTOPUS® GLASS-Jack GL-RN-F 400/600/ 800 in advance).
- Move the travelling cage into the position shown in fig. 4 (also s. point 2.3 "Control of the counterweight balancer").
- Remove the locking bolt B with lynch pin type 1 (s. fig. 7).
- Tilt the crane arm 90° down and secure its new position by mounting the previously removed locking bolt B with lynch pin type 1 (s. fig. 4).

The adjustment of the overhang and thus of the lengths of the counterweight balancer is described under point 3.3 (Preparation of the counterweight balancer) of this operating manual.

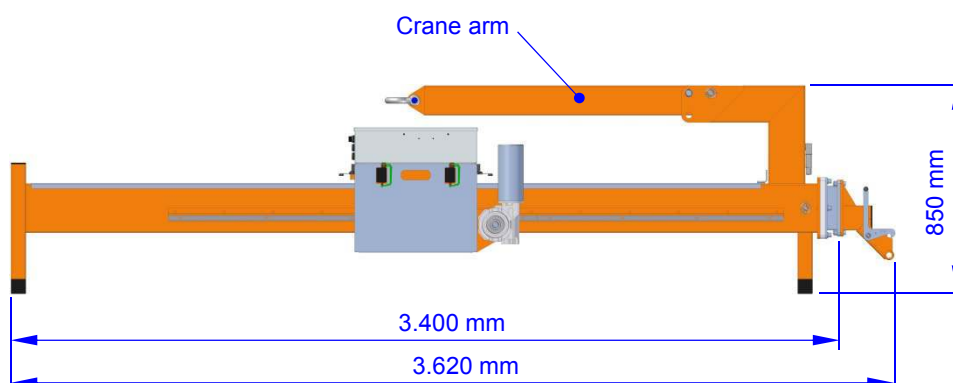


Fig. 4: Transport and storage of the counterweight balancer

3 Instructions for using the counterweight balancer

3.1 Electrical power supply

Electrical power is supplied by a battery 24 V / 12 Ah (two 12 V batteries in line).

The charge level of the battery is monitored by a charge indicator according to figure 5. Light-emitting diodes (LED) in the signal colours green, yellow and red indicate the current charge level after the counterweight balancer has been switched on.

The charge indicator shows the following charging states:

- ⇒ If one of the green LEDs lights up, the battery is charged. The OKTOPUS® is ready for use.
- ⇒ If the third LED from the left (yellow LED) lights up, the battery should be charged.
- ⇒ If the second LED from the left (yellow LED) lights up, or if the second LED (yellow LED) from the left and the red LED light up in turns, the battery has to be charged without delay, in order to avoid deep discharge and potential damages.

The charge indicator is arranged on the counterweight balancer as per fig. 1.

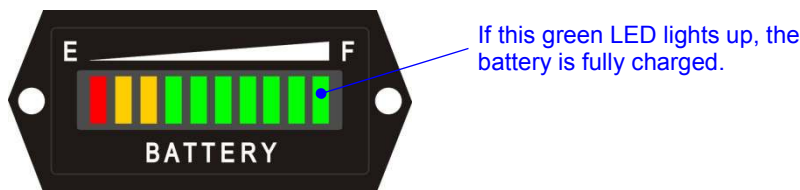


Fig. 5: Charge indicator



Do not use the counterweight balancer, if the yellow LED is flashing, or the yellow and the red LED are flashing alternately. Possibly suctioned loads shall be lowered. The counterweight balancer has to be charged instantly in order to avoid deep discharge and by that possible damage to the battery.



The user has to ensure that the battery is properly charged when operating the counterweight balancer.



The charge indicator only shows the current voltage level of the battery. It does not give any reliable information regarding the batteries' capacity.



The charge indicator responds rather slowly. In order to assess the voltage level realistically after the charging process (s. point 4.3) you have to move the travelling cage of the counterweight balancer for approximately 2 minutes, and then use the indicated charge level of the battery as a basis for assessing how to employ the counterweight balancer.

3.2 Control of the counterweight balancer

During operation the counterweight balancer is controlled in case of the OKTOPUS® GLASS-Jack GL-RN-B 400/600/800 by the cable remote control and in case of the OKTOPUS® GLASS-Jack GL-RN-F 400/600/800 by the radio remote control of the OKTOPUS®. The corresponding buttons are indicated by arrows. Figure 6 shows an example of this marking for an OKTOPUS® GLASS-Jack GL-RN-F 400/600/800.

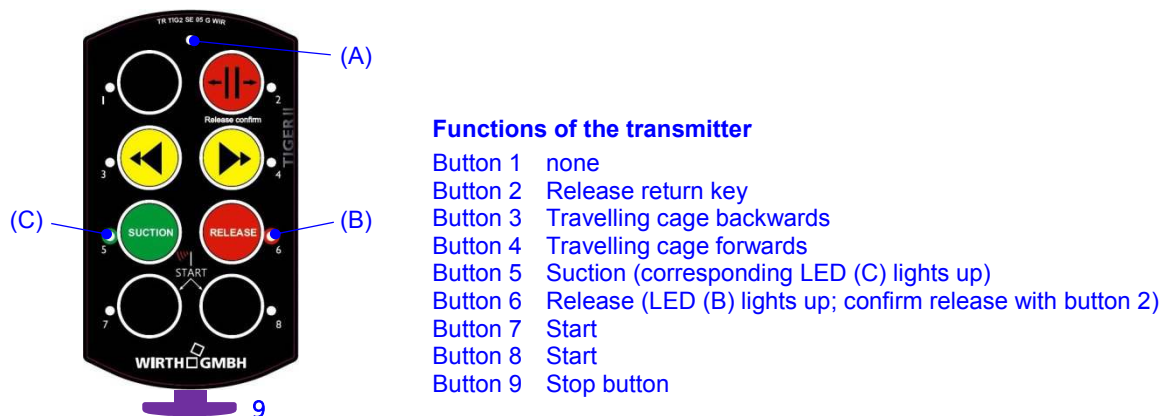


Fig. 6: Transmitter radio remote control

There are two control buttons on the travelling cage of the counterweight balancer (s. fig. 1, pos. 9 and 10). When the counterweight balancer is switched on, the travelling cage can be moved "forwards" and/or "backwards" by pressing these buttons, if no OKTOPUS® is connected to the counterweight balancer. This is helpful in order to move the travelling cage into the transport position, for example (s. point 2.7).



The two control buttons of the counterweight balancer are deactivated as soon as an OKTOPUS® is electrically coupled to the counterweight balancer. It does not matter whether the OKTOPUS® is switched on or off.

3.3 Preparation of the counterweight balancer

Perform the following steps successively in order to **assemble** the counterweight balancer:

- ⇒ Prepare the OKTOPUS® for the assembly of the counterweight balancer as follows:
 - Place the OKTOPUS® flat on a clean, even, heightened surface (e.g. work bench, suction pads facing downwards).
 - Disassemble the crane arm of the OKTOPUS® from its swivel joint by removing the bolt that connects the crane arm with the swivel joint.
- ⇒ If not done yet, tilt the crane arm of the counterweight balancer 90° up and secure it by means of the locking bolt B with lynch pin type 1 (s. fig. 7).
- ⇒ Adjust the required overhang on the counterweight balancer. Therefor remove the locking bolt A, push the overhang to the required position and install the previously removed locking bolt A. Secure the locking bolt A by means of a lynch pin type 1.
- ⇒ Install a number of counterweights that corresponds to the load to be lifted. To this end proceed as follows:
 - Remove the lynch pin type 2 (s. fig. 7).

- Take the counterweights from or push the counterweights onto the rectangular tubes of the travelling cage. Make sure that there is always the same number of counterweights on each side of the travelling cage!
- Note:*
Two of the 24 counterweights differ in their form of the other ones. Push each of them at first on the rectangular tubes (1x left, 1x right).
- Install the previously removed lynch pins type 2 as close as possible to each of the outermost counterweights. This is the only way to ensure that the counterweights do not slip or even slide off the rectangular tubes during operation or transport.
- ⇒ Couple the counterweight balancer to the crane and lift it. In doing so, equilibrate the counterweight balancer by moving the travelling cage. For moving press the buttons “travelling cage forwards” and “backwards” (also s. point 3.2 “Control of the counterweight balancer”).
- ⇒ Move the counterweight balancer to the OKTOPUS® and couple the “adapter OKTOPUS®” to the OKTOPUS®. Use the bolt $\varnothing 20$ supplied with the delivery of the counterweight balancer as connector. Secure the bolt $\varnothing 20$ with a lynch pin type 1.
- ⇒ Couple the counterweight balancer electrically to the OKTOPUS®. To this end use the spiral cable supplied with the delivery of the counterweight balancer. Make sure that the retaining clips of the two connectors properly snap into place.

Disassembly of the counterweight balancer takes place in reverse order.

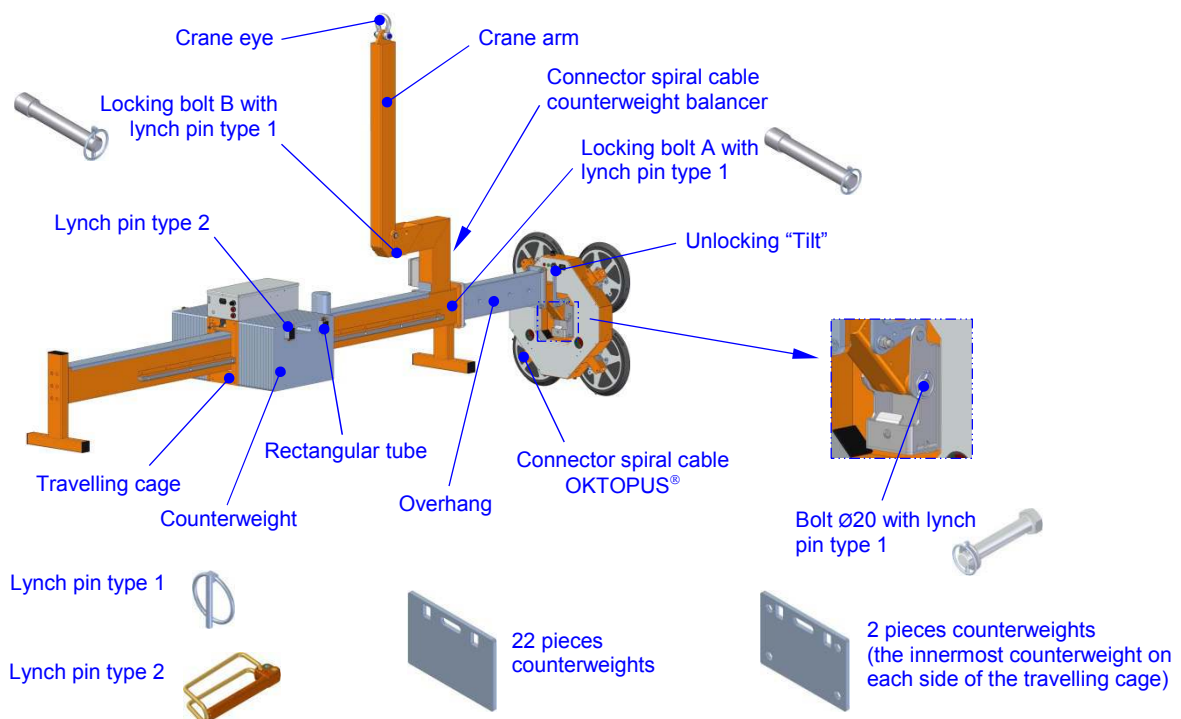


Fig. 7: Counterweight balancer mounted to the OKTOPUS®



Make sure that the counterweight balancer is placed on a flat, solid ground during the adjustment of the overhang and the assembly/disassembly of the counterweights! Non-compliance with these instructions can lead to uncontrolled tipping of the counterweight balancer and result in physical injury as well as damages to the device!



Make sure that the mounted counterweights are secured to the travelling cage by means of four lynch pins type 2 after assembly/disassembly of the counterweights!

3.4 Inclination of the counterweight balancer

The movable counterweights enable to equilibrate the OKTOPUS®, if applicable, including a suctioned load. Due to safety-related aspects, the inclination angle of the main girder is limited to $\pm 10^\circ$ by sensors. If the main girder reaches $\pm 10^\circ$ of inclination, the travelling cage with the counterweights stops. Then it can only be moved in the opposite direction.



By moving the counterweights, make sure that the main girder of the OKTOPUS® is always tared! The maximum admissible angle deviation is $\pm 10^\circ$.

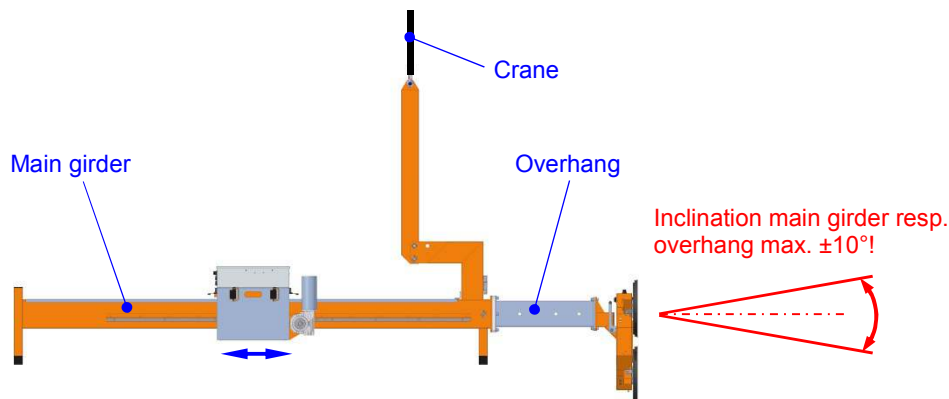


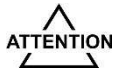
Fig. 8: Inclination of the counterweight balancer

3.5 Start-up

In order to start-up the combination counterweight balancer/OKTOPUS® proceed as follows:

- Turn the main switch of the counterweight balancer to position “ON”.
- Turn the main switch of the OKTOPUS® to position “ON” and in case of the OKTOPUS® GLASS-Jack GL-RN-F 400/600/800 activate the transmitter of the radio remote control.
- First press the button “Release” and then “Release return key” of the transmitter of the radio remote control or turn the selector switch “Suction/Release” of the cable remote control to position “Release” and press the button “Release return key”.
 - ⇒ The red warning light is illuminated.
 - ⇒ Vacuum pump and alarm buzzer switch off after a short time.
- Check the batteries’ charge level (counterweight balancer, OKTOPUS®) on the charge indicators:
 - ⇒ if the green LED lights up, the device is ready for operation,
 - ⇒ if the second LED from the left (yellow LED) flashes or the second LED from the left (yellow LED) and the red LED light up in turns, the battery needs to be charged!

3.6 Handling of glass and façade elements



The following explanations on the handling of glass and façade elements do not substitute the intensive study of the operating manual of the OKTOPUS® model in use!



Before commencing to work, make sure that all mechanical and electrical components and/or linked and all engaged suction pads of the OKTOPUS® are connected to the vacuum system!

Prior to the grabbing of glass and façade elements:

- ⇒ the counterweight balancer has to be mounted to the OKTOPUS® according to section 3.3 of this operating manual and following this, the combination counterweight balancer/OKTOPUS® has to be coupled to the crane (s. fig. 2).
- ⇒ the counterweight balancer and OKTOPUS® have to be started-up.



Always lift the combination counterweight balancer/OKTOPUS® slowly and carefully using the crane. Equilibrate them by moving the travelling cage while lifting!



When handling loads, always wear a helmet, suitable protective clothes (long trousers), working gloves and safety shoes!

The installation of glass and façade elements is carried out as follows:

- ⇒ Lift the combination counterweight balancer/OKTOPUS® and move the travelling cage until the main girder is balanced.
- ⇒ Loosen the wing screw of the stop plate and push the stop plate onto the travelling cage until the limit switch is triggered. Retighten the wing screw (s. fig. 9).
Remark: Later “release” of a suctioned glass/façade element is only possible, if the travelling cage is moved up to the stop plate and the limit switch of the travelling cage has been triggered!
- ⇒ Move the combination counterweight balancer/OKTOPUS® to the elements by means of the crane. Align the suction pads of the OKTOPUS® parallel to the suction area of the load. Adjust the position of the OKTOPUS® by moving the counterweights using the buttons “travelling cage forwards” and “travelling cage backwards”.
- ⇒ Position the suction pads of the OKTOPUS® above the centre of mass of the load (± 5 cm) and place the suction pads on the suction area. If the surface of the construction element is covered with protective film, remove the protective film at least in the area of the suction pads before placing the OKTOPUS®.
- ⇒ Activate the “Suction” function of the OKTOPUS®. According to the model in use:
 - Press the button “Suction” of the radio remote control.
 - Turn the selector switch “Suction/Release” of the cable remote control to position “Suction”.
- ⇒ Only lift the load after the red warning light and the alarm buzzer have turned off, the vacuum gauges indicate that the working area has been reached, the green signal light is illuminated and you have ensured that there is nobody in the hazardous area.
- ⇒ Move the travelling cage backwards (away from the glass/façade element) until the glass/façade element is slightly lifted and subsequently move it towards the installation site, while making sure that the main girder is always balanced.

- ⇒ Do not lift the load higher than necessary!
- ⇒ Bring the load into the required position by the driving and lifting movements of the crane as well as by manual guidance of the combination counterweight balancer/OKTOPUS®.
- ⇒ Secure the glass and/or façade element after installing it at the site in such a way that it does not constitute a threat after the release of the OKTOPUS®.
- ⇒ Afterwards the glass/façade element is released. Therefor proceed as follows:
 - Move the travelling cage forwards up to the stop plate.
The “Release” function of the OKTOPUS® can only be activated, if the travelling cage is moved up to the stop plate and the limit switch of the travelling cage has been triggered.
 - Successively press the buttons “Release” and “Return release key” of the transmitter of the radio remote control resp. turn the selector switch “Suction/Release” of the cable remote control to position “Release” and then press the button “Return release key”. The confirmation is an additional safety measure against unintentional operating errors.



Make sure that the load is properly placed on the OKTOPUS®! Unbalanced loads can cause damage to the device!



As a result of the own weight of the OKTOPUS® there is still a residual vacuum after venting the suction pads through the vacuum system. Jerkily lifting the OKTOPUS® increases this effect. Therefore, always remove the device slowly and steadily from the installed elements.

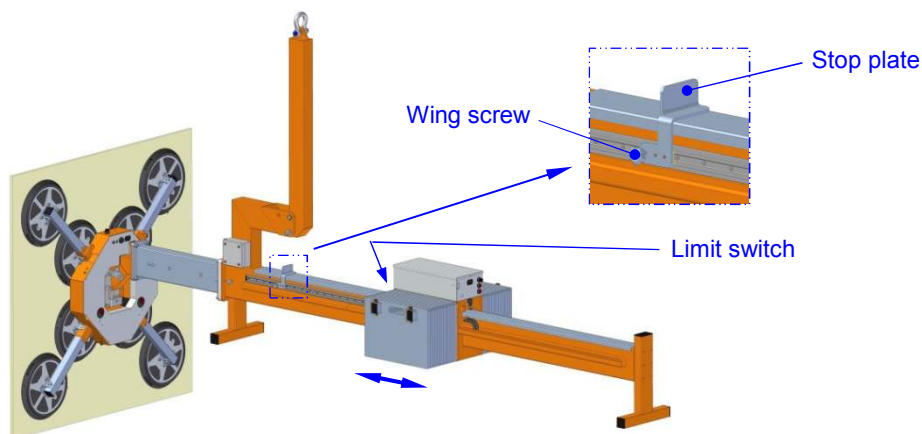


Fig. 9: Handling of glass and façade elements

4 Service and maintenance

4.1 General remarks

Since the counterweight balancer is a load lifting attachment both the manufacturer and the operator bear a high responsibility to guarantee the relevant safety standard throughout the entire operating time. Thus, service and maintenance are of great importance.

For maintaining a high level of operational safety, the counterweight balancer GGA-E-FB 800/26/2,0/4,8 has to be inspected by the service workshop of Wirth GmbH or by an especially qualified person (expert)

- ⇒ at least every 12 months or in shorter intervals, if this is stipulated by national standards or regulations, or
- ⇒ after specific incidents.

Additional operative and scheduled maintenance and service work may only be performed by a skilled expert.

Maintenance and service work may only be performed when the counterweight balancer is taken out of operation.



Before performing any repair or maintenance work turn the counterweight balancer off; turn the main switch to position “OFF” and if applicable, disconnect any connected battery charger.

Defective parts may only be replaced with original spare parts. They will be provided on request after consulting with the service team of the manufacturer of the counterweight balancer. Using non-original spare parts leads to exemption from liability by the manufacturer.

In order to perform maintenance and service work an appropriate tool kit has to be used.



Maintenance always has to be followed by a functional check.

If damages cannot be repaired by the operator's staff, the Wirth GmbH service workshop needs to be informed.

4.2 Mechanical system

The mechanical system is sturdy and surface protected. For maintenance perform

- ⇒ prior to start-up, **daily** visual inspection of the mechanical components of the counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24 for damages.

The counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24 is a load lifting attachment. Therefore, repairs on the mechanical functioning parts shall exclusively be carried out by the manufacturer.



Do not perform any repairs at mechanical functioning parts!

4.3 Electrical and electronic components

The counterweight balancer GGA-E-FB 800/26/2,0/4,8 B24 is powered by maintenance-free lead-gel batteries (acidic). The battery casings are sealed hermetically.

Maintenance work focuses on:

- ⇒ **daily** visual inspection of the external electrical functional and alarming equipment:
 - limit switches of the travelling cage,
 - battery charging socket,
 - charge indicator.
- ⇒ visual inspection of the battery's charge level shown on the charge indicator (s. fig. 5).
- ⇒ charging the battery

A 24 V / 5 A charger for charging the battery is supplied by the manufacturer of the counterweight balancer (s. fig. 10).

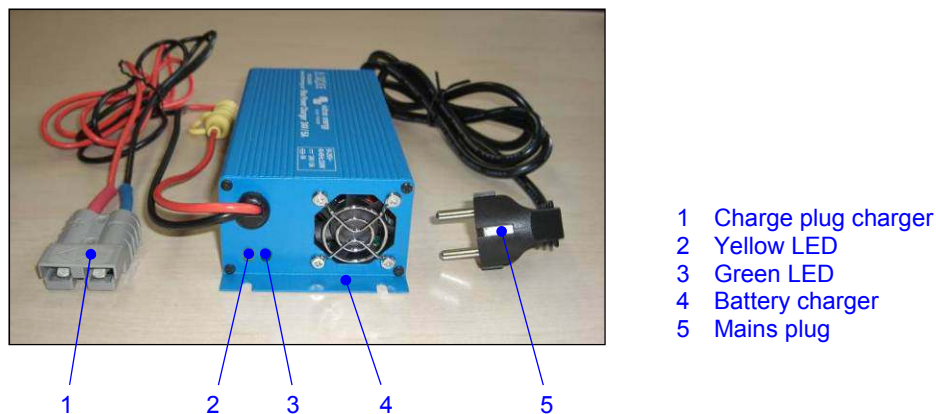


Fig. 10: Battery charger (example)



Prior to connecting the charger, check whether it is compatible with your mains grid! The performance data is stipulated on the charger.



Please absolutely contact the Wirth service team in advance, if you want to use a different charger than the one supplied with the delivery of the counterweight balancer!

The charging process is performed as follows:

- Turn the counterweight balancer off. Therefor turn the main switch to position "OFF"!
- Connect the charge plug of the charger with the battery charging socket of the counterweight balancer.
- Connect the mains plug of the charger to a power outlet and thus to the mains grid, in order to start the charging process.
- The charging process is completed, when the yellow LED is constantly illuminated.
- Proceed as follows in order to disconnect the charger from the counterweight balancer:
 1. disconnect the charger from the mains grid,
 2. disconnect the charger from the battery.

LED Display

- ⇒ The green LED is illuminated when the charger is connected to the mains grid.
- ⇒ The yellow LED flashes fast during the first charging stage and slower during the second. At the end of the charging cycle the yellow LED is constantly illuminated.

For maintenance and in case of breakdown of the charger, please contact our service department.



The sealed lead-gel battery requires strict adherence to the charging instructions!



In order to avoid damage due to deep discharge, the batteries of the counterweight balancer have to be charged at least every two weeks.



The battery charger has to be protected from spray water and has to be set up in a way that the venting slots and the fan are unobstructed and cannot be pierced through by pointed objects.

5 Handling incidents

In case of mechanical and/ or electrical failures, immediately leave the hazardous area. Locate and rectify the cause for the failure. If you cannot remedy the fault, stop operating the counterweight balancer immediately and secure the counterweight balancer against further use.



In case of faults that cannot be remedied, working with the counterweight balancer shall be stopped immediately. The counterweight balancer has to be secured against further use. Contact the service workshop of Wirth GmbH.

If the display of the charge indicator is not illuminated when turning the counterweight balancer on please contact the service workshop of Wirth GmbH immediately.

6 Disposal and recycling

For packaging the counterweight balancer materials like wood, cardboard, paper and film are used. These materials shall be recycled according to national regulations.

To dispose the counterweight balancer hand it over to a waste management company. If you have any question, please do not hesitate to contact Wirth GmbH.



For environmental reasons, hand over the counterweight balancer for disposal to a waste management company being fully aware of and observing the respective national regulations!

Declaration of Conformity

according to Annex II A of the EC Machinery Directive 2006/42/EC

Manufacturer: WIRTH GMBH
Installation Systems Division
Brehnaer Straße 1
D-06188 Landsberg

We hereby confirm that the machine hereinafter described is in conformity with any provision relevant to the EC Machinery directive 2006/42/EC

Product description: Counterweight balancer
Type: GGA-E-FB 800/26/2,0/4,8 B24
Serial number: *A 810 637*
Year of manufacture: *03 / 2017*

Furthermore the machine corresponds with the requirements of **EC Directive 2009/104 EC concerning the minimum safety and health requirements for the use of work equipment by workers at work**, of **EC Directive 2001/95 EC on general product safety** and of **EC directive 2014/30/EU on electromagnetic compatibility**.

Applied harmonized standards:

DIN EN ISO 12100 (03/11)

Safety of Machinery – General Principles for Design – Risk Assessment and Risk Reduction

DIN EN ISO 13857 (06/08)

Safety of Machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs

DIN EN 60204 Part 1 (06/07)

Electrical equipment of machines – General Requirements

DIN EN 13155 (08/09)

Cranes - Safety - Non-fixed Load Lifting Attachments

Authorized representative for compiling the relevant technical documents:

Sven Röthe, Brehnaer Straße 1, D-06188 Landsberg

This declaration solely corresponds to the machine in the status as put on the market, any parts additionally installed and/or modifications additionally carried out by the end user shall be unconsidered. This declaration shall become invalid, in case the product is modified without approval.

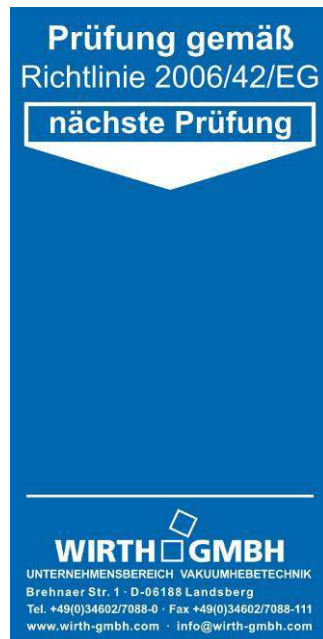
Landsberg, *12.04.2017*



Holger Schadwinkel
(Managing Director)

Inspection Tag of the GGA-E-FB 800/26/2,0/4,8 B24

according to Directive 2006/42/EC



Sign size: 80 x 40 mm

Background: blue

Foreground: white

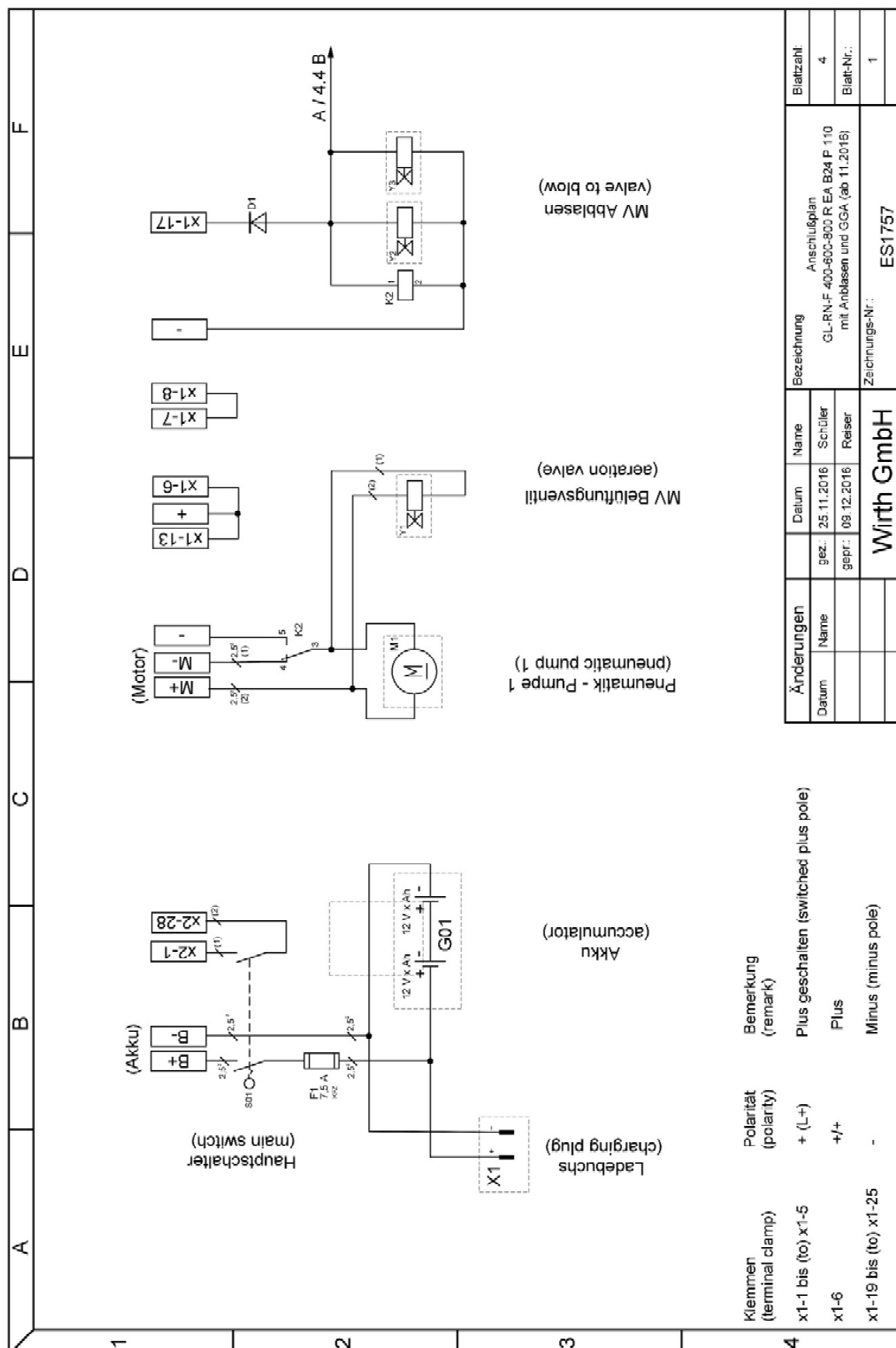
Font: white on blue

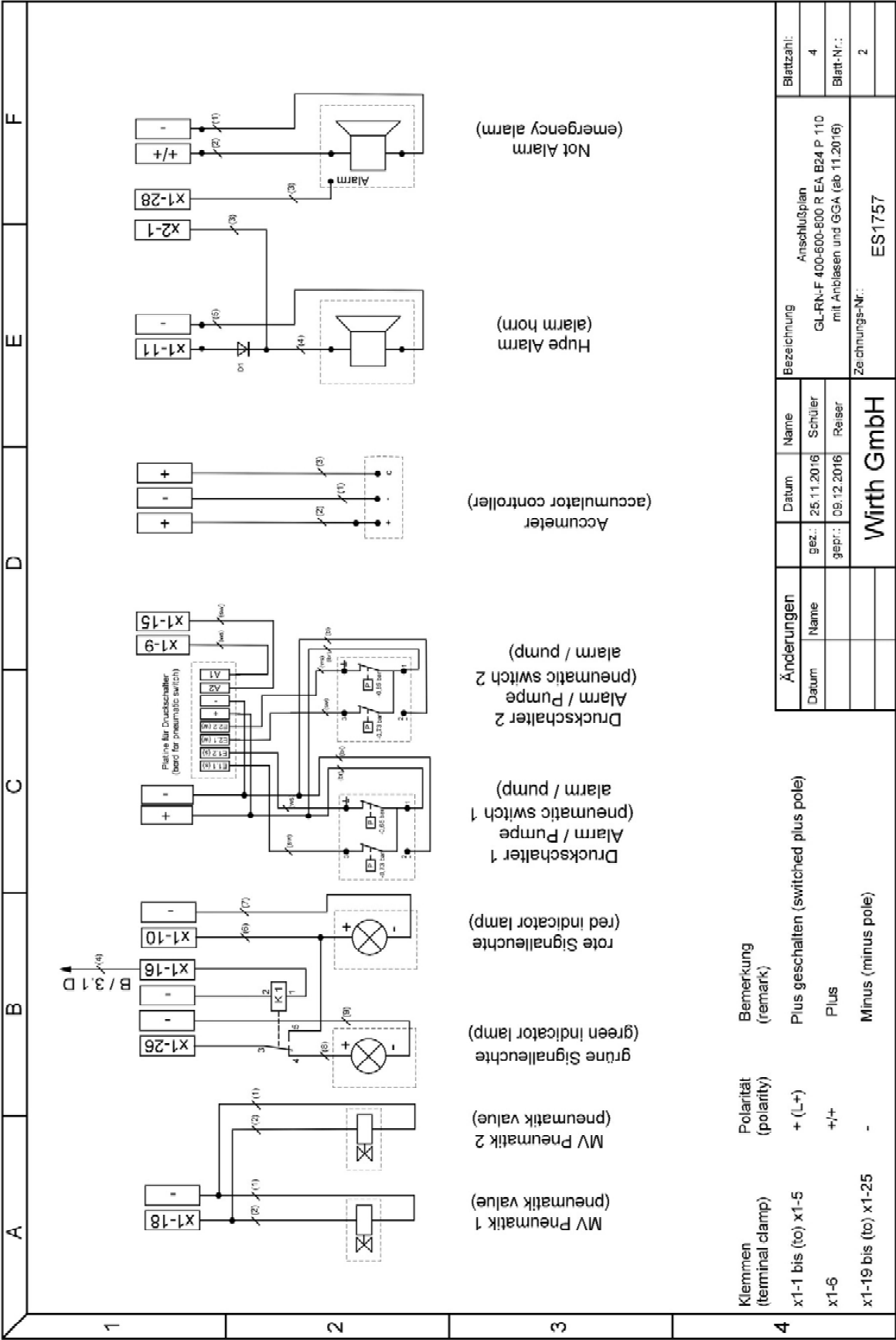
Plate size: diameter 30 mm

Background: depending on the year

Foreground: depending on the year

Electrical Circuit Diagram





A		B		C		D		E		F																																																			
<p>(balance weight forward)</p> <p>(balance weight reverse)</p> <p>(release confirm)</p> <p>(suction / release)</p>																																																													
<p>(Saugen) / Lösen</p> <p>Lösen bestätigen</p>																																																													
<p>Klemmen (terminal clamp)</p> <p>Polarität (polarity)</p> <p>Bemerkung (remark)</p> <p>Plus geschaltet (switched plus pole)</p> <p>Plus</p> <p>Minus (minus pole)</p>																																																													
<table><tr><th colspan="2">Änderungen</th><th colspan="2">Datum</th><th colspan="2">Name</th><th colspan="2">Bezeichnung</th><th colspan="2">Blattzahl</th></tr><tr><td colspan="2">Datum</td><td colspan="2">Name</td><td colspan="2">Name</td><td colspan="2">Anschlußplan</td><td colspan="2">4</td></tr><tr><td colspan="2">gepr.: 09.12.2016</td><td colspan="2">Reiser</td><td colspan="2">Schüler</td><td colspan="2">GL-RN-F 400-600-800 R EA B24 P 110</td><td colspan="2">Blatt-Nr.: 3</td></tr><tr><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2">mit Anblasen und GGA (ab 11.2016)</td><td colspan="2">ES1757</td></tr><tr><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2">Zeichnungs-Nr.:</td><td colspan="2"></td></tr></table>												Änderungen		Datum		Name		Bezeichnung		Blattzahl		Datum		Name		Name		Anschlußplan		4		gepr.: 09.12.2016		Reiser		Schüler		GL-RN-F 400-600-800 R EA B24 P 110		Blatt-Nr.: 3								mit Anblasen und GGA (ab 11.2016)		ES1757								Zeichnungs-Nr.:			
Änderungen		Datum		Name		Bezeichnung		Blattzahl																																																					
Datum		Name		Name		Anschlußplan		4																																																					
gepr.: 09.12.2016		Reiser		Schüler		GL-RN-F 400-600-800 R EA B24 P 110		Blatt-Nr.: 3																																																					
						mit Anblasen und GGA (ab 11.2016)		ES1757																																																					
						Zeichnungs-Nr.:																																																							

