Installation and Service Instructions

Electromagnetic Bolt E 205

Translation of original operating instructions

014-046X00002-2401-EN



ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, Germany

✓ info@elka.eu
✓ +49(0) 4861 · 9690 · 0
✓ +49(0) 4861 · 9690 · 0

Index of contents

1	General information	2
1.1	Symbol explanation	2
1.2	Copyright	
2	Safety	3
2.1	Personnel requirements – professional skills, knowledge and qualifications	
2.2	Personal protective equipment	
3	Transportation inspection	4
4	Declaration of incorporation	5
4.1	Declaration of conformity – complete system	6
4.2	Nameplate	
5	Usage	7
6	Technical data	7
7	Installation	8
7.1	Mounting dimensions	9
7.2	Electrical connection	
7.3	Emergency release during power failure	13
8	Decommissioning	14
8.1	Disposal	14

1 General information

These operating instructions must be available on site at all times. It should be read thoroughly by all persons who use, service or transport the units. Improper usage or servicing – or ignoring the operating instructions – can be harmful and/or result in physical damage. If the meaning of any part of these instructions isn't clear, then please contact ELKA-Torantriebe GmbH u. Co. Betriebs KG (hereinafter referred to as "ELKA") before putting the unit into operation.

This applies to all setup procedures, troubleshooting, material disposal, care and servicing of the unit. The accident prevention regulations and applicable technical regulations (e.g., safety or electrical), as well as the environmental protection regulations of the country in which the unit is used, also apply.

All repairs to the unit must be carried out by qualified persons. ELKA accepts no liability for damage which is caused by using the unit for purposes other than those for which it is intended.

ELKA cannot recognise every possible source of danger in advance. If the unit is used other than in the recommended manner, the user must ascertain that no danger to themself or others will result from this use. They must also ascertain that the planned use will have no detrimental effect on the unit itself. The unit should only be used when all safety equipment is available and in working order. All faults which could be a source of danger to the user or to third persons must be eliminated immediately. All warning and safety notices on the unit must be kept legible.

All electrical periphery equipment which is connected to the unit must have a CE/UKCA Mark, which ensures that it conforms to the relevant EC/UK regulations. Neither mechanical nor electrical alterations to the unit, without explicit agreement of the manufacturer, are permitted. All alterations or extensions to the unit must be carried out with parts which ELKA have defined as suitable for such alterations, and be carried out by qualified personnel. Please note that with any alteration of the product, no matter whether mechanical or electrical, the warranty expires and the conformity is revoked. Only the use of ELKA accessories and original ELKA spare parts is allowed. In case of any contravention, ELKA disclaims liability of any kind.



INFORMATION!

The operation of the system within CEN / UK countries must also be conformant with the European / UK safety-relevant directives and standards.

We reserve the right to make technical improvements without prior notice.

1.1 Symbol explanation

WARNING!

Remarks regarding the safety of persons and the barrier opener itself are marked through the use of special symbols. These remarks must be absolutely observed in order to avoid accidents and physical damage.



DANGER!

...indicates an imminent dangerous situation, which can cause death or serious injuries if it is not avoided.

WARNING!

...indicates a potentially dangerous situation, which can cause death or serious injuries if it is not avoided.

ATTENTION!

 \ldots indicates a potentially dangerous situation, which can cause minor or slight injuries if it is not avoided.

...indicates a potentially dangerous situation, which can cause property damage if it is not avoided.



ATTENTION!

REMARK!

Important notice for installation or functioning.

1.2

Copyright

The operating manual and the contained text, drawings, pictures, and other depictions are protected by copyright. Reproduction of any kind – even in extracts – as well as the utilization and/or communication of the content without written release certificate are prohibited. Any violations will obligate to compensation for damages. We reserve the right to make further claims.

ELKA

2 Safety

2.1 Personnel requirements – professional skills, knowledge and qualifications



The following instructions and work steps are to be implemented by the executing specialist on their own responsibility.

WARNING!

NOTE!

 \triangleright

Risk of injury through inadequate qualification!

Improper handling during installation, maintenance, repair work or dismantling can result in personal injury and/or property damage.

Work during installation, maintenance, repair and dismantling must be performed by skilled personnel only.

(Service) specialist - is a person with suitable technical training, knowledge and experience who can recognize and avoid hazards.

Electrician - In German-speaking countries, a skilled electrician is the name of a person who is allowed to carry out and supervise electrotechnical work commercially. According to EN 50110-1 / BS EN 50110-1, they are defined as "a person with suitable technical training, knowledge and experience so that they can recognize and avoid hazards that may be caused by electricity".

Instructed person - is a person who has been instructed in operation and use.

2.2 Personal protective equipment

During installation, maintenance, repair work and dismantling suitable personal protective equipment must be worn.



CAUTION!

Bruising/jamming/driving over (e.g. by material handling equipment, industrial trucks) the feet, contusion by falling heavy objects, cutting injuries by stepping into pointed/sharp objects. Foot injuries

Wearing of suitable safety shoes during the installation, maintenance, repair work and dismantling protects against serious foot injuries with long-lasting consequences.



Falling heavy objects hitting the head

Head injuries

CAUTION!

Wearing of a suitable safety helmet during the installation, maintenance, repair work and dismantling protects against serious head injuries with long-lasting consequences.

CAUTION!

Cutting injuries resulting from pointed/sharp objects

Hand injuries

Wearing of suitable safety gloves during the installation, maintenance, repair work and dismantling protects against serious hand injuries with long-lasting consequences.



CAUTION!

Injuries resulting from drilling chips or saw dust

Eye injuries

Wearing of suitable safety goggles during the installation and repair work protects against serious eye injuries with long-lasting consequences.

3 Transportation inspection

ELK/

The shipment has to be inspected for transportation damage immediately after receipt. In case of any damage record the type and extent on the delivery receipt or refuse acceptance. Inform ELKA immediately in the event of damage.

In case the above points are not observed claims will be denied due to insurance regulations.

4

ELKA

according to EC Machinery Directive 2006/42/EC, annex II part 1 B The manufacturer ELKA-Torantriebe GmbH u. Co. Betriebs KG Dithmarscher Str. 9 25832 Tönning, Germany We herewith declare that the partly completed machinery Product description: Locking devices Function: Locking of swing gate openers Type designation: Electromagnetic bolt E 205 Article number: 803900102 From production number: 2347 complies with the essential requirements of the following directive, as far as possible attachment for information regarding which requirements are met) 2006/42/EC Machine directive 2014/30/EU EMC directive 2014/55/EU RoHS directive Surf CME Safety of household and similar electrical appliances Further we declare that the special technical documentation for this partly completed accordance with annex VII part B, and we undertake to transmit relevant information authorities upon request. The partly completed machinery must not be put into service until it is incorporated in been declared in conformity with the provisions of the EC Machinery Directive and for conformity according to annex II A was issued. Empowered to draw up the declaration: ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	s, part 1 General requiremen d machinery is compiled in
Dithmarscher Str. 9 25832 Tönning, Germany We herewith declare that the partly completed machinery Product description: Locking devices Function: Locking of swing gate openers Type designation: Electromagnetic bolt E 205 Article number: 803900102 From production number: 2347 complies with the essential requirements of the following directive, as far as possible attachment for information regarding which requirements are met) 2006/42/EC Machine directive 2011/65/EU RoHS directive The following harmonized standards are applied: EN 60335-1: 2012 Safety of household and similar electrical appliances Further we declare that the special technical documentation for this partly completed accordance with annex VII part B, and we undertake to transmit relevant information authorities upon request. The partly completed machinery must not be put into service until it is incorporated ir been declared in conformity with the provisions of the EC Machinery Directive and for conformity according to annex II A was issued. Empowered to draw up the declaration: ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	s, part 1 General requiremen d machinery is compiled in
Product description: Locking devices Function: Locking of swing gate openers Type designation: Electromagnetic bolt E 205 Article number: 803900102 From production number: 2347 complies with the essential requirements of the following directive, as far as possible attachment for information regarding which requirements are met) 2006/42/EC Machine directive 2014/30/EU EMC directive 2011/65/EU RoHS directive The following harmonized standards are applied: EN 60335-1: 2012 Safety of household and similar electrical appliances Further we declare that the special technical documentation for this partly completed accordance with annex VII part B, and we undertake to transmit relevant information authorities upon request. The partly completed machinery must not be put into service until it is incorporated ir been declared in conformity with the provisions of the EC Machinery Directive and for conformity according to annex II A was issued. Empowered to draw up the declaration: ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	s, part 1 General requiremen d machinery is compiled in
Function: Locking of swing gate openers Type designation: Electromagnetic bolt E 205 Article number: 803900102 From production number: 2347 complies with the essential requirements of the following directive, as far as possible attachment for information regarding which requirements are met) 2006/42/EC Machine directive 2014/30/EU EMC directive 2011/65/EU RoHS directive The following harmonized standards are applied: EN 60335-1: 2012 Safety of household and similar electrical appliances Further we declare that the special technical documentation for this partly completed accordance with annex VII part B, and we undertake to transmit relevant information authorities upon request. The partly completed machinery must not be put into service until it is incorporated ir been declared in conformity with the provisions of the EC Machinery Directive and fo conformity according to annex II A was issued. Empowered to draw up the declaration: ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	s, part 1 General requiremen d machinery is compiled in
attachment for information regarding which requirements are met) 2006/42/EC Machine directive 2014/30/EU EMC directive 2011/65/EU RoHS directive The following harmonized standards are applied: EN 60335-1: 2012 Safety of household and similar electrical appliances Further we declare that the special technical documentation for this partly completed accordance with annex VII part B, and we undertake to transmit relevant information authorities upon request. The partly completed machinery must not be put into service until it is incorporated ir been declared in conformity with the provisions of the EC Machinery Directive and fo conformity according to annex II A was issued. Empowered to draw up the declaration: ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	s, part 1 General requiremen d machinery is compiled in
2014/30/EU EMC directive 2011/65/EU RoHS directive The following harmonized standards are applied: EN 60335-1: 2012 Safety of household and similar electrical appliances Further we declare that the special technical documentation for this partly completed accordance with annex VII part B, and we undertake to transmit relevant information authorities upon request. The partly completed machinery must not be put into service until it is incorporated in been declared in conformity with the provisions of the EC Machinery Directive and for conformity according to annex II A was issued. Empowered to draw up the declaration: ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	d machinery is compiled in
EN 60335-1: 2012 Safety of household and similar electrical appliances. Further we declare that the special technical documentation for this partly completed accordance with annex VII part B, and we undertake to transmit relevant information authorities upon request. The partly completed machinery must not be put into service until it is incorporated in been declared in conformity with the provisions of the EC Machinery Directive and for conformity according to annex II A was issued. Empowered to draw up the declaration: ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	d machinery is compiled in
Further we declare that the special technical documentation for this partly completed accordance with annex VII part B, and we undertake to transmit relevant information authorities upon request. The partly completed machinery must not be put into service until it is incorporated ir been declared in conformity with the provisions of the EC Machinery Directive and fo conformity according to annex II A was issued. Empowered to draw up the declaration: ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	d machinery is compiled in
accordance with annex VII part B, and we undertake to transmit relevant information authorities upon request. The partly completed machinery must not be put into service until it is incorporated in been declared in conformity with the provisions of the EC Machinery Directive and fo conformity according to annex II A was issued. Empowered to draw up the declaration: ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	
been declared in conformity with the provisions of the EC Machinery Directive and fo conformity according to annex II A was issued. Empowered to draw up the declaration: ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	
ELKA-Torantriebe GmbH u. Co. Betriebs KG, Dithmarscher Str. 9, 25832 Tönning, G	
	Germany
Tönning, 20.11.2023 	
Attachment	
Requirements of annex I of 2006/42/EG which are met. The numbers relate to the ch	hapters of annex I:
1.1.2., 1.1.3., 1.1.5., 1.1.6., 1.2.1., 1.2.3., 1.2.6., 1.3.4., 1.3.8., 1.3.9., 1.5.1., 1.5.6., 1 1.7.3., 1.7.4. (partially),	1.5.11., 1.7.1. (partially), 1.7

Drawing 1

UK CA		ELK
UK-Declaration of inc for the installation of	orporation a partly completed machi	nery
according to Supply of M	achinery (Safety) Regulations 2	2008, annex II part 1 B
The manufacturer	ELKA-Torantriebe GmbH u. Dithmarscher Str. 9 25832 Tönning, Germany	Co. Betriebs KG
We herewith declare that th	e partly completed machinery	
Product description: Function: Type designation: Article number: From production number:	Locking devices Locking of swing gate opene E 205 803900102 2347	ers
	requirements of the following dire	ective, as far as possible with the scope of delivery (se e met)
Supply of Machiner Electromagnetic Co	y (Safety) Regulations 2008	ostances in Electrical and Electronic Equipment
The following harmonized s	tandards are applied:	
BS EN 60335-1: 2012	Safety of household and s requirements	similar electrical appliances, part 1 General
accordance with annex VII authorities upon request. The partly completed mach been declared in conformity an UK-Declaration of incorp Empowered to draw up the	part B, and we undertake to trans inery must not be put into service with the provisions of the Supply poration according to annex II A v	
Tönning, 20.11.2023		i.U. Oliva Hove
Attachment		i.V. Oliver Nave DiplIng. (FH) Chief Engineer
Attachment Requirements of annex I of the chapters of annex I:	Supply of Machinery (Safety) Re	gulations 2008 which are met. The numbers relate to
1.1.2., 1.1.3., 1.1.5., 1.1.6., 1.7.3., 1.7.4. (partially),	1.2.1., 1.2.3., 1.2.6., 1.3.4., 1.3.8	s., 1.3.9., 1.5.1., 1.5.6., 1.5.11., 1.7.1. (partially), 1.7.2.

Drawing 2

4.1 Declaration of conformity – complete system

After the installation an EG-declaration of conformity according to EC-machinery directive 2006/42/EG for the complete system has to be issued by the person responsible for the integration.

4.2 Nameplate

The type plate is attached to the electric lock E 205 under the cover.

i

5

Usage

Electromagnetic bolt E 205 to lock swing gates. The bolt locks either downwards or to the side.

When using the electromagnetic bolt sidewards, it must be protected from moisture by a cover (on site).

6

Technical data

Power supply	24Vac/dc	
Maximum current	approx. 6.0A during stroke movement approx. 1.0A during stop position	
Degree of protection	IP43	
Emergency release	With key (cylinder lock)	
Measurements (W x H x L)	94 x 295 x 58mm	
Stroke	50mm	

Table 1



7 Installation



WARNING!

Risk of injury due to improper installation!

Improper installation can lead to serious injuries and property damage!

- > All assembly and adjustment work may only be carried out by qualified personnel or electricians.
- Sufficient freedom of assembly must be ensured before and during the work. Mounting materials, components or tools are obstacles and sources of danger!
- The fastening data (foundation and anchoring / screws) are minimum requirements and must be adhered to.



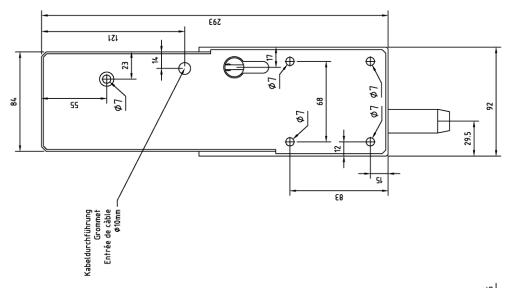
WARNING! Risk of injury in the assembly area!

Unauthorized persons may be injured during assembly in the non-secured assembly area!

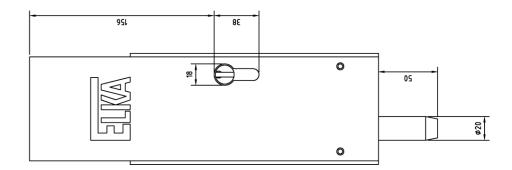
- > The assembly area must be clearly blocked or secured.
- > Unauthorized persons and vehicles must not be present in the assembly area.

7.1 **Mounting dimensions**

Installation for locking downwards. The length of the pin is 50mm from the lower edge of the housing.







Drawing 3



Mount the electric lock on a flat surface! When installed on a uneven surface, the housing of the electric lock may brace which can compromise the function of the electric lock itself!

CAUTION !

Do not screw too toght! If the screw connection is too tight, the housing of the electric lock may brace which can compromise the fonction of the electric lock itself!

ELKA

7.2 Electrical connection

The cross section of the cable to the bolt depends on the distance between the controller and the electromagnetic bolt:

up to 50m: 1.5mm²



Please note that with an increasing distance between controller and swing gate the range of the radio remote control decreases, since the radio remote control receiver is plugged onto the controller.

7.2.1 Electrical connenction MO36 when using without warning light (230VAC)

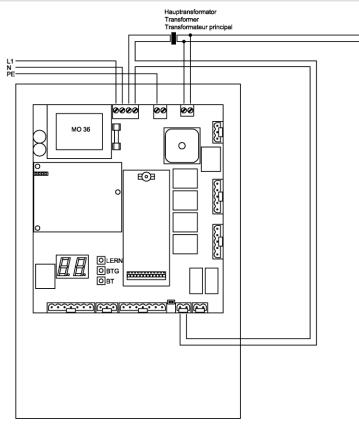


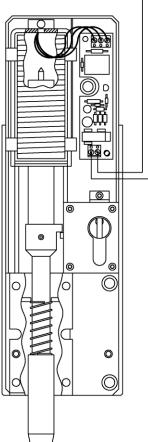
WARNING!

Danger by electrical voltage!

Danger of electric shock.

The device should be connected to the supply voltage (230Vac) by a qualified electrician only.





Drawing 4

Directly connectable through the warning light connection and the main transformer of the controller MO 36. Connect the electromagnetic bolt E 205 to the transformer clamp of the main board (secondary winding of the toroid transformer). The supply of the toroid transformer is switched over one conductor of the warning light connection.



Please set the pre-warning time for both directions to 4 seconds (learning sequence P8).

7.2.2 Electrical connection MO36 when using with warning light (230 VAC)

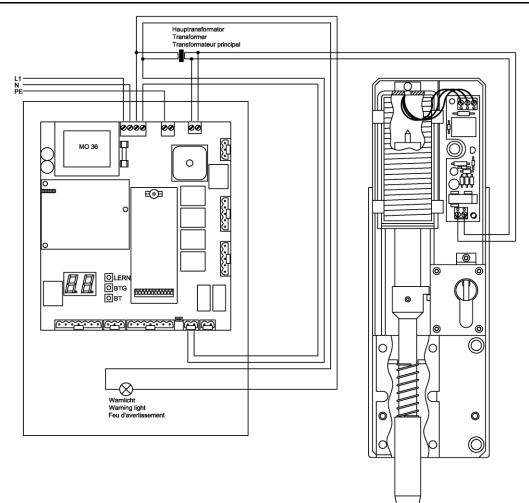


WARNING!

Danger by electrical voltage!

Danger of electric shock.

The device should be connected to the supply voltage (230Vac) by a qualified electrician only.



Drawing 5

Connect the electromagnetic bolt E 205 to the transformer clamp of the main board (secondary wiring of the toroid transformer). The supply of the toroid transformer is switched over one conductor of the warning light connection.



Set the pre-warning time for both directions to 4 seconds (learning sequence P8).

When warning light and the E 205 shall be used, connect the warning light as shown above.



7.2.3 Electrical connection MO 32, MO 34 and other controllers

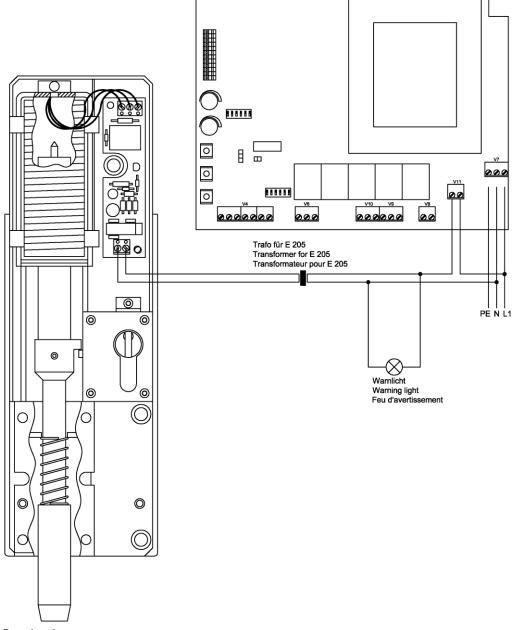


WARNING!

Danger by electrical voltage!

Danger of electric shock.

> The device should be connected to the supply voltage (230Vac) by a qualified electrician only. Installation example controller MO 34



Drawing 6

With other controllers the power supply has to come through a separate transformer from a connection which is activated at every gate movement, e.g. warning light connection.



7.3 Emergency release during power failure

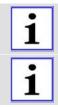
Release the bolt by turning the key clockwise (approx. 4 turns) until the pin has reached its upper position.



ATTENTION!

Using the key move the pin into the uppermost (emergency released) position or into the lowest (engaged) position only. Do not move the pin into an in-between position.

Engage by turning the key counter-clockwise.



The enclosed single cylinder lock can be replaced by another single cylinder lock or by a double cylinder lock on site (e.g. from a master key system).

When using a double cylinder lock the lock can be released from inside or outside the gate as long as there is an opening for the double profile cylinder in the gate leaf.

8 Decommissioning

A product that is no longer usable should not be recycled as complete unit, but recycled according to material types. Non-recyclable materials have to be disposed of in an environmentally compatible manner.

- The decommissioning, disassembly and disposal of the product must be carried out by qualified persons.
- The disassembly has to be carried out in reverse order to the assembly.
- The product has be disposed of according with respective country-specific regulations.

8.1 Disposal

i

For any related questions to proper disposal of the electrical and electronic components contact ELKA or competent specialist dealer.

INFORMATION!

Environmental hazard due to inappropriate disposal of the product (or parts thereof)! Incorrect disposal can cause damage to the environment.

- > The applicable environmental standards must always be observed.
- > After appropriate dismantling and disassembly, use the dismantled components for recycling.
- Separate the valuable substances and recycle the relevant material.

Index

D
Decommissioning14 Disposal14
Disposal14
E
Electrician
G
General information2
I
Installation8
Instructed person3

М
Mounting dimensions9
Р
Personal protective equipment3
S
Specialist
т

I

Technical data7
