## A Leuze electronic

the sensor people

## L100

Safety Locking Devices

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## $\Delta$ Leuze electronic

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## 1 About this document

### 1.1 Other applicable documents

The information on the L100 Safety Locking Device is divided into two documents. Document "L100 Application information" contains only the most important safety notices.
${ }^{\circledR}$ ) For the safe implementation, testing and operation, download document L100
Safe implementation and operation from http://www.leuze.com/l100/ or request it from service.schuetzen@leuze.de or tel. +49 8141 5350-111.

Table 1.1: Documents for the L100 Safety Locking Device

| Purpose and target group | Title | Source |
| :--- | :--- | :--- |
| Detailed information for all <br> users | L100 Safe implementation <br> and operation (this docu- <br> ment) | On the Internet, download <br> from: http:// <br> www.leuze.com//100/ |
| Basic information for techni- <br> cians and operating company | L100 Application information | Print document part <br> no. 607244 included in the <br> delivery contents of the <br> product |

### 1.2 Used symbols and signal words

Table 1.2: Warning symbols and signal words

|  | Symbol for dangers |
| :--- | :--- |
| NOTICE | Signal word for property damage <br> Indicates dangers that may result in property damage if the measures for <br> danger avoidance are not followed. |
| CAUTION | Signal word for minor injury <br> Indicates dangers that may result in minor injury if the measures for dan- <br> ger avoidance are not followed. |
| WARNING | Signal word for severe injury <br> Indicates dangers that may result in severe or fatal injury if the measures <br> for danger avoidance are not followed. |
| DANGER | Signal word for life-threatening danger <br> Indicates dangers that will result in severe or fatal injury if the measures <br> for danger avoidance are not followed. |

Table 1.3: Other symbols

|  | Symbol for tips <br> Text passages with this symbol provide you with further information. |
| :---: | :--- |
|  | Symbols for action steps <br> Text passages with this symbol instruct you to perform actions. |
|  | Placeholder in the product description for all variants |

## 2 Safety

Before using the Safety Locking Device, a risk evaluation must be performed according to valid standards (e.g. EN ISO 12100-1, EN ISO 13849-1, EN ISO 14121). For mounting, operating and testing, document L100 Safe implementation and operation, application information as well as all applicable national and international standards, regulations, rules and directives must be observed. Observe and print out relevant and supplied documents and distribute to the affected personnel.


## WARNING

Serious accidents may result if the voltage supply is interrupted!
If the voltage supply to the electromagnet of an electromagnetically locked Safety Locking Device is interrupted, the protective device may be opened immediately.

The following standards apply for the risk evaluation at the protective device prior to using the Safety Locking Device:

- EN ISO 14121, Safety of machinery, risk evaluation
- EN ISO 12100-1, Safety of machinery
- EN ISO 13849-1, Safety-related parts of control systems

The realizable category of the integration in control circuits according to EN ISO $13849-1$ is dependent on the used contact block and wiring.
In particular, the following national and international legal regulations apply for the start-up, technical inspections and work with Safety Locking Devices:

- Machinery directive 2006/42/EC
- Low voltage directive 2006/95/EC
- Electromagnetic compatibility directive 2004/108/EC
- Use of work equipment directive 89/655 EEC
- Safety regulations
- Accident-prevention regulations and safety rules
- Ordinance on Industrial Safety and Health and Labor Protection Act
- Device Safety Act

For safety-related information you may also contact the local authorities (e.g., industrial inspectorate, employer's liability insurance association, labor inspectorate, labor protection and health authority).

### 2.1 Approved purpose and foreseeable improper operation

### 2.1.1 Proper use

- The Safety Locking Device must only be used after it has been selected in accordance with the respectively applicable instructions and relevant standards, rules and regulations regarding labor protection and safety at work, and after it has been installed on the machine, connected, commissioned, and checked by a competent person.
- When selecting the Safety Locking Device it must be ensured that its safetyrelated capability meets or exceeds the required performance level $P L_{r}$ ascertained in the risk assessment.
- It must be in perfect condition and inspected regularly.
- The switching process must only be triggered by an actuator approved for this Safety Locking Device that is connected to the moveable guard in a non-detachable and tamperproof manner.



## WARNING

A running machine can cause severe injuries!
${ }^{4}$ ) Make certain that, during all conversions, maintenance work and inspections, the system is securely shut down and protected against being restarted again.

L100 Safety Locking Devices must be connected in such a way that a dangerous state can only be activated while the protective device is closed and so that they prevent premature opening during the lag time before the dangerous state has ended. Electromagnetic Safety Locking Devices may only be used instead of spring-locked Safety Locking Devices in exceptional cases and following appropriate risk evaluation.
Connection conditions:

- dangerous state can be activated only with closed protective device and locked locking device
- protective device cannot be opened while locking device is locked

Furthermore, the L100 Safety Locking Device must not be used under the following conditions:

- high concentration of dust particles in the surrounding area
- rapidly changing ambient temperature (leads to condensation)
- in the event of strong physical shocks
- in explosive or easily flammable atmospheres
- the mounting locations are not sufficiently stable
- in the event of electromagnetic interference
- the safety of multiple persons is dependent on the function of this Safety Locking Device (e.g. nuclear power plants, trains, aircraft, motor vehicles, incinerators, medical devices)
Handling the Safety Locking Device:
${ }^{\Perp}$ Never unlock the Safety Locking Device before the dangerous state has ended.
( ) Observe the permissible environmental conditions for storage and operation (see chapter 14).
↔ Immediately replace damaged Safety Locking Devices according to these instructions.

4) Use cable gland, insulation materials and connecting wires of the appropriate protection rating.
4 Protect the Safety Locking Device from penetrating foreign bodies (e.g. shavings, sand and blasting agent).
↔) Before performing painting work, cover the actuation slot, actuator and name plate.
«) Immediately clean any contamination from the Safety Locking Device that impacts function according to these instructions.
↔ Make no structural changes to the Safety Locking Device.
5) The Safety Locking Device must be exchanged after a maximum of 20 years.

### 2.1.2 Foreseeable misuse

Any use other than that defined under the "approved purpose" or which goes beyond that use of the Safety Locking Device is considered improper use!
E.g. - using without non-detachably mounted actuator

- looping into the safety circuit parts that are not relevant to safety
- using the locking device as a limit stop


### 2.2 Competent personnel

Prerequisites for competent personnel:

- suitable technical training
- knows the rules and regulations for labor protection, safety at work and safety technology and can assess the safety of the machine
- knows the instructions for the Safety Locking Device and the machine
- was instructed by the responsible individuals on the mounting and operation of the machine and of the Safety Locking Device


### 2.3 Responsibility for safety

Manufacturer and operating company must ensure that the machine and implemented Safety Locking Device function properly and that all affected persons are adequately informed and trained.
The type and content of all imparted information must not lead to unsafe actions by users.

The manufacturer of the machine is responsible for:

- safe machine construction
- safe implementation of the Safety Locking Device
- imparting all relevant information to the operating company
- adhering to all regulations and directives for the safe starting-up of the machine

The operating company is responsible for:

- instructing the operating personnel
- maintaining the safe operation of the machine
- adhering to all regulations and directives for labor protection and safety at work
- regular testing by competent personnel


### 2.4 Exemption of liability

Leuze electronic $\mathrm{GmbH}+\mathrm{Co}$. KG is not liable in the following cases:

- Safety Locking Device is not used as intended
- safety notices are not adhered to
- mounting and electrical connection are not properly performed
- reasonably foreseeable misuse is not taken into account


## 3 Device description

The Safety Locking Device of the L100 series is an electro-mechanical switching device in a housing made of glass-fibre-reinforced and non-combustible plastic; the device satisfies protection rating IP 66. By means of the funnel-shaped insertion opening, the actuator self-centers, even if the door is slightly misadjusted. The magnet switched currents can be reduced for both variants (adjustable via a switch). The spring-actuated models (L100-Pxxx-SLM24) are equipped with an auxiliary release located below the deflection head.


1 Deflection head
2 Dust cover
3 Insertion opening for actuator
4 Auxiliary release (L100-Pxxx-SLM24)
5 Housing cover
6 Name plate (connection data, production code and year of manufacture)

Table 3.1: L100 Safety Locking Devices

| Article | Part No. | Description |
| :--- | :--- | :--- |
| L100-P3C3-M20-SLM24 | 63000600 | Mechanical locking (spring force), manual auxiliary <br> release, slow action contacts M:(1NC+1NO) <br> A:(1NC) |
| L100-P3C3-M20-MLM24 | 63000601 | Electromagnetic locking, slow action contacts <br> M:(1NC+1NO) A:(1NC) |
| L100-P4C3-M20-SLM24 | 63000602 | Mechanical locking (spring force), manual auxiliary <br> release, slow action contacts M:(2NC) A:(1NC) |



Figure 3.1: Dimensions of L100-P3C3-M20-SLM24 and L100-P4C3-M20SLM24 in mm


Figure 3.2: Dimensions of L100-P3C3-M20-MLM24 in mm
The deflection head can be turned in $90^{\circ}$ increments and set to 5 approach directions. A selection of different actuators ensures that the Safety Locking Device can be mounted in any position.


Figure 3.3: Approach directions

## 4 Functions

### 4.1 Spring locking

With the L100-P3C3-M20-SLM24 and L100-P4C3-M20-SLM24, the safety contacts close when the actuator moves in, and the actuator is mechanically held in the locked position by the spring force. The dangerous process can be activated via the safety switching device.
After the dangerous process has stopped, the operating voltage for unlocking the electromagnet is applied and the actuator is released. The protective device can be opened. In the event of failure of the operating voltage, release is also possible via the auxiliary release.

### 4.2 Electromagnetic locking

With the L100-P3C3-M20-MLM24, the safety contact for the position monitoring of the protective device closes when the actuator is moved in. The electromagnet is energized and holds the actuator in the locked position. The dangerous process can be activated via the safety switching device.
On release, the voltage supply to the electromagnet is interrupted. The electromagnet releases the actuator and the protective device can be opened.

## 5 Applications

Safety Locking Devices with spring locking are suitable for e.g. position monitoring and locking the following protective devices:

- turning or swiveling moveable guards
- laterally moveable protective gratings or sliding gates

Safety Locking Devices with electromagnetic lock are used primarily as locks for moveable guards to prevent undesired process interruptions.
By means of the switched-current reduction option, larger systems can be equipped with multiple L100 Safety Locking Devices. With magnet activation, possible voltage peaks associated with switching on and off can be reduced in this way.

## 6 Mounting

## WARNING

Severe accidents may result if the Safety Locking Device is not mounted properly!
The protective function of the Safety Locking Device is only ensured if used in the intended area of application and if it is mounted professionally.
$\leftrightarrow$ Mounting may only be performed by competent personnel.
${ }_{4}$ ) Observe standards, regulations and these instructions.
\& Protect the housing and deflection head from materials penetrating the enclosure (environmental conditions (see chapter 14)).
$\leftrightarrow$ Test to ensure proper function.

### 6.1 Adjusting the deflection head

${ }^{\star}$ ) Unscrew the 2 screws on the deflection head.
$\leftrightarrow$ Turn the deflection head in the desired direction.

${ }^{4}$ Tighten the 2 screws on the deflection head with $0.7-0.9 \mathrm{Nm}$.
$\stackrel{4}{4}$ Close unused opening with the dust cover.

### 6.2 Mounting the Safety Locking Device

Prerequisites for mounting:

- deflection head has been set
- fully assembled
$\stackrel{\mu}{>}$ Select the mounting location so that the following conditions are satisfied:
- Safety Locking Device and actuator can be well matched to one another and permanently mounted
- auxiliary release is accessible to qualified personnel
- accessible to qualified personnel for testing and replacement
${ }^{4}$ P Position washers and screw down Safety Locking Device with 2-3Nm.



### 6.3 Mounting the actuator

## NOTICE

The Safety Locking Device may be damaged if mounted improperly!
${ }^{4}$ ) Use separate mechanical limit stop for the moving part of the protective device.
. Align actuator so that it does not hit or rub against the edges of the insertion opening.

Prerequisites for proper function:

- actuator is not deformed or damaged
- actuator is appropriate for the Safety Locking Device Proper function is ensured only with original accessories (see chapter 13).

Wrong


Correct

(4) Align actuator.

Play for the actuator in the closed state: $0.5-5 \mathrm{~mm}$.

${ }^{\wedge}$ Secure actuator with rivets or tamperproof screws so that it cannot be detached.


## 7 Electrical connection



## WARNING

Serious accidents may result if the electrical connection is faulty!
$\stackrel{y}{4}$ Electrical connection may only be performed by competent personnel.

### 7.1 Setting the switched-current reduction

O With magnet activation, this function enables the reduction of switch-on and
! switch-off peaks by splitting into up to 4 groups.

## DANGER

## Risk of death by electric shock!

${ }^{4}$ Interrupt the voltage supply to the Safety Locking Device.
${ }^{4}$ ) Unscrew the housing cover.
${ }^{4}$ ) Remove the two screws on the black protective cover of the electromagnet.
$\stackrel{\Perp}{ } \rightarrow$ Remove the protective cover.
${ }^{4}$ ) Use an appropriate tool to set the DIP switches of the Safety Locking Devices to different combinations (for more than 4 Safety Locking Devices, split uniformly).

$\xrightarrow{4}$ Mount the black protective cover and screw down with 0.8 Nm .
${ }^{\text {n }}$ ) Tighten the housing cover with $0.7-0.9 \mathrm{Nm}$.

### 7.2 Connecting the contact block

Prerequisites:

- temperature stability of the cable insulation material must be greater than the maximum temperature of the housing (see chapter 14)
- cable gland with appropriate protection rating
- maximum current load is observed (see chapter 14)


Figure 7.1: Contact block 2NC + 1NO (L100-P3xxx)


Figure 7.2: Contact block 2NC + 1NC (L100-P4xxx)

A

## DANGER

Risk of death by electric shock!
$\stackrel{4}{4}$ Interrupt the voltage supply to the Safety Locking Device.
${ }^{4}$ ) Unscrew the housing cover.
$\stackrel{\wedge}{\wedge}$ Connect the electromagnet via terminals A1 and A2.
$\stackrel{4}{4}$ Connect the contact block according to the application-specific circuit diagram.


Figure 7.3: Connection example L100-P3C3-M20-SLM24
$\stackrel{4}{4}$ Tighten cable terminal screws with $0.6-0.8 \mathrm{Nm}$.

${ }^{4}$ ) Tighten the housing cover with $0.7-0.9 \mathrm{Nm}$.

## 8 Setting the device into service

## !. WARNING <br> Serious accidents may result if the Safety Locking Device is unlocked prematurely!

${ }^{4}$ ) Before unlocking the Safety Locking Device and opening the protective device, wait until the dangerous state has ended.

Prerequisites:

- Safety Locking Device is mounted and connected according to these instructions
- operating personnel have been trained in the correct use
$\stackrel{4}{4}$ Test the function of the Safety Locking Device (see chapter 9).
The Safety Locking Device is then ready for use.


## $9 \quad$ Testing

L100 Safety Locking Devices are maintenance free. Nevertheless, they must be replaced after maximum 800,000 switching cycles.
$\leadsto$ Always replace the entire Safety Locking Device including actuator.
${ }^{\Perp}$ For the testing intervals, observe nationally applicable regulations.
${ }^{\star}$ Document all tests in a comprehensible manner.

### 9.1 To be performed prior to the initial start-up by competent personnel

4) Check whether the Safety Locking Device is operated according to its specified environmental conditions (see chapter 14).
$\stackrel{\text { ® }}{ }$ Test to ensure proper mechanical and electrical function (see chapter 9.2).

### 9.2 To be performed periodically by competent personnel

Mechanical function
${ }^{4}$ Stop the dangerous state and open the protective device.
$\Leftrightarrow$ Check that the components are securely fastened.
$\leadsto$ Test the cable entry for leaks.
4. Check Safety Locking Device and actuator for damage, deposits, deformation and wear.
(4) If present, test auxiliary release.

ヶ Test several times whether the actuator can be easily moved into the Safety Locking Device.

## Electrical function

| 1 WARNING |
| :--- | :--- |
| Severe accidents may result if tests are not performed properly! |
| $\&$ Make certain that there are no persons in the danger zone. |

↔ Stop the dangerous state and open the protective device.
$\leftrightarrow$ Make certain that the machine cannot be started while the protective device is open.
${ }_{4}{ }^{4}$ Close the protective device and start the machine.
4. Make certain that the protective device cannot be opened until after the machine has been shut down and the Safety Locking Device has been released.
«y Make certain that the dangerous state ends before the protective device can be opened.

### 9.3 To be performed daily by the operating personnel

## WARNING

Severe accidents may result if tests are not performed properly!
$\stackrel{\leftrightarrow}{\Perp}$ Make certain that there are no persons in the danger zone.
${ }^{4}$ Stop the dangerous state and open the protective device.
4. Check the Safety Locking Device and actuator for damage or tampering.
$\leftrightarrow$ Make certain that the machine cannot be started while the protective device is open.
$\Perp$ Close the protective device and start the machine.
$\leftrightarrow$ Make certain that the protective device cannot be opened until after the machine has been shut down and the Safety Locking Device has been released.

## 10 Cleaning

There must be no soiling (e.g. shavings or dust) present, especially in the deflection head of the Safety Locking Device.
Prerequisites for cleaning:

- protective device is opened and machine is switched off
- voltage supply for the Safety Locking Device is interrupted
$\stackrel{4}{4}$ Periodically clean the Safety Locking Device while the protective device is opened (e.g. with vacuum cleaner).


## 11 Disposing

${ }^{4}$ The nationally valid regulations for electro-mechanical components are to be observed when disposing.

## 12 Service and support

Telephone number for 24 -hour standby service:
+49 (0) 7021/573-0

Service hotline:
+49 (0) 8141/5350-111
Monday to Thursday, 8.00 a.m. to 5.00 p.m. (UTC+1)
Friday, 8.00 a.m. to 16.00 p.m. (UTC +1)

E-mail:
service.protect@leuze.de Return address for repairs: Service Center Leuze electronic GmbH + Co. KG
In der Braike 1
D-73277 Owen - Teck / Germany


Leuze electronic offers a regular safety inspection by a competent person.

## 13 Accessories

Table 13.1: Actuators of the AC-AH series for the L100 Safety Locking Device

| Article | Part No. | Description |
| :--- | :--- | :--- |
| AC-AH-S | 63000720 | Straight |
| AC-AH-A | 63000721 | Angled |
| AC-AH-F4 | 63000722 | Straight, flexible, 4 directions |
| AC-AH-F2J2 | 63000723 | Straight, flexible, 2 directions, alignable 2 direc- <br> tions |
| AC-AH-F1J2 | 63000724 | Straight, flexible, 1 direction, alignable 2 directions |
| AC-AH-F4J2-TK | 63000725 | Straight, flexible, 4 directions, alignable 2 direc- <br> tions, rotatable head |

Table 13.2: Accessories for the L100 Safety Locking Device

| Article | Part No. | Description |
| :--- | :--- | :--- |
| AC-A-M20-12NPT | 63000843 | Adapter, M20 x 1.5 on 1/2 NPT |
| AC-PLP-8 | 63000844 | Built-in plug, M12, plastic, with internal 8-pin con- <br> nection cable |
| AC-KL-AH | 63000846 | Actuator interlock, for locking the actuator intro- <br> duction |
| CB-M12-5000E-5GF | 678055 | PUR, 5-pin, 5 m, shielded, M12 coupling, straight, <br> prefabricated on one end |
| CB-M12-10000E-5GF | 678056 | PUR, 5-pin, 10 m, shielded, M12 coupling, <br> straight, prefabricated on one end |
| CB-M12-15000E-5GF | 678057 | PUR, 5-pin, 15 m, shielded, M12 coupling, <br> straight, prefabricated on one end |
| CB-M12-25000E-5GF | 678058 | PUR, 5-pin, 25 m, shielded, M12 coupling, <br> straight, prefabricated on one end |
| CB-M12-5000E-8GF | 678060 | PUR, 8-pin, 5 m, shielded, M12 coupling, straight, <br> prefabricated on one end |


| Article | Part No. | Description |
| :--- | :--- | :--- |
| CB-M12-10000E-8GF | 678061 | PUR, 8-pin, 10 m, shielded, M12 coupling, <br> straight, prefabricated on one end |
| CB-M12-15000E-8GF | 678062 | PUR, 8-pin, 15 m, shielded, M12 coupling, <br> straight, prefabricated on one end |
| CB-M12-25000E-8GF | 678063 | PUR, 8-pin, 25 m, shielded, M12 coupling, <br> straight, prefabricated on one end |

### 13.1 Accessory dimensional drawings



Figure 13.1: AC-AH-S actuator


Figure 13.2: AC-AH-A actuator


Figure 13.3: AC-AH-F4 actuator


Figure 13.4: AC-AH-F2J2 actuator


Figure 13.5: AC-AH-F1J2 actuator


Figure 13.6: AC-AH-F4J2-TK actuator

## 14 Technical data

Table 14.1: General

| Switch type | Interlock device with locking according to <br> EN 1088 |
| :--- | :--- |
| Actuator, external | AC-AHxx series: straight, angled, <br> spring-mounted, adjustable |
| Lock type | L100-Pxxx-SLM24: spring force <br> L100-Pxx-MLM24: electromagnetic |
| Lock actuation | L100-Pxxx-SLM24: spring <br> L100-Pxxx-MLM24: electromagnet |
| Approach actuation directions | $1 \times$ above, $4 \times$ side $\left(90^{\circ}\right)$ |
| Approach speed | min. $1 \mathrm{~mm} / \mathrm{s}$, max. $0.5 \mathrm{~m} / \mathrm{s}$ |
| Actuation force (pull-out) | 30 N |
| Actuation path, min. with forced separation | 10 mm |
| Mechanical life time in accordance with <br> IEC 60947-5-1 | $0.8 \times 10^{6}$ switching cycles |
| Actuation frequency according to <br> IEC 60947-5-1 | max. 600 per hour |
| Service life (T m $)$ in accordance with <br> EN ISO 13849-1 | 20 years |


| Number of cycles before dangerous failure (B10d) according to EN 61810-2 | 5,000,000 |
| :---: | :---: |
| Usage category according to EN 60947-5-1 <br> Maximum load when using 5-pin cables: Maximum load when using 8-pin cables: | $\begin{aligned} & \mathrm{AC} 15 \text { (Ue / le): } \\ & 250 \mathrm{~V} / 6 \mathrm{~A} \\ & 400 \mathrm{~V} / 4 \mathrm{~A} \\ & 500 \mathrm{~V} / 1 \mathrm{~A} \\ & \\ & \mathrm{DC} 13 \text { (Ue / le): } \\ & 24 \mathrm{~V} / 6 \mathrm{~A} \\ & 125 \mathrm{~V} / 1.1 \mathrm{~A} \\ & 250 \mathrm{~V} / 0.4 \mathrm{~A} \\ & \\ & 24 \mathrm{~V} / 4 \mathrm{~A} \text { (see chapter 13) } \\ & 24 \mathrm{~V} / 2 \mathrm{~A} \text { (see chapter 13) } \end{aligned}$ |
| Dimensions (dimensional drawings) | see chapter 3 |

Table 14.2: Safety

| Protection rating | IP 66 |
| :--- | :--- |
| Contact protection | protective insulation O |
| Recoil tolerance | 4.5 mm |
| Interlocking force | max. 1100N |
| Contact allocation | L100-P3xx: <br> magnet: 1NC + 1NO, actuator: 1NC <br> L100-P4xxx: <br> magnet: 2NC, actuator: 1NC |
| Contact material | silver alloy |
| Switching principle | slow-action contact |
| Opening of contact | positive-forced |
| Rated insulation voltage | 400 V AC |
| Conventional thermal current | max. 10 A <br> Shagnet: $1.0 \mathrm{~A}, 24 \mathrm{~V}$, type aM <br> IEC $60269-1$ |
| Magnet operating voltage and tolerance | 24 VDC (-10\% to +25\%) |


| Switch-on time | $100 \%$ |
| :--- | :--- |
| Power consumption | average 20VA |
| Switch-on power limit, adjustable | 4-way |

Table 14.3: Housing

| Housing material | fiberglass-reinforced, thermo-plastic plastic, <br> self-extinguishing |
| :--- | :--- |

Table 14.4: Connection

| Number of cable entries | 3 |
| :--- | :--- |
| Type of cable entry | $\mathrm{M} 20 \times 1.5$ |
| Conductor cross-section (stranded) | $1 \times 0.34 \mathrm{~mm}^{2}$ to $2 \times 1.5 \mathrm{~mm}^{2}$ |

Table 14.5: Environment

| Temperature range, operation | $-25 \ldots+60^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Degree of contamination, external, <br> according to EN 60947-1 | 3 |

O These tables do not apply in combination with additional M12 plug or connecting

1cable except where these components are explicitly mentioned.

# 15 EC Declaration of Conformity 

# Leuze electronic 

EG-KONFORMITÄTSERKLÄRUNG

EC DECLARATION OF CONFORMITY

DECLARATION CE DE CONFORMITE

| Der Hersteller | The Manufacturer | Le constructeur |
| :---: | :---: | :---: |
| erklärt, dass die nachfolgend aufgeführten Produkte den einschlägigen Anforderungen der genannten EG-Richtlinien und Normen entsprechen. | Leuze electronic GmbH + Co. KG <br> In der Braike 1, PO Box 1111 <br> 73277 Owen, Germany <br> declares that the following listed products fulfil the relevant provisions of the mentioned EC Directives and standards. | déclare que les produits identifiés suivants sont conformes aux directives CE et normes mentionnées. |
| Produktbeschreibung: | Description of product: | Description de produit: |
| Sicherheits-Schalter S20, S200, S300, S400 Sicherheits-Zuhaltung L10, L100, L200 <br> NOT-HALT-Befehlsgerät ERS200 <br> Seriennummer siehe Typschild | Safety Switch <br> S20, S200, S300, S400 <br> Safety Locking Device <br> L10, L100, L200 <br> E-STOP command device <br> ERS200 <br> Part No. see name plates | Interrupteur de sécurité S20, S200, S300, $\mathbf{S 4 0 0}$ <br> Interverrouillage de sécurité L10, L100, L200 <br> Appareil de commande d'ARRÊT <br> D'URGENCE <br> ERS200 <br> Art. $\mathrm{n}^{\circ}$ voir plaques signalétiques |
| Angewandte EG-Richtlinie(n): | Applied EC Directive(s): | Directive(s) CE appliquées: |
| $\begin{gathered} \text { 2006/42/EG } \\ \text { 2004/108/EG } \\ \text { 2006/95/EG } \end{gathered}$ | $\begin{gathered} 2006 / 42 / \mathrm{EC} \\ 2004 / 108 / \mathrm{EC} \\ 2006 / 95 / \mathrm{EC} \end{gathered}$ | $\begin{gathered} \text { 2006/42/CE } \\ \text { 2004/108/CE } \\ \text { 2006/95/CE } \end{gathered}$ |
| Angewandte Normen: | Applied standards: | Normes appliquées: |
|  | EN 60947-5-1; IEC 60947-5-1 |  |
| Benannte Stelle / Baumusterprüfbescheinigung: | Notified Body / Certificate of Type Examination: | Organisme notifié / Attestation d'examen CE de type: |

IMQ S.p.A.
Istituto Italiano Del Marchio Di Qualitá Via Quintiliano 43 l-20138 Milano

CAO2.03747(S20); CAO2.03748 (L100) );
, CAO2.04212 (L200); CAO2.03749 (S200, S300);
1 CAO2.03756 (S400); CAO2.03749 (ERS200, L10-M); CAO2.03750 (L10-P)

| Bevollmächtigter für die Zusam- <br> menstellung der technischen <br> Unterlagen: | Authorized person to compile the <br> technical file: | Personne autorisée à constituer <br> le dossier technique: |
| :---: | :---: | :---: |

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