



Product Service

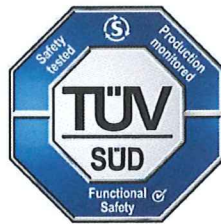
# CERTIFICATE

No. Z10 13 05 22795 099

**Holder of Certificate:** Leuze electronic GmbH + Co. KG  
Liebigstrasse 4  
82256 Fürstenfeldbruck  
GERMANY

**Factory(ies):** 70507

**Certification Mark:**



**Product:** Electro-Sensitive Protective Equipment  
Safety Light Curtain

**Model(s):** MLC-Series  
For nomenclature see attachment

**Parameters:**

Power Supply:	24VDC $\pm$ 20%
Protective field height:	150 - 3000mm (in Steps of 150mm)
Operating temperature:	0°C - +55°C
Degree of protection:	IP 67

**Tested according to:**

- 2006/42/EC
- EN 61508-1:2001 (SIL1/SIL3)
- EN 61508-2:2001 (SIL1/SIL3)
- EN 61508-3:2001 (SIL1/SIL3)
- EN 61508-4:2001 (SIL1/SIL3)
- EN ISO 13849-1:2008 (Cat.2/4 PL c/e)
- IEC 61496-1:2012 (Type 2/4)
- IEC 61496-2:2013 (Type 2/4)

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

**Test report no.:** 717502509

**Valid until:** 2018-05-16

**Date,** 2013-05-17

  
( Günter Greil )



Page 1 of 2



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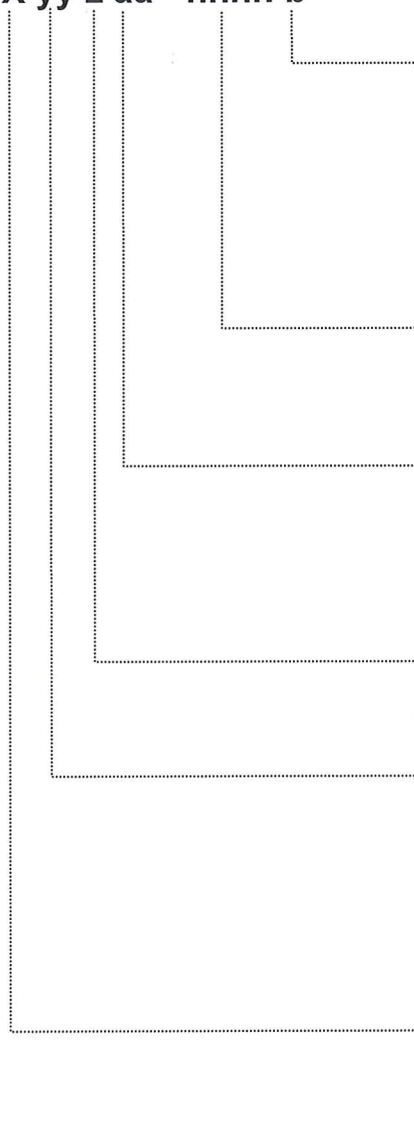
# ATTACHMENT

to certificate

No. Z10 13 05 22795 099

## Nomenclature of MLC-Series

MLC X yy z aa - hhhh b



### Option

- H Host
- G Guest
- MG Middle Guest
- L L-Shape
- U U-Shape
- C Cutter
- /A AS-i Interface

### Protective field height

- 150... from 150mm
- ...3000 to 3000mm
- (in Steps of 150mm)

### Resolution

- 14 14mm
- 20 20mm
- 30 30mm
- 40 40mm
- 90 90mm

### Device type

- T Transmitter
- R Receiver

### Function classes

- 00 Transmitter
- 10 Receiver PNP
- 18 Receiver NPN
- 20 Receiver PNP - EDM/RES
- 28 Receiver NPN - EDM/RES
- 30 Receiver PNP - Muting/Blanking
- 38 Receiver NPN - Muting/Blanking

### Series

- 3 MLC 300 (Type 2)
- 5 MLC 500 (Type 4)

Department: TR-RA/MUC  
 Date: 2013-05-17

Page 2 of 2

## Zertifizierungsvertrag

Grundlage für die Zertifikatserteilung ist die Prüf- und Zertifizierungsordnung von TÜV SÜD Product Service.

Mit Erhalt des Zertifikates erkennt der Zertifikatsinhaber die jeweils gültige Fassung der Prüf- und Zertifizierungsordnung an ([www.tuev-sued.de/ps\\_regulations](http://www.tuev-sued.de/ps_regulations)) und wird somit Partner im Zertifizierungssystem von TÜV SÜD Product Service.

### Prinzipielle Voraussetzung für die Gültigkeit des Zertifikates:

- Gültigkeit der zitierten normativen Prüfgrundlage(n) ist gegeben
- und zusätzlich bei Zertifikaten mit Berechtigung zur Verwendung eines Prüfzeichens bzw. bei Zertifikaten für QM-Systeme:
- Voraussetzungen für vorschriftsmäßige Fertigung werden eingehalten.
- Die Fertigungs- bzw. Betriebsstätten werden regelmäßig überwacht.

## Certification contract

Certification is based on the TÜV SÜD Product Service Testing and Certification Regulations.

On receipt of the certificate the certificate holder agrees to the current version of the Testing and Certification Regulations ([www.tuev-sued.de/ps\\_regulations](http://www.tuev-sued.de/ps_regulations)) and thus becomes partner in the TÜV SÜD Product Service Certification System.

### Requirements for the validity of the certificate in principle:

- Validity of the quoted test standard(s)
- In addition for certificates with the right to use a certification mark and for QM certificates:
- Conditions for an adequate manufacturing are maintained
- Regular surveillance of the facility is performed

Akkreditierungen / Benennungen (Status 25.02.2010) /  
Accreditations / notifications (as of 2010-02-25)

## Deutschland / Germany

Geräte- und Produktsicherheitsgesetz (GPSG) /  
Equipment and Product Safety Act (GPSG)

## Europa / Europe

- Niederspannungsrichtlinie 2006/95/EG
- Spielzeugrichtlinie 2009/48/EG
- Richtlinie für aktive medizinische Implantate 90/385/EWG
- Richtlinie für Medizinprodukte 93/42/EWG
- Richtlinie für In-vitro-Diagnostika 98/79/EG
- Richtlinie für Gasverbrauchseinrichtungen 90/396/EWG
- Richtlinie für persönliche Schutzausrüstungen 89/686/EWG
- EMV-Richtlinie 2004/108/EG
- Richtlinie für Sportboote 94/25/EG + 2003/44/EG
- Richtlinie für Maschinen 2006/42/EG
- Richtlinie für Ex-Schutz Geräte 94/9/EG
  
- Low Voltage Directive 2006/95/EC
- Toys Directive 2009/48/EC
- Directive for Active Implantable Medical Devices 90/385/EEC
- Directive for Medical Devices 93/42/EEC
- Directive on In Vitro Diagnostic Medical Devices 98/79/EC
- Directive for Gas Appliances 90/396/EEC
- Directive for Personal Protective Equipment 89/686/EEC
- EMC Directive 2004/108/EC
- Directive for Recreational Craft 94/25/EC + 2003/44/EC
- Directive for Machinery 2006/42/EC
- Directive for Ex Safe Equipment 94/9/EC
  
- ENEC Agreement for luminaires and IT equipment

## USA

- Nationally Recognized Testing Laboratory (NRTL) to 29 CFR 1910.7 by OSHA
- Accredited for FDA 510(k) Third Party Review
- Conformity Assessment Body to the MRA for Medical Devices; FDA QSR Reg Inspections, FDA 510(k) Third Party Review

## Asien-Pazifik Region / Asia Pacific

- Recognized Certification Body to Electrical Products (Safety) Regulation; Hong Kong
- Konformitätsbewertungsstelle / Conformity Assessment Body to the MRA for Medical Devices; Australien / Australia
- Konformitätsbewertungsstelle / Conformity Assessment Body to the MRA for Medical Devices; Neuseeland / New Zealand

## Weltweit / Worldwide

- NCB im CB-Scheme des IECEE / NCB in the CB Scheme of IECEE
- ExCB im IECEX-Scheme des IECEE / ExCB in the IECEX Scheme of IECEE
- TÜV SÜD Product Service Mark für Produkte / TÜV SÜD Product Service Mark for products DAP-ZE-1213.00
- Zertifizierung von QMS / Certification of QMS TGA-ZM-08-93-00
- Zertifizierung von QMS gemäß / Certification of QMS according to (DIN) EN ISO 13485 / ISO 13485