# OMRON

# **EC Declaration of Conformity**

We hereby declare that the following products are in conformity with the requirements of the following EC Directives:

Product: Single-beam Safety Sensor (AOPD Type2, With F3SX)

Type: E3ZS-T81A

Title and No. of Directive: EMC Directive 2004/108/EC

Machinery Directive 2006/42/EC

These products are designed and manufactured in accordance with the following standards.

EMC Directive:

EMI (Electromagnetic Interference):

EN 55011:2009/A1:2010

EMS (Electromagnetic Susceptibility):

EN 61496-1:2004/A1: 2008

Machinery Directive:

Electro-sensitive protective equipment:

EN 61496-1:2004/A1: 2008

Active opto-electronic protective devices:

IEC 61496-2: 2006

### Description of Product:

The E3ZS-T81A, with the F3SX, is an electro-sensitive device designed specifically to detect persons in order to ensure their safety.

The E3ZS-T81A, with the F3SX, is an ESPE Type 2 device according to EN61496-1 and AOPD Type 2 device according to IEC61496-2. The device can be used as a safeguard for personal protection at machinery and other hazardous areas, which require safeguards intended for up to Category 2 and "PL d" according to EN ISO 13849-1:2008.

#### Certificate:

Machinery Directive - Certificate for EC Type-Examination (No.: M6A 10 04 39656 205)

Notified Body: TÜV SÜD Product Service GmbH

Address: Zertifizierstelle, Ridlerstrasse 65, 80339, München, Germany

Notified Body identification No.: 0123

Responsible person for documentation:

Hugo Sintnicolaas OMRON EUROPE B.V.

Zilverenberg 2, 5234 GM, 's-Hertogenbosch, The Netherlands

Manufacturer:

Name: OMRON Corporation, Industrial Automation Company,

Safety Division

Address: Shiokoji-horikawa, Shimogyo-ku, Kyoto, 600-8530, JAPAN

Date:

Signed:

Jim Ashford

Business Development Dept. Manager

Representative in EU:

Name: OMRON Europe B.V.

Address: Zilverenberg 2, 5234 GM, 's-Hertogenbosch, THE NETHERLANDS

Date:

Signed;

Hugo Sintnicolaas

European Manufacturing and Quality Manager

## Products Covered

## Type: E3ZS-T81A Series

E3ZS - T81A - () - () () () ()

I : L, D, or blank

II : Blank, or additional letter(s), number(s), and/or dash

Revision History

Rev.	Date	Revised Contents
Α	31 Jan2005	Original Version
В	28 Dec2009	
С	30 Nov 2011	- The document format updated The edition of EN 61496-1 and EN 55011 updated prEN 61496-2:2004 changed to IEC 61496-2:2006 EN 954-1 changed to EN ISO 13849-1:2008 "Certificate" section updated "Responsible person for documentation" statement added Manufacturer's signer name changed "Product covered" statement added.



## **EC-Type Examination Certificate**

No. M6A 10 04 39656 205

Holder of Certificate: Omron Corporation

Shiokoji Horikawa, Shimogyo-ku

Kyoto

600-8530 JAPAN

**Product:** Electro-Sensitive Protective Equipment

(AOPD) Type 2

Model(s): E3ZS-T81A

Parameters: Power supply: 24Vdc

(supplied by Safety Controller F3SX)
Nominal current: 15mA Emitter, 20mA Receiver

Operating temperature: -10°C ... +55°C

Protection class: IP67

Conditions: Use only with certified control

unit F3SX

This EC Type Examination Certificate is issued according to Article 12(3) b or 12(4) a of Council Directive 2006/42/EC relating to machinery. It confirms that the listed Annex-IV equipment complies with the principal protection requirements of the directive. It refers only to the sample submitted to TÜV SÜD Product Service GmbH for testing and certification. See also notes overleaf.

**Test report no.:** 70035164

Valid until: 2015-04-05

**Date**, 2010-04-15 (Alfred Beer)

1090 B to 365309

TÜV SÜD Product Service GmbH is Notified Body according to Council Directive 2006/42/EC relating to machinery, notified by publication in the Official Journal of the EC with identification No. 0123.

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## CERTIFICATE

No. Z10 10 04 39656 208

**Holder of Certificate: Omron Corporation** 

Shiokoji Horikawa, Shimogyo-ku

**Kvoto** 

600-8530 JAPAN

Factory(ies):

48774, 56891

**Certification Mark:** 



**Product: Electro-Sensitive Protective Equipment** 

(AOPD) Type 2

Model(s): E3ZS-T81A

Parameters: Power supply: 24Vdc

(supplied by Safety Controller F3SX)

Nominal current: 15mA Emitter, 20mA Receiver -10°C ... +55°C

Operating temperature:

Protection class: **IP67** 

Conditions: Use only with certified control

unit F3SX

**Tested** ISO 13849-1:2006 (Category 2, PI d)

according to: IEC 61496-1:2008 IEC 61496-2/Ed.2:2006

EN 61496-1/A1:2008 CLC/TS 61496-2:2006

EN 954-1:1996 (Category B, 1-2)

EN 55011/A2:2002 EN 61000-6-2:2001 EN 50178:1997

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.: 70035164

2010-04-15 Date,

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( Alfred Beer )





# NIPF.E199694 Active Opto-electronic Protective Devices

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## **Active Opto-electronic Protective Devices**

See General Information for Active Opto-electronic Protective Devices

OMRON CORP E199694

SAFETY STANDARDS GROUP IAB GLOBAL QUALITY CENTER SHIOKOJI HORIKAWA, SHIMOGYO-KU KYOTO, 600-8530 JAPAN

Control unit, Model F3SP-B1P.

Type 4 light curtain systems, Model+ F3S-A followed by 08, 16, 24, 32, 40 or 48, followed by 1 or 2, may be followed by P or S, may be followed by L or D, may be followed by additional numbers and/or letters.

Type 2 or 4 light curtain systems+, emitters and receivers, Model F3SJ, followed by Blank or 2, followed by E or B, followed by 0185-2065, followed by N, P or -, followed by 25, may be followed by L or D, may be followed by additional suffixes.

Type 4 control unit, Model+ F3SX followed by N, E, H, M, NR, ER, HR, MR, followed by R, R1, R2, L1, L2, L4, M1, D1, P1, P2 and B1, followed by additional suffixes.

Type 2 single beam system, Model + E3FS-10, for use only with the Model F3SX control unit.

Type 2 or Type 4 light curtain, Model+ F3SJ-A or F3SJ-2A, followed by 0245-2495, followed by P or N, followed by 14, 20, 25, 30, 35, 55 or 65, may be followed by L or D, may be followed by TS, 01TS, 01T, may be followed by additional suffixes.

Model F3SJ-AM+, followed by 2-4, followed by P or N, followed by 300, 400 or 500, may be followed by L or D, may be followed by additional suffixes.

Type 2 single beam sensor, Model + E3ZS followed by T, followed by 8, followed by 1, followed by A, followed by D, L or blank, followed by additional suffixes

Type 4 light curtain systems+, emitters and receivers, Model F3SN-A followed by xxxx, followed by P or N, followed by 12, 14, 25, 40, 55 or 70, may be followed by S, SS, H, HS or HSS, followed by L, D or blank, may be followed by additional numbers and/or letters; Model F3SH-A followed by xx, followed by P or N, followed by xx, may be followed by S or SS, followed by L, D or blank, may be followed by additional numbers and/or letters.

Type 2 light curtain systems+, emitters and receivers, Model F3SN-B followed by xxxx, followed by P or N, followed by 12, 14, 25, 40, 55 or 70, may be followed by S, SS, H, HS or HSS, followed by L, D or blank, may be followed by additional numbers and/or letters.

Type 2 light curtain systems+, emitters and receivers, Model F3SH-B followed by xx, followed by P or N, followed by xx, may be followed by S or SS, followed by L, D or blank, may be followed by additional numbers and/or letters.

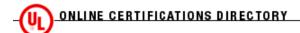
Type 2 and Type 4 Light Curtain System, Model F3SR followed by 2 or 4, followed by 30, followed by B, followed by four numbers, may be followed by L or D, may be followed by additional numbers and/or letters.

+Also complies with UL 1998, the Standard for Safety Related Software.

Trademark and/or Tradename: ONRON, Sti

Last Updated on 2011-11-17

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## NIPF7.E199694 Active Opto-electronic Protective Devices Certified for Canada

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## **Active Opto-electronic Protective Devices Certified for Canada**

See General Information for Active Opto-electronic Protective Devices Certified for Canada

**OMRON CORP** E199694

SAFETY STANDARDS GROUP IAB GLOBAL QUALITY CENTER SHIOKOJI HORIKAWA, SHIMOGYO-KU KYOTO, 600-8530 JAPAN

Control unit. Model F3SP-B1P.

Type 4 light curtain systems, Model + F3S-A, followed by 08, 16, 24, 32, 40 or 48, followed by 1 or 2, may be followed by P or S, may be followed by L or D, may be followed by additional numbers and/or letters.

Type 2 or 4 light curtain systems+, emitters and receivers, Model F3SJ, followed by Blank or 2, followed by E or B, followed by 0185-2065, followed by N, P or -, followed by 25, may be followed by L or D, may be followed by additional suffixes.

Type 4 control unit, Model+ F3SX, followed by N, E, H, M, NR, ER, HR, MR, followed by R, R1, R2, L1, L2, L4, M1, D1, P1, P2 and B1, followed by additional suffixes.

Type 2 single beam system, Model + E3FS-10, for use only with the Model F3SX control unit.

Type 2 or Type 4 light curtain, Model+ F3SJ-A or F3SJ-2A, followed by 0245-2495, followed by P or N, followed by 14, 20, 25, 30, 35, 55 or 65, may be followed by L or D, may be followed by TS, 01TS, 01T, may be followed by additional suffixes.

Model F3SJ-AM+, followed by 2-4, followed by P or N, followed by 300, 400 or 500, may be followed by L or D, may be followed by additional suffixes.

Type 2 single beam sensor, Model + E3ZS followed by T, followed by 8, followed by 1, followed by A, followed by D, L or blank, followed by additional suffixes.

Type 4 light curtain systems+, emitters and receivers, Models F3SN-A followed by xxxx, followed by P or N, followed by 12, 14, 25, 40, 55 or 70, may be followed by S, SS, H, HS or HSS, followed by L, D or blank, may be followed by additional numbers and/or letters; Model F3SH-A followed by xx, followed by P or N, followed by xx, may be followed by S or SS, followed by L, D or blank, may be followed by additional numbers and/or letters.

Type 2 light curtain systems+, emitters and receivers, Model F3SN-B followed by xxxx, followed by P or N, followed by 12, 14, 25, 40, 55 or 70, may be followed by S, SS, H, HS or HSS, followed by L, D or blank, may be followed by additional numbers and/or letters.

Type 2 light curtain systems+, emitters and receivers, Model F3SH-B followed by xx, followed by P or N, followed by xx, may be followed by S or SS, followed by L, D or blank, may be followed by additional numbers and/or letters.

Type 2 and Type 4 Light Curtain System, Model F3SR followed by 2 or 4, followed by 30, followed by B, followed by four numbers, may be followed by L or D, may be followed by additional numbers and/or letters.

+ Also complies with UL 1998, the Standard for Safety Related Software.

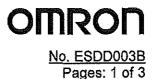
OMRON Sti

Trademark and/or Tradename Last Updated on 2011-11-17

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## **EC DECLARATION OF CONFORMITY**

We hereby declare that the following product is in conformity with the requirements of the below referred EC Directives:

## Single-beam Safety Sensor(PDF-D) Type: E3ZS-T81A Series

No. of Directive: 2006/42/EC Title of Directive: Machinery

No. of Directive: 2004/108/EC

Title of Directive: Electromagnetic Compatibility

The above referenced products conform to the following standards:

Safety of machinery:

EN60947-5-3/A1: 2005

Electromagnetic compatibility:

EN60947-5-3/A1: 2005

## **Description of Product**

The E3ZS-T81A series are a proximity device with an enhanced resistance to failure.

The E3ZS-T81A series are PDF-D according to EN60947-5-3.



No. ESDD003B Pages: 2 of 3

## Manufacturer

Name

Safety Division

Industrial Automation company

**Omron Corporation** 

Address

Shiokoji-horikawa, Shimogyo-ku, Kyoto 600-8530 JAPAN

Date

28 12 2009

Signed

Yoshinori Matsueda

Business Development Dept. Manager

## Representative in EU

Name

OMRON EUROPE B.V.

Address

Zilverenberg 2, 5234 GM, 's-Hertogenbosch,

The Netherlands

Date

22 12 2009

Signed

Hugo Sintnicolaas

European Manufacturing and Quality Manager



## **Products covered**

Type: E3ZS-T81A Series

I : Blank, D or L II : Blank, 1 or 2



# CERTIFICATE

No. Z10 10 04 39656 207

**Holder of Certificate: Omron Corporation** 

Shiokoji Horikawa, Shimogyo-ku

Kyoto

600-8530 JAPAN

**Factory(ies):** 48774, 56891

**Certification Mark:** 



Product: Proximity switch

(PDF-D)

Model(s): E3ZS-T81A, E3ZS-T81A-1, E3ZS-T81A-2

Parameters: Power supply: 12 - 24Vdc ±10%

Nominal current: max. 15mA Emitter max. 20mA Receiver

Operating temperature: -10°C...+55°C

Protection class: IP67

Tested 2006/42/EC

according to: EN 60947-5-3/A1:2005

IEC 60947-5-3/A1:2005

EN 954-1:1996 (Category B, 1)

EN 55011/A2:2002 EN 61000-6-2:2005 EN 50178:1997

ISO 13849-1:2006 (Cat.1 PL c)

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.:** 70035161

Date, 2010-04-15

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( Alfred Beer )



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C235I-E-01 04/14

Note: Specifications are subject to change.

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