KEMA
REGISTERED QUALITY

(1) EC-TYPE EXAMINATION CERTIFICATE

(2) Equipment or protective system intended for use in potentially explosive atmospheres – Directive 94/9/EC

(3) EC-Type Examination Certificate Number: **KEMA 01ATEX1058 X**

(4) Equipment or protective system: **Bus Termination Module Type Terminator Ex**

(5) Manufacturer: **Weidmüller Interface GmbH & Co.**

(6) Address: **Klingenbergstraße 16, 32758 Detmold, Germany**

(7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA, notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. 2007712.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014 : 1997 EN 50020 : 1994 EN 50028 : 1987

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:

II 2 G EEx ia IIC T6 and EEx m II T6

Arnhem, 20 April 2001
by order of the Board of Directors of N.V. KEMA

C.M. Boschloo
Certification Manager

KEMA Registered Quality B.V.
Utrechtseweg 310, 6812 AR Arnhem, The Netherlands
P.O. box 9035, 6800 ET Arnhem, The Netherlands
Telephone +31 26 3 56 34 28, Telefax +31 26 3 52 58 00

ACCREDITED BY THE DUTCH COUNCIL FOR ACCREDITATION

(13) # SCHEDULE

(14) **to EC-Type Examination Certificate KEMA 01ATEX1058 X**

(15) **Description**

Bus Termination Module Type Terminator Ex for use in an intrinsically safe or in a non-intrinsically safe fieldbus system (e.g. in type of protection EEx e or EEx d).
The module is provided with a permanently connected cable.

Ambient temperature range -40 °C ... +80 °C.

Electrical data

Type of protection intrinsic safety EEx ia IIC

Fieldbus connection ..... (integral cable) — in type of protection intrinsic safety EEx ia IIC, only for connection to a certified intrinsically safe fieldbus system (e.g. in accordance with the FISCO-model), with following maximum values:

U_i = 17,5 V
I_i = 380 mA
P_i = 5,32 W

Capacitance C ≤ 2,2 µF and
resistor R_V ≥ 90 Ω.
Effective internal inductance L_i < 10 µH
(data according to the FISCO-model).

The intrinsically safe circuit is isolated from the metallic enclosure to a test voltage of at least 500 Vac, in accordance with clause 6.4.12 of EN 50020.

Type of protection encapsulation EEx m II

For connection to a non-intrinsically safe fieldbus system.

The module contains a capacitance of 1 µF in series with a resistor of 100 Ω.

Routine tests

The Bus Termination Module must be tested in accordance with clause 7 of EN 50028.
A test voltage of 1500 Vrms must be applied during 1 minute without breakdown, between the circuit and the enclosure.

(16) **Report**

KEMA No. 2007712.

(13) # SCHEDULE

(14) **to EC-Type Examination Certificate KEMA 01ATEX1058 X**

(17) **Special conditions for safe use**

If not used with an intrinsically safe fieldbus system, the free end of the permanently connected cable of the Bus Termination Module must be connected outside the hazardous area or, when inside the hazardous area, in an enclosure with a suitable type of explosion protection and in accordance with the requirements of the type of protection applied.

If a Bus Termination Module is connected to a non-intrinsically safe fieldbus system, the marking for intrinsic safety must be made invalid.

(18) **Essential Health and Safety Requirements**

Essential Health and Safety Requirements not covered by the standards listed at (9)	
Clause	Subject
1.0.5	Marking
1.0.6 b) and d)	Instructions

These Essential Health and Safety Requirements are examined and positively judged. The results are laid down in the report listed at (16)

(19) **Test documentation**

		signed
1.	Description (2 pages)	06.12.2000
2.	Drawing No. 855646 (7 sheets)	11.04.2001
3.	Samples	

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AMENDMENT 1

to EC-Type Examination Certificate KEMA 01ATEX1058 X

Manufacturer: **Weidmüller Interface GmbH & Co.**

Adress: **Klingenbergstraße 16, 32758 Detmold, Germany**

Description

In future, the range of Fieldbus Components is extended with a Bus Termination Module with an alternative mechanical construction and with the intrinsically safe Fieldbus Distribution Modules Type FBCon PA CG 1 way Ex, 2 way Ex, and 4 way Ex, and
Type FBCon PA CG/M12 1 way Ex, 2 way Ex and 4 way Ex.

The following non-certified connectors and couplers may be used for the connection of intrinsically safe fieldbus systems:
Connectors, male Type 945564 and female Type 842622 and locating plug-in connectors Type 945565, 842591, 842593 and 842594.

The distribution modules, connectors and couplers are passive components, which do not influence the properties of the intrinsically safe fieldbus system.

All other data remain unchanged.

Test documentation

	dated
1. Drawing No. 855646, rev. 2 (sheets 2, 3, 4, 5 and 6))	
860618, rev. 0 (sheets 2, 3, 4, 5 and 6))	
860619, rev. 0 (sheets 2, 3, 4, 5 and 6))	
860620, rev. 0 (sheets 2, 3, 4, 5 and 6))	
856415, rev. 0 (sheets 2, 3, 4 and 5))	17.09.2001
856416, rev. 0 (sheets 2, 3, 4 and 5))	
856417, rev. 0 (sheets 2, 3, 4 and 5))	
856418, rev. 0 (sheets 2, 3, 4 and 5))	
856419, rev. 0 (sheets 2, 3, 4 and 5))	
856420, rev. 0 (sheets 2, 3, 4 and 5))	
4-22884, rev. 1 (sheet 2))	
945564, rev. 1 (sheets 2 and 5))	
842622, rev. 1 (sheets 2 and 3))	
945565, rev. 3 (sheet 2))	07.06.2001
945565, rev. 2 (sheet 3))	
842591, rev. 2 (sheet 2))	
842591, rev. 1 (sheet 3))	
945588, rev. 1 (sheet 2)	23.12.1997
2. Technical delivery condition No. 5203	23.02.2001

Arnhem, 9 October 2001
KEMA Quality B.V.

T. Pijpker
Certification Manager

Code: Ⓔx II 2 G EEx ia IIC T6 and EEx m II T6

[2012174]

AMENDMENT 2

to EC-Type Examination Certificate KEMA 01ATEX1058 X

Manufacturer: **Weidmüller Interface GmbH & Co.**

Adress: **Klingenbergstraße 16, 32758 Detmold, Germany**

Description

In future, the range of Fieldbus Components is extended with the intrinsically safe Fieldbus Distribution Modules Type FBCon PA CG 8 way Ex and Type FBCon PA CG/M12 8 way Ex.

The distribution modules are passive components, which do not influence the properties of the intrinsically safe fieldbus system.

All other data remain unchanged.

Test documentation

		dated
1. Drawing No. 856424, rev. 0 (sheets 2, 3, 4, 5 and 6)	)	
856425, rev. 0 (sheets 2, 3, 4, 5 and 6)	)	29.01.2002

Arnhem, 20 March 2002
KEMA Quality B.V.

T. Pijpker
Certification Manager

[2018568]

AMENDMENT 3

to EC-Type Examination Certificate KEMA 01ATEX1058 X

Manufacturer: **Weidmüller Interface GmbH & Co.**

Adress: **Klingenbergstraße 16, 32758 Detmold, Germany**

Description

In future, the range of Fieldbus Components is extended with the intrinsically safe Fieldbus Distribution Modules Type FBCon FF CG-7/8 " 1 way Ex, Type FBCon FF CG-7/8" 2 way Ex and Type FBCon FF CG-7/8" 4 way Ex.

The distribution modules are passive components, which do not influence the properties of the intrinsically safe fieldbus system.

In future, the intrinsically safe Fieldbus Distribution Modules Type FBCon PA CG/M12 1 way Ex, 2 way Ex, 4 way Ex and 8 way Ex and Type FBCon PA CG 1 way Ex, 2 way Ex, 4 way Ex and 8 way Ex may also be manufactured in accordance with the revised documentation listed below.

All other data remain unchanged.

Test documentation

		dated
Drawing No.	433199, rev. 1 (4 sheets)	
	433200, rev. 1 (4 sheets)	
	433201, rev. 1 (4 sheets)	
	856415, rev. 1 (4 sheets)	
	856416, rev. 1 (4 sheets)	
	856417, rev. 1 (4 sheets)	15.04.2002
	856418, rev. 1 (4 sheets)	
	856419, rev. 1 (4 sheets)	
	856420, rev. 1 (4 sheets)	
	856424, rev. 1 (4 sheets)	
	856425, rev. 1 (4 sheets)	

Arnhem, 14 June 2002
KEMA Quality B.V.

T. Pijpker
Certification Manager

[2018568]

KEMA

AMENDMENT 4

to EC-Type Examination Certificate KEMA 01ATEX1058 X

Manufacturer: **Weidmüller Interface GmbH & Co. KG.**

Address: **Klingenbergstrasse 16, D-32758 Detmold, Germany**

Description

In future, the Bus Termination Module Type Terminator Ex and FBCon modules may also be used in explosive atmospheres caused by the presence of combustible dust.

The marking shall include the code:

 II 2 GD EEx ia IIC T6 T85 °C IP 66

The maximum surface temperature T 85 °C is based on an ambient temperature of 80 °C.

Compliance with the Essential Health and Safety Requirements has been additionally assured by compliance with:

EN 50281-1-1 : 1998 + A1

The enclosure provides a degree of ingress protection of at least IP 66 in accordance with EN 60529.

Furthermore the Bus Termination Module Type Terminator Ex and FBCon modules may also be constructed in accordance with the test documentation listed below.
The changes concern the internal construction.

All other data remain unchanged.

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AMENDMENT 4

to EC-Type Examination Certificate KEMA 01ATEX1058 X

Test documentation

1. EC-Type Examination Certificate PTB 98 ATEX3101 U

		signed
2. Drawing No.	435272, issue 1)	
	435275, issue 1)	
	435276, issue 1)	
	435277, issue 1)	
	435278, issue 1)	
	435279, issue 1)	
	435287, issue 1)	02.02.2004
	4 35349, issue 1)	
	4 35350, issue 0)	
	4 35351, issue 1)	
	4 35352, issue 1)	
	435680, issue 1)	
	34695	09.02.2005
	34696	09.02.2005
	38892	01.02.2005
	38893	01.02.2005
	3 38895	30.07.2004
	434693	--
	434694	--
	438896	--
	438897	--

Arnhem, 24 March 2005
KEMA Quality B.V.

T. Pijpker
Certification Manager

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