

(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 99ATEX7894 X**
- (4) Equipment or protective system: **Terminal Boxes Type STB**
- (5) Manufacturer: **Cooper Crouse-Hinds (UK) Ltd**
- (6) Address: **Dorset Road, Sheerness, Kent ME12 1LP, England**
- (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. 97894.

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

EN 50014 : 1992 + prA1
EN 50020 : 1994

EN 50019 : 1994 + prA1
EN 50281-1-1 : 1998

- (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 and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.
- (12) The marking of the equipment or protective system shall include the following:



II 2 G EEx e II T6 or T5 or
II 2 D T100 °C



II 1 G EEx ia IIC T6 or T5 or
II 2 D T100 °C



II 2 (1) G EEx e [ia] IIC T6 or T5
II 2 D T100 °C

Arnhem, 25 April 2000
by order of the Board of Directors of N.V. KEMA

L.M.J. Vries
Certification Manager

© This Certificate may only be reproduced in its entirety and without any change



SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 99ATEX7894 X

(15) **Description**

Terminal Boxes Type STB, made of mild steel or stainless steel, for fixed installation, provided with terminals in type of protection increased safety "e", for non-intrinsically safe and/or intrinsically safe circuits.

The area intended for the terminals of intrinsically safe circuits is marked, e.g. in blue colour.

Electrical data

Rated voltage		max. 750 V
Rated current)	
Number of conductors)	as per Appendix Nos. 1 to 8
Conductor cross section)	

Installation instructions

The degree of ingress protection of at least IP 54 according to EN 60529 for use in potentially explosive atmospheres of flammable gases, vapours and mists is only achieved if certified cable entries are used that are suitable for the application and correctly installed.

The degree of ingress protection of at least IP 64 according to EN 60529 for use in the presence of combustable dusts is only achieved if E- or ATEX-generation certified cable entries are used that are suitable for the application and correctly installed.

At ambient temperatures exceeding +40 °C, suitable heat resisting cables and cable glands shall be used with an operating temperature of at least 85 °C.

For external earthing and bonding connection a cable lug shall be used so that the conductor is secured against loosening and twisting and that the contact pressure is permanently secured.

Routine test

If factory wired, each terminal box shall be submitted to a dielectric strength test according to Clause 7.1 of EN 50019.

(16) **Report**

No. 97894

(13)

SCHEDULE

(14)

to EC-Type Examination Certificate KEMA 99ATEX7894 X

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

When the Terminal Boxes are used in potentially explosive atmospheres of flammable gases, vapours or mists, the following information is to be taken into account.

The marking includes: Ex II 2 G EEx e II T6 or T5 or

Ex II 1 G EEx ia IIC T6 or T5 or

Ex II 2 (1) G EEx e [ia] IIC T6 or T5

The relation between the gasket material, the ambient temperature range and the temperature class is given in the table below:

gasket material	ambient temperature range	temperature class
HT800	-65 °C ... +40 °C	T6
	-65 °C ... +55 °C	T5
MacLellan 641	-30 °C ... +40 °C	T6
	-30 °C ... +55 °C	T5

Note.

The gasket material MacLellan 641 is to be used for the enclosure types STB 1, STB 1.1, STB 2, STB 2.1, STB 3 and STB 4 only.

When the Terminal Boxes are used in the presence of combustable dusts, the following information is to be taken into account:

The marking includes: Ex II 2 D T100 °C

According to clause 6.2.1 of EN 50281-1-1 : 1998, precautions must be taken to ensure that the thickness of the dust layer on the Terminal Boxes will not exceed 5 mm.

The relation between the gasket material, the ambient temperature range and the maximum surface temperature is given in the table below:

gasket material	ambient temperature range	maximum surface temperature
HT800	-65 °C ... +55 °C	100 °C
MacLellan 641	-30 °C ... +55 °C	100 °C

The maximum surface temperature of the enclosure "T" is based on an ambient temperature of 55 °C.

SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 99ATEX7894 X

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

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

1. EC-Type Examination Certificate KEMA 99ATEX7895 U
Certificate of Conformity KEMA No. Ex-97.E.9236 X

signed

- | | |
|--------------------------|------------|
| 2. Description (2 pages) | 01.02.2000 |
| 3. Drawings No. 723167 | 11.02.2000 |
| 723168 | 01.03.2000 |
| 723169 | 28.02.2000 |
| 700707 | 11.02.2000 |

Cooper Crouse-Hinds
Attn. Mr. J. Fuller
Dorset Road, Sheerness
KENT, ME12 1LP

England

your letter
your reference

our reference KRQ/ING
00- FCL
author F.C. Lankamp
direct line +31 26 3 56 28 55
telefax +31 26 3 52 58 00
e-mail f.c.lankamp@kema.nl

Subject certificate KEMA 99ATEX7895U

Arnhem, 02 August 2001

Dear Mr. Fuller,

Herewith we confirm that the following Enclosure types are covered by our certificate KEMA 99ATEX7895U:

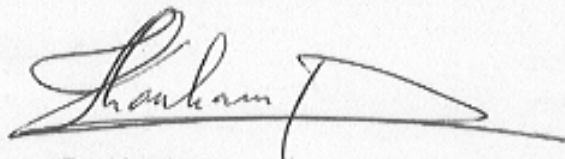
- STB 1
- STB 1.1
- STB 2
- STB 2.1
- STB 3
- STB 4
- STB 5 and
- STB 6.

These Enclosures are used for the range of Terminal Blocks Type STB, as certified in our certificate KEMA 99ATEX7894X.

We hope this information is satisfactory.

Yours sincerely,

KEMA Registered Quality B.V.



Fred Lankamp
KRQ/ING