



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in
Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:

PTB 02 ATEX 1014



- (4) Equipment: Terminal box, type ExTRA
- (5) Manufacturer: Cooper Crouse-Hinds (UK) Ltd, Enclosure Division
- (6) Address: Dorset Road, Sheerness, Kent ME 12 1LP, United Kingdom
- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment 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 the confidential report PTB Ex 02-12032.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014:1997 + A1 + A2 EN 50019:2000 EN 50020:1994
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment 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 in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:



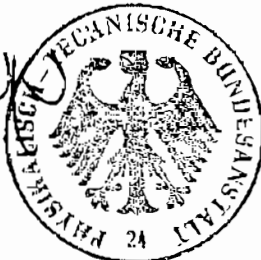
II 2 G EEx e ia IIC T6

Zertifizierungsstelle Explosionsschutz

Braunschweig, March 20, 2002

By order:

Dr.-Ing. U. Klausmeyer
Regierungsdirektor



(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1014

(15) Description of equipment

The terminal box, type EXTRA, consists of a stainless-steel enclosure, designed to type of protection Increased Safety "e", which may, when required, be provided with flanges. It is used to accommodate terminals for intrinsically safe and non-intrinsically safe circuits.

The box section intended for intrinsically safe circuits is marked, e.g. with a light-blue colour. Connection is by means of explosion-proof cable entries. All the installed and mounted components have been tested and certified under separate examination certificates.

Technical data

Rated voltage*	 up to	750 V
Rated current*	 max.	500 A
Rated cross section*	 max.	240 mm ²

*) depending on the type of terminal and explosion-proof components used

The ratings specified are maximum values, actual values will be subject to the electrical equipment used from case to case. Depending on the system conditions, the mode of operation, the utilisation category, etc., the manufacturer will define the definitive ratings which will be within the range of these limiting values and will comply with the relevant standards.

Ambient temperature depending on sealing used
 -40°C to +55°C for polymer CR
 -55°C to +55°C for silicone

Sizes	Width	Length	Depth
smallest	300 mm	200 mm	150 mm
largest	1000 mm	800 mm	300 mm

Shock protection, protection against solid bodies,
 and protection against ingress of water: IP54 according to EN 60529:1991
 as a minimum.

The composition of the protection symbol will be based on the types of protection of components actually used.

(16) Test report PTB Ex 02-12032

(17) Special conditions for safe use

None

Notes for manufacture and use

For the maximum number of conductors for each enclosure size, which is subject to the cross section and the permissible continuous current, reference is made to the attached data sheets.

Equipment designed to type of protection Intrinsic Safety "i" shall be installed in such a way that the clearance and creepage distances that are required according to EN 60079-14 between intrinsically safe and non-intrinsically safe circuits are duly considered.

If system installation and layout does not provide for the clearance requirements for connectors as specified in EN 50020, wiring that meets the quality criteria Increased Safety "e" shall be used, or the wiring shall be of the fail-safe type.

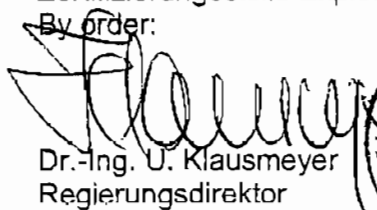
When using more than one intrinsically safe circuit, the regulations for interconnection shall duly be observed.

(18) Essential health and safety requirements

The tests and the favourable results these have produced reveal that the terminal box, type ExTRA, meets the requirements of directive 94/9/EC as well as those of the standards quoted on the cover sheet.

Zertifizierungsstelle Explosionsschutz

By order:



Dr.-Ing. U. Klausmeyer
Regierungsdirektor



Braunschweig, March 20, 2002

1st SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1014

(Translation)

Equipment: Terminal box, type ExTRA

Marking:  II 2 G EEx e ia IIC T6

Manufacturer: Cooper Crouse-Hinds (UK) Ltd, Enclosure Division

Address: Dorset Road, Sheerness, Kent ME 12 1LP, United Kingdom

Description of supplements and modifications

The enclosure of the terminal box, type ExTRA may optionally be provided with a changed sealing system.

Notes for manufacture and use

The notes of the EC-type-examination certificate are valid for this 1st supplement too.

Test report: PTB Ex 02-12139

Zertifizierungsstelle Explosionsschutz

By order:


Dr.-Ing. U. Klausmeyer
Regierungsdirektor



Braunschweig, May 29, 2002

2nd SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1014

(Translation)

Equipment: Terminal box, type EXTRA

Marking:  II 2 G EEx e ia IIC T6

Manufacturer: Cooper Crouse-Hinds (UK) Ltd, Enclosure Division

Address: Dorset Road, Sheerness, Kent ME 12 1LP, Great Britain

Description of supplements and modifications

Standard applied in addition: EN 50281-1-1:1998.

The terminal box, type EXTRA, has been expanded to additionally include the type series Ex-Cell – "I" XCL

The empty enclosures used are those certified under the 1st supplement for EC type examination certificate PTB 02 ATEX 1021 U.

The terminal boxes may also be employed in areas in which a potentially explosive atmosphere as a mixture of dust and air can occasionally form.

The temperature class is extended to T5. Due not shall be given to the maximum permissible ambient temperature of the separately certified equipment.

The marking changes to read:

 II 2 G/D EEx e ia IIC T6, T5 IP 66 T 80 °C, T 95 °C

Technical data for all type series

Rated voltage*	up to	750 V
Rated current*	max.	500 A
Rated cross section*	max.	240 mm ²

*) depending on type of terminal and Ex components used

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc.

Sizes, type ExTRA		Width	Length	Depth
	Smallest	300 mm	200 mm	150 mm
	Largest	1200 mm	1200 mm	300 mm

Sizes, type Ex-Cell – "I" XCL		Width	Length	Depth
	Smallest	228 mm	152 mm	127 mm
	Largest	1000 mm	800 mm	300 mm

Ambient temperature subject to sealing used
-40 °C to +55 °C with polymer CR sealing
-55 °C to +55 °C with silicone sealing
-20 °C to +40 °C with PUR sealing

Protection against contact, foreign
bodies and water: IP66 in compliance with EN 60529 for PUR sealing
IP54 in compliance with EN 60529 for silicone and
polymer CR sealing

Test report: PTB Ex 04-14125

Zertifizierungsstelle Explosionsschutz

Braunschweig, June 08, 2004

By order:


Dipl.-Phys. U. Volke



3rd SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1014

(Translation)

Equipment: Terminal box, types ExTRA and Ex-Cell "I" XCL

Marking:  II 2 G/D EEx e ia IIC T6, T5 IP 66 T 80 °C, T 95 °C

Manufacturer: Cooper Crouse-Hinds (UK) Ltd, Enclosure Division

Address: Dorset Road, Sheerness, Kent ME 12 1LP, UK

Description of supplements and modifications

The terminal boxes, type ExTRA and type Ex-Cell "I" XCL....., are extended to include the type series Ex-Cell "T" XCL The enclosures of this type series consist of a base and a stainless-steel cover which is bolted in place. Flanges may optionally be mounted on the side walls.

The maximum number of terminal blocks that may be fitted is defined in companion sheets by means of a calculation program in such a way that the temperature class T6 cannot be exceeded.

The companion sheets for type series Ex-Cell "I" XCL..... are supplemented to cover a series of intermediate sizes.

Technical data for all type series

Rated voltage*	up to	750 V
Rated current*	max.	500 A
Rated cross section*	max.	240 mm ²

*) depending on type of terminal and Ex-type components used

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc.

Sizes, type Ex-Cell "T" XCL		Width	Length	Depth
	Smallest	150 mm	150 mm	80 mm
	Largest	510 mm	250 mm	160 mm

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

3rd SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1014

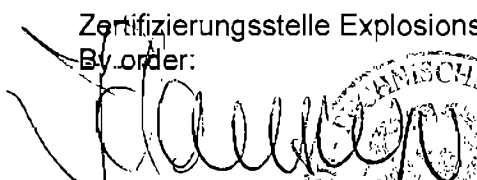
Ambient temperature subject to sealing used
-40 °C to +55 °C with polymer CR sealing
-55 °C to +55 °C with silicone sealing
-20 °C to +40 °C with PUR sealing

Protection against contact, foreign
bodies and water: IP66 in compliance with EN 60529

Test report: PTB Ex 04-14252

Zertifizierungsstelle Explosionsschutz

By order:


Dr.-Ing. U. Klausmeyer
Regierungsdirektor



Braunschweig, December 22, 2004

4th SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1014

(Translation)

Equipment: Terminal box, types ExTRA, Ex-Cell - "I" XCL, and
Ex-Cell - "T" XCL

Marking:  II 2 G EEx e ia IIC T6, T5
 II 2 D IP 66 T 80°C, T95 °C

Manufacturer: Cooper Crouse-Hinds (UK) Ltd, Enclosure Division

Address: Dorset Road, Sheerness, Kent ME 12 1LP,
United Kingdom

Description of supplements and modifications

The terminal boxes, types ExTRA, Ex-Cell - "I" XCL, and Ex-Cell - "T" XCL, are extended to include the control and distributor box, type Ex-Cell - "C" XCL

The terminal boxes, type Ex-Cell - "I" XCL, which may be optionally fitted with – separately certified – control and display components, built-in switches, measuring instruments, transformers, flange-mounting socket outlets, etc., serve as a basis for this type.

The marking is extended to read:

 II 2 G EEx dem ia/ib IIC T6, T5, T4
 II 2 D IP 66 T 80 °C, T 95 °C, T 130 °C

Technical data for type Ex-Cell - "C" XCL

Rated voltage*	 up to	750 V
Rated current*	 max.	180 A
Nominal cross section*	 max.	240 mm ²

*) depending on type of terminal and explosion-proof components used.

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc.

The composition of the protection symbol will be based on the types of protection of components actually used.

Ambient temperature subject to sealing used
..... -40 °C to +55 °C with polymer CR sealing
..... -55 °C to +55 °C with silicone sealing
..... -20 °C to +40 °C with PUR sealing

Protection against contact, foreign
bodies and water IP66 in compliance with EN 60529
..... for PUR sealing

Applied standards

EN 50014:1997 + A1 + A2

EN 50018:2000 + A1

EN 50019:2000

EN 50020:2002

EN 50028:1988

EN 50281-1-1:1998

Test report: PTB Ex 05-15223

Zertifizierungsstelle Explosionsschutz

Braunschweig, September 2, 2005

By order:


Dr.-Ing. U. Klausmeyer
Direktor und Professor

5th SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1014

(Translation)

Equipment: Terminal box, and control and distributor box, type ExTRA,
type Ex-Cell - "I" XCL....., type Ex-Cell - "T" XCL, and type Ex-Cell - "C" XCL.....

Marking:  II 2 G EEx de ia/ib IIC T6, T5, T4
 II 2 D IP 66 T 80 °C, T 95 °C, T 130 °C

Manufacturer: Cooper Crouse-Hinds (UK) Ltd, Enclosure Division

Address: Dorset Road, Sheerness, Kent ME 12 1LP, UK

Description of supplements and modifications

The terminal box, and control and distribution box, type ExTRA, type Ex-Cell -"I" XCL.....,
type Ex-Cell -"T" XCL, and type Ex-Cell -"C" XCL..... is modified in the following respects:

- 1) It has been re-inspected on the basis of Standards EN 60079-0, EN 60079-1, EN 60079-7,
EN 60079-11, EN 60079-18, EN 61241-0 and EN 61241-1. The marking will thus change to:

 II 2 G Ex de ia/ib m IIC T6, T5, T4
 II 2 D Ex tD A21 IP 66 T 80 °C, T 95 °C, T 130 °C

- 2) The maximum rated voltage is reduced to 690 V.
- 3) Fermapor may be used as an alternative sealant.
- 4) It may in addition also be manufactured by

Cooper Crouse-Hinds GmbH
Neuer Weg-Nord 49
69412 Eberbach, Germany

Technical data for all type series

Rated voltage* up to 690 V
Rated current* max. 500 A
Conductor size* max. 1.5 mm² to 240 mm²

*) depending on type of terminal and 'Ex' components used.

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc.

Ambient temperature depending on gasket used
..... -40 °C to +55 °C with polymer CR gasket
..... -55 °C to +55 °C with silicone gasket
..... -40 °C to +55 °C with Fermapor gasket
..... -20 °C to +40 °C with PUR gasket

Shock protection and protection against
ingress of solid foreign bodies and
water:

IP66 acc. to EN 60529 when using a PUR gasket
IP54 acc. to EN 60529 when using a silicone, Fermapor
and polymer CR gasket

The composition of the type-of-protection symbol depends on the types of protection of components actually used.

Applied standards

EN 60079-0:2006	EN 60079-1:2004	EN 60079-7:2007
EN 60079-11:2007	EN 60079-18:2004	EN 61241-0:2006
EN 61241-1:2004		

Test report: PTB Ex 08-18065

Zertifizierungsstelle Explosionsschutz
By order:

Dr.-Ing. U. Klausmeyer
Direktor und Professor



Braunschweig, June 3, 2008

6th SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 1014

(Translation)

Equipment: Terminal box and control and distributor box, type ExTRA ,
type Ex-Cell –"I" XCL....., type Ex-Cell –"T" XCL and type Ex-Cell –"C" XCL.....

Marking:  II 2 G Ex de ia/ib m IIC T6, T5, T4
 II 2 D Ex tD A21 IP 66 T 80 °C, T 95 °C, T 130 °C

Manufacturer: Cooper Crouse-Hinds (UK) Ltd, Enclosure Division

Address: Dorset Road, Sheerness, Kent ME 12 1LP, Great Britain

Description of supplements and modifications

The terminal box and control and distributor box, type ExTRA , type Ex-Cell –"I" XCL....., type Ex-Cell –"T" XCL and type Ex-Cell –"C" XCL..... , is complemented to include the following housing sizes:

	Width	Length	Depth
Ex-Cell (EXTRA)- -"XCL 14010040	1,400mm	1,000mm	400mm
Ex-Cell (EXTRA)- -"XCL 16012035	1,600mm	1,200mm	350mm

Technical data for all type series

Rated voltage* up to 690 V
Rated current* max. 500 A
Conductor size* max. 1.5 mm² to 240 mm²

*) depending on type of terminal and 'Ex' components used.

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc.

Ambient temperature depending on gasket used
..... -40 °C to +55 °C with polymer CR gasket
..... -55 °C to +55 °C with silicone gasket
..... -40 °C to +55 °C with Fermapor gasket
..... -20 °C to +40 °C with PUR gasket

Shock protection and protection
against ingress of solid foreign
bodies and water:

IP66 acc. to EN 60529 when using a PUR gasket

IP54 acc. to EN 60529 when using a silicone, Fermapor and
polymer CR gasket

The composition of the type-of-protection symbol depends on the types of protection of components
actually used.

Applied standards

EN 60079-0:2006

EN 60079-1:2007

EN 60079-7:2007

EN 60079-11:2007

EN 60079-18:2004

EN 61241-0:2006

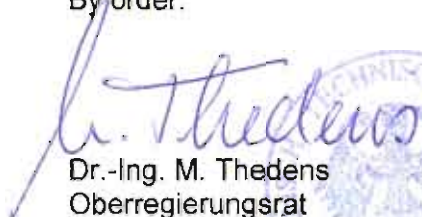
EN 61241-1:2004

Test report: PTB Ex 08-18264

Zertifizierungsstelle Explosionsschutz

Braunschweig, October 9, 2008

By order:


Dr.-Ing. M. Thedens
Oberregierungsrat