

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: **Baseefa03ATEX0052X**

4 Equipment or Protective System: **TYPE HVB I, HVB II AND HVB III JUNCTION BOXES**

5 Manufacturer: **COOPER CROUSE-HINDS (UK) Limited**

6 Address: **Dorset Road, Sheerness, Kent, ME12 1LP**

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 Baseefa (2001) Ltd. Notified body number 1180, 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. **02(C)0514 dated 10 February 2003**

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

EN50014:1997 + amd. 1 & 2 and EN50019:2000

except in respect of those requirements listed at item 18 of the Schedule.

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. 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 2G EEx e II T(see schedule)

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa (2001) Ltd. Customer Reference No. 4221

Project File No. 02/0514

This certificate is granted subject to the general terms and conditions of Baseefa (2001) Ltd. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa (2001) Ltd.

Health and Safety Laboratory Site, Harpur Hill,
Buxton, Derbyshire SK17 9JN

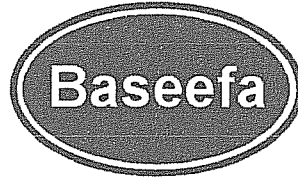
Telephone +44 (0) 1298 28255 Fax +44 (0) 1298 28216
e-mail info@baseefa2001.biz web site www.baseefa2001.biz
Registered in England No. 4305578 at 13 Dovedale Crescent, Buxton,
Derbyshire, SK17 9BJ

R S SINCLAIR

DIRECTOR

On behalf of

Baseefa (2001) Ltd.



Schedule

15 Description of Equipment or Protective System

Type HVB I, HVB II and HVB III Junction boxes consist of a component approved, fabricated steel junction box covered by certificate BAS01ATEX2208U fitted with six or 8 insulating posts connected to form a 3 or 4 pole connection assembly.

Internal and external earth connections are provided.

The junction boxes are rated for use at up to 6.6kV and a maximum current of 200A. The appropriate temperature classification and maximum current rating when supplied with cabling of at least 70mm² are detailed below:

Temperature Classification	Maximum Current (Amps)
T4	200
T5	180
T6	160

If the incoming and outgoing cables enter the junction box via the same gland plate the maximum current is limited to 195A for HVB I and 180A for HVB II and HVB III for a temperature classification of T4 using 70mm² cable.

Dehn Type 755 200 Earthing Balls can be fitted to each of the phase links in a Type HVB III Junction Box if required.

Type HVB III Junction Boxes may optionally include a Type STB121208 Junction Box covered by certificate KEMA99ATEX7894X mounted internally such that the minimum creepage and clearance distances are maintained.

16 Report Number

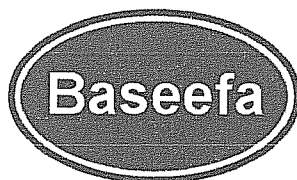
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17 Special Conditions for Safe Use

1. When used as a junction or marshalling box the maximum recommended cable ratings are:

Conductor Size		Current (A)		
AWG	mm ²	T6	T5	T4
6	13.3	42	59	65
-	16	47	68	75
4	21.2	55	80	88
-	25	62	89	98
3	26.7	64	92	102
2	33.6	73	107	118
-	35	75	110	122
1	42.4	81	121	134
-	50	89	133	147
1/0	53.5	101	141	156
2/0	67.4	150	173	192
-	70	160	180	200

2. The certificate does not take into account any short circuit forces.
3. All unused connection bolts shall be fully tightened down.



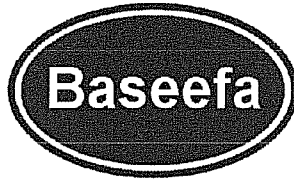
4. Wiring lead insulation shall extend to within 1mm of the cable lug connector
5. Each circuit shall be protected with close excess current protection.
6. ATEX approved cable entries which maintain the IP rating of the enclosure must be used.
7. All unused cable entries must be filled by ATEX approved blanking plugs which maintain the IP rating of the enclosure.
8. When Type STB121208 Junction Boxes are fitted within HVB Type III junction boxes polyamide terminals are not permitted for T4 and T5 temperature classes.
9. For T6 temperature class the terminals permitted within the Type STB121208 Junction Box are limited to a maximum current of 10A.
10. The junction box must be de-energised when earth cables are attached to the Dehn Type 755 200 Earthing Balls.

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

<u>Number</u>	<u>Issue</u>	<u>Date</u>	<u>Description</u>
747369	0	14/8/02	General arrangement – type I (3 pole)
747370	0	14/8/02	General arrangement – type II (3 pole)
747371	0	14/8/02	General arrangement – type III (3 pole)
747372	0	14/8/02	General arrangement – type III (4 pole)
747373	0	14/8/02	General arrangement – type III (3 pole) with STB
747374	0	14/8/02	General arrangement – type III (4 pole) with STB
747375	0	14/8/02	General arrangement – type III (3 pole) with earthing balls
747376	0	14/8/02	6.6 kV post insulators
747377	0	15/8/02	Internal termination components
747378	0	15/8/02	Cover & mounting plates – types I & II
747379	0	16/8/02	Cover & mounting plates – types III
747380	0	19/9/02	Internal termination components – type III with earthing balls
747400	0	20/9/02	Temperature warning label
747401	0	20/9/02	High voltage warning label
724268	0	27/9/02	Certification Label
701562	0	27/9/02	Certification Label engraving details



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **Baseefa03ATEX0052X/1**

4 Equipment or Protective System: **Type HVB I, HVB II, and HVB III Junction Boxes**

5 Manufacturer: **Cooper Crouse-Hinds (UK) Limited**

6 Address: **Dorset Road, Sheerness, Kent, ME12 1LP**

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa03ATEX0052X** to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.


Baseefa Customer Reference No. **4221**

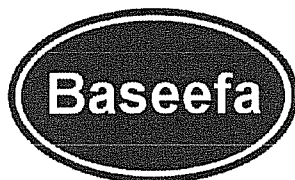
Project File No. **05/0274**

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Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa (2001) Ltd
Registered in England No. 4305578 at the above address


M POWNEY
R S SINCLAIR
DIRECTOR
On behalf of
Baseefa (2001) Ltd.



13 **Schedule**

14 **Certificate Number Baseefa03ATEX0052X/1**

15 **Description of the variation to the Equipment or Protective System**

Variation 1.1

To increase the maximum ambient temperature with a corresponding reduction in current as indicated below.

16 **Report Number**

None

17 **Special Conditions for Safe Use**

Conductor Size		Maximum Current (A) at Ta = 50°C		
AWG	mm ²	T6	T5	T4
6	13.3	34	48	53
-	16	38	55	61
4	21.2	45	65	72
-	25	51	73	80
3	26.7	52	75	83
2	33.6	60	87	96
-	35	61	90	100
1	42.4	66	99	109
-	50	73	109	120
1/0	53.5	82	115	127
2/0	67.4	122	141	157
-	70	131	147	163

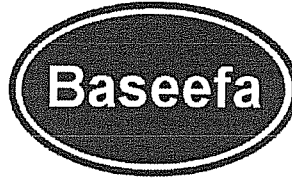
Conductor Size		Maximum Current (A) at Ta = 60°C		
AWG	mm ²	T6	T5	T4
6	13.3	24	34	37
-	16	27	39	43
4	21.2	32	46	51
-	25	36	51	56
3	26.7	37	53	59
2	33.6	42	61	68
-	35	43	63	70
1	42.4	47	70	77
-	50	51	76	84
1/0	53.5	58	81	90
2/0	67.4	86	99	110
-	70	92	103	115

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

None



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **Baseefa03ATEX0052X/2**

4 Equipment or Protective System: **Type HVB, HVB II, and HVB III Junction Boxes**

5 Manufacturer: **Cooper Crouse-Hinds (UK) Limited**

6 Address: **Dorset Road, Sheerness, Kent, ME12 1LP**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa03ATEX0052X to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

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Baseefa Customer Reference No. **4221**

Project File No. **05/0632**

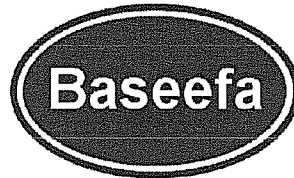
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Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa (2001) Ltd
Registered in England No. 4305578 at the above address

A handwritten signature in black ink, appearing to read "R S Sinclair".

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa (2001) Ltd.



13

Schedule

14

Certificate Number Baseefa03ATEX0052X/2

15 Description of the variation to the Equipment or Protective System

Variation 1.1

Inclusion of the NexT component approved enclosure range, enabling a reduction in the lower ambient temperature to -45°C.

Variation 1.2

The addition of dust temperature ratings.

16 Report Number

N/A

17 Special Conditions for Safe Use

None additional to those listed previously

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Issue	Date	Description
747369	1	14 Nov 2005	ATEX GA High Voltage EEx e JB Type I (6.6kV 200A) 3-pole
747370	1	14 Nov 2005	ATEX GA High Voltage EEx e JB Type II (6.6kV 200A) 3-pole
747371	1	14 Nov 2005	ATEX GA High Voltage EEx e JB Type III (6.6kV 200A) 3-pole
747372	1	14 Nov 2005	ATEX GA High Voltage EEx e JB Type III (6.6kV 200A) 4-pole
747373	1	14 Nov 2005	ATEX GA High Voltage EEx e JB Type III (6.6kV 200A) 3-pole (with STB)
747374	1	14 Nov 2005	ATEX GA High Voltage EEx e JB Type III (6.6kV 200A) 4-pole (with STB)
747375	1	14 Nov 2005	ATEX GA High Voltage EEx e JB Type III (6.6kV 200A) 3-pole (with earthing balls)
701562	1	14 Nov 2005	HVB Certification Label Engraving Detail
726178	0	10 Nov 2005	(NexT) HVB Certification Label
701595	0	14 Nov 2005	(NexT) HVB Certification Label Engraving Detail