




EC - TYPE EXAMINATION CERTIFICATE

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

- 1
- 2
- 3 EC - Type Examination Certificate Number: **Baseefa12ATEX0014X**
- 4 Equipment or Protective System: **Mark IV Range of Controlex Connectors**
- 5 Manufacturer: **Hawke International (A Member of the Hubbell Group of Companies)**
- 6 Address: **Oxford Street West, Ashton under Lyne, Lancashire, OL7 0NA**
- 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, 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. **GB/BAS/ExTR12.0014/00**
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
IEC 60079-0: 2011 **EN 60079-1: 2007** **EN 60079-31: 2009**
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 2GD** See schedule for marking information

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

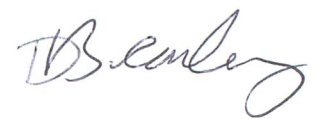
Baseefa Customer Reference No. **0500**

Project File No. **11/0938**

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

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Registered in England No. 4305578. Registered address as above.


PP DIBREARLEY

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa

Re-issued 29th July 2014 to replace original



13

Schedule

14

Certificate Number Baseefa12ATEX0014X

15 Description of Equipment or Protective System

The MKIV Range of Controlex Connectors may be manufactured in brass, steel, stainless steel or bronze and comprise a cylindrical body section which may take the form of a Type CP In-line Connector with a male mating flame path, a Type CR In-line Connector with a female mating flamepath, or a Type BR Bulkhead Connector also with a female mating flamepath.

When joined the male and female parts are secured with a threaded locking ring which is fixed and locked to the male half with hexagon socket grub screws. When separated the connection chambers are closed with flameproof caps which are secured and locked in the same manner.

The cylindrical body sections are used to house a variety of electrical plug and socket arrangements which are keyed into position by a cemented socket head screw passing through the side wall of the enclosure. The plug and socket arrangement of the in-line connector assembly is supported from the rear by a non-metallic ferrule.

In the bulkhead assemblies the support ferrule is compressible and also acts as a former for the polyurethane potting compound, these together create a sealing plug in the rear cable entry.

At the rear of the in-line units is a compression element and securing ring arrangement, the securing ring is locked with hexagon socket grub screws. The compression element includes a female entry thread for the accommodation of the Type BR range of reducers and/or adaptors to NPT thread form, or flameproof cable entry devices suitable for the cable and the conditions of use, and be certified as Equipment (not a Component).

At the rear of the bulkhead units a compression element and a male entry thread is provided for connection through the wall of bulkheads or flameproof enclosures.

The connectors are available in a range of seven sizes, based on the size of the in-line connector metric rear entry thread i.e. 16, 25, 32, 40, 50, and 63. The actual entry thread of the equivalent size bulkhead connector is one size larger, i.e. M25 to M75.

The Connectors maybe marked:

Ex d IIC T* Gb Ex tb IIIC T**°C Db (Tamb -40°C to +**°C). The temperature classification and maximum ambient temperature are dependent upon the power dissipation, or

Ex d IIB+H₂ T* Gb Ex tb IIIC T**°C Db (Tamb -40°C to +**°C) when manufactured in unplated aluminium bronze. The temperature classification and maximum ambient temperature are dependent upon the power dissipation.

CONNECTOR SIZE	Max Ambient = 40°C Temperature Class		Max Ambient = 50°C Temperature Class		Max Ambient = 60°C Temperature Class	
	T6/T85°C	T5/T100°C	T6/T85°C	T5/T100°C	T6/T85°C	T5/T100°C
16	5W	7W	4W	6W	2.6W	4.6W
25	8W	11W	6W	10W	4W	7W
32	10.5W	14.5W	8W	12W	5.4W	9W
40	12W	17W	9W	14W	5.5W	10.5W
50	13W	20W	10W	17W	6.5W	12.5W
63	17W	29W	13W	24W	8.5W	17W

Variation 0.1

To allow interconnection with the Controlex Connectors certified under Baseefa03ATEX0355X.



16 Report Number

Baseefa CertificationReport GB/BAS/ExTR12.0014/00.

17 Specific Conditions of Use

- 1 These connectors must be electrically isolated before any attempt is made to remove the covers or join or separate the two halves
2. When separated the flameproof caps is to be fitted and locked before any associated supply cables are re-energised.
3. The cable entry devices selected for use with the in-line connectors shall provide a mechanical cable retention facility appropriate to the cable type and conditions of service.
4. The cables terminated within the bulkhead connectors shall be mechanically protected from pulling and twisting, and the potted ferrule shall not be subjected to temperatures exceeding 100°C.
5. When used in dust environments the cable entry threads, or bulkhead mounting, shall be sealed in accordance with the installation code of practice to ensure that a minimum ingress protection level of IP66 is maintained.

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

Number	Issue	Date	Description
6905	A	02/07/12	Controlex Label
6906 Sheet 1 of 5	C	14/03/2012	Controlex MKIV Connector Certification Drawing
6906 Sheet 2 of 5	C	14/03/2012	Controlex MKIV Connector Certification Drawing
6906 Sheet 3 of 5	C	14/03/2012	Controlex MKIV Connector Certification Drawing
6906 Sheet 4 of 5	C	14/03/2012	Controlex MKIV Connector Certification Drawing
6906 Sheet 5 of 5	C	14/03/2012	Controlex MKIV Connector Certification Drawing
6907	B	14/03/2012	Controlex MKIV CP Assembly
6908	B	14/03/2012	Controlex MKIV CR Assembly
6909	B	14/03/2012	Controlex MKIV BR Assembly
6189	C	02/07/2012	Material Specifications
7007	B	14/03/2012	Controlex MKIV Flameproof Receptacle Cap Assembly
7008	B	14/03/2012	Controlex MKIV Flameproof Plug Cap Assembly

These drawings are common to, and held with, IECEx BAS 12.0006X.



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: **Baseefa12ATEX00014X/1**

4 Equipment or Protective System: **MKIV ControlEx Range of In-line and Bulkhead Connectors**

5 Manufacturer: **Hawke International (A Division of Hubbell Limited)
(A Member of the Hubbell Group of Companies)**

6 Address: **Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa12ATEX00014X** 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. **0500**

Project File No. **12/0869**

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.

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Registered in England No. 4305578. Registered address as above


R S SINCLAIR 
DIRECTOR
On behalf of
Baseefa Ltd.



13

Schedule

14

Certificate Number Baseefa12ATEX0014X/1

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

Variation 1.1

To allow the Hawke Type 49* Swivel Elbows, certified as Ex Components under Siral1ATEX1347U, coded Exd IIC Gb Exe II Gb and Extb IIIC Db, and the Raxton Elbows, certified as Ex Components under Siral0ATEX1228U, coded Exd IIC Gb Exe II Gb and Extb IIIC Db, to be used with the size M32 and M40 MKIV Range of ControlEx In Line and Bulkhead Connectors.

16 **Report Number**

Baseefa Certification Report GB/BAS/ExTR12.0313/00, held with IECEx BAS 12.0006X.

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**

Drawing No	Issue	Date	Description
6906 Sheets 1 to 6	D	4/12/12	ControlEx MKIV Connector Certification Drawing

The above drawings are common to, and held on, IECEx BAS 12.0006X.

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: **Baseefa12ATEX0014X/2**

4 Equipment or Protective System: **MKIV ControlEx Range of In-line and Bulkhead Connectors**

5 Manufacturer: **Hawke International (A Division of Hubbell Limited)
(A Member of the Hubbell Group of Companies)**

6 Address: **Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa12ATEX0014X 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.

Baseefa Customer Reference No. **0500**

Project File No. **13/0728**

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R S SINCLAIR
GENERAL MANAGER

On behalf of SGS Baseefa Limited

13

Schedule

14

Certificate Number Baseefa12ATEX0014X/2

15

Description of the variation to the Equipment or Protective System

Variation 2.1

To confirm that the Bulkhead Connectors of the MKIV ControlEx Range of In-line and Bulkhead Connectors may be used in either Flameproof (Ex d) and Increased Safety (Ex e) enclosures.

16

Report Number

GB/BAS/ExTR13.0215/00.

17

Specific Conditions of 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

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: **Baseefa12ATEX0014X/3**

4 Equipment or Protective System: **MKIV ControlEx Range of In-line and Bulkhead Connectors**

5 Manufacturer: **Hawke International (A Division of Hubbell Limited)
(A Member of the Hubbell Group of Companies)**

6 Address: **Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa12ATEX0014X 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.

Baseefa Customer Reference No. **0500**

Project File No. **13/0760**

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P R S SINCLAIR
GENERAL MANAGER

On behalf of SGS Baseefa Limited

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Schedule

14

Certificate Number Baseefa12ATEX0014X/3

15 Description of the variation to the Equipment or Protective System

Variation 3.1

To add to the certificate rated current, voltage resistance information for each specific connector configuration, as per the tables below.

The maximum current per contact in the table below assumes that all contacts are being used. If contacts are not used, the current levels can be increased on the remaining contacts providing that the Maximum Power Dissipation value for the arrangement is less than the maximum permitted for the connector, and the contact pin current is less than the maximum value stated in the table.

CONNECTEX MKIV	Pin configuration	Upper Ambient Temperature of + 40°C		Upper Ambient Temperature of + 50°C		Upper Ambient Temperature of + 60°C		Recommended Max Voltage AC/DC
		T6	T5	T6	T5	T6	T5	
Connector size		Maximum Current Per Contact Amps		Maximum Current Per Contact Amps		Maximum Current Per Contact Amps		
Ex16								
3x1.5sq mm + Grd	3x16AWG + Grd	9.8	10	8.75	10	7	9.4	690
4x1.5sq mm + Grd	4x16AWG + Grd	8.5	10	7.6	9.3	6.1	8.15	690
Ex 25								
4x1.5sq mm + Grd	4x16AWG + Grd	10	10	9.3	10	7.6	10	690
9x1.5sq mm + Grd	9x16AWG + Grd	7.15	8.4	6.2	8	5	6.7	690
12x1.5sq mm + Grd	12x16AWG + Grd	6.2	7.25	5.35	6.9	4.38	5.8	690
4x2.5sq mm + Grd	4x12AWG + Grd	13.5	15.8	11.7	15	9.5	12.6	690
7x2.5sq mm + Grd	7x12AWG + Grd	10.2	12	8.8	11.4	7.2	9.5	690
4x6sq mm + Grd	4x10AWG + Grd	19.2	22.5	16.6	21.5	13.5	18	690
4x6sq mm + Grd 4sq mm cable	4x11AWG + Grd	19	19	14	18	11	15	690
Ex 32								
12x1.5sq mm + Grd	12x16AWG + Grd	7	8.3	6.2	7.6	5.1	6.5	690
19x1.5sq mm + Grd	19x16AWG + Grd	5.6	6.6	4.9	9	4	5.2	690
10x2.5sq mm + Grd	10x12AWG + Grd	9.8	11.5	8.5	10.4	7	9	690
12x2.5sq mm + Grd	12x12AWG + Grd	8.9	10.5	7.8	9.5	6.4	8.2	690
4x6sq mm + Grd	4x10AWG + Grd	22	25.9	19.2	23.5	15.8	20.4	690
4x6sq mm + Grd 4sq mm cable	4x11AWG + Grd	18	21	16	19	13	17	690
6x6sq mm + Grd	6x10AWG + Grd	18	21.1	15.7	19.2	12.9	16.6	690
6x6sq mm + Grd 4sq mm cable	6x11AWG + Grd	15	17	13	16	10	14	690
3x10sq mm + Grd	3x8AWG + Grd	32.5	38.2	28.4	34.8	23.3	30.1	690
4x10sq mm + Grd	4x8AWG + Grd	28	33.1	24.1	30	20.2	26.1	690
3x16sq mm + Grd	3x6AWG + Grd	38	44.8	33.3	40.8	27.3	35.3	690
4x16sq mm + Grd	4x6AWG + Grd	33	38.8	28.8	35.3	23.7	30.6	690
Ex 40								
24x1.5sq mm + Grd	24x16AWG + Grd	5.3	6.3	4.6	5.8	3.7	5	690
30x1.5sq mm + Grd	30x16AWG + Grd	4.8	5.7	4.1	5.1	3.3	4.4	690
19x2.5sq mm + Grd	19x12AWG + Grd	7.6	9	6.5	8.2	5.3	7.1	690
4x25sq mm + Grd	4x4AWG + Grd	40	48.5	35.3	44	28.6	38.1	690
4x35sq mm + Grd	4x1AWG + Grd	44.7	53.2	38.7	48.3	31.3	41.8	690
8x 6sq mm + Grd	4x10AWG + Grd	16	19.5	14	18	11.5	15.5	690
8x6sq mm + Grd 4sq mm cable	4x11AWG + Grd	14	16	12	15	9	13	690
5 x 10 sq mm +Grd	5 x 8AWG + Grd	26	32	23	29	18.5	25	690
5 x 16 sq mm +Grd	5 x 6AWG + Grd	31.5	37.5	27	34	22	29.5	690
Ex 50								
37x1.5sq mm + Grd	37x16AWG + Grd	4.5	5.5	3.9	5.1	3.1	4.4	690
27x2.5sq mm + Grd	27x12AWG + Grd	6.6	8.2	5.8	7.6	4.6	6.5	690
37x2.5sq mm + Grd	37x12AWG + Grd	5.6	7	4.9	6.4	4	5.5	300
13x6sq mm + Grd	13x10AWG + Grd	13.5	16.5	11.5	15.5	9.5	13.2	690
13x6sq mm + Grd 4sq mm cable	13x11AWG + Grd	11	14	10	13	8	11	690
Ex 63								
37x1.5sq mm + Grd	37x16AWG + Grd	5.6	7	4.9	6.4	4	5.5	690
49x1.5sq mm + Grd	49x16AWG + Grd	4.4	5.8	3.9	5.3	3.1	4.4	690
60x1.5sq mm + Grd	60x16AWG + Grd	5	6.6	4.4	6	3.6	5	690

Contact Size	Combined Cable and Contact Resistance (Ohms)		Contact Current Rating (Amps)
	Soldered	Crimped	
1.5 sq mm	0.0166	0.0173	10
2.5 sq mm	0.0102	0.0109	17
6 sq mm for 4 sq mm cable	0.0069	0.0076	30
6 sq mm	0.0047	0.0054	30
10 sq mm	0.0027	0.0033	78
16sq mm	0.0018	0.0024	78
25sq mm	0.0012	0.0018	125
35sq mm	0.0009	0.0015	125
Note - the 6 sq mm contact accepts both 4 sq mm and 6 sq mm cables.			

Variation 3.2

To include additional materials of construction for the contact carrier; which are Acetal grade Tecaform AH, PE1 grade Ultem 1000 and GR Polyester grade BIP G7B.

16 Report Number

GB/BAS/ExTR13.0220/00.

17 Specific Conditions of 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	Sheet	Issue	Date	Description
6189	1 of 1	D	13/09/13	ATEX connector material specifications

This drawing is common to Baseefa03ATEX0355X, Baseefa12ATEX0014X and IECEx BAS 12.0006X, and is held on the technical file associated with certificate IECEx BAS 08.0063X.

SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

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

- 3 Supplementary EC - Type Examination Certificate Number: **Baseefa12ATEX0014X/4**
- 4 Equipment or Protective System: **MKIV ControlEx Range of In-line and Bulkhead Connectors**
- 5 Manufacturer: **Hawke International (A Division of Hubbell Limited)
(A Member of the Hubbell Group of Companies)**
- 6 Address: **Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**
- 7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa12ATEX0014X 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.

Baseefa Customer Reference No. **0500**

Project File No. **14/0101**

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R S SINCLAIR

GENERAL MANAGER

On behalf of SGS Baseefa Limited

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Schedule

14

Certificate Number Baseefa12ATEX0014X/4

15 Description of the variation to the Equipment or Protective System

Variation 4.1

To amend the values given in the previous supplement for the MKIV ControlEx Ex63 Size 37. The correct values are as below.

The maximum current per contact in the table below assumes that all contacts are being used. If contacts are not used, the current levels can be increased on the remaining contacts providing that the Maximum Power Dissipation value for the arrangement is less than the maximum permitted for the connector, and the contact pin current is less than the maximum value stated in the table.

CONTROLEX MKIV	Pin configuration	Upper Ambient Temperature of + 40°C		Upper Ambient Temperature of + 50°C		Upper Ambient Temperature of + 60°C		Recommended Max Voltage AC/DC
		T6	T5	T6	T5	T6	T5	
Connector size		Maximum Current Per Contact Amps		Maximum Current Per Contact Amps		Maximum Current Per Contact Amps		
Ex16								
3x1.5sq mm + Grd	3x16AWG + Grd	9.8	10	8.75	10	7	9.4	690
4x1.5sq mm + Grd	4x16AWG + Grd	8.5	10	7.6	9.3	6.1	8.15	690
Ex 25								
4x1.5sq mm + Grd	4x16AWG + Grd	10	10	9.3	10	7.6	10	690
9x1.5sq mm + Grd	9x16AWG + Grd	7.15	8.4	6.2	8	5	6.7	690
12x1.5sq mm + Grd	12x16AWG + Grd	6.2	7.25	5.35	6.9	4.38	5.8	690
4x2.5sq mm + Grd	4x12AWG + Grd	13.5	15.8	11.7	15	9.5	12.6	690
7x2.5sq mm + Grd	7x12AWG + Grd	10.2	12	8.8	11.4	7.2	9.5	690
4x6sq mm + Grd	4x10AWG + Grd	19.2	22.5	16.6	21.5	13.5	18	690
4x6sq mm + Grd 4sq mm cable	4x11AWG + Grd	19	19	14	18	11	15	690
Ex 32								
12x1.5sq mm + Grd	12x16AWG + Grd	7	8.3	6.2	7.6	5.1	6.5	690
19x1.5sq mm + Grd	19x16AWG + Grd	5.6	6.6	4.9	9	4	5.2	690
10x2.5sq mm + Grd	10x12AWG + Grd	9.8	11.5	8.5	10.4	7	9	690
12x2.5sq mm + Grd	12x12AWG + Grd	8.9	10.5	7.8	9.5	6.4	8.2	690
4x6sq mm + Grd	4x10AWG + Grd	22	25.9	19.2	23.5	15.8	20.4	690
4x6sq mm + Grd 4sq mm cable	4x11AWG + Grd	18	21	16	19	13	17	690
6x6sq mm + Grd	6x10AWG + Grd	18	21.1	15.7	19.2	12.9	16.6	690
6x6sq mm + Grd 4sq mm cable	6x11AWG + Grd	15	17	13	16	10	14	690
3x10sq mm + Grd	3x8AWG + Grd	32.5	38.2	28.4	34.8	23.3	30.1	690
4x10sq mm + Grd	4x8AWG + Grd	28	33.1	24.1	30	20.2	26.1	690
3x16sq mm + Grd	3x6AWG + Grd	38	44.8	33.3	40.8	27.3	35.3	690
4x16sq mm + Grd	4x6AWG + Grd	33	38.8	28.8	35.3	23.7	30.6	690
Ex 40								
24x1.5sq mm + Grd	24x16AWG + Grd	5.3	6.3	4.6	5.8	3.7	5	690
30x1.5sq mm + Grd	30x16AWG + Grd	4.8	5.7	4.1	5.1	3.3	4.4	690
19x2.5sq mm + Grd	19x12AWG + Grd	7.6	9	6.5	8.2	5.3	7.1	690
4x25sq mm + Grd	4x4AWG + Grd	40	48.5	35.3	44	28.6	38.1	690
4x35sq mm + Grd	4x1AWG + Grd	44.7	53.2	38.7	48.3	31.3	41.8	690
8x 6sq mm + Grd	4x10AWG + Grd	16	19.5	14	18	11.5	15.5	690
8x6sq mm + Grd 4sq mm cable	4x11AWG + Grd	14	16	12	15	9	13	690
5 x 10 sq mm +Grd	5 x 8AWG + Grd	26	32	23	29	18.5	25	690
5 x 16 sq mm +Grd	5 x 6AWG + Grd	31.5	37.5	27	34	22	29.5	690
Ex 50								
37x1.5sq mm + Grd	37x16AWG + Grd	4.5	5.5	3.9	5.1	3.1	4.4	690
27x2.5sq mm + Grd	27x12AWG + Grd	6.6	8.2	5.8	7.6	4.6	6.5	690
37x2.5sq mm + Grd	37x12AWG + Grd	5.6	7	4.9	6.4	4	5.5	300
13x6sq mm + Grd	13x10AWG + Grd	13.5	16.5	11.5	15.5	9.5	13.2	690
13x6sq mm + Grd 4sq mm cable	13x11AWG + Grd	11	14	10	13	8	11	690
Ex 63								
37x2.5sq mm + Grd	37x12AWG + Grd	5.6	7	4.9	6.4	4	5.5	690
49x1.5sq mm + Grd	49x16AWG + Grd	4.4	5.8	3.9	5.3	3.1	4.4	690
60x1.5sq mm + Grd	60x16AWG + Grd	5	6.6	4.4	6	3.6	5	690

Contact Size	Combined Cable and Contact Resistance (Ohms)		Contact Current Rating (Amps)
	Soldered	Crimped	
1.5 sq mm	0.0166	0.0173	10
2.5 sq mm	0.0102	0.0109	17
6 sq mm for 4 sq mm cable	0.0069	0.0076	30
6 sq mm	0.0047	0.0054	30
10 sq mm	0.0027	0.0033	78
16sq mm	0.0018	0.0024	78
25sq mm	0.0012	0.0018	125
35sq mm	0.0009	0.0015	125
Note - the 6 sq mm contact accepts both 4 sq mm and 6 sq mm cables.			

16 Report Number

SGS Baseefa certification report GB/BAS/ExTR14.0034/00.

17 Specific Conditions of 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

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: **Baseefa12ATEX0014X/5**

4 Equipment or Protective System: **MKIV ControlEx Range of In-line and Bulkhead Connectors**

5 Manufacturer: **Hawke International (A Division of Hubbell Limited)
(A Member of the Hubbell Group of Companies)**

6 Address: **Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa12ATEX0014X** 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.

Baseefa Customer Reference No. **0500**

Project File No. **14/0502**

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R S SINCLAIR

GENERAL MANAGER

On behalf of SGS Baseefa Limited

13

Schedule

14

Certificate Number Baseefa12ATEX0014X/5

15

Description of the variation to the Equipment or Protective System

Variation 5.1

To allow the use of NBR EX1089 80 IRHD face seal as an alternative to the BUNA "O ring" to provide ingress protection; both elastomeric materials have identical physical properties

Variation 5.2

To allow the increase of maximum working voltage on the connector configurations detailed below to the values as detailed in the table,

CONTROLEX MKIV	Pin Configuration	Upper Ambient Temperature of -40°C		Upper Ambient Temperature of +50°C		Upper Ambient temperature of +60°C		ATEX/IECEX/ Inmetro Recommended max Voltage AC/Dc	CSA Recommended Max Voltage AC/DC
		T6	T5	T6	T5	T6	T5		
Connector Size		Maximum Current per Contact Amp		Maximum Current per Contact Amp		Maximum Current per Contact Amp			
Ex 16									
3x1.5sq mm + Grd	3x16 AWG +Grd	9.8	10	8.75	10	7	9.4	750	600
4x1.5sq mm + Grd	4x16 AWG +Grd	8.5	10	7.6	9.3	6.1	8.15	750	600
Ex 25									
4 x 1.5 sq mm + Grd	4x16 AWG +Grd	10	10	9.3	10	7.6	10	750	600
9 x 15 sq mm + Grd	9x16 AWG +Grd	7.15	8.4	6.2	8	5	6.7	750	600
12 sq mm + Grd 1x.5	12x16 AWG +Grd	6.2	7.25	5.35	6.9	4.38	5.8	750	600
4 x 2 sq mm + Grd.5	4x12 AWG +Grd	13.5	15.8	11.7	15	9.5	12.6	750	600
7 x 2.5sq mm + Grd	7x12 AWG +Grd	10.2	12	8.8	11.4	7.2	9.5	750	600
4 x 6 sq mm + Grd	4x10 AWG +Grd	19.2	22.5	16.6	21.5	13.5	18	750	600
4 x 6 sq mm + Grd 4 sq mm cable	4x11 AWG +Grd	19	19	14	18	11	15	750	600
Ex 32									
12 x 1.5 sq mm + Grd	12x16 AWG +Grd	7	8.3	6.2	7.6	5.1	6.5	750	600
19 x 1.5 sq mm + Grd	19x16 AWG +Grd	5.6	6.6	4.9	9	4	5.2	750	600
10 x2.5 sq mm + Grd	10x12 AWG +Grd	9.8	11.5	8.5	10.4	7	9	750	600
12 x 2.5 sq mm + Grd	12x12 AWG +Grd	8.9	10.5	7.8	9.5	6.4	8.2	1000	600
4 x 6 sq mm + Grd	4x10 AWG +Grd	22	25.9	19.2	23.5	15.8	20.4	750	600
4x6 sq mm + Grd 4sq mm cable	4x11 AWG +Grd	18	21	16.0	19	13.0	17.0	750	600
6x6 sq mm + Grd	6x10 AWG +Grd	18	21.1	15.7	19.2	12.9	16.6	750	600
6 x 6 sq mm + Grd 4sq mm cable	6x11 AWG +Grd	15	17	13.0	16.0	10	14.0	750	600
3x 10 sq mm + Grd	3x8 AWG +Grd	32.5	38.2	28.4	34.8	23.3	30.1	750	600
4 x 10	4x8 AWG +Grd	28	33.1	24.1	30	20.2	26.1	750	600
3 x 16 sq mm + Grd	3x6 AWG +Grd	38	44.8	33.3	40.8	27.3	35.3	750	600
4 x 16 sq mm + Grd	4x6 AWG +Grd	33	38.8	28.8	35.3	23.7	30.6	750	600
Ex 40									
24x1.5 sq mm + Grd	24x16 AWG +Grd	5.3	6.3	4.6	5.8	3.7	5	750	600
30 x1.5 sq mm + Grd	30x16 AWG +Grd	4.8	5.7	4.1	5.1	3.3	4.4	1000	600
19x2.5 sq mm + Grd	19x12 AWG +Grd	7.6	9	6.5	8.2	5.3	7.1	750	600
4x25 sq mm + Grd	4x4 AWG +Grd	40	48.5	35.3	44	28.6	38.1	750	600
4x35 sq mm + Grd	4x1 AWG +Grd	44.7	53.2	38.7	48.3	31.3	41.8	750	600
8x6 sq mm + Grd	4x10 AWG +Grd	16	19.5	14	18	11.5	15.5	750	600
8x6 sq mm + Grd 4sq mm cable	4x11 AWG +Grd	14	16	12.0	15.0	9.0	13.0	750	600
5x10 sq mm + Grd	5x8 AWG +Grd	26	32	23	29	18.5	25	750	600
5x16 sq mm + Grd	5x6 AWG +Grd	31.5	37.5	27	34	22	29.5	750	600
Ex40 (special)4x2.5	4x12 AWG +Grd	16	17	14	17	11	15	3000	N/A
Ex 50									
37x1.5 sq mm + Grd	37x16 AWG +Grd	4.5	5.5	3.9	5.1	3.1	4.4	750	600
27x2.5 sq mm + Grd	27x12 AWG +Grd	6.6	8.2	5.8	7.6	4.6	6.5	750	600
37x2.5 sq mm + Grd	37x12 AWG +Grd	5.6	7	4.9	6.4	4	5.5	300	600
13x6 sq mm + Grd	13x10 AWG +Grd	13.5	16.5	11.5	15.5	9.5	13.2	750	600
13x6 sq mm + Grd 4sq mm cable	13x11 AWG +Grd	11	14	10	13	8	11	750	600

Ex63									
37x2.5 sq mm + Grd	37x12 AWG +Grd	5.6	7	4.9	6.4	4	5.5	750	600
49x1.5 sq mm + Grd	49x16 AWG +Grd	4.4	5.8	3.9	5.3	3.1	4.4	750	600
60x1.5 sq mm + Grd	60x16 AWG +Grd	5	6.6	4.4	6	3.6	5	750	600

16 Report Number

SGS Baseefa certification report GB/BAS/ExTR14.0183/00

17 Specific Conditions of Use

The User must ensure that the maximum working voltage used is suitable for the type of connector used. For reference use table above.

18 Essential Health and Safety Requirements

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

19 Drawings and Documents

Drawing No.	Sheet	Issue	Date	Description
6189	1 of 1	E	18/12/13	ATEX CONNECTOR MATERIAL SPECIFICATIONS
6808	12 of 19	A	30/11/2011	Ex40-4X2.5 PIN INSERT INLINE RETAINER MK3
6809	1 of 1	A	30/11/2011	EX40-4X2.5 INLINE PIN INSERT BLOCK MK3
6821	1 of 2	F	20/12/13	Ex40 30X1.5 INLINE PIN INSERT BLOCK
6831	1 of 2	F	20/12/13	Ex40 19X2.5 INLINE PIN INSERT BLOCK
6908	1 of 1	D	25/03/14	CONTROLEX MKIV CR ASSEMBLY
6909	1 of 1	C	25/03/14	CONTROLEX MKIV BR ASSEMBLY
6926	1 of 1	A	23/7/12	CONTROLEX 32 MKIV KEYWAY SPACER TUBE
7006	1 of 1	B	25/03/14	CONTROLEX MKIV PROTECTIVE PLUG CAP ASSEMBLY
7008	1 of 1	C	25/03/14	CONTROLEX MKIV FLAMEPROOF PLUG CAP ASSEMBLY
7043	1 to 2	B	20/12/13	Ex PIN INSERT INLINE RETAINER Ex25-9X1.5 MK IV
7048	1 to 2	B	20/12/13	Ex PIN INSERT INLINE RETAINER Ex32-19X1.5 MK IV
7050	1 to 2	B	20/12/13	Ex PIN INSERT INLINE RETAINER Ex32-12X2.5 MKIV
7052	1 to 2	B	20/12/13	Ex PIN INSERT INLINE RETAINER Ex40-30X1.5 MK IV
7053	1 to 2	B	20/12/13	Ex PIN INSERT INLINE RETAINER Ex40-19X2.5 MK IV
7081	1 to 2	C	20/12/13	Ex25 9x1.5 INLINE PIN INSERT BLOCK MK IV
7083	1 of 2	C	20/12/13	Ex25 4X2.5 INLINE PIN INSERT BLOCK MK IV
7086	1 to 2	C	20/12/13	Ex32 19X1.5 INLINE PIN INSERT BLOCK MK IV
7088	1 of 2	C	20/12/13	Ex32 12X2.5 INLINEPIN INSERT BLOCK MK IV.
7190	-	A	24/3/14	CONTROLEX 16 FRONT COMP SEAL
7191	-	A	24/3/14	CONTROLEX 25 FRONT COMP SEAL
7192	-	A	24/3/14	CONTROLEX 32 FRONT COMP SEAL
7193	-	A	24/3/14	CONTROLEX 40 FRONT COMP SEAL
7194	-	A	24/3/14	CONTROLEX 50 FRONT COMP SEAL
7195	-	A	24/3/14	CONTROLEX 63 FRONT COMP SEAL

The drawings above are common to, and held with, certificate IECEx BAS 12.0006

SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

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

- 3 Supplementary EC - Type Examination Certificate Number: **Baseefa12ATEX0014X/6**
- 4 Equipment or Protective System: **MKIV ControlEx Range of In-Line and Bulkhead Connectors**
- 5 Manufacturer: **Hawke International (A Division of Hubbell Limited)
(A Member of the Hubbell Group of Companies)**
- 6 Address: **Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**
- 7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa12ATEX0014X** 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.

Baseefa Customer Reference No. **0500**

Project File No. **14/0860**

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AP M Pinner
R S SINCLAIR *M Pinner*

GENERAL MANAGER

On behalf of SGS Baseefa Limited

13 **Schedule**

14 **Certificate Number Baseefa12ATEX0014X/6**

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

Variation 6.1

To allow the stamping of the plug cap on all sizes of the MARK IV Range of ControlEx Connectors. Stamping to be detailed as follows:

CAP LABEL = HAWKE CONTROL  Ex (SIZE) WARNING: DO NOT SEPARATE WHILST ENERGISED. DO NOT OPEN EVEN WHEN ISOLATED WHEN FLAMMABLE ATMOSPHERE IS PRESENT.

16 **Report Number**

Baseefa certification report: GB/BAS/ExTR14.0303/00

17 **Specific Conditions of 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	Sheet	Issue	Date	Description
6905	1 of 1	B	14/10/14	CONTROLEX LABEL
6906	1 to 6	E	14/10/14	CONTROLEX MKIV CONNECTOR CERTIFICATION DRAWING

SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

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

- 3 Supplementary EC - Type Examination Certificate Number: **Baseefa12ATEX0014X/7**
- 4 Equipment or Protective System: **MKIV ControlEx Range of In-Line and Bulkhead Connectors**
- 5 Manufacturer: **Hawke International (A Division of Hubbell Limited)
(A Member of the Hubbell Group of Companies)**
- 6 Address: **Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**
- 7 This supplementary certificate extends EC - Type Examination Certificate No. **Baseefa12ATEX0014X** 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.
- 8 Item 9 of the original Certificate is replaced by "Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2012 EN 60079-1: 2014 EN 60079-31: 2014

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

- 9 The marking of the equipment has changed from the original Certificate and shall include the following:

Ex II 2 GD Ex db IIC T* Gb/ Ex tb IIIC TC Db (Tamb -40°C to +**°C)**

Ex II 2 GD Ex db IIB+H₂ T* Gb/ Ex tb IIIC TC Db (Tamb -40°C to +**°C)**

*see schedule on the associated certificates for marking information.

The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa, Notified Body Number 1180, is responsible only for the additional work relating to this supplementary certificate and any other supplementary certificate it has issued.

This certificate shall be held with the original certificate.

Baseefa Customer Reference No. **0500**

Project File No. **14/0608**

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TS Sinclair

R S SINCLAIR

GENERAL MANAGER

On behalf of SGS Baseefa Limited

13

Schedule

14

Certificate Number Baseefa12ATEX0014X/7

15

Description of the variation to the Equipment or Protective System

Variation 7.1

To confirm that the equipment complies with the requirements of latest editions of EN 60079-1:2014 and EN 60079-31:2014 standards.

Variation 7.2

Updated the instructions and marking label.

Variation 7.3

To include additional Specific Condition of Safe Use

16

Report Number

GB/BAS/ExTR15.0019/00

17

Specific Conditions of Use

In addition to those listed previously

1. The flameproof joints are not to be repaired.

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	Sheet	Issue	Date	Description
6905	1 OF 1	C	19/1/15	CONTROLEX LABEL

This drawing is common to and held with IECEX BAS 12.0006X

SUPPLEMENTARY EU - TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

Supplementary EU - Type Examination Certificate Number: **Baseefa12ATEX0014X/8**

In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016

Product: **MKIV ControlEx Range of In-Line and Bulkhead Connectors**

Manufacturer: **Hawke International (A Division of Hubbell Limited) (A Member of the Hubbell Group of Companies)**

Address: **Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**

This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa12ATEX0014X** to apply to products 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.

SGS Baseefa, Notified Body number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that the product, as modified by this supplementary certificate, has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

SGS Baseefa Customer Reference No. **0500**

Project File No. **17/0133**

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PP McPawney
McPawney

R S SINCLAIR

TECHNICAL MANAGER

On behalf of SGS Baseefa Limited

13

Schedule

14

Certificate Number Baseefa12ATEX0014X/8

15 Description of the variation to the Product

Variation 8.1

To include 3 new pin configurations to the MKIV ControlEx Connector for Ex 63 and Ex 50 connector sizes only

CONTROLEX MKIV	Pin Configuration	Upper Ambient Temperature of -40°C		Upper Ambient Temperature of +50°C		Upper Ambient temperature of +60°C		ATEX/IECEX/ Inmetro Recommended max Voltage AC/Dc	CSA Recommended Max Voltage AC/DC
		T6	T5	T6	T5	T6	T5		
Connector Size		Maximum Current per Contact Amp		Maximum Current per Contact Amp		Maximum Current per Contact Amp			
Ex 16									
3x1.5sq mm + Grd	3x16 AWG +Grd	9.8	10	8.75	10	7	9.4	750	600
4x1.5sq mm + Grd	4x16 AWG +Grd	8.5	10	7.6	9.3	6.1	8.15	750	600
Ex 25									
4 x 1.5 sq mm + Grd	4x16 AWG +Grd	10	10	9.3	10	7.6	10	750	600
9 x 15 sq mm + Grd	9x16 AWG +Grd	7.15	8.4	6.2	8	5	6.7	750	600
12 sq mm + Grd 1x.5	12x16 AWG +Grd	6.2	7.25	5.35	6.9	4.38	5.8	750	600
4 x 2 sq mm + Grd.5	4x12 AWG +Grd	13.5	15.8	11.7	15	9.5	12.6	750	600
7 x 2.5sq mm + Grd	7x12 AWG +Grd	10.2	12	8.8	11.4	7.2	9.5	750	600
4 x 6 sq mm + Grd	4x10 AWG +Grd	19.2	22.5	16.6	21.5	13.5	18	750	600
4 x 6 sq mm + Grd 4 sq mm cable	4x11 AWG +Grd	19	19	14	18	11	15	750	600
Ex 32									
12 x 1.5 sq mm + Grd	12x16 AWG +Grd	7	8.3	6.2	7.6	5.1	6.5	750	600
19 x 1.5 sq mm + Grd	19x16 AWG +Grd	5.6	6.6	4.9	9	4	5.2	750	600
10 x2.5 sq mm + Grd	10x12 AWG +Grd	9.8	11.5	8.5	10.4	7	9	750	600
12 x 2.5 sq mm + Grd	12x12 AWG +Grd	8.9	10.5	7.8	9.5	6.4	8.2	1000	600
4 x 6 sq mm + Grd	4x10 AWG +Grd	22	25.9	19.2	23.5	15.8	20.4	750	600
4x6 sq mm + Grd 4sq mm cable	4x11 AWG +Grd	18	21	16.0	19	13.0	17.0	750	600
6x6 sq mm + Grd	6x10 AWG +Grd	18	21.1	15.7	19.2	12.9	16.6	750	600
6 x 6 sq mm + Grd 4sq mm cable	6x11 AWG +Grd	15	17	13.0	16.0	10	14.0	750	600
3x 10 sq mm + Grd	3x8 AWG +Grd	32.5	38.2	28.4	34.8	23.3	30.1	750	600
4 x 10	4x8 AWG +Grd	28	33.1	24.1	30	20.2	26.1	750	600
3 x 16 sq mm + Grd	3x6 AWG +Grd	38	44.8	33.3	40.8	27.3	35.3	750	600
4 x 16 sq mm + Grd	4x6 AWG +Grd	33	38.8	28.8	35.3	23.7	30.6	750	600
Ex 40									
24x1.5 sq mm + Grd	24x16 AWG +Grd	5.3	6.3	4.6	5.8	3.7	5	750	600
30 x1.5 sq mm + Grd	30x16 AWG +Grd	4.8	5.7	4.1	5.1	3.3	4.4	1000	600
19x2.5 sq mm + Grd	19x12 AWG +Grd	7.6	9	6.5	8.2	5.3	7.1	750	600
4x25 sq mm + Grd	4x4 AWG +Grd	40	48.5	35.3	44	28.6	38.1	750	600
4x35 sq mm + Grd	4x1 AWG +Grd	44.7	53.2	38.7	48.3	31.3	41.8	750	600
8x6 sq mm + Grd	4x10 AWG +Grd	16	19.5	14	18	11.5	15.5	750	600
8x6 sq mm + Grd 4sq mm cable	4x11 AWG +Grd	14	16	12.0	15.0	9.0	13.0	750	600
5x10 sq mm + Grd	5x8 AWG +Grd	26	32	23	29	18.5	25	750	600
5x16 sq mm + Grd	5x6 AWG +Grd	31.5	37.5	27	34	22	29.5	750	600
Ex40 (special)4x2.5	4x12 AWG +Grd	16	17	14	17	11	15	3000	N/A
Ex 50									
5x25 sq mm +Grd	5x4 AWG + Grd	38.01	47.14	33.33	43.46	26.87	37.27	750	N/A
5x35 sq mm +Grd	5x1 AWG + Grd	41.63	51.64	36.51	47.61	29.44	40.82	750	N/A
37x1.5 sq mm + Grd	37x16 AWG +Grd	4.5	5.5	3.9	5.1	3.1	4.4	750	600
27x2.5 sq mm + Grd	27x12 AWG +Grd	6.6	8.2	5.8	7.6	4.6	6.5	750	600

37x2.5 sq mm + Grd	37x12 AWG +Grd	5.6	7	4.9	6.4	4	5.5	300	600
13x6 sq mm + Grd	13x10 AWG +Grd	13.5	16.5	11.5	15.5	9.5	13.2	750	600
13x6 sq mm + Grd 4sq mm cable	13x11 AWG +Grd	11	14	10	13	8	11	750	600

CONTROLEX MKIV	Pin Configuration	Upper Ambient Temperature of -40°C		Upper Ambient Temperature of +50°C		Upper Ambient temperature of +60°C		ATEX / IECEx / Inmetro Recommended max Voltage AC/Dc	CSA Recommended Max Voltage AC/DC
		T6	T5	T6	T5	T6	T5		
Connector Size		Maximum Current per Contact Amp		Maximum Current per Contact Amp		Maximum Current per Contact Amp			
Ex63									
37x2.5 sq mm + Grd	37x12 AWG +Grd	5.6	7	4.9	6.4	4	5.5	750	600
49x1.5 sq mm + Grd	49x16 AWG +Grd	4.4	5.8	3.9	5.3	3.1	4.4	750	600
60x1.5 sq mm + Grd	60x16 AWG +Grd	5	6.6	4.4	6	3.6	5	750	600
65x1.5 sq mm +Grd	65x16 AWG + Grd	3.89	5.08	3.40	4.62	2.75	3.89	750	N/A
73x1.5 sq mm +Grd	73x16 AWG + Grd	3.67	4.79	3.21	4.36	2.59	3.67	750	N/A

Variation 8.2

To amend the table for dust temperature class to T5/T95°C and T6/80°C as follows:

CONNECTOR SIZE	Max Ambient = 40°C		Max Ambient = 50°C		Max Ambient = 60°C	
	Temperature Class		Temperature Class		Temperature Class	
	T6/T80°C	T5/T95°C	T6/T80 C	T5/T95°C	T6/T80°C	T5/T95°C
16	5W	7W	4W	6W	2.6W	4.6W
25	8W	11W	6W	10W	4W	7W
32	10.5W	14.5W	8W	12W	5.4W	9W
40	12W	17W	9W	14W	5.5W	10.5W
50	13W	20W	10W	17W	6.5W	12.5W
63	17W	29W	13W	24W	8.5W	17W

16 Report Number

GB/BAS/ExTR17.0079/00

17 Specific Conditions of 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	Sheet	Issue	Date	Description
6888	1 to 2	A	30/1/17	Ex 63 65x1.5 Inline socket insert block
6889	1 of 1	A	30/1/17	Ex 63 65x1.5 Inline Pin Insert block
6976	1 to 8	B	02/02/17	Ex Pin Insert Inline MK IV
6977	1 to 8	B	02/02/17	Ex Socket Inserts inline MK IV

Number	Sheet	Issue	Date	Description
7059	1 of 1	A	30/1/17	Ex Pin Insert Inline Retainer Ex 63 – 65x1.5 MK IV
7079	1 to 2	A	30/1/17	Ex Socket Insert Inline Retainer Ex 63-65x1.5 MK IV
7218	1 of 1	A	30/1/17	Ex Pin Insert Inline Retainer Ex 63 – 73x1.5 MK IV
7219	1 to 2	A	30/1/17	Ex 63 73x1.5 Inline socket insert block
7220	1 of 1	A	30/01/17	Ex 63 73x1.5 Inline pin insert block
7280	1 to 2	A	30/1/17	Ex Socket Insert Inline Retainer Ex 63-73x1.5 MK IV

These drawings are common to, and held with, certificate number IECEx BAS 12.0006X.

1 SUPPLEMENTARY EU - TYPE EXAMINATION CERTIFICATE

**2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

3 Supplementary EU - Type Examination Certificate Number: **Baseefa12ATEX0014X/9**

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016

4 Product: **MKIV ControlEx Range of In-Line and Bulkhead Connectors**

5 Manufacturer: **Hawke International (A Division of Hubbell Limited)
(A Member of the Hubbell Group of Companies)**

6 Address: **Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa12ATEX0014X** to apply to products 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.

8 SGS Baseefa, Notified Body number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that the product, as modified by this supplementary certificate, has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

SGS Baseefa Customer Reference No. **0500**

Project File No. **18/0167**

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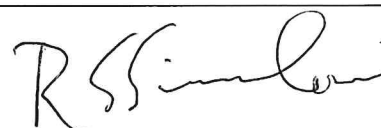
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R S SINCLAIR
TECHNICAL MANAGER
On behalf of SGS Baseefa Limited

13 **Schedule**

14 **Certificate Number Baseefa12ATEX0014X/9**

15 **Description of the variation to the Product**

Variation 9.1

To introduce the option of the use of up to 4 resistors between pins, with a total maximum power dissipation of 1W, within the body of the size 40 Mark IV ControlEx Connector. The 4 resistors can be used in within the body of either the female socket or male plug connector.

Variation 9.2

To amend the table for T class / dust temperature class to include the variant of the size 40 Mark IV ControlEx Connector with the 4 resistors between pins. The maximum power dissipation is reduced by 1W for this variant as shown below as 40R.

CONNECTOR SIZE	Max Ambient = 40°C		Max Ambient = 50°C		Max Ambient = 60°C	
	Temperature Class		Temperature Class		Temperature Class	
	T6/T80°C	T5/T95°C	T6/T80°C	T5/T95°C	T6/T80°C	T5/T95°C
16	5W	7W	4W	6W	2.6W	4.6W
25	8W	11W	6W	10W	4W	7W
32	10.5W	14.5W	8W	12W	5.4W	9W
40	12W	17W	9W	14W	5.5W	10.5W
40R	11W	16W	8W	13W	4.5W	9.5W
50	13W	20W	10W	17W	6.5W	12.5W
63	17W	29W	13W	24W	8.5W	17W

16 **Report Number**

SGS Baseefa certification report GB/BAS/ExTR18.0080/00.

17 **Specific Conditions of 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	Sheet	Issue	Date	Description
6906	1 to 7	F	04/4/18	ControlEx MKIV Connector Certification Drawing

This drawing is common to and held with IECEx BAS 12.0006X.