

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: **Baseefa02ATEX0241X**

4 Equipment or protective system: **TYPE 007 'M6' SWITCHBOX**

5 Manufacturer: **K CONTROLS LIMITED**

6 Address: **West Drayton, Middlesex, UB7 8JU**

7 This equipment 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)0105 dated 12 December 2002**

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

EN 50014: 1997 + A1 & A2 EN 50018: 2000 EN 50019: 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 of 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 ed IIC T6 (T_{amb} -50°C to +55°C)**

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

Baseefa (2001) Ltd. Customer Reference No. **0600**

Project File No. **02/0105**

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.

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

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



Schedule

15 Description of Equipment or Protective System

Type 007 'M6' Switchbox rated at 250V a.c., 5A resistive or inductive, 250V d.c., 0.25A resistive, 0.03A inductive.

The unit comprises a cast aluminium alloy or stainless steel base and cover assembly secured by means of two M5 screws and sealed by nitrile or silicone rubber 'O' rings. A drive shaft for the cam actuator mechanism passes through an acetal or brass bearing in the base of the enclosure and is sealed by a nitrile or silicone rubber 'O' ring.

The enclosure contains one or two Burgess micro-switches as type E1V3C/XXXX Kestrel, Certificate No. BAS01ATEX2358U coded EEx d IIC with associated terminals provided by a Klippon Weidmuller Type BK6 terminal strip as Certificate No. BAS98ATEX3084U coded EEx e II. An additional Klippon Weidmuller Type BK2 terminal strip as Certificate No. BAS98ATEX3084U coded EEx e II may be provided for auxiliary connections rated at up to 10A.

Both internal and external earthing facilities are provided, the internal one requiring the use of a crimped eyelet.

Up to three threaded holes are provided for fitting suitably certified cable entry devices that maintain the degree of protection of the enclosure.

Variation 0.1

A visual position indicator with or without a plastic cover with a surface area $\leq 20\text{cm}^2$ may be fitted to the main cover which incorporates a shaft extension that is sealed by means of a nitrile or silicone rubber 'O' ring. These units are designated Type 1 products.

Variation 0.2

An alternative plastic cover with a surface area $\leq 100\text{cm}^2$ and either with or without a non-removeable aluminium shroud may also be used with the position indicator.

Units with this variation are coded:

EEx ed IIB ($T_{\text{amb}} -50^{\circ}\text{C}$ to $+55^{\circ}\text{C}$)

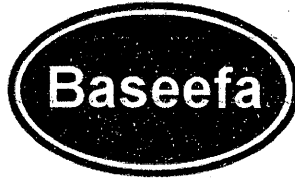
and are designated Type 2 products.

16 Report No.

02(C)0105

17 Special Conditions for Safe Use

1. No more than one single or multiple stranded wiring lead shall be connected into either side of the terminal strip, unless multiple conductors have been joined in a suitable manner, e.g. two conductors into a single insulated crimped boot lace ferrule.
2. Leads connected to the terminal shall be insulated for the appropriate voltage and this insulation shall extend to within 1mm of the metal of the terminal throat.
3. All terminal screws, used and unused, must be tightened down.

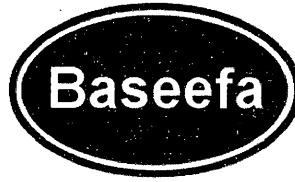


18 Essential Health and Safety Requirements

None additional to those covered by the standards listed at item 9

19 Drawings and Documents

Number	Revision	Date	Description
CO8076 sheet 1	1	08.07.02	GA
CO8076 sheet 2	1	08.07.02	GA
CO8077	3	04.12.02	Indicator Variant
CO8230	1	14.11.02	Cert. Label IIC
CO8260	1	05.12.02	Cert. Label IIB



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 **Baseefa02ATEX0241X/1**
Examination Certificate Number:

4 Equipment or Protective System: **TYPE 007 'M6' SWITCHBOX**

5 Manufacturer: **K CONTROLS LIMITED**

6 Address: **West Drayton, Middlesex, UB7 8JU**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa02ATEX0241X 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 (2001) Ltd. Customer Reference No. **0600**

Project File No. **03/0373**

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.



13

Schedule

14

Certificate Number Baseefa02ATEX0241X/1

15

Description of the variation to the Equipment or Protective System

Variation 1.1

Addition of dimensions to the drawing to allow an alternative method of confirming the thickness of material at the root of a drilled hole.

Variation 1.2

Confirmation of compliance with EN 50281-1-1: 1998 to allow the enclosure to be used on combustible dust atmospheres.

The marking is now amended to:-

⊕ II 2 GD T85°C

16

Report Number

03(CI)0373

17

Special Conditions for Safe Use

None additional to those listed previously

18

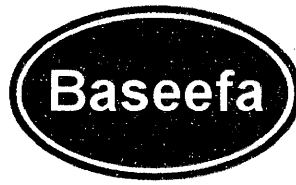
Essential Health and Safety Requirements

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

19

Drawings and Documents

Number	Rev.	Date	Description
C08077	4	12.05.03	Indicator Variant
C08260	3	10.06.03	Label
C08230	3	10.06.03	Label



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: Baseefa02ATEX0241X/2

4 Equipment or Protective System: TYPE 007 'M6' SWITCHBOX

5 Manufacturer: K CONTROLS LIMITED

6 Address: West Drayton, Middlesex, UB7 8JU

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa00ATEX0241X 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 (2001) Ltd. Customer Reference No. 0600

Project File No. 03/0644

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

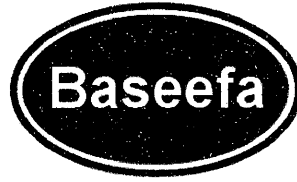
Telephone +44 (0) 1298 28255 Fax +44 (0) 1298 28216
e-mail info@baseefa2001.biz web site www.baseefa2001.biz
Registered in England No. 4305578 at 13 Dovedale Crescent, Buxton,
Derbyshire, SK17 9BJ

R S SINCLAIR

DIRECTOR

On behalf of

Baseefa (2001) Ltd.



13

Schedule

14

Certificate Number Baseefa02ATEX0241X/2

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

Variation 2.1

Alternative terminals as SIRA01ATEX3247U.

16 **Report Number**

None

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	Sheet	Rev.	Date	Description
C08076	1	2	16.07.03	GA
C08076	2	2	16.07.03	GA



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: Baseefa02ATEX0241X/3

4 Equipment or Protective System: TYPE 007 'M6' SWITCHBOX

5 Manufacturer: K CONTROLS LIMITED

6 Address: West Drayton, Middlesex, UB7 8JU

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa02ATEX0241X 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. 0600

Project File No. 06/0949

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

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


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



13

Schedule

14

Certificate Number Baseefa02ATEX0241X/3

15 Description of the variation to the Equipment or Protective System

Variation 3.1

To confirm that the equipment covered by this certificate has been reviewed against the requirements of EN60079-0: 2004, EN 60079-7: 2001, EN 60079-1: 2004, prEN 61241-0: 2005 and EN 61241-1:2004 in respect of the differences from EN 50014: 1997 + Amds 1&2, EN 50018: 2000 + Amd 1, EN 50019:2000 and EN 50281-1-1: 1998, and that none of these differences affect this equipment.

16 Report Number

None

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	Sheet	Issue	Date	Description
C08076	1 of 2	3	04/12/06	General assembly
C08076	2 of 2	3	04/12/06	General assembly
C08230	-	4	04/12/06	Label IIC
C08260	-	4	04/12/06	Label IIB



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: Baseefa02ATEX0241X/4

4 Equipment or Protective System: TYPE 007 'M6' SWITCHBOX

5 Manufacturer: K CONTROLS LIMITED

**6 Address: Process House, Stone Close, Horton Road, West Drayton,
Middlesex, UB7 8JN**

7 This supplementary certificate extends EC - Type Examination Certificate No. Baseefa02ATEX0241X 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. 0600

Project File No. 07/0471

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

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


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



13

Schedule

14

Certificate Number Baseefa02ATEX0241X/4

15

Description of the variation to the Equipment or Protective System

Variation 4.1

To allow the use of an optional anti-static coated plastic visual indicator.

16

Report Number

None

17

Special Conditions for Safe Use

None additional to those listed previously

18

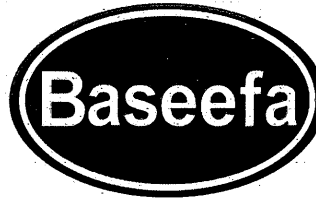
Essential Health and Safety Requirements

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

19

Drawings and Documents

Number	Issue	Date	Description
C08077	5	11/06/07	007 'M6' Switchbox indicator variant



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: Baseefa02ATEX0241X/5

4 Equipment or Protective System: TYPE 007 'M6' SWITCHBOX

5 Manufacturer: K. Controls Ltd

**6 Address: 2 Crown Way, Crown Business Centre, Horton Road, West Drayton,
Middlesex, UB7 8HZ**

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa02ATEX0241X 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. **0600**

Project File No. **11/0612**

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.


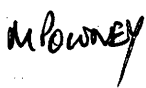
Baseefa

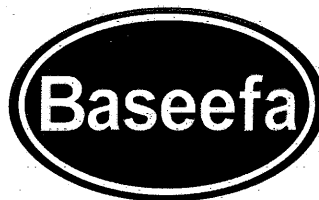
Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ

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 Ltd

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


R S SINCLAIR 
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number Baseefa02ATEX0241X/5

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

Variation 5.1

To confirm that the equipment covered by this certificate has been reviewed against the requirements of EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-7: 2007, EN 60079-31: 2009 in respect of the differences from EN60079-0: 2004, EN 60079-7: 2003, EN 60079-1: 2004, prEN 61241-0: 2005 and EN 61241-1:2004, and the equipment has been assessed and is in compliance with the requirements of the latest standards.

The marking is now as follows:

⊕ II 2GD Ex ed IIC T6 Gb Ex tb IIIC T85°C Db IP67 Tamb -50°C to +55°C

16 **Report Number**

11(C)0612

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
C08076	1 of 2	4	18/10/11	007 'M6' switchbox general arrangement
C08076	2 of 2	4	18/10/11	007 'M6' switchbox general arrangement
C08230		5	18/10/11	M6 certification label Type 1 & 3 – Ex ed IIC
C08260		5	18/10/11	M6 certification label Type 2 – Ex ed IIB