



EC-TYPE EXAMINATION CERTIFICATE

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

EC-Type Examination Certificate Number : **BAS01ATEX2436X**

Equipment or Protective System: **A RANGE OF SOLENOIDS SIZES 3 TO SIZE 6**

Manufacturer: **FCx THOMPSON VALVES**

Address: **Poole, Dorset, BH17 7EF**

This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

The Electrical Equipment Certification Service, notified body number 600 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 N°

01(C)0879 dated 3 January 2002

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

EN 50014: 1997 + Amds 1 & 2

EN 50018: 2000

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

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.

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.

The marking of the equipment or protective system shall include the following:-

**Ex II 2 G EEx d IIC T6 (T_{amb} = -40°C to +40°C)
or T4 (T_{amb} = -40°C to +90°C)**

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

File No: EECS 3782/01/011

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire, SK17 9JN, United Kingdom
Tel: +44(0)1298 28000 Fax: +44(0)1298 28244
internet: www.baseefa.com e-mail: baseefa.info.eecs@hsl.gov.uk



I M CLEARE
DIRECTOR
28 January 2002



13

Schedule

14

EC-TYPE EXAMINATION CERTIFICATE N° BAS01ATEX2436X

15

Description of Equipment or Protective System

A Range of Solenoids Sizes 3 to Size 6 comprises a cylindrical body, a cover and a base all manufactured from grade EN-JL1030 cast iron. The body houses a coil, a core piece and the armature which passes through the base to operate the driven device. A plate is provided above the coil for mounting, terminals, up to 4 position indicating switches, transient suppressors, as well as bridge rectifiers, and capacitors when connected to an a.c. supply.

The size 3 to size 6 coils have a dissipation of 40W, 75W, 100W, and 150W respectively, and are rated 24V - 440V a.c. 40 - 60 Hz, or 12V -250V d.c.

Internal and external earth facilities are provided.

Cable entry holes are provided as specified on the certified drawings for the accommodation of suitable BASEEFA certified flameproof cable entry devices, with or without the interposition of a suitable BASEEFA certified flameproof thread adapter. Unused entries are to be fitted with suitable BASEEFA certified flameproof stopping plugs.

Suitable flameproof cable entry devices, thread adapters and stopping plugs certified as Equipment (not a Component) under an EC Type Examination Certificate to Directive 94/9/EC may also be used in the manner specified above.

16

Report No.

BASEEFA Certification Report No. 01(C)0879 dated 3 January 2002.

17

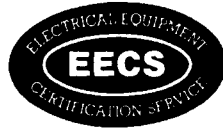
Special Conditions For Safe Use

- 1 For replacement purposes the cover fixing screws shall be of grade A4-80 stainless steel or stronger.
- 2 The maximum flamepath gaps shall not exceed 0.1 mm.

18

Essential Health and Safety Requirements

Essential Health and Safety Requirements not covered by Standards listed at (9)		
Clause	Subject	Compliance
1.0.2	Analysis of possible operating faults	Manufacturer's Instructions
1.0.3	Special checking and maintenance conditions	No special requirements
1.0.6	Instructions	Manufacturer's Instructions
1.2.2	Components for incorporation or replacement	No user serviceable parts
1.2.4	Dust deposits	Certification for gas atmospheres only
1.2.5	Additional means of protection	Not applicable



13

Schedule

14

EC-TYPE EXAMINATION CERTIFICATE N° BAS01ATEX2436X

Essential Health and Safety Requirements not covered by Standards listed at (9)

Clause	Subject	Compliance
1.2.7	Protection against other hazards	BASEEFA Report No. 01(C)0879
1.3.5	Hazards arising from pressure compensation	Not applicable
1.5.	General requirements for safety devices	Not applicable
1.6.1	Manual override	Not applicable
1.6.2	Emergency shutdown	Not applicable
1.6.3	Hazards arising from power failure	Not applicable
1.6.5	Placing of warning devices as parts of equipment	Not applicable
2.0.	Category M	Not applicable
2.1.	Category 1	Not applicable
2.2.1	Category 2G	BASEEFA Report No. 01(C)0879
2.2.2	Category 2D	Not applicable
2.3.	Category 3	Not applicable
3.	Requirements for protective systems	Not applicable

19

DRAWINGS

Number	Sheet	Issue	Date	Description
S300000000000D0	1	1	24.09.01	General Assembly Size 3-6 Housings
S300000000000D0	2	1	24.09.01	Notes and wiring Diagrams Size 3-6 Housings
S300000000000D0	3	1	24.09.01	Parts List Size 3-6 Housings
3M01-00B127	1	1	24.09.01	Housings
3M84-00B308	-	1	24.09.01	Housing Cover
3M11-00B207	1	1	24.09.01	Housing Base
3M02-00B307	-	1	24.09.01	Armature

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

BASEEFA List Keywords
2SOLEVAL



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 **BAS01ATEX2436X/1**
Number :

4 Equipment or protective system: **A Range of Solenoid Sizes 3 to 6**

5 Manufacturer : **FCx Thompson Valves Limited**

6 Address : **Poole, Dorset, BH17 7EF**

7 This supplementary certificate, issued by Baseefa (2001) Ltd., Notified Body Number 1180, extends EC - Type Examination Certificate No. BAS01ATEX2436X 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

The Electrical Equipment Certification Service, Notified Body Number 0600, retains responsibility for its original documentation. Baseefa (2001) Ltd. is responsible only for the additional work relating to this supplementary certificate and any other supplementary certificate that it has issued.

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

Baseefa (2001) Ltd. Customer Reference No. **3782**

Project File No. **02/0232**

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.

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

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

Description of the variation to the Equipment or Protective System

Variation 1.0

Modification to armature maximum flamepath gap to facilitate manufacture.

Report No.

None

Special Conditions for Safe Use

The special condition for safe use number 2 on original certificate no longer applies.

Essential Health and Safety Requirements

See original certificate

Drawings and Documents

Number	Issue	Date	Description
3M02-00B307	2	10.09.02	Armature



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: **BAS01ATEX2436X/2**

4 Equipment or Protective System: **A Range of Solenoids Sizes 3 to 6**

5 Manufacturer: **FCx Thompson Valves Limited**

6 Address: **Poole, Dorset, BH17 7EF**

7 This supplementary certificate extends EC – Type Examination Certificate No. **BAS01ATEX2436X** 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.

The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa (2001) Ltd., 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 may only be reproduced in its entirety, without any change, schedule included.

Baseefa (2001) Ltd. Customer Reference No. 3782

Project File No. 03/0812

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 BAS01ATEX2436X/2

15

Description of the variation to the Equipment or Protective System

Variation 2.1

To permit an alternative dual coil option and minor changes to drawings.

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
S300000000000D0	1	2	06.09.03	General Assembly Size 3-6 Housings
S300000000000D0	2	2	06.09.03	Notes and Wiring Diagrams Size 3-6 Housings
S300000000000D0	3	2	06.09.03	Parts List Size 3-6 Housings
3M000B127	1	2	06.09.03	Housings



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: BAS01ATEX2436X/3**
- 4 Equipment or Protective System: A Range of Solenoids Sizes 3 to 6**
- 5 Manufacturer: FCx Thompson Valves Limited**
- 6 Address: Poole, Dorset, BH17 7EF**
- 7 This supplementary certificate extends EC – Type Examination Certificate No. BAS01ATEX2436X 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.

The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa (2001) Ltd., 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 may only be reproduced in its entirety, without any change, schedule included.

Baseefa (2001) Ltd. Customer Reference No. 3782

Project File No. 04/0605

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 BAS01ATEX2436X/3

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

Variation 3.1

To permit an increase in the maximum flamepath gaps to facilitate manufacture.

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
S300000000000D0	2	03	10.08.04	General Assembly Size 3-6 Housings
3M84-00B308	-	2	09.08.04	Cover
3M11-00B207	1	2	10.08.04	Pot Base