1 # TYPE EXAMINATION CERTIFICATE

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

3 Type Examination Certificate Number : **Baseefa02ATEX0077**

4 Equipment : **TYPE ICO4N SOLENOID**

5 Manufacturer : **FC-X THOMPSON VALVES**

6 Address : **17 Balena Close, Creekmoor, Poole, BH17 7EF**

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. Certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment of Category 3 intended for use in potentially explosive atmospheres given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in confidential Report No. **02(C)0025 dated 15 November 2002**

9 Compliance with the Essential Health and Safety Requirements has been assessed by reference to :

EN50021:1999

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 is subject to special conditions of safe use specified in the schedule to this certificate.

11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment and not to specific items of equipment subsequently manufactured.

12 The marking of the equipment shall include the following :

⟨Ex⟩ **II 3G EEx nA II T (see schedule) T_{amb} (see schedule)**

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

Baseefa (2001) Ltd. Customer Reference No. 3782 Project File No. 02/0025

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.

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Schedule

15 Equipment Description

A Type ICO4N Solenoid consists of an encapsulated coil contained within a cylindrical cast iron enclosure. A magnetic steel armature located in the centre of the coil passes though the base of the enclosure.

A removable lid, secured by two screws, provides access to ATEX category 3 approved terminals suitably rated for connection to an external supply. A number of different supply options are permitted provided the devices specified below are fitted:

Max. input voltage (Volts)	Max. input power (Watts)	Device across the terminals	
40 dc	12	A	Transient voltage suppressor diodes 47v
150 dc	12	B	Transient voltage suppressor diodes 200v
250 dc/ac	12	C	2KBP10 bridge rectifier **
110 ac	12	D	Capacitor 0.1μF or 0.22μF 110v plus item C
250 ac	12	E	Capacitor 0.22μF 250 v plus item C

** Alternatives 2KBB100R, 2KBPM10M, 1KAB100E, KBP10M or W10G may be used

The temperature classification depends on the ambient temperature range and the equipment may be marked as follows:

⟨Ex⟩ II 3G EEx nA II T6 T_{amb} -20°C to 40°C

or

⟨Ex⟩ II 3G EEx nA II T4 T_{amb} -20°C to 90°C

VARIATION 0.1

The solenoid may be produced without an external earth stud in which the certificate shall include a suffix 'X' indicating the requirement for external earthing via a cable gland.

16 Report

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17 Special Conditions for Safe Use

1. When the solenoid is produced without an external earth stud the external earthing requirement must be met by the use of an ATEX approved metallic cable gland with an earth tag located between the gland and the solenoid body.

18 Compliance with Essential Health and Safety Requirements

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

19.Drawings and Documents

Number	Sheet	Issue	Date	Description
Y5	1	2	11/11/02	General assembly
Y5	2	2	11/11/02	Parts specification
Y5	3	2	11/11/02	Material list