



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: **Baseefa03ATEX0589X**

4 Equipment or Protective System: **18mm RANGE OF SENSORS**

5 Manufacturer: **SYNATEL INSTRUMENTATION LTD**

6 Address: **Norton Canes, Cannock, Staffordshire, WS11 9TB**

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. **03(C)0769**

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

**EN50281-1-1:1998 + amd. 1**

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 1D T100°C T<sub>amb</sub> -15°C to 50°C**

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

Baseefa (2001) Ltd. Customer Reference No. **1057**

Project File No. **03/0769**

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



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## Schedule

14

Certificate Number Baseefa03ATEX0589X

### 15 Description of Equipment or Protective System

The 18mm Range of Sensors are self contained sensors with a variety of different functions and circuit options contained within a 18mm diameter x 80mm long moulded plastic enclosure and encapsulated using epoxy. The product type is identified in the series and code on the label. The outer surface of the tubular enclosure is threaded M18 x1.0mm for a length of 60mm starting at the sensor end of the enclosure. Two plastic nuts are supplied to clamp the sensor in a mounting bracket. An integral cable is provided for connection to a 12-240V dc or 24-240V ac supply. The sensors may act as a switch with a maximum switching capacity of 200mA in which case they must be connected in series with a suitable load with the same voltage rating as the supply being used, typically a relay.

Alternatively the sensors may be a 10-30V DC 4 wire version which contains an output with a switching capacity of 100mA.

The maximum power supplied to the sensor circuit is controlled by a 63mA fuse and two parallel zener diodes rated at 7.5V. The normal working voltage is 6.2V. The input supply is protected a thermal fuse rated at 98°C.

### 16 Report Number

03(C)0769

### 17 Special Conditions for Safe Use

1. These sensors are not suitable for mounting where they will be exposed to direct sunlight unless fitted with an auxiliary metal shield completely protecting the plastic enclosure from UV exposure.

### 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
A4-300376A	-	19/2/03	Enclosure detail
A3-200368A	-	4/9/03	Circuit diagram
A4-15016A	-	3/9/03	Label