



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: **BAS01ATEX2365X**

4 Equipment or Protective System: **TYPE PUI1DR(A) SINGLE OUTPUT SPEEDSWITCH**

5 Manufacturer: **SYNATEL INSTRUMENTATION LIMITED**

6 Address: **Walsall Road, Norton Canes, Cannock, Staffs, WS11 3TB**

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 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°

99(C)0985 dated 29 January 2002

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

EN 50281-1-1: 1998

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. 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 2D T100°C T_{amb} -15°C to 50°C

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

File No: EECS 1057/03/004

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.



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I M CLEARE
DIRECTOR
30 January 2001



13 **Schedule**

14 **EC-TYPE EXAMINATION CERTIFICATE N° BAS01ATEX2365X**

15 **Description of Equipment or Protective System**

The Type PU1DR(A) Single Output Speedswitch is a self contained, self calibrating, processor based underspeed monitor encapsulated within a 100mm x 40mm x 40mm moulded resin enclosure using epoxy. The external surface of the enclosure is coated with a nickel based conductive paint to within 24mm of the active end containing the sensor.

An integral cable is provided for connection to a 12-240V d.c. or 24-240V a.c. supply and for switching an output device with a maximum rating of 240V, 2.5A. A M20 x 1.5 female conduit fitting is provided if protection of the integral cable is required.

Once calibrated to the normal running speed of a machine the device switches the output relay contacts if the machine speed falls to 20% below it's normal speed. LED's visible through the body of the device indicate detection of a target and whether the output is energised.

16 **Report No.**

99(C)0985

17 **Special Conditions For Safe Use**

1. These sensors are only suitable for installation in areas where there is a low risk of impact damage.
2. 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.
3. The integral cable shall be terminated in an appropriate enclosure and shall be mechanically protected.

18 **Essential Health and Safety Requirements**

None that are not covered by assessment against Harmonised Standard EN 50281-1-1: 1998.

19 **DRAWINGS**

Number	Revision	Date	Description
A3-300229A	1	24/10/01	Enclosure detail
A3-200279A	-	15/10/01	Circuit diagram
A4-14813-B	B	22/11/01	Label

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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: **BAS01ATEX2365X/1**

4 Equipment or Protective System: **SINGLE OUTPUT SPEED SWITCH TYPE PU1DR(A)**

5 Manufacturer: **SYNATEL INSTRUMENTATION LTD**

6 Address: **Walsall Road, Norton Canes, Cannock, Staffordshire WS11 3TB**

7 This supplementary certificate extends EC - Type Examination Certificate No. BAS01ATEX2365X 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. **1057**

Project File No. **03/0901**

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.



13

Schedule

14

Certificate Number BAS01ATEX2365X/1

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

Variation 1.1

To allow the use of two alternative moulding materials, nylon and polycarbonate.

Variation 1.2

To allow the removal of the nickel based coating.

16 **Report Number**

03(C)0901

17 **Special Conditions for Safe Use**

As specified previously except:

1. Nylon has improved mechanical properties and is suitable for use in areas with a normal risk of impact.

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
A3-300229B	B	27/08/03	PU1DR(A) Enclosure Details