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:	**Baseefa06ATEX0034X**
4	Equipment or Protective System:	**TP-P**-*-NI Series Surge Protection Devices**
5	Manufacturer:	**Atlantic Scientific Corporation (MTL Global Surge Technologies)**
6	Address:	**4300 Fortune Place, Suite A, W. Melbourne, Florida 32904, USA**

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. **06(C)0103**

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

EN 50014: 1997 + A1 & A2 EN 50020: 2002 EN 60079-26: 2004

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 :

Ⓔx II 1G EEx ia IIC T5 / T6 ($-40°C \leq T_a \leq$ See Schedule)

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

Baseefa Customer Reference No. **5229**

Project File No. **06/0103**

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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13 **Schedule**

14 **Certificate Number Baseefa06ATEX0034X**

15 **Description of Equipment or Protective System**

The TP-P**-*-NI Series Surge Protection Devices are designed to provide protection for sensitive electronic equipment, and are intended to be mounted within a Hazardous Area.

Within the TP-P**-*-NI Series Surge Protection Devices, two different working voltages are available, TP-P48 and TP-P32 but all units have the same safety input parameters for intrinsic safety purposes. Each unit has two active connections and an earth connection, but all connections must form part of the same intrinsically safe circuit.

The TP-P**-*-NI Series devices comprise two circuits which include a three-terminal gas discharge tube, resistors, a silicon avalanche diode, and for the TP-P32 only, a diode bridge circuit, with the components mounted on a printed circuit board. These assemblies are encapsulated within a tubular metal enclosure, open at both ends. One end is provided with flying leads and has a male threaded stub intended for screwing into the wall of other equipment. The three connection wires emerge from the encapsulation and are intended to be terminated within the enclosure. The other end of the tubular metal enclosure is provided with a terminal block within the tube, and a female threaded section for a suitable cable gland. Various different thread forms are available denoted by the suffix N, I or G, to the type number.

The type number TP-P	**	-*	-NI	
	48/32	-*	-NI	Nominal surge protection voltage
	**	N/I/G	-NI	Differing thread forms

Ⓔx II 1G EEx ia IIC T6 ($-40°C \leq T_a \leq 60°C$) or
Ⓔx II 1G EEx ia IIC T5 ($-40°C \leq T_a \leq 80°C$)

TP-P48-*-NI or TP-P32-*-NI Series Surge Protection Devices Parameters

$U_i = 60V$
$P_i = 1.2W$
$C_i = 0$
$L_i = 0$

$U_o = U_i$
$I_o = I_i$
$P_o = P_i$

Variation 0.1

To permit alternative type numbers to be used for the TP-P**-*-NI Series Surge Protection Devices.

Original type numbers	Alternative type numbers
TP-P32-I-NI	VEGA ŰSB 63-32.G
TP-P32-N-NI	VEGA ŰSB 63-32.N
TP-P48-I-NI	VEGA ŰSB 63-48.G
TP-P48-N-NI	VEGA ŰSB 63-48.N

16 Report Number

06(C)0103

17 Special Conditions for Safe Use

1. The apparatus is to be installed such that the flying leads and the terminal block are afforded a degree of protection of at least IP6x.

2. Although all versions of the Surge Protection Devices will meet the 500V test to the metal case, the electrical circuits within the Surge Protection Devices are not capable of withstanding the 500V test to the Green/Yellow wire for one minute without breakdown. This must be taken into consideration in any installation.

3. These devices are not provided with an external connection facility for an earthing or bonding conductor.

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings

Number	Sheet	Issue	Date	Description
1100463	1	-	1st Nov 2005	Index sheet
1100463	2	-	1st Nov 2005	Certification Label
1100463	3	-	1st Nov 2005	Certification Label
1100463	4	-	1st Nov 2005	Circuit Diagram
1100463	5	-	1st Nov 2005	Internal Components
1100463	6	-	1st Nov 2005	Enclosure
1100463	7		1st Nov 2005	Full Assembly