



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: **Baseefa05ATEX0011X**

4 Equipment or Protective System: **MODEL 646Y SERIES PRESSURE SWITCH**

5 This certificate is held by: **CUSTOM CONTROL SENSORS INCORPORATED**

6 Address: **21111 Plummer Street, Chatsworth, California 91311, 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. 05(C)0035

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

EN 60079-0: 2004

EN 60079-1: 2004

EN 50281-1-1: 1998 + Amendment 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 2 GD Ex d IIC T85°C (T_{amb} -34°C to +71°C) or T100°C (T_{amb} -34°C to +86°C)

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

Baseefa Customer Reference No. 0253

Project File No. 05/0035

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.

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R S SINCLAIR

DIRECTOR
On behalf of
Baseefa (2001) Ltd.



Or e) VACUUM PRESSURE SWITCHES

646VEY 646VEMY
646VEAY 646VEAMY
646VEFY 646VEFMY

With a system pressure of 500 p.s.i. maximum.

Or f) TEMPERATURE SWITCHES

646TEY
646TEMY
646TUEY
646TUEMY

With a system pressure of 1250 p.s.i. maximum.

16 Report Number

Baseefa Certification Report No 05(C)0035

17 Special Condition for Safe Use

The integral cabling shall be suitably mechanically protected and terminated in a suitable junction or terminal facility.

18 Essential Health and Safety Requirements

As follows, in addition to those covered by the standards at item 9.

Clause	Subject	Compliance
1.2.1	Design and construction	Report 05(C)0035

19 Drawings and Documents

Number	Issue	Date	Description
646**Y sheet 1	L	01/05	General Arrangement
646**Y sheet 2	L	11/04	General Arrangement
646**Y sheet 3	L	11/04	Switch Housing Detail
646**Y sheet 4	L	11/04	General Arrangement
646**Y sheet 5	L	11/04	Alternative Inlet Arrangements
646**Y sheet 6	L	11/04	Alternative Inlet Arrangements
646 **Y sheet 7	L	01/05	Parts List
646**Y sheet 8	L	11/04	Switch Housing Detail
38-11	D	6/95	Strap



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Schedule

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Certificate Number Baseefa05ATEX0011X

15 Description of Equipment or Protective System

A Model 646Y Series Pressure Switch rated up to 15A at 125, 250 or 480 volts a.c. 50 or 60Hz, or up to 125 volts d.c., 1A and a process system pressure of 7500 p.s.i. maximum, comprising an electrical assembly and a pressure actuator arrangement.

The electrical assembly comprises a sealed steel cylindrical enclosure housing a single pole double throw micro-switch which is operated by an actuator arm through a wobblephragm in the enclosure wall and with integral cabling potted into the cable entry provided with a male thread form. The enclosure body is reinforced with a stainless steel strap secured with a nut and bolt around its periphery.

The pressure actuator arrangement comprises an aluminium rectangular enclosure housing a range scale and set point adjustment assembly with an aluminium pressure port and a pressure plate assembly incorporating a film diaphragm and 'O' rings.

The equipment provides ingress protection to IP66 and IP67 in accordance with EN 60529: 1991.

The model reference for the equipment includes provision to add, as a suffix, various letters and numbers denoting the range and type of switch.

The Model 646Y Series Pressure Switch comprises the switch types listed below together with their respective model numbers:

a) GAUGE PRESSURE SWITCHES

646GEY	646GEFY
646GEMY	646GEFMY
646GEAY	646GBEY
646GEAMY	646GBEMY

With a system pressure of 3000 p.s.i. maximum.

Or b) PISTON PRESSURE SWITCHES (for hydraulic systems)

646PEY	646PEMY
646PEAY	646PEAMY
646PEFY	646PEFMY

With a hydraulic system pressure of 7500 p.s.i. maximum.

Or c) GAUGE PRESSURE SWITCHES

646GZEY	646GZEFY
646GZEMY	646GZEMFY

With a system pressure of 5000 p.s.i. maximum.

Or d) DIFFERENTIAL PRESSURE SWITCHES

646DZEY
646DZEMY

With a system pressure of 400 p.s.i. maximum and a differential pressure of 75 p.s.i. maximum.