



EC TYPE-EXAMINATION CERTIFICATE

Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

Certificate Number: Sira 02ATEX1087X

Equipment: Range of Electrical Snap-Switch Assemblies Types 057-07**

Applicant: ITT Aerospace Controls

Address: 28150 Industry Drive
Valencia
CA 91355
USA

This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number R51A8354A.

Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 50014:1997 (Amendments A1 & A2)

EN 50018:2000

EN 50281-1-1:1998

If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

The marking of the equipment shall include the following:



II 2 G D

EEx d IIC T* (Ta = -40°C to +*°C) (* A Max)

* These values are dependent upon the Type of Electrical Snap-Switch Assembly, refer to Certificate Schedule, Section 13, Description of Equipment

Project Number 51A8354
Date 2 February 2005
C. Index 18

D R Stubbings BA MIEE
Certification Manager

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Sira Certification Service

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SCHEDULE

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13 DESCRIPTION OF EQUIPMENT

The equipment, as detailed in Figures 1 and 2, is a range of hermetically sealed pressure or temperature switches that are activated by a Belleville Spring that snaps at a predetermined force. They are of basic cylindrical shape with a hexagonal shoulder in the middle. One end contains the actuator assembly, the other end contains potting through which the equipment wiring passes.

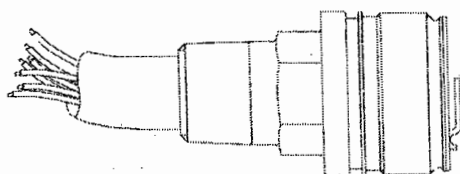


Figure 1. – Drawing of a 057-076* Assembly

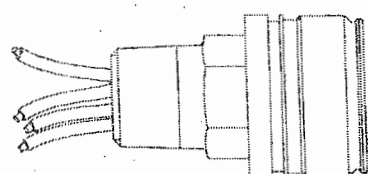


Figure 2. – Drawing of a 057-077* Assembly

Variants

Part No.	Description	Applicable marking
057-0760	Single Pole Double Throw, 5 Amp or 11 Amp, Halogen-free cable	EEx d IIC T6 (Ta = -40°C to +70°C) (5 A Max) EEx d IIC T6 (Ta = -40°C to +60°C) (11 A Max)
057-0761	Double Pole Double Throw, 5 Amp or 11 Amp, Halogen-free cable	EEx d IIC T6 (Ta = -40°C to +70°C) (5 A Max) EEx d IIC T6 (Ta = -40°C to +45°C) (11 A Max)
057-0762	Single Pole Double Throw, 1 Amp, Halogen-free cable	EEx d IIC T6 (Ta = -40°C to +70°C) (1 A Max)
057-0763	Double Pole Double Throw, 1 Amp, Halogen-free cable	EEx d IIC T6 (Ta = -40°C to +70°C) (1 A Max)
057-0770	Single Pole Double Throw, 5 Amp or 11 Amp, Free leads	EEx d IIC T6 (Ta = -40°C to +70°C) (5 A Max) EEx d IIC T5 (Ta = -40°C to +75°C) (11 A Max)
057-0771	Double Pole Double Throw, 5 Amp or 11 Amps, Free leads	EEx d IIC T6 (Ta = -40°C to +70°C) (5 A Max) EEx d IIC T4 (Ta = -40°C to +65°C) (11 A Max)
057-0772	Single Pole Double Throw, 1 Amp, Free leads	EEx d IIC T6 (Ta = -40°C to +70°C) (1 A Max)
057-0773	Double Pole Double Throw, 1 Amp, Free leads	EEx d IIC T6 (Ta = -40°C to +70°C) (1 A Max)

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14 DESCRIPTIVE DOCUMENTS

14.1	Drawing No.	Sheet	Rev.	Date	Description
	057-0760	C	1 of 1	13 Oct 04	Electrical Assy
	S057-0760	C	1 of 1	06 May 02	Electrical Assy
	057-0761	C	1 of 1	13 Oct 04	Electrical Assy
	S057-0761	C	1 of 1	06 May 02	Electrical Assy
	057-0762	C	1 of 1	13 Oct 04	Electrical Assy M-Option
	S057-0762	C	1 of 1	06 May 02	Electrical Assy
	057-0763	C	1 of 1	13 Oct 04	Electrical Assy M-Option
	S057-0763	C	1 of 1	06 May 02	Electrical Assy
	057-0770	C	1 of 1	08 April 02	Electrical Assy
	S057-0770	C	1 of 1	06 May 02	Electrical Assy
	057-0771	D	1 of 1	08 Apr 02	Electrical Assy
	S057-0771	C	1 of 1	06 May 02	Electrical Assy
	057-0772	C	1 of 1	08 Apr 02	Electrical Assy M-Option
	S057-0772	D	1 of 1	06 May 02	Electrical Assy
	057-0773	C	1 of 1	05 Aug 04	Electrical Assy M-Option
	S057-0773	D	1 of 1	06 May 02	Electrical Assy
	058-0014	M	1 of 1	01 Apr 02	Caps, Electrical
	058-0157	G	1 of 2	05 Jan 05	Electrical Caps
	058-0157	G	2 of 2	05 Jan 05	Electrical Caps

14.2 Report number R51A8354A

15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

15.1 The Electrical Snap Switch Assemblies shall be installed such that the equipment wiring is protected from mechanical damage by the use of metal conduit or a method providing equivalent protection. The equipment wiring must not be subjected to tension or torque. If it is to be terminated within a potentially explosive atmosphere, a suitably certified termination facility must be used.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in report number R51A8354A.

17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

17.3 Each enclosure shall be subjected to a routine overpressure test of 9.3 bar for at least 10 s as required by EN 50018:1994 clause 16.1. There shall be no permanent deformation of the joints or damage to the enclosure.

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