IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx SIR 10.0047X issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2010-05-28** Page 1 of 4

Applicant:
Federal Signal Corporation
2645 Federal Signal Drive
University Park
Illinois 60466-3195
United States of America

Electrical Apparatus: **WCP-BG Manual Call Point, WCP-PB Manual Call Point, WCP-TR Manual Call Point, WCP-BG-XXX, WCP-PB-XXX and WCP-TR-XXX Manual Call Points (with resistors)**

Optional accessory:

Type of Protection: **Increased safety, flameproof, encapsulation and dust**

Marking:
BExCP3A Range of Call Points
Ex e d IIC T6 Gb (-40°C ≤ Ta ≤ +55°C)
Ex t IIIC T60°C Db (-40°C ≤ Ta ≤ +55°C)
BExCP3B Range of Call Points
Ex e d mb IIC T4 Gb (-40°C ≤ Ta ≤ +50°C)
Ex t IIIC T70°C Db (-40°C ≤ Ta ≤ +50°C)

Approved for issue on behalf of the IECEx Certification Body: D R Stubbings BA MIET

Position: Certification Manager

Signature: (for printed version)

Date: 2010-05-28

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:
SIRA Certification Service
Rake Lane
Eccleston
Chester
CH4 9JN
United Kingdom

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Manufacturer: **Federal Signal Corporation**
2645 Federal Signal Drive
University Park
Illinois 60466-3195
United States of America

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:
The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2007-10 Edition: 5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 60079-18 : 2009 Edition: 3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/SIR/ExTR10.0059/00

Quality Assessment Report:
US/UL/QAR06.0012/03

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The equipment is a range of manual call points, as detailed on page 4, in all cases, external connections are made via 'Ex e' terminals mounted within the enclosure, the cables entering the enclosure via certified cable glands. The following ratings are applicable

WCP-BG, WCP-PB and WCP-TR Call Points	WCP-BG-XXX, WCP-PB-XXX and WCP-TR-XXX range of Call Points
AC Voltage 250 V Max Current 5 A Max.	DC Voltage 56 V Max Current 0.75 A Max.
DC Voltage 50 V Max Current 1 A Max.	or DC Voltage 28 V Max Current 1.0 A Max
	or DC Voltage 15 V Max Current 1.0 A Max.
	or DC Voltage 9 V Max Current 1.0 A Max

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The terminals shall be fitted only with wires that have cross-sectional area falling within the following limitations:
   WCP-BG, WCP-PB and WCP-TR Call Points - 0.5 mm² to 4 mm²
   WCP-BG-XXX, WCP-PB-XXX and WCP-TR-XXX Call Points fitted with terminal strip - 0.5 mm² to 4 mm²
   WCP-BG-XXX, WCP-PB-XXX and WCP-TR-XXX Call Points fitted with rail mounted terminals – 0.5 mm² to 2.5 mm²
2. Not more than one single or multiple strand lead shall be connected to a terminal, unless multiple conductors have been joined in a suitable manner, e.g. two conductors into a single insulated crimped boot lace ferrule.
3. Leads connected to the terminals shall be insulated for the appropriate voltage and this insulation shall extend to within 1mm of the metal of the terminal throat.
4. During installation, the terminals shall be only wired with cable in an ambient temperature range between −10°C to 80°C.
5. All terminal screws, used or unused, shall be fully tightened down.
6. Plain holes are provided for M20 cable glands or blanking elements. All of these shall be fitted with either a cable gland or certified blanking element that is suitable for the application and has been certified by a notified body. These shall provide and maintain a minimum enclosure ingress protection of IP66.

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EQUIPMENT(continued):

Model	Description of Enclosure	Contents includes	Mode of operation
WCP-BG	Aluminium enclosure fitted with a glass window	'Ex d' switch	Break glass
WCP-PB	Aluminium enclosure fitted with a push button	'Ex d' switch	Push button fitted with a spring-loaded cover that must be lifted before operating
WCP-TR	Aluminium enclosure fitted with a push button	'Ex d' switch	Push button fitted with a spring-loaded cover that must be lifted before operating, the push button can only be reset by a tool
WCP-BG-XXX	Aluminium enclosure fitted with a glass window	'Ex d' switch and up to two resistor modules	Break glass
WCP-PB-XXX	Aluminium enclosure fitted with a push button	'Ex d' switch and up to two resistor modules	Push button fitted with a spring-loaded cover that must be lifted before operating
WCP-TR-XXX	Aluminium enclosure fitted with a push button	'Ex d' switch and up to two resistor modules	Push button fitted with a spring-loaded cover that must be lifted before operating, the push button can only be reset by a tool

The Manufacturer shall comply with the following condition of manufacture:

1. All complete WCP-BG-XXX, WCP-PB-XXX and WCP-TR-XXX manufactured units shall be subjected to a routine dielectric strength test of 500V r.m.s. a.c. applied for 1 s or 600V r.m.s. a.c. applied for 100 ms between all terminals and the equipment enclosure, in accordance with Clause 9.2 of IEC 60079-18:2009.
2. All completed resistor modules shall be subjected to a visual inspection on the encapsulation in accordance with Clause 9.1 of IEC 60079-18:2009. No damage shall be evident such as cracks in the compound, exposure of the encapsulated parts, flaking, inadmissible shrinkage, swelling, decomposition, failure in adhesion or softening.
3. The products covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform Sira of any modifications of the devices that may impinge upon the explosion safety design of their products.