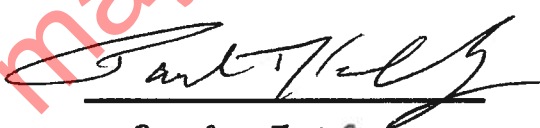




IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:	IECEx UL 06.0010X	issue No.:1	Certificate history: Issue No. 1 (2008-7-29) Issue No. 0 (2006-7-25)
Status:	Current		
Date of Issue:	2008-07-29	Page 1 of 4	
Applicant:	Federal Signal Corp. 2645 Federal Signal Dr. University Park, IL 60466 United States of America		
Electrical Apparatus: Optional accessory:	Series WV450XD and WV450XE Visual Signaling Devices		
Type of Protection:	Ex d IIB+H2, Ex de IIB+H2		
Marking:	WV450XD Ex d IIB+H2 T3-T4 -20°C<Ta<55°C IP66 WV450XE Ex de IIB+H2 T3-T4 -20°C<Ta<55°C IP66		
Approved for issue on behalf of the IECEx Certification Body:	Paul T. Kelly		
Position:	Lead Operations Manager		
Signature: (for printed version)			
Date:	<u>2008-07-29</u>		

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:

Underwriters Laboratories Inc (UL)
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America





IECEX Certificate of Conformity

Certificate No.: IECEx UL 06.0010X

Date of Issue: 2008-07-29

Issue No.: 1

Page 2 of 4

Manufacturer: **Federal Signal Corp.**
2645 Federal Signal Dr.
University Park, IL 60466
United States of America

Manufacturing location(s):

Federal Signal Corp.
2645 Federal Signal Dr.
University Park, IL 60466
United States of America

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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 60079-7 : 2001 Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'

*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:

US/UL/ExTR06.0036/00
US/UL/ExTR06.0036/01

Quality Assessment Report:

US/UL/QAR06.0012/00



IECEx Certificate of Conformity

Certificate No.: IECEx UL 06.0010X

Date of Issue: 2008-07-29

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Ex d IIB + H₂ T4

Model WV450XD05-024X, rated 24-48VDC, 0.87/0.48A, 5 Joule
Model WV450XD10-024X, rated 24-48VDC, 0.91/0.46A, 10 Joule
Model WV450XD15-024X, rated 24-48VDC, 0.94/0.48A, 15 Joule

Ex d IIB+H₂ T3

Model WV450XD05-110X, rated 110VAC, 0.17A, 5 Joule
Model WV450XD10-110X, rated 110VAC, 0.27A, 10 Joule
Model WV450XD15-110X, rated 110VAC, 0.57A, 15 Joule

Ex d IIB+H₂ T3

Model WV450XD05-220X, rated 220-248VAC, 0.12A, 5 Joule
Model WV450XD10-220X, rated 220-248VAC, 0.23A, 10 Joule
Model WV450XD15-220X, rated 220-248VAC, 0.33A, 15 Joule

Ex de IIB+H₂ T4

Model WV450XE05-024X, rated 24-48VDC, 0.87/0.48A, 5 Joule
Model WV450XE10-024X, rated 24-48VDC, 0.91/0.46A, 10 Joule
Model WV450XE15-024X, rated 24-48VDC, 0.94/0.48A, 15 Joule

Ex de IIB+H₂ T3

Model WV450XE05-110X, rated 110VAC, 0.17A, 5 Joule
Model WV450XE10-110X, rated 110VAC, 0.27A, 10 Joule
Model WV450XE15-110X, rated 110VAC, 0.57A, 15 Joule

Ex de IIB+H₂ T3

Model WV450XE05-220X, rated 220-248VAC, 0.12A, 5 Joule
Model WV450XE10-220X, rated 220-248VAC, 0.23A, 10 Joule
Model WV450XE15-220X, rated 220-248VAC, 0.33A, 15 Joule

CONDITIONS OF CERTIFICATION: YES as shown below:

WARNING – DO NOT OPEN WHEN ENERGIZED. DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

WARNING - POTENTIAL STATIC CHARGING HAZARD - CLEAN ONLY WITH DAMP WET CLOTH

Use wire rated 85°C or higher.



IECEx Certificate of Conformity

Certificate No.: IECEx UL 06.0010X

Date of Issue: 2008-07-29

Issue No.: 1

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1: Capacitor designations, part numbers and values were changed for Models WV450XD and WV450XE, 110 Vac and 220-240 Vac. Drawing Nos. AT2581921B, AT2581921B-01, AT258192B-02, AT2581921B-03 and AT258192B-06 were updated to reflect these changes. Drawing Nos. AT8545104A, AT85454104B and 2562015C were updated to reflect revisions for the ATEX certification only; the revisions do not affect this IECEx Certificate.

HISTORICAL REFERENCE ONLY
Document may not be up to date