

(2)

(3)



#### **Translation**

# (1) EC-Type Examination Certificate

- Directive 94/9/EC -

Equipment and protective systems intended for use in potentially explosive atmospheres

DMT 03 ATEX G 003 X

(4) Equipment:

Suprema

(5) Manufacturer:

MSA Auer GmbH

(6) Address:

D-12006 Berlin

- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this type examination certificate.
- (8) The certification body of Deutsche Montan Technologie GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 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 the test reports PFG-no. 41300202P, 41300202P NI and

The examination and test results are recorded in the test reports PFG-no. 41300202P, 41300202P NI and 41300202P NII.

(9) The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

DIN EN 50054 (VDE 0400 part 1 / 07/1999)

DIN EN 50057 (VDE 0400 part 4 / 07/1999)

DIN EN 50058 (VDE 0400 part 5 / 07/1999)

DIN EN 50104 (VDE 0400 part 20 / 07/1999)

DIN EN 50271 (VDE 0400 part 21 / 05/2002)

This EC-type examination certificate covers the measuring function of this control unit, when operated with remote sensors D-7010, for the gases and vapours methane, propane, ethylene, propene, hydrogen, n-butane, ethanol, n-hexane, toluene, 2-propanol, ethyl acetate, i-butyl acetate, benzine 65/95 and n-nonane with the measuring range 0 - 10 %LEL and xylene (mixture 1:1:1 from m-, p- and o-xylene) with the measuring range 0 - 20 %LEL.

This EC-type examination certificate covers the measuring function of this control unit, when operated with remote sensors D-7100, for the gases and vapours methane, propane, ethylene, propene, hydrogen, n-butane, ethanol, n-hexane, toluene, 2-propanol, ethyl acetate, i-butyl acetate, benzine 65/95, n-nonane and xylene (mixture 1:1:1 from m-, p- and o-xylene) with the measuring range 0 - 100 %LEL.

This EC-type examination certificate covers the measuring function of this control unit, when operated with remote sensors with 4-20 mA interface, for the gases and vapours listed in the EC-type examination certificate of the remote sensor.

This EC-type examination certificate covers control units with software-versions 1.02.07 (module MCP 10), 1.02.07b (module MDO 10), 1.02.01 (modules MDA 10 and MGO 10) and 1.02.00 (module MAO 10).

(10) 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.



- (11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.

  Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

⟨Ex⟩ II (1) G (2) G

#### Deutsche Montan Technologie GmbH

Essen, dated 16. May 2003

Signed: Jockers	Signed: Bredenbroeker	
DMT-Certification body	Special services unit	



(13)

(14)

Appendix to

## EC-Type Examination Certificate

#### **DMT 03 ATEX G 003 X**

#### (15) 15.1 Subject and type

Control unit Suprema operated with remote sensors D-7010 and D-7100 or remote sensors with 4-20 mA interface

#### 15.2 Description

The modular control unit Suprema is, when operated with remote sensors D-7010 or D-7100, a fixed system for the measurement of combustible gases or vapours mixed with air or oxygen. The control unit is not suitable for use in potentially explosive atmospheres.

The remote sensors D-7010 and D-7100 are subject of the EC-type examination certificate DMT 98 ATEX E 016 X.

#### 15.3 Parameters

not applicable

#### (16) Test and assessment report

PFG-no. 41300202P dated 31/07/2002

PFG-no 41300202P NI dated 09/05/2003

PFG-no. 41300202P NII dated 15/05/2003

EC-type examination certificate DMT 98 ATEX E 016 X dated 29/06/1998

- 1. supplement to the EC-type examination certificate DMT 98 ATEX E 016 X dated 07/09/1999
- 2. supplement to the EC-type examination certificate DMT 98 ATEX E 016 X dated 23/11/2001

#### (17) Special conditions for safe use

The assessment of the functional safety of the control unit according to prEN 50402 is not subject of this EC-type examination certificate.

 see section "Special conditions for safe use according to EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual

> We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

45307 Essen, 16. May 2003 PFG-Kie

Deutsche Montan Technologie GmbH

MT-Certification body





## 1st Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

# to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

Equipment:

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate covers for operation with remote sensors D-715K, D-7152K, D-7111K or D-7711K-PR the measuring function for the gases and vapours methane, ethane, propane, toluene, ethanol, acetone and hydrogen.

#### Test report

EC-type examination certificate PTB 01 ATEX 1152 X dated 23/05/2002

- 1. supplement to the EC-type examination certificate PTB 01 ATEX 1152 X dated 11/07/2003
- 2. supplement to the EC-type examination certificate PTB 01 ATEX 1152 X dated 03/09/2003
- EC-type examination certificate BAM 03 ATEX 0004 X dated 27/08/2003

#### Special conditions for safe use

see EC-type examination certificate PTB 01 ATEX 1152 X see EC-type examination certificate BAM 03 ATEX 0004 X see EC-type examination certificate DMT 03 ATEX G 003 X

#### Deutsche Montan Technologie GmbH

Bochum, dated 19. December 2003

Signed: Jockers	Signed: Kiesewetter
Certification body	 Special services unit



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 19. December 2003 PFG-Kie

Deutsche Montan Technologie GmbH

Certification body





# 2nd Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

# to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

Equipment:

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

The control unit may be modified according to the descriptive documents as mentioned in the pertinent test report. The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 50054:1998 EN 50057:1998 EN 50058:1998 EN 50104:1998

EN 50271:2001

This supplement to the EC-type examination certificate covers control units with software-versions 2.02.15a (module MCP 10), 2.02.15e (module MDO 10), 1.02.02 (module MDA 10), 2.02.06 (module MGO 10) and 2.02.01 (module MAO 10).

#### Test report

test report PFG-no. 41300202P NIV dated 09/08/2004

#### Special conditions for safe use

see section "Special conditions for safe use according to the EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual

#### EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 09. August 2004

Signed: Migenda	Signed: Bredenbröker
<ul> <li>A supplied to the second second</li></ul>	
Certification body	Special services unit



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 09. August 2004 PFG-Kie

EXAM BBG Prüf- und Zertifizier GmbH

Certification body





## 3rd Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

# to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

Equipment:

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate concerns the operation of the control unit with remote sensors type series 47 K-ST.

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 61779-1:2000 EN 61779-4:2000

This supplement to the EC-type examination certificate covers the measuring function for methane and propane.

#### Test report

EC-type examination certificate INERIS 03 ATEX 0208 dated 24/10/2003 EC-type examination certificate CESI 02 ATEX 091 dated 26/09/2002 EC-type examination certificate KEMA 99 ATEX 3853 dated 02/02/2000 EC-type examination certificate CESI 01 ATEX 090 U dated 15/12/2001 Test report PFG-no. 41300204P dated 30/09/2004

#### Special conditions for safe use

- see section " Special conditions for safe use according to EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual of the control unit
- The description of the effects of the accessories on the instrument characteristics in the instruction manual of the remote sensor has to be considered.

#### EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 30/09/2004

Signed: Jockers	Signed: Bredenbröker	
Certification body	Special services unit	



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 30. September 2004 PFG-Kie

EXAM BBG Prüf- und Zertifizier GmbH





## 4th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

# to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

Equipment:

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate concerns the operation of the control unit with remote sensors type series 47 K-PRP.

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 61779-1:2000 EN 61779-4:2000

This supplement to the EC-type examination certificate covers the measuring function for methane in the measuring range 0 - 100 % LEL.

#### Test report

EC-type examination certificate INERIS 03 ATEX 0208 dated 24/10/2003 EC-type examination certificate CESI 02 ATEX 091 dated 26/09/2002 EC-type examination certificate KEMA 99 ATEX 3853 dated 02/02/2000 EC-type examination certificate CESI 01 ATEX 090 U dated 15/12/2001 Test report PFG-no. 41300204P NI dated 03/11/2004



#### Special conditions for safe use

- see section " Special conditions for safe use according to EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual of the control unit
- The description of the effects of the accessories on the instrument characteristics in the instruction manual of the remote sensor has to be considered.
- The remote sensor series 47 K-PRP shall only be operated under conditions where changes of the ambient pressure can not exceed  $\pm 50$  hPa with respect to calibration.

#### EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 08/11/2004

Signed: Jockers	Signed: Bredenbröker
Certification body	Special services unit
	e translation from the German original. erman wording shall be valid and binding.
44809 Bochum, 08. November 2004 PFG-Kie	
EXAM BBG Prüf- und Zertifizier GmbH	
Certification body	Special services unit





## 5th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

# to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

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Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

The control unit may be modified according to the descriptive documents as mentioned in the pertinent test report. This supplement to the EC-type examination certificate covers control units with software-versions 2.02.18 (module MCP 10), 2.02.18 (module MDO 10), 1.02.02 (module MDA 10), 2.02.06 (module MGO 10) and 2.02.01 (module MAO 10).

#### Test report

test report PFG-no. 41300202P NV dated 01/04/2005

#### Special conditions for safe use

see section "Special conditions for safe use according to the EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual

#### EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 04. April 2005

Signed: Jockers		Signed: Bredenbröker
Certification body	<del></del>	Special services unit



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 04. April 2005 PFG-Kie

EXAM BBG Prüf- und Zertifizier GmbH





## 6th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

# to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

**Equipment:** 

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate concerns re-testing according to the EN 61779 series of standards and the use of CAN/LWL-converters.

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 61779-1:2000 + A11:2004 EN 61779-4:2000 EN 61779-5:2000

This supplement to the EC-type examination certificate covers control units with software-versions 2.02.18 (module MCP 10), 2.02.18 (module MDO 10), 1.02.02 (module MDA 10), 2.02.06 (module MGO 10) and 2.02.01 (module MAO 10).

#### Test report

test report PFG-no. 41300202P NVI dated 11/11/2005

#### Special conditions for safe use

see section "Special conditions for safe use according to the EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual

#### EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 11. November 2005

Signed: Jockers	Signed: Bredenbröker	
Certification body	Special services unit	



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 11. November 2005 PFG-Kie

EXAM BBG Prüf- und Zertifizier GmbH

Certification body Special services unit





## 7th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

# to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

**Equipment:** 

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate concerns the operation of the control unit with remote sensors type series 47 K-ST.

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 61779-1:2000 + A11:2004 EN 61779-4:2000

This supplement to the EC-type examination certificate covers the measuring function in the measuring range 0 - 100 % LEL for 2-butanone, acetone, acetylene, ammonia, 1,3-butadiene, diethyl ether, acetic acid, acetic anhydride, ethane, ethanol, ethylene, ethyl acetate, ethylene oxide, (FAM-)Standard mineral spirit 65/95, i-butyl acetate, n-butyl acetate, n-butane, n-nonane, n-pentane, 2-propanol, propylene, propylene oxide, toluene, hydrogen, xylene (mixture of isomers 1:1:1 p-m-o), cyclopentane, allyl alcohol, i-butylene, i-butane, methanol und cyclohexane.

#### Test report

test report PFG-no. 41300204P NII dated 19/05/2006

Special conditions for safe use

see 3rd supplement to the EC-type examination certificate DMT 03 ATEX G 003 X

#### EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 19. May 2006

Signed: Jockers	Signed: Kiesewetter	
Certification body	Special services unit	



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 19. May 2006 PFG-Kie

EXAM BBG Prüf- und Zertifizier GmbH

Certification body

Miesewell

Special services unit





# 8th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

# to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

**Equipment:** 

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate concerns the operation of the control unit with remote sensors type series 47 K-HT.

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 61779-1:2000 + A11:2004 EN 61779-4:2000

This supplement to the EC-type examination certificate covers the measuring function in the measuring range 0 - 100 % LEL for methane, propane, 2-butanone, acetone, ethanol, ethyl acetate and toluene.

#### Test report

EC-type examination certificate INERIS 03 ATEX 0208 dated 24/10/2003 1st supplement to the EC-type examination certificate INERIS 03 ATEX 0208 dated 08/11/2003 test report PFG-no. 41300204P NIII dated 05/07/2006

#### Special conditions for safe use

see 3rd supplement to the EC-type examination certificate DMT 03 ATEX G 003 X

#### EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 05. July 2006

Signed: Jockers	Signed: Bredenbröker	
Certification body	Special services unit	



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 05. July 2006 PFG-Kie

EXAM BBG Prüf- und Zertifizier GmbH





# 9th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

# to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

Equipment:

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate concerns the functional safety of the control unit in non-redundant configuration (SIL-capability 2) and redundant configuration (SIL-capability 3). The Essential Health and Safety Requirements with respect to the functional safety when used with a measuring function for explosion protection are assured by application of:

#### EN 50402:2005

This supplement to the EC-type examination certificate covers control units with software-versions 2.02.19 (module MCP 10), 2.02.19 (module MDO 10), 1.02.02 (module MDA 10) and 2.02.06 (module MGO 10).

#### Test report

test report FLES-no. PB06006 dated 15/12/2006 test report FLES-no. PB06026 dated 15/12/2006

#### Special conditions for safe use

- see section "Special conditions for safe use according to the EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual
- The functional safety of connected remote sensors including MCI- or MPI-modules is not subject of this certificate.
- Combinations of modules and hardware failure rates are described in annexes A and B of the test report FLES-Nr. PB06006.

#### EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 22. December 2006

Signed: Jockers	Signed: Kiesewetter	
Certification body	Special services unit	



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 22. December 2006 PFG-Kie

EXAM BBG Prüf- und Zertifizier GmbH

Special services unit

Miererch





## 10th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

# to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

Equipment:

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate concerns the operation of the control unit with modified remote sensors type series 47 K-PRP.

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 61779-1:2000 + A11:2004 EN 61779-4:2000

This supplement to the EC-type examination certificate covers the measuring function in the measuring range 0 - 100 % LEL for methane, propane, 2-butanone, acetone, ethanol, ethyl acetate, (FAM-) Standard mineral spirit 65/95, 1-Propanol, 2-Propanol, propene, toluene, hydrogen and 1-Ethoxy-2-propanol.

#### Test report

test report PFG-no. 41300204P NIV dated 26/03/2007

#### Special conditions for safe use

- see section " Special conditions for safe use according to EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual of the control unit
- The description of the effects of the accessories on the instrument characteristics in the instruction manual of the remote sensor has to be considered.
- After the measuring range is exceeded the sensitivity of the remote sensor may be temporarily increased. The advice in the instruction manual of the remote sensor has to be considered.

#### EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 26. March 2007

Signed: Jockers	Signed: Bredenbröker	
Certification body	Special services unit	



Special services unit

We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 26. March 2007 PFG-Kie

EXAM BBG Prüf- und Zertifizier GmbH





## 11th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

## to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

Equipment:

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate concerns modifications of the design, modifications of the software, new modules MDA20 and MGO20 and the use of the PC-software "Service-Pack" for configuration and parametrisation of the control unit.

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 61779-1:2000 + A11:2004

EN 61779-4:2000

EN 61779-5:2000

EN 50104:2002 + A1:2004

EN 50271:2001

EN 50402:2005

This supplement to the EC-type examination certificate covers control units with software-versions 2.06.01 (module MCP10), 2.06.01 (module MDO10), 1.02.02 (module MDA10), 2.01.01 (module MDA20), 2.02.06 (module MGO10), 3.01.01 (module MGO20), 2.02.01 (module MAO10) and the software Service-Pack with software-version 2.06.01.

#### Test report

Test report PFG-no. 41300202P NVII dated 24/10/2007

#### Special conditions for safe use

- see section "Special conditions for safe use according to the EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual
- The indications of the Software "Servive-Pack" shall not be used for safety-related purposes.

#### DEKRA EXAM GmbH

Bochum, dated 25/10/2007

Signed: Jockers	Signed: Bredenbröker
Certification body	Special services unit



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 25. October 2007 PFG-Kie

DEKRA EXAM GmbH

Certification body

Special services unit

e-mail zs-exam@dekra.com





# 12th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

### to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

Equipment:

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate concerns modifications of the design of the modules MCP10, MDA20, MGO20 and MAO10 and modifications of the software of the module MCP10.

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 61779-1:2000 + A11:2004

EN 61779-4:2000 EN 61779-5:2000

EN 50104:2002 + A1:2004

EN 50271:2001 EN 50402:2005

This supplement to the EC-type examination certificate covers control units with software-versions 2.06.03 (module MCP10), 2.06.02 (module MDO10), 1.02.02 (module MDA10), 2.01.01 (module MDA20), 2.02.06 (module MGO10), 3.01.01 (module MGO20), 2.02.01 (module MAO10) and the software Service-Pack with software-version 2.06.01.

#### Test report

Test report PFG-no. 41300202P NVIII dated 02/10/2008

#### Special conditions for safe use

- see section "Special conditions for safe use according to the EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual
- The indications of the Software "Servive-Pack" shall not be used for safety-related purposes.

#### DEKRA EXAM GmbH

Bochum, dated 02/10/2008

Signed: Jockers	Signed: Bredenbröker
Certification body	Special services unit



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 02. October 2008 PFG-Kie

DEKRA EXAM GmbH





# 13th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

### to the EC-Type Examination Certificate DMT 03 ATEX G 003 X

Equipment:

Suprema

Manufacturer:

MSA AUER GmbH

Address:

D-12006 Berlin

#### Description

This supplement to the EC-type examination certificate concerns modifications of the design of the modules MCP10, MDO10, MDA20, MGO20, MAO10, MST10 and MPI10 and modifications of the software of the modules MCP10 and

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 61779-1:2000 + A11:2004

EN 61779-4:2000 EN 61779-5:2000

EN 50104:2002 + A1:2004

EN 50271:2001 EN 50402:2005

This supplement to the EC-type examination certificate covers control units with software-versions 2.06.04 (module MCP10), 2.06.04 (module MDO10), 1.02.02 (module MDA10), 2.01.01 (module MDA20), 2.02.06 (module MGO10), 3.01.01 (module MGO20), 2.02.01 (module MAO10) and the software Service-Pack with software-version 2.06.01.

#### Test report

Test report PFG-no. 41300202P NIX dated 19/02/2009

#### Special conditions for safe use

- see section "Special conditions for safe use according to the EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual
- The indications of the Software "Servive-Pack" shall not be used for safety-related purposes.

#### DEKRA EXAM GmbH

Bochum, dated 19/02/2009

Signed: Müller	Signed: Bredenbröker
Certification body	Special services unit



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 19. February 2009 PFG-Kie

Dinnendahlstrasse 9

DEKRA EXAM GmbH

Certification body Special services unit

e-mail zs-exam@dekra.com





# 14th Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

## to the EC-Type Examination Certificate **DMT 03 ATEX G 003 X**

Equipment:	Suprema
Manufacturer:	MSA AUER GmbH
Address:	D-12006 Berlin
Description	
	ype examination certificate concerns the use of the module MRO-16-TS-SSR. fety Requirements with respect to the measuring function for explosion protection are
EN 61779- EN 61779-	-5:2000 :2002 + A1:2004 :2001
Test report	
Test report PFG-no. 413002	02P NX dated 02/11/2009
Special conditions for safe u	<u>ise</u>
- see section "Special cond X" in the instruction man	ditions for safe use according to the EC-type examination certificate DMT 03 ATEX G 003 mual
	DEKRA EXAM GmbH

Bochum, dated 02/11/2009

Signed: Simanski

Certification body

Signed: Nemec



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 02. November 2009 PFG-Kie

**DEKRA EXAM GmbH** 

Certification body

# 15. Supplement to the EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6

(3) No. of EC-Type Examination Certificate: DMT 03 ATEX G 003 X

(4) Equipment: Suprema

(5) Manufacturer: MSA AUER GmbH

(6) Address: D-12006 Berlin

- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM GmbH, notified body no 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 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 the test report PFG-no. 41300202P NXI
- (9) The Essential Health and Safety Requirements are assured by compliance with

EN 60079-29-1:2007 EN 50104:2010 EN 50271:2001

This supplement to the EC-type examination certificate covers control units with software versions 3.01.01 (module MCP 20), 3.01.01 (module MDO 20), 2.01.02 (module MDA 20), 3.01.02 (module MGO 20) and 2.02.01 (module MAO 10).

- (10) 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 appendix to this certificate.
- (11) This supplement to the EC-Type Examination/Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.

  Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:



DEKRA EXAM GmbH Bochum, dated 22. June 2011

Signed: Simanski Signed: Bredenbröker

Certification body Special services unit

- (13) Appendix to
- (14) 15. Supplement to the EC-Type Examination Certificate DMT 03 ATEX G 003 X
- (15) 15.1 Subject and type

Control unit Suprema

15.2 Description

This supplement to the EC-type examination certificate concerns the use of the new modules MCP20, MDO20 (with MDC20), MRO20-8-TS, MRO20-16-TS and MRO20-8-TS-SSR. The equipment can be modified according to the descriptive documents as mentioned in the pertinent test report.

15.3 Parameters

Not applicable

(16) Test and assessment report

PFG-no. 41300202P NXI as of 22.06.2011

- (17) Special conditions for safe use
  - see section "Special conditions for safe use according to EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual

We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding

DEKRA EXAM GmbH 44809 Bochum, 22. June 2011 PFG-Kie/Bre

Certification body

# 16. Supplement to the EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6

(3) No. of EC-Type Examination Certificate: DMT 03 ATEX G 003 X

(4) Equipment: Sup

Suprema

(5) Manufacturer:

**MSA AUER GmbH** 

(6) Address:

D-12006 Berlin

- (7) The design and construction of this equipment and any acceptable variation/thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 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 the test report PFG-no. 41300202P NXII.
- (9) The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 60079-29-1:2007 EN 50104:2010 EN 50271:2010

This supplement to the EC-type examination certificate covers control units with software versions 3.01.02 (module MCP 20), 3.01.02 (module MDO 20), 2.01.02 (module MDA 20), 3.01.02 (module MGO 20) and 2.02.01 (module MAO 10).

- (10) 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 appendix to this certificate.
- (11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.

  Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:



II (1) G (2) G

DEKRA EXAM GmbH Bochum, dated 14. December 2011

Signed: Simanski

Signed: Bredenbröker

Certification body

- (13) Appendix to
- (14) 16. Supplement to the EC-Type Examination Certificate DMT 03 ATEX G 003 X
- (15) 15.1 Subject and type

Control unit Suprema

15.2 Description

This supplement to the EC-type examination certificate concerns modifications of the software of the modules MCP20 and MDO20 as well as re-testing according to EN 50271:2010. The equipment can be modified according to the descriptive documents as mentioned in the pertinent test report.

15.3 Parameters

Not applicable

(16) Test and assessment report

PFG-no. 41300202P NXII as of 14.12.2011

- (17) Special conditions for safe use
  - see section "Special conditions for safe use according to EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual

We confirm the correctness of the translation from the German original.///
In the case of arbitration only the German wording shall be valid and binding

DEKRA EXAM GmbH 44809 Bochum, 14. December 2011 PFG-Kie/Bre

Certification body

# 17. Supplement to the EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6

(3) No. of EC-Type Examination Certificate: DMT 03 ATEX G 003 X

(4) Equipment: Suprema

(5) Manufacturer: MSA AUER GmbH

(6) Address: D-12006 Berlin

(7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.

- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 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 the test report PEG-no. 41300204P NVII.
- (9) The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 60079-29-1:2007 EN 50271:2010

This supplement to the EC-type examination certificate covers for the operation of the control unit with remote sensors series 47K-ST the measuring function in the measuring range 0 - 100 % LEL for methane, propane, 2-butanone, acetone, acetylene, ammonia, 1,3-butadiene, diethyl ether, acetic acid, acetic anhydride, ethanol, ethylene, ethyl acetate, ethylene oxide, (FAM-)Standard mineral spirit 65/95, i-butyl acetate, n-butyl acetate, n-butane, n-hexane, n-nonane, n-pentane, 2-propanol, propylene, propylene oxide, toluene, hydrogen, xylene (mixture of isomers 1:1:1/p-m-o), cyclopentane, allyl alcohol, i-butylene, i-butane, methanol und cyclohexane.

This supplement to the EC-type examination certificate covers for the operation of the control unit with

remote sensors series 47K-PRP the measuring function in the measuring range 0 - 100 % LEL for methane, propane, 2-butanone, acetone, ethanol, ethyl acetate, (FAM-) Standard mineral spirit 65/95, 1-Propanol, 2-Propanol, propene, toluene, hydrogen and 1-Ethoxy-2-propanol.

This supplement to the EC-type examination certificate covers for the operation of the control unit with remote sensors series 47K-HT the measuring function in the measuring range 0 - 100 % LEL for methane, propane, 2-butanone, acetone, ethanol, ethyl acetate and toluene.

- (10) 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 appendix to this certificate.
- (11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.

  Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:

#### see INERIS 03 ATEX 0208 and BVS 10 ATEX E 066 X

DEKRA EXAM GmbH Bochum, dated 14. December 2011

Signed: Simanski	Signed: Bredenbröker
Certification body	Special services unit

- (13) Appendix to
- (14) 17. Supplement to the EC-Type Examination Certificate DMT 03 ATEX G 003 X
- (15) 15.1 Subject and type

Control unit Suprema with remote sensors series 47K-ST. 47K-PRP and 47K-HT

#### 15.2 Description

This supplement to the EC-type examination certificate concerns for the operation of the control unit with remotes sensors types series 47K-ST, 47K-PRP and 47K-HT re-testing of the remote sensors according to EN 60079-29-1 as well as the operation with other junction boxes.

#### 15.3 Parameters

See INERIS 03 ATEX 0208 and BVS 10 ATEX E 066 X

(16) Test and assessment report

PFG-no. 41300204P NVII as of 14/12/2011

- 3. supplement to the EC-type examination certificate INERIS 03 ATEX 0208 as of 28/11/2007 EC-type examination certificate BVS 10 ATEX E 066 X as of 28/05/2010
- 1. supplement to the EC-type examination certificate BVS 10 ATEX E 066 X as of 23/09/2011
- (17) Special conditions for safe use
  - see section "Special conditions for safe use according to EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual
  - The description in the instruction manual of the remote sensor of the effects of the accessories on the instrument characteristics has to be considered.

We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH 44809 Bochum, 14. December 2011 PFG-Kie/Bre

Certification body

# 18. Supplement to the EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres Directive 94/9/EC Supplement accordant with Annex III number 6
- (3) No. of EC-Type Examination Certificate:

**DMT 03 ATEX G 003 X** 

(4) Equipment:

Suprema

(5) Manufacturer:

MSA AUER GmbH

(6) Address:

D-12006 Berlin

- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM GmbH, notified body no 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March / 994 certifies that this equipment 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 the test report PEG-no. 41300204P NVIII
- (9) The Essential Health and Safety Requirements with respect to the measuring tunction for explosion protection are assured by application of:

EN 60079-29-1:2007/ EN 50271:2010////

This supplement to the EC-type examination certificate covers for the operation of the control unit with remote sensors series 47K-HT-PRP the measuring function in the measuring range/0/100/% //EL for methane.

- (10) 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 appendix to this certificate.
- (11) This supplement to the EC-Type/Examination Certificate/relates/only/to/the design examination/and tests of the specified equipment in accordance to Directive 94/9/EC.

  Further requirements of the Directive apply/to/the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment/shall include the following:

#### see INERIS 03 ATEX 0208

DEKRA EXAM GmbH Bochum, dated 13. March 2013

Signed: Migenda

Signed: Bredenbröker

Certification body

- (14) 18. Supplement to the EC-Type Examination Certificate DMT 03 ATEX G 003 X
- (15) 15.1 Subject and type

Control unit Suprema with remote sensors series 47K-HT-PRP

15.2 Description

This supplement to the EC-type examination certificate concerns for the operation of the control unit with remotes sensors types series 47K-HT-PRP.

15.3 Parameters

See INERIS 03 ATEX 0208

(16) Test and assessment report

PFG-no. 41300204P NVIII as of 12/03/2013

3. supplement to the EC-type examination certificate INERIS 03 ATEX 0208 as of 28/11/200

- (17) Special conditions for safe use

  - see section "Application, advice and restrictions" in the instruction manual of the remote senso
  - The description in the instruction manual of the remote sensor of the effects of the accessories of the instrument characteristics has to be considered.

We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding

DEKRA EXAM GmbH/////44809 Bochum, 13. March 2013 PFG-Kie/Bre

Certification body

# 19. Supplement to the EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6

(3) No. of EC-Type Examination Certificate: DMT 03 ATEX G 003 X

(4) Equipment: Suprema

(5) Manufacturer: MSA AUER GmbH

(6) Address: D-12006 Berlin

- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM GmbH, notified body no 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 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 the test report PFG-no. 41300202P NXIV.
- (9) The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 60079-29-1:2007 EN 50104:2010 EN 50271:2010

This supplement to the EC-type examination certificate covers control units with software versions 3.01.06 (module MCP 20), 3.01.06 (module MDO 20), 2.01.02 (module MDA 20), 3.01.02 (module MGO 20) and 3.01.02 (module MAO 20).

- (10) 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 appendix to this certificate.
- (11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.

  Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:



II (1) G (2) G

DEKRA EXAM GmbH Bochum, dated 24. October 2013

Signed: Simanski Signed: Bredenbröker

Certification body Special services unit

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- (13) Appendix to
- (14) 19. Supplement to the EC-Type Examination Certificate DMT 03 ATEX G 003 X
- (15) 15.1 Subject and type

Control unit Suprema

15.2 Description

This supplement to the EC-type examination certificate concerns modifications of the modules MPI10-WT10 and MPI10-WT100 as well as testing of the module MAO20. The equipment can be modified according to the descriptive documents as mentioned in the pertinent test report.

15.3 Parameters

Not applicable

(16) Test and assessment report

PFG-no. 41300202P NXIV as of 24.10.2013

- (17) Special conditions for safe use
  - see section "Special conditions for safe use according to EC-type examination certificate DMT 03 ATEX G 003 X" in the instruction manual

We confirm the correctness of the translation from the German original.// In the case of arbitration only the German wording shall be valid and binding

DEKRA EXAM GmbH 44809 Bochum, 24. October/2013 PFG-Kie/Bre

Certification body

# 20. Supplement to the EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6

(3) No. of EC-Type Examination Certificate: DMT 03 ATEX G 003 X

(4) Equipment: Suprema

(5) Manufacturer: MSA AUER GmbH

(6) Address: D-12006 Berlin

- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM GmbH, notified body no 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 and protective systems intended for use in potentially explosive atmospheres, given in Annex 11 to the Directive. The examination and test results are recorded in the test report PFG-no. 413002029 NXV.
- (9) The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured by application of:

EN 60079-29-1:2007 EN 50104:2010 EN 50271:2010

This supplement to the EC-type examination certificate covers the use of the PC-software Suprema Manager with version 2.2.0.4 with control units with software versions 3.01.06 (modules MCP 20 and MDO 20) or 2.06.04 (modules MCP 10 and MDO 10).

- (10) 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 appendix to this certificate.
- (11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.

  Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:



DEKRA EXAM GmbH Bochum, dated 17. March 2014

Signed: Siebrecht Signed: Bredenbröker

Certification body Special services unit

- (13) Appendix to
- (14) 20. Supplement to the EC-Type Examination Certificate DMT 03 ATEX G 003 X
- (15) 15.1 Subject and type

Control unit Suprema

15.2 Description

This supplement to the EC-type examination certificate concerns the use of the PC-software "Suprema Manager" for configuration and parametrization of the control unit.

15.3 Parameters

Not applicable

(16) Test and assessment report

PFG-no. 41300202P NXV as of 17.03.2014

- (17) Special conditions for safe use
  - see section "Special conditions for safe use according to EC-type examination certificate DMT 03 ATEX G 003 X" in the Suprema instruction manual

We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding

DEKRA EXAM GmbH 44809 Bochum, 17. March 2014 PFG-Kie/Bre

Certification body