



Translation

(1) **EC-Type Examination Certificate**

(2) **- Directive 94/9/EC -**
Equipment and protective systems intended for use
in potentially explosive atmospheres

(3) **BVS 10 ATEX E 081**

(4) **Equipment:** Power Supply type APS768x-***

(5) **Manufacturer:** Mettler-Toledo (Albstadt) GmbH

(6) **Address:** 72423 Albstadt, Germany

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

(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 and assessment report BVS PP 10.2160 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2009 General requirements
EN 60079-7:2007 Increased safety 'e'
EN 60079-11:2007 Intrinsic safety 'i'
EN 60079-18:2009 Encapsulation 'm'
EN 60079-31:2009 Protection by enclosures 't'

(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 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 2G Ex e mb [ib] IIC T4 Gb
II 2D Ex t IIIC [ib] IP66 T70°C Db

DEKRA EXAM GmbH

Bochum, dated 01 July 2010

Signed: Hans Christian Simanski

Signed: Dr. Franz Eickhoff

Certification body

Special services unit

(13) Appendix to

(14) **EC-Type Examination Certificate**

BVS 10 ATEX E 081

(15) 15.1 Subject and type

Power Supply type APS768x-***

15.2 Description

The power supply is used for supply of components of weighing systems.

The power supply has a metallic enclosure, type of protection Ex e resp. Ex t with an inside mounted module type of protection Ex mb with up to 6 intrinsically safe output circuits level of protection Ex ib.

15.3 Parameters

15.3.1 Mains circuit

15.3.1.1 Type APS768x-230V and option Barcode wiring

Nominal voltage		AC	230	V
Max. voltage	Um	AC	250	V

15.3.1.2 Type APS768x-100V and option Barcode wiring

Nominal voltage		AC	100	V
Max. voltage	Um	AC	250	V

15.3.2 Output circuits

15.3.2.1 Circuit U1

Voltage	Uo	DC	8.7	V
Current	Io		133	mA
Power	Po		1.15	W
External capacitance	Co		1	µF
External inductance	Lo		0.3	mH

15.3.2.2 Circuit U2

Voltage	Uo	DC	12.6	V
Current	Io		42	mA
Power	Po		0.53	W
External capacitance	Co		0.4	µF
External inductance	Lo		1	mH

15.3.2.3 Circuit U3

Voltage	Uo	DC	7.15	V
Current	Io		107	mA
Power	Po		0.77	W
External capacitance	Co		1	µF
External inductance	Lo		0.3	mH

15.3.2.4	Circuit U4				
	Voltage	U _o	DC	10.5	V
	Current	I _o		74	mA
	Power	P _o		0.78	W
	External capacitance	C _o		0.6	μF
	External inductance	L _o		0.3	mH
15.3.2.5	Circuit U5				
	Voltage	U _o	DC	5.4	V
	Current	I _o		240	mA
	Power	P _o		1.3	W
	External capacitance	C _o		1	μF
	External inductance	L _o		0.3	mH
15.3.2.6	Circuit U6				
	Voltage	U _o	DC	12.6	V
	Current	I _o		92	mA
	Power	P _o		1.16	W
	External capacitance	C _o		0.5	μF
	External inductance	L _o		0.3	mH
15.3.3	Temperatures				
	Ambient temperature range	T _a		-10 °C up to +40 °C	
	Max. surface temperature dust				T70 °C
	Degree of protection				IP66

(16) Test and assessment report

BVS PP 10.2160 EG as of 01.07.2010

(17) Special conditions for safe use

None

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, den 01.07.2010
BVS-Schu/Her A 20090865

DEKRA EXAM GmbH



Certification body



Special services unit

Translation

(1) 1. 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: **BVS 10 ATEX E 081**
- (4) Equipment: **Power Supply type APS768x-*****
- (5) Manufacturer: **Mettler-Toledo (Albstadt) GmbH**
- (6) Address: **72423 Albstadt, Germany**
- (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 and assessment report BVS PP 10.2160 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- EN 60079-0:2009 **General requirements**
 - EN 60079-7:2007 **Increased safety 'e'**
 - EN 60079-11:2007 **Intrinsic safety 'i'**
 - EN 60079-18:2009 **Encapsulation 'm'**
 - EN 60079-31:2009 **Protection by enclosures 't'**
 - EN 61241-11:2006 **Intrinsic safety 'i'**
- (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 2G Ex e mb [ib] IIC T4 Gb**
II 2D Ex t IIIC [ib] IP66 T70°C Db

DEKRA EXAM GmbH
Bochum, dated 24.10.2011

Signed: Simanski

Certification body

Signed: Dr. Eickhoff

Special services unit



- (13) Appendix to
- (14) **1. Supplement to the EC-Type Examination Certificate
BVS 10 ATEX E 081**
- (15) 15.1 Subject and type

Power Supply type APS768x-***

15.2 Description

The power supply can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report and can be equipped with an option APS768x-CL/CL Interface board.

The electrical parameters of the power supply are still valid; the version with integrated APS768x CL/CL-Interface board gets the following additional parameters.

15.3 Parameters option APS768x-CL/CL

15.3.1 Scale-Interface S1, S2 and S3, S4

Values for each circuit

Voltage	U _o	DC	7.15	V
Current	I _o		24	mA
Power	P _o		43	mW
External capacitance	C _o		0.2	µF
External inductance	L _o		0.2	mH

15.3.2 Communication-Interface C1, C2, C3 and C4


Voltage	U _o	DC	7.15	V
Current	I _o		107	mA
Power	P _o		270	mW
External capacitance	C _o		0.3	µF
External inductance	L _o		0.6	mH

- (16) Test and assessment report
BVS PP 10.2160 EG as of 24.10.2011

- (17) Special conditions for safe use
None

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, 24.10.2011
BVS-Schu/Her A 20110634



Certification body



Special services unit