



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 BVS 10.0054 issue No.: 1

Status: Current

Certificate history:
Issue No. 1 (2011-11-3)
Issue No. 0 (2010-7-1)

Date of Issue: 2011-11-03 Page 1 of 5

Applicant: **Mettler-Toledo (Albstadt) GmbH**
Unter dem Malesfelsen 34
72458 Albstadt
Germany

Electrical Apparatus: **Power Supply Type APS768x-*****
Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i", Equipment protection by encapsulation "m", Equipment dust ignition protection by enclosure 't', Equipment protection by increased safety "e"**

Marking: **Ex e mb [ib] IIC T4 Gb**
Ex t IIC [ib] IP66 T70°C Db

Approved for issue on behalf of the IECEx Certification Body: H.-Ch. Simanski

Position: Head of Certification Body

Signature:
(for printed version)

Date:

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:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
DEKRA EXAM GmbH



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Manufacturer: **Mettler-Toledo (Albstadt) GmbH**
Unter dem Malesfelsen 34
72458 Albstadt
Germany

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 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-18 : 2009 Edition: 3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 61241-11 : 2005 Edition: 1	Electrical apparatus for use in the presence of combustible dusts - Part 11: Protection by intrinsic safety 'ID'

*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:
[DE/BVS/ExTR10.0077/01](#)

Quality Assessment Report:

[DE/TUN/QAR07.0003/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

107 Description

The power supply is used for the 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.

The power supply can be modified slightly and can be equipped with an option APS768x CL/CL Interface board.

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

Parameters option APS768x CL/CL

1 Scale-Interface S1, S2 and S3, S4

Values for each circuit

Voltage	Uo DC	7.15 V
Current	Io	24 mA
Power	Po	43 mW
External capacitance	Co	0.2 µF
External inductance	Lo	0.2 mH

2 Communication-Interface C1, C2, C3 and C4

Voltage	Uo DC	7.15 V
Current	Io	107 mA
Power	Po	270 mW
External capacitance	Co	0.3 µF
External inductance	Lo	0.6 mH

CONDITIONS OF CERTIFICATION: NO



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EQUIPMENT(continued):

Parameters

1 Mains circuit

1.1 Type APS768x-230V and option Barcode wiring

Nominal voltage AC 230 V

Max. voltage Um AC 250 V

1.2 Type APS768x-100V and option Barcode wiring

Nominal voltage AC 100 V

Max. voltage Um AC 250 V

2 Output circuits

2.1 Circuit U1

Voltage Uo DC 8.7 V

Current Io 133 mA

Power Po 1.15 W

External capacitance Co 1 μ F

External inductance Lo 0.3 mH

2.2 Circuit U2

Voltage Uo DC 12.6 V

Current Io 42 mA

Power Po 0.53 W

External capacitance Co 0.4 μ F

External inductance Lo 1 mH

2.3 Circuit U3

Voltage Uo DC 7.15 V

Current Io 107 mA

Power Po 0.77 W

External capacitance Co 1 μ F

External inductance Lo 0.3 mH

2.4 Circuit U4

Voltage Uo DC 10.5 V

Current Io 74 mA

Power Po 0.78 W

External capacitance Co 0.6 μ F

External inductance Lo 0.3 mH

2.5 Circuit U5

Voltage Uo DC 5.4 V

Current Io 240 mA

Power Po 1.3 W

External capacitance Co 1 μ F

External inductance Lo 0.3 mH

2.6 Circuit U6

Voltage Uo DC 12.6 V

Current Io 92 mA

Power Po 1.16 W

External capacitance co 0.5 μ F

External inductance Lo 0.3 mH

3 Temperatures

Ambient temperature range Ta -10 °C up to +40 °C

Max. surface temperature dust T70 °C

Degree of protection IP66



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

The power supply can be modified slightly and can be equipped with an option APS768x CL/CL Interface board.