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 TUR 14.0037X	Issue No: 0	Certificate history: Issue No. 0 (2016-08-31)
Status:	**Current**	Page 1 of 3	
Date of Issue:	**2016-08-31**		

Applicant: **HIMA Paul Hildebrandt GmbH**
Albert-Bassermann-Str. 28
68782 Brühl
Germany

Equipment: **HIMA power supplies, net filters, relais and isolating amplifiers**
Optional accessory:

Type of Protection: **Ex nA nC IIC T4 Gc**

Marking:
Ex nA nC IIC T4 Gc
Ex nA IIC T4 Gc
Ex nC IIC T4 Gc

Approved for issue on behalf of the IECEx Certification Body: Geoffrey Stenzel

Position: Assigned Certifier

Signature:
(for printed version)

Date: 2016-08-31

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:

TUV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany

TÜVRheinland

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Manufacturer: **HIMA Paul Hildebrandt GmbH**
Albert-Bassermann-Str. 28
68782 Brühl
Germany

Additional 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

*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/TUR/ExTR14.0033/00

Quality Assessment Report:

DE/PTB/QAR11.0008/02

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Relays H 4116, H 4134, H 4135A, H 4136

Switching amplifiers H 4007, H 4011, H 4012

Analog repeater power supply H 6200A

HART multiplexer H 6210

Power supply filters H 7013, H 7021

Power supply unit PS 1000

For technical data see attachment.

CONDITIONS OF CERTIFICATION: YES as shown below:

See attachment.

Annex:

DE-IECEx_TUR_14.0037_X_00_Attachment.pdf

Attachment to Certificate IECEx TUR 14.0037X

Device: HIMA power supplies, net filters, relays and isolating amplifiers
Type: Relays type H 4116, H 4134, H 4135A, H 4136
Switching amplifiers type H 4007, H 4011, H 4012
Analog repeater power supply type H 6200A
HART multiplexer type H 6210
Power supply filters type H 7013, H 7021
Power supply unit type PS 1000

Manufacturer: HIMA Paul Hildebrandt GmbH

Address: Albert-Bassermann-Str. 28
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Germany

Technical data:

H Devices:

Device	$T_{a,min}$	$T_{a,max}$	U_n	Tolerance	Switching capacity
H 4007	-25	50	24 VDC	-15/+20%	
H 4011	-25	60	24 VDC	-15/+20%	
H 4012	-25	60	24 VDC	-15/+20%	
H 4116	-25	50	24 VDC	-15/+20%	250 VAC / 127 VDC
H 4134	-25	50	230 VAC	-15/+10%	250 VAC / 127 VDC
H 4135A	-25	60	24 VDC	-15/+20%	250 VAC / 220 VDC
H 4136	-25	60	48 VDC	-15/+20%	250 VAC / 127 VDC
H 6200A	0	60	24 VDC	-15/+20%	
H 6210	0	60	24 VDC	-15/+20%	
H 7013	-25	70	24 VDC	-15/+66%	
H 7021	-25	70	48 VDC	-15/+25%	

H devices are intended for top hat rail mounting.

PS 1000 variants:

Type	HW	Description
PS 1000/230 011	02	Coated power supply unit, input voltage 230/ 240 VAC, output voltage 24 VDC, output power 40 A
PS 1000/230 017	00	Power supply unit, wall mounted, coated, input voltage 230/ 240 VAC, output voltage 24 VDC, output power 40 A
PS 1000/115 011	03	Coated power supply unit, input voltage 120 VAC, output voltage 24 VDC, output power 40 A
PS 1000/115 017	00	Power supply unit, wall mounted, coated, input voltage 120 VAC, output voltage 24 VDC, output power 40 A

Ambient temperature for PS1000: $0°C < T_a < 60°C$

Special Conditions of Use for Ex Equipment:

1. The H devices shall be supplied with a SELV or PELV supply only.

2. The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.

3. The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC 60079-15.

4. The maximum allowed values for input (supply) voltages and output current depend on the distance between the top hat rail mounted devices of at least 5mm:

	With distance		Without distance T_a < 50°C		Without distance T_a > 50°C	
	Input U_{max}	Output I_{max}	Input U_{max}	Output I_{max}	Input U_{max}	Output I_{max}
H 4116	Un+20%	4A	Un+20%	3A	-	-
H 4134	Un+10%	4A	Un+10%	4A	-	-
H 4135A	Un+20%	4A	Un+20%	3A	Un+20%	3A
H 4136	Un+20%	4A	Un+20%	3A	Un+10%	3A

Values according to datasheet
Special condition for zone 2

5. The external enclosure for the power supplies PS1000 shall be capable for a power dissipation of 130W.