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 12.0003X issue No.:0	Certificate history:
Status:	**Current**	
Date of Issue:	**2012-04-13**	Page 1 of 3

Applicant: **Gecma Components GmbH**
Heisenbergstr. 26-40
50169 Kerpen
Germany

Electrical Apparatus: **Intrinsically Safe Power Supply CPS-1***
Optional accessory:

Type of Protection: **Ex e q [ib] IIC T4 Gb**

Marking: Ex e q [ib] IIC T4 Gb

Approved for issue on behalf of the IECEx Certification Body: Dipl.-Ing. Heinz Farke

Position: Deputy of ExCB

Signature:
(for printed version)

Date: 2012-04-13

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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Certificate No.: IECEx TUR 12.0003X

Date of Issue: **2012-04-13** Issue No.: **0**

Manufacturer: **Gecma Components GmbH**
Heisenbergstr. 26-40
50169 Kerpen
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 60079-5 : 2007-03 Edition: 3	Explosive atmospheres - Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by 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:
DE/TUR/ExTR12.0003/00

Quality Assessment Report:

DE/TUR/QAR09.0005/00

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

Intrinsically safe power supply type CPS-1AC and CPS-1DC
CPS-1* is the power supply used in the GeCma Challenger Remote Terminal Interface systems. The units will be mounted in the stainless steel enclosure of the Challenger systems and shall offer power outputs to supply the sub modules.The unit has 8 galvanically isolated supplies for nominal 12V, approx. 500mA loads, with cable loom and appropriate connectors, which can be then plugged directly to the existing Challenger installation. The outputs are intrinsically safe.There are 2 versions available.
CPS-1dc: The unit shall have a nominal 24V DC (20-30V) voltage input. The isolation between the power input and power outputs as well as between the individual output channels shall be conform to the applicable explosion protection standards.
CPS-1ac: This product is similar to CPS-1dc, except for a AC/DC power module at the input. The input has a universal wide voltage input range (90-253 VAC).

CONDITIONS OF CERTIFICATION: YES as shown below:

- The CPS-1* has to be mounted inside an enclosure, that fulfils IP54 according to IEC 60079-0.
- Installation should be done according to IEC 60079-14 or national erection code as applicable.

Annexe: 10572374_ExTR-Cover Annex.pdf

General product information:

Intrinsic safe power supply type CPS-1AC and CPS-1DC

CPS-1* is the power supply used in the GeCma Challenger Remote Terminal Interface systems. The units will be mounted in the stainless steel enclosure of the Challenger systems and shall offer power outputs to supply the sub modules.
The unit has 8 galvanically isolated supplies for nominal 12V, approx. 500mA loads, with cable loom and appropriate connectors, which can be then plugged directly to the existing Challenger installation. The outputs are intrinsically safe.
There are 2 versions available.

CPS-1dc
The unit shall have a nominal 24V DC (20-30V) voltage input. The isolation between the power input and power outputs as well as between the individual output channels shall be conform to the applicable explosion protection standards

CPS-1ac
This product is similar to CPS-1dc, except for a AC/DC power module at the input. The input has a universal wide voltage input range (90-253 VAC).

Electrical Parameters

	Input Circuit (terminal 1 and 2)	**Output Circuits** (terminals PS1-PS8) each channel are Intrinsically safe and galvanically isolated from each other (Terminals PS1: 1+2, PS2: 3+4: PS3:5+6, PS4:7+8, PS5: 9+10; PS6:11+12; PS7: 13+14; PS8:15+16)
CPS-1 AC	Nominal Voltage = 90-253V AC Max. Voltage Um= 253V AC	Uo = 12,3 V DC Io = 543 mA Po = 6,68 W Characteristics: Rectangular Co ≤ 1 µF Lo ≤ 10 µH

	Input Circuit (terminal 1 and 2)	**Output Circuits** (terminals PS1-PS8) each channel are Intrinsically safe and galvanically isolated from each other (Terminals PS1: 1+2, PS2: 3+4: PS3:5+6, PS4:7+8, PS5: 9+10; PS6:11+12; PS7: 13+14; PS8:15+16)
CPS-1 DC	Nominal Voltage = 20-30V DC Max. Voltage Um= 253V DC	Uo = 12,3 V DC Io = 543 mA Po = 6,68 W Characteristics: Rectangular Co ≤ 1 µF Lo ≤ 10 µH