



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 DEK 14.0092X Issue No: 0 Certificate history:
Issue No. 0 (2015-01-12)

Status: Current Page 1 of 3

Date of Issue: 2015-01-12

Applicant: Honeywell International Inc.
512 Virginia Drive
Fort Washington, PA 19034
United States of America

Electrical Apparatus: Profibus PA / Foundation Fieldbus transmitter, Type STT650-S2-0-A-CF0,
STT650-S2-0-A-CP0, STT650-T2-0-A-CF0, and STT650-T2-0-A-CP0

Optional accessory:

Type of Protection: Ex i

Marking: Ex ia IIC T6 ... T4 Ga
Ex ia IIIC Da
Ex ib [ia Ga] IIC T6 ... T4 Gb
Ex ia I Ma

Approved for issue on behalf of the IECEx
Certification Body:

R. Schuller

Position:

Certification Manager

Signature:
(for printed version)

2015-01-12

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](http://www.iecex.com).

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands





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Manufacturer: **Honeywell International Inc.**
512 Virginia Drive
Fort Washington, PA 19034
United States of America

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 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I"
Edition:6.0

*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:

NL/DEK/ExTR14.0095/00

Quality Assessment Report:

NL/DEK/QAR13.0031/00



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Profibus PA / Foundation Fieldbus Transmitter, Type STT650-S2-0-A-CF0, STT650-S2-0-A-CP0, STT650-T2-0-A-CF0, and STT650-T2-0-A-CP0, for rail mounting, with one or two independent channels, converts the measurement signals of temperature sensors, mV signals or mA signals into a Profibus PA fieldbus or to a Foundation Fieldbus.
For electrical and thermal data, refer to Annex 1 to this certificate.

CONDITIONS OF CERTIFICATION: YES as shown below:

For electrical and thermal data, refer to the attachment to this certificate.

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

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Ga, Gb, Da, Db, Ma or Mb, and if the enclosure is made of aluminium, it must be installed such, that ignition sources due to impact and friction sparks are excluded.

Electrostatic charges on the transmitters enclosure shall be avoided.

Annex:

[Annex 1 to CoC IECEx DEK 14.0092 X iss 0, ExTR_DEK14.0095.00.pdf](#)

Annex 1 to Certificate of Conformity IECEx DEK 14.0092 X, issue 0
Annex 1 to NL/DEK/ExTR/14.095/00
Annex 1 to DEKRA 14ATEX0139 X, issue 1

General product information:

Profibus PA / Foundation Fieldbus Transmitter Type STT650-S2-0-A-CF0, STT650-S2-0-A-CP0, STT650-T2-0-A-CF0, and STT650-T2-0-A-CP0, for rail mounting, with one or two independent channels, converts the measurement signals of temperature sensors, mV signals or mA signals into a Profibus PA fieldbus or to a Foundation Fieldbus.

For marking Ex ia IIC T6 ... T4 Ga

The transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP20 according to EN/IEC 60529 and that is suitable for the application and correctly installed.
Ambient temperature range is specified under chapter "Electrical and thermal data".

For marking Ex ia IIIC Da

The transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP6X according to EN/IEC 60529, and that is suitable for the application and correctly installed.

The surface temperature of the enclosure is equal to the ambient temperature +20 K for a dust layer with a maximum thickness of 5 mm.

Ambient temperature range: -40 °C to +85 °C

For marking Ex ia I Ma

The transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP6X according to EN/IEC 60529, and that is suitable for the application and correctly installed.

Ambient temperature range: -40 °C to +85 °C

Fieldbus input circuit (terminals 11 and 12, respectively 21 and 22):

in type of protection intrinsic safety Ex ia IIC, Ex ia IIIC or Ex ia I, only for connection to a certified intrinsically safe circuit, with the following maximum values (per circuit):

$U_i = 30 \text{ V}$; $I_i = 120 \text{ mA}$; $P_i = 0,84 \text{ W}$.
 $T_a \leq 85 \text{ °C}$: Temperature class T4
 $T_a \leq 70 \text{ °C}$: Temperature class T5
 $T_a \leq 60 \text{ °C}$: Temperature class T6 or

$U_i = 30 \text{ V}$; $I_i = 300 \text{ mA}$; $P_i = 1,3 \text{ W}$.
 $T_a \leq 75 \text{ °C}$: Temperature class T4
 $T_a \leq 65 \text{ °C}$: Temperature class T5
 $T_a \leq 45 \text{ °C}$: Temperature class T6

or for connection to a certified intrinsically safe circuit in accordance with FISCO, with following maximum values:

$U_i = 17,5 \text{ V}$; $I_i = 250 \text{ mA}$; $P_i = 2,0 \text{ W}$.
 $T_a \leq 85 \text{ °C}$: Temperature class T4
 $T_a \leq 60 \text{ °C}$: Temperature class T5
 $T_a \leq 45 \text{ °C}$: Temperature class T6 or

$U_i = 15 \text{ V}$; $I_i = 900 \text{ mA}$; $P_i = 5,32 \text{ W}$.
 $T_a \leq 85 \text{ °C}$: Temperature class T4
 $T_a \leq 60 \text{ °C}$: Temperature class T5
 $T_a \leq 45 \text{ °C}$: Temperature class T6

Annex 1 to Certificate of Conformity IECEx DEK 14.0092 X, issue 0
Annex 1 to NL/DEK/ExTR/14.095/00
Annex 1 to DEKRA 14ATEX0139 X, issue 1

or in type of protection intrinsic safety Ex ib IIC, only for connection to a certified intrinsically safe fieldbus, with following maximum values:

$U_i = 30 \text{ V}$; $I_i = 250 \text{ mA}$; $P_i = 5,32 \text{ W}$.
 $T_a \leq 85 \text{ °C}$: Temperature class T4
 $T_a \leq 75 \text{ °C}$: Temperature class T5
 $T_a \leq 60 \text{ °C}$: Temperature class T6

or for connection to a certified intrinsically safe circuit in accordance with FISCO, with following maximum values:

$U_i = 17,5 \text{ V}$; $I_i = \text{any}$ $P_i = \text{any}$.
 $T_a \leq 85 \text{ °C}$: Temperature class T4
 $T_a \leq 75 \text{ °C}$: Temperature class T5
 $T_a \leq 60 \text{ °C}$: Temperature class T6

The effective internal capacitance and the effective internal inductance of the Fieldbus input circuit are:
 $C_i = 2 \text{ nF}$; $L_i = 1 \text{ }\mu\text{H}$.

Sensor Circuit (terminals 41...44, respectively 51...54):

in type of protection intrinsic safety Ex ia IIC, Ex ia IIIC or Ex ia I, with following maximum values:
 $U_o = 5,7 \text{ V}$; $I_o = 8,4 \text{ mA}$; $P_o = 12 \text{ mW}$; $C_o = 40 \text{ }\mu\text{F}$; $L_o = 200 \text{ mH}$.

Current Measurement Input Circuit (terminals 13 and 14, respectively 23 and 24):

in type of protection intrinsic safety Ex ia IIC, Ex ia IIIC or Ex ia I, only for connection to a certified intrinsically safe circuit, with the following maximum values (per circuit):
 $U_i = 30 \text{ V}$, $I_i = 140 \text{ mA}$, $P_i = 1 \text{ W}$, $C_i = 0 \text{ nF}$, $L_i = 0 \text{ mH}$

The Sensor Circuit and the Current Measurement Input Circuit are not infallibly galvanic isolated from the Fieldbus input circuit. However, the galvanic isolation is capable of withstanding a test voltage of 500Vac during 1 minute.

The Sensor Circuit is galvanically connected to the Current Measurement Input Circuit and only one circuit can be connected at a time.