

Supplement No. 2
to
EC-TYPE EXAMINATION CERTIFICATE
Equipment or Protective systems or Components intended for use in
Potentially Explosive Atmospheres
Directive 94/9/EC

Certificate Number:
SP03ATEX3602

Certificate SP03ATEX3602 of 3.6.2003 including Supplement No. 1 has been updated to cover the following standards:

- EN 60079-0:2009 (SS-EN 60079-0 ed 3)
- EN 60079-11:2007 (SS-EN 60079-11 ed 1)
- EN 60079-0:2012 (SS-EN 60079-0 ed 4)
- EN 60079-11:2012 (SS-EN 60079-11 ed 2)

Code: **Ex II 2 (1) G Ex ia IIC T4**

Category "2 (1)" in the code indicates that the amplifier (transmitter) is category 2 (for location in zone 1) and the intrinsically safe input (two cable connections) are category 1 (for connection to zone 0 circuits).

Applicant (manufacturer): Vishay Nobel AB

Report No.

PX01986:C

Drawings and documents

Description	Number	Issue	Date	Pages
Specification (PG 13,5)	110278	Rev. 3	120229	3 pages
Specification kretskort	110153	Rev. 0	010615	19 pages
BILT 4 assembly (PG 13,5)	400560	Rev. 2	030729	1 page
PC-board	500458	Rev. 0	000616	1 page
Circuit diagram	500610	Rev. 2	010806	1 page
PC assembly	500662	Rev. 0	000616	1 page
Beröringsskydd för PG13,5...	500664	Rev. 1	070206	1 page
Låda, PG 13,5	500666	Rev. 1	110406	1 page
Jordplåt... PG 13,5	500740	Rev. 0	001128	1 page
Skylt	500743	Rev. 2	120229	1 page
Montageskena	600418	Rev. 0	000619	1 page
Etikett... PG 13,5	600680	Rev. 1	030729	1 page
Technical Manual	600679	Rev. 3	120924	26 pages

Supplement No. 2 to Certificate No. SP03ATEX3602, issued by Notified Body No. 0402

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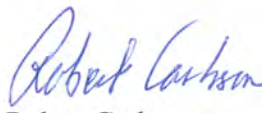
CERTIFIKAT



Borås 21th March 2013

**SP Technical Research Institute of Sweden
Certification**


Lennart Månsson
Certification Manager


Robert Carlsson
Certification Officer

SP ref.: 247404

SP Technical Research Institute of Sweden

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Supplement No. 1

to

EC-TYPE EXAMINATION CERTIFICATE

Equipment or Protective systems or Components intended for use in
Potentially Explosive Atmospheres
Directive 94/9/EC

Certificate Number:

SP03ATEX3602

Certificate SP03ATEX3602 of 3.6.2003 has been extended to apply also to a variant of the Transducer Amplifier type BILT 4 as specified below.

The specifications below apply for the equipment and replaces corresponding specifications according to the certificate. In other respects the specifications stated in the certificate apply.

The differences concern minor modifications of the enclosure, circuit diagram, marking and technical manual. Location shoulders on the cover have been removed to allow mounting of the cover in two possible directions on the enclosure.

Applicant (manufacturer): Vishay Nobel AB

Report No.

PX01986:B

Drawings and documents

Description	Number	Issue	Date	Pages
Specification (PG 21)	110277	Rev. 0	030430	2 pages
Specification (PG 13,5)	110278	Rev. 1	100302	3 pages
Specification kretskort	110153	Rev. 0	010615	19 pages
BILT 4 assembly (PG 21)	400559	Rev. 2	030729	1 page
BILT 4 assembly (PG 13,5)	400560	Rev. 2	030729	1 page
PC-board	500458	Rev. 0	000616	1 page
Circuit diagram	500610	Rev. 2	010806	1 page
PC assembly	500662	Rev. 0	000616	1 page
Beröringsskydd för PG21...	500663	Rev. 0	000620	1 page
Beröringsskydd för PG13,5...	500664	Rev. 1	070206	1 page
Låda, PG 21	500665	Rev. 0	000620	1 page
Låda, PG 13,5	500666	Rev. 1	110406	1 page
Jordplåt... PG 13,5	500740	Rev. 0	001128	1 page
Jordplåt... PG 21	500741	Rev. 0	001128	1 page
Skylt	500743	Rev. 1	110321	1 page
Montageskena	600418	Rev. 0	000619	1 page

Supplement No. 1 to Certificate No. SP03ATEX3602, issued by Notified Body No. 0402

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Etikett... PG 13,5	600680	Rev. 1	030729	1 page
Etikett... PG 21	600681	Rev. 1	030729	1 page
Technical Manual	600679	Rev. 2	110822	22 pages

Note: One set of the drawings and documents above, submitted to the holder of this certificate, may contain or may be accompanied with comments by SP which shall be considered by the holder.

Borås 11th October 2011

**SP Technical Research Institute of Sweden
Certification**


Lennart Månsson
Certification Manager


Robert Carlsson
Certification Officer

SP ref.: 247404

SP Technical Research Institute of Sweden

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CERTIFICATE


Certificate issued by a Notified Body

SP 03ATEX3602
(24 74 04)

1(2)




- [1] **EC-TYPE EXAMINATION CERTIFICATE**
- [2] **Equipment or Protective System intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**
- [3] EC-Type Examination Certificate Number: **SP 03ATEX3602**
- [4] Equipment or Protective System: Transducer Amplifier type BILT 4
- [5] Applicant (manufacturer): Vishay Nobel AB, Karlskoga, Sweden
- [6] Address: Skrantahöjdsvägen 40, Karlskoga, Sverige
- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] SP, Notified Body No. 0402 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 a confidential report No. P301826:A.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN 50014:1997 + A1...A2 (SS-EN 50014 ed. 4 + A1...A2)
 - EN 50020:2002 (SS-EN 50020 ed. 5)
- [10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- [11] This EC Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- [12] The marking of the equipment or protective system shall include the following

 II 2(1) G EEx ia IIC T4

Borås 3 June 2003

**SP Swedish National Testing and Research Institute
Certification**


Lennart Månsson
Certification manager


Åke Månsson
Certification officer



CERTIFICATE

SP 03ATEX3602, dated 03.06.2003

Signed on behalf of SP, 03.06.2003:

[13]

Schedule

[14]

EC-TYPE EXAMINATION CERTIFICATE No. SP 03ATEX3602

[15]

Description of equipment

The transducer amplifier has two cable entries for permanent connection to a transducer and an associated apparatus. The corresponding cable terminals forms an intrinsically-safe input with input data as specified below.

The amplifier is cased in a plastic enclosure for permanent mount. The amplifier is available in two versions with different diameter for the cable entries (art.no. 110277 for PG21 and 110278 for PG13,5). The enclosure has a conductive coating inside for screening. The screens of the connected cables are connected to the conductive coating via the cable entries. An internal sheet metal rail provides an infallible connection between the cable entries for the connected cable screens. The intrinsically safe circuit of the amplifier is electrically insulated from the enclosure.

Data for the two terminals (J1 and J2) forming an intrinsically-safe input:

Maximum input voltage (U_i): 30,0 V
Maximum input current (I_i): 200 mA
Maximum input power (P_i): 1,2 W
Internal capacitance (C_i): 30,0 nF
Internal inductance (L_i): 10 μ H

Ambient temperature (T_{amb}): -20 °C to +60 C°

[16]

Report No.

P301826:A

[17]

Special conditions for safe use

None

[18]

Essential health and safety requirements

Additional requirements not applicable.

[19]

Drawings and documents

According to the specification P301826:B.