



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **CSANe 22ATEX1006X** Issue: **0**

4 Equipment: **5674-100 Channel Card (Ex i)**

5 Applicant: **BARTEC Benke GmbH**

6 Address: **Borsigstr. 10
D-21465 Reinbek
Germany**

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-11:2012

EN 60079-28:2015

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



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Ta = -20°C ≤ Tamb ≤ +70°C

Signed: J A May

Title: Director of Operations



Project Number 80088682

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CSA Group Netherlands B.V. Utrechtseweg 310, Building B42, 6812AR, Netherlands



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

CSANe 22ATEX1006X
Issue 0

13 DESCRIPTION OF EQUIPMENT

The 5674-100 Channel Card (Ex i) will be used in the HYGROPHIL F 5674 Moisture Analyzer as an Analog to Digital converter. The Moisture Analyzer is intended for measuring the humidity of gases in pipes, vessels or tanks with the associated humidity sensor. A maximum of three sensors can be connected to the Moisture Analyzer, three Channel Card are required for this.

The Channel Card transforms the Ex i-signals of the temperature and pressure (PT100 and 0/4... 20mA) from a Moisture Sensor to a digital signal. This signal is transmitted to the HYGROPHIL F 5674 Moisture Analyzer via an I²C interface.

The humidity is measured optically with the sensor. A fiber optic cable supplies the sensor with intrinsically safe light. The LED for the light supply of the sensor is also installed on the card.

The channel card has the following connections:

- Digital data bus with 24V DC supply
- intrinsically safe connector for PT100
- intrinsically safe connector for 4-20 mA (active or passive input)
- intrinsically safe fiber optic cable connector

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated CSA Group Reports and Certificate History

Issue	Date	Report number	Comment
0	21 March 2022	R80088682A	The release of the prime certificate.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

15.1 Equipment is intended to be permanently installed in a non-hazardous area only within a Hy-F 5674 enclosure.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.





SCHEDULE

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CSANe 22ATEX1006X
Issue 0

17 CONDITIONS OF MANUFACTURE

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.
- 17.3 Intrinsic safe relevant transformers shall withstand for one min without breakdown, the application of an ac potential of 2500Vrms between primary and secondary circuits according in accordance with EN 60079-11:2012, Clause 11.2, Table 10.

Certificate Annexe



Certificate Number: CSANe 22ATEX1006X
Equipment: 5674-100 Channel Card (Ex i)
Applicant: BARTEC Benke GmbH

Issue 0

Drawing	Sheets	Rev.	Date (Stamp)	Title
449469	1 to 8		15 Feb-2022	D-01 Circuit diagram Channel Card 5674-100
449469	1 to 1	A	15 Feb-2022	P-01 Part list Channel Card 5674-100
5674-100	1 to 7	A	15 Feb-2022	L-01 PCB Layout Channel Card 5674-100
Hy-F 5674-100EN	1 to 26	2.0	17 Feb-2022	Manual - Hy-F 5674-100 Channel Card (Ex i)
HY0001AES01	1 to 1	-	17 Feb-2022	Nameplate Channel Card (Ex-i) Type 5674-100

