



Translation

EC-Type Examination Certificate

(1)

(2)

- Directive 94/9/EC -
Equipment and protective systems intended for use
in potentially explosive atmospheres

(3)

BVS 08 ATEX E 096

(4)

Equipment: Measuring gas cooler type JCT5 – Ex class

(5)

Manufacturer: JCT Analysentechnik GmbH

(6)

Address: 2700 Wiener Neustadt / Austria

(7)

The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.

(8)

The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment 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 the test and assessment report BVS PP 08.2138 EG.

(9)

The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2006	General requirements
EN 60079-1:2004	Flameproof enclosure
EN 60079-2:2004	Pressurised Enclosure
EN 60079-7:2007	Increased Safety
EN 60079-11:2007	Intrinsic Safety

(10)

If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.

(11)

This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.

Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate

(12)

The marking of the equipment shall include the following:



II 2G Ex px de [ia] IIC T4

DEKRA EXAM GmbH

Bochum, dated 2008-08-26

Signed: Dr. Rainer Jockers

Signed: Dr. Franz Eickhoff

Certification body

Special services unit

(13)

Appendix to

(14)

EC-Type Examination Certificate

BVS 08 ATEX E 096

(15) 15.1 Subject and type

Measuring gas cooler type JCT5 – Ex class

15.2 Description

The measuring gas cooler of type JCT5 – Ex class consists of a hermetically sealed cooling agent compressor of types GD40AC, GD40ME, THB4413Y, TL4G, and TL4GH of the type of protection Pressurised Enclosure; it is equipped with an electrical connection of the type of protection Increased Safety and the components listed below which are separately certified. The cooling agent compressor types are of identical power and construction but made by different manufacturers.

The control unit of type 8265/5 (PTB 06 ATEX 1077) is made for the type of protection Flameproof Enclosure and features an installed isolating switch amplifier of type 9170/*0-**-*1 (DMT 02 ATEX E 195 X) which has been functionally tested. The pressure and temperature switches of the measuring gas coolers are operated in intrinsically safe circuits of the type of protection Intrinsic Safety.

The cooling agent compressor is protected by a separate motor circuit breaker located in the Ex-d enclosure. The electrical connection of the measuring gas cooler is provided by a permanent cable.

15.3 Parameters

15.3.1	Electrical parameters	
	Rated voltage	115/230 VAC, 50-60 Hz
	Rated current	6/3 A
	Rated power	224/182 W
15.3.2	Thermal parameters	
	Ambient temperature range	+10 °C to +40 °C
	Maximum entry temperature of measuring gas	120 °C
15.3.3	Other parameters	
	Maximum service pressure cooling agent	20 bar
	Cooling agent	R134a

(16) Test and assessment report

BVS PP 08.2138 EG, as of 2008-08-26

(17) Special conditions for safe use

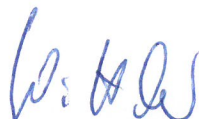
None

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH

44809 Bochum, 2018-02-19

BVS-Pz/Ar E 7705/18



Certification body



Special services unit

Translation

EU-Type Examination Certificate Supplement 1

Change to Directive 2014/34/EU

Equipment or Protective System intended for use
in potentially explosive atmospheres
Directive 2014/34/EU

EU-Type Examination Certificate Number: **BVS 08 ATEX E 096**

Product: **Measuring gas cooler type JCT-5Ex**

Manufacturer: **JCT Analysentechnik GmbH**

Address: **Werner-Heisenberg-Straße 4, 2700 Wiener Neustadt, Austria**

This supplementary certificate extends EC-Type Examination Certificate No. BVS 08 ATEX E 096 to apply to products designed and constructed in accordance with the specification set out in the Appendix of the said certificate but having any variations specified in the Appendix attached to this certificate and the documents therein referred to.

DEKRA EXAM GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in the confidential Report No. BVS PP 08.2138 EU.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012 + A11:2013	General requirements
EN 60079-1:2014	Flameproof Enclosure "d"
EN 60079-2:2014	Pressurised Equipment "p"
EN 60079-7:2015	Increased Safety "e"
EN 60079-11:2012	Intrinsic Safety "i"

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the appendix to this certificate.

This supplementary certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:

 **II 2G Ex pxb db eb [ia] IIC T4 Gb**

DEKRA EXAM GmbH
Bochum, dated 2018-01-31

Signed: Jörg Koch

Certifier

Signed: Ralf Leiendecker

Approver

13 **Appendix**
 14 **EU-Type Examination Certificate**

**BVS 08 ATEX E 096
 Supplement 1**

15 **Product description**

15.1 **Subject and type**

Measuring gas cooler type JCT5 – Ex Class

15.2 **Description**

The measuring gas cooler of type JCT5 – Ex class consists of a hermetically sealed cooling agent compressor of types GD40AC, GD40ME, THB4413Y, TL4G, TL4GH, PL35G, and PL30F of the type of protection Pressurised Equipment; it is equipped with an electrical connection of the type of protection Increased Safety and the components listed below which are separately certified. The cooling agent compressor types are of identical power and construction but made by different manufacturers.

The control unit of type 8265/5 (PTB 06 ATEX 1077) is made for the type of protection Flameproof Enclosure and features an installed isolating switch amplifier of type 9170/*0-**-*1 (DMT 02 ATEX E 195 X) which has been functionally tested. The pressure and temperature switches of the measuring gas coolers are operated in intrinsically safe circuits of the type of protection Intrinsic Safety.

The cooling agent compressor is protected by a separate motor circuit breaker located in the Ex-d enclosure. The electrical connection of the measuring gas cooler is provided by a permanent cable.

The fan motor of type of protection Flameproof Enclosure is not subject of this type examination. The fan motor is listed in the documentation as its attachment is supposed to be examined at a later time via a supplement.

Reason for the supplement:

- Change to Directive 2014/34/EU
- Extension of cooling agent compressor range by two types, PL35G and PL30F
- Compliance with the updated versions of the following standards: EN 60079-0:2012+A11:2013, EN 60079-1:2014, EN 60079-2:2014 and EN 60079-11:2012.

With this supplement the certificate is changed to Directive 2014/34/EU. (Annotation: In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.)

15.3 **Parameters**

15.3.1 Electrical parameters

Rated voltage	115/230 VAC, 50-60 Hz
Rated current	6/3 A
Rated power	224/182 W

15.3.2 Thermal parameters

Ambient temperature range	+10 °C to +40 °C
Maximum entry temperature of measuring gas	120 °C

15.3.3 Other parameters

Maximum service pressure cooling agent	20 bar
Cooling agent	R134a

16 **Report Number**

BVS PP 08.2138 EU, as of 2018-01-31

17 **Special Conditions for Use**

None

18 **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 **Drawings and Documents**

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH

44809 Bochum, 2018-02-19
BVS-Pz/Ar E 7705/18

Certifier

Approver