

Translation

(1) **EC-Type Examination Certificate**

**TÜV NORD**



(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 94/9/EC**

(3) **Certificate Number** TÜV 06 ATEX 2958

(4) for the equipment: Ex – Cooling conditioning units type FKS ...

(5) of the manufacturer: BARTEC BENKE GmbH

(6) Address: Borsigstraße 10  
D-21465 Reinbek

Order number: 8000553294

Date of issue: 2006-10-08

(7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, notified body No. 0044 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), 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 the confidential report No. 07 203 553294.

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

EN 1127-1:1997	EN 60 079-0:2004	EN 60 079-1:2004
EN 60 079-2:2004	EN 60 079-7:2003	EN 60 079-18:2004

(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 in accordance to the 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 or protective system must include the following:

**II 2 G Ex px mb e IIB resp. IIC T4 resp. T3 (see annex)**

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body

Schwedt

Hanover office, Am TÜV 1, 30519 Hanover, Fon +49 (0)511 986 1455, Fax +49 (0)511 986 1590

This certificate may only be reproduced without any change, schedule included.  
Excerpts or changes shall be allowed by the TÜV NORD CERT GmbH

(13) **SCHEDULE**

(14) **EC-Type Examination Certificate No. TÜV 06 ATEX 2958**

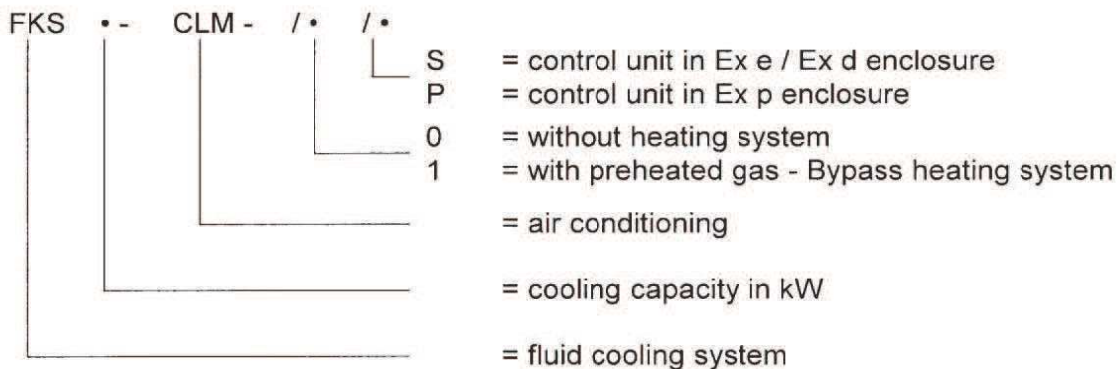
(15) Description of equipment

The Ex – Cooling conditioning units are designed as follows:

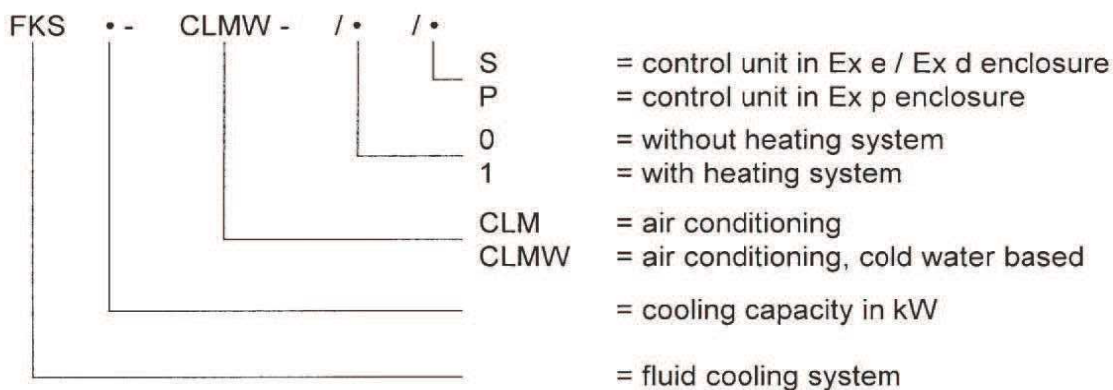
- Ex – Wall air conditioning unit      type FKS• - CLM-/•/•
- Ex - Air conditioning system      type FKS• - CLMW /•/•/•
- Ex – Cooler for liquids              type FKS• - KWS- /•/•

Type code

Ex - Wall air conditioning unit

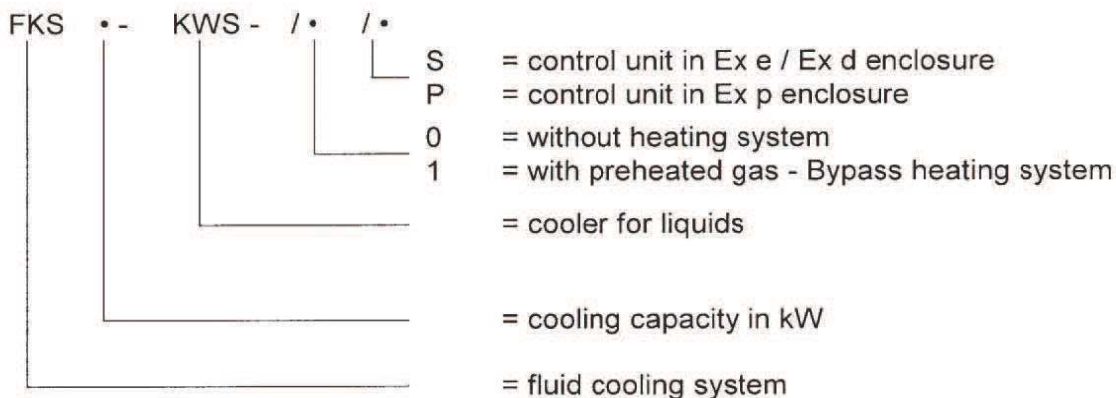


Ex- Air conditioning system



Schedule EC-Type Examination Certificate No. TÜV 07 ATEX 2958





Ex - Cooler for liquids



### Technical data

Permissible range of ambient temperature for the flameproof enclosure of the control unit	- 20 °C to 55 °C
Permissible range of ambient temperature for the cooling system. The cooling system do not operate under - 20°C.	- 35 °C to 55 °C
Rated Voltage	200 to 600V AC ± 10% 50/60 Hz
	Max. refrigeration capacity
Ex - Wall air conditioning unit	8 kW
Ex - Air conditioning system	13 kW
Ex - Cooler for liquids	13 kW

### Marking

-  II 2 G Ex px mb e IIC T3 (Ex - Wall air conditioning unit)
-  II 2 G Ex px mb e IIB resp. IIC T4 resp. T3 (Ex - Air conditioning system)
-  II 2 G Ex px mb e IIC T4 resp. T3 (Ex - Cooler for liquids)
-  II 2 G Ex de [ja] IIC T4 (de-control unit)

(16) Test documents are listed in the test report No. 07 203 553294.

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

## Translation 1. SUPPLEMENT

to Certificate No. **TÜV 06 ATEX 2958**  
 Equipment: Ex – Cooling conditioning units type FKS ...  
 Manufacturer: BARTEC BENKE GmbH  
 Address: Borsigstraße 10  
 21465 Reinbek / Germany  
 Order number: 8000555022  
 Date of issue: 2010-02-17

### Amendments:

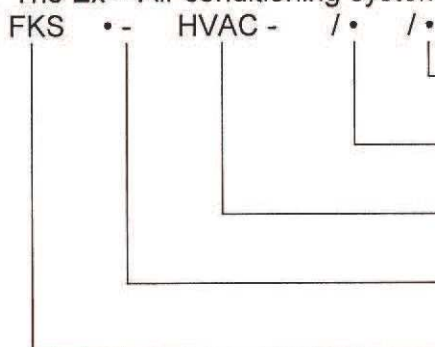
- A) The Ex – Cooling conditioning units can be equipped with a controller in the combination Flameproof enclosure / Increased Safety.  
 B) Change of the type key  
 C) Increasing of the refrigeration capacity to 60 KW for the Type series FKS- HVAC and FKS- KWS  
 D) Additional types of the connection cable at the compressor  
 E) Change of an additional model regarding the permitted ambient temperature.

To A) The controller may in the following technical data:

Permitted Range of the ambient temperature for the controller	- 20 °C to 55 °C
Rated voltage	200 to 600V AC ± 10% 50/60 Hz
Rated current	Max. 80 A

To B) New Type key

The Ex – Air conditioning system



- = Controller in Ex e / Ex de enclosure
- = Controller in Ex p enclosure
- = without heating system
- = with heating system
- = air conditioning
- = cooling capacity in kW
- = fluid cooling system

To C)

	Max. cooling capacity
Ex- Air conditioning system, Type series FKS- HVAC	60 kW
Ex - cooler for liquids, Type series FKS- KWS	60 kW

To D) As connection cable of the compressor can be used additional the types ÖLFLEX CLASSIC 110 and ÖLFLEX TrayFlex II CY to 4x10mm<sup>2</sup>

1. Supplement to Certificate No. TÜV 06 ATEX 2958

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To E)

Option A: Permissible range of ambient temperature for the cooling system with stationary heating installation	- 35 °C to 55 °C
Option B: Permissible range of ambient temperature for the cooling system without stationary heating installation	- 20 °C to 55 °C

The supplement meets the requirements of these standards:

EN 1127-1:2007	EN 60079-0:2006	EN 60079-1:2007
EN 60079-2:2007	EN 60079-7:2007	EN 60079-11:2007
EN 60079-18:2004		

(16) The test documents are listed in the test report No. 10 203 555022.

(17) Special conditions for safe use

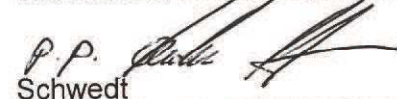
no additional ones

(18) Essential Health and Safety Requirements

no additional ones

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The head of the certification body



Schwedt

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Translation

**2. SUPPLEMENT**

**to Certificate No.** TÜV 06 ATEX 2958  
**Equipment:** Ex – Cooling conditioning units type FKS ...  
**Manufacturer:** BARTEC BENKE GmbH  
**Address:** Borsigstraße 10  
D-21465 Reinbek  
**Order number:** 8000556258  
**Date of issue:** 2010-11-26

Amendment:

Range of the permitted ambient temperature for the Ex– Cooling conditioning units in the application with stationary heating installation	- 40 °C to 55 °C
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The Amendment meets the requirements of these standards:

EN 1127-1:2007                      EN 60079-0:2009                      EN 60079-1:2007  
EN 60079-2:2007                      EN 60079-7:2007                      EN 60079-11:2007  
EN 60079-18:2004

(16) The test documents are listed in the test report No. 10 203 556258.

(17) Special conditions for safe use

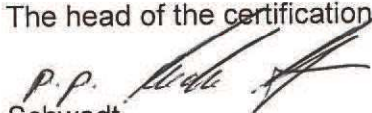
no additional ones

(18) Essential Health and Safety Requirements

no additional ones

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Translation  
**3. SUPPLEMENT**

**to Certificate No.**

Equipment:  
 Manufacturer:  
 Address:


**TÜV 06 ATEX 2958**

Ex – Cooling conditioning units type FKS ...  
 BARTEC BENKE GmbH  
 Borsigstraße 10  
 21465 Reinbeck  
 Germany

Order number: 8000420431  
 Date of issue: 2013-10-02

Amendments:

- 1.) A new certified heater of type EH31/HR...-T3 (BVS 11 ATEX E 088X) is used. The previous stationary heating installation is not necessary.
- 2.) Alternatively to the temperature monitoring device type U-EK230E (PTB 03 ATEX 3045) also the type 3RN10.. (PTB 01 ATEX 3218) can be used.
- 3.) The marking changes as follows:

	II 2 G IIB resp. IIC T3 resp. T4 Gb	Equipment type HVAC
	II 2 G IIC T3 resp. T4 Gb	Equipment type KWS
	II 2 G IIC T3 Gb	Equipment type CLM
	II 2 G Ex px mb e IIC T3 resp. T4 Gb	Compressor for all equipment
	II 2 G Ex d e [ia] IIC T4 Gb	Control unit for type HVAC and KWS
	II 2 G Ex d [ia] IIC T4 Gb	Control unit for type CLM

4.) The device name is changed from cooling water treatment to chiller for liquids.

All other data apply unchanged for this supplement.

The equipment incl. of this supplement meets the requirements of these standards:

EN 1127-1:2011	EN 60079-0:2012	EN 60079-1:2007
EN 60079-2:2007	EN 60079-7:2007	EN 60079-11:2012
EN 60079-18:2009		

(16) The test documents are listed in the test report No. 13 203 120466.

(17) Special conditions for safe use

no additional ones

(18) Essential Health and Safety Requirements

no additional ones

3. Supplement to Certificate No. TÜV 06 ATEX 2958

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The head of the notified body

A handwritten signature in blue ink, appearing to be "Meyer". The signature is stylized with several overlapping strokes.

Meyer

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