(1) # EU - Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – **Directive 2014/34/EU**

(3) EU - Type Examination Certificate Number

EPS 21 ATEX 1 127 X **Revision 0**

(4) Equipment: Chiller FKS *-KWS-*

(5) Manufacturer: Bartec Benke GmbH

(6) Address: Borsigstraße 10
21465 Reinbek
Germany

(7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 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 and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 21TH0222.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-7:2015
EN IEC 60079-7:2015/A1:2018

EN ISO 80079-36:2016

EN ISO 80079-37:2016

IEC TS 60079-46:2017

(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 annex to this certificate.

(11) This EU - Type Examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.

(12) The marking of the equipment shall include the following:

Ex II 2G Ex IIB+H2 T3/T4

ZERTIFIZIERUNGSSTELLE BUREAU VERITAS Bureau Veritas CPS Germany GmbH 1828

Certification department of explosion protection

Ulrich Feike

Tuerkheim, 2023-06-28

(13) # Annex

(14) **EU - Type Examination Certificate EPS 21 ATEX 1 127 X** **Revision 0**

(15) Description of equipment:

The chiller type FKS *-KWS-* is intended for the industrial cooling of flammable and non-flammable liquids in potentially hazardous areas of zone 1 and 2 environments.

The refrigerant of the chiller is driven by a reciprocating hermetic compressor with the electric motor being completely encapsulated by the refrigerant cycle. Because the refrigerant circuit is considered hermetically sealed, it does not require standardized ignition protection. Electrical connection to the compressor is made in type of protection "e".

The chiller can be operated indoors and outdoors, given that suitable weather protection exists.

The control unit for the chiller is separately certified and excluded from the scope of this type certification.

Allowed ambient temperature ranges:

Ta min °C	Ta max °C	FKS 0,5- KWS	FKS 1,4- KWS	FKS 2,4- KWS	FKS 4- KWS	FKS 6- KWS	FKS 10- KWS	
+5	+35	x						Standard
+5	+40		x	x	x	x	x	Standard
+5	+55		x	x	x	x	x	High temperature option
-20	+40		x	x	x	x	x	Low temperature option
-20	+55		x	x	x	x	x	High and low temperature option

Electrical data:

Rated voltage: 110 – 600 V ac

(16) Reference number: 21TH0222

(17) Special conditions for safe use:

The chiller shall only be operated with all safety covers closed.

Simple apparatus as part of the chiller shall be labeled as such and need to be supplied by a suitable intrinsically safe associated apparatus.

Non-metallic parts of the equipment shall be cleaned with a damp cloth only.

Electric motors need to be protected from exceeding the maximum surface temperature by a suitably certified safety device.

Pressure surges in the coolant cycle are to be avoided.

Installation and putting the chiller into service in combination with the already certified control unit shall be performed in accordance with the national regulations for the installation of equipment in potentially explosive atmospheres and EN 60079-14.

The operating instructions and conditions of use given in the respective type certificate of the incorporated equipment shall be followed as well as the operating documentation for the assembly.

EU - Type Examination Certificate EPS 21 ATEX 1 127 X **Revision 0**

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection Tuerkheim, 2023-06-28

Ulrich Feike