

2 Equipment or Protective systems intended for use in Potentially

**Explosive Atmospheres - Directive 2014/34/EU** 

3 Type Examination Certificate No: FM16ATEX0030X

4 Equipment or protective system: Model 4492 CPsingle and CPdouble Condensate (Type Reference and Name) Pumps

5 Name of Applicant: Bühler Technologies GmbH

6 Address of Applicant: Harkortstrasse 29, Ratingen, DE-40880, Germany

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

8 FM Approvals Ltd. 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 confidential report number:

3058168 dated 24th August 2016

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0: 2012 + A11: 2013, EN 60079-15: 2010

- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. 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:



II 3 G Ex nA IIC T4 Ta = 0°C to 50°C Gc



Mick Gower Certification Manager, FM Approvals Ltd.

Issue date: 01st September 2016

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Ltd. 1 Windsor Dials, Windsor, Berkshire, UK. SL4 1RS T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: <a href="mailto:atex@fmapprovals.com">atex@fmapprovals.com</a> www.fmapprovals.com

F ATEX 029 (Apr/16) Page 1 of 3



to Type Examination Certificate No. FM16ATEX0030X

#### 13 Description of Equipment or Protective System:

**General** – The 4492 CPsingle and CPdouble peristaltic pumps are intended to discharge condensate from gas analysis systems in commercial applications. The pumps consist of a pump head and drive motor and operate on the peristaltic principle. The output axle of the gear motor turns a rotor on which two diametrically arranged rollers press a hose against a dimensionally adapted hood and the continuous rotation displaces the contents of the hose in the direction of rotation. The constructive selection of rotor speed and hose diameter also allow minimal or larger amounts to be conveyed, depending on the viscosity of the medium to be pumped.

**Construction** - The pumps are provided with flying leads. As their physical configuration is not compatible with Zone 2 wiring methods, installation within a suitable final enclosure is required.

**Ratings** - The 4492 CPsingle and CPdouble peristaltic pumps operate at 115 Vac or 230 Vac, selectable by the installer's wiring configuration. The pumps are rated for use in an ambient temperature range of 0°C to +50°C.

# 4492abcdefg, CPsingle and CPdouble condensate pumps NI/I/2/ABCD/T4 $\,0^{\circ}\text{C} < \text{Ta} < 50^{\circ}\text{C}$

a = Condensate path; 1 or 2

b = Building version; 1 or 2

c = Voltage; 2

d = Application area; 2

e = Hose material; 1, 2 or 3

f = Liters/hour; 0, 1, 2 or 3

g = Hose connections; 1, 2, 3, 4, 5, 6, 7, 8 or 9

#### 14 Specific Conditions of Use:

- 1. The equipment shall be installed within a tool-secured enclosure providing a minimum degree of ingress protection of IP54 and meeting the requirements of EN 60079-0 or certified as Ex e and in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application. The enclosure shall be rated for the service temperature range of 0°C to 52°C.
- 2. Wiring, including the earth conductor, shall be terminated within the enclosure using terminals meeting EN 60947-7-1, 60947-7-2, or 60999-1, as applicable, or certified as Ex e and rated for the marked supply voltage, load current and service temperature range of 0°C to 52°C.
- 3. The earthing scheme shall be constructed in accordance with the earthing requirements of EN 60079-0.

#### 15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

F ATEX 029 (Apr/16) Page 2 of 3



Member of the FM Global Gro

to Type Examination Certificate No. FM16ATEX0030X

#### 16 Test and Assessment Procedure and Conditions:

This Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

#### 17 Schedule Drawings

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by FM Approvals Ltd.

#### 18 Certificate History

Details of the supplements to this certificate are described below:

Date	Description
01st September 2016	Original Issue.

# FM Approvals

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

F ATEX 029 (Apr/16) Page 3 of 3



2 Equipment or Protective systems intended for use in Potentially

Explosive Atmospheres - Directive 2014/34/EU

3 Type Examination Certificate No:

FM16ATEX0030X

4 Equipment or protective system: (Type Reference and Name)

Model 4492 CPsingle and CPdouble Condensate Pumps

5 Name of Applicant:

Bühler Technologies GmbH

6 Address of Applicant:

Harkortstrasse 29, Ratingen, DE-40880, Germany

- 7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.
- 8 FM Approvals Ltd. 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 confidential report number:

3058168 dated 24th August 2016

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0: 2012 + A11: 2013, EN 60079-15: 2010

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. 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:



II 3 G Ex nA IIC T4 Ta = 0°C to 50°C Gc



Mick Gower
Certification Manager, FM Approvals Ltd.

Issue date: 28th October 2016

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Ltd. 1 Windsor Dials, Windsor, Berkshire, UK. SL4 1RS T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: <a href="mailto:atex@fmapprovals.com">atex@fmapprovals.com</a> www.fmapprovals.com

F ATEX 029 (Apr/16) Page 1 of 3



to Type Examination Certificate No. FM16ATEX0030X

#### 13 Description of Equipment or Protective System:

General – The 4492 CPsingle and CPdouble peristaltic pumps are intended to discharge condensate from gas analysis systems in commercial applications. The pumps consist of a pump head and drive motor and operate on the peristaltic principle. The output axle of the gear motor turns a rotor on which two diametrically arranged rollers press a hose against a dimensionally adapted hood and the continuous rotation displaces the contents of the hose in the direction of rotation. The constructive selection of rotor speed and hose diameter also allow minimal or larger amounts to be conveyed, depending on the viscosity of the medium to be pumped.

**Construction** - The pumps are provided with flying leads. As their physical configuration is not compatible with Zone 2 wiring methods, installation within a suitable final enclosure is required.

**Ratings** - The 4492 CPsingle and CPdouble peristaltic pumps operate at 115 Vac or 230 Vac, selectable by the installer's wiring configuration. The pumps are rated for use in an ambient temperature range of 0°C to +50°C.

# 4492abcdefg, CPsingle and CPdouble condensate pumps NI/I/2/ABCD/T4 $0^{\circ}$ C < Ta < $50^{\circ}$ C

a = Condensate path; 1 or 2

b = Building version; 1 or 2

c = Voltage; 2

d = Application area; 2

e = Hose material; 1, 2 or 3

f = Liters/hour; 0, 1, 2 or 3

g = Hose connections; 1, 2, 3, 4, 5, 6, 7, 8 or 9

# ADDIOVAS , 4, 5, 6, 7, 8 or 9

#### 14 Specific Conditions of Use:

- 1. The equipment shall be installed within a tool-secured enclosure providing a minimum degree of ingress protection of IP54 and meeting the requirements of EN 60079-0 or certified as Ex e and in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application. The enclosure shall be rated for the service temperature range of 0°C to 52°C.
- 2. Wiring, including the earth conductor, shall be terminated within the enclosure using terminals meeting EN 60947-7-1, 60947-7-2, or 60999-1, as applicable, or certified as Ex e and rated for the marked supply voltage, load current and service temperature range of 0°C to 52°C.
- The earthing scheme shall be constructed in accordance with the earthing requirements of EN 60079-0.

#### 15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Ltd. 1 Windsor Dials, Windsor, Berkshire, UK. SL4 1RS T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: <a href="mailto:atex@fmapprovals.com">atex@fmapprovals.com</a> www.fmapprovals.com

F ATEX 029 (Apr/16) Page 2 of 3



to Type Examination Certificate No. FM16ATEX0030X

#### 16 Test and Assessment Procedure and Conditions:

This Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

#### 17 Schedule Drawings

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by FM Approvals Ltd.

#### 18 **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
01st September 2016	Original Issue.
28 <sup>th</sup> October 2016	Supplement 1: Report Reference: RR207007 dated 25 <sup>th</sup> October 2016 Description of the Change: Minor revisions to instructions not impacting certification



#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Ltd. 1 Windsor Dials, Windsor, Berkshire, UK. SL4 1RS T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: <a href="mailto:atex@fmapprovals.com">atex@fmapprovals.com</a> www.fmapprovals.com

F ATEX 029 (Apr/16) Page 3 of 3



2 Equipment or Protective systems intended for use in Potentially

**Explosive Atmospheres - Directive 2014/34/EU** 

3 Type Examination Certificate No: FM16ATEX0030X

4 Equipment or protective system: Model 4492 CPsingle and CPdouble Condensate (Type Reference and Name) Pumps

5 Name of Applicant: Bühler Technologies GmbH

6 Address of Applicant: Harkortstrasse 29, Ratingen, DE-40880, Germany

- 7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.
- 8 FM Approvals Ltd. 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 confidential report number:

3058168 dated 24th August 2016

Oompliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0: 2012 + A11: 2013, EN 60079-15: 2010

- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. 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:



II 3 G Ex nA IIC T4 Ta = 0°C to 50°C Gc



Mick Gower Certification Manager, FM Approvals Ltd.

Issue date: 18th January 2017

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Ltd. 1 Windsor Dials, Windsor, Berkshire, UK. SL4 1RS T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: <a href="mailto:atex@fmapprovals.com">atex@fmapprovals.com</a> www.fmapprovals.com

F ATEX 029 (Apr/16) Page 1 of 3



to Type Examination Certificate No. FM16ATEX0030X

#### 13 Description of Equipment or Protective System:

**General** – The 4492 CPsingle and CPdouble peristaltic pumps are intended to discharge condensate from gas analysis systems in commercial applications. The pumps consist of a pump head and drive motor and operate on the peristaltic principle. The output axle of the gear motor turns a rotor on which two diametrically arranged rollers press a hose against a dimensionally adapted hood and the continuous rotation displaces the contents of the hose in the direction of rotation. The constructive selection of rotor speed and hose diameter also allow minimal or larger amounts to be conveyed, depending on the viscosity of the medium to be pumped.

**Construction** - The pumps are provided with flying leads. As their physical configuration is not compatible with Zone 2 wiring methods, installation within a suitable final enclosure is required.

**Ratings** - The 4492 CPsingle and CPdouble peristaltic pumps operate at 115 Vac or 230 Vac, selectable by the installer's wiring configuration. The pumps are rated for use in an ambient temperature range of 0°C to +50°C.

# 4492abcdefg, CPsingle and CPdouble condensate pumps NI/I/2/ABCD/T4 $0^{\circ}$ C < Ta < $50^{\circ}$ C

a = Condensate path; 1 or 2

b = Building version; 1 or 2

c = Voltage; 2

d = Application area; 2

e = Hose material; 1, 2 or 3

f = Liters/hour; 0, 1, 2 or 3

g = Hose connections; 1, 2, 3, 4, 5, 6, 7, 8 or 9

#### 14 Specific Conditions of Use:

- 1. The equipment shall be installed within a tool-secured enclosure providing a minimum degree of ingress protection of IP54 and meeting the requirements of EN 60079-0 or certified as Ex e and in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application. The enclosure shall be rated for the service temperature range of 0°C to 52°C.
- 2. Wiring, including the earth conductor, shall be terminated within the enclosure using terminals meeting EN 60947-7-1, 60947-7-2, or 60999-1, as applicable, or certified as Ex e and rated for the marked supply voltage, load current and service temperature range of 0°C to 52°C.
- The earthing scheme shall be constructed in accordance with the earthing requirements of EN 60079-0.

#### 15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

F ATEX 029 (Apr/16) Page 2 of 3



to Type Examination Certificate No. FM16ATEX0030X

#### 16 Test and Assessment Procedure and Conditions:

This Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

#### 17 Schedule Drawings

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by FM Approvals Ltd.

#### 18 Certificate History

Details of the supplements to this certificate are described below:

Date	Description
01st September 2016	Original Issue.
28th October 2016	Supplement 1: Report Reference: RR207007 dated 25 <sup>th</sup> October 2016 Description of the Change: Minor revisions to instructions not impacting certification
18 <sup>th</sup> January 2017	Supplement 2: Report Reference: RR208001 dated 15 <sup>th</sup> January 2017 Description of the Change: Unique instruction manual number created for 'Ex' pump variants. Marking label revised.



#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

F ATEX 029 (Apr/16) Page 3 of 3



2 Equipment or Protective systems intended for use in Potentially

**Explosive Atmospheres - Directive 2014/34/EU** 

3 Type Examination Certificate No: FM16ATEX0030X

4 Equipment or protective system: Model 4492 CPsingle and CPdouble Condensate (Type Reference and Name) Pumps

5 Name of Applicant: Bühler Technologies GmbH

6 Address of Applicant: Harkortstrasse 29, Ratingen, DE-40880, Germany

- 7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.
- FM Approvals Europe Ltd. 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 confidential report number:

3058168 dated 24th August 2016

Oompliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0:2012+A11:2013 and EN 60079-15:2010

- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. 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:



II 3 G Ex nA IIC T4 Ta = 0°C to +50°C Gc



Digitally signed by Damien Mc Ardle DN: cn=Damien Mc Ardle, o=FM Approvals, ou=FM Approvals Europe Ltd, email=damien.mcardle@fmappr ovals.com, c=IE Date: 2019.04.12 13:33:19 +01'00'

Damien Mc Ardle Certification Manager, FM Approvals Europe Ltd.

Issue date: 12th April 2019

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Europe Ltd. One Georges Quay Plaza, Dublin. Ireland. D02 E440 T: +353 (0) 1761 4200 E-mail: <a href="mailto:atex@fmapprovals.com">atex@fmapprovals.com</a> <a href="mailto:www.fmapprovals.com">www.fmapprovals.com</a>

F ATEX 029 (Mar/2019) Page 1 of 3



to Type Examination Certificate No. FM16ATEX0030X

#### 13 Description of Equipment or Protective System:

General – The 4492 CPsingle and CPdouble peristaltic pumps are intended to discharge condensate from gas analysis systems in commercial applications. The pumps consist of a pump head and drive motor and operate on the peristaltic principle. The output axle of the gear motor turns a rotor on which two diametrically arranged rollers press a hose against a dimensionally adapted hood and the continuous rotation displaces the contents of the hose in the direction of rotation. The constructive selection of rotor speed and hose diameter also allow minimal or larger amounts to be conveyed, depending on the viscosity of the medium to be pumped.

**Construction** - The pumps are provided with flying leads. As their physical configuration is not compatible with Zone 2 wiring methods, installation within a suitable final enclosure is required.

**Ratings** - The 4492 CPsingle and CPdouble peristaltic pumps operate at 115 Vac or 230 Vac, selectable by the installer's wiring configuration. The pumps are rated for use in an ambient temperature range of 0°C to +50°C.

# 4492abcdefg, CPsingle and CPdouble condensate pumps NI/I/2/ABCD/T4 $0^{\circ}$ C < Ta < +50 $^{\circ}$ C

a = Condensate path; 1 or 2

b = Building version; 1 or 2 c = Voltage; 2

d = Application area; 2

e = Hose material; 1, 2 or 3

f = Liters/hour; 0, 1, 2 or 3

g = Hose connections; 1, 2, 3, 4, 5, 6, 7, 8 or 9

# 4, 5, 6, 7, 8 or 9

#### 14 Specific Conditions of Use:

- 1. The equipment shall be installed within a tool-secured enclosure providing a minimum degree of ingress protection of IP54 and meeting the requirements of EN 60079-0 or certified as Ex e and in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application. The enclosure shall be rated for the service temperature range of 0°C to +52°C.
- 2. Wiring, including the earth conductor, shall be terminated within the enclosure using terminals meeting EN 60947-7-1, 60947-7-2, or 60999-1, as applicable, or certified as Ex e and rated for the marked supply voltage, load current and service temperature range of 0°C to +52°C.
- 3. The earthing scheme shall be constructed in accordance with the earthing requirements of EN 60079-0.

#### 15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Europe Ltd. One Georges Quay Plaza, Dublin. Ireland. D02 E440 T: +353 (0) 1761 4200 E-mail: <a href="mailto:atex@fmapprovals.com">atex@fmapprovals.com</a> <a href="https://www.fmapprovals.com">www.fmapprovals.com</a>

F ATEX 029 (Mar/2019) Page 2 of 3



to Type Examination Certificate No. FM16ATEX0030X

#### 16 Test and Assessment Procedure and Conditions:

This Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Europe Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Europe Ltd's ATEX Certification Scheme.

#### 17 Schedule Drawings

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by FM Approvals Europe Ltd.

#### 18 **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
01st September 2016	Original Issue.
28 <sup>th</sup> October 2016	Supplement 1: Report Reference: RR207007 dated 25 <sup>th</sup> October 2016 Description of the Change: Minor revisions to instructions not impacting certification
18 <sup>th</sup> January 2017	Supplement 2: Report Reference: RR208001 dated 15 <sup>th</sup> January 2017 Description of the Change: Unique instruction manual number created for 'Ex' pump variants. Marking label revised.
12 <sup>th</sup> April 2019	Supplement 3: Description of the Change: Certificate transferred from FM Approvals Ltd., notified body no. 1725, to FM Approvals Europe Ltd., notified body no. 2809.

HW Approvals

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Europe Ltd. One Georges Quay Plaza, Dublin. Ireland. D02 E440 T: +353 (0) 1761 4200 E-mail: <a href="mailto:atex@fmapprovals.com">atex@fmapprovals.com</a> <a href="https://www.fmapprovals.com">www.fmapprovals.com</a>

F ATEX 029 (Mar/2019) Page 3 of 3



2 Equipment or Protective systems intended for use in Potentially

**Explosive Atmospheres - Directive 2014/34/EU** 

- 3 Type Examination Certificate No: FM16ATEX0030X
- 4 Equipment or protective system: Model 4492 CPsingle and CPdouble Condensate (Type Reference and Name) Pumps
- 5 Name of Applicant: Bühler Technologies GmbH
- 6 Address of Applicant: Harkortstrasse 29, Ratingen, DE-40880, Germany
- 7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.
- FM Approvals Europe Ltd. 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 confidential report number:

3058168 dated 24th August 2016

Oompliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN IEC 60079-0:2018 and EN 60079-15:2010

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. 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:



II 3 G Ex nA IIC T4 Gc Ta =  $0^{\circ}$ C to  $+50^{\circ}$ C



Richard Zammitt
Certification Manager, FM Approvals Europe Ltd.

Issue date: 21st February 2022

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Europe Ltd. One Georges Quay Plaza, Dublin. Ireland. D02 E440 T: +353 (0) 1761 4200 E-mail: <a href="mailto:atex@fmapprovals.com">atex@fmapprovals.com</a> <a href="https://www.fmapprovals.com">www.fmapprovals.com</a>



F ATEX 029 (Dec/2020)



to Type Examination Certificate No. FM16ATEX0030X

#### 13 Description of Equipment or Protective System:

**General** – The 4492 CPsingle and CPdouble peristaltic pumps are intended to discharge condensate from gas analysis systems in commercial applications. The pumps consist of a pump head and drive motor and operate on the peristaltic principle. The output axle of the gear motor turns a rotor on which two diametrically arranged rollers press a hose against a dimensionally adapted hood and the continuous rotation displaces the contents of the hose in the direction of rotation. The constructive selection of rotor speed and hose diameter also allow minimal or larger amounts to be conveyed, depending on the viscosity of the medium to be pumped.

**Construction** - The pumps are provided with flying leads. As their physical configuration is not compatible with Zone 2 wiring methods, installation within a suitable final enclosure is required.

**Ratings** - The 4492 CPsingle and CPdouble peristaltic pumps operate at 115 Vac or 230 Vac, selectable by the installer's wiring configuration. The pumps are rated for use in an ambient temperature range of 0°C to +50°C.

#### 4492abcdefg, CPsingle and CPdouble condensate pumps

II 3 G Ex nA IIC T4 Gc Ta = 0°C to +50°C

a = Condensate path; 1 or 2

b = Building version; 1 or 2

c = Voltage; 2

d = Application area; 2

e = Hose material; 1, 2 or 3

f = Liters/hour; 0, 1, 2 or 3

g = Hose connections; 1, 2, 3, 4, 5, 6, 7, 8 or 9

# 5, 6, 7, 8 or 9

#### 14 Specific Conditions of Use:

- 1. The equipment shall be installed within a tool-secured enclosure providing a minimum degree of ingress protection of IP54 and meeting the requirements of EN 60079-0 or certified as Ex e and in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application. The enclosure shall be rated for the service temperature range of 0°C to +52°C.
- 2. Wiring, including the earth conductor, shall be terminated within the enclosure using terminals meeting EN 60947-7-1, 60947-7-2, or 60999-1, as applicable, or certified as Ex e and rated for the marked supply voltage, load current and service temperature range of 0°C to +52°C.
- 3. The earthing scheme shall be constructed in accordance with the earthing requirements of EN 60079-0.

#### 15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Europe Ltd. One Georges Quay Plaza, Dublin. Ireland. D02 E440 T: +353 (0) 1761 4200 E-mail: <a href="mailto:atex@fmapprovals.com">atex@fmapprovals.com</a> www.fmapprovals.com

F ATEX 029 (Dec/2020) Page 2 of 3



Member of the FM Global Grou

to Type Examination Certificate No. FM16ATEX0030X

#### 16 Test and Assessment Procedure and Conditions:

This Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Europe Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Europe Ltd's ATEX Certification Scheme.

#### 17 Schedule Drawings

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by FM Approvals Europe Ltd.

#### 18 Certificate History

Details of the supplements to this certificate are described below:

Date	Description
01st September 2016	Original Issue.
28 <sup>th</sup> October 2016	Supplement 1: Report Reference: RR207007 dated 25 <sup>th</sup> October 2016 Description of the Change: Minor revisions to instructions not impacting certification
18 <sup>th</sup> January 2017	Supplement 2: Report Reference: RR208001 dated 15 <sup>th</sup> January 2017 Description of the Change: Unique instruction manual number created for 'Ex' pump variants. Marking label revised.
12 <sup>th</sup> April 2019	Supplement 3: Description of the Change: Certificate transferred from FM Approvals Ltd., notified body no. 1725, to FM Approvals Europe Ltd., notified body no. 2809.
21 <sup>st</sup> February 2022	Supplement 4: Report Reference: RR231317 dated 18 <sup>th</sup> February 2022. Description of the Change: 1) EN 60079-0:2012+A1:2013 updated to EN IEC 60079-0:2018 2) Documents update.

#### THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Europe Ltd. One Georges Quay Plaza, Dublin. Ireland. D02 E440 T: +353 (0) 1761 4200 E-mail: atex@fmapprovals.com www.fmapprovals.com

F ATEX 029 (Dec/2020) Page 3 of 3