

CERTIFICATE OF CONFORMITY



1. **ELECTRICAL EQUIPMENT PER US REQUIREMENTS**

2. **Certificate No:** **FM18NUS0015**

3. **Equipment:** TC-Standard; TC-Standard+; TC-MIDI; TC MIDI+; TC-Double
(Type Reference and Name) & TC-Double+

4. **Name of Listing Company:** **Sample gas cooler**
Bühler Technologies GmbH

5. **Address of Listing Company:** **Harkortstrasse 29**
Ratingen, D-40880
Germany

6. The examination and test results are recorded in confidential report number:

3062014 dated 4th October 2018

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3810:2018, ANSI/ISA 61010-1-2012

8. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

9. **Equipment Ratings:**

In type of protection general electrical safety, the equipment is certified to the following classification(s).

Suitable electrical equipment for the listing categories for use in ordinary (unclassified) locations with an ambient temperature rating of upto 0 °C to +60 °C.

Certificate issued by:



J.E. Marquedant
Manager, Electrical Systems

4 October 2018

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

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

FM Approvals LLC, 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA

T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

SCHEDULE



to US Certificate Of Conformity No: FM18NUS0015

10. Description of Equipment:

General - The TC- Standard; TC-MIDI & TC-Double sample gas chillers are intended to cool and dry the sample gas before going into the gas analyzers. Sample gases contain vapor which has to be withdrawn before it reaches the gas analyzer. The gas flows through a heat exchanger (impinger) inserted into a cooling block. The latter then is cooled to a pre-set temperature (5°C mostly). Depending on the required cooling capacity the size of the heat exchanger and therefore chiller is chosen and depending on the kind of gas to be cooled different heat exchanger materials are provided (stainless steel, glass or PVDF). A gas cooler (chiller) might be prepared for more than one heat exchanger. The cooling block is cooled by different combinations of Peltier-elements. The temperature is sensed by an RTD.

The TC-Standard / TC-MIDI series of sample gas coolers are designed specifically for high cooling capacities and high ambient temperatures. The TC-Standard+ / TC-MIDI+ series are designed specifically for the requirements in automated measuring systems (AMS) according to EN 15267-3. The series connection of the heat exchangers will cool in two cycles to minimize wash out effects. The TC-Double series are designed specifically for high cooling capacities, high ambient temperatures and to cool in two cycles to minimize wash out effects. The TC-Double+ incorporates two cooling blocks that can be set do different temperatures.

Construction – The equipment is housed in a brushed stainless steel IP20 enclosure.

Ratings - TC-Standard operate at 24VDC, 115 VAC or 230 VAC, selectable by ordering, with an ambient temperature rating of 0°C of up to 50°C. TC-MIDI and TC-Double Models operate at 115 VAC or 230 VAC, selectable by ordering, with an ambient temperature rating of 0°C of up to 60°C.

4496 211b1d1fgh0jkl0n0 TC-Standard - Sample Gas Cooler (fitted with 1 heat exchanger)

b = Gas cooler model: 1 or 2
d = Supply voltage; 1, 2 or 4
f, g = Heat exchanger; 10, 15, 20, 25, 30, or 35
h = Peristaltic Pumps; 0, 1, 3
j, k = Moisture detector / Filter; 00, 01, 10, or 11
l = Status Outputs; 0 or 1
n = Delta T control; 0 or 1

4496 212b1d2fgh0jkl0n0 TC-Standard - Sample Gas Cooler (fitted with 2 heat exchangers)

b = Gas cooler model: 1 or 2
d = Supply voltage; 1, 2 or 4
f, g = Heat exchanger; 10, 15, 20, 25, 30, or 35
h = Peristaltic Pumps; 0, 2, or 4
j, k = Moisture detector / Filter; 00, 01, 02, 10, 11, 20, 21, 22
l = Status Outputs; 0 or 1
n = Delta T control; 0 or 1

4496 212b1d2fgh0jkl000 TC-Standard+ - Sample Gas Cooler (with 2 heat exchangers in series)

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- b = Gas cooler model: 1 or 2
- d = Supply voltage; 1, 2 or 4
- f,g = Heat exchanger; 22, 27, 32 or 37
- h = Peristaltic Pumps; 0, 2, 4
- j,k = Moisture detector / Filter; 00, 01, 10, or 11
- l = Status Outputs; 0 or 1

4496 311b1d1fghijkl0n0 Thermoelectric Cooler, TC-MIDI (fitted with 1 heat exchanger and one gas path inside)

- b = Gas cooler types 1 or 2
- d = Supply Voltage; 1 or 2
- f,g = Heat exchangers; 10, 15, 20, 25, 30 or 35
- h = Peristaltic pumps; 0, 1, or 3
- i = Sample gas pumps; 0, 1, 2, 6, or 7
- j,k = Moisture detector / Filter; 00, 01, 02, 10, or 11
- l = Status output; 0 or 1
- n = Delta T control; 0 or 1

4496 311b1d2fghijkl0n0 Thermoelectric Cooler, TC-MIDI (fitted with 1 heat exchanger and two gas paths inside)

- b = Gas cooler types 1 or 2
- d = Supply Voltage; 1 or 2
- f,g = Heat exchangers; 60, 61, 65, 66, 70, 75, 80 or 85
- h = Peristaltic pumps; 0, 2, or 4
- i = Sample gas pumps; 0, 1, 2, 6, or 7
- j,k = Moisture detector / Filter; 00, 01, 02, 10, 11, 20, 21, or 22
- l = Status output; 0 or 1
- n = Delta T control; 0 or 1

4496 312b1d1fghijkl000 Thermoelectric Cooler, TC-MIDI+ (fitted with 2 heat exchangers in series)

- b = Gas cooler types 1 or 2
- d = Supply Voltage; 1 or 2
- f,g = Heat exchangers; 22, 27, 32, or 37
- h = Peristaltic pumps; 0, 2, or 4
- i = Sample gas pumps; 0, 1, 2, 6 or 7
- j,k = Moisture detector / Filter; 00, 01, 02, 10 or 11
- l = Status output; 0 or 1

4496 312b1d2fghijkl0n0 Thermoelectric Cooler, TC-MIDI (fitted with 2 heat exchangers)

- b = Gas cooler types 1 or 2
- d = Supply Voltage; 1 or 2
- f,g = Heat exchangers; 22, 27, 32, or 37
- h = Peristaltic pumps; 0, 2, or 4
- i = Sample gas pumps; 0, 1, 2, 6, or 7
- j,k = Moisture detector / Filter; 00, 01, 02, 10, 11, 20, 21 or 22
- l = Status output; 0 or 1
- n = Delta T control; 0 or 1

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SCHEDULE

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4496 611a1c1efghijk000 Thermoelectric Cooler, TC-Double

- a = Gas cooler types 1, 2, 3 or 4
- c = Voltage; 1 or 2
- e,f = Heat exchangers; 10,15, 20,25,30, or 35
- g = Peristaltic pumps; 0, 2, or 4
- h = Sample gas pumps; 0, 1, or 2
- i,j = Moisture Detector/Filter; 00, 01, 10, or 11
- k = Status output; 0 or 1

4496 611a1c1efghijk000 Thermoelectric Cooler, TC-Double+

- a = Gas cooler types 1, 2, 3 or 4
- c = Voltage; 1 or 2
- e,f = Heat exchangers; 22, 27, 32, or 37
- g = Peristaltic pumps; 0, 2, or 4
- h = Sample gas pumps; 0, 1, or 2
- i,j = Moisture Detector/Filter; 00, 01, 10, or 11
- k = Status output; 0 or 1

11. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

12. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

13. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
4 th October 2018	Original Issue.

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CERTIFICATE OF CONFORMITY

1. ELECTRICAL EQUIPMENT PER US REQUIREMENTS

2. Certificate No: FM18NUS0015
3. Equipment:
(Type Reference and Name) TC-Standard X2; TC-Standard+ X2; TC-MIDI X2; TC-MIDI+ X2; TC-Double X2 & TC-Double+ X2 Sample Gas cooler
4. Name of Listing Company: Bühler Technologies GmbH
5. Address of Listing Company: Harkortstraße 29, Ratingen D-40880, Germany
6. The examination and test results are recorded in confidential report number:

3062014 dated 4th October 2018

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM 3810:2021, ANSI/UL 61010-1:2019

8. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

9. Equipment Ratings:

TC-Standard operates at 24VDC, 115 VAC or 230 VAC
TC-MIDI and TC-Double Models operate at 115 VAC or 230 VAC

10. Description of Equipment:

General - The TC- Standard; TC-MIDI & TC-Double sample gas chillers are intended to cool and dry the sample gas before going into the gas analyzers. Sample gases contain vapor which has to be withdrawn before it reaches the gas analyzer. The Gas flows through a heat exchanger (impinger) inserted into a cooling block. The latter then is cooled to a pre-set temperature (5°C mostly). Depending on the required cooling capacity the size of the heat exchanger and therefore chiller is chosen and depending on the kind of gas to be cooled different heat exchanger materials are provided (stainless steel, glass or PVDF).

Certificate issued by:



J.E. Marquedant
VP, Manager - Electrical Systems

9 October 2024

Date

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SCHEDULE

to US Certificate of Conformity No: FM18NUS0015

A gas cooler (chiller) might be prepared for more than one heat exchanger. The cooling block is cooled by different combinations of Peltier-elements. The temperature is sensed by an RTD.

The TC-Standard X2 / TC-MIDI X2 series of sample coolers are designed specifically for high cooling capacities and high ambient temperatures.

The TC-Standard+ X2 / TC-MIDI+ X2 series are designed specifically for the requirements in automated measuring systems (AMS) according to EN 15267-3. The series connection of the heat exchangers will cool in two cycles to minimize wash out effects.

The TC-Double X2 series are designed specifically for high cooling capacities, high ambient temperatures and to cool in two cycles to minimize wash out effects.

The TC-Double+ X2 incorporates two cooling blocks that can be set do different temperatures.

Construction – The equipment is housed in a brushed stainless-steel IP20 enclosure.

Ratings - TC-Standard operate at 24VDC, 115 VAC or 230 VAC, selectable by ordering, with an ambient temperature rating of 0°C of up to 50°C. and TC-MIDI and TC-Double Models operate at 115 VAC or 230 VAC, selectable by ordering, with an ambient temperature rating of 0°C of up to 60°C.

See Annex for Model Codes

11. Specific Conditions of Use:

None

12. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

13. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

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SCHEDULE
to US Certificate of Conformity No: FM18NUS0015

Date	Description
9 October 2024	<u>Supplement 1:</u> Report Reference: RR242035 dated 9 October 2024. Description of the Change(s): <ol style="list-style-type: none">1. Addition of product variants due to changes to electronics2. FM3810 updated to latest edition (2021)3. ANSI/ISA 61010-1:2012 updated to ANSI/UL 61010-1:2019

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ANNEX

4496 211b2d1fg0000lOnOpp TC-Standard X2 - Sample Gas Cooler (fitted with 1 heat exchangers for H2/O2 applications)

Description of Equipment:

b = Gas cooler model: 1 or 2
d = Supply voltage; 1, 2 or 4
f & g = Heat exchanger; 10, 15, 20, 25, 30, or 35
h = Condensate drain; 0, 1, 3
j & k = Moisture detector/Filter; 00, 01, 10, or 11
l = Status Outputs; 0 or 1
n = Delta T control; 0 or 1
p = heat exchanger optimized for high-purity hydrogen/oxygen; -H2 or -O2

4496 211b2d1fgh0jklOnO TC-Standard X2 - Sample Gas Cooler (fitted with 1 heat exchangers)

Description of Equipment:

b = Gas cooler model: 1 or 2
d = Supply voltage; 1, 2 or 4
f & g = Heat exchanger; 10, 15, 20, 25, 30, or 35
h = Condensate drain; 0, 1, 3
j & k = Moisture detector/Filter; 00, 01, 10, or 11
l = Status Outputs; 0 or 1
n = Delta T control; 0 or 1

4496 212b2d2fgh0jklOnO TC-Standard X2 - Sample Gas Cooler (fitted with 2 heat exchangers)

Description of Equipment:

b = Gas cooler model: 1 or 2
d = Supply voltage; 1, 2 or 4
f & g = Heat exchanger; 10, 15, 20, 25, 30, or 35
h = Condensate drain; 0, 2, or 4
j & k = Moisture detector/Filter; 00, 01, 02, 10, 11, 20, 21 or 22
l = Status Outputs; 0 or 1

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SCHEDULE

to US Certificate of Conformity No: FM18NUS0015

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n = Delta T control; 0 or 1

4496 212b2d2fgh0jkl0n0 TC-Standard+ X2 - Sample Gas Cooler (with 2 heat exchangers in series)

Description of Equipment:

b = Gas cooler model: 1 or 2
d = Supply voltage; 1, 2 or 4
f & g = Heat exchanger; 22, 27, 32 or 37
h = Condensate drain; 0, 2, 4
j & k = Moisture detector/Filter; 00, 01, 10, or 11
l = Status Outputs; 0 or 1
n = no value assigned.

4496 311 b2defghijklmno TC-MIDI X2(fitted with 1 heat exchangers)

Description of Equipment:

b = Gas cooler types 1 or 2
d = Supply Voltage; 1 or 2
e = Gas path; 1 or 2
f,g = Heat exchangers; 10, 15, 20, 25, 30 or 35
h = Condensate drain; 0, 1, or 3
i = Sample gas pumps; 0, 1, 2, 6, or 7
j,k = Moisture detector/Filter; 00, 01, 10 or 11
l,m = Signal output; 00 or 10
n,o = Delta T control; 00 or 10

4496 311 b2defg0000lmnop TC-MIDI X2 (fitted with 1 heat exchangers for H2/O2 applications)

Description of Equipment:

b = Gas cooler types 1 or 2
d = Supply Voltage; 1 or 2
e = Gas path; 1 or 2
f,g = Heat exchangers; 10, 15, 60, 65
l,m = Signal output; 00 or 10
n,o = Delta T control; 00 or 10
p = heat exchanger optimized for high-purity hydrogen/oxygen; -H2 or -O2

To verify the availability of the Approved product, please refer to www.approvalguide.com

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4496 312 b2d1fghijklm00 TC-MIDI + X2(fitted with 2 heat exchangers)

Description of Equipment:

b = Gas cooler types 1 or 2
d = Supply Voltage; 1 or 2
f,g = Heat exchangers; 60, 65, 61, 66, 70, 75, 80 or 85
h = Condensate drain; 0, 2, or 4
i = Sample gas pumps; 0, 1, 2, 6, or 7
j,k = Moisture detector/Filter; 00, 01, 02, 10, 11, 20, 21 or 22
l,m = Signal Output; 00 or 10
n, o = Delta T control; 00 or 10

4496 611a2c1efghijkl000 TC-Double X2

Description of Equipment:

a = Gas cooler types 1 or 2
c = Voltage; 1 or 2
e,f = Heat exchangers; 10,15, 20,25,30, or 35
g = Peristaltic pumps; 0, 2, or 4
h = Sample gas pumps; 0, 1, or 2
i,j = Moisture Detector/Filter; 00, 01, 10, or 11
k,l = Status output; 00 or 10

4496 611a2c1efghijkl000 TC-Double+ X2

Description of Equipment:

a = Gas cooler types 1 or 2
c = Voltage; 1 or 2
e,f = Heat exchangers; 22, 27, 32, or 37
g = Peristaltic pumps; 0, 2, or 4
h = Sample gas pumps; 0, 1, or 2
i,j = Moisture Detector/Filter; 00, 01, 10, or 11
k,l = Status output; 00 or 10

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CERTIFICATE OF CONFORMITY



1. ELECTRICAL EQUIPMENT PER US REQUIREMENTS

2. Certificate No: FM18NUS0015
3. Equipment:
(Type Reference and Name) TC-Standard; TC-Standard+; TC-MIDI; TC-MIDI+; TC-Double & TC-Double+ Sample Gas cooler
4. Name of Listing Company: Bühler Technologies GmbH
5. Address of Listing Company: Harkortstraße 29, Ratingen D-40880, Germany
6. The examination and test results are recorded in confidential report number:

3062014 dated 4th October 2018

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM 3810:2021, ANSI/UL 61010-1:2019

8. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

9. Equipment Ratings:

TC-Standard operates at 24VDC, 115 VAC or 230 VAC
TC-MIDI and TC-Double Models operate at 115 VAC or 230 VAC

10. Description of Equipment:

General - The TC- Standard; TC-MIDI & TC-Double sample gas chillers are intended to cool and dry the sample gas before going into the gas analyzers. Sample gases contain vapor which has to be withdrawn before it reaches the gas analyzer. The Gas flows through a heat exchanger (impinger) inserted into a cooling block. The latter then is cooled to a pre-set temperature (5°C mostly).

Depending on the required cooling capacity the size of the heat exchanger and therefore chiller is chosen and depending on the kind of gas to be cooled different heat exchanger materials are provided (stainless steel, glass or PVDF).

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

24 January 2025

Date

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A gas cooler (chiller) might be prepared for more than one heat exchanger. The cooling block is cooled by different combinations of Peltier-elements. The temperature is sensed by an RTD.

The TC-Standard / TC-MIDI / TC Double series of sample coolers are designed specifically for high cooling capacities and high ambient temperatures.

The TC-Standard+ / TC-MIDI+ / TC Double + series are designed specifically for the requirements in automated measuring systems (AMS) according to EN 15267-3. The series connection of the heat exchangers will cool in two cycles to minimize wash out effects.

The TC-Double+ incorporates two cooling blocks that can be set do different temperatures.

Construction – The equipment is housed in a brushed stainless-steel IP20 enclosure.

Ratings - TC-Standard operate at 24VDC, 115 VAC or 230 VAC, selectable by ordering, with an ambient temperature rating of 0°C of up to 50°C. and TC-MIDI and TC-Double Models operate at 115 VAC or 230 VAC, selectable by ordering, with an ambient temperature rating of 0°C of up to 60°C.

See Annex for Model Codes

11. Specific Conditions of Use:

None

12. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

13. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

14. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
4th October 2018	Original Issue.
9 October 2024	<u>Supplement 1:</u> Report Reference: RR242035 dated 9 October 2024 Description of the Change(s): <ol style="list-style-type: none">1. Addition of product variants due to changes to electronics2. FM3810 updated to latest edition (2021)3. ANSI/ISA 61010-1:2012 updated to ANSI/UL 61010-1:2019

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Date	Description
5 December 2024	<u>Supplement 2:</u> Report Reference: RR243713 dated 5 December 2024. Description of the Change(s): Correction of Type reference and Model names
24 January 2025	<u>Supplement 3:</u> Report Reference: RR244252 dated 24 January 2025. Description of the Change(s): Correction of model numbers

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ANNEX

4496 211b1d1fg0000l0n0pp TC-Standard - Sample Gas Cooler (fitted with 1 heat exchangers for H2/O2 applications)

Description of Equipment:

b = Gas cooler model: 1 or 2
d = Supply voltage; 1, 2 or 4
f & g = Heat exchanger; 10, 15, 20, 25, 30, or 35
h = Condensate drain; 0, 1, 3
j & k = Moisture detector/Filter; 00, 01, 10, or 11
l = Status Outputs; 0 or 1
n = Delta T control; 0 or 1
p = heat exchanger optimized for high-purity hydrogen/oxygen; -H2 or -O2

4496 211b1d1fgh0jkl0n0 TC-Standard - Sample Gas Cooler (fitted with 1 heat exchangers)

Description of Equipment:

b = Gas cooler model: 1 or 2
d = Supply voltage; 1, 2 or 4
f & g = Heat exchanger; 10, 15, 20, 25, 30, or 35
h = Condensate drain; 0, 1, 3
j & k = Moisture detector/Filter; 00, 01, 10, or 11
l = Status Outputs; 0 or 1
n = Delta T control; 0 or 1

4496 212b1d2fgh0jkl0n0 TC-Standard - Sample Gas Cooler (fitted with 2 heat exchangers)

Description of Equipment:

b = Gas cooler model: 1 or 2
d = Supply voltage; 1, 2 or 4
f & g = Heat exchanger; 10, 15, 20, 25, 30, or 35
h = Condensate drain; 0, 2, or 4
j & k = Moisture detector/Filter; 00, 01, 02, 10, 11, 20, 21 or 22
l = Status Outputs; 0 or 1

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to US Certificate of Conformity No: FM18NUS0015

n = Delta T control; 0 or 1

4496 212b1d2fgh0jkl0n0 TC-Standard+ - Sample Gas Cooler (with 2 heat exchangers in series)

Description of Equipment:

b = Gas cooler model: 1 or 2
d = Supply voltage; 1, 2 or 4
f & g = Heat exchanger; 22, 27, 32 or 37
h = Condensate drain; 0, 2, 4
j & k = Moisture detector/Filter; 00, 01, 10, or 11
l = Status Outputs; 0 or 1
n = no value assigned.

4496 311 b1defghijklmno TC-MIDI (fitted with 1 heat exchangers)

Description of Equipment:

b = Gas cooler types 1 or 2
d = Supply Voltage; 1 or 2
e = Gas path; 1 or 2
f,g = Heat exchangers; 10, 15, 20, 25, 30 or 35
h = Condensate drain; 0, 1, or 3
i = Sample gas pumps; 0, 1, 2, 6, or 7
j,k = Moisture detector/Filter; 00, 01, 10 or 11
l,m = Signal output; 00 or 10
n,o = Delta T control; 00 or 10

4496 311 b1defg0000lmnop TC-MIDI (fitted with 1 heat exchangers for H₂/O₂ applications)

Description of Equipment:

b = Gas cooler types 1 or 2
d = Supply Voltage; 1 or 2
e = Gas path; 1 or 2
f,g = Heat exchangers; 10, 15, 60, 65
l,m = Signal output; 00 or 10
n,o = Delta T control; 00 or 10
p = heat exchanger optimized for high-purity hydrogen/oxygen; -H₂ or -O₂

To verify the availability of the Approved product, please refer to www.approvalguide.com

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

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SCHEDULE

to US Certificate of Conformity No: FM18NUS0015

FM Approvals

4496 312b1d1fghijkl000 Thermoelectric Cooler, TC-MIDI+ (fitted with 2 heat exchangers in series)

Description of Equipment:

b = Gas cooler types 1 or 2
d = Supply Voltage; 1 or 2
f,g = Heat exchangers; 22, 27, 32 or 37
h = Condensate drain; 0, 2, or 4
i = Sample gas pumps; 0, 1, 2, 6, or 7
j,k = Moisture detector/Filter; 00, 01, 02, 10 or 11
l = Signal Output; 0 or 1

4496 611a1c1efghijkl000 TC-Double

Description of Equipment:

a = Gas cooler types 1 or 2
c = Voltage; 1 or 2
e,f = Heat exchangers; 10, 15, 20, 25, 30, or 35
g = Peristaltic pumps; 0, 2, or 4
h = Sample gas pumps; 0, 1, or 2
i,j = Moisture Detector/Filter; 00, 01, 10, or 11
k,l = Status output; 00 or 10

4496 611a1c1efghijkl000 TC-Double+

Description of Equipment:

a = Gas cooler types 1 or 2
c = Voltage; 1 or 2
e,f = Heat exchangers; 22, 27, 32, or 37
g = Peristaltic pumps; 0, 2, or 4
h = Sample gas pumps; 0, 1, or 2
i,j = Moisture Detector/Filter; 00, 01, 10, or 11
k,l = Status output; 00 or 10

To verify the availability of the Approved product, please refer to www.approvalguide.com

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