

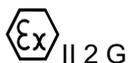


EU-Type Examination Certificate CML 18ATEX1028X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment Electric PYGas Sample Conditioner
EPG3000/EPG5000/EPG6000/EPG7000
- 3 Manufacturer TAECHIN SMET Corporation
- 4 Address 60 Donyu-ro,
Munsan-eup,
Paju-si,
Korea
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, 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 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.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of certification (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015
EN 60079-18:2015

- 10 The equipment shall be marked with the following:



Ex db eb mb IIB+H₂ T3 Gb

Ta=-20°C to +55°C

R C Marshall
Certification Officer



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11 Description

The Electric PYGAS Sample Conditioner models EPG3000, EPG5000, EPG6000 and EPG7000 are a pre-treatment system, for sampling light hydrocarbons, in which the equipment cleans hot, dirty and/or wet gas samples at the process tap to deliver a reproducible sample to a variety of analysers located downstream of the equipment.

Materials that are removed by the PY Gas Sample Conditioners are typically carbon polymers and any other solids contained in the process connection. The Sample Conditioners consists of a tap, filter stage, temperature indicator, needle valves, as well as electric temperature control and flow indication equipment.

The EPG models utilise separately certified electrical devices for temperature monitoring, control and valve actuation.

12 Certificate history and evaluation Reports

Issue	Date	Associated report	Notes
0	13/02/2018	R11491A/00	Report for the prime certificate issue

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following are conditions of manufacture:

- 13.1 A copy of the separately certified equipment's ATEX certificate shall be provided to the end-user.
- 13.2 The Electric PYGAS series covered by this certificate incorporate previously certified devices. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform CML of any modification of the devices that may impinge upon the explosion safety.
- 13.3 A hydrostatic pressure to ASME B16.5 shall be performed, refer to drawing EPG-LD-010 for test requirements.



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14 Special Conditions for Safe Use (Conditions of Certification)

The following conditions relate to safe installation and/or use of the equipment:

- 14.1 If the compressed air supply is continually monitored and stops the process upon failure of the air supply to the PYGAS Sampler Conditioner, the equipment may be used with process temperatures $\leq 200^{\circ}\text{C}$ in T3 areas.
- Otherwise, the process temperature shall be limited to $\leq 195^{\circ}\text{C}$.
- 14.2 The PYGAS Sample Conditioners shall be supplied with regulated dry instrument air with a supply pressure of 5.52 to 6.9 bar (80 to 100 psig), as well as a supply capable of delivering ≥ 8 SCFM. The air temperature shall not exceed $+55^{\circ}\text{C}$.
- 14.3 Refrigerants may be used as a sample coolant; some refrigerants may constitute a source of release of flammable materials; therefore, it is the responsibility of the end user that any refrigerants utilised are suitable for II 2 G T3 areas in an ambient temperature of -20°C to $+60^{\circ}\text{C}$.

The end user shall also take into account that the utilised refrigerant does not act as an oxidizer nor become oxidized in the presence of known process substances that are adjacent to the PYGAS Sampler. Chemical compatibility of the refrigerant and the materials utilised in the PYGAS sampler shall also be verified.

Certificate Annex



Certificate Number CML 18ATEX1028X
Equipment Electric PY Gas Sample Conditioner
EPG3000, EPG5000, EPG6000 & EPG7000
Manufacturer TAECHIN SMET Corporation

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev.	Approved date	Title
EPG-LD-001	1 of 14	1	13 Feb 2018	Sample conditioner Part ID Diagram for Vortex Tube
EPG-LD-002	2 of 14	1	13 Feb 2018	Sample conditioner Part ID Diagram for Vortex Tube
EPG-LD-003	3 of 14	1	13 Feb 2018	Sampled Conditioner Part ID Diagram for Chilled Coolant
EPG-LD-004	4 of 14	1	13 Feb 2018	Sampled Conditioner Part ID Diagram for Chilled Coolant
EPG-LD-005	5 of 14	1	13 Feb 2018	Ex d JB Layout and Cable Connection Diagram
EPG-LD-006	6 of 14	1	13 Feb 2018	Electric Py-Gas Body Section Diagram
EPG-LD-007	7 of 14	1	13 Feb 2018	Electric Py-Gas Diagram for EPG 3000
EPG-LD-008	8 of 14	1	13 Feb 2018	Electric Py-Gas Diagram for EPG 5000
EPG-LD-009	9 of 14	1	13 Feb 2018	Electric Py-Gas Diagram for EPG 6000
EPG-LD-0010	10 of 14	1	13 Feb 2018	Electric Py-Gas Diagram for EPG 7000
EPG-LD-0011	11 of 14	1	13 Feb 2018	Electric Py-Gas Certification Label Diagram
EPG-LD-0012	12 of 14	1	13 Feb 2018	Electric Py-Gas Certification Label Diagram
EPG-LD-0013	13 of 14	1	13 Feb 2018	Electric Py-Gas Certification Label Diagram
EPG-LD-0014	14 of 14	1	13 Feb 2018	Electric Py-Gas Certification Label Diagram
EPG-ED-001	1 of 2	1	13 Feb 2018	Power and Signal Diagram
EPG-ED-002	2 of 2	1	13 Feb 2018	Grounding Diagram