



CML 15ATEX1033
Issue 2

11 Description

The *D-D58.DC Range of Gas Detectors are flameproof and rated at 24V dc, 360 mA. They incorporate two sensor types:

- Catalytic combustion Method
- Semi-Conductor Method

The *-D58.*C Flameproof Gas detectors consist of an aluminium body and lid, with a threaded display window, actuator case and lid, two gas sensors, holders and flame arrestors at the front of the gas detector. Cable entry into the enclosure is via two cable glands at the bottom of the enclosure body.

Special fasteners are Stainless steel hexagon socket head (ISO 4762, 6H/6g), A2-70 cap screws.

The Gas Detectors have both an internal and external earth point.

The following Gas Detector flamepaths shall be maintained:

Location	Flamepath type	Length (mm)	Max. Gap (mm)	No. of Threads
Body and lid	Threaded M140 x 2mm (6H/6g)	16.5 (+0.7/-0.5)	N/A	8
Lid and Window Plate	Threaded M62 x 1.5mm (6H/6g)	9.5 (+0.7/-0)	N/A	6
Sensor Holder and Socket (Gas Sensor)	Spigot joint – cylindrical part	12.8 \pm 0.3	0.1	N/A
Sensor Holder and Socket (Flow Sensor)	Spigot joint – cylindrical part	12.8 \pm 0.3	0.1	N/A
Sensor Holder and Gas Sensor	Spigot joint – cylindrical part	10.7 (+0.3/-0.2)	0.1	N/A
Sensor Holder and Flow Sensor	Spigot joint – cylindrical part	12.2 (+0.2/-0)	0.1	N/A
Body and Sensor Holder	Spigot joint – cylindrical part	14 (+0.6/-0.2)	0.15	N/A
Body and Actuator Case	Spigot joint – cylindrical part	14.5 (+0.4/-0.2)	0.15	N/A



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Variation 1

This variation introduces the following modifications:

- i. To permit the change in material of the guard and cable gland.
- ii. To update the certificate reference to the 2014//34/EU Directive

Variation 2

This variation introduces the following modifications:

- i. To permit modifications to the cable diameter range take of the cable entry devices, additional clamp washer sizes have been introduced accordingly.
- ii. Following appropriate assessment to demonstrate compliance with the requirements of the latest standards, the document previously listed, EN 60079-1:2007, was replaced by those currently listed, the markings were updated accordingly.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	19 Mar 2015	R399A/00	Issue of prime certificate
1	12 May 2017	R1615A/00	To introduce variation 1
2	12 May 2017	R1737A/00	To introduce variation 2

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

13 Conditions of manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- 13.1 Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.

14 Special Conditions for Safe Use (Conditions of Certification)

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

None

Certificate Annex



Certificate Number CML 15ATEX1033
Equipment **-D58.*C Gas Detectors
Manufacturer RIKEN KEIKI Co., Ltd.

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

Issue 0 and 1

Drawing No	Sheets	Rev	Approved date	Title
M2-4287-01-10K	1 of 1	0	19/03/2015	Gas Detector
M3-4287-02-03K	1 of 1	0	19/03/2015	Details of Internal Part 1 A-A~E-E Section
M3-4287-01-15K	1 of 1	0	19/03/2015	Details of Internal Part 2 F-F~I-I Section
M3-4287-01-11K	1 of 1	0	19/03/2015	Details of Internal Part 3 K-K~L-L Section
M3-4287-01-16K	1 of 1	0	19/03/2015	Socket
M4-4062-01-02K	1 of 1	0	19/03/2015	Gas Sensor
M4-4380-27-01K	1 of 1	0	19/03/2015	Flow Sensor
M4-4287-02-04K	1 of 1	0	19/03/2015	Name Plate – SD-D58.DC
E3-6991-5371-10-01E	1 of 1	0	19/03/2015	SD-D58.DC Internal Wiring
E3-6991-5371-10-02E	1 of 1	0	19/03/2015	SD-D58.DC Residual Energy Indication
E4-6991-5051-10-01E	1 of 1	0	19/03/2015	Gas Sensor A – Circuit Diagram
E4-6991--5028-50-01E	1 of 1	0	19/03/2015	Flow Sensor – Circuit Diagram
M4-4287-01-04K	1 of 1	0	19/03/2015	Plate
M4-4262-01-12K	1 of 1	0	19/03/2015	Cable Entry
M3-4287-04-03K	1 of 1	0	19/03/2015	Details of Internal Part 1 A-A~E-E Section
M4-4287-04-04K	1 of 1	0	19/03/2015	Name Plate – SD-D58.DC.GH
M4-4085-01-02K	1 of 1	0	19/03/2015	Gas Sensor
E4-6991--5212-00-01E	1 of 1	0	19/03/2015	Semi-Conductor Sensor – Circuit Diagram
E3-6991-5356-90-02K	1 of 1	0	19/03/2015	GD-D58.DC.GH Internal Wiring
E3-6991-5356-90-03K	1 of 1	0	19/03/2015	SD-D58.DC.GH Residual Energy Indication
M3-4181-01-03K	1 of 1	0	19/03/2015	Details of Internal Part 1 A-A~E-E Section
M4-4181-01-04K	1 of 1	0	19/03/2015	Name Plate PR-D58.DC
E3-6991-5358-30-01K	1 of 1	0	19/03/2015	PR-D58.DC Internal Wiring
M4-4264-02-01K	1 of 1	0	19/03/2015	Name Plate – GD-D58.DC
M4-4264-04-01K	1 of 1	0	19/03/2015	Name Plate – GD-D58.DC.GH
M2-4287-01-11K	1	2	28 Nov 2016	Details of Internal Part 3 K-K~L-L Section

Certificate Annex



Certificate Number CML 15ATEX1033
Equipment **-D58.*C Gas Detectors
Manufacturer RIKEN KEIKI Co., Ltd.

Issue 1

Drawing No	Sheets	Rev	Approved date	Title
M2-4287-01-11K	1	2	28 Nov 2016	Details of Internal Part 3 K-K~L-L Section

Issue 2

Drawing No	Sheets	Rev	Approved date	Title
M2-4287-01-11K	1 of 1	3	03/04/2017	Details of internal part 3 K-K~L-L Section
M4-4181-01-04K	1 of 1	3	03/04/2017	Name plate RP-D58.DC
M4-4287-02-04K	1 of 1	3	03/04/2017	Name Plate – SD-D58.DC
M4-4264-02-01K	1 of 1	1	03/04/2017	Name Plate – GD-D58.DC
M4-4287-04-04K	1 of 1	3	03/04/2017	Name Plate – SD-D58.DC.GH
M4-4264-04-01K	1 of 1	1	03/04/2017	Name Plate – GD-D58.DC.GH