EU Type Examination Certificate CML 20ATEX3217X Issue 2

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment **Type 501/RCG (Rapid Connection Gland)**

3 Manufacturer **Hawke International (A division of Hubbell Limited) (A Member of the Hubbell Group of Companies)**

4 Address **Oxford Street West, Ashton Under Lyne, Lancashire, OL7 0NA UK**

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, 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.

The examination and test results are recorded in the confidential reports listed in Section 12.

7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (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 IEC 60079-0:2018 EN IEC 60079-7:2015+A1:2018 EN 60079-31:2014

10 The equipment shall be marked with the following:

II 2 G D

Ex eb II* T** Gb

Ex tb III* T** Db

T_{amb} = -60°C to +60°C**

The equipment can be marked for all Gas and Dust groups, IIA, IIB or IIC and IIIA, IIIB or IIIC.

(*/**) See schedule for related ambient and temperature class.

11 Description

The Type 501/RCG (Rapid Connection Gland) is designed to allow rapid electrical coupling of cables. The equipment's metallic body and clamping parts are manufactured from brass, stainless steel or aluminium and contains a polymeric insert. The equipment may include the following components to form 501/RCG Entry, Body and or the Coupler:

- Entry component: Two sizes M20 and M25
- Middle nut
- Spigot
- Reversible armour clamping ring
- Back nut seal
- Back nut clamp
- Back nut
- Internal terminal socket/crimp inserts (male and female pins)
- O-ring
- Deluge Boot
- Extension insert and extension tube

The product consists of modular components which can be used to either connect to equipment or to create an inline cable connection. The modular variants are:

The 501/RCG Entry assembly may be installed onto enclosures or fittings and consist of a metallic entry component fitted with a polymeric insert. This insert is populated with male pin contacts which make crimped connection to cable conductors.

The 501/RCG Body assembly is used to terminate cable. The assembly consists of metallic centre nut, middle nut, and back nut. Inside the middle nut may be housed an armour clamping ring and spigot. A polymeric insert may be mounted to the spigot. The insert is populated with female socket contacts which make a screwed connection to cable conductors. Inside the back nut is an elastomeric sealing ring and polymeric cage which form an ingress protection seal with the cable outer sheath when installed.

The 501/RCG Coupler is used as an inline connection to cables terminated with 501/RCG Bodies. The coupler consists of a metallic outer tube and a polymeric insert containing male through pin connections. The 501/RCG Coupler may alternatively be fitted with a metallic adaptor to allow cable termination with suitable cable glands fitted to one side of the product.

The 501/RCG products can be provided with Hawke GMC accessories, and if fitted no further clamping of cables is required.

The equipment has the provision for braided, armour and non-armour cables with 4 to 6 pins configuration with solid or stranded conductors' size 0.75mm^2 up to 6mm^2.

The conductors may be used with crimp ferrules as an option. The equipment is rated up to 300V AC or 212V DC and IK10 impact rated as per IEC 62262.

Temperature rating table vs Amperage:

Product	Product Size	Conductor Size mm²	Amperage for T5/100°C @50°C	Amperage for T6/85°C @+60°C
501/RCG Entry and Body	4 Pin	0.75	5	5
		1.5	5	5
		2.5	16	10
		4	18	12
		6	30	20
	6 Pin	0.75	5	5
		1.5	5	5
		2.5	16	10
		4	18	12
		6	25	20
501/RCG Coupler	4Pin	0.75	5	5
		1.5	10	5
		2.5	16	10
		4	18	12
		6	30	20
	6Pin	0.75	5	5
		1.5	10	5
		2.5	16	10
		4	18	12
		6	30	20

Variation 1

This variation introduced the following changes:

i. To introduce the 0.75mm² conductor size to the equipment for both 4 and 6 pins variants.
ii. To update the description to include the rated current for the new Connection size and other model variants.
iii. To include an additional specific condition of safe use.
iv. To amend the equipment name.
v. To remove an irrelevant Condition of Manufacture.

Variation 2

This variation introduced the following changes:

i To modify the wording of the specific conditions of use, and the removal of a condition of manufacture.
ii To update the rating table options.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	18 Dec 2020	R13490A/00	The issue of prime certificate.
1	16 Feb 2021	R13863A/00	The introduction of variation 1.
2	31 Oct 2023	R17014A/00	The introduction of variation 2.

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

13 Conditions of Manufacture

None.

14 Specific Conditions of Use (Special Conditions)

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

i. Do not disconnect product when energised and in a hazardous area.

ii. When disconnected in a hazardous area, the product must be immediately capped to maintain IP ratings for the Ex protection concepts.

iii. When disconnected in a hazardous area, so long as the provided blanking caps are fitted, the product may then be energised.

iv. The socket grub screws shall be tightened and secured by thread locking compound provided.

v. When a coupler is fitted with an adapter, a suitable cable gland shall be utilised.

vi. Product ambients:

- For T6/T80°C applications, the upper ambient temperature shall not exceed +60°C.
- For T5/T95°C applications, the upper ambient temperature shall not exceed +50°C.

Certificate Annex

Certificate Number	**CML 20ATEX3217X**
Equipment	**Type 501/RCG (Rapid Connection Gland)**
Manufacturer	**Hawke International**

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

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
620155	1 to 6	A	18 Dec 2020	501/RCG certification drawing

Issue 1

Drawing No	Sheets	Rev	Approved date	Title
620155	1 to 6	B	16 Feb 2021	501/RCG certification drawing

Issue 2

Drawing No.	Sheets	Rev	Approved date	Title
620155	1 to 6	D	24 Oct 2023	501/RCG Certification Drawing