



[1] **TYPE EXAMINATION CERTIFICATE**

[2] Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU.

[3] Type Examination Certificate Number: **FIDI 21 ATEX 0067X**

Issue: **1**

[4] Product: **Rotary gear limit switch**

Type: **FGR2...EX series**

[5] Manufacturer: **Giovenzana International B.V.**

[6] Address: **WTC Strawinskylaan 1105, 1077 XX – Amsterdam, Netherlands**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

[8] FIDITAS Ltd., Certification Body, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II of the Directive.

The examination and test results are recorded in confidential Report No: **FIDI 21 CR 049**

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-1:2014

EN IEC 60079-7:2015 / A1:2018

except in respect of those requirements listed at item 18 of the Schedule.

[10] If the sign 'X' is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.

[11] This Type Examination Certificate relates only to the design, examination and test of the specified product in accordance with Annex III. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:



II 3G Ex dc ec IIB T5 Gc

Our ref.: 21.CRT.331

Date: 06.10.2022.



FIDITAS Ltd.
Certification department

Approved:

Marino Kelava, M.E.Eng.



[13]

SCHEDULE

[14] TYPE EXAMINATION CERTIFICATE No.:

FIDI 21 ATEX 0067X

[15] **Description of product**

The rotary gear limit switch FGR2-EX is equipment used to control the number of rotation or direction angle of industrial and building machines. The equipment is designed with 3 parts: the bottom box (cast aluminium alloy), middle body (cast aluminium alloy) and plastic cover. Inside of enclosure 4 or 6 microswitches (type MFI-EX, II 3G Ex dc ec IIB Gc, FIDI 21 ATEX 0066U) are used.

For cable entry enclosure has two threaded holes intended for installation of certified cable glands. For installation cable with resistance > 90°C is required.

Technical data:

Voltage [Ui]: 250 V a.c.

Current [Ie]: 8 A – 250 Va.c. resistive load

1 A – 250 Va.c. inductive load ($\cos\varphi=0,6$)

Ambient temperature: -20°C to +70°C

Mechanical protection: IP 65

Warning markings:

“WARNING - DO NOT OPEN WHEN EXPLOSIVE ATMOSPHERE IS PRESENT.

POTENTIAL ELECTROSTATIC CHARGING HAZARD, SEE INSTRUCTION - T cable 90°C”

[16] Confidential Report No.

FIDI 21 CR 049

[16.1] **Routine testing**

None

[17] **Specific Conditions of Use**

- Rotary gear limit switch is tested with lower impact energy, and it is intended to be used in areas with lower risk of mechanical danger.
- Rotary gear limit switch has a plastic enclosure that constitutes a potential electrostatic hazard. The enclosure must be cleaned only with a damp cloth.

[18] **Essential Health and Safety Requirements**

Covered by the conformity with harmonized standards listed under item 9.



[19] Drawings and Documents

Title:	Drawing No.:	Rev. level:	Date:
Technical File Serie FGR2-EX Rotary Limit Switch in Ex "dc" "ec" and "tb" EXECUTION	I.4.20.13	01	02.2022.
Standard compliance gap analysis	TN_I42013_Annex 7_Gap_0	/	02.2022.
Safety, Use and Maintenance Instructions	I.4.20.17	02	01.2022.
General label for metallic enclosure for FGR ATEX	132030EX	01	18.02.2022.
FGR2 cams group hub	11703018	05	12.10.2021.
Enclosure body drawing	20502008	03	27.06.2016.
Rubber seal	11901029	-	03.02.2015.
Enclosure worked box drawing	20502007	04	27.06.2016.
Enclosure cover drawing	11708091	-	15.05.2015.
Drawing of isolation plate	11901022	-	07.07.2016.
Warning label	13202800	-	27.04.2017.
Spacer drawing	11702032	02	26.06.2016.
Assembly drawing	FGR2006EX	-	01.10.2015.
Assembly drawing	FGR2007EX	-	18.05.2015.
Assembly drawing	FGR2008EX	04	02.10.2015.
Assembly drawing	FGR2009EX	-	02.10.2015.
Assembly drawing	FGR2010EX	-	05.10.2015.
Assembly drawing	FGR2006BEX	-	01.10.2015.
Assembly drawing	FGR2007BEX	-	01.10.2015.
Assembly drawing	FGR2008BEX	04	02.10.2015.
Assembly drawing	FGR2009BEX	-	02.10.2015.
Assembly drawing	FGR2010BEX	-	05.10.2015.
Assembly drawing	FGR20066EX	-	06.05.2016.
Assembly drawing	FGR20076EX	-	06.05.2016.
Assembly drawing	FGR20086EX	-	06.05.2016.
Assembly drawing	FGR20096EX	-	06.05.2016.
Assembly drawing	FGR20106EX	-	06.05.2016.
Assembly drawing	FGR2006B6EX	-	06.05.2016.
Assembly drawing	FGR2007B6EX	-	06.05.2016.
Assembly drawing	FGR2008B6EX	-	06.05.2016.
Assembly drawing	FGR2009B6EX	-	06.05.2016.
Assembly drawing	FGR2010B6EX	-	06.05.2016.