TYPE EXAMINATION CERTIFICATE



[2] Equipment or Protective System intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU

- [3] Type Examination Certificate Number: **DEMKO 20 ATEX 2414X Rev. 0**
- [4] Product: Limit Switches, FCT2 Series

[1]

- [5] Manufacturer: GIOVENZANA International B.V.
- [6] Address: WTC Strawinskylaan 1105, 1077 XX Amsterdam, The Netherlands
- [7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S 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 to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

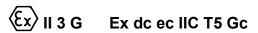
The examination and test results are recorded in confidential report no. DK/ULD/ExTR20.0003/00.

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

EN IEC 60079-0:2018 EN 60079-7: 2015 +A1:2018 EN 60079-1: 2014

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 the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.
- [12] The marking of the product shall include the following:



Certification Manager

Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2021-01-28

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com



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LOL [15] Description of Product:

The FCT-EX Limit Switch Series are thermoplastic pre-wired limit switches with 2 m indissociable cable. The cable could be with lateral or vertical entry (L or V). The limit switch is designed to be equipped with two different types of inner microswitch, as follows: - CONTACT ELEMENTS DIRECT ACTING (Or Slow Break – X11 type):

the contact element of a device for manual or automatic control circuits where speed of movement of the contact depends on the speed of motion of the actuator

- CONTACT ELEMENTS ACTING INDIPENDENTLY (Or Snap Action - Z11 type):

the contact element of a device for manual or automatic control circuits where the speed of motion of the contact is virtually independent of the speed of motion of the actuator. Commonly called "quick trigger" the electrical behaviour of these elements means that the contact is fast in order even in the slow movements of the actuator. These contact elements have position doesn't coincide with the release of drive (differential stroke).

Both microswitches are equipped with NO contact and NC contact, the cable is composed by n. 4 wires:

- Blue/brown for NO contact
- Black/black for NC contact.

The series is designed with 10 different types of actuators.

Product Nomenclature:

FCT	2	L	02	X11	D	EX
	=	III	IV	V	VI	VII

I - Model:

FCT limit switches

II - Cable length:

2 - 2m

III - Cable direction:

L – Parallel

V – Vertical

IV - Head and actuators:

01 - Steel end plunger

02 – Roller plunger

03 – 90° Roller plunger

04 - Metal revolving lever ø 17.5 nylon roller

05 – Adjustable length straight metal revolving lever ø 17.5 nylon roller

06 – Steel end plunger with threaded flange

07 - Roller plunger with threaded flange

08 – 90° Roller plunger with threaded flange

09 - Steel end plunger with rubber protection

10 - Rod lever type

V - Contact Types:

X11 – 1NC/1NO Slow Action

Z11 – 1NC/1NO Snap Action

VI - Housing - Distance between fixing holes:

D - Plastic, 20 mm

VII - Applications:

EX – Hazardous Locations

Temperature range:

The ambient temperature range is -20 °C to +60 °C.

Electrical data

Rated Thermal current (Ith) = 10A

Model	Rated operational current le (A)	Rated operational voltage Ue	
	6A	120V ac, 50/60 Hz	
	3A	240V ac, 50/60 Hz	
Slow action	2A	400V ac, 50/60Hz	
FCT2X11	2.5A	24V dc	
	0.55A	125V dc	
	0.27A	240V dc	

Model	Rated operational current le (A)	Rated operational voltage Ue	
	3A	120V ac, 50/60 Hz	
	4A	240V ac, 50/60 Hz	
Snap action	3A	400V ac, 50/60Hz	
FCT2Z11	2.5A	24V dc	
	0.55A	125V dc	
	0.27A	240V dc	



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Routine tests:

A test voltage of 2500 V ac r.m.s. shall be applied:

- between live parts of the switching element and the Limit switch enclosure likely to be touched in service, made conductive by a metal foil: and
- between live parts belonging to electrically separated switching elements,

for a minimum of 60 s. There shall be no unintentional disruptive discharge during the tests

[16] <u>Descriptive Documents</u>

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

[17] Special Conditions of Use:

- Care shall be taken to prevent accumulation of electrostatic charges. See installation instructions.
- FCT-EX series of Limit switch was submitted to tests corresponding to the low risk of mechanical danger and shall be installed such as it is sufficiently protected from mechanical danger.
- FCT2*09**D-EX shall be installed such as the rubber bellow is protected from mechanical damage.
- Ambient temperature and Surface temperature see instructions.
- FCT-EX series of Limit switch shall be protected against UL light or radiation.

[18] <u>Essential Health and Safety Requirements</u>

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

G.G.

The trademark

will be used as the company identifier on the marking label.

