

[1] **EC – TYPE EXAMINATION CERTIFICATE**

[2] Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC

[3] EC-Type Examination Certificate Number: **EXA 15 ATEX 0039X** Issue: **1**

[4] Equipment or Protective System **Limit switch box**

Type: **Guardbox - GD series**

[5] Manufacturer: **Eisenbau**

[6] Address: **Via T.A.Edison,16 – 20090 Cusago (MI) Italy**

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

[8] Ex-Agencija, Notified Body number 2465 according to Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment or protective system intended for use in potentially explosive atmospheres given in Annex II of the Directive.

The examination and test results are recorded in confidential report number: **EXA 15CR053**

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012/ A11:2013 **EN 60079-1:2014** **EN 60079-31:2014**

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 equipment or protective system is subject to specific conditions for safe use specified in the schedule to this certificate.

[11] This EC-Type Examination Certificate relates only to the design, examination and test of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:



II 2G Ex db IIC T6...T4 Gb
II 2D Ex tb IIIC T85°C...T135°C Db

Date: 03.08.2015.

PB.14.TC.786/ISt

Prepared:



Ivan Stepanić, mag.ing.el.



Ex-Agencija

Department of equipment certification

Approved:



Stipo Đerek, dipl.ing.el.

[13]

SCHEDULE

 [14] **EC - TYPE EXAMINATION CERTIFICATE No.:** EXA 15 ATEX 0039 X

[15] Description of Equipment or Protective System

Guardbox Limit switch boxes are electromechanical devices for monitoring the operation of industrial valves in plants. The Guardbox devices are used to control the position of the valve and provide electrical feedback signal of valve status to plant control systems. They are equipped with visible position indicator that represent a true indication of valve position. Degree of protection by enclosure is IP68.

 Ambient temperature: $-60^{\circ}\text{C} \leq T_a \leq +105^{\circ}\text{C}$

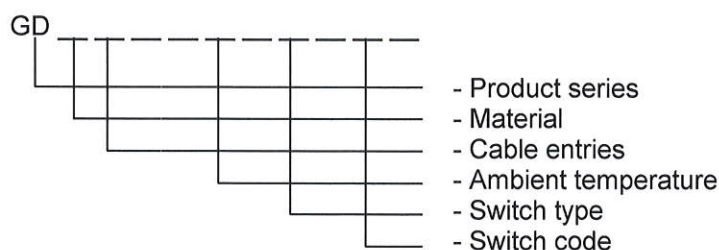
Nominal voltage: 0 VDC - 125 VDC

0 VAC - 250 VAC

Nominal current: 0.1A - 10A

$T_{a_{max}}$ [°C]	Maximal allowed power dissipation [W]	Temperature class	Maximum surface temperature	Suitable cable temperature class
40	10	T6	85°C	70°C
65	4	T6	85°C	80°C
	10	T5	100°C	100°C
85	4	T5	100°C	100°C
	10	T4	135°C	120°C
90	4	T4	135°C	105°C
	10	T4	135°C	125°C
105	4	T4	135°C	120°C

Marking:



Minimum width of joints (L) are shown in the following table:

Flameproof joint	Joints [mm]					
	L	l	c	d	Pitch	i_{max}
Housing - cover	15.5	12.5	/	15.5	/	0.04
Housing - shaft	25.5	/	25.5	/	/	0.15
Cover - shaft	25.5	/	25.5	/	/	0.15
Housing - cable gland (1/2" NPT, 3/4" NPT, M20×1.5, M25×1.5)	14	/	/	/	1.5	/

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[15.1] Documentation

Title:	Drawing No.:	Rev. level:	Date:
IOM0100	-	1	20.07.2015.
Certification drawing	EC-0101005-01	-	19.11.2014.
Certification drawing	EC-0102002-01	-	05.09.2014.
Certification drawing	EC-0120003-01	-	15.09.2014.
Certification drawing	EC-0101002-01	-	17.09.2014.
Certification drawing	EC-0102009-01	-	18.12.2014.
Certification drawing	EC-0120001-01	-	15.09.2014.
Certification drawing	EC-0120002-01	-	15.09.2014.
Certification drawing	EC-0102008-01	-	25.09.2014.
Certification drawing	EC-0120004-01	-	15.09.2014.
Certification drawing	EC-0102010-01	-	30.12.2014.
Certification drawing	EC-0104001-00	-	10.07.2014.
Certification drawing	EC-0104003-00	-	10.07.2014.
Certification drawing	EC-0107002-00	-	18.12.2014.
Certification drawing	EC-0108001-00	-	08.01.2015.
Certification drawing	EC-0109001-00	-	30.07.2014.
Certification drawing	EC-0120011-00	-	15.09.2014.
Certification drawing	EC-0120012-00	-	15.09.2014.

[16] Confidential Report No. EXA 15CR053

[16.1] Routine testing

None.

[17] Specific Conditions for Safe Use 'X'

1. Appropriate method of installation, maintenance and operation, should prevent accumulation of static charge on enclosure of the device.
2. Use screws of quality A2-70 or A4-70 according to UNI 5931 with ultimate tensile strength of at least 700 N/mm².

[18] Essential Health and Safety Requirements

Covered by the standards listed at item 9.