



[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 22 ATEX 0001X** Issue: **1**

[4] Product: **Transformer Isolated Loop Powered Current Separator**
Type: **KFD0-CS-Ex1.50P, KFD0-CS-Ex1.51P, KFD0-CS-Ex2.50P or KFD0-CS-Ex2.51P**

[5] Manufacturer: **Pepperl+Fuchs SE**

[6] Address: **Lilienthalstrasse 200, 68307 Mannheim, Germany**

[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 22 CR 001**

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

EN IEC 60079-0:2018

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 ec IIC T4 Gc

Our ref.: 21.CRT.488

Date: 25.01.2022.



FIDITAS Ltd.
Certification department
Approved:

Marino Kelava, M.E.Eng.



[13] **SCHEDULE**

[14] **TYPE EXAMINATION CERTIFICATE No.:** **FIDI 22 ATEX 0001X**

[15] **Description of product**

The KFD0-CS-Ex*.5* Transformer Isolated Loop Powered Current Separator is Associated Apparatus intended for transfer of signals and intended for installation in hazardous areas that require EPL Gc.

The input circuit is galvanically isolated from the output circuit by transformers. The voltage and current limitation for the input circuit is achieved with zener diodes and current limiting resistors. The circuits are located on a single printed circuit board (PCB).

The polymeric enclosure is suitable for mounting on a DIN rail. It provides an environmental rating of IP 20 and is required to be installed in an enclosure or area with control of pollution access. Transformer Isolated Loop Powered Current Separator must also be installed in a suitably certified enclosure providing ingress protection of IP54 minimum. Field wiring connections to the device are by colour coded pluggable connectors.

Intrinsically safe connections are provided for current or voltage signals and these are covered by a separate certificate.

Equipment type code:

KFD0 - CS - Ex * . 5 * P
(1) (2)

where:

KFD0-CS Transformer Isolated Loop Powered Current Separator
No of channels
(1) **1** - single input/single output
2 - dual input/dual output
Current input/output (loop powered)
(2) **0** - 4 mA to 20 mA
1 - 0 mA to 40 mA

for the following model types:

KFD0-CS-Ex1.50P (single input/single output, 4mA to 20mA)
KFD0-CS-Ex1.51P (single input/single output, 0mA to 40mA)
KFD0-CS-Ex2.50P (dual input/dual output, 4mA to 20mA)
KFD0-CS-Ex2.51P (dual input/dual output, 0mA to 40mA)

Technical data:

Ambient temperature: -20°C to +70°C

For type **KFD0-CS-Ex*.50P**

Rated current: $I_{max} = 4\text{mA} \dots 20\text{mA}$

Rated voltage: $V_{max} = 35\text{Vdc}$

For type **KFD0-CS-Ex*.51P**

Rated current: $I_{max} = 0\text{mA} \dots 40\text{mA}$

Rated voltage: $V_{max} = 35\text{Vdc}$



[16] Confidential Report No. FIDI 22 CR 001

[16.1] Routine testing

Transformer Isolated Loop Powered Current Separator shall be subject to a routine dielectric strength test according to the clause 7.1 of EN IEC 60079-7.

[17] Specific Conditions of Use

- The equipment shall be installed in an enclosure that provides a degree of protection not less than IP54 in accordance with the requirements of EN IEC 60079-0. In addition, the equipment must be installed and operated only in the environment of overvoltage category II (or better) and in a controlled environment that ensure a pollution degree 2 (or better) as defined in EN IEC 60664-1.
- The equipment must be installed in a suitable enclosure that requires the service temperature inside the enclosure to be evaluated at the location of the equipment. The installer shall ensure that the maximum ambient temperature of the equipment when installed is not exceeded.

[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:
Instruction Manual (Sheets 1 to 2)	266-0003FI-09	-	14.01.2022.
Marking (Sheets 1 to 2)	266-0003FI-10	-	14.01.2022.
Drawings:			
Relevant Components for Zone 2 (Sheets 1 to 12)	266-0003CM-02	-	28.02.2019.
Moulded Transformer Housing-base (Sheets 1 to 5 of 14)	16-0706IE-04D	-	30.03.2016.
KF – Housing 12 Term. Symm (Sheets 6 to 14 of 14)	16-0706IE-04D	-	30.03.2016.
Schematics KFD0-CS-Ex*.5* (Sheets 1 to 4)	266-003BS-01E	-	28.09.2017.