

CERTIFICATE OF CONFORMITY



Member of the FM Global Group

1. HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS

2. **Certificate No:** FM23US0051X
3. **Equipment:** excom N-system
(Type Reference and Name)
4. **Name of Listing Company:** Hans Turck GmbH & Co KG
5. **Address of Listing Company:** Witzlebenstraße 7, 45472 Mülheim an der Ruhr, Germany

6. The examination and test results are recorded in confidential report number:

PR464614 dated 10 July 2023

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM 3600:2022, FM 3611:2021, FM 3810:2021, ANSI/UL 60079-0:2020, ANSI/UL 60079-7:2021, ANSI/UL 60079-15:2020, ANSI/UL 61010-1:2019, ANSI/UL 121201:2017

8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

10. Equipment Ratings:

Nonincendive for Class I, Division 2, Groups A, B, C, and D T4; Increased Safety, Protected Sparking for Class I, Zone 2 ; hazardous (classified) locations.

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

10 July 2023

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC, 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA

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11. The marking of the equipment shall include:

Class I Division 2, Groups A, B, C, D; T4
Class I, Zone 2, AEx ec nC IIC T4 Gc; instruction #100047234
Ta: See Annex.

12. **Description of Equipment:**

General - The excom N-system is a modular I/O System for non-intrinsically safe circuits which consists of power supplies, a backplane, gateways and I/O Modules. The system can operate with either a single or redundant power supplies. The backplane serves to distribute energy, transmit data, and connect field devices. The gateways function as both a master and slave subsystem. In the roles as the master they control the internal data bus, while in the role as the slaves they communicate with the higher level fieldbus devices. The gateways control data communication between the I/O Modules and the process control system. The I/O Modules interface to the field devices. A total of 24 I/O Modules may be operated within a single backplane. The gateways and I/O Modules are not hot swappable during operation or if an explosive atmosphere is present in the hazardous (classified) location.

Ratings – The excom power supply is provided by an external power supply with a range of 18 - 32 VDC, nominally 24 VDC, which also supplies the gateways and I/O modules with power via the backplane. The excom N-system modules operate over an ambient temperature range of -20°C to +70°C, -40°C to +70°C, or -20°C to +60°C.

13. **Specific Conditions of Use:**

The modules shall be installed within an enclosure having a minimum rating of IP54 in accordance with ANSI/UL 60079-0, with a pollution degree of 2 or better.

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
10 July 2023	Original Issue.

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ANNEX

AI43-N

Description of Equipment:

**AI43-N 4-Channel Potentiometer Module
FM23US0051X**

Ta = -20°C to +70°C

AIH401-N

Description of Equipment:

**AIH401-N 4 Channel Analog Input Module with HART
FM23US0051X**

Ta = -20°C to +70°C

AOH401-N

Description of Equipment:

**AOH401-N 4-Channel Analog Output Module with HART
FM23US0051X**

Ta = -20°C to +70°C

DF20-N

Description of Equipment:

**DF20-N 2-Channel Frequency Meter
FM23US0051X**

Ta = -20°C to +70°C

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DI40-N

Description of Equipment:

**DI40-N 4-Channel Digital Input Module
FM23US0051X**

Ta = -20°C to +70°C

DI80-N

Description of Equipment:

**DI80-N 8-Channel Digital Input Module
FM23US0051X**

Ta = -20°C to +70°C

DM80-N

Description of Equipment:

**DM80-N 8-Channel Digital I/O Module
FM23US0051X**

Ta = -20°C to +70°C

DO40-N

Description of Equipment:

**DO40-N 4-Channel Digital Output Module
FM23US0051X**

Ta = -20°C to +70°C

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DO60R-N

Description of Equipment:

**DO60R-N 6-Channel Relay Module
FM23US0051X**

Ta = -20°C to +60°C

DO80-N

Description of Equipment:

**DO80-N 8-Channel Digital Output Module
FM23US0051X**

Ta = -20°C to +70°C

GDP-N/FW2.3

Description of Equipment:

**GDP-N/FW2.3 Profibus DP Gateway
FM23US0051X**

Ta = -20°C to +70°C

GEN-N

Description of Equipment:

**GEN-N Ethernet Gateway
FM23US0051X**

Ta = -20°C to +70°C

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MT08-N

Description of Equipment:

**MT08-N 8 I/O Module Rack
FM23US0051X**

Ta = -40°C to +70°C

MT16-N

Description of Equipment:

**MT16-N 16 I/O Module Rack
FM23US0051X**

Ta = -40°C to +70°C

MT24-N

Description of Equipment:

**MT24-N 24 I/O Module Rack
FM23US0051X**

Ta = -40°C to +70°C

PSM24-N.1

Description of Equipment:

**PSM24-N.1 24 VDC Power Supply Module for MTxx-N module racks
FM23US0051X**

Ta = -40°C to +70°C

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TI401-N

Description of Equipment:

**TI401-N. 4-Channel Temperature Input Module
FM23US0051X**

Ta = -40°C to +70°C

TI41-N

Description of Equipment:

**TI41-N. 4-Channel Temperature Input Module
FM23US0051X**

Ta = -20°C to +70°C

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