

(1) TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) Type-Examination Certificate Number

TÜV 14 ATEX 7557 X

Issue: 02

- (4) Equipment: **HIQuad X systems**
- (5) Manufacturer: **HIMA Paul Hildebrandt GmbH**
- (6) Address: **Albert-Bassermann-Str. 28
68782 Brühl, Germany**

- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex7557.02/14

- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0: 2018 EN IEC 60079-7: 2015 / A1: 2018 EN IEC 60079-15: 2019

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



II 3 G Ex ec nC IIC T4 Gc



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TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2023-09-01

Dipl.-Ing. Christian Mehrhoff



This Type Examination Certificate without signature and stamp shall not be valid.
This Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the
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(13)

Annex

(14)

Type Examination Certificate

TÜV 14 ATEX 7557 X

Issue: 02

(15)

Description of equipment

15.1 Equipment and type:

HIQuad X systems are compact and modular automation systems, in which the modules can be inserted into slots. The modules are:

F-CPU 01, F-IOP 01, F-COM 01, F-PWR 01, F-PWR 02, F 3221, F 3224A, F 3236, F 3237, F 3238, F 3240, F 3248, F 3322, F 3325, F 3330, F 3331, F 3333, F 3334, F 3335, F 3349, F 3422, F 3430, F 5220, F 6215, F 6217, F 6221, F 6705, F 6706, F 7133, F-BASE RACK 01 *, F-BASE RACK 02 *, F-BASE RACK 11, F-BASE RACK 12 *

Filters:

H 7034, H 7035, power supply filter

Accessories:

Cable plugs Z 7***

15.2 Description / Details of Change

HIQuad X is a safety-related programmable control system and is intended for high availability. HIQuad X is a modular system, which consists of 19 inch subracks for central devices and modules for binary and analog input or output signals.

Depending on the required safety and availability, HIQuad X can be supplied as one-channel or dual-channel (redundant) devices with the same modules in the central device, as well as in the input or output layer. Redundant modules increase the availability, as in case of an error in a safety-related module this module is automatically switched off, while the redundant module continues the operation.

Technical Data

Rated voltage: 20.4 ... 28.8 V DC

Ambient temperature: 0°C < Ta < 60°C (-25°C < Ta < 70°C for H 7034 /H 7035 only)

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Details of Change:

- Standard update to EN IEC 60079-0: 2018, EN IEC 60079-7: 2015 / A1: 2018 and EN IEC 60079-15: 2019
- New types F-BASE RACK 12 and F-BASE RACK 12 R, F-BASE RACK 01 R and F-BASE RACK 02 R
- Modification of cable plugs Z 7***
- Hardware changes of module F 3349
- Not relevant changes
- End of life for HIQuad (H41, H51)
F 6220, F 7126, F 7130A, F 7131, F 7546, F 7553, F 8621A, F 8627X, F 8628X, F 8650X, F 8652X, B 4234, B 4235, B 4236-1, B 4236-2, B 4237-1, B 4237-2, B 5230, B 5231, B 5232-1, B 5232-2, B 5233-1, B 5233-2, B 9302, B 9361, H 7505, H 7506

(16) Test-Report No. 557/Ex7557.02/14

(17) Special Conditions for safe use

1. The system shall be supplied with a SELV or PELV supply only.
2. The equipment shall only be used in an area of not more than pollution degree 2, as defined in EN 60664-1.
3. The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with EN IEC 60079-0 or EN IEC 60079-7.
4. The enclosure in use must be able to safely dissipate the generated heat.
5. Only voltages of the same potential are allowed to be connected to the I/O s of the module F 3422.
6. The I/O subrack must be provided with forced ventilation.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

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