

IECEx QUALITY ASSESSMENT REPORT Form F-001, Edition 3.1



CONFIDENTIAL

IECEx QAR Reference No.: NO/NEM/QAR10.0005/08
Audit Report No.: NEM-QAR-393551

ExCB Project No.:	393551
Manufacturer Include Address with post code	Autronica Fire and Security AS Bromstadveien 59 7047 Trondheim NORWAY
Production Site(s) audited Include Address with post code	1) Autronica Fire and Security AS Bromstadveien 59 7047 Trondheim NORWAY 2) Fosstech AS Stalsbergvn. 9 3128 Nøtterøy NORWAY
Product Description	Flame arrestors, Fire, Heat, Smoke & Gas Detectors; Input Units; Call Points; Loop Drivers; Interface and Shunt Protection
Employee count	Total onsite: 200 Total involved in Ex products: 50
Scope of Audit	Initial Assessment □ Re-Assessment ⊠ Surveillance Assessment □
Electrical equipment with type(s) of protection of	d ⊠ e ⊠ h □ i ⊠ m ⊠ n □ p □ Other (specify) □
Audit Team Leader	Reidar Syversen
Audit Date	2020-03-17 to 18 and 2020-03-24

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Edition 3.1 – based on ISO/IEC 80079-34, Edition 2.0

ENTERPRISE NUMBER NO974404532

1. Summary Report

Assessment Summary and Conclusions:

(State the most important **results** and **conclusions** of the quality assessment)

The assessment has been performed by the means of telephone, e-mail, skype/teams and/or other possible methods to review the required procedures, documents, records, photos, manufacturing and production processes and other areas assessed.

The assessment is based on the agenda issued to and agreed with the manufacturer prior to the audit, as well as agreement on the special arrangements necessary for the time being. The assessment is performed during a difficult period caused by the Novel Coronavirus COVID-19 outbreak, were onsite assessments have not been possible to perform due to restrictions given by the authorities, as well as company policies given by Nemko and/or the client. Nemko reserves the right to carry out a limited onsite assessment later, if this is found necessary for any reason.

For manufacturer/factory 1:

There are totally about 200 employees in Autronica Fire and Security AS, Bromstadveien 59, 7047 Trondheim. About 50 employees are involved in the Ex production or related activities.

(Cl. 4.2.3 / 7.5.5) Reviewed certificates; IECEx PRE 17.0018X issue 1 for model BD-55/xxx EXD and BD-505/xxx EXD, IECEx NEM 11.0009X Issue 4 for model BF-502/EX. Applicable routine tests:

For certificate Nemko 04ATEX1406X issue 4 and IECEx PRE 17.0018X issue 1: The integrity of the welds on Heat detector probe enclosure have to be verified by liquid penetrant inspection method specified in Cl. 16.3 of EN 60079-1:2014 (in accordance with ASTM E1417/E1417M). (Verified by DoC from the producer.)

Several checks and tests are conducted and documented according to instruction and checklist for all models.

All physical production, assembly and checks are carried out in the manufacturer's facilities in Trondheim except models OFA 1 and OFA 2.

Suppliers of PCB's and enclosures are considered as safety critical. Enclosures used, Ex d and e, are all separate Ex certified and the manufacturers have their own IECEx QAR, except models OFA 1 and OFA 2 assembled in factory 2.

Manufacturer of Ex d enclosures are Cortem in Villesse, Gorizia, Italy and Bartec Technor in Stavanger, Norway. (Ex certified enclosures.)

According to information received, Autronica Fire and Security AS has one supplier of populated PCB's, UTC CCS Manufacturing Polska Sp. z o.o., ul. Kolejowa 24, 39 – 100 Ropczyce, Poland. Nemko will do on-site verification of Ex safety PCBA supplier covering NEK ISO/IEC 80079-34:2018 part 7.5.3 (implementation of production documents), 5.3 (Coordinator against customer, Ex), 7.1.5, 7.2, 8.4, 8.5.1, 8.5.2, 8.7, 9.2 and A.4 when an visit is possible due to the coronavirus epidemic. Anyway; Autronica must conduct critical supply audits within the period stated in part 8.4.1 f).

The manufacturer representatives are informed; Models in IECEx FMG 13.0042X are produced by Detector Electronics Corporation and not covered under IECEx QAR, NO/NEM/QAR10.0005.

For factory 2:

There are totally 3 employees in Fosstech AS, Nøtterøy, all are involved in the Ex production or related activities. Previously those workes belonged to Autronica, Nøtterøy. Aurtonica, Nøtterøy have about 30 employes and employed Rainer Westphal is Product Manager / Ex coordinator and Roar Elmer is Project Manager / Deputy Ex coordinator for the Fosstech production.

(Cl. 4.2.3 / 7.5.5) Reviewed certificate; IECEx PRE 14.0054X Issue 2 for models OFA 1 and OFA 2.

Applicable routine tests: Checks and tests are conducted and documented according to instruction and checklist.

All physical production, assembly and checks for models OFA 1 and OFA 2 are carried out in the factory 2 facilities Nøtterøy.

Suppliers of enclosure parts and sintered material are considered as safety critical.

OFA 1 and OFA 2 are only used internally by Autronica for other products and not sold separately.

Next Quality Audit due : 2021-09 (surveillance)

Non-Conformities

(Indicate the Serial No.(s) of non-conformities recorded. Individual non-conformities are recorded on the non-conformity reports)

NCR No.(s):

See Nemko Ex audit report 393551

Audit Team Leader Recommendations

□ Certification to be issued/maintained*
 once satisfactory technical assessment of the product is completed, and a test report is issued.
 ☑ Certification to be issued/maintained*

following receipt of satisfactory documentary evidence supporting effective corrective action, and a test report is issued. Corrective action to be verified at next surveillance visit.

☐ Certification to be issued/maintained*

following a satisfactory follow-up visit and verification that corrective actions have been effectively documented and implemented, and test report issued.

☐ Certification to be refused/suspended*

a further complete assessment to be conducted

☐ Certification to be refused/suspended*

close the application/withdraw the notification and inform the Scheme Administrator

Reidar Syversen

Rida Syrasu

Ståle Sandstad

Audit Team Leader Signature
Date 2020-05-25

ExCB Technical Reviewer

Date 20yy-mm-dd

Audit Information

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was cor 2.3	Date(s)	ance document ddition to IECE and Durat r of auditor day	ion of Audit	ISO 9001:2015 : 2020-03-17-18 and 24, Totally 3 auditor days on site	
ISO 90 certifi		Certified by	Expiry date	Scope	
90077	76	Nemko	2020-06-23	Marketing, sale, development, engineering, manufacture, installation, commissioning and servic of suppression, fire and gas detection and alarm systems.	ing
	Yes No N/A ((no NCs)	n-conformities f	from latest ISO 9001 audit reviewed?	

4 NCR's, all closed in june 2019.

2.5 **Composition of Audit Team:**

Name Position		Role in Audit (Sole Auditor, Team Leader, Auditor, Technical Specialist, etc)	
Reidar Syversen	ATEX & IECEx Lead Auditor	ATEX & IECEx Lead Auditor	

Interviewed Representatives of Manufacturer (Auditee): 2.6

Name	Position		
Frank R. Walstad	Director of QA / Administrative Ex responsible / Trondheim		
Jan Inge Jenssen	R & D Engineer / Technical Ex responsible / Trondheim		
Lenka Johansen mob.: 954 37 679	Quality System Manager / Trondheim		
Rainer Westphal mob.: 913 74 064	Product Manager / Ex coordinator / Nøtterøy		

2.7 Critical Suppliers: (List critical suppliers reviewed during audit of supplier evaluation)

Name of Supplier	Critical item or service provided
UTC CCS Manufacturing Polska Sp. z o.o.	Supplier of Ex PCBA
Cortem	Supplier of Ex d enclosures
Bartec Technor	Supplier of Ex d enclosures

2.8 Manufacturers Documentation: (List manufactures documentation related to this Quality Audit Report) See Nemko Ex audit report 393551

2.9 Manufacturers IECEx Certificates of Conformity:

See Nemko Ex audit report 393551, as well as www.iecex.com

3. <u>Documentation Review and Assessment of Implementation</u>

See Nemko Ex audit report 393551

Requirement	Documents reference and/or comments	Verdict
ISO 9001:2015.	Document references and/or comments are given in the Nemko Ex audit report, if relevant	P
ISO/IEC 80079-34 addition to ISO 9001:2015	Document references and/or comments are given in the Nemko Ex audit report, if relevant	P

4. Observations

See Nemko Ex audit report 393551