QUALITY ASSESSMENT REPORT

Report No.: QAR25022-01 **IECEx QAR No.: AU/ITA/QAR07.0004/14**

Manufacturer Include Address with country	Weidmuller Pty Ltd 43 Huntingwood Drive, Huntingwood NSW 2148, Australia							
Locations audited Include Address with country	Weidmuller Pty Ltd 43 Huntingwood Drive, Huntingwood NSW 2148, Australia (On-Site Audit)							
Product Description	Assembled Junction Boxes and Control Stations							
Schemes Covered	IECEx Equipment Scheme	ANZEx Equipment Scheme 2021	ATEX Directive 2014/34/EU	UKCA UKSI 2016:1107	Other			
	☒	☐	☒	☐	☐			
Scope of Audit	Initial Assessment	Re-Assessment	Surveillance Assessment	Other				
	☐	☒	☐	☐				
Electrical equipment protection types	d	e	n	i	m	p	t	Other
	☒	☒	☒	☒	☒	☐	☐	☐
Job Number	25022							
Audit Notes	Held in “Audit Notes – Job 25022”							
Audit Team Leader	David Price							
Audit Date and duration	2025-03-12 9am to 5pm							

This report uses proforma QMA-HAE-08-630 dated 2025-01-08, which is based on the IECEx form F-001 Edition 5.0.
It refers to the Standard ISO/IEC 80079-34:2018 (Edition 2.0).
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Contents:

1. Summary Report

Assessment Summary and Conclusions:

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

Weidmuller Australia (WAUS) builds Ex control stations and Ex junction box equipment, using fabricated steel enclosures supplied by Weidmuller, Germany. Weidmuller Australia creates Ex equipment by specifying connectors, terminals, glands, internal power supplies, communication devices etc, and assembling, inspecting and shipping the product. In this way, Weidmuller Australia is regarded as the Ex Manufacturer.

Enclosures are industry benchmark for design and quality, with many of the internal components being Weidmuller product. The equipment is supplied with derating charts to allow for 'watts loss'.

Additional to being a supplier of Ex equipment, Weidmuller Australia is also an 'Application Center' where ATEX and IECEx certified equipment is produced on behalf of manufacturer Weidmuller Germany. This arrangement is covered by an IECEx QAR for Weidmuller Germany, number NL/DEK/QAR12.0052. The competency for these operations were checked, but the complete certificates are not covered in this QAR.

This audit focussed on the specific quality system and certification requirements of the IECEx/ATEX Scheme that exist over and above the general requirements of ISO 9001. Weidmuller Australia shows clear support for the principles of quality management and compliance with IECEx/ATEX certification scheme.

Management of Ex certification is from Weidmuller Germany, with input from Weidmuller Australia.
IECEx certification covers the assembled equipment for protection types 'd', 'e', 'i', 'm', 'n', 't', as shown in the list of certificates. ATEX certificates are listed on the Weidmuller website.
Certificate DEKRA QAN 12ATEXQ0147 covers ATEX production.

Items raised in the previous audit (QAR AU/ITA/QAR07.0004/13) have been addressed.

Non-Conformities

NCR No.(s):	Brief Description (details are recorded on the non-conformity reports)	Closed on:
1	During the audit it was observed that the QMS allows for Engineering officers to authorize changes to related drawings. This responsibility is defined as the responsibility of the Ex Authorised person(s).	2025-04-11

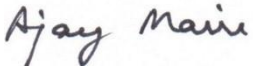
2	During the audit it was observed that the holes drilled for entry devices in the enclosure are confirmed by Go-NoGo gauges. It was noted that these devices were checked by the use of micrometres however there was no evidence that any of the equipment used for this verification was calibrated.	2025-04-11

Next Ex Audit	~~Reassessment~~/Surveillance	**Due on**	2026-08

Audit Team Leader Recommendations

☒ **Certification to be issued/maintained,** with corrective action (if applicable) to be verified at next visit

☐ **Certification to be refused/suspended*** A further complete assessment to be conducted

				
Signature			**Signature**	
Name	David Price		**Name**	Ajay Maira
Date	2025-05-06		**Date**	2025-05-07
Audit Team Leader			**ExCB Technical Reviewer**	

2. Audit Information

2.1 Scope of Audit:

Type A ~~initial assessment~~/reassessment of manufacturer with a certified QMS*…… ☒

Type B initial assessment/reassessment of manufacturer without a certified QMS…… ☐

Type C surveillance of manufacturer with a certified QMS*…… ☐

Type D surveillance of manufacturer without a certified QMS…… ☐

** where manufacturer has a certified quality system, complete the table below*

ISO 9001 certificate No	**Certified by**	**Expiry date**	**Last audit report No**	**Last audit conducted on:**
QEC0879	Intertek SAI Global	2028-04-21	CMPY-208575	2025-02-19 to 2025-02-21
Scope of certificate:	The manufacture and distribution of electrical, electronic and related products for interfacing electrical plant, control and instrumentation equipment.			
Comments on last audit report, and any non-conformities	***Finding 1849931-1:*** The organization has not adequately maintained its policy ***Finding 1849931-2:*** The organization has not adequately planned actions to address risks and opportunities ***Finding 1849931-3:*** The organization has not adequately implemented its corrective action process ***Finding 1849931-8:*** Design and Development change was not properly signed, approved and documented. ECO 103, form 170 – issue 1, was raised and signed by Matt, but was not signed as approved. This ECO has been completed ***Finding 1849931-9:*** Identification and Traceability - The COPQ (rework) bins do not have “COPQ” labels on them, provide identification labels to prevent misuse and/or confusion. ***Finding 1849931-10:*** Equipment calibration not calibrated as per specified intervals These findings on the ISO 9001 requirements will be observed during the audit, in particular Finding 8, 9 and 10. The design & development, identification & traceability and calibration control is critical to Ex production and were observed to be acceptable during the audit.			

2.2 Audit Criteria:

List any other reference documents, against which Audit was conducted	ISO/IEC 80079-34, Ed. 2.0:2018	☒
	Other applicable reference Standards	☐

2.3 Composition of Audit Team:

Name	**Position**	**Role in Audit** *(Sole Auditor, Team Leader, Auditor, Technical Specialist, etc)*
David Price	Senior Testing and Certification Engineer	Sole Auditor

2.4 Interviewed Representatives of Manufacturer (Auditee):

Name	Position
Ben Scott	Engineering Manager
Bill Bradshaw	QEHS Management

2.5 Manufacturers certificates in scope of this audit

IECEx Certificates of Conformity:

IECEx Certificate No.	Description of Ex equipment	Ex marking	Conditions of manufacture
IECEx ITA 14.0013X-3	Klippon small control station enclosures	Ex d e IIC T_ Gb Ex tb III C T_ Db	Nil
IECEx ITA 15.0017X-5	Klippon CSL (large control station) enclosures	Ex d e ia mb op pr IIC T_ Gb Ex nA nC d e ia op pr IIC T_ Gc Ex ia op pr tb IIIC T_ Db	Refer Annex A
IECEx PTB 11.0071-1	Explosion protected power distribution, switchgear and control gear combination type series Klippon TBe MH Klippon TBe QL Klippon TBe FS	II 1 G Ex ia IIC T6...T4 Ga II 2 G Ex ib IIC T6...T4 Gb II 3 G Ex ic IIC T6...T4 Gc II 2 D Ex tb III C T 120 °C Db II 3 G Ex nA IIC T6...T4	Nil

Note : The following SIRA certificates are being removed from the scope of manufacture for this location on request.
IECEx SIR 06.0029X-1 - Klik Lok Junction Boxes
IECEx SIR 06.0030X-0 - Ezee Fit Junction Boxes

ANZEx Certificates of Conformity:

ANZEx Certificate No.	Description of Ex equipment	Ex marking	Conditions of manufacture
Nil			

ATEX Certificates of Conformity:

ATEX Certificate No.	Description of Ex equipment	Ex marking	Conditions of manufacture
Note: There are several ATEX certificates, and the complete set of certificates are held on the Weidmuller website.			

UKCA Certificates of Conformity:

UKCA Certificate No.	Description of Ex equipment	Ex marking	Conditions of manufacture
Nil			

2.6 Manufacturers Documentation: (*Use this table to list details of the manufacturers quality management system documentation cited in Section 3 by document identity and reviewed during the audit covered by this Quality Audit Report)*

Document No.	Document Name	Rev.	Date
C_005	Weidmüller Ex-Management System; Requirements for Design, Manufacture and Supply of Ex-Products including Application of EN ISO/IEC 80079-34	1.5	2021-11-22
CIS-002-2	Customer Service - Handling Customer Complaints	04	2024-09-30
CIS-005-3	Process Control CSA Projects	06	2024-11-27
CIS-015	Supplier Selection and Review	08	2025-01-29
CIS-015-1	Incoming Inspection Procedure	03	2023-03-06
CIS-020	Product Recall Procedure	05	2017-04-27
CIS-026	Assembled Product Quotation Procedure	10	2024-11-14
CIS-027	Document Control	09	2024-09-23
-	Weidmuller Pty Ltd AUDIT REPORT	-	2025-03-14
M_001	Management System Guideline - an integrated approach -	17	2023-05-10
P_C37_PD_AUS	Control of Nonconforming Products	01	2024-08-12
-	Company Records Register	-	2022-04
-	Weidmuller Training Skills Matrix – Production	-	2024-19-30

3. Documentation Review and Assessment of Implementation

(For surveillance audits, major document changes only may be reviewed)

NOTE 1: Details and audit evidence are recorded in the "Audit Notes" mentioned in Section 1

NOTE 2: Even when there are no additional IEC/ISO 80079-34:2018 requirements to ISO 9001:2015 the auditor shall provide a verdict in accordance with the Note 3 below. The IECEx System expectation is that where the form specifies that "ISO 9001:2015 applies" for the manufacturing of Ex product, these requirements are reviewed and assessed as necessary by the ExCB irrespective of whether the manufacturer has ISO 9001:2015 certification (guidance on ExMC decisions in this area is available in 17021-1, Clause 9.1.3.4)

NOTE 3: Possible audit verdicts: P = Pass, F = Fail (add the Non-conformity number against a clause where a Non-conformity has been issued), N/A = Not Applicable

Clause	Requirement	Documents reference and/or comments	Verdict
4	**Context of the organization**		
	Determination and monitoring of external and internal issues relevant to purpose of organization, and should include Ex product being manufactured according to the Ex certificate and associated technical documentation.	Refer to the documents C_005, M_001. These documents show the capabilities of the QMS to support the production of Ex compliant products.	**P**
	Quality management system available and maintained.	The QMS is available and maintained by WAS Staff. Bill Bradshaw who was the Ex Authorised person in the past is now in the position of the Quality Environment Health and Safety Management.	**P**
5	**Leadership**		

Clause	Requirement	Documents reference and/or comments	Verdict
	Commitment to quality management system, quality policy	Refer to the documents C_005, M_001. These documents show the capabilities of the QMS to support the production of Ex compliant products.	**P**
	Customer focus and regulatory requirements, improvements	Refer to the documents C_005, M_001, CIS-002-2. These documents show the focus that the company has on customers and regulatory requirements.	**P**
	Organization roles, responsibility allocations (including Ex)	During the audit the organisational chart was observed. There is an appropriate number of staff. A letter from Germany declared Ben Scott as the Ex Authorised Person During the audit the document “Register of responsibilities and Authority_Hazardous Areas Ver _01-10-2024.xlsx” was opened in the application “Mango” During the audit it was observed in document CIS-005-03 that Engineering officers are permitted to modify and issue related drawings in contradiction to the requirement that related drawings are to be authorised by the ExAP.	**NCR01**
	Total staff onsite, and total involved in Ex products	Total onsite: 52 Total involved in Ex products: 7	**P**
6	**Planning**		
	Risks and opportunities identification and address to them	The QMS is sufficient to address this requirement as audited by Intertek SAI Global. Refer to documents C_005 and M_001.	**P**
	Establishment of measurable quality objectives that are consistent with the Quality policy, enhance customer satisfaction, and communicated adequately	The QMS is sufficient to address this requirement as audited by Intertek SAI Global. Refer to documents C_005 and M_001.	**P**
	Changes in organization, quality management system are considered for consequences,	There were no significant changes in the organization	**P**

Clause	Requirement	Documents reference and/or comments	Verdict
	resourcing, allocation of responsibilities and authorities	or QMS since the last audit. The implementation of SAP is still in progress however is mostly performed and the General Manager was changed at the end of 2024.	
7	**Support**		
	Internal resources availability: - People: their competence, training, working environment - Organisational knowledge retention - Infrastructure - Logistics - Information and communication technology. - Measuring tools, their calibration	The manufacturing facilities appeared to be clean and tidy. Staff have access to the appropriate level of infrastructure for the performance of the work. Many of the staff have been in the organisation for decades and have been training up newer staff. During the audit the engineer Angelo was interviewed. Angelo has been in the company in a full time capacity for less than a year, and prior to that working part time for only a couple of years however his understanding of the requirements of Ex product design appeared to be quite good. Currently the PLM software Mango is used. A design checklist was observed for project RFQ_2025QR0101_Ghazlan Expansion 2 557T. The checklist covers items such as checks on the BOM, datasheets, checks on the relevant standards, packaging requirements and checks on non-Weidmuller parts. The product being observed during the audit included an HMI from Siemens. The power dissipation calculations for the enclosure considered the datasheet specification for the rated dissipated power of the HMI. Currently the micrometer assets 3289, 3290 and 3291	

Clause	Requirement	Documents reference and/or comments	Verdict
		are used to confirm the hole gauges. There is however no evidence to support the calibration, or verification of these micrometres or the recording of the verification of the hole gauges. The calibration of the micrometres is required as they are used to verify the Go-NoGo gauges for entry holes. The insulation resistance test equipment, with the serial number 25888, was observed, the calibration sticker shows a calibration due date of 26-08-2025. The calibration report 24.1099010 was observed and was acceptable and signed into Mango by Binu Jacob, the Production Manager who is responsible for calibrations. Observed "Certificate of Excellence" for Miles Williams. "Hazardous Areas Assembly Training and Assessment Course for ACS (extended scope)". Refer to the "Weidmuller Training Skills Matrix – Production" spreadsheet for details on the training.	**NCR02**
	Documented information: - Adequacy and availability at required locations - Control of authenticity, legibility, version control, specially for Ex relevant document changes by Ex responsible personnel, disposition of documents - Compatibility with certified documents - Validity with current Standards, regulations, other external specifications - Retention of quality records as per regulatory requirements (minimum 10 years)	Refer to document CIS-027, the "Company Records Register" which states the retention of related documents for more than 10 years. Refer to document C_005 regarding the requirements related to changes to controlled documents and the validity of certificates to standards and regulations. Section 7 of C_005 stipulates that the ExCB is to be contacted in the event of a change to certified products.	**P**

Clause	Requirement	Documents reference and/or comments	Verdict
		The certificates were reviewed prior to the audit by Weidmuller (WAUS) however some certificates have Ex Components that have been cancelled. These Ex Component certificates should be checked. It is noted that the current practices include the printing of all of the certificates associated with the build of the Ex Product. It was noted that the certificates IECEx SIR 06.0029X-1 and IECEx SIR 06.0030X-0 list component certificates that have been cancelled. These products have not been manufactured by WAUS for many years. After some discussion the certificates have been excluded from the scope of this audit.	**OBS01**
8	**Operation**		
	Planning of operations Customer communications Customer order review, including regulatory requirements, Ex requirements	Refer to document CIS-026 which outlines sufficiently the process to ensure the customer order is correct. During the audit Angelo was interviewed and he was able to show clear evidence that the product design of equipment requested. The customer signs the drawings and approves the quotation before start of the project. It was noted that documented consideration of the conditions of manufacture related to the certificate IECEx ITA 15.0017X was not able to be produced during the audit.	**P** **OBS02**
	Design changes placed in document control process	Refer to CIS-005-3 clause 4.3.3. changes are submitted to a change process.	**P**

Clause	Requirement	Documents reference and/or comments	Verdict
	Control of purchase, including providing current technical documentation when ordering, external provided processes, services, incoming inspection according to criticality to the Ex product requirements. This includes customer supplied property.	Refer to the documents C_005 and CIS-015. During the audit the PO 15192388/1300070 on CZ Electric Co was witnessed. The purchase order was for catalogue items and all of them with a current Ex certificate. Refer to document C_005 section 8.5.3 regarding the customer supplied items.	**P**
	Traceability of final product to documentation applied, incoming materials, processes used, test equipment used. This includes customer supplied property.	Traceability of the equipment is through the ERP software SAP and the traveler sheets which include drawings, parts lists, checklists, certificates of pre-certified parts and user manual.	**P**
	Routine testing where specified in Ex report, certificate	Where required, factory wired enclosures have been tested for insulation resistance. Other tests are performed such as entry hole size checks.	**P**
	Supplier review, including provision of declarations of conformity, third party accredited certificates. If required, extension of this audit to include supplier processes	Refer to document CIS-015. The majority of the product used for Ex equipment are already certified, the rest of the equipment is free supply items . It was observed during the audit that the evaluation of the calibration service “TR Calibration” was not available. This supplier is required to have an evaluation. The supplier of the CZ parts have a QAR.	**P** **OBS03**
	Adequate control of the supporting resources (documentation, infrastructure, monitoring, environment, competency of personnel, validation of processes, release of product) for the production of the Ex product.	During the audit it was observed that the supporting resources were sufficient for the production of Ex product.	**P**
	Control of product release after all checks are implemented, adequate packing and accompanying documentation.	The document pack for equipment is complete, a user manual accompanies each Ex product.	**P**

Clause	Requirement	Documents reference and/or comments	Verdict
	Examination of the marking for correct information including certificate number.	The marking label on the enclosure XE-AU-I-110833 was observed to be correct.	**P**
	Post delivery activities including regulatory requirements, warranty provisions, customer feedback.	Refer to the document CIS-002-2 “Customer Service - Handling Customer Complaints”.	**P**
	Control of changes used for the production with involvement of Ex authorized persons	Refer to CIS-005-3 clause 4.3.3. changes are submitted to a change process.	**P**
	Control of non-conforming outputs, including documented procedures and records, for correction, information to customer, return, suspension	Refer to the documents P_C37_PD_AUS and C_005. The documents specify that if any product has been found to be non-compliant in the market that the issues are managed by the German head office. It is within the responsibility of the German head office to contact the certification body in the event of significant issues.	**P**
9	**Performance evaluation**		
	Determination of methods and tools to monitor performance of the quality system, followed by application and evaluation, Records to be retained. This includes monitoring of customer satisfaction	During the audit the “Global Customer Satisfaction Survey 2024”. 14/11/2024. The report shows WAUS results, 49% recommendation result, not highest, not lowest. Shows a downward trend of 12% from last report dated 2022. Perhaps because of SAP implementation. Observed GCS2024 “Global Customer Survey 2024” for WAUS only.	**P**
	Internal audit of the quality management system and the requirements of ISO/IEC 80079-34, using documented procedures for frequency (<14 months), methods (including vertical audit), competency, responsibilities, reporting, actions and record retention.	The audit observed “WAUS Audit Program 2025” Ver 1, 12/2/2025. Observed audit Document “WAU-23-009 Production – Rail Assembly and Workshop” dated 20/9/2024. Noted that the “Ex Register” needed to be updated. It’s noted that the ISO/IEC 80079-34 is not listed in the Area Audit. While it’s noticed that Ex topics are raised, the internal audit scope should be reviewed to	**P** **OBS04**

Clause	Requirement	Documents reference and/or comments	Verdict
		ensure all requirements are covered. Observed WAU_006 for "Product and Marketing." Shown in the register as not being performed, is actually done. Witnessed the report, clearly the audit register is not updated.	**OBS05**
	Management review of the Quality Management system regularly (<14 months between reviews), with participation by Ex responsible person, with inputs and outputs effective to monitor and improve the system.	Reviewed meeting held 2025-01-07 Ben present, Bill as an observer/guest. Noted a separate section for 80079-34 topics	**P**
10	**Improvement**		
	Determining and acting of opportunities to improve products and services, correcting undesired effects Improving performance of quality management system with continual improvement. .	The Audit observed BPIR 5240 in Mango for enclosures which had faulty parts installed. The NCR is ongoing with some investigations. SAP as 200932378 also has this NCR since it is related to parts supply. Initially the complaint is registered in Mango. A SAP NCR might be generated if it's related to parts. Suggested to make a note of the SAP number in the BPIR. Everything appears to be well documented. Ben will investigate, Bill will close.	**P** **OBS06**
	Recording and dealing with nonconformities and complaints in a timely manner, including reviewing and analysing, determining cause, checking systems for undetected nonconformities, implementing actions and reviewing effectiveness, with changes to quality management system or procedures as necessary. Retention of records	The non-conformance and complaints process appears to be acceptable.	**P**

Annex A (informative)	
Information relevant to particular Types of Protection and specific Ex Products	
A.1	**Overview**
This annex provides information on those aspects that the quality management system should address with respect to particular types of protection. It does not add to or otherwise change the requirements of this document.	
A.2	**General**

Schedule Drawings and test reports, which support the certificate of the Ex Product, may provide conditions for the particular Type of Protection. All markings should be in accordance with schedule drawings. For enclosures and other components forming part of the enclosure and for fans, fan hoods and ventilation screens, the manufacturer should verify the material composition (e.g. External Provider's Declaration of Conformity). Statistical basis are not appropriate for routine tests required by the certificate or reports, except where the following currently permit such techniques: • the relevant standard; or • appropriate interpretation and clarification sheets; All measurements should consider temperature variations.

Tests and inspections relevant to the type of protection		
A.3	Tests and inspections relevant to Ex d • Castings • Machining • Cementing • Over Pressure • Batches • Welded construction • Flanges • Breathing/Draining	
Products incorporate pre-certified items that are included into the equipment. Certificates of pre-certified equipment are printed out and checked during quality checks.		P
A.4	Tests and inspections relevant to Ex i • Safety Components • PCBs • Sub-assemblies • Enclosures (III) / Spacings • Routine Verification	
Products incorporate pre-certified items that are included into the equipment. Certificates of pre-certified equipment are printed out and checked during quality checks.		P
A.5	Tests and inspections relevant to Ex e • Ingress Protection • Internal Wiring • Rotating Machines • Windings • Terminal Boxes • Glands and Accessories • Routine Verification	

During the audit an enclosure certified to IECEx IBE 14.0013 which is an enclosure with terminals certified under IECEx ULD 14.0005U fitted. The enclosure, build drawings, inspection sheets and traveller sheet for Production Order “0007364508” were observed for enclosure serial number XE-AU-I-110833. The gland plate for the pre-certified enclosure is modified by WAUS to have entry holes drilled for the assembly based on the design drawings. The holes are checked by the manufacturing staff with Go-NoGo guages. During the audit there was evidence presented that the guages are verified by the uncalibrated micrometers with the asset numbers 3289, 3290 and 3291. There was no record of the verification data presented at the audit. The insulation resistance test equipment, with the serial number 25888, was observed, the calibration sticker shows a calibration due date of 26-08-2025. The calibration report 24.1099010 was observed and was acceptable.		NCR02
A.7	Tests and inspections relevant to Ex m • Production documentation • Routine Verification	
Products incorporate pre-certified items that are included into the equipment. Certificates of pre-certified equipment are printed out and checked during quality checks.		P
A.10	Tests and inspections relevant to Ex n • Dielectric Strength • Ex nA PCB’s • Ex nA Terminals and Wiring • Ex nC Sealed devices • Ex nR Creepage and Dimensional • Ex nR Glands • Ex nR Shafts • Ex nR Test Equipment • Ex nR Routine Verification	
Products incorporate pre-certified items that are included into the equipment. Certificates of pre-certified equipment are printed out and checked during quality checks.		P
A.11	Tests and inspections relevant to Ex t • Casting • Enclosure Parts • Gaskets • Protection Devices • Cemented Parts • Ingress Protection • Routine Verification	
Refer to the comments about Ex e equipment.		P

4. ATEX Specific Requirements

ATEX Directive 2014/34/EU of 26th February 2014		Documents reference and/or comments	Verdict
Z.1	"Technical Documentation" A technical Dossier must be compiled and retained for 10 years after last sale. Ref Annex III, Module B, Cl 9. Ref Annex VII – Cl 6	There is adequate documented information for the technical dossier.	P
Z.2	Manufacturer document stating that the dossier will be made available to the importer / client in the EU in case the EU market surveillance requests for it. Ref Annex III, Module B, Cl 9. Ref Annex VII – Cl 6	This is provided by the DoC declaration	P
Z.3	Marking Label to include – • Manufacturers Name • Manufacturers Address • CE Marking (correct symbol) with correct NB • Model • Batch/Serial number • Year of construction • the specific marking of explosion protection Ex followed by the symbol of the equipment-group and category, • Where Equipment Group II, must contain G (Gas) and/or D (Dust). Ref Annex II , 1.0.5 Marking and Ref Annex VII – Cl 5.1	No products were available with the ATEX cert number applied	N/A
Z.4	DoC to be checked for correctness Ref Annex VII – Cl 5.2	A declaration of conformity was witnessed for and found to be acceptable.	P
Z.5	DoC to accompany every product Ref Annex VII – Cl 5.2	There was no production of ATEX products during the audit. Refer to document C_005 Section 7.4 which states that the "Technical documents (NTI) EU DoC as necessary" will be delivered to the customer with supplied product.	N/A
Z.6	CE marking – Correct Symbol Ref Annex VII – Cl 5.1	There was no production of ATEX products during the audit.	N/A
Z.7	User manual more formal – To include EHS requirements Ref Annex II, 1.0.6 Instructions.	There was no production of ATEX products during the audit.	N/A

ATEX Directive 2014/34/EU of 26th February 2014		Documents reference and/or comments	Verdict
Z.8	Language of User manual to where product is shipped too Chapter 2 – Article 8, Item 4.	The user manual "2000590000/04/04-2023" for a product certified under IECEx IBE 14.0013 was observed during the audit and was written in 7 different languages. It is noted that the user manual "2000590000/04/04-2023" has a typographical error for certificate "IECEx IBE 14.0013" writing it at "IECEx IEB 14.0013"	P OBS07
Z.9	Notification of approval to the manufacturer (QAN) Ref Annex VII – Cl 3.5	QAN is from DEKRA (NB 0344) DEKRA 12ATEXQ0147 "Weidmuller Interface GmbH, Klingenbergstrasse 26, Detmold" The QAN was valid at the time of the audit.	P

5. UKCA Specific Requirements

UK Government "guidance/ using-the-ukca-marking 2022-06" read with UKSI 2016:1107 and its amendments		Documents reference and/or comments	Verdict
Y.1	Manufacturer's procedure for: - monitoring the usage of the product in the market - responding to any safety risks identified - recording consumer complaints - informing distributors of any test results, investigations or consumer feedback that may present a safety risk - notification to UK Trading Standards service in case safety risks or consumer incidents are identified - responsibility to carry out any programme of corrective action or product recall.	Not in the scope of the audit	N/A
Y.2	accuracy, size and durability of the UKCA mark on the product	Not in the scope of the audit	N/A

UK Government "guidance/ using-the-ukca-marking 2022-06" read with UKSI 2016:1107 and its amendments		Documents reference and/or comments	Verdict
Y.3	Marking Label to include – • Manufacturers Name • Manufacturers Address • CE Marking (correct symbol) with correct NB (if required for ATEX) • Model • Batch/Serial number • Year of construction • the specific marking of explosion protection Ex followed by the symbol of the equipment-group and category, • Where Equipment Group II, must contain G (Gas) and/or D (Dust). • Where Equipment Group I, must contain M (Mines)	Not in the scope of the audit	N/A
Y.4	UKCA DoC to accompany every product containing: 1. Product name and type 2. Batch or serial number 3. Name and address of manufacturer / manufacturer's authorised representative. 4. Identification / brief description of actual product. 5. A statement that the manufacturer takes full responsibility for the product's compliance 6. A statement that the product conforms with the UK Product Safety legislation 7. References to the applicable UK designated standards. 8. Reference to the approved body (TUV UK) that carried out the conformity assessment activity (name, number and description of activity). 9. Signature of manufacturer (or authorised representative, where there is one) 10. Date of the declaration.	Not in the scope of the audit	N/A
Y.5	Notification of approval to the manufacturer (UKQAN) under UKSI 2016:1107 (as amended by UKSI 2019:696 with Schedule 3A, Part 2) that the quality system meets the requirements of "Conformity of Type based on Quality Assurance of the Production Process"	Not in the scope of the audit	N/A

6. Observations

Brief comments on issues where improvements may be implemented for the future

Observation #	Heading	Details
OBS01	Certificate validity	During the audit it was noted that the checking of the supporting Ex Components certificates listed on the equipment certificate is not documented.
OBS02	Ex Requirements	During the audit it was noted that documented consideration of the conditions of manufacture related to the certificate IECEx ITA 15.0017X was not able to be produced. The conditions of manufacture are requirements that the manufacturer is required to comply with in order that the produced item has all the required Ex properties.
OBS03	Supplier evaluations	It was observed during the audit that the evaluation of the calibration service “TR Calibration” was not available. This supplier is required to have an evaluation.
OBS04	Internal Audit checklists	It’s noted that the ISO/IEC 80079-34 is not listed in the Area Audit. While it’s noticed that Ex topics are raised, the internal audit scope should be reviewed to ensure all requirements are covered.
OBS05	Audit Schedule	It was noted that the audit schedule is not up to date and most audits have been performed up to date but the schedule is a couple of months behind.
OBS06	NCR Process	It was noted that the NCR BPIR 5240 that was entered into Mango did not have a direct and easy to identify link to the related SAP NCR 200932378. The recommendation is to mention the related NCR’s for easy cross referencing.
OBS07	Typographical error	It is noted that the user manual “2000590000/04/04-2023” has a typographical error for certificate “IECEx IBE 14.0013” writing it at “IECEx IEB 14.0013”

Annex A – Conditions of Manufacture for IECEx ITA 15.0017X-5

1. The required creepage distances and clearances as required by IEC 60079-14 must be observed for factory fitted wiring.
2. Conductors of sizes smaller than those given on the component certificates are not permitted. Where conductor sizes are permitted which are smaller than the rating of the terminal the manufacturer is to provide the user with instructions that state the lower current rating required.
3. Unused terminals shall be tightened by the end user in accordance with the instruction guide of the terminals.
4. All certified items shall be installed in accordance with their Conditions of Manufacture, Conditions of Use, Cross-Connection Guide and Installation Instructions.
5. No more than a single conductor may be connected to a single connection point in any terminal except where specifically allowed by the certificate.
6. Leads connected to the terminals shall be insulated for the appropriate voltage and this insulation shall extend to within 1 mm of the metal of the terminal throat.
7. Terminal Blocks made from PA66 shall not experience maximum operating temperatures above 80°C. For all other terminals, the maximum operating temperature in service shall not exceed 20K less than the maximum operating temperature given by the respective component certificate.
8. Terminals must be installed in a manner such that they can be easily inspected in service.
9. Ex i circuits shall be segregated from other circuits by a minimum of 50 mm.
10. The total dissipated power for terminals shall be calculated in accordance with IEC 60079-7:2017 . Annexe E, Clause E.2. Other items shall be considered when assessing the maximum power dissipation of the equipment.
11. The control station assemblies covered by this report incorporate separately certified items. It is the responsibility of the manufacturer to continually monitor the status of the certification associated with these items.
12. The manufacturer shall take all reasonable steps to ensure that the user/installer complies with the special conditions of manufacture associated with the range of control stations. The manufacturer shall also provide the user/installer with an appropriate copy of the certificate and user manual for each certified device that is fitted as part of the assembly.
13. Enclosures in the KTB range which are not listed in the table may be used, limited by the minimum and maximum dimensions of the range. Power dissipation for these enclosures must be calculated using the method used in the reference documents listed.
14. Internal earthing facility to be connected to the earth terminal blocks when installed.
15. Any method of calculating the power dissipation of the certified enclosures must be verified to not exceed the values listed the in tables in Appendix B of AU/ITA/ExTR16.0012/00 and Appendix C of AU/ExTC/ExTR20.0046/00. Where the certified enclosures do not appear in the tables or where the calculated power dissipation exceeds the values listed in the table, thermal control mechanisms shall be implemented. The thermal control shall ensure that the service and surface temperatures of all devices including the enclosure are not exceeded.
16. Components and equipment may specify specific voltage and current supply parameters and / or require protection from transient power disturbances. Electrical protection may be included with the equipment or an instruction to the user to provide the protection externally. Refer to the equipment description for clarity on related certificates.
17. A breathing / drain device shall be fitted when required by the component certificate for the apparatus to be installed in an environment with a pollution level not more than 2.
18. When fitted with cable transit devices listed under certificate IECEx NEM 12.0014X the assembly process shall not expose the transit devices to the effects of strain or pressure on the cables for at least 24 hours.
19. The enclosure shall have a warning fitted to the enclosure that is technically equivalent to "WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – WIPE WITH DAMP CLOTH" when fitted with the following:
    - "8007 Inspection window" certified under IECEx CML 17.0042U.
    - EXM Calotte and Series 4019 accessory certified under IECEx CML 19.0056U.
    - Touchscreens PP885R and PP886H certified under IECEx LC 15.0002U.
    - Touchscreen PP880R certified under IECEx LC 15.0005U
    - Wall- and coupler-socket type 8570/**-*** certified under IECEx PTB 05.0023.

- Flange Socket type 8572/15-***-* under IECEx PTB 16.0028U
- Flange Socket type 8570/**-***-* under IECEx PTB 19.0018U
- Plug type 8570/**-***-* under IECEx PTB 19.0019U
- Luminaire Controller Assembly and Occupancy Sensor, Models HZS-X12 and HZS-X40 certified under IECEx UL 19.0042U.

20. When fitted with the Fieldbus Barrier type R4D0-FB-IA* equipment certified under IECEx BVS 13.0119X the external of the enclosure is to carry the warning “WARNING – NON-INTRINSICALLY SAFE CIRCUITS PROTECTED BY INTERNAL IP30 COVER“
21. This report has assessed the equipment listed in the table “Permitted Certified Items”. Equipment which is not listed but is certified to the appropriate standards or later versions listed on page 1 of this report may be installed under the responsibility of the manufacturer. (Equipment with Ex Component certificate marked with a ‘U’ is not to be installed unless it is assessed and certified with this equipment).
22. Equipment marked only as associated apparatus and is not otherwise protected by another type of protection listed in IEC 60079-0 (Eg. Where the code is only [Ex ia Da] IIIC) is only permitted for use in explosive dust environments (EPL’s Db and Dc) when fully protected by the enclosure.
23. Batteries are not to be installed unless they have been suitably protected by one of the methods listed in IEC 60079-0.
24. The EPL shown on the marking label will be taken from the item of the assembly with the lowest EPL level.
25. All of the existing conditions of manufacture apply to explosive dust environments, especially the power dissipation calculations.
26. There is no restriction to the internally mounted equipment for dust only “Ex tb” assemblies in respect of electrical arcing hazards, however the effect on the temperature of the external surfaces of the enclosure exposed to dust shall be taken into account.
27. All equipment mounted internally for “Ex tb” equipment is to be mounted on the appropriate mounting arrangements and not on the side walls or lids of the enclosure.
28. The internal local ambient temperature must be considered when positioning devices to ensure that the installed equipment does not exceed their operating temperature limitations.
29. The external ambient temperature rating for the assembled equipment and T rating is to be calculated by considering the worst case operating/service temperature range of all of the parts which together form the equipment and the temperature rise due to power dissipation. The ambient temperature range shall be added to the marking label.
30. When intrinsically safe devices (‘ia’, ‘ib’ or ‘ic’) are mounted internally the output parameters, as shown on the relevant certificates, are to be marked on the outside of the enclosure. Alternatively information may be marked on the content label inside the enclosure if the marking label shows a notification that there are details inside. The content label shall have sufficient details to positively identify the relevant output parameters listed on the certificate of the devices.
31. The type of protection ‘op pr’ may be applied to the marking code when fitting optic fibre connectors which are suitably rated for the calculated internal ambient temperature and comply with the constructional requirements of IEC 61754-2, IEC 61754-4 or IEC 61754-20 and the tensile strength requirements of IEC 61300-2-6.
32. The operators Y2*, Y3*, Y4*, Y5*, Y6* and Y8 listed on certificate IECEx CML 19.0056U may be fitted only on equipment marked for Group IIA, Group IIB or Group III hazardous atmospheres. The operators Y0 and Y1 have not been assessed for use with this equipment.
33. When fitted with devices with certified batteries or fuses a warning will be placed on the enclosure which is technically equivalent with “WARNING - BATTERIES AND FUSES SHALL NOT BE REPLACED IN THE PRESENCE OF A HAZARDOUS ATMOSPHERE”.
34. Where enclosures are coupled together, the gland plate interface shall be used to join the enclosures. The coupling of the enclosures shall not compromise the ingress protection rating. All power shall be considered to be dissipated by the upper enclosure and condition of manufacture #17 shall apply.
35. The user/installer shall adhere to the specified torque requirements for the component.
36. Components certified under IECEx CML 19.0055U must not be mounted in the walls of the enclosure.
37. The manufacturer/installer shall ensure that conductors are suitably protected against undue stresses or damage at their termination points.
38. The effects of earthed devices on the earthing system shall be considered during installation.

39. Ex Components bearing a marking code that is not listed in the “Permitted marking code” column of the “Permitted certified items” table is not permitted to be used.
40. Enclosures that are fitted with fault current limited equipment shall bear a warning label stating the maximum allowable fault current.
41. The coated protective metallic collars listed on certificate IECEx PTB 13.0047U may only be fitted to metallic enclosures.
42. The enclosure shall have a warning fitted that is technically equivalent to “WARNING – WHEN THE PLUG IS NOT INSERTED, THE BAYONET RING OF THE PLUG AND THE HINGED COVER OF THE SOCKET MUST BE CLOSED AND SCREWED UP TO THE STOP.” when fitted with:
    - Wall- and coupler-socket type 8570/**-*** under IECEx PTB 05.0023.
    - Flange Socket type 8572/15-***-* under IECEx PTB 16.0028U.
    - Flange Socket type 8573/15-***-* under IECEx PTB 16.0030U.
    - Flange Socket type 8570/**-***-* under IECEx PTB 19.0018U.
    - Plug type 8570/**-***-* under IECEx PTB 19.0019X.
43. The enclosure shall have a warning fitted to the enclosure that is technically equivalent to “WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.” when fitted with drivers for Light-Emitting-Diode Arrays, Models: MU060H105AQ_MB, 60W and MU100H120AQ_MB, 100W certified under IECEx UL 19.0113U.
44. Entry devices shall maintain the ingress protection properties of the enclosure to which they are installed. Refer to the installation processes for entry devices.
45. Enclosures containing devices which feature plugs, sockets, or connectors shall bear a warning label stating: “WARNING – DO NOT SEPARATE CONNECTORS WHEN ENERGIZED.”
46. Multi-stranded wires shall be suitably terminated by use of lugs, ferrules, etc., to prevent potential adverse effects from loose strands.
47. Enclosures which feature external non-metallic materials that are adversely affected by exposure to UV light shall be installed in a low UV risk environment. The manufacturer shall ensure that the user is aware of the environmental requirements of the enclosure.
48. The operators Y2*, Y3*, Y4*, Y5*, Y6* and Y8 listed on certificate IECEx CML 19.0056U must be installed on the following components in accordance with the manufacturer’s instructions, when the enclosures are fitted with:
    - CZ0202 Series Explosion-proof Signal Lamp Modules IECEx CML 19.0052U.
    - CZ0201 Series Explosion-proof Switch Module IECEx CML 19.0053U.
    - CZ0212 Series Explosion-proof Signal Lamp with Button Module IECEx CML 19.0054U.
    - CZ0513 Series Explosion-proof Load Isolation Switch Module IECEx CML 19.0055U.
    - CZ0205 Series Explosion-proof Voltmeter and Ammeter Modules IECEx CML 19.0136U.
49. When components certified under IECEx LC 16.0005U are fitted, the components shall be restricted to the following model numbers and the end user / installer shall ensure that the battery terminals are disabled:
    - 415U-2-C-EX
    - 415U-E-C-EX
50. Metallic labels shall not be applied to non-metallic or powder coated enclosures.
51. The manufacturer shall apply the relevant temperature range on the certification label depending on gaskets fitted
52. When the Meech Cabinet Cooler certified under IECEx BAS 16.0087X is installed in this equipment, the following conditions apply:
    - The certification of the enclosure and its installed components / equipment shall not be compromised by the installation or operation of this device.
    - The equipment shall have a maximum localized ambient of +55 °C, and not have a temperature class lower than T4.
    - Consideration shall be given to the guidance given in PD IEC/TS 60079-32 ‘Explosive atmospheres - Electrostatic hazards