



(1) **EU-TYPE EXAMINATION CERTIFICATE**

(2) Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres –
Directive 2014/34/EU

(3) EU-Type Examination Certificate Number:

SIQ 18 ATEX 018 X

Issue: 1



(4) Product: Ammeter, type: 8402/6

(5) Manufacturer: R. STAHL Schaltgeräte GmbH

(6) Address: Am Bahnhof 30, 74638 Waldenburg, Germany

(7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) SIQ Ljubljana, Notified body number 1304 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 to the Directive. Certification body is not accredited for notification purposes.

The examination and test results are recorded in the confidential test report TEx004/23.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 + AC:2020-02

EN 60079-11:2012

Where additional criteria beyond those given here have been used, they are listed at item (18) in the schedule to this certificate.

(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 EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance with the Directive 2014/34/EU. 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 2 G Ex ib IIC T4...T6 Gb

Certification body

Ljubljana, 10 February 2023

Bojan Pečavar



(13)

SCHEDULE

(14) **EU-Type Examination Certificate Number SIQ 18 ATEX 018 X, Issue: 1**

(15) Description of Product

Ammeter, type: 8402/6, is used for measurement and display of current values in hazardous area. It is intended to be used in intrinsically safe circuit with the standardized signals from 0 to 20 mA. Moving coil is used as measuring system.

Technical data

Ambient temperature range:

$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +70^{\circ}\text{C}$... for temperature class T4

$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +55^{\circ}\text{C}$... for temperature class T5

$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +40^{\circ}\text{C}$... for temperature class T6

Ammeter	Type: 8402/6
Measuring range	20 mA d.c., 0...20 mA 20 mA d.c., 4...20 mA
Intrinsically safe parameters: - Nominal current - Maximum short circuit current - Internal resistance - Internal inductance - Internal capacitance	$I_n = 20 \text{ mA}$ $I_i = 160 \text{ mA}$ $R_i = 3 \Omega$ $L_i = 90 \mu\text{H}$ $C_i = 0$
Housing – connection and terminals holder	Polyamide or Polycarbonate
Ingress protection with terminal cover	IP20
Movement	Moving coil
Mounting	TS35 mounting rail
Rated insulation voltage - Built in additional housing IP20 - Built as independent device	690 V r.m.s. 300 V r.m.s.
Connection - wiring	Solid: $0.34 \text{ mm}^2 \dots 6 \text{ mm}^2$ (AWG 22 ... 10) Finely stranded or stranded: $0.34 \text{ mm}^2 \dots 4 \text{ mm}^2$ (AWG 22 ... 12)
Terminal clamp tightening torque	1.2 Nm

(16) Test Report

TEx004/23 dated 10 February 2023.



(17) Specific Conditions of Use

- Ammeter is suitable for following temperature classes within corresponding ambient temperature ranges:
 - temperature class T4 ... $-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +70^{\circ}\text{C}$
 - temperature class T5 ... $-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +55^{\circ}\text{C}$
 - temperature class T6 ... $-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +40^{\circ}\text{C}$
- Ammeter shall only be cleaned with damp or electrostatically dissipative cloth.

(18) Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements has been assured by compliance with the requirements of the standards listed under item (9).

(19) Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
* Certification Operating Instruction, Ammeters 8406/6 (BQ0407) and 8407/6 (BQ0307), R. Stahl Schaltgeräte GmbH	8406 0 000 007 0 and 8407 0 000 006 0	Issue 2.0	9. 5. 2022
* Test Report, PU6 Potting Material D0206-00 for 840* gauges, Temperature cycling test, Tensile test, Hardness test (Shore A), Microsection inspection, R. STAHL Schaltgeräte GmbH	UB12252	/	15. 12. 2021
Analogue instruments with moving coil BQ (8402/6, 8406/6, 8407/6), Implementation of ATEX requirements, Iskra d.d.	/	Ver 1.00	4. 1. 2018
Technical drawing EX BQ0307, GENERAL ASSEMBLY BQ0307, Iskra d.d.	22.025.500.EX, L1+	V2	24. 8. 2017
Technical drawing EX BQ0307, EXPLODED VIEW – DRAWING BQ0307, Iskra d.d.	22.025.500.EX, L2+	V2	24. 8. 2017
Technical drawing EX BQ0307, MARKINGS BQ 0307, Iskra d.d.	22.025.500.EX, L3	V4	4. 1. 2018
Technical drawing EX ORGAN GIBLJIVI, BQ0307EX, Iskra d.d.	22.804.521, L1	V1	7. 12. 2017
Technical drawing EX DNO, FQ0307EX, Iskra d.d.	22.710.123, L1	V1	25. 5. 2017
Technical drawing EX ZASCITA KONTAKTA, FQ0307EX, Iskra d.d.	22.710.005, L1	V1	26. 5. 2017
Technical drawing EX PODALJSEK Q72 RAIL, FQ0307EX, Iskra d.d.	22.710.004, L1	V3	25. 1. 2017
Technical drawing EX POKROV KONTAKTA, FQ0307EX, Iskra d.d.	22.710.011, L1	V1	26. 5. 2017
Technical drawing EX KONTAKT Q72 RAIL, FQ0307EX, Iskra d.d.	22.710.006, L1	V3	5. 10. 2016



Title:	Drawing No.:	Rev. Level:	Date:
Technical drawing EX SPONKA, KMPL, Iskra d.d.	37.900.399, List 1	10	20. 6. 2017
Technical drawing EX VIJAK M4, BI, Iskra d.d.	37.300.811, List 1	3	20. 6. 2017
Technical drawing EX PODLOŽKA 4B DIN127, FQ0307EX, Iskra d.d.	91.012.596, L1	V1	10. 7. 2017
Technical drawing EX KONTAKT M4A, FQ0307EX, Iskra d.d.	22.710.034, L1	V2	27. 6. 2016

*Note: An * is included before the title of documents that are new or revised.*

(20) Consolidated Certificates

This certificate is a consolidated certificate and reflects the latest status of the certification, including the following:

- Original EU-Type-Examination Certificate No. SIQ 18 ATEX 018 X, Issue 0.
- Issue 1: New editions of standards were considered, and minimum service temperature was decreased from -40°C to -55°C.