



EU-TYPE EXAMINATION CERTIFICATE

Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

Certificate Number: **Sira13ATEX2026X** Issue: **5**

Equipment: **Remote Communication Interface RCI9H2**

Applicant: **Neles Finland Oy**

Address: Vanha Porvoontie 229
FI 01380 Vantaa
Finland

This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

CSA Group Netherlands B.V., Notified Body Number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012

EN 60079-11:2012

EN 60079-26:2007

If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

The marking of the equipment shall include the following:



II (1)G

[Ex ia Ga] IIC

Ta = -20°C to +60°C

Project Number 80038718

Signed: J A May

Title: Director of Operations

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CSA Group Netherlands B.V.
Utrechtseweg 310,
6812 AR, Arnhem,
Netherlands



SCHEDULE

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13 DESCRIPTION OF EQUIPMENT

The RCI9H2 is a Remote Communication Interface unit which limits the transfer of energy from the Safe Area into the Hazardous Area. It is associated electrical equipment designed to provide an intrinsically safe output to equipment such as the ValvGuard located in zone 0 hazardous area.

The RCI9H2 comprises electronic circuit mounted on a printed circuit board which is housed in a plastic enclosure designed to be mounted on a rail. External electrical connections to the safe are made at six sets of (white) terminals and external connections to the hazardous area are made at a set of (blue) terminals.

At the safe area side terminals POWER SUPPLY, SAFETY SIGNAL, TESTING STATUS, ALARM STATUS, HART AND PST START

$$U_m = 253V$$

At hazardous area side terminals SIGNAL TO VG

$$U_o = 24.5V \quad I_o = 93.6mA \quad P_o = 595mW \quad C_o = 0.117\mu F \quad L_o = 4.29mH$$

Variation 1 - This variation introduced the following changes:

- It was recognised that electrical components, circuits and the circuit board layout were changed.
- An EMC cap was allowed to be placed over each transformer.

Variation 2 - This variation introduced the following change:

- The company name was changed from Metso Automation Oy to Metso Flow Control Oy.

Variation 3 - This variation introduced the following change:

- The electrical circuits and PCB layout were changed; this modification does not affect the explosion safety.

Variation 4 - This variation introduced the following change:

- To permit alternative circuit component values.

Variation 5 - This variation introduced the following change:

- Changes to the application name.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	03 May 2013	R29001A/00	The release of the prime certificate.
1	04 March 2015	R70004824A	The introduction of Variation 1.
2	23 March 2015	R70027359A	The introduction of Variation 2.
3	01 April 2015	R70026385A	The introduction of Variation 3.



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Issue	Date	Report no.	Comment
4	15 June 2017	R70137503A	This Issue covers the following changes: • EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. <i>(In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</i> • The introduction of Variation 4.
5	15 October 2019	0883	Transfer of certificate Sira13ATEX2026X from Sira Certification Service to CSA Group Netherlands B.V.
6	21 April 2020	R80038718A	The introduction of Variation 5.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

- 15.1 The quoted entity parameters of Co and Lo are applicable for the distributed capacitance and inductance in cable. Where there is circuit capacitance or inductance in the connected equipment (represented by Ci and Li respectively), then these values shall not exceed 50% of the quoted Co and Lo.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

Certificate Annexe



Certificate Number: Sira 13ATEX2026

Equipment: Remote Communication Interface RCI9H2

Applicant: Neles Finland Oy

Issue 0

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
F38333	1 of 1	0.0	06 Mar 13	Housing Top RCI9H2_Sira
F38334	1 of 1	0.0	06 Mar 13	Housing Bottom RCI9H2
F41524	1 of 1	0.1	06 Mar 13	RCI9H2 Top Housing ID Plate_Sira
F41525	1 of 1	0.3	06 Mar 13	RCI9H2 Bottom Housing ID Plate_Sira
F43128	1 of 1	0.0	06 Mar 13	RCI9H2 Bottom Housing S/N Stiker_Sira
F38335	1 of 1	0.0	06 Mar 13	Clamp RCI9H2_Sira
F38336	1 of 1	0.0	06 Mar 13	Protection cover RCI9H2_Sira
SCH90202	1 to 7	D,6.0	06 Mar 13	RCI2.0 Schematic
RCI9H2	1 to 7	D,7.0	06 Mar 13	Parts List – RCI9H2 Board
PCB90202	1 to 16	D,1.0	06 Mar 13	Printed Circuit Board RCI2.0
F39872	1 & 2	0.2	06 Mar 13	RCI9H2 Hart Transformer Wire Diagram
F39576	1 & 2	0.3	06 Mar 13	RCI9H2 Safety Transformer Wire Diagram
F40994	1 of 1	0.0	06 Mar 13	Bobbin RCI9H2 – Hart & Safety_Sira
F40995	1 of 1	0.0	06 Mar 13	Bobbin Base RCI9H2 – Hart & Safety_Sira
F40996	1 of 1	0.0	06 Mar 13	Transformer Cap – RCI9H2_Sira
F40997	1 to 4	0.0	06 Mar 13	Transformer Assembly RCI9H2 – Hart & Safety

Issue 1

Drawing no.	Sheets	Ver, Rev	Date (Sira stamp)	Title
SCH90202	1 to 7	I, 1.0	12 Feb 15	RCI2.0 Schematic
F39576	1 & 2	F, 1.0	12 Feb 15	RCI9H2 Safety 16mA Transformer wire diagram
F39577	1 & 2	F, 1.0	12 Feb 15	RCI9H2 Safety 4mA & SMPS Transformer wire diagram
F39872	1 & 2	F, 0.3	12 Feb 15	RCI9H2 HART Transformer wire diagram
F40091	1 of 1	1.0, 0.2	12 Feb 15	Bobbin
F40518	1 of 1	1.0, 0.2	12 Feb 15	Bobbin base
F40092	1 of 1	0.0, 0.1	12 Feb 15	Transformer cap
F57790	1 to 2	1.0, 0.4	12 Feb 15	Transformer EMC shield
F40519	1 to 6	1.0, 0.3	12 Feb 15	Transformer assembly
PCB90202	1 to 10	I, 2.0	12 Feb 15	Printed Circuit Board RCI 2.0 track layouts
PCB90202	1 of 1	I, 2.0	12 Feb 15	Printed Circuit Board RCI 2.0 Drill details
RCI9H2	1 to 4	I, 1.0	12 Feb 15	Parts list - RCI9H2/RCI2- board

Issue 2

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
F41525	1 of 1	0.5	20 Mar 15	RCI9H2 Bottom Housing ID Plate

Issue 3

Drawing no.	Sheets	Ver, Rev	Date (Sira stamp)	Title
SCH90202	1 to 7	K, 1.0	30 Mar 15	RCI2.0 Schematic
PCB90202	1 to 12	K, 2.0	30 Mar 15	Printed Circuit Board RCI 2.0 track layouts
PCB90202	1 of 1	K, 2.0	30 Mar 15	Printed Circuit Board RCI 2.0 Drill details
RCI9H2	1 to 5	K, 1.0	30 Mar 15	Parts list/BOM - RCI9H2/RCI2- board

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 Netherlands

Certificate Annexe



Certificate Number: Sira 13ATEX2026

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Applicant: Neles Finland Oy

Issue 4

Drawing	Sheets	Ver, Rev.	Date (Sira stamp)	Title
SCH90202	1 to 7	L, 1	02 Jun 17	Schematic
RCI9H2	1 to 4	L, 1	02 Jun 17	Parts list RCI9H2/RCI2 board BOM

Issue 5. No new drawings were introduced

Issue 6

Drawing	Sheets	Ver, Rev.	Date (Sira stamp)	Title
F41525	1 to 1	0.8	15 Apr 20	RCI9H2 bottom housing ID PLATE_SIRA

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