Certificates

Device platform RAPTOR

ET-208

SERIES 200 Operator Interfaces

THE STRONGEST LINK.

HW-Rev. ET-208-TX-*-DC:	**01.00.15**
HW-Rev. ET-208-TX-*-AC:	**01.00.25**
HW-Rev. ET-208-TX-W00-DC-GLN:	**01.00.32**
HW-Rev. ET-208-TX-W00-AC-GLN:	**01.00.40**

Certificates version:	**01.00.14**
Issue:	**19.01.2024**

Disclaimer

Publisher and copyright holder:

R. STAHL HMI Systems GmbH
Adolf-Grimme-Allee 8
D 50829 Köln

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E-mail:	(Sales Support)	sales.dehm@r-stahl.com	
	(Technical Support)	support.dehm@r-stahl.com	

Table of contents

1 Preface

NOTICE	This document contains all valid certificates for the HMI devices of the SERIES 200 - device platform RAPTOR. All certificates are also available on R. STAHL's website and on the CDs / DVDs / USB sticks included in the delivery and a copy can also be ordered from R. STAHL HMI Systems GmbH.

2 ATEX EC type examination certificate

Translation

(1) EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) No. of EC-Type Examination Certificate: **BVS 15 ATEX E 042 X**

(4) Equipment: **Operator Terminal type ET-208**

(5) Manufacturer: **R. STAHL HMI Systems GmbH**

(6) Address: **Im Gewerbegebiet Pesch 14, 50767 Köln, Germany**

(7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.

(8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment 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 atmospheres, given in Annex II to the Directive. The examination and test results are recorded in the Test and Assessment Report BVS PP 15.2075 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2012 + A11:2013	**General requirements**
IEC 60079-5:2015	**Powder filling "p"**
EN 60079-7:2007	**Increased Safety "e"**
EN 60079-11:2012	**Intrinsic Safety "i"**
EN 60079-31:2009	**Protection by Enclosure "t"**

(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 appendix to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:

II 2G Ex e ib q [ib] IIC T4 Gb
II 2D Ex tb ib [ib] IIIA T115°C Db

DEKRA EXAM GmbH
Bochum, dated 2015-04-22

Signed: Dr. Eickhoff
Certification body

Signed: Leiendecker
Special services unit

DEKRA EXAM GmbH, Dinnendahlstrasse 9, 44809 Bochum, Germany,
telephone +49.234.3696-105, Fax +49.234.3696-110, zs-exam@dekra.com

(13) Appendix to

(14) **EC-Type Examination Certificate**
BVS 15 ATEX E 042 X

(15) 15.1 Subject and type

Operator Terminal type ET-208-TX-W00-**-GL
└ AC supply
DC supply

15.2 Description

The Operator Terminals type ET-208-TX-W00-**-GL serve as human machine interface in areas requiring EPL Gb or Db.
The terminals consist of a metallic enclosure with a glass panel integrated in its front cover. Behind this glass panel there is a display with touch-screen.
The enclosure is carried out in type of protection „q" respective „tb" and contains a power supply module, a CPU-module as well as the display. The touch-screen is intrinsically safe, level of protection Ex ib.

The terminals are supplied via terminals which are located in two separate terminal boxes on the back side of the enclosure. The terminal box in type of protection intrinsic safety contains an intrinsically safe USB interface and an intrinsically safe interface for connection to an external keyboard. The second terminal box is in type of protection „e" respective „tb" and serves to connect the supply circuit as well as the
non-intrinsically safe data circuits.

A heating within the enclosure in type of protection „q" resp. "tb" assures functionality if the device is used in temperatures from -40 °C up to -10 °C.

The terminal can also be used in explosive dust atmospheres requiring equipment group IIIB or IIIC. Therefor it has to be integrated in the wall of an enclosure fulfilling all applicable requirements of IEC 60079-0 and IEC 60079-31. A minimum degree of protection of IP65 according to IEC 60529 shall be ensured.

The Operator Terminal can also be integrated in a wall of an enclosure in type of protection Increased Safety "e".

Only suitable cable entries and blind plugs are used.

15.3 Parameters

15.3.1 Non-Intrinsically safe circuits

15.3.1.1 Power supply input, connection via terminal block X1

for type ET-208-TX-W00-AC-GL:
Terminals X1 (L, N)

Rated voltage voltage		AC	115 / 230	V
Rated current			≤ 2	A
Rated power				
Heater off			18	VA
Heater on			36	VA
Max. input voltage	U_m	AC	253	V

for type ET-208-TX-W00-DC-GL:
Terminals X1 (+, -)

Rated voltage voltage		DC	24	V
Rated current			≤ 1.6	A
Rated power				
Heater off			12	W
Heater on			22	W
Max. input voltage	U_m	AC	253	V

DEKRA EXAM GmbH, Dinnendahlstrasse 9, 44809 Bochum, Germany,
telephone +49.234.3696-105, Fax +49.234.3696-110, zs-exam@dekra.com

15.4.1.2 Com1 RS-422 interface
Connection via terminal block X2, terminals X2 (1, 2, 3, 4)

Rated voltage voltage		5	V
Max. input voltage	U_m	30	V

15.3.1.3 Com2 RS-422 interface
Connection via terminal block X3, terminals X3 (1, 2, 3, 4)

Rated voltage voltage		5	V
Max. input voltage	U_m	30	V

15.3.1.4 Ethernet TP interface
Connection via terminal block X5, terminals X5 (1, 2, 3, 4)

Rated voltage voltage		5	V
Max. input voltage	U_m	30	V

15.3.1.5 USB interface
Connection via terminal block X4, terminals X4 (1, 2, 3, 4)

Rated voltage voltage		5	V
Max. input voltage	U_m	30	V

Terminal X4.5 shall not be connected inside explosive areas!

15.3.2 Intrinsically safe circuits level of protection Ex ib IIC resp. Ex ib IIIA
15.3.2.1 Intrinsically safe USB circuit
Connection via terminal block X7 or USB-socket X8. X7 and X8 shall not be used at the same time.

Terminal block X7:
Terminals 1(VBUS), 2(D-), 3(D+) and 4(GND)
Terminal 5 (shield) is intended for the connection of a cable shield.

Max. output voltage	U_o	DC	5.45	V
Max. output current	I_o		755	mA
Max. output power	P_o		2.5	W

Maximum permissible (combined) values for external capacitance C_o and external inductance L_o in accordance with the following tables:

for group IIC:

L_o [µH]	4.8	1.8
C_o [µF]	4.7	27.7

for group IIB resp. group III:

L_o [µH]	49.8	19.8	9.8
C_o [µF]	20.7	51.7	107.7

DEKRA EXAM GmbH, Dinnendahlstrasse 9, 44809 Bochum, Germany,
telephone +49.234.3696-105, Fax +49.234.3696-110, zs-exam@dekra.com

15.3.2.2 Intrinsically safe interface for the connection of a keyboard
Connection via terminal block X9, terminals 1...12 and 13 (GND)

Max. output voltage	U_o	DC	4.96	V
Max. output current	I_o		60	mA
Linear output characteristics				
Max. output power	P_o		75	mW

Maximum permissible (combined) values for external capacitance C_o and external inductance L_o in accordance with the following tables:

for group IIC:

L_o [µH]	100	50	20
C_o [µF]	6.7	8.5	11.9

for group IIB resp. group III:

L_o [µH]	100	50	20
C_o [µF]	42	49	95

15.3.3 Ambient temperature range Ta -40 °C...+65 °C
temperature class T4
max. surface temperature with thermofuse limited to 115 °C

(16) Test and Assessment Report

BVS PP 15.2075 EG as of 2015-04-22

(17) Special conditions for safe use

17.1 The intrinsically safe circuits are connected to earth. Along the intrinsically safe circuits, potential equalization must exist.
Maximum overvoltage category II according to IEC 60664- 1 is permitted for the non-intrinsically safe circuits.

17.2 For use in explosive gas atmospheres the terminal may be built in the wall of an enclosure fulfilling all relevant clauses of IEC 60079-0.
The terminal itself fulfills all mechanical requirements according to IEC 60079-0 and the degrees of protection IP65 according to IEC 60529 if mounted according to the user`s manual.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH
44809 Bochum, 2015-04-22
BVS-Hk/Ma A 20130842

Certification body

Special services unit

DEKRA EXAM GmbH, Dinnendahlstrasse 9, 44809 Bochum, Germany,
telephone +49.234.3696-105, Fax +49.234.3696-110, zs-exam@dekra.com

3 IECEx certificate

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx BVS 15.0039X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2015-04-28)
Date of Issue:	2022-02-03		
Applicant:	**R. STAHL HMI Systems GmbH** Adolf-Grimme-Allee 8 50829 Köln **Germany**		
Equipment:	**Operator Terminal type ET-208**		
Optional accessory:			
Type of Protection:	**Equipment protection by intrinsic safety "i", Equipment dust ignition protection by enclosure "t", Equipment protection by powder filling "q", Equipment protection by increased safety "e"**		
Marking:	Ex eb ib q [ib] IIC T4 Gb Ex tb ib [ib] IIIA T115°C Db		

Approved for issue on behalf of the IECEx Certification Body: **Dr Franz Eickhoff**

Position: **Lead Auditor and officially recognised expert**

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 15.0039X** Page 2 of 4

Date of issue: 2022-02-03 Issue No: 1

Manufacturer: **R. STAHL HMI Systems GmbH**
Adolf-Grimme-Allee 8
50829 Köln
Germany

Manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-11:2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31:2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-5:2015 Edition:4.0	Explosive atmospheres –Part 5: Equipment protection by powder filling “q”
IEC 60079-7:2017 Edition:5.1	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/BVS/ExTR15.0036/01

Quality Assessment Report:

DE/BVS/QAR06.0007/13

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 15.0039X** Page 3 of 4

Date of issue: 2022-02-03 Issue No: 1

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Subject and type

See Annex

Description

The Operator Terminals type ET-208-TX-W00-**-GL serve as human machine interface in areas requiring EPL Gb or Db.

The Terminals consist of a metallic enclosure with a glass panel integrated in its front cover. Behind this glass panel there is a display with touch-screen.
The enclosure is carried out in type of protection „q" respective „tb" and contains a power supply module, a CPU-module as well as the display. The touch-screen is intrinsically safe, level of protection Ex ib.The Operator Terminals are supplied via terminals which are located in two separate terminal boxes on the back side of the enclosure. The first terminal box contains an intrinsically safe USB interface and an intrinsically safe interface for the connection of an external keyboard. The second terminal box is in type of protection „eb" respective „tb" and serves to connect the supply circuit as well as the non-intrinsically safe data circuits. A heating within the enclosure in type of protection „q" resp. "tb" assures functionality if the device is used in temperatures from -40 °C up to -10 °C.The terminal can also be used in explosive dust atmospheres requiring equipment Group IIIB or IIIC. Therefor it has to be integrated in the wall of an enclosure fulfilling all applicable requirements of IEC 60079-0 and IEC 60079-31. A minimum degree of protection of IP65 according to IEC 60529 shall be ensured. The Operator Terminal can also be integrated in a wall of an enclosure in type of protection Increased Safety "eb". Only suitable cable entries and blind plugs are used.

Parameters

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The intrinsically safe circuits are connected to earth. Along the intrinsically safe circuits, potential equalization must exist. Maximum overvoltage category II according to IEC 60664- 1 is permitted for the non-intrinsically safe circuits.
2. For use in explosive gas atmospheres the terminal may be built in the wall of an enclosure fulfilling all relevant clauses of IEC 60079-0. The terminal itself fulfills all mechanical requirements according to IEC 60079-0 and the degrees of protection IP65 according to IEC 60529 if mounted according to the user`s manual.

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 15.0039X** Page 4 of 4

Date of issue: 2022-02-03 Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Updating to the current versions of IEC 60079-0 and IEC 60079-7

Modification of marking: "eb" instead of "e"

Change of applicants address

Annex:

BVS_15_0039x_RStahl_Annex1_1.pdf

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 15.0039 X Issue No. 1**
Annex
Page 1 of 3

Subject and type

Operator Terminal type ET-208-TX-W00-**-GL
- ** = AC supply
- ** = DC supply

Parameters

Non-Intrinsically safe circuits

1 Power supply input, Connection via terminal block X1

for type ET-208-TX-W00-AC-GL:
Terminals X1 (L, N)

Rated voltage		AC	115 / 230	V
Rated current			≤ 2	A
Rated power				
Heater off			18	VA
Heater on			36	VA
Max. input voltage	U_m	AC	253	V

for type ET-208-TX-W00-DC-GL:
Terminals X1 (+, -)

Rated voltage		DC	24	V
Rated current			≤ 1.6	A
Rated power				
Heater off			12	W
Heater on			22	W
Max. input voltage	U_m	AC	253	V

IECEx Certificate of Conformity

DEKRA

Certificate No.: **IECEx BVS 15.0039 X Issue No. 1**
Annex
Page 2 of 3

2. Com1 RS-422 interface
Connection via terminal block X2, terminals X2 (1, 2, 3, 4)

Rated voltage		5	V
Max. input voltage	U_m	30	V

3. Com2 RS-422 interface
Connection via terminal block X3, terminals X3 (1, 2, 3, 4)

Rated voltage		5	V
Max. input voltage	U_m	30	V

4. Ethernet TP interface
Connection via terminal block X5, terminals X5 (1, 2, 3, 4)

Rated voltage		5	V
Max. input voltage	U_m	30	V

5. USB interface
Connection via terminal block X4, terminals X4 (1, 2, 3, 4)

Rated voltage		5	V
Max. input voltage	U_m	30	V

Terminal X4.5 shall not be connected inside explosive areas!

Intrinsically safe circuits level of protection Ex ib IIC resp. Ex ib IIIA

1. Intrinsically safe USB circuit
Connection via terminal block X7 or USB-socket X8. X7 and X8 shall not be used at the same time.

Terminal block X7:
Terminals 1(VBUS), 2(D-), 3(D+) and 4(GND)
Terminal 5 (shield) is intended for the connection of a cable shield.

Max. output voltage	U_o	DC	5.45	V
Max. output current	I_o		755	mA
Max. output power	P_o		2.5	W

Maximum permissible (combined) values for external capacitance C_o and external inductance L_o in accordance with the following tables:

for Group IIC:

L_o [µH]	4.8	1.8
C_o [µF]	4.7	27.7

for Group IIB resp. Group III:

L_o [µH]	49.8	19.8	9.8
C_o [µF]	20.7	51.7	107.7

IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 15.0039 X Issue No. 1**
Annex
Page 3 of 3

2. Intrinsically safe interface for the connection of a keyboard
Connection via terminal block X9, terminals 1…12 and 13 (GND)

Max. output voltage	U_o	DC	4.96	V
Max. output current	I_o		60	mA
Linear output characteristics				
Max. output power	P_o		75	mW

Maximum permissible (combined) values for external capacitance C_o and external inductance L_o in accordance with the following tables:

for Group IIC:

L_o [µH]	100	50	20
C_o [µF]	6.7	8.5	11.9

for Group IIB resp. Group III:

L_o [µH]	100	50	20
C_o [µF]	42	49	95

Ambient temperature range	T_a	-40 °C…+65 °C
Temperature class		T4
Max. surface temperature with thermofuse limited to		115 °C

4 Indian certification

4.1 PESO certificate

Government of India
Ministry of Commerce & Industry
Petroleum & Explosives Safety Organisation (PESO)
5th Floor, A-Block, CGO Complex, Seminary Hills,
Nagpur - 440006

E-mail : explosives@explosives.gov.in
Phone/Fax No : 0712 -2510248, Fax-2510577

Approval No : A/P/HQ/TN/104/6230 (P541910) Dated : 11/08/2022

To,

M/s. R. STAHL HMI SYSTEMS GmbH,
Adolf-Grimme-Allee 6,Köln
50829
GERMANY

Sub : Approval of Intrinsically Safe, Sand Filled, Increased Safety Type Electrical Equipments under Petroleum Rules 2002. under Petroleum Rules 2002- Regarding.

Sir(s),

Please refer to your letter No. OIN1110266 dated 28/07/2022 on the subject.

The following Ex electrical equipment(s) manufactured by you according to IEC 60079-0 : 2017, IEC 60079-11 : 2011, IEC 60079-5 : 2015, IEC 60079-7 : 2017, standards and covered under DEKRA Testing and Certification GmbH Test reports mentioned below is/are approved for use in Zone 1 of Gas IIC hazardous areas coming under the the Petroleum Rules, 2002 administered by this Organization.

Sr. No	Description	Safety Protection	Equipment reference Number	Test Agency			Drawing no
				Name	Certificate No.	Certificate Date	
1	Operator Terminal type ET-208	Ex eb ib q [ib] IIC T4 Gb	P541910/1	DEKRA Testing and Certification GmbH	IECEx BVS 15.0039X Issue No 1	03/02/2022	13100004
2	Keyboard with pointing device Type KB2-Z1-...	Ex ia IIC T4 Gb	P541910/2	DEKRA Testing and Certification GmbH	IECEx BVS 20.0065X Issue No 0	19/10/2020	10591300
3	Keyboard with pointing device Type KB2-Z1-...	Ex ib IIC T4 Gb	P541910/3	DEKRA Testing and Certification GmbH	IECEx BVS 20.0065X Issue No 0	19/10/2020	10591300

This Approval is granted subject to observance of the following conditions:-

1)The design and construction of the equipment shall be strictly in accordance with description, condition and drawings as mentioned in the DEKRA Testing and Certification GmbH Test Reports referred to above.

2)The equipment shall be used only with approved type of accessories and associated apparatus.

3)Each equipment shall be marked either by raised lettering cast integrally or by plate attached permanently to the main structure to indicate conspicuously:-
(a) Name of the manufacturer
(b) Name and number by which the equipment is identified.
(c) Number & date of the test report of the DEKRA Testing and Certification GmbH applicable to the equipment.
(d) Equipment reference number of this letter by which use of apparatus is approved.
(e) Protection level.

4) A certificate to the effect that the equipment has been manufactured strictly in accordance with the drawing referred to in the DEKRA Testing and Certification GmbH Test report and is identical with the one tested and certified at DEKRA Testing and Certification GmbH shall be furnished with each equipment.
5) The customer shall be supplied with a copy of this letter, an extract of the conditions and maintenence schedule, if any, recommended by DEKRA Testing and Certification GmbH in their test reports and copy of instructions booklet detailing operation & maintenance of the equipment so as to maintain its Flame Proof characterestics.
6) The After sales service and maintanance of subject equipment shall be looked after by your representative R. STAHL PRIVATE LIMITED, Plot No.5, Malrosapuram Main Road

Conditions of the Approval:-
The approval for above equipment is subject to validity of IECEx Quality Assessment Report No. DE/BVS/QAR06.0007.

This approval also covers the permissible variations as approved under the DEKRA Testing and Certification GmbH test reports referred above. This approval is liable to be cancelled if any of the conditions of the approval is violated or not complied with . The approval may also be amended or withdrawn at any time, if considered necessary in the interest of safety.

The field performance report from actual users/your customers of the subject equipment may please be collected and furnished to this office for verification and record on annual basis.
The Approval is Valid upto 31/12/2026

Yours faithfully,

(A.B. Tamgadge)
Dy. Chief Controller of Explosives
For Chief Controller of Explosives
Nagpur

Copy to :
1. Jt. Chief Controller of Explosives, South Circle Office, CHENNAI
2. R. STAHL PRIVATE LIMITED,Plot No.5, Malrosapuram Main Road

for Chief Controller of Explosives
Nagpur

(For more information regarding status,fees and other details please visit our website http://peso.gov.in)

This is System Generated document. Signature is not required.

Digitally signed by A B TAMGADGE
Reason: Approval No. : A/P/HQ/TN/104/6230
Location:Nagpur [P541910]
Date:2022.08.11 05:58:25 +05:30

4.2 BIS certificate

भारतीय मानक ब्यूरो
(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)
BUREAU OF INDIAN STANDARDS
(Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India)

मानक : पथप्रदर्शक :

मानक भवन, 9 बहादुर शाह जफ़र मार्ग, नई दिल्ली – 110002
Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi – 110002
दूरभाष / Phone: +91-11-23230856/2323010131/23233375/23239402
ई-मेल / E-mail: registration@bis.gov.in
वेबसाईट / Website: https://bis.gov.in/, https://www.crsbis.in/BIS/

Our Ref: REGISTRATION /CRS-2021-4525/R-41201782

Dated: 2023-07-31 10:17:29

RENEWAL ID : 21468

Subject : RENEWAL OF LICENCE R-41201782 AS PER IS 13252(Part 1):2010/ IEC 60950-1 : 2005

R.Stahl Hmi Systems Gmbh
ADOLF-GRIMME-ALLEE 8, 50829 COLOGNE
COLOGNE, Germany, 50829

Dear Sir/Madam,

With reference to your online application dated 31-07-2023 for renewal of the above mentioned licence; this is to inform you that the same has been renewed from **08-09-2023** to **07-09-2025**.

It may be noted that the said licence granted under clause (b) of sub section (2) of section 13 of the Act shall *expire* at the end of the period for which it is granted unless renewed or its renewal is deferred. You are, therefore, requested to apply for next renewal to BIS within three months before the expiration of the licence.

Thanking you.

Yours faithfully,

Registration Department
Bureau of Indian Standards,
9, Bahadur Shah Zafar Marg,
New Delhi-110002.
Telfax : +91-11-23230856
E-mail: registration@bis.gov.in

Note: This is a system generated letter. Hence signature is not required.
To verify authentication of letter, kindly scan the QR code on this letter.

For details information on BIS, consult the e-BIS Portal (www.manakonline. in).
Please use BIS CARE APP for verification of ISI-marked goods and hallmarked gold jewellery.

भारतीय मानक ब्यूरो
(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)
BUREAU OF INDIAN STANDARDS
(Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India)

मानक भवन, 9 बहादुर शाह ज़फ़र मार्ग, नई दिल्ली - 110002
Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi – 110002
दूरभाष / Phone: +91-11-23230856/2323010131/23233375/23239402
ई-मेल / E-mail: registration@bis.gov.in
वेबसाईट / Website: https://bis.gov.in/, https://www.crsbis.in/BIS/

Our Ref: Registration/CRS 2021-4525/R-41201782 Date:08-09-2021

Subject : Licence Document

MANUFACTURING UNIT :	R.Stahl Hmi Systems Gmbh ADOLF-GRIMME-ALLEE 8, 50829 COLOGNE COLOGNE,Germany-50829 office@stahl-hmi.de 49221768061000	

Dear Sir,

1.With reference to your Application, we are pleased to inform you that it has been decided to grant you licence as per details given below :

Product Category :	Automatic Data Processing Machine
Product Name :	INTELLIGENT PANEL (ADPM)
IS NO :	IS 13252(PART 1):2010/ IEC 60950-1 : 2005
Brand (As Declared by Manufacturer) :	STAHL
Model :	[Brand -> STAHL, Models -> ET-208-TX-W00-AC-GL, ET-208-TX-W00-DC-GL]
Factory Address :	ADOLF-GRIMME-ALLEE 8, 50829 COLOGNE COLOGNE,Germany-50829

2. The Licence is being granted for your unit located at the address and for the brand and models mentioned at serial no 1 above.

3. The number assigned to this Licence is **R-41201782** which has been made operative from **08-09-2021** and is valid upto **07-09-2023** . The Licence Number should invariably be referred to in your future correspondence.

4. The rights and privileges under the licence shall not be exercised by any other factory / organization at any other location. This licence is not transferable. In the event of shifting of the manufacturing machinery from the registered premises to some other place use of the Licence Number shall be stopped and BIS shall be informed.

5. The licensee shall comply with the provisions of the Act, rules and regulations framed thereunder and as amended from time to time.

6. The licensee shall follow the guidelines for the use of Standard Mark and labeling requirements as per Annex-I.

7. The licensee shall not use the licence in any manner which contravenes the provisions of Act, rules and regulations framed thereunder and as amended from time to time.

8. Upon expiry of validity, stoppage or suspension or cancellation of licence, you shall discontinue forthwith the self declaration of conformity to the relevant Indian Standard(s) and withdraw all promotional and advertising matter which contains any reference thereto.

9. As per your declaration, **SATHISHKUMAR D, Certification Manager, R STAHL PRIVATE LIMITED(Address- Plot No 5 Malrosapuram Main Road, Sengundram Industrial Area Singaperumal koil Kanchipuram District 603204,NA)** is your authorized Indian representative. Any intended change in the name of the Indian representative ought to be brought to our notice immediately along with requisite fees and document.

10. For renewal of licence, the licensee shall have to apply to BIS three months in advance before expiration of the licence and application form for renewal is available on BIS website

11. The licence is not transferable. Kindly acknowledge receipt of this letter.

Thanking you,

Yours faithfully,
(Avik Datta)
Scientist-C
Telfax : +91-11-23230856
E-mail: registration@bis.gov.in

Note: This is a system generated letter. Hence signature is not required.
To verify authentication of letter, kindly scan the QR code on this letter.

5 CNEx certificate

国家防爆

Electrical Apparatus for Explosive Atmospheres

CERTIFICATE OF CONFORMITY

Cert. No.: CNEx18.3155X

Manufacturer	R. STAHL HMI Systems GmbH Adolf-Grimme-Allee 8, 50829 Koeln, Germany
Name of Product	Operator Terminal
Type of Product	ET-208
Marking	Ex e ib q [ib] IIC T4 Gb Ex tb ib [ib] IIIA T115°C Db
Drawing No.	-

The drawings, technical documents and the samples are verified and certified according to standard(s) for safety as below:

GB 3836.1-2010	Explosive Gas atmospheres - Part 1: Equipment - General requirements
GB 3836.3-2010	Explosive Gas atmospheres - Part 3: Equipment protection by increased safety "e"
GB 3836.4-2010	Explosive Gas atmospheres - Part 4: Equipment protection by intrinsic safety "i"
GB 3836.7-2017	Explosive Gas atmospheres - Part 7: Equipment protection by powder filling "q"
IEC60079-31:2013	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"

Note

1. Temperature range - 40 °C to + 65 °C
2. Ingress protection: rear side: IP54, inside: IP65
3. This certificate is only valid in combination with the related Annex
4. Please read and understand the special conditions for safe use as stated in the Annex to this certificate

Valid Date	From July 18, 2018 to July 17, 2023
Issue Date	July 18, 2018
Director	

Ex CQST NAN YANG

CHINA NATIONAL QUALITY SUPERVISION AND TEST CENTRE FOR EXPLOSION PROTECTED ELECTRICAL PRODUCTS

Address: No.20 North Zhongjing Rd, Nanyang, Henan(473008), P.R.China

Tel: 0377-63258564 Fax: 0377-63208175 Http://www.china-ex.com

Note:This certificate is only valid for the products which identify with the sample(s) tested and verified. Holder(s) of this certificate have the responsibility to ensure the products complying with relavant standard(s).

登陆网站 输入数码 查询真伪 5806 9732 6970 4452 查询方式：www.china-ex.com

CNEX
国家防爆

Electrical Apparatus for Explosive Atmospheres

CERTIFICATE OF CONFORMITY

Annex to Cert. No.: CNEx18.3155X

Page 1 of 4

This Annex to certificate CNEx 18.3155X covers the following model: Type ET-208.
This product has been certified, under certificate number IECEx BVS 15.0039X, issue 0, dated 2015-04-28.

Ex marking: Ex e ib q [ib] IIC T4 Gb
Ex tb ib [ib] IIIA T115°C Db

Product Description:
The operator terminals type ET-208-TX-W00-**-GL serve as human machine interface in areas requiring EPL Gb or Db.
The terminals consist of a metallic enclosure with a glass panel integrated in its front cover. Behind this glass panel there is a display with touch-screen.
The enclosure is carried out in type of protection "q" respective "tb" and contains a power supply module, a CPU-module as well as the display. The Touch-Screen is intrinsically safe, level of protection Ex ib.
The Operator Terminals are supplied via terminals which are located in two separate terminal boxes on the back side of the enclosure. The first terminal box contains an intrinsically safe USB Interface and an intrinsically safe Interface for connection to an external Keyboard. The second terminal box is in type of protection "e" respective "tb" and serves to connect the supply circuit as well as the non-intrinsically safe data circuits.
A heating within the enclosure in type of protection "q" resp. "tb" assures functionality if the device is used in temperatures from -40 °C up to -10 °C.
The Operator Terminal can also be used in explosive dust atmospheres requiring equipment group IIIB or IIIC. Therefore it has to be integrated in the wall of an enclosure fulfilling all applicable requirements of GB383.1 and IEC 60079-31. A minimum degree of protection of IP65 according to GB/T4208 shall be ensured.
The Operator Terminal can also be integrated in a wall of an enclosure in type of protection Increased Safety “e”.
Only suitable cable entries and blind plugs are used.

Issue Date July 18, 2018

Director

Ex
CQST
NAN YANG

CHINA NATIONAL QUALITY SUPERVISION AND TEST CENTRE
FOR EXPLOSION PROTECTED ELECTRICAL PRODUCTS

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CNEX 国家防爆

Electrical Apparatus for Explosive Atmospheres

CERTIFICATE OF CONFORMITY

Annex to Cert. No.: CNEx18.3155X

Page 2 of 4

Subject and type:

Operator Terminal type ET-208-TX-W00-**-GL

**: AC supply or DC supply

Parameters:

Non-Intrinsically safe circuits

1. Power supply input, Connection via terminal block X1

for type ET-208-TX-W00-AC-GL:

Terminals X1 (L, N)

Rated voltage		AC	115 / 230	V
Rated current			≤ 2	A
Rated power				
Heater off 18 VA			18	VA
Heater on 36 VA			36	VA
Max. input voltage	U_m	AC	253	V

for type ET-208-TX-W00-DC-GL:

Terminals X1 (+, -)

Rated voltage		DC	24	V
Rated current			≤ 1.6	A
Rated power				
Heater off 18 VA			12	W
Heater on 36 VA			22	W
Max. input voltage	U_m	AC	253	V

2. Com1 RS-422 interface

Connection via terminal block X2, terminals X2 (1, 2, 3, 4)

Rated voltage			5	V
Max. input voltage	U_m		30	V

Issue Date July 18, 2018

Director

Ex CQST NAN YANG

CHINA NATIONAL QUALITY SUPERVISION AND TEST CENTRE FOR EXPLOSION PROTECTED ELECTRICAL PRODUCTS

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CNEX 国家防爆

Electrical Apparatus for Explosive Atmospheres

CERTIFICATE OF CONFORMITY

Annex to Cert. No.: CNEx18.3155X

3. Com2 RS-422 interface
Connection via terminal block X3, terminals X3 (1, 2, 3, 4)

Rated voltage		5	V
Max. input voltage	U_m	30	V

4. Ethernet TP interface
Connection via terminal block X5, terminals X5 (1, 2, 3, 4)

Rated voltage		5	V
Max. input voltage	U_m	30	V

5. USB interface
Connection via terminal block X4, terminals X4 (1, 2, 3, 4)

Rated voltage		5	V
Max. input voltage	U_m	30	V

Terminal X4.5 shall not be connected inside explosive areas!

Intrinsically safe circuits level of protection Ex ib IIC resp. Ex ib IIIA

1. Intrinsically safe USB circuit
Connection via terminal block X7 or USB-socket X8. X7 and X8 shall not be used at the same time.
Terminal block X7:
Terminals 1(VBUS), 2(D-), 3(D+) and 4(GND)
Terminal 5 (shield) is intended for the connection of a cable shield.

Max. output voltage	U_o	DC	5.45	V
Max. output current	I_o		755	mA
Max. output power	P_o		2.5	W

Maximum permissible (combined) values for external capacitance Co and external inductance Lo in accordance with the following tables:
for group IIC:

L_o [µH]	4.8	1.8
C_o [µF]	4.7	27.7

Issue Date July 18, 2018

Director

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CHINA NATIONAL QUALITY SUPERVISION AND TEST CENTRE
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Electrical Apparatus for Explosive Atmospheres

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Annex to Cert. No.: CNEx18.3155X

for group IIB resp. group III:				
L_o [µH]	49.8	19.8	9.8	
C_o [µF]	20.7	51.7	107.7	

2. Intrinsically safe interface for the connection of a keyboard
Connection via terminal block X9, terminals 1...12 and 13 (GND)

Max. output voltage	U_o	DC	4.96	V
Max. output current	Io		60	mA
Linear output characteristics				
Max. output power	P_o		75	mW

Maximum permissible (combined) values for external capacitance Co and external inductance Lo in accordance with the following tables:

for group IIC:			
L_o [µH]	100	50	20
C_o[µF]	6.7	8.5	11.9
for group IIB resp. group III:			
L_o [µH]	100	50	20
C_o[µF]	42	49	95

Ambient temperature range:		Ta	-40 °C...+65 °C
temperature class			T4
max. surface temperature with thermofuse limited to			115 °C

Special conditions for safe use:

1. The intrinsically safe circuits are connected to earth. Along the intrinsically safe circuits, potential equalization must exist. Maximum overvoltage category II according to GB/T16935.1 is permitted for the non-intrinsically safe circuits.
2. For use in explosive gas atmospheres the terminal may be built in the wall of an enclosure fulfilling all relevant clauses of GB3836.1.
The terminal itself fulfills all mechanical requirements according to GB3836.1 and the degrees of protection IP65 according to GB/T4208 if mounted according to the user's manual.

Issue Date July 18, 2018

Director

Ex CQST NAN YANG

CHINA NATIONAL QUALITY SUPERVISION AND TEST CENTRE FOR EXPLOSION PROTECTED ELECTRICAL PRODUCTS

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6 Korean certification

6.1 KCS certificate

ktl 한국산업기술시험원 Korea Testing Laboratory

제2019-020026-01-1호

안 전 인 증 서

R.STHAL HMI Systems GmbH
Im Gewerbegebiet Pesch 14 50767 Köln, Germany

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목
Operator Terminal

형식·모델(용량·등급) / 인증번호
ET-208-TX-W00-**-GL(Ex tb ib q [ib] IIIA T115℃) / 19-KA4BO-0206X

인 증 기 준
고용노동부고시 제2019-15호

인 증 조 건

1. 제조공장
·본 인증서는 'Im Gewerbegebiet Pesch 14 50767 Köln, Germany'에서 생산하는 제품에 한함.

2. 제품개요
·당 기기는 접속용 외함과 터치스크린으로 구성되어 있는 HMI(Human Machine Interface)임.
·정격: (115 ~ 230) Vac, 24 Vdc
·사용주위온도: -40 ℃ ≤ T_a ≤ +65 ℃
·본질안전을 위한 전기적 파라미터
-Terminal block X7(Terminal 1...3, 4(GND)): U_0 = 5.45 V, I_0 = 755 mA, P_0 = 2.5 W, C_0(L_0) = 20.7 μF(49.8 μH), 51.7 μF(19.8 μH), 107.7 μF(9.8 μH)
-Terminal block X9(Terminal 1...12, 13(GND)) U_0 = 4.96 V, I_0 = 60 mA, P_0 = 75 mW, C_0(L_0) = 42 μF(100 μH), 49 μF(50 μH), 95 μF(20 μH)
·IEC 60529에 따른 보호등급 IP 65(전면), IP54(후면)를 만족함.

3. 인증범위: 본 인증서는 ET-208-TX-W00-AC-GL과 ET-208-TX-W00-DC-GL 제품에 한하여 유효함.

4. 안전한 사용을 위한 조건
·제품 설치 시 후면은 IEC 60529에 따른 보호등급 IP65에 적합하도록 추가적으로 보호해야 함.
·관련 IECEx 인증서(IECEx BVS 15.0039X Issue No.0) conditions of certification 참조

5. 인증(변경)사항: 없음.

6. 그 밖의 사항
·안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수
·본 안전인증서는 반드시 관련 IECEx 인증서(IECEx BVS 15.0039X Issue No.0)와 함께 사용

2019 년 04 월 09 일

한국산업기술시험원장

산업안전보건법 시행규칙 [별지 제10호의6서식]

(08389) 서울시 구로구 디지털로 26길 87(구로동) http://www.ktl.re.kr
(52852) 경상남도 진주시 충의로 10(충무공동)

ktl 한국산업기술시험원 Korea Testing Laboratory

제2019-020028-01-1호

안 전 인 증 서

R.STHAL HMI Systems GmbH
Im Gewerbegebiet Pesch 14 50767 Köln, Germany

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목
Operator Terminal

형식·모델(용량·등급) / 인증번호
ET-208-TX-W00-**-GL(Ex e ib q [ib] IIC T4) / 19-KA4BO-0207X

인 증 기 준
고용노동부고시 제2019-15호

인 증 조 건

1. 제조공장
·본 인증서는 'Im Gewerbegebiet Pesch 14 50767 Köln, Germany'에서 생산하는 제품에 한함.

2. 제품개요
·당 기기는 접속용 외함과 터치스크린으로 구성되어 있는 HMI(Human Machine Interface)임.
·정격: (115 ~ 230) Vac, 24 Vdc
·사용주위온도: -40 ℃ ≤ T_a ≤ +65 ℃
·본질안전을 위한 전기적 파라미터
-Terminal block X7(Terminal 1...3, 4(GND)): U_0 = 5.45 V, I_0 = 755 mA, P_0 = 2.5 W,
C_0(L_0) = 4.7 μF(4.8 μH), 27.7 μF(1.8 μH)
-Terminal block X9(Terminal 1...12, 13(GND)) U_0 = 4.96 V, I_0 = 60 mA, P_0 = 75 mW,
C_0(L_0) = 6.7 μF(100 μH), 8.5 μF(50 μH), 11.9 μF(20 μH)
·IEC 60529에 따른 보호등급 IP 65(전면), IP54(후면)를 만족함.

3. 인증범위: 본 인증서는 ET-208-TX-W00-AC-GL과 ET-208-TX-W00-DC-GL 제품에 한하여 유효함.

4. 안전한 사용을 위한 조건
·관련 IECEx 인증서(IECEx BVS 15.0039X Issue No.0) conditions of certification 참조

5. 인증(변경)사항: 없음.

6. 그 밖의 사항
·안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수
·본 안전인증서는 반드시 관련 IECEx 인증서(IECEx BVS 15.0039X Issue No.0)와 함께 사용

2019 년 04 월 09 일

한국산업기술시험원장

산업안전보건법 시행규칙 [별지 제10호의6서식]

(08389) 서울시 구로구 디지털로 26길 87(구로동) http://www.ktl.re.kr
(52852) 경상남도 진주시 충의로 10(충무공동)

6.2 KCC certification

12BF-DA91-D4B1-C454

방송통신기자재등의 적합등록 필증

Registration of Broadcasting and Communication Equipments

상호 또는 성명 *Trade Name or Registrant*	R. STAHL HMI Systems GmbH
기자재명칭(제품명칭) *Equipment Name*	ET/MT-208
기본모델명 *Basic Model Number*	ET/MT-208-TX-W00-AC
파생모델명 *Series Model Number*	
등록번호 *Registration No.*	R-R-RS3-ET208AC
제조자/제조(조립)국가 *Manufacturer/Country of Origin*	R. STAHL HMI Systems GmbH / 독일
등록연월일 *Date of Registration*	2019-07-03
기타 *Others*	

위 기자재는「전파법」제58조의2 제3항에 따라 등록되었음을 증명합니다.

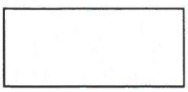
It is verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act.

2019년(Year) 07월(Month) 03일(Day)

국립전파연구원장 국립전파연구원장인

Director General of National Radio Research Agency

※ 적합등록 방송통신기자재는 반드시 "적합성평가표시" 를 부착하여 유통하여야 합니다.
위반시 과태료 처분 및 등록이 취소될 수 있습니다.



12DB-F8F3-3CD2-DAD2

방송통신기자재등의 적합등록 필증

Registration of Broadcasting and Communication Equipments

상호 또는 성명 *Trade Name or Registrant*	R. STAHL HMI Systems GmbH
기자재명칭(제품명칭) *Equipment Name*	ET/MT-208
기본모델명 *Basic Model Number*	ET/MT-208-TX-W00-DC
파생모델명 *Series Model Number*	
등록번호 *Registration No.*	R-R-RS3-ET208DC
제조자/제조(조립)국가 *Manufacturer/Country of Origin*	R. STAHL HMI Systems GmbH / 독일
등록연월일 *Date of Registration*	2019-07-03
기타 *Others*	

위 기자재는「전파법」제58조의2 제3항에 따라 등록되었음을 증명합니다.

It is verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act.

2019년(Year) 07월(Month) 03일(Day)

국립전파연구원장 국립전파연구원장인

Director General of National Radio Research Agency

※ 적합등록 방송통신기자재는 반드시 **"적합성평가표시"** 를 부착하여 유통하여야 합니다.
위반시 과태료 처분 및 등록이 취소될 수 있습니다.

6.3 Customer confirmation letter

Customer confirmation letter
납품처 확인서

1. Delivery Overview/ 납품 개요

   - Target company name / 대상 회사명: (exporter/(수출자)
   - Usage / 용도: (product name / 제품명)
   - Model and quantity / 모델 및 수량:

     (product number / type number) - (quantity) / (제품 품번 / 타입번호) - (수량)

2. Overview of domestic imports of products / 제품의 국내 수입 개요

   The above (product name, model, quantity) are imported from (company name) and then delivered to the supplier (company name) (if there is an intermediary seller), the products are all overseas (country name) will be re-exported.
   상기의 (제품명, 모델, 수량)은 제조사(회사명), (중간판매상이 있을 경우 기입,) 납품처 (회사명) 로 납품하는 것으로서, 해당 제품은 모두 해외(나라이름)로 재 수출되는 것입니다.

3. According to the contract between (importer), (if there is an intermediary seller), and the supplier (company name), the product has been imported, and according to the contract of the (supplier), all are re-exported abroad. I will confirm.

   (수입자), (중간판매상 있을경우 기입), 납품처(회사명) 간 계약에 따라, 해당 제품 수입진행 하였으며, (납품처)의 계약서에 따라, 모두 해외로 재 수출되는 것임을 확인 드립니다.

   Year Month Day / 년 월 일
   Manager / 담당자 :
   contact / 연락처 :
   (Company Name) / (회사명)

4. Attachments:

- Customer PO / 고객 PO
- Owner PO of customer (in case of re-exporter) / 고객의 소유자 PO(재수출자의 경우)
- Product photo / 제품 사진
- Catalogue / 카탈로그
- Invoice / Packing list / B/L / 송장 / 포장 목록 / B/L
- Business registration / 사업자 등록

7 JPNEx certificate

7.1 English version

Type Examination Certificate

for Electrical Equipment used in Potentially Explosive Atmosphere

Issued by Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK					
Applicant	R. STAHL HMI Systems GmbH Adolf-Grimme Allee 8, 50829 Köln, Germany				
Manufacturer name	R. STAHL HMI Systems GmbH Adolf-Grimme Allee 8, 50829 Köln, Germany				
Product name	Terminal				
Type/model code	Operator Terminal type ET-208 (See Attachment 1)				
Type of protection	Intrinsic safety, Increased safety, Dust ignition protection by enclosure.				
Group, Temperature Class and EPL	IIC T4 Gb, [IIC Gb] IIIA T115ºC Db, [IIIA Db]				
The equipment shall be marked with the following	Ex e ib q [ib] IIC T4 Gb Ex tb ib [ib] IIIA T115°C Db Tamb: -40 ºC to +65 ºC				
Ratings	See Attachment 2				
Special condition for safe use	See Attachment 3				
Certificate number	**CML 19JPN5469X**				
Term of validity	From	12-12-2019	to	11-12-2022	
	From	12-12-2022	to	11-12-2025	

This is to certify that the equipment specified above complies with the requirements stipulated in Ordinance on Examination of Machines and Other Equipment of the Ministry of Health, Labour and Welfare, Japan.

Issue date: 12-12-2022

Signature of chief examiner:

JPN Type Approval minimum Version: 7.0 Approval: Approved
This certificate shall only be copied in its entirety and without change
www.CMLEx.com

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CML 19JPN5469X
Issue: 1

Attachment 1: Type/model code

Operator Terminal type ET-208

Operator Terminal type		**ET**	**-**	**208**	**-**	**TX**	**-**	**W00**	**-**	******	**-**	**GL**
Supply												
**	AC	AC Supply										
	DC	DC Supply										

Attachment 2: Ratings

Non-Intrinsically safe circuits

1 Power supply input, Connection via terminal block X1

for type ET-208-TX-W00-AC-GL:

Terminals X1 (L, N)			
Rated voltage		AC	115 / 230 V
Rated current			≤ 2 A
Rated power			
Heater off			18 VA
Heater on			36 VA
Max. input voltage	Um	AC	253 V

for type ET-208-TX-W00-DC-GL:

Terminals X1 (+, -)			
Rated voltage		DC	24 V
Rated current			≤ 1.6 A
Rated power			
Heater off			12 W
Heater on			22 W
Max. input voltage	U_m	AC	253 V

2 Com1 RS-422 interface

Connection via terminal block X2, terminals X2 (1, 2, 3, 4)

Rated voltage			5 V
Max. input voltage	U_m		30 V

3 Com2 RS-422 interface

Connection via terminal block X3, terminals X3 (1, 2, 3, 4)

Rated voltage			5 V

CML 19JPN5469X
Issue: 1

Max. input voltage U_m 30 V

4 Ethernet TP interface

Connection via terminal block X5, terminals X5 (1, 2, 3, 4)

Rated voltage 5 V

Max. input voltage U_m 30 V

5 USB interface

Connection via terminal block X4, terminals X4 (1, 2, 3, 4)

Rated voltage 5 V

Max. input voltage U_m 30 V

Terminal X4.5 shall not be connected inside explosive areas!

Intrinsically safe circuits level of protection Ex ib IIC and Ex ib IIIA

1 Intrinsically safe USB circuit

Connection via terminal block X7 or USB-socket X8. X7 and X8 shall not be used at the same time.

Terminal block X7:

Terminals 1(VBUS), 2(D-), 3(D+) and 4(GND)

Terminal 5 (shield) is intended for the connection of a cable shield.

Max. output voltage Uo DC 5.45 V

Max. output current Io 755 mA

Max. output power Po 2.5 W

Maximum permissible (combined) values for external capacitance Co and external inductance Lo in accordance with the following tables:

	for group IIC:			for group IIB and group III:		
C_o [µF]	4.7	27.7		49.8	19.8	9.8
L_o [µH]	4.8	1.8		20.7	51.7	107.7

2 Intrinsically safe interface for the connection of a keyboard

Connection via terminal block X9, terminals 1...12 and 13 (GND)

Max. output voltage Uo DC 4.96 V

Max. output current Io 60 mA

Linear output characteristics

Max. output power Po 75 mW

CML 19JPN5469X
Issue: 1

Maximum permissible (combined) values for external capacitance Co and external inductance Lo in accordance with the following tables:

	Group IIC:			Group IIB and Group III:		
L_o [µH]	100	50	20	100	50	20
C_o [µF]	6.7	8.5	11.9	42	49	95

Ambient temperature range	Ta: -40 °C...+65 °C
temperature class	T4
max. surface temperature with thermofuse limited to	115 °C

Attachment 3: Special condition for safe use

i. The intrinsically safe circuits are connected to earth. Along the intrinsically safe circuits, potential equalization must exist. Maximum overvoltage category II is permitted for the non-intrinsically safe circuits.
ii. The terminal may be built in the wall of an enclosure and provide explosion protection and the degrees of protection IP65 if mounted according to the user`s manual.

7.2 Japanese version

防爆構造電気機械器具型式検定合格証

発行者： ユーロフィンズ・イーアンドイー・シーエムエル・リミテッド ユニット 1、ニューポートビジネスパーク、ニューポートロード、エレスメアポート CH65 4LZ 英国		
申請者	R. STAHL HMI Systems GmbH Adolf-Grimme Allee 8, 50829 Köln, Germany	
製造者	R. STAHL HMI Systems GmbH Adolf-Grimme Allee 8, 50829 Köln, Germany	
品名	オペレータ用端末	
型式の名称	ET-208（別紙 1 のとおり）	
防爆構造の種類	本質安全防爆構造、砂詰防爆構造、安全増防爆構造 容器による粉じん防爆構造	
対象ガス又は蒸気の発火度及び爆発等級	IIC T4 Gb, [IIC Gb] IIIA T115ºC Db, [IIIA Db]	
製品上の Ex マーキング	Ex e ib q [ib] IIC T4 Gb Ex tb ib [ib] IIIA T115°C Db Tamb: -40 ºC ～ +65 ºC	
定格	別紙 2 のとおり	
使用条件	別紙 3 のとおり	
型式検定合格番号	**CML 19JPN5469X**	
有効期間	2019 年 12 月 12 日 から 2022 年 12 月 11 日まで	
	2022 年 12 月 12 日 から 2025 年 12 月 11 日まで	

機械等検定規則による型式検定に合格したことを証明する

2022 年 12 月 12 日

型式検定実施者：ユーロフィンズ・イーアンドイー・シーエムエル・リミテッド主任検定員

本証明書の複写に際しては
全体を変更なしに行うこと
www.CML-Ex.com

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CML 19JPN5469X
版: 1

別紙 1　型式

ET - 208 - TX - W00 - ** - GL

** = 給電

AC　交流電源

DC　直流電源

別紙 2　定格

非本質安全回路

1　電源入力、端子台 X1 経由で接続

ET-208-TX-W00-AC-GL の場合：

端子 X1 (L, N)		
定格電圧	AC	115 / 230 V
定格電流		≤ 2 A
定格電力		
ヒータ　オフ		18 VA
ヒータ　オン		36 VA
最大入力電圧　Um	AC	253 V

ET-208-TX-W00-DC-GL の場合：

端子 X1 (+, -)		
定格電圧	DC	24 V
定格電流		≤ 1.6 A
定格電力		
ヒータ　オフ		12 W
ヒータ　オン		22 W
最大入力電圧　U_m	AC	253 V

2　Com1 RS-422 インターフェース

端子台 X2 経由で接続、端子 X2 (1, 2, 3, 4)

定格電圧	5 V
最大入力電圧　U_m	30 V

3　Com2 RS-422 インターフェース

端子台 X3 経由で接続、端子 X3 (1, 2, 3, 4)

定格電圧	5 V
最大入力電圧　U_m	30 V

4　Ethernet TP インターフェース

端子台 X5 経由で接続、端子 X5 (1, 2, 3, 4)

定格電圧	5 V
最大入力電圧　U_m	30 V

CML 19JPN5469X
版: 1

5 USB インターフェース

端子台 X4 経由で接続、端子 X4 (1, 2, 3, 4)

定格電圧	5 V
最大入力電圧 U_m	30 V

端子 X4.5 は、危険場所内で接続してはならない。

Ex ib IIC、Ex ib IIIA の本質安全回路

1 本質安全 USB 回路

端子台 X7 又は USB ソケット X8 経由の接続。X7 と X8 は同時に使用しないこと。

端子台 X7

端子 1(VBUS)、2(D-)、3(D+)、4(GND)

端子 5（シールド）は、ケーブルシールドの接続用である。

最大出力電圧 Uo	DC	5.45 V
最大出力電流 Io		755 mA
最大出力電力 Po		2.5 W

外部キャパシタンス Co と外部インダクタンス Lo に関する最大許容（結合）値：下表参照

	グループ IIC の場合			グループ IIB 及び III の場合		
C_o [µF]	4.7	27.7		49.8	19.8	9.8
L_o [µH]	4.8	1.8		20.7	51.7	107.7

2 キーボード接続用の本質安全インターフェース

端子台 X9 経由の接続、端子 1...12 及び 13 (GND)

最大出力電圧 Uo	DC	4.96 V
最大出力電流 Io		60 mA
線形出力特性		
最大出力電力 Po		75 mW

外部キャパシタンス Co と外部インダクタンス Lo に関する最大許容（結合）値：下表参照:

	グループ IIC の場合			グループ IIB 及び III の場合		
L_o [µH]	100	50	20	100	50	20
C_o [µF]	6.7	8.5	11.9	42	49	95

周囲温度範囲	Ta:	-40 °C...+65 °C
温度等級		T4
温度ヒューズで制限される最大表面温度		115 °C

CML 19JPN5469X
版: 1

別紙 3　使用条件

i. 本質安全回路はアースに接続される。本質安全回路に沿って等電位化がなされること。非本質安全回路に許容される最大過電圧カテゴリは II である。

ii. 当該機器は容器の壁にはめ込むことができ、取扱説明書に従って取り付けた時に、爆発保護及び IP65 を提供する。

8 NEC certificate

UL Product iQ™

NWGD.E202379 - Programmable Controllers for Use in Zone Classified Hazardous Locations

Programmable Controllers for Use in Zone Classified Hazardous Locations

See General Information for Programmable Controllers for Use in Zone Classified Hazardous Locations

R. STAHL HMI SYSTEMS GMBH E202379
Adolf-Grimme-Allee 8
50829 Koeln, GERMANY
Class I, Zone 1, AEx e ib q [ib] IIC T4 Gb; Zone 21, AEx tb ib [ib] IIIA/IIIC T115°C Db, Model(s) ET-208-TX-W00-AC-GL*, MT-208-TX-W00-AC-GL*

Class I, Zone 1, AEx e ib q [ib] IIC T4 Gb; Zone 21, AEx tb ib [ib] IIIA/IIIC T115°C Db, Model(s) Operator Terminals, Types ET-208-TX-W00-DC-GL and MT-208-TX-W00-DC-GL providing intrinsically safe circuits when installed per Control Drawing No. 11100030.

* - providing intrinsically safe circuits when installed per Control Drawing No. 11100030

Last Updated on 2020-06-30

9 CEC certificate

UL Product iQ™

NWGD7.E202379 - Programmable Controllers for Use in Zone Classified Hazardous Locations Certified for Canada

Programmable Controllers for Use in Zone Classified Hazardous Locations Certified for Canada

See General Information for Programmable Controllers for Use in Zone Classified Hazardous Locations Certified for Canada

R. STAHL HMI SYSTEMS GMBH E202379
Adolf-Grimme-Allee 8
50829 Koeln, GERMANY
Class I, Zone 1, AEx e ib q [ib] IIC T4 Gb; Zone 21, AEx tb ib [ib] IIIA/IIIC T115°C Db, Model(s) ET-208-TX-W00-AC-GL*, MT-208-TX-W00-AC-GL*

Class I, Zone 1, AEx e ib q [ib] IIC T4 Gb; Zone 21, AEx tb ib [ib] IIIA/IIIC T115°C Db, Model(s) Operator Terminals, Types ET-208-TX-W00-DC-GL and MT-208-TX-W00-DC-GL providing intrinsically safe circuits when installed per Control Drawing No. 11100030.

* - providing intrinsically safe circuits when installed per Control Drawing No. 11100030

Last Updated on 2020-06-30

10 DNV certificate

only version: ET-208-TX-W00-AC-GL

DNV·GL

Certificate No:
TAA00002SK

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Peripheral Equipment

with type designation(s)
ET-208-TX-W00-AC-GL

Issued to
R. Stahl HMI Systems GmbH
Köln, Nordrhein-Westfalen, Germany

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Location classes:

Temperature	**C**
Humidity	**B**
Vibration	**A**
EMC	**A**
Enclosure	**B (IP54)**

Issued at **Hamburg** on **2020-05-29**

This Certificate is valid until **2025-05-28**.
DNV GL local station: **Essen**

Approval Engineer: **Holger Jansen**

for **DNV GL**
Digitally Signed By:
Papanuskas, Joannis

Joannis Papanuskas
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Job Id: **262.1-033958-1**
Certificate No: **TAA00002SK**

Product description

Operator Interface 7" display with capacitive glass touch screen

Type: ET-208-TX-W00-AC-GL

Electric data
- Nominal voltage: 115 – 230 Vac, 48 - 62 Hz
- Processor type: Cortex A8, 800MHz
- Operating System: Windows Embedded Compact 7

Display
- Version: TFT colour display
- Size: 7"
- Resolution: WVGA 800 x 480
- Touchscreen: capacitive

Interfaces
- 1 x Ethernet 10/100 Base-TX
- 2 x Serial: RS422, RS422/RS485
- 4 x 8 potential free contacts

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Type Approval documentation

Drawings: Operating Instructions, Ver. 01.00.12, 2019-11-20
Paptor ET – 208, Dwg.No. 2013 20 7003 0
Assembly Dwg.No. 13100086 Rev01, 2014-08-22
Raptor-Disp-1, Dwg.No. 2012 05 02 2x
Raptor-CutOff-1, Dwg.No. 2012 05 07 0 S
Raptor-BB-1, Dwg.No. 2012 05 01 1x
Raptor-Adapt-BB-1, Dwg.No. 2010 05 10 0x
Raptor-Adapt-BB-2, Dwg.No. 2010 05 11 0x
Raptor-Adapt-PSAC-1, Dwg.No. 2010 05 09 0x
Datasheet: Operator Interface, Series 200, 2015/V 01.00.09
Test reports: Phoenix Testlab No. U200273E1, 2020-04-22
Phoenix Testlab No. E200273E1 + Annex, 2020-04-23
Phoenix Testlab No. E200273E2 + Annex, 2020-04-23
Dekra Test record BVSPS27212, 2015-01-12
Test Description Monitoring VC 01.04.00
Dekra Cer.No. IECEx BVS 15.0039X, 2015-04-28
Dekra No. DE/BVS/ExTR15.0036/00, 2015-04-23
Type Approval Assessment Report 2020-05-15

Job Id: **262.1-033958-1**
Certificate No: **TAA00002SK**

Tests carried out

Applicable tests according to DNVGL-CG-0339, December 2019

Marking of product

The products to be marked with:
- R. Stahl HMI Systems GmbH
- Model name
- Serial number

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:
- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE

11 Release Notes

The chapter entitled "Release Notes" contains all the changes made in every version of the certificates.

Version 01.00.08

- Removal of previous release notes
- Changing HW Rev at cover for ET-208-TX-W00-AC
- Changing HW Rev at cover for ET-208-TX-W00-DC-GLN
- Addition of CCC certificate
- Removal notice at NEC and CEC certification
- Formal changes

Version 01.00.09

- Update of EAC certificate

Version 01.00.10

- Update of NEC and CEC certificate

Version 01.00.11

- Changing HW Rev at cover
- Addition of BIS certificate
- Shifting CCC certificate into operating instructions

Version 01.00.12

- Addition of "Customer confirmation letter" for Korea
- Formal changes

Version 01.00.13

- Correction of phone and fax no.
- Changing from DNV / GL -> into DNV
- Correction of certification designation KGS for Korea -> into KCS
- Renew IECEx certificate
- Renew PESO (Indian) certificate
- Renew JPNEx (Japanese) certificate
- Formal changes

Version 01.00.14

- Renew BIS certificate
- Removal of EAC certificate
- Formal changes

R. STAHL HMI Systems GmbH
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r-stahl.com