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 PTB 21.0024X**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2022-04-12		
Applicant:	**R. STAHL Schaltgeräte GmbH** Am Bahnhof 30 74638 Waldenburg **Germany**		
Equipment:	**Maintenance socket type 8571/51-***-*(-*)**		
Optional accessory:			
Type of Protection:	**Flameproof Enclosure "db", Increased Safety "eb" and Protection by Enclosure "tb"**		
Marking:	Ex db eb IIC T6 … T5 Gb Ex tb IIIC T76 °C Db		

Approved for issue on behalf of the IECEx Certification Body: **Dr. -Ing. D. Markus**

Position: **Head of Departament "Explosion Protection in Energy Technology"**

Signature: (for printed version)

D. Markus

Date: (for printed version)

14.04.22

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:

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
Germany

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

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Manufacturer: **R. STAHL Schaltgeräte GmbH**
Am Bahnhof 30
74638 Waldenburg
Germany

Manufacturing locations: **R. STAHL Schaltgeräte GmbH**
Am Bahnhof 30
74638 Waldenburg
Germany

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 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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/PTB/ExTR21.0037/00

Quality Assessment Report:

DE/BVS/QAR10.0002/17

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

The maintenance socket type 8571/51-***-*(-*) is used for connection of portable and fixed electrical equipment.
The maintenance socket is explosion-protected electrical apparatus. They are used for commissioning portable and permanently installed non-explosion-protected electrical apparatus, or plugs and socket receptacles located within hazardous areas during periods when a potentially explosive atmosphere is not present (e.g. during repair and maintenance work).

The maintenance socket type 8571/51-***-*(-*) is the same as the Wall Socket type 8571/**-*** which have its own certificate according to IECEx.

For more information see annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:
The maintenance socket can only be used within hazardous areas during periods when a potentially explosive atmosphere is not present (e.g. during repair and maintenance work).

The maintenance socket can only be use by the plant operator or his authorized agents of the area.

The switch to activate the maintenance socket isolator shall be secured by means of a lock which can only be opened by the plant operator or his authorized agents of the area.

Annex:

COCA210024X-00.pdf

Applicant: R. STAHL Schaltgeräte GmbH
Am Bahnhof 30
74638 Waldenburg
Germany

Electrical Apparatus: Maintenance socket type 8571/51-***-*(-*)

Description

The maintenance socket type 8571/51-***-*(-*) is used for connection of portable and fixed electrical equipment.
The maintenance socket is explosion-protected electrical apparatus. They are used for commissioning portable and permanently installed non-explosion-protected electrical apparatus, or plugs and socket receptacles located within hazardous areas during periods when a potentially explosive atmosphere is not present (e.g. during repair and maintenance work).

The maintenance socket type 8571/51-***-*(-*) is the same as the Wall Socket type 8571/**-*** which have its own certificate according to IECEx.

Nomenclature

8571	/	*	*	-	*	**	-	*	(-*)
a	b	c	d		e	f		g	h

a Type series

b Version:
/ complete device packed
A assembly internal

c Version:
5 Maintenance Socket

d Design:
1 Wall mounting socket

e Number of Poles:
4 4 poles (3P + PE)
5 5 poles (3P + N + PE)

f Code for pin orientation and voltage

g B: silicone free
S: containing silicone

h Sign (- *) can contain 0-xx characters, including the separators "-", "/" or ". ". Additional parameters that do not affect the explosion protection of the equipmentg special versions

Ambient temperature

-50°C≤ Tamb ≤ +25 °C…+65 °C / T6 … T5 by current range 16 A … 32 A

-50°C≤ Tamb ≤ +25 °C…+60 °C / T6 … T5 by current range 16 A … 32 A valid for use of metal plate or terminal of auxiliary contact with adhesive D0213

Service temperature

-50°C ≤ Ts ≤ +60°C (valid for use of metal plate or terminal of auxiliary contact with adhesive D0213)

-50°C ≤ Ts ≤ +75°C (for the enclosure)

-50°C ≤ Ts ≤ +95°C valid for contact sleeve carrier

Ingress protection according to IEC 60079-0, IEC 60079-7 and IEC 60079-31

IP64
Cover must be closed properly when plug is not inserted to maintain ingress protection. The plug shall be free from water and dust before is inserted to the flange socket.

Electrical Data

Table 1: 8571/51

	Main contacts	Auxiliary contacts
	4, 5 poles	
Max. rated operational voltage	690 V AC / 110 V DC	500 V AC / 110 V DC
Max. rated insulation voltage	750 V AC	550 V AC
Max. rated operational current	32 A	6 A
Switching capacity	AC-3, 690 V, 32 A 7,5 kW, 220 … 240 V 15 kW, 380 … 415 V 30 kW, 600 … 690 V DC-1, 110 V, 32 A	AC-15, 500 V, 1250 VA AC-15, 230 V, 1380 VA AC-12, 500 V, 3000 VA DC-13, 110 V, 110 W
Max. rated frequency	0 ... 500 Hz	
Short-circuit protection	35 A gG (with thermal protection)	
Terminal capacity	1 or 2 x 2.5 … 10 mm² (12… 8 AWG) solid 1 or 2 x 2.5 … 6 mm² (12… 10 AWG) stranded	
Terminal capacity for auxiliary contacts	1 or 2 x 0.5 … 2.5 mm² (20 … 14 AWG) solid or stranded	
PE conductor size	Same or larger than line / load cross section	

	Main contacts	Auxiliary contacts
	4, 5 poles	
Tightening torque	Terminals: 1.6 Nm, for 2 x 10 mm²: 2 Nm Fixing screws of the flange socket: 2.3 Nm Fixing screws of the enclosure cover: 1.8 Nm	

Note: Stranded wires are suitable with or without wire end ferrules.

Notes for installation and operation

1. The maintenance socket type 8571/51-***-*(-*) can only be used within hazardous areas during periods when a potentially explosive atmosphere is not present (e.g. during repair and maintenance work).
2. The maintenance socket type 8571/51-***-*(-*) can only be use by the plant operator or his authorized agents of the area.
3. The switch to activate the maintenance socket shall be secure by means of a lock which can only be open by the plant operator or his authorized agents of the area.
4. Openings that are not used must be closed in compliance with the specifications of the standards listed on the cover sheet.
5. In order to ensure the ingress protection IP, the bayonet ring of the plug must be screwed up to the stop to the socket or the hinged cover of the socket must be closed and screwed up to the stop when the plug is not inserted. The cover of the terminal compartment must be fastened with the appropriate torque.
6. The maintenance socket type 8571/51-***-*(-*) must not be used in dust areas where highly charge-generating processes, machine friction and separation processes, electron spraying (e.g. around electrostatic coating systems) and pneumatically conveyed dust occur.
7. The connecting cable of the maintenance socket type 8571/51-***-*(-*) shall be fixed and routed so that it will be adequately protected against mechanical damage.
8. Installation of electrical components requires a further assessment by an ExCB.

This information must accompany each device in an adequate form.

The user shall be informed of the following conditions in an appropriate form, e.g. with a note included in the operating instructions:

"WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS"

"WARNING – USE ONLY BY THE PLANT OPERATOR OR HIS AUTHORIZED AGENTS OF THE AREA – SEE INSTRUCTIONS"

"WARNING – IN ORDER TO ENSURE THE INGRESS PROTECTION IP, THE BAYONET RING OF THE PLUG MUST BE SCREWED UP TO THE STOP TO THE SOCKET AND THE HINGED COVER OF THE SOCKET MUST BE CLOSED AND SCREWED UP TO THE STOP WHEN THE PLUG IS NOT INSERTED. THE COVER OF THE TERMINAL COMPARTMENT MUST BE FASTENED WITH THE APPROPRIATE TORQUE"

"WARNING - THE MAINTENANCE SOCKET TYPE 8571/51-***-* IS TO BE SECURED FOR SWITCHING WITH THEHELP OF A PADLOCK. SWITCHING ON AND OPERATING THE

MAINTENANCE FLANGE SOCKET IS ONLY PERMITTED IF THERE IS NO EX-ATMOSPHERE PRESENT.
Commissioning a maintenance socket type 8571/51-***-*requires the approval of the plant operator or his authorized agents.

The word “Warning” must be added to the text of the warning label.

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