



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 05.0023	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 5	Issue 4 (2020-05-27)
Date of Issue:	2022-04-11		Issue 3 (2012-10-12)
Applicant:	R. STAHL Schaltgeräte GmbH Am Bahnhof 30 74638 Waldenburg Germany		Issue 2 (2010-07-30)
Equipment:	Wall Socket and Coupler Socket type 8570/**-***-*.**		Issue 1 (2006-01-31)
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 T73 °C Db		

Approved for issue on behalf of the IECEx
Certification Body:

Dr. Ing. Detlev Markus

Position:

Head of Department "Explosion Protection in Energy Technology"

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
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Certificate issued by:

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





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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 60079-7:2015](#) Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

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/ExTR10.0043/03](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/17](#)

IECEX ATR:

File reference:



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The series 8570/**_*** wall socket and coupler socket are used for connection of portable and fixed electrical equipment as well as cables and circuits in potentially explosive atmospheres.

A staggered connector pin assignment safeguards that only plugs or socket contacts of identical voltage rating can be used together. The series 8570/**_*** wall sockets and coupler sockets are operated with plug of the series 8570, which have its own certificate according to IECEx.

For more information see annex.

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

1) Addition of an earthed metal plate

Annex:

[COCA050023-5.pdf](#)



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

Electrical Apparatus: Wall Socket and Coupler Socket type 8570/**-***-**-**

Description

The series 8570/**-*** wall socket and coupler socket are used for connection of portable and fixed electrical equipment as well as cables and circuits in potentially explosive atmospheres.

A staggered connector pin assignment safeguards that only plugs or socket contacts of identical voltage rating can be used together. The series 8570/**-*** wall sockets and coupler sockets are operated with plug of the series 8570, which have its own certificate according to IECEx.

Nomenclature

8570	/	*	*	-	*	**	-	*	-	**
a	b	c	d	e	f	g	h			

- a Type series
- b Version:
 - / Complete device packed
 - A Assembly internal
- c Bauart / Design:
 - 1 Standard
 - 2 North America
- d Device:
 - 1 Wall mounting socket
 - 6 Portable coupler socket
- e Number of Poles:
 - 3 2P + PE or 1P + N + PE
 - 4 3P + PE
 - 5 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 equipment

Ambient temperature

For Wall Socket type 8570/*1-*** and Coupler Socket type 8570/*6-***:

$-50^{\circ}\text{C} \leq T_{\text{amb}} \leq +35^{\circ}\text{C} \dots +65^{\circ}\text{C}$ / T6 ... T5 by current range 6 A ... 16 A (20 A)

$-50^{\circ}\text{C} \leq T_{\text{amb}} \leq +35^{\circ}\text{C} \dots +60^{\circ}\text{C}$ / T6 ... T5 by current range 6 A ... 16 A (20 A) valid for use of metal plate or terminal of auxiliary contact with adhesive D0213

Service temperature

For Wall Socket type 8570/*1-*** and Coupler Socket type 8570/*6-***:

$-50^{\circ}\text{C} \leq T_{\text{s}} \leq +60^{\circ}\text{C}$ (valid for use of metal plate or terminal of auxiliary contact with adhesive D0213)

$-50^{\circ}\text{C} \leq T_{\text{s}} \leq +75^{\circ}\text{C}$ (for the enclosure)

$-50^{\circ}\text{C} \leq T_{\text{s}} \leq +95^{\circ}\text{C}$ valid for contact sleeve carrier

Electrical Data

Table 1: 8570/*1 and 8570/*6

	Main contacts		Auxiliary contacts
	3 poles	4, 5 poles	
Max. rated operational voltage	500 V AC / 110 V DC	690 V AC / 110 V DC	500 V AC / 110 V DC
Max. rated insulation voltage	550 V AC	750 V AC	550 V AC
Max. rated operational current	16 A / 20 A		6 A
Switching capacity	AC-3, 690 V, 16 A AC-3, 500 V / 20 A 4 kW, 200 ... 250 V 7.5 kW, 380 ... 500 V 11 kW, 600 ... 690 V DC-1, 110 V, 16 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	16 A gG (without thermal protection) 35 A gG (with thermal protection)		
Terminal capacity for flange socket type 8570/*5-**	1 or 2 x 1.5 ... 6 mm ² (16 ... 10 AWG) solid 1 or 2 x 1.5 ... 4 mm ² (16 ... 12 AWG) stranded		
Terminal capacity for auxiliary contacts	1 or 2 x 0.5 ... 2.5 mm ² (20 ... 14 AWG) solid or stranded		
PE conductor size	Same or larger than line / load cross section		
Tightening torque	Terminals: 1.2 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.



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.

Notes for installation and operation

1. Openings that are not used must be closed in compliance with the specifications of the standards listed on the cover sheet.
2. 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.
3. The wall socket 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.
4. The connecting cable of the wall socket or the coupler socket type 8570/**-*** shall be fixed and routed so that it will be adequately protected against mechanical damage.
5. If the temperature at the entry parts exceeds 70 °C, temperature-resistant connecting cables shall be used.
6. Installation of electrical components requires a further assessment by an ExCB. This information must accompany each device in an adequate form.

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 – DO NOT OPEN WHEN ENERGIZED”

“WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – 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 – TEMPERATURE AT THE ENTRY POINTS HIGHER THAN +70 °C. A PROPER SELECTION OF CABLE AND CABLE GLANDS OR CONDUCTORS IN CONDUIT IS REQUIRED”

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