



# (1) EC TYPE-EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 94/9/EC**
- (3) EC Type-Examination Certificate Number

## TÜV 14 ATEX 7568 X

- (4) Equipment: Explosion protected Switch type 14105/\*/\*\*/(\*\*)/(\*\*\*\*\*)
- (5) Manufacturer: WISKA Hoppmann & Mulsow GmbH
- (6) Address: Kisdorfer Weg 28  
24568 Kaltenkirchen
- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle for ex-protected products of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies 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 atmosphere, given in Annex II to the Directive.
- The examination and test results are recorded in the confidential report 557/Ex 568.00 / 14
- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:
- EN 60079-0: 2012    EN 60079-1: 2007    EN 60079-7: 2007    EN 60079-31: 2013**
- except the requirements, which are listed under item (18).
- (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 schedule to this certificate.
- (11) This EC-Type-Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:

 **II 2 G**                      **Ex de IIC T6...T5 Gb**  
 **II 2 D**                        **Ex tb IIIC T80°C Db**

TÜV Rheinland ExNB for explosion protected equipment

Cologne, 2015-08-24

Dipl.-Ing. Klauspeter Graffi

This EC-Type-Examination Certificate without signature and stamp shall not be valid.  
This EC-Type-Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Notified Body of TÜV Rheinland Industrie Service GmbH, Am Grauen Stein 51105 Köln  
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

(13)

Annex to

(14)

## **EC-Type Examination Certificate**

### **TÜV 14 ATEX 7568 X**

(15) **Description of equipment**

#### **15.1 Equipment and type:**

Explosion protected Switch type 14105/\*/\*\*/(\*\*)/(\*\*\*\*\*)

#### **15.2 Description**

##### **General product information**

The Switch type 14105/\*/\*\*/(\*\*)/(\*\*\*\*\*) (2 poles) is designed in Equipment protection by increased safety „e“ or Equipment dust ignition protection by enclosure "t".  
The switch serves for connecting or disconnecting of electrical circuits.  
The switch consists essentially of a bottom part a cover of cast brass and an inner mounted separately certified switch in type of protection Equipment protection by flameproof enclosures "d" with connecting facilities in Equipment protection by increased safety „e“. For tightening an o-ring is located between the bottom part and the switch cover.  
The bottom enclosure part can be equipped with up to four cable entries dependent which type is needed (M18x1,5 or M20x1,5 or M24x1,5 or M25x1,5), for up to four separately certified cable glands or blind plugs in Equipment protection by increased safety „e“. Not used cable entries are closed by separately certified blind plugs in Equipment protection by increased safety „e“.

##### **Used Component:**

Control Switch / Switch-Disconnecter type 8008/2-....-....  
(PTB 00 ATEX 1111 U, 1<sup>st</sup> supplement )

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Type code:

14105/	*/	**/	(**)/	(*****)
1	2	3	4	5

- 1 = Type designation:  
14105= Type designation for the switch
- 2 = Specification of number and position of the cable gland  
 1 = one cable gland  
 2 = two cable glands side by side  
 3 = three cable glands  
 4 = four cable glands  
 D = two cable glands oppositely
- 3 = Specification of the inner mounted switch type, f. e.:  
 WE = alteration switch  
 SE = series switch  
 etc.
- 4 = Specification color of switch knob:  
 No specification = switch knob black  
 RD = switch knob red  
 etc.
- 5 = Specification of size and sort of cable gland (only if delivered with cable glands), f.e.  
 2x24-Z14 = two cable glands with rated size M24 with earth link 14 mm  
 1x20-W10/1x20-Z10 = one cable gland rated size M20 without earth links  
 For cable diameter 10mm and cable gland size M20 with earth links for cable diameter 10mm  
 etc.

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### 15.3 Technical Data

Rated voltage: up to 690 VAC / 230 VDC  
 Rated current: up to 16 A  
 Connection cross-section:  
 fine wired: 1,5mm<sup>2</sup> up to 8A / 2,5mm<sup>2</sup> up to 16A  
 Solid core: 1,5mm<sup>2</sup> up to 8A / 2,5mm<sup>2</sup> ... 4mm<sup>2</sup> up to 16A  
 Tightening torque of the terminals 1,8Nm  
 IP-protectiom acc. to EN 60529 IP66  
 Rated Limits

AC Rating			
Utilization category	690 V	500 V	415 V
AC-1	16 A	-/-	-/-
AC-3	4 A	8 A	-/-
AC-15	-		16 A
AC-3	16 A	-/-	-/-

DC Rating				
Utilization category	220 V	110 V	60 V	24 V
DC-1	-	6 A	6 A	6 A
DC-3	0,4 A	-	-	-
notes	L/R = 300 ms			

Ambient temperature range: Ta -40 °C up to +45 °C for Temperature class T6  
 Ambient temperature range: Ta -40 °C up to +55 °C for Temperature class T5  
 and for dust protection max surface temperature T80 °C

(16) **Test-Report No.** 557/Ex 568.00/14

Parts of the device, which already fulfill the requirements for the category, were not approved and assessed by TÜV Rheinland Industrie Service  
 (Control Switch / Switch-Disconnecter type 8008/2-....-... (PTB 00 ATEX 1111 U, 1<sup>st</sup> supplement)

The applicability and assembly of mechanical and electrical parts and components were assessed and approved by TÜV Rheinland Industrie Service with respect to the requirements of explosion protection.

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(17) **Special Conditions for safe use**

- The ambient temperature differs from the standard ambient temperature range, details see clause General product description / parameters and manufacturer's instructions.
- For temperature class and max. surface temperature see details clause General product description / parameters.
- The used cable glands and blind plugs must have a minimum operating temperature range of -40 °C up to +80 °C.
- For type of protection Equipment dust ignition protection by enclosure "t" separately certified blanking elements and cable glands with affiliated gaskets/o-rings for tightening between enclosure and cable gland should be used. The gaskets / o-rings must be tested and certified together with the cable glands and must be suitable for this purpose (min. IP6X).

(18) **Basic Safety and Health Requirements**

Covered by afore mentioned standard

TÜV Rheinland ExNB für explosion protected equipment

Cologne, 2015-08-24

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