

Inspection report for external lightning protection installation:

RE:		Page 1 of 3
Client:		
Manufacturer:		
Year of erection:		
Building use:		
Name of investigator:		

Basis for the inspection

Lightning protection standard at time of erection	<input type="checkbox"/> DIN VDE 0185-1 (1982-11)	<input type="checkbox"/> DIN VDE 0185-3 (2002-11)
	<input type="checkbox"/> ABB (8th issue)	<input type="checkbox"/> DIN VDE 0185-2 (1982-11) <input type="checkbox"/> DIN EN 62305-3 (2006-10)
	<input type="checkbox"/> TGL _____	<input type="checkbox"/> DIN VDE 0185-100 (1996-08)
Type of periodic inspection	<input type="checkbox"/> Visual inspection <input type="checkbox"/> Full inspection	
	The inspection is restricted to the known, documented and accessible installation parts.	
Protection class (according to inspection log)	<input type="checkbox"/> Class I	<input type="checkbox"/> Class III
	<input type="checkbox"/> Class II	<input type="checkbox"/> Class IV

Inspection

1. Internal lightning protection systems

The necessary lightning protection equipotential bonding with the metal installations in the buildings and with the cables and lines of the electrical energy and information technology implemented in the physical structure is not included in the scope of the inspection. Please note that the lightning protection system is only complete if the measures of the internal lightning protection are also designed according to DIN EN 62305-3: 2006-10, section 6.2 and are functional.

2. Separation distances

Danger point Description: _____ Place: _____

Separation distance Required: _____ cm Actual: _____ cm

Measures required? ☐ Yes ☐ No

3. Visual inspection

Proper condition of mounting of all lines and system components? ☐ Yes ☐ No

Proper condition of structure and condition of interception system? ☐ Yes ☐ No

Proper condition of the structure and condition of the discharge lines? ☐ Yes ☐ No

Proper condition of the structure and condition of the earthing connections? ☐ Yes ☐ No

Parts weakened by corrosion? ☐ Yes ☐ No

Inspection

4. Inspection by measurement (recommended test current ≥ 200 mA)

Interception devices

☐ Yes ☐ No

Discharge lines

☐ Yes ☐ No

Earthing lines

☐ Yes ☐ No

Equipotential bonding lines

☐ Yes ☐ No

(Reference value < 1 Ohm)

☐ Yes ☐ No

Measurement values:

Conduct to metal installations (in Ohm)			
Gas	Water	Heating	Ventilation

Contact resistance at all measurement points to determine conductivity of lines

Disconnect point	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
Value in Ohm									
Disconnect point	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
Value in Ohm									
Disconnect point	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Value in Ohm									

Measurement of earth resistance of single earth electrodes with open disconnect points

Disconnect point	1	2	3	4	5	6	7	8	9
Value in Ohm									
Disconnect point	10	11	12	13	14	15	16	17	18
Value in Ohm									
Disconnect point	19	20	21	22	23	24	25	26	27
Value in Ohm									

Measurement of earth resistance of whole installation with closed disconnect points

Value in Ohm	
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Soil type:

☐ Sandy ground

☐ Gravel

☐ Bog, swampy, humous soil

☐ Stony

☐ Concrete

☐ Loamy, clay, farm soil

Soil condition:

☐ Dry

☐ Moist

☐ Frozen

5. Inspection of the earthing system

Overall earthing resistance of the system

Value in Ohm	
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Note:

Lightning protection systems must be examined at regular intervals.

The lightning protection maintenance service must be advised of any structural modifications or lightning strikes!

Inspection result

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The following defects were found:

The owner or operator of the object is responsible for ensuring that the above defects are repaired without delay. A specific order must be issued for the remedy of defects.

Inspection carried out professionally and in accordance with standards

Information received

Responsible inspector

Owner / operator

Place / Date

Signature

Place / Date

Signature

RE:

Description of the building:

Building materials

☐ Brick

 ☐ Reinforced concrete

 ☐ Wood

 ☐ Steel skeleton

 ☐ Other: _____

Roofing:

☐ Brick

 ☐ Paperboard

 ☐ Sheet metal

 ☐ Film

 ☐ Reed

 ☐ Other: _____

Description of external lightning protection

Roof wire from:

☐ 8 mm = 50 mm² galvanised steel

 ☐ 8 mm = 50 mm² Wrought aluminium alloy
☐ 8 mm = 50 mm² copper

 ☐ 8 mm CrNiSt 1.4571

Discharge line from:

☐ 8 mm = 50 mm² galvanised steel

 ☐ 8 mm = 50 mm² Wrought aluminium alloy
☐ 8 mm = 50 mm² copper

All building parts and metal constructions are included in the BSA, if required.

☐ Yes

 ☐ No

Earthing system from:

☐ 10 mm = 78 mm² galvanised steel

 ☐ 30 x 3.5 mm CrNiSt 1.4571
☐ 30 x 3.5 mm = 105 mm² galvanised strip steel

 Mesh size (in m): _____
☐ Foundation earthing electrode

 ☐ Deep earthing electrode
☐ Beam earthing electrode

 ☐ Ring earthing electrode

Description of internal lightning protection

Equipotential bonding complete and present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Equipotential bonding bars present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Connection to lightning protection system present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SPD power supply present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No If applicable, type: _____
SPD information technology present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No If applicable, type: _____
Ground connection in order:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Mains connection in order:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Functional test / fault indication in order:	<input type="checkbox"/> Yes	<input type="checkbox"/> No