

according to BetrSichV, DGUV V3 according to DIN VDE 0701-0702

Customer data:

Name: _____ Address: _____

Contract no.: _____

Device data:

Device type _____ Location: _____ Inventory no.: _____

Manufacturer: _____ Type: _____ Factory no.: _____

Voltage: _____ 1-phase ☐ 3-phase ☐ Current: _____ Power: _____

Test device: _____ Type: _____ Serial no.: _____ Calibrated until: _____

Test device: _____ Type: _____ Serial no.: _____ Calibrated until: _____

☒ Please tick as appropriate (i.o. = examined function in order, n.i.o. = examined function not in order)

Required Inspections	Protection class I <input type="checkbox"/> / II <input type="checkbox"/> / III <input type="checkbox"/>		Inspection procedure according to DIN VDE 0701-0702:
	Electrical appliances		
	i.o.	n.i.o.	
1 External damage visual inspection			
1.1 Housing in general	<input type="checkbox"/>	<input type="checkbox"/>	Visual check
1.2 Condition of insulation	<input type="checkbox"/>	<input type="checkbox"/>	
1.3 Strain relief, protection against bending	<input type="checkbox"/>	<input type="checkbox"/>	
1.4 Signs of overload / improper use	<input type="checkbox"/>	<input type="checkbox"/>	
1.5 Unauthorised intervention and modifications	<input type="checkbox"/>	<input type="checkbox"/>	
1.6 Unsafe dirt or corrosion	<input type="checkbox"/>	<input type="checkbox"/>	
1.7 Selection and use of lines and plugs as intended	<input type="checkbox"/>	<input type="checkbox"/>	
1.8 Cooling vents free	<input type="checkbox"/>	<input type="checkbox"/>	
1.9 Fuse links and light sources correctly assembled	<input type="checkbox"/>	<input type="checkbox"/>	

2 Protective conductor resistance (limits for lines with a rated current > 16 A to be calculated based on conductor material, diameter and length!)			
2.1	Checking of the conductivity of the protective conductor	Limit values: $\leq 0.3 \Omega$ up to 5 m length $+ 0.1 \Omega$ per additional 7.5 m; but max. 1 Ω or calculate with $I_N > 16 \text{ A}$	
		Do not forget to move the line!	
2.2	Measured	_____ Ω	
		No measurable protective conductor <input type="checkbox"/>	
		i.o.	n.i.o.
		<input type="checkbox"/>	<input type="checkbox"/>
		Line length: _____ m	
		Cross-section: _____ mm ²	
3 Insulation resistance measurement (Caution - electronic switching equipment is not active! Protection or filter switching could be damaged! This measurement may be omitted for information technology devices or if damage can be expected from the required adapting with probes. For protection class I devices with heating elements with total power of > 3.5 kW, if resistance is under 0.3 MΩ, the device is still sound if the protective conductor current does not exceed 1 mA/kW and 10 mA.)			
3.1	Measurement of active conductors against the protective conductors	Limit values: $\geq 1 \text{ M}\Omega$ for protection class I $\geq 2 \text{ M}\Omega$ for protection class II $\geq 0.25 \text{ M}\Omega$ for protection class III $\geq 0.3 \text{ M}\Omega$ for devices with heating elements	
		Scan the exposed conductive parts which are not connected with the protective conductor!	
3.2	Measured	M Ω	
		Measurement not technically possible (electronic switch equipment etc.) <input type="checkbox"/>	
		Omit measurement as destruction of components expected <input type="checkbox"/>	
		i.o.	n.i.o.
		<input type="checkbox"/>	<input type="checkbox"/>
		For surge arresters, the measurement voltage may be reduced to 250 V DC.	
4 Protective conductor current (preferably use differential current measurement procedure) This measurement must be undertaken in <u>both</u> plug positions!)			
4.1	Measurement of active conductors against the protective conductors	Limit value: $\leq 3.5 \text{ mA}$	
		Plug position 1	Plug position 2
		Put appliance into operation.	
4.2	Measured	mA	mA
		i.o.	n.i.o.
		<input type="checkbox"/>	<input type="checkbox"/>
		Beware of rotating machine parts!	
		Do not use testing probe.	

5 Contact current (preferably use direct current measurement procedure) This measurement must be undertaken in <u>both</u> plug positions!				
5.1	Measure the exposed conductive parts which are not connected with the protective conductor	Limit value: $\leq 0.5 \text{ mA}$		Put appliance into operation. Beware of rotating machine parts! Use testing probe.
		Plug position 1	Plug position 2	
5.2	Measured	mA	mA	
		No scannable parts available <input type="checkbox"/>		
		i.o.	n.i.o.	
		<input type="checkbox"/>	<input type="checkbox"/>	
6 Substitute leakage current measurement (alternative to point 4 (protective conductor current measurement) and 5 (contact current measurement), if point 3 (insulation measurement) was carried out <u>successfully</u>. Caution - there must not be any switch equipment depending on mains voltage in the appliance - unsuitable measurement procedure! Protection or filter switching could affect the measurement result!)				
6.1	Measuring the protective conductor current	Limit value: $\leq 3.5 \text{ mA}$		Do not use a probe
6.2	Measured	mA		
		i.o.	n.i.o.	
		<input type="checkbox"/>	<input type="checkbox"/>	
6.3	Measuring the contact current	Limit value: $\leq 0.5 \text{ mA}$		<u>Scan exposed</u> conductive parts
6.4	Measured	mA		
		i.o.	n.i.o.	
		<input type="checkbox"/>	<input type="checkbox"/>	
7 Proof of isolation from supply circuit (SELV and PELV) (may be omitted for information technology devices, or if damage can be expected from the required adapting with probes.)				
7.1	Voltage of exposed SELV outlets	V	<input type="checkbox"/> AC <input type="checkbox"/> DC	Proof of voltage compliance with the specifications for SELV and PELV
		Measurement not technically possible <input type="checkbox"/>		
7.2	Insulation resistance measurements	Limit value $\geq 0.25 \text{ M}\Omega$		Measurements: - Primary to secondary
		i.o.	n.i.o.	

Protocol for the inspection of portable electrical appliances

according to BetrSichV, DGUV V3 according to DIN VDE 0701-0702

according to point 3	<input type="checkbox"/>	<input type="checkbox"/>	side - Primary side to exposed conductive parts - Secondary side to exposed conductive parts
	Omit measurement as destruction of components expected <input type="checkbox"/>		

according to BetrSichV, DGUV V3 according to DIN VDE 0701-0702

8 Inspection of the effectiveness of residual current device (for PRCDs, please use special protocol)			
8.1 Functional test by pressing the test button	i.o.	n.i.o.	The protective device must be connected with the mains for this inspection!
	<input type="checkbox"/>	<input type="checkbox"/>	
8.2 Trigger current	I_D mA	Limit value 50% - 100% * $I_{\Delta N}$	
	i.o.	n.i.o.	
	<input type="checkbox"/>	<input type="checkbox"/>	
	No protective device available <input type="checkbox"/>		
8.3 Trigger time	t_A ms	Limit value 0.3 seconds	
	i.o.	n.i.o.	
	<input type="checkbox"/>	<input type="checkbox"/>	
9 Additional inspections			
9.1 Safety installations	i.o.	n.i.o.	Test trigger
	<input type="checkbox"/>	<input type="checkbox"/>	
10 Functional inspection (required after modification and repair, otherwise only if required to assess safety)			
10.1 Function of appliance	in order	not in order	Visual check
	<input type="checkbox"/>	<input type="checkbox"/>	

Inspection passed and label granted: ☐ yes ☐ no

Date of next inspection determined based on the hazard assessment according to Section 3 BetrSichV:	_____
Additional notes	

_____ Place, date
 Inspector: _____ Name
 _____ Signature