

## METREL test and measurement accessories:



### **SFC Adapter A 1789 Instruction manual**

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Mark on your equipment certifies that it meets requirements of all subjected EU regulations.



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# 1 Safety and operational considerations

## 1.1 Warnings and notes

In order to reach high level of operator's safety while carrying out various tests and measurements using A 1789 as well as to keep the test accessory and equipment undamaged, it is necessary to consider the following general warnings:

-  Warning on the A 1789 means »Read the Instruction manual with special care to safety operation«. The symbol requires an action!
- If the adapter is used in a manner not specified in this Instruction manual and the manual of used test equipment, the test results may be wrong and misleading and the protection provided by the combined equipment may be impaired!
- The adapter is intended for connection to mains test socket of dedicated test instruments (PAT testers, machine testers etc). Never connect the adapter to installation sockets! The overcurrent protection must be provided by the test instrument or installation. Adapter is not fused.
- Take care of correct connection of the mains plug to the test instrument! This is especially important to set sfN condition correctly.
- With the adapter single fault conditions are simulated. The device under test may become dangerous during this condition!
- Consider all generally known precautions in order to avoid risk of electric shock while dealing with hazardous voltages!
- Service is allowed to be carried out only by a competent authorized person!

## 1.2 Standards applied

The A 1789 is manufactured and tested according to the following regulation, listed below.

### Safety (LVD)

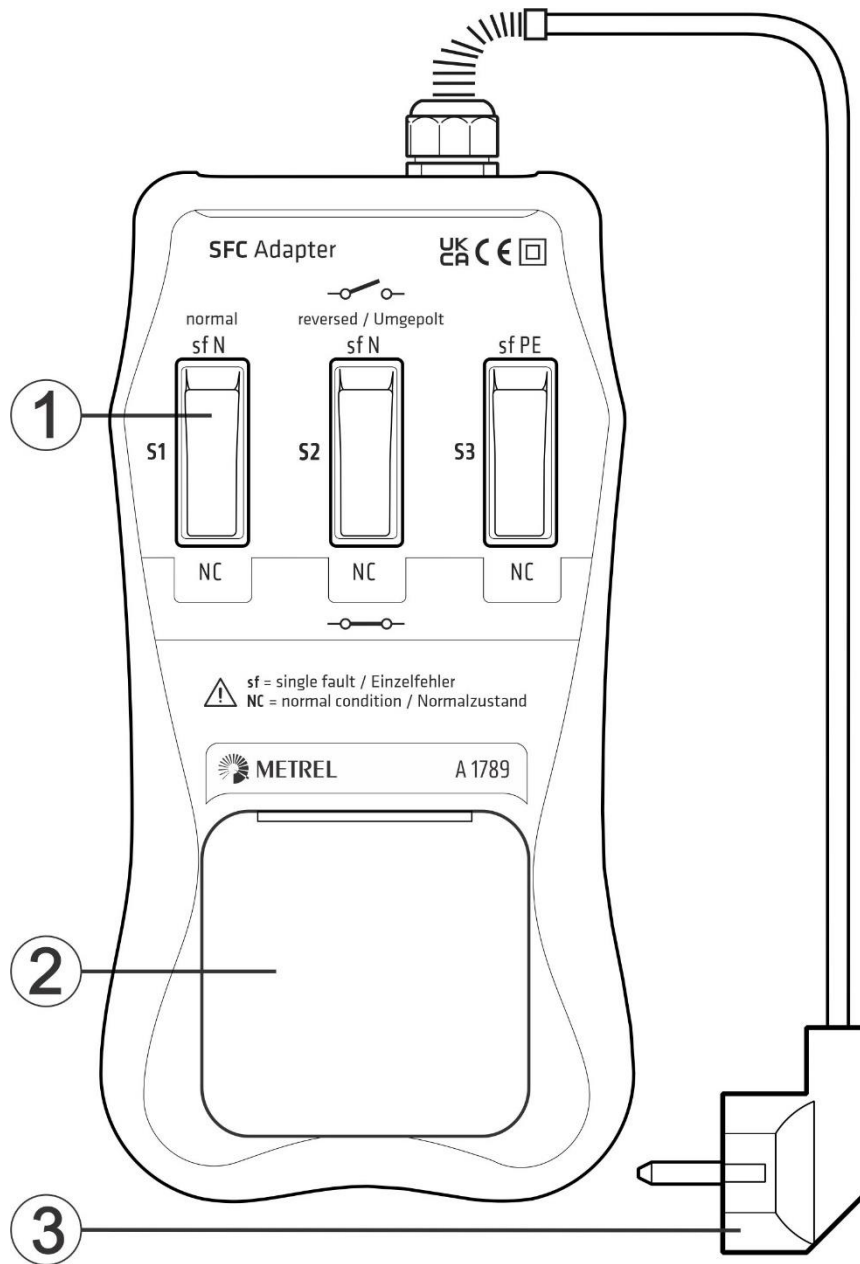
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EN 61010-1	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements
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## 2 A 1789 Description

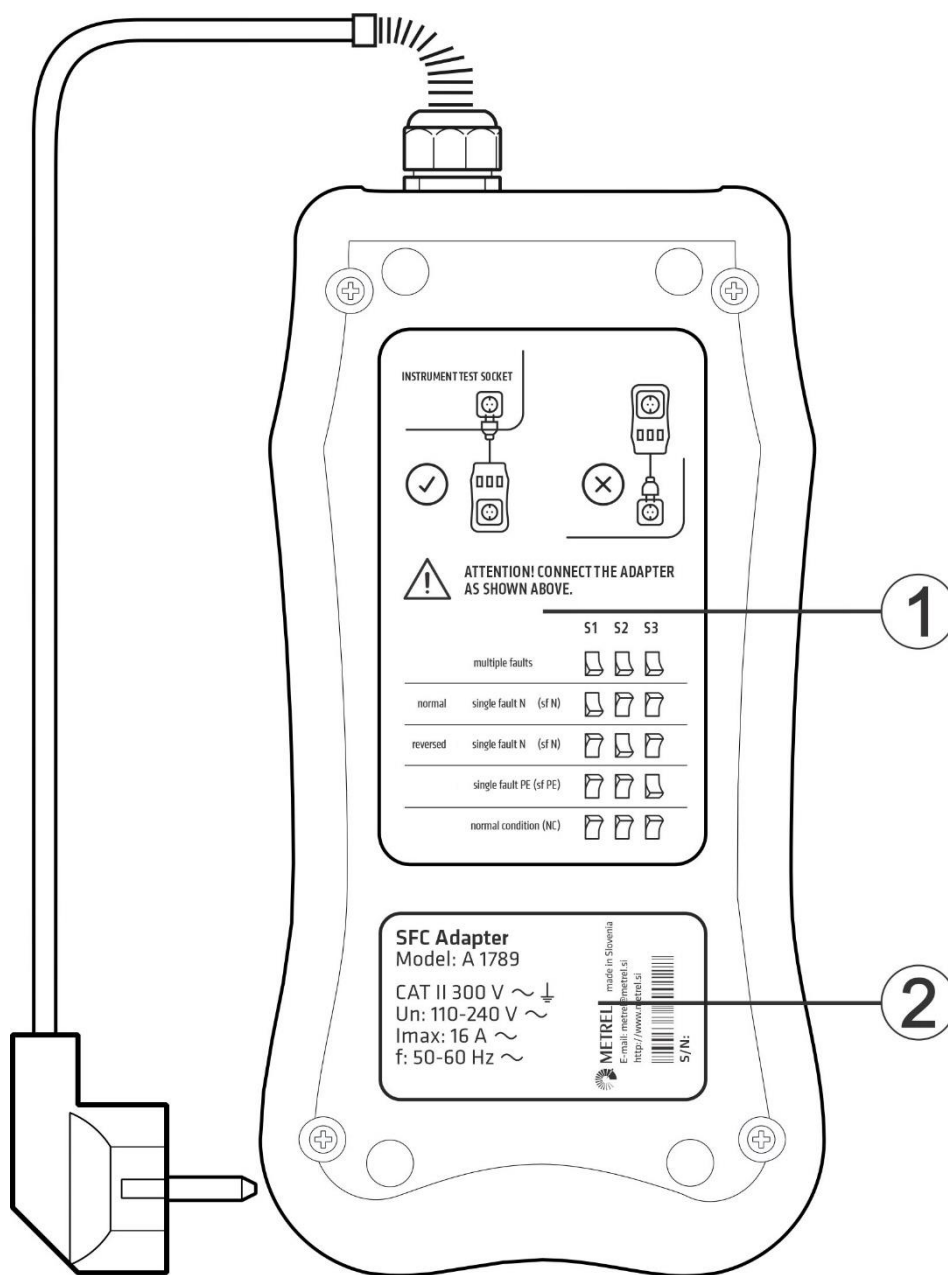
### 2.1 Connections



Legend:

- 1 Switches for simulating normal and single fault conditions
- 2 Test socket for connection to device under test
- 3 Mains plug for connection to test instrument.

## 2.2 Bottom side



Legend:

**1** Test setup / information label

**2** Serial number label

## **2.3 A 1789 set and accessories**

### **2.3.1 Standard set**

- A 1789 SFC Adapter
- Soft carrying bag
- Warranty declaration
- Declaration of conformity

### 3 A 1789 Operation

#### 3.1 Measuring with A 1789

- 
- › Connect A 1789 SFC (Single Fault Condition) Adapter between test instrument and device under test.

Consider correct plug orientation (follow instructions on information label)

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- › Set test condition with switches:  
normal condition (NC),  
single fault on neutral conductor (sf N) (normal or reversed polarity),  
single fault on PE conductor (sf PE),  
Multiple fault.

Instructions are given on the information label

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#### Warning

- › Setup of switches for sfN depends on position of phase and neutral polarity on test instrument's output.
- › Instructions for Metrel test instruments are given on information label (for normal and reversed/change polarity).

#### 3.2 Supported instruments

A 1789 can be used in combination with different Metrel appliance and machine testers with compatible mains test sockets.



## **4 Maintenance**

Unauthorized person is not allowed to open the A 1789. There are no user replaceable components inside the adapter.

### **4.1 Cleaning**

No special maintenance is required for the housing. To clean the surface of the adapter, use a soft cloth slightly moistened with soapy water or alcohol. Then leave the A 1789 to dry totally before use.

#### **Warnings:**

- Do not use liquids based on petrol or hydrocarbons!
- Do not spill cleaning liquid over the adapter!

### **4.2 Service**

For repairs under warranty, or at any other time, please contact your distributor.

## 5 Technical specifications

Max. input voltage.....264 V~

Max. load current .....16 A~ (Overcurrent protection should be provided with test instrument or installation)

Nominal frequency range .....50 Hz ... 60 Hz

Protection classification .....double insulation

Pollution degree .....2

Protection degree .....IP 40 (Test socket cover closed)  
IP 20 (Test socket used)

Altitude .....≤ 2000 m

Measurement category .....300 V CAT II

Dimensions (w × h × l) .....11 cm × 7 cm × 25 cm

Adapter plug cable length .....0.5 m

Weight .....0.43 kg

### Operation conditions

Working temperature range.....0 °C ... 40 °C

Maximum relative humidity .....95 %RH (0 °C ... 40 °C), non-condensing

Operation.....Indoor use

### Storage conditions

Temperature range.....-10 °C ... +70 °C

Maximum relative humidity .....90 %RH (-10 °C ... +40 °C)  
80 %RH (40 °C ... 60 °C)