

# THE POWERHOUSE SAFETYTEST 3HD

Test device for safety-related testing of AC consumers according to DIN EN 50678 (DIN VDE 0701), DIN EN 50699 (DIN VDE 0702), DIN EN 60974-4 (DIN VDE 0544-4) and EN 62353 (DIN VDE 0751)

Art. no.: 0035120

Compatible  
with



## Technical Highlights

- ✓ Testing according to DGUV regulation 3, DIN VDE 0701-0702, DIN EN 60974-4 (DIN VDE 0544-4) welding equipment and DIN EN 62353 (DIN VDE 0751) medical equipment
- ✓ QWERTZ keyboard, large high-contrast LC display
- ✓ Connections: CEE32 5-pole, CEE16 5-pole, CEE16 3-pole, socket and plug suitable for IP 67, Schuko, cold-device plug
- ✓ Test of extension cables, optionally with RCD type A/B (construction current distributor), PRCD, PRCD-S, PRCD-S Plus and PRCD-K
- ✓ Automatic test sequence, plain text operation and green/red LED display for OK/error
- ✓ Faster procedure of all active tests including function test with true effective power display in only one test step
- ✓ Check of the mains connection for PE connection and automatic switch-off in case of dangerous residual current of the DUT
- ✓ Data memory for up to 100,000 master data
- ✓ Ident number input via: QWERTY keyboard, barcode scanner, 2D QR code scanner, transponder scanner
- ✓ Bidirectional data exchange between unit or PC possible with USB stick or via USB cable
- ✓ Optional control of the meter (remote operation): **Remote-Master App** (Android and iOS), **Test-Master App** (Android), **Safety-Remote Software** (Windows PC/Tablet)

## Features

- The robust SAFETYTEST 3HD test set is used for testing after repair and for repeat testing of electrical work equipment with a connected load of up to 24 kW. It contains all common sockets for testing three-phase consumers, alternating current consumers and extension cables. Work equipment with IP67 plugs can be connected. The mains connection can be made via 400 V three-phase current or via 230 V Schuko connection cable.
- Operation is menu-driven via a large backlit LCD display. Pictograms are displayed for each measurement to help with the connection and test procedure.
- Prior to the test, the DUT is classified to define the test sequence and the setting of the limit values according to the selected VDE regulation (e.g. heating power, connection cable length).
- For an efficient test sequence, separate sequences are provided for extension leads (optionally with RCD), welding equipment (optional) and permanently connected equipment. The measured values are automatically stored in the unit and can then be logged via the PC, transferred to an optional test management or database software via USB, USB stick or Bluetooth (optional).
- The test items are distinguished by assigning a unique identification number via the QWERTY keyboard or a barcode, QR or transponder scanner that can be connected to the interface. Master data with parameters for determining the test sequences can be transferred from the PC to the test unit.
- The tester can be controlled via the **Remote Master App** (Android and iOS), **Test Master App** (Android) and **Safety Remote Software** (Windows PC/tablet).

### + ADDITIONAL OPTIONS

#### Bluetooth



Art.-Nr.:  
0010600

#### 10 A



Art.-Nr.:  
0039060

#### RCD 30 / 500



Art.-Nr.:  
0039080  
0039090

#### Special Networks



Art.-Nr.:  
0028660  
0039130

#### ARC



Art.-Nr.:  
0039121

#### Med



Art.-Nr.:  
0039100

#### 1.500 V / 2.500 V



Art.-Nr.:  
0039140 /  
0039150

## Product standards

- DIN EN 61557-16/EN 61010
- DIN EN 61326
- CAT II 300 V

## Dimensions, Weight

- Case with lid 470 mm x 420 mm x 220 mm
- Weight ca. 9,7 kg

## Technical parameters

- Mains connection: Alternating current 230 V ± 10 %
- alternating current 400 V, 16 A/32 A
- Ambient operating temperature: 5 °C ... 40 °C

## Menu navigation (App examples)

Remote-Master App

Display

## Included accessories

- Power cable Schuko
- Power cable CEE 32 A
- Cold appliance cable for extension cable and RCD testing
- Test probe 2-pole 2 m
- Accessories bag
- Factory calibration certificate

## Optional accessories

- Barcode scanner
- Barcode label
- Barcode printer
- Transponder scanner
- Transponder label
- DGUV regulation 3 label
- Test probe 2-pole: 2 m/5 m/10 m
- Active probe 2-pole: 2 m/5 m/10 m
- Test clamp 4 mm
- Brush probe 4 mm
- Measuring cable 2 m/5 m
- Differential current clamp **DI40**
- Differential current clamp **DI80**
- **Calibration adapter KA1**

## Optional Software/App

- **Remote master app (Android and iOS), Art. no.: (Basic) 0042690, (Pro) 0042691, (Comfort) 0042692, (Comfort+) 0043900**  
Individual test sequences with unique operating concept for efficient testing and fast documentation. Central access and rights and role management with the Cloud Master (server solution) Item no. 0042693
- **Test-Master App (Android), Art. no.: 0039370**  
Menu-driven app with camera documentation, protocol generation and SQLite3 database.
- **PC software SafetyDoc, Art. no.: 0004140**  
Protocol software with protocol function (scope of delivery) and Excel list function (optional) for transferring existing inspection and inventory lists and for deadline monitoring and statistical evaluation.
- **PC database software Safety-Remote, Art. no.: 0001004**  
Database software with logging, remote control and database functionality

## Measurements (usage error 5 % of value + 1 % of range)

Protective conductor resistance	0.000 Ω ... 4.000 Ω, test current 200 mA DC/ open-circuit voltage approx. 10 V <b>Option 10A:</b> 10 A DC/open-circuit voltage approx.4V
Insulation resistance	0.00 MΩ ... 20.00 MΩ, Open-circuit voltage: • 500 V (usage error 5 % o. v. + 1 % o. r.) • 250 V (usage error 10 % o. v. + 2 % o. r.) • 50 V (usage error 20 % o. v. + 2 % o. r.) Short-circuit current: max. 1,2 mA Output L-N: max. 500 V/50 MΩ <b>Option 1,500 V and 2,500 V</b> Open-circuit voltage: 1,000 V, 1,500 V, 2,500 V <b>Option MED</b> 0,00 MΩ ... 70,00 MΩ (min. 500 V) (usage error 20 % o. v. + 2 % o. r.)
Integrated Residual current breaker	Differential current > approx. 20 mA
Substitute leakage current	0.00 mA ... 20.00 mA, Open-circuit voltage approx. 230 V AC (max. 2.5 mA), (internal resistance 1kΩ)
Differential current according to DIN EN 61557-14 for correct evaluation of harmonics	Test socket: 0.00 mA ... 20.00 mA AC <b>Optionally with differential current clamp</b> • DI40: 0.00 mA ... 40.00 mA • DI80: 0.00 mA ... 40.00 mA
Contact current	0.000 mA ... 4.000 mA 0.000 mA ... 10.000 mA (DIN EN 60974-4)
Voltage L1, L2, L3 against N	L1: 200 V ... 250 V AC <b>(Option special networks 110 V: L1: 110 V ... 250 V AC)</b> L2: 0 ... 250 V AC, L3: 0 ... 250 V AC

## Measurements (usage error 5 % of value + 1 % of range)

Protective conductor monitoring	Voltage N-PE > 30 V
Current measurement IL1, IL2, IL3	Test socket Schuko: 0.00 A ... 16.0 A Test sockets CEE: 3x 0.00 A ... 40.0 A <b>Optionally with differential current clamp</b> • DI40: 0.00 A ... 40.00 AAC • DI80: 0.00 A ... 10.00 AAC
Power measurement	0 W ... 30.000 W
RCD (Option RCD)	Rated residual current 10/30/100/300/500 mA Tripping time: 0 ... 300 ms RCD type A, F, B, B+ PRCD, PRCD type S, S+, K
Interfaces	<ul style="list-style-type: none"> <li>• USB type A for USB stick 2.0 or barcode and transponder scanner USB type B for control with a Windows PC or Android tablet.</li> <li>• RS232 for barcode, 2D QR code and transponder scanner</li> <li>• Bluetooth (<b>Option Bluetooth</b>) for wireless control with a Windows PC or Android tablet</li> </ul>
Memory	100.000 Master data records
Voltage measurement SELV/PELV via probe	0 V ... 440 V AC/DC
Testing procedures	SKI active/passive, SKII active/passive, extension, fixed connection with tongs, SKIII and individual measurements
Open-circuit voltage (Option ARC)	0 V ... 150 V (5 kΩ ... 200 Ω), according to: DIN EN 60974-4 (DIN VDE 0544-4)

Calibration and Service  
<https://kp.safetytest.eu>



Manuals and Datasheets  
<https://doku.safetytest.eu/>



Need help? Contact us  
<https://ssp.safetytest.eu>

