

Bonding And Loop Resistance Tester

>BLRT2-XX-X<



<BLRT2>
TEST-FUCHS part no. 151020031

AIRBUS CERTIFIED

The equipment is developed as multifunctional bonding tester. It is especially used in aircraft manufacturing. It can be used on all aircraft types. It is capable of performing various tests depending on used accessories.

The test capability ranges from simple 4-wire bonding tests to loop resistance testing using current clamps with or without current measuring clamps up to special tests e.g. ESN tests (electrical structure network) or bonding test of multiple connected earth connections.

- > All testing features can be selected and combined independently. Options can also be retrofitted at a later stage
- > The tester is housed in a light and practical case with handle ensuring easy handling by the user
- > The high capacity accumulator ensures that the equipment can be used for long periods of time
- > A wide range of accessories is available for this tester

GENERAL INFORMATION

- > Large display for good readability
- > User friendly software for easy operator use
- > Multi-function tester with selectable standard and special functions
- > Clamps and cables are coded
- > USB interface
- > Memory capacity for 1,000 measuring values (including date and time)
- > PC-Software for data processing is available
- > Including self test unit for function control of the test equipment and the measuring clamps

TECHNICAL DATA

| | |
|---|---|
| <p>> Electrical supply (requirements):</p> <p>Mains charger adapter: 1/N/PE AC 50Hz Accumulator: 2 x Li-Ion 7.2V 47.5Wh</p> | <p>> Interface:</p> <p>Interface: USB (Mini USB) Memory capacity: min. 1,000 measuring values</p> |
| <p>> Functions:</p> <p>Measuring functions: see "FUNCTIONS" Ranges: see "OPTIONS" Accuracy: see "OPTIONS"</p> | <p>> Operating conditions (operation):</p> <p>Temperature: -15°C to +50°C (+5°F to +122°F) does not apply to all measuring functions +10°C to +50°C (+50°F to +122°F) for "Single Clamp Measurement"</p> <p>Rel. humidity: max. 95% relative humidity (non-condensing)</p> |
| <p>> Output values:</p> <p>Output voltage DC: max. 7VDC Output current DC: max. 10ADC Output voltage AC: max. 40VAC Output power AC: max. 30W</p> | <p>> Operating conditions (storage):</p> <p>Temperature: -20°C to +70°C (-4°F to 158°F) Rel. humidity: max. 95% relative humidity (non-condensing)</p> |
| <p>> Measurement range:</p> <p>Functions: Measurement ranges and tolerances are listed in the item "FUNCTIONS"</p> <p>Battery voltage: Range: 0 to 10V Tolerance: 0.5% of reading</p> | <p>> Dimensions and weight:</p> <p>Width: approx. 250mm (9.8in) Depth: approx. 170mm (6.7in) Height: approx. 170mm (6.7in) Weight: approx. 3.2kg (7.1lb)</p> |

FUNCTIONS

BONDING TESTER (OPTION B)

(TEST-FUCHS part no. 151020036)

> **Technical description**

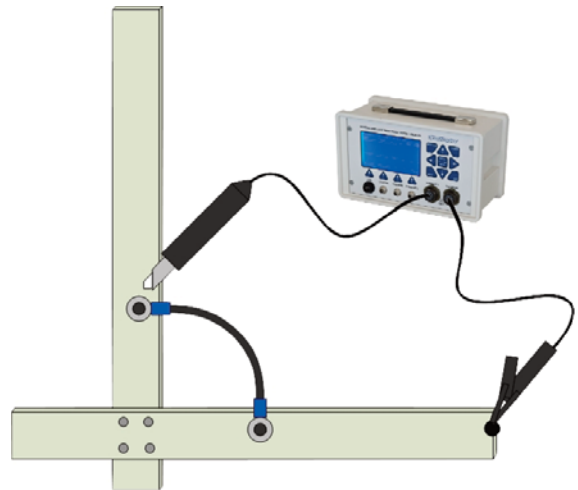
Bonding Tester with 10A, 1A and 0.1A test current. It works as a Kelvin Resistance Meter.

The bonding tester measures the resistive connection between two measuring points.

During the bonding test an increased test current is injected in the unit under test by means of test probes or terminals. The voltage drop is recorded on two test points. The contact resistance between voltage test points is calculated by means of current and voltage values.

This measuring method only works when the total measurement current flows through the unit under test.

Schematic diagram of the test set-up

**BONDING TEST FOR MULTIPLE CROSSED CONNECTIONS (UP TO 20A) (OPTION C)**

(TEST-FUCHS part no. 151020037)

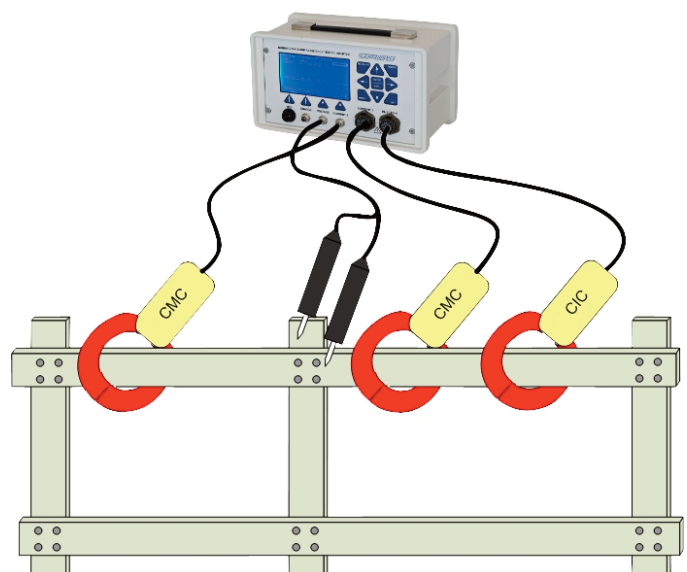
> **Technical description**

This bonding test is carried out when the injected test current can flow through different paths and there is a physical access to the unit under test.

The test current is injected by means of a "Current Injection Clamp" (CIC). Here a loop resistance is necessary. The "Current Measurement Clamp" (CMC) measures this test current. The voltage drop at the UUT is measured by means of a pair of voltage test probes. The injected current which is not flowing through the unit under test is measured by means of an additional "Current Measurement Clamp" (CMC) and is taken into account at the calculation.

The contact resistance is determined by means of measured currents and voltage drop.

Schematic diagram of the test set-up



FUNCTIONS

HIGH CURRENT / LOW FREQUENCY MICRO-OHMMETER (OPTION E)

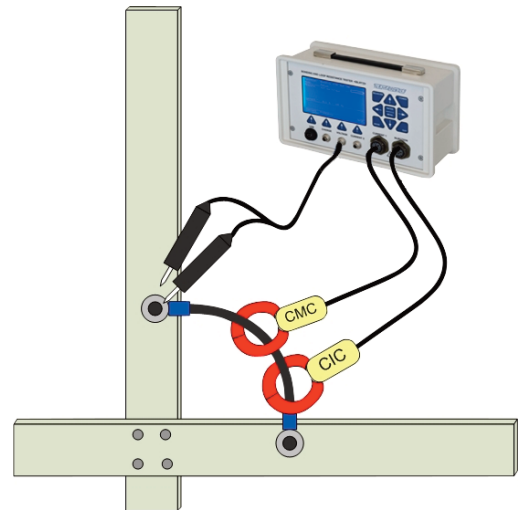
(TEST-FUCHS part no. 151020038)

> **Technical description**

The “High Current / Low Frequency Test” (up to 150A and with different frequencies) is used to evaluate the quality of the connections.

The very high test current with low frequency is injected by means of a “Current Injection Clamp” (CIC) For this purpose a loop resistance is necessary. A “Current Measurement Clamp” (CMC) measures this test current. The voltage drop at the UUT is measured by a pair of voltage test probes. The contact resistance is determined by means of test current and voltage drop.

Schematic diagram of the test set-up

**LOOP RESISTANCE TEST (OPTION L, M, N)**

(TEST-FUCHS part no. 151020039 for option L - 1,000Hz)

(TEST-FUCHS part no. 151020040 for option M - 2,000Hz)

(TEST-FUCHS part no. 151020041 for option N - 100 to 200Hz)

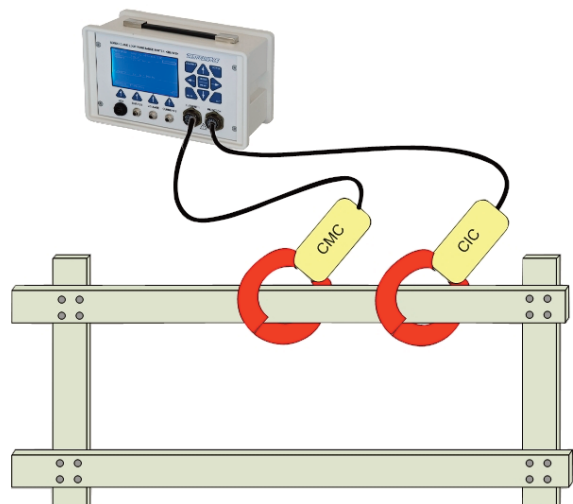
> **Technical description**

The “Loop Resistance Test” measures the overall resistance of a bonding loop. It is used for example when a metal tube has multiple connections to structure.

A “Current Injection Clamp” (CIC) injects alternating current into the current loop and the required voltage is measured. A “Current Measurement Clamp” (CMC) measures the injected current. The overall resistance of the current loop is calculated by means of voltage and current value.

For this method it is essential that there is only one current loop.

Schematic diagram of the test set-up



FUNCTIONS

OVERBRAID TEST (OPTION O)

(TEST-FUCHS part no. 151020042)

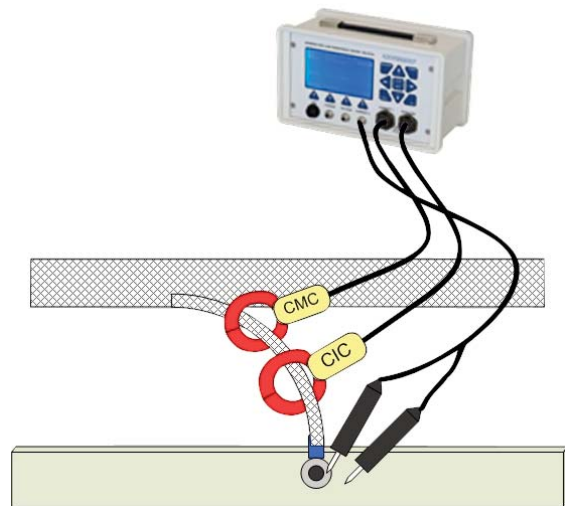
> Technical description

The Overbraid Test verifies whether bonding connections (e.g. of a shielding braid) are properly connected to the structure.

The test current of up to 10A is injected by means of the "Current Injection Clamp" (CIC). For this purpose a loop resistance is necessary. A "Current Measurement Clamp" (CMC) measures this test current. The voltage drop at the connection is measured by means of a pair of voltage test probes. The contact resistance is determined by means of test current and voltage drop.

This test method is similar to option E however lower currents are used in this case.

Schematic diagram of the test set-up

**HIGH RESISTANCE LOOP TEST (OPTION P)**

(TEST-FUCHS part no. 159060017)

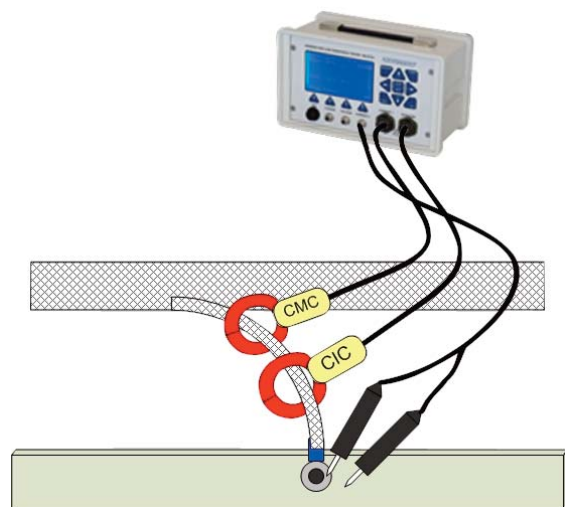
> Technical description

With this bonding test, the loop impedance and ohmic resistance are determined, also if these are rather high ($< 4 \text{ Ohm}$). In addition the ohmic resistance on one connection can be determined by choice.

By means of the "Current Injection Clamp" (CIC), the test current is injected. For this purpose, a loop resistance is necessary. The required voltage is measured. A "Current Measurement Clamp" (CMC) measures the test current. The impedance and the ohmic resistance of the loop are calculated with these voltage and current values.

In addition, the voltage drop at the connection can be measured by means of a pair of voltage test probes. In this case the ohmic resistance of the connection is determined.

Schematic diagram of the test set-up



FUNCTIONS

MICRO-OHMMETER WITH SEPARATE CURRENT MEASUREMENT CLAMP (OPTION S)

(TEST-FUCHS part no. 151020043)

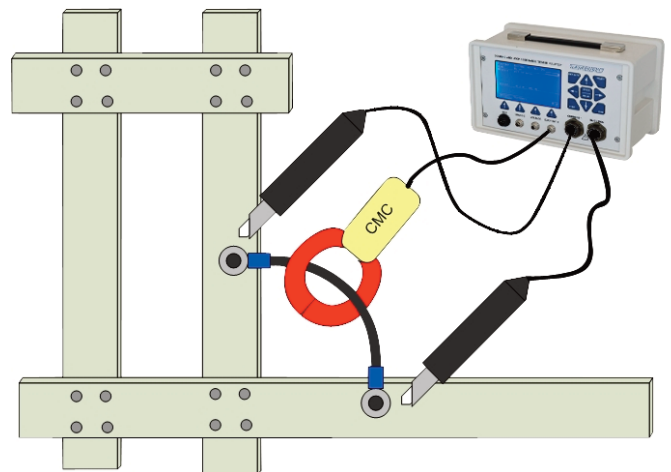
> Technical description

This bonding test is carried out when the injected test current can use different paths and there is a physical access to the unit under test (also for the current measuring clamp). When this is not the case, option C can be used instead.

This bonding test operates like a standard bonding test (option B), in addition the real UUT current is measured by means of a „Current Measurement Clamp“.

The result is the contact resistance of the connection element which is located between the voltage probes and which is enclosed by the current probe.

Schematic diagram of the test-setup



FUNCTIONS

WIRELESS COMMUNICATION (OPTION V)

(TEST-FUCHS part no. 151020044)

> **Technical description**

Automatic wireless transfer of data between the <BLRT2> and a PC can be performed. For this purpose a RF USB stick is inserted into the PC.

SINGLE CLAMP MEASUREMENT (OPTION Y)

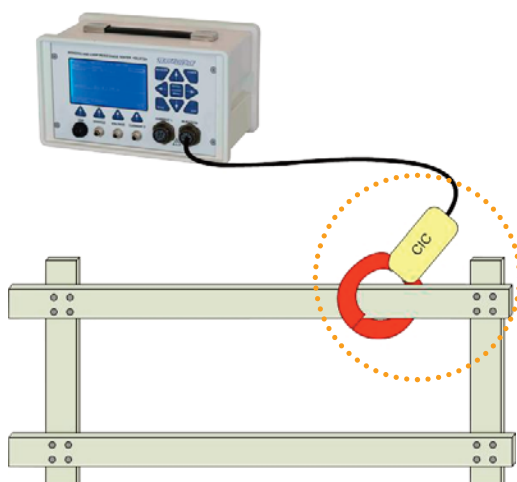
(TEST-FUCHS part no. 151020045)

> **Technical description**

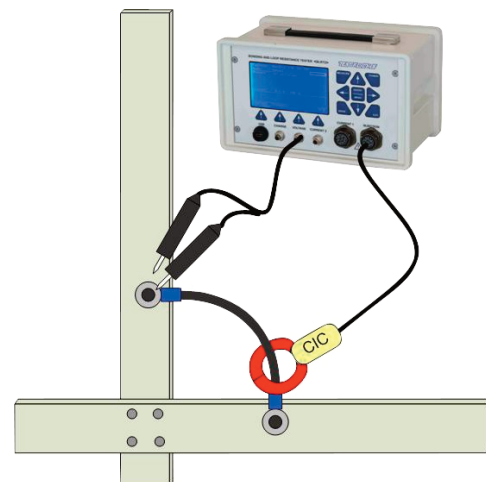
Single Clamp Measurement for the options E and N.

Many of the functions require one "Current Injection Clamp" (CIC) and one "Current Measurement Clamp" (CMC). When, due to space strictions, it is not possible to attach two clamps to the unit under test, the "Single Clamp Measurement" method can be used. In this case only one clamp is used (to inject the current). The injected current is calculated using the operating parameters. The advantage of this method is that measurements can easily be carried out and the number of clamps is reduced to one. The disadvantage is that the measurement accuracy is reduced by approx. +2% of reading (depends on the used function).

Schematic diagram of the test set-up



Loop Resistance
Test (Option L,M,N)
Single Clamp Measurement



High Current / Low Frequency
Test (Option E)
Single Clamp Measurement

FUNCTIONS

CAPACITIVE MEASUREMENT (OPTION Z)

(TEST-FUCHS part no. 151020046)

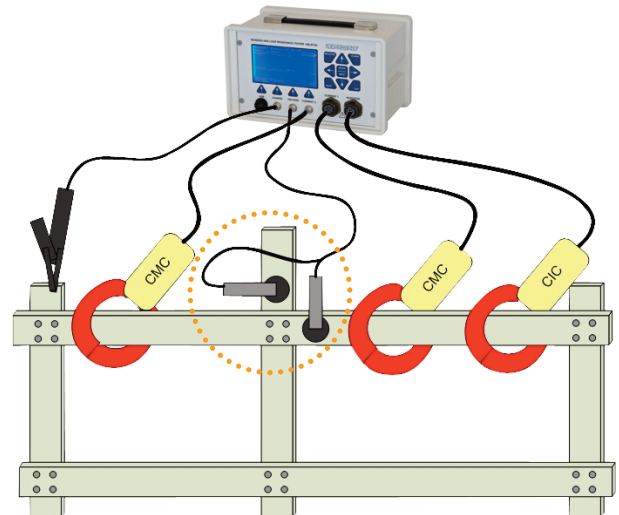
> Technical description

Voltage probes must have a conductive connection to the metal. Therefore it might be necessary to break through the varnish coating of the UUT which will require renewal after test completion.

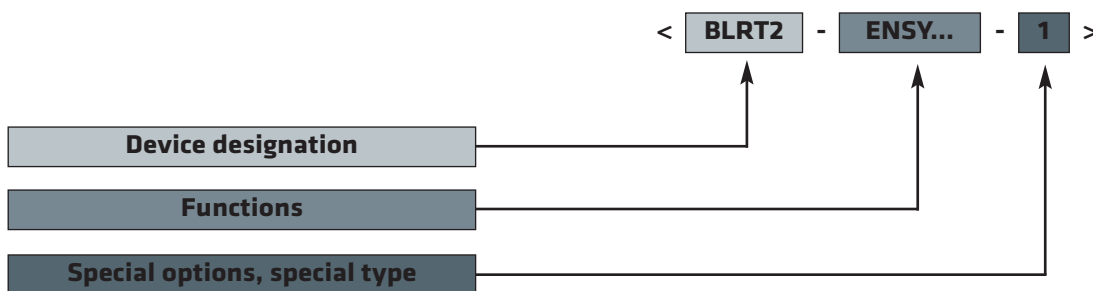
To avoid this extensive process it is possible to use capacitive voltage measurement instead of the voltage probes. This can replace one or both voltage measurements. This test method can only be used for AC measurements.

Due to the capacitive measurement system, the accuracy of measurements is reduced by approx. +3% (depending on the used function).

Schematic diagram of the sensor



TYPE KEY



OPTIONS

| Option | Function | TEST-FUCHS part no. | Measure-ment (mOhm) | Resolution (μOhm) | Adjustable current (A) | Frequency (Hz) | Standard accuracy (% of reading) | Required accessories | Remarks |
|----------|--|---------------------|--------------------------------------|-------------------|------------------------|----------------|---|--|---|
| B | Bonding Tester | 151020036 | 2 to 1000 at 0.1A | 1 | 0.1 1 10 | DC | 0.2% reading +0.2% final v. | 2 x Kelvin Probe | (available) Standard Bonding |
| C | Bonding Test for Multiple Crossed Connections | 151020037 | 0.01 to 100 | 1 | 10 20 | 1000 | 10 ±2μOhm | 1 x Voltage Probe 1 x Current Injection Clamp 2 x Current Measurement Clamp | (under development) |
| E | High Current / Low Frequency Micro-Ohmmeter | 151020038 | Rc: 0.005 to 0.5 Zloop: 0.1 to 20 | 0.1 | 10 20 50 100 150 | 100 200 | Rc: 10 ±1μOhm Zloop: 10±20μOhm | 1 x Current Injection Clamp 1 x Current Measurement Clamp or 1 x Combined Injection Measurement Clamp and 1 x Voltage Probe | (available) e.g.: used for ESN Measurement |
| L | Loop Resistance Tester 1000Hz | 151020039 | 1 to 200 | 10 | 1 10 | 1000 | 5 ±50μOhm | 1 x Current Injection Clamp 1 x Current Measurement Clamp or 1 x Combined Injection Measurement Clamp | (available) Standard Loop Resistance Test |
| M | Loop Resistance Tester 2000Hz | 151020040 | 1 to 200 | 10 | 1 10 | 2000 | 5 ±50μOhm | 1 x Current Injection Clamp 1 x Current Measurement Clamp or 1 x Combined Injection Measurement Clamp | (development is planned) |
| N | Loop Resistance Tester 100Hz | 151020041 | 0.1 to 20 | 1 | 0.1 1 10 | 100 200 | 10 ±20μOhm | 1 x Current Injection Clamp 1 x Current Measurement Clamp or 1 x Combined Injection Measurement Clamp | (available) e.g.: used for ESN Measurement |
| O | Overbraid Test | 151020042 | Rc: 0.005 to 0.5 Zloop: 0.1 to 20 | 1 | 0.1 1 10 | 100 200 | Rc: 10 ±1μOhm Zloop: 10 ±20μOhm | 1 x Current Injection Clamp 1 x Current Measurement Clamp or 1 x Combined Injection Measurement Clamp and 1 x Voltage probe | (available) |
| P | High Loop Resistance Tester | 159060017 | Zloop: 1 to 4000 Rc: 0.01 to 4000 | 10 or 1000 | max. 1 | 200 | Zloop: 5 ±0.2μOhm Rc: ± 5 % reading or 0.2μOhm | 1 x Current Injection Clamp 1 x Current Measurement Clamp or 1 x Combined Injection Measurement Clamp | (available) |
| S | Micro-Ohmmeter with separate Current Measurement Clamp | 151020043 | 0.1 to 10 | 1 | 0.1 1 10 | DC | 10 | 2 x Kelvin Probe 1 x Current Measurement Clamp | (available) e.g.: used for ESN Measurement |
| V | Wireless communication | 151020044 | | | | 858MHz | | RF USB Stick for Computer | RF 858MHz (development is planned) |
| Y | Single Clamp Measurement | 151020045 | | | | | additional 2% | only Current Injection Clamp required | (available) In combination with one of these options: E, L, M, N, O |
| Z | Capacitive Measurement | 151020046 | | | | | additional 3% | | In combination with one of these options: E, O (development is planned) |

Standard Accessories For Bonding And Loop Resistance Tester

>BLRT2-XX-X<

Battery Package

(2 batteries "S307149")

(TEST-FUCHS part no. 106220138)

| | |
|---|------------|
| Manufacturer: | TEST-FUCHS |
| Type: | S307149 |
| Output voltage: | 7.2V |
| Power: | 48Wh |
| Current output: | min. 6A |
| Intermediate charging is possible (no memory effect) | |



Power Supply Unit "S307164"

(TEST-FUCHS part no. 103070582)



Shoulder Strap

Type "1472"

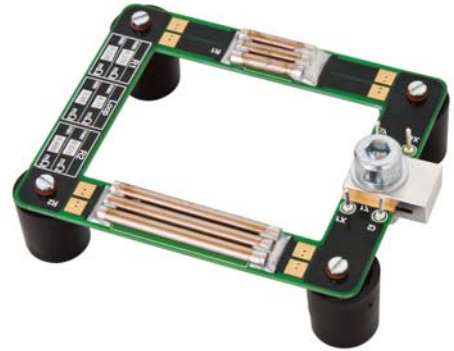
(TEST-FUCHS part no. 106330923)



Self Test Unit

(TEST-FUCHS part no. 106375881)

Manufacturer: TEST-FUCHS
Type: L1708/000/000
Functions: E, S, N
not calibrated



Connection Cable

Mini USB B-A 2m

(TEST-FUCHS part no. 106331470)



Travel adapter

(„SKROSS PRO“)

(TEST-FUCHS part no. 103206789)



Optional Accessories For Bonding And Loop Resistance Tester

>BLRT2-XX-X<

Storage Case "EXPLORER 8.850-W"

(TEST-FUCHS part no. 150090174)

With wheels and extendable handle
Very solid and stackable
Inside coated with foam
Compartments for: - BONDING AND LOOP RESISTANCE
TESTER <BLRT2-XX-X>
- Various accessories
- Technical documentation
Dimensions: approx. 650 x 500 x 250mm
(approx. 25.6 x 19.7 x 9.8in)
Weight (empty): approx. 5kg (approx. 11.0lb)



Standard Battery Charger

(TEST-FUCHS part no. 103230267)

Manufacturer: TEST-FUCHS
Type: S274257
Input: AC 100 to 240V; 50 / 60Hz
Output: DC 7 to 8.4V; 1.8A
Loading time: approx. 4h (90%)
Two batteries can be charged at the same time



Extended Battery Charger

(TEST-FUCHS part no. 103070532)

Manufacturer: TEST-FUCHS
Type: S307139
Input: AC 100 to 240V; 50 / 60Hz
Output: DC 12 to 17V; 10A
Loading time: approx. 1.5h (90%)
Two batteries can be charged at the same time



Body Strap

Type „1-8151“

(TEST-FUCHS part no. 106331548)



Small Current Injection Clamp <CIC1>

(TEST-FUCHS part no. 151020047)

| | |
|-----------------------------|------------------------------------|
| Manufacturer: | Fluke modified by TEST-FUCHS |
| Inner diameter: | 21mm (0.8in) |
| Length: | 135mm (5.3in) |
| Width of the clamp: | 18mm (0.7in) |
| Width of the clamp housing: | 28mm (1.1in) |
| Height: | 48mm (1.9in) |
| Weight: | 494g (1.1lb) |
| Cable length: | 4m (157.5in) |
| Windings, primary: | 180 |
| Windings, measurement: | 30 |
| Supply max. 100Hz: | 7.2V |
| Supply max. 200Hz: | 13.5V |
| Supply max. 400Hz: | 22V |
| Uloop max. 100Hz: | 36mV |
| Uloop max. 200Hz: | 67.5mV |
| Uloop max. 400Hz: | 110mV |
| Uloop max. 1000Hz: | 185mV |
| Uloop max. 2000Hz: | 205mV |
| Clamp Open Detection: | not included |
| Integr. temperature sensor: | not included |



Big Current Injection Clamp <CIC2>

(TEST-FUCHS part no. 151020049)

| | |
|-----------------------------|---------------|
| Manufacturer: | Metrel |
| | modified by |
| | TEST-FUCHS |
| Inner diameter: | 55mm (2.2in) |
| Length: | 170mm (6.7in) |
| Width of the clamp: | 36mm (1.4in) |
| Width of the clamp housing: | 36mm (1.4in) |
| Height: | 97mm (3.8in) |
| Weight: | 877g (1.9lb) |
| Cable length: | 4m (157.5in) |
| Windings, primary: | 180 |
| Windings, measurement: | 30 |
| Supply max. 100Hz: | 16.5V |
| Supply max. 200Hz: | 30V |
| Supply max. 400Hz: | 37V |
| Uloop max. 100Hz: | 82.5mV |
| Uloop max. 200Hz: | 150mV |
| Uloop max. 400Hz: | 185mV |
| Clamp Open Detection: | not included |
| Integr. temperature sensor: | not included |



Small Current Injection Clamp For Single Clamp And Clamp-Open Detection And Temperature Sensor <CIC5>

(TEST-FUCHS part no. 151020059)

| | |
|-------------------------------|---------------|
| Manufacturer: | Fluke |
| | modified by |
| | TEST-FUCHS |
| Inner diameter: | 23mm (0.9in) |
| Length: | 135mm (5.3in) |
| Width of the clamp (reduced): | 13mm (0.5in) |
| Width of clamp housing: | 28mm (1.1in) |
| Height: | 48mm (1.9in) |
| Weight: | 494g (1.1lb) |
| Cable length: | 4m (157.5in) |
| Windings, primary: | 180 |
| Windings, measurement: | 30 |
| Supply max. 100Hz: | 7.2V |
| Supply max. 200Hz: | 13.5V |
| Supply max. 400Hz: | 22V |
| Uloop max. 100Hz: | 36mV |
| Uloop max. 200Hz: | 67.5mV |
| Uloop max. 400Hz: | 110mV |
| Clamp Open Detection: | included |
| Integr. temperature sensor: | included |



Big Current Injection Clamp For Single Clamp And Clamp-Open Detection And Temperature Sensor <CIC8>

(TEST-FUCHS part no. 150020835)

| | |
|-----------------------------|-------------------------------------|
| Manufacturer: | Metrel modified by TEST-FUCHS |
| Inner diameter: | 55mm (2.2in) |
| Length: | 170mm (6.7in) |
| Width of the clamp (rear): | 36mm (1.4in) |
| Width of the clamp (front): | 25mm (1.0in) |
| Width of the clamp housing: | 36mm (1.4in) |
| Height: | 97mm (3.8in) |
| Weight: | 877g (1.9lb) |
| Cable length: | 4m (157.5in) |
| Windings, primary: | 180 |
| Windings, measurement: | 30 |
| Supply max. 100Hz: | 16.5V |
| Supply max. 200Hz: | 30V |
| Supply max. 400Hz: | 37V |
| Uloop max. 100Hz: | 82.5mV |
| Uloop max. 200Hz: | 150mV |
| Uloop max. 400Hz: | 185mV |
| Clamp Open Detection: | included |
| Integr. temperature sensor: | included |



Small Current Measurement Clamp <CMC1>

(TEST-FUCHS part no. 151020048)

| | |
|-----------------------------|------------------------------------|
| Manufacturer: | Fluke modified by TEST-FUCHS |
| Inner diameter: | 21mm (0.8in) |
| Length: | 135mm (5.3in) |
| Width of the clamp: | 18mm (0.7in) |
| Width of the clamp housing: | 28mm (1.1in) |
| Height: | 48mm (1.9in) |
| Weight: | 494g (1.1lb) |
| Cable length: | 4m (157.5in) |
| Windings, primary: | 1,000 |
| Max. current measurement: | 150A |



Big Current Measurement Clamp <CMC2>

(TEST-FUCHS part no. 151020050)

| | |
|-----------------------------|-------------------------------------|
| Manufacturer: | Metrel modified by TEST-FUCHS |
| Inner diameter: | 55mm (2.2in) |
| Length: | 170mm (6.7in) |
| Width of the clamp: | 36mm (1.4in) |
| Width of the clamp housing: | 36mm (1.4in) |
| Height: | 97mm (3.8in) |
| Weight: | 877g (1.9lb) |
| Cable length: | 4m (157.5in) |
| Windings, primary: | 1,000 |
| Max. current measurement: | 150A |



Active Clamp <CMC3>

(TEST-FUCHS part no. 151020051)

Active, small AC and DC current measurement clamp

Supplied by the <BLRT2> thus batteries are not required

The switch and regulator that are fitted on the clamp are deactivated and have no influence on the operation

| | |
|-----------------------------|------------------------------------|
| Manufacturer: | Fluke modified by TEST-FUCHS |
| Inner diameter: | 20mm (0.8in) |
| Length: | 180mm (7.1in) |
| Width of the clamp: | 15mm (0.6in) |
| Width of the clamp housing: | 25mm (1.0in) |
| Height: | 70mm (2.8in) |
| Weight: | 326g (0.7lb) |
| Cable length: | 4m (157.5in) |
| Proportion: | 10mV/A AC and DC |
| Max. current measurement: | 10A |



Small Current Measurement Clamp - Reduced Size <CMC6>

(TEST-FUCHS part no. 150090173)

| | |
|----------------------------------|------------------------------------|
| Manufacturer: | Fluke modified by TEST-FUCHS |
| Inner diameter: | 23mm (0.9in) |
| Length: | 135mm (5.3in) |
| Width of clamp (reduced): | 13mm (0.5in) |
| Width of clamp housing: | 28mm (1.1in) |
| Height: | 48mm (1.9in) |
| Height of a clamp arm (reduced): | 8.5mm (0.3in) |
| Weight: | 494g (1.1lb) |
| Cable length: | 4m (157.5in) |
| Windings, primary: | 1.000 |
| Max. current measurement: | 150A |



Small Combined Injection / Measurement Clamp <CIMC7>

(TEST-FUCHS part no. 151020052)

| | |
|-----------------------------|---------------|
| Manufacturer: | TEST-FUCHS |
| Inner diameter: | 26mm (1.0in) |
| Length: | 175mm (6.9in) |
| Width of clamp: | 31mm (1.2in) |
| Width of clamp housing: | 31mm (1.2in) |
| Height: | 62mm (2.4in) |
| Height of a clamp arm: | 16mm (0.6in) |
| Weight: | 494g (1.1lb) |
| Cable length: | 4m (157.5in) |
| Windings, primary: | 360 |
| Max. current measurement: | |
| - Voltage measurement: | 60 |
| - Current measurement: | 1100 |
| Maximal supply 1 kHz: | 30V |
| Maximal Uloop 1 kHz: | 83.3mV |
| Clamp Open Detection: | not included |
| Integr. temperature sensor: | not included |



Active Clamp <CMC9>

(TEST-FUCHS part no. 150090371)

Active, small AC and DC current measurement clamp

Supplied by the <BLRT2> thus batteries are not required

The switch and regulator that are fitted on the clamp are deactivated and have no influence on the operation

| | |
|-----------------------------|------------------------------------|
| Manufacturer: | Fluke modified by TEST-FUCHS |
| Inner diameter: | 20mm (0.8in) |
| Length: | 180mm (7.1in) |
| Width of the clamp: | 15mm (0.6in) |
| Width of the clamp housing: | 25mm (1.0in) |
| Height: | 70mm (2.8in) |
| Weight: | 326g (0.7lb) |
| Cable length: | 4m (157.5in) |
| Proportion: | 10mV/A AC and DC |
| Max. current measurement: | 10A |



Kelvin Probes With Extended Tips Injection <PKL552-2>

(TEST-FUCHS part no. 103240488)

Hardened and spring-loaded Kelvin tips were developed by TEST-FUCHS

Design of these tips ensures their capability to test through varnished and anodized material

The tips are made of hardened steel and can be exchanged

The cable is designed for one current injection and one voltage metering

The plug has to be connected to the plug "INJECTION" of the <BLRT2>

The cable length is 4m (157.5in)



Kelvin Probes With Extended Tips Current 1 <PKL552-3>

(TEST-FUCHS part no. 103240489)

Hardened and spring-loaded Kelvin tips were developed by TEST-FUCHS

Design of these tips ensures their capability to test through varnished and anodized material

The tips are made of hardened steel and can be exchanged

The cable is designed for one current injection and one voltage metering

The plug has to be connected to the plug "CURRENT 1" of the <BLRT2>

The cable length is 4m (157.5in)



Kelvin Probes With Standard Tips Injection <PKL552-4>

(TEST-FUCHS part no. 103240490)

Standard Kelvin tips

Kelvin tips are required for injecting current and for voltage metering

The cable is designed for one current injection and one voltage metering

The plug has to be connected to the plug "INJECTION" of the <BLRT2>

The cable length is 4m (157.5in)



Kelvin Probes With Standard Tips Current 1 <PKL552-5>

(TEST-FUCHS part no. 103240491)

Standard Kelvin tips

Kelvin tips are required for injecting current and for voltage metering

The cable is designed for one current injection and one voltage metering

The plug has to be connected to the plug "CURRENT 1" of the <BLRT2>

The cable length is 4m (157.5in)



Voltage Probes With Extended Tips

<PKL552-6>

(TEST-FUCHS part no. 103240502)

Two point voltage metering tips with hardened tips

Hardened tips were developed by TEST-FUCHS

Design of these tips ensures their capability to break through varnished and anodized material

The tips are made of hardened steel and can be exchanged

While using this cable, there is no need of any other voltage metering

The plug has to be connected to the plug "VOLTAGE" of the <BLRT2>

The cable length is 4m (157.5in)



Injection Probes With Banana Plug And Clips

<PKL552-8>

(TEST-FUCHS part no. 103240517)

This cable is used if the test current is fed separately into the measuring point

The tips can be chosen. In the scope of delivery there are two measuring tips and two crocodile clips

Instead of the delivered measuring tips also other tips can be used if they are approved for 10A test current for three seconds

The cable length is 2m (78.7in)



FURTHER VERSIONS, OPTIONAL VERSIONS OR OTHER CABLE LENGTHS ARE AVAILABLE ON REQUEST.

>BLRT2<