


Operating Instructions

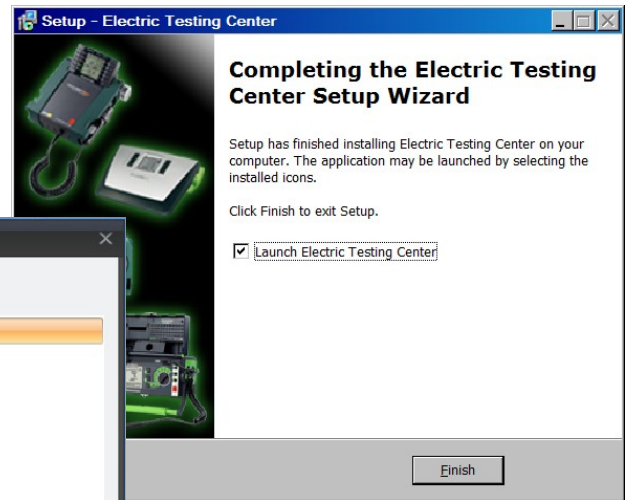
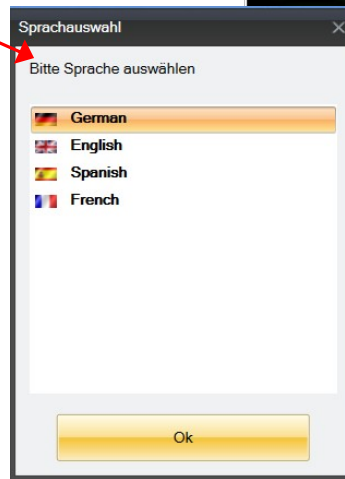
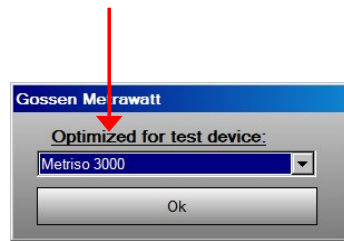
Metriso[®] 3000 - ETC Software



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1. Installation

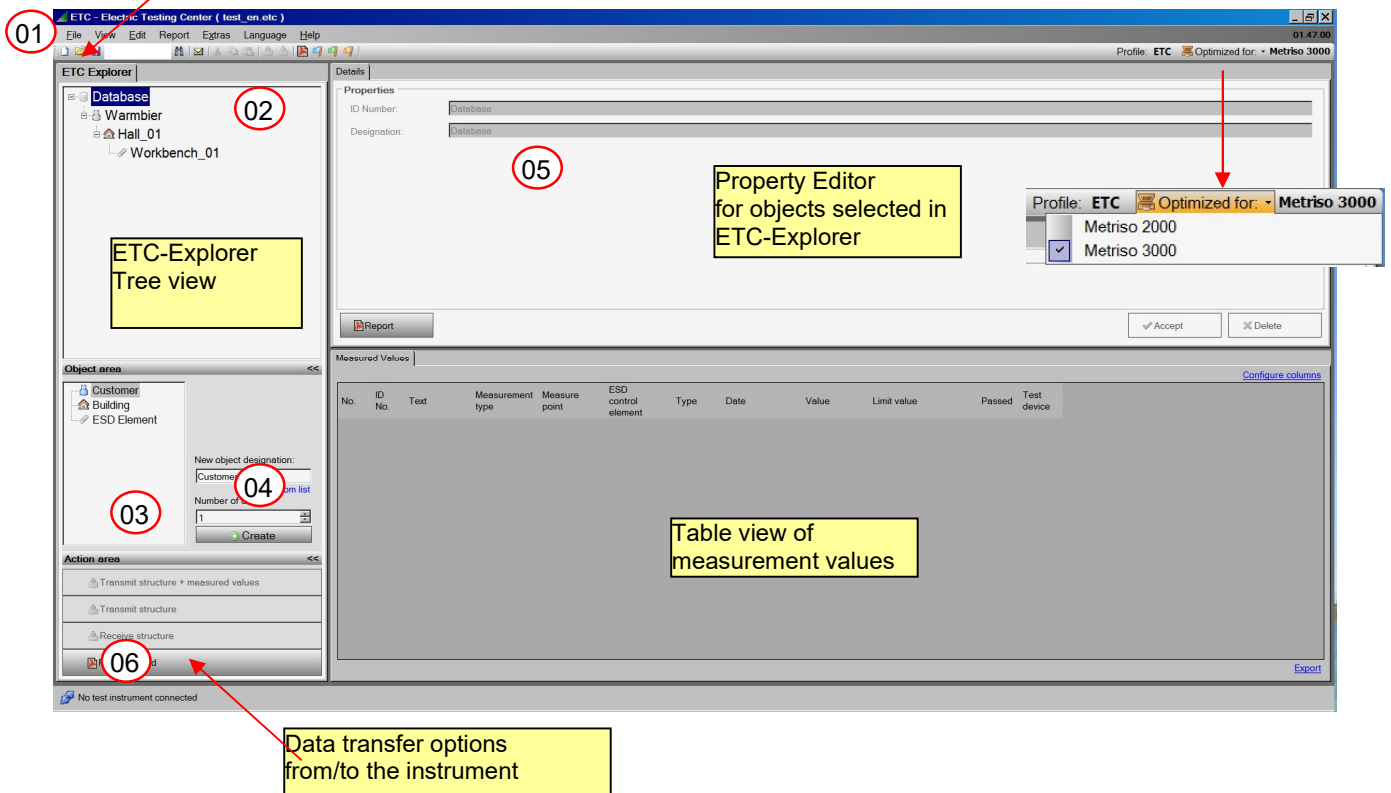
- Uninstall any previously installed ETC Software
- Insert the CD-ROM and select ETC -  or alternatively run the setup file from folder Software/ETC
- Select the language for installation
- Accept the license agreement
- Select the destination location
- Select a start menu folder
- Confirm the installation of the USB driver in the following dialog
- After the first run select your language and device



2. Functional overview

Function keys

Instrument selector



01: File menu

02: ETC-Explorer Tree view

03: Object area

04: Number of items

05: Property Editor for objects selected in ETC-Explorer

06: Action area

ETC-Explorer Tree view

Property Editor for objects selected in ETC-Explorer

Table view of measurement values

Data transfer options from/to the instrument

No.	ID No.	Text	Measurement type	Measure point	ESD control element	Type	Date	Value	Limit value	Passed	Test device

Creating a structure

01	Create a new structure
02	Select an initial position within the tree structure
03	Select an object type (Customer, Building, ESD)
04	Object designation - enter the name and number of objects
05	Determine object properties; save by clicking the "Accept" button




Processing a structural element

	Cut out the selected structural element
	Copy the selected structural element
	Paste a structural element


Project maintenance

	Save file, select location and filename
	Open file, select ETC-file

Data transfer

	Transmit structure and measurements to the instrument
	Transmit structure - only sends the structure without measurement data
	Read out structure - reads the structure and measurement data from the instrument

Report generation

	Report assistant, select reporting objects
	Supplement the report if desired, i.e. with visual inspection results
	Generate the report and save it as a PDF file

Export function

	Extras -> Export - Save exported measurement values to Excel spreadsheet
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3. General procedure

- a) Select the instrument - Optimized for: "Metriso 3000"
- b) Create a new structure or load a previously stored structure from file
(Creating a structure / Project maintenance)
- c) Connect the instrument to the computer via USB and transmit the structure
(Data transfer: Transmit structure)
- d) Disconnect the instrument and make all predefined measurements with the Metriso 3000.
- e) Reconnect the instrument and load the measurements to the computer
(Data transfer: Read out structure)
- f) Save the project
(Project maintenance: File save)
- g) Select the required object in ETC explorer and generate the test report
(Report generation - Report assistant)

4. Creating a structure

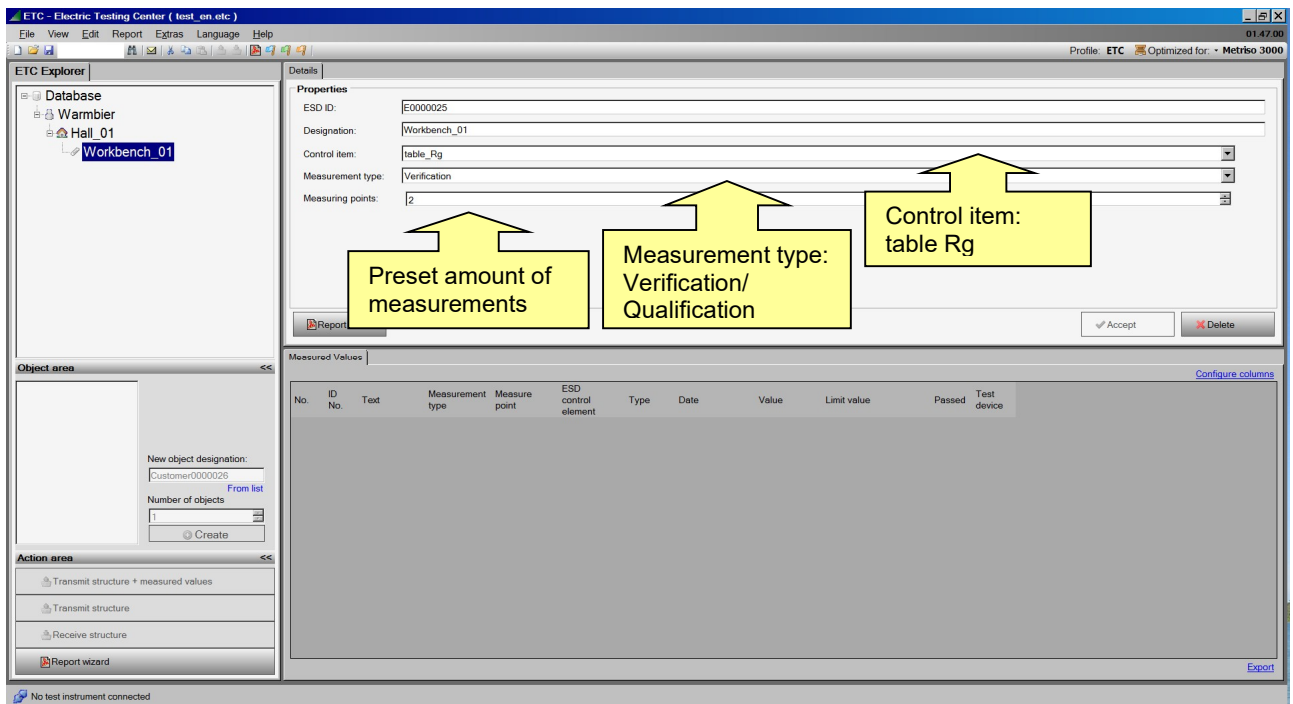
You can create a simple structure by following the steps below:

Select "File - New"

In ETC-Explorer:

- Database
 - Object area: Customer
 - Objekt designation: *edit* (i.e. Warmbier)
 - Create
- Warmbier
 - Object area : Building
 - Objekt designation: *edit* (i.e. Hall_01)
 - Create
- Hall_01
 - Object area: ESD
 - Objekt designation: *edit* (i.e. Workbench_01)
 - Create
- Workbench_01
 - Properties: Control Item - table Rg
 - Measurement type: Verification
 - Accept

File - Save



ETC - Electric Testing Center (test_en etc)

File View Edit Report Extras Language Help

Profile: ETC Optimized for: Metriso 3000 01.47.00

ETC Explorer

- Database
 - Warmbier
 - Hall_01
 - Workbench_01

Object area

New object designation: Customer000025 From list

Number of objects: 1

Create

Action area

- Transmit structure + measured values
- Transmit structure
- Receive structure
- Report wizard

Details

Properties

ESD ID: E0000025

Designation: Workbench_01

Control item: table_Rg

Measurement type: Verification

Measuring points: 2

Report Accept Delete

Measured Values

No.	ID No.	Text	Measurement type	Measure point	ESD control element	Type	Date	Value	Limit value	Passed	Test device
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Configure columns

Export

No test instrument connected

5. Table of ESD control items


ESD Control Item	Nr.	EN	Qualification			Verification		
			Reference point	Lower limit	Upper limit	Reference point	Lower limit	Upper limit
WRISTBAND_CORD	1	wristb_cord	R	0	5.00E+06	R	0	-----
WRISTBAND_INTERNAL_SIDE	2	wristb_int	R	0	100E+03	R	0	-----
WRISTBAND_EXTERNAL_SIDE	3	wristb_ext	R	10.0E+06	-----	R	0	-----
WRISTBAND_SYSTEM	4	wristb_sys	-----	0	-----	R	0	35.0E+06
SHOES_CONDUCTIVE	5	shoe_con	R	0	100E+03	-----	0	-----
SCOES DISSIPATIVE	6	shoe_diss	R	100E+03	100E+06	-----	0	-----
PERSON_SHOE_FLOOR_SYSTEM_A	7	per_systA	Rgp	0	35.0E+06	Rg	0	35.0E+06
PERSON_SHOE_FLOOR_SYSTEM_B	8	per_systB	Rgp	0	1.00E+09	Rg	0	1.00E+09
PERSON_SHOE_SYSTEM_A	9	per_Met_A	-----	0	-----	R	0	35.0E+06
PERSON_SHOE_SYSTEM_B	10	per_Met_B	-----	0	-----	R	0	1.0E+09
WORK_SURFACE_RPP	11	table_Rpp	Rpp	0	1.00E+09	-----	0	-----
WORK_SURFACE_RG_RGP	12	table_Rp	Rgp	0	1.00E+09	Rg	0	1.0E+09
SHELVE_RPP	13	shelve_Rpp	Rpp	0	1.00E+09	-----	0	-----
SHELVE_RG_RGP	14	shelve_Rg	Rgp	0	1.00E+09	Rg	0	1.0E+09
TROLLEY_RPP	15	trolley_Rpp	Rpp	0	1.00E+09	-----	0	-----
TROLLEY_RG_RGP	16	trolley_Rg	Rgp	0	1.00E+09	Rg	0	1.00E+09
FLOORING	17	flooring	Rgp	0	1.00E+09	Rg	0	1.00E+09
CHAIR	18	chair	Rgp	0	1.0E+09	Rg	0	1.0E+09
GARMENT	19	garment	Rpp	0	1.00E+11	Rpp	0	1.00E+11
GARMENT_TO_GROUND	20	garm_gnd	Rpp	0	1.00E+09	Rpp	0	1.00E+09
PACKAGING_CONDUCTIVE_RS	21	pack_C_Rs	Rs	0	10.0E+03	Rs	0	10.0E+03
PACKAGING_CONDUCTIVE_RV	22	pack_C_Rv	Rv	0	10.0E+03	Rv	0	10.0E+03
PACKAGING DISSIPATIVE_RS	23	pack_D_Rs	Rs	10.0E+03	100E09	Rs	10.0E+03	100E09
PACKAGING DISSIPATIVE_RV	24	pack_D_Rv	Rv	10.0E+03	100E09	Rv	10.0E+03	100E09
Resistance 1k	25	1k	R	0	1.00E+03	R	0	1.00E+03
Resistance 10k	26	10k	R	0	1.00E+04	R	0	1.00E+04
Resistance 50k	27	50k	R	0	5.00E+04	R	0	5.00E+04
Resistance 100k	28	100k	R	0	1.00E+05	R	0	1.00E+05
Resistance 500k	29	500k	R	0	5.00E+05	R	0	5.00E+05
Resistance 1M	30	1M	R	0	1.00E+06	R	0	1.00E+06
Resistance 5M	31	5M	R	0	5.00E+06	R	0	5.00E+06
Resistance 10M	32	10M	R	0	1.00E+07	R	0	1.00E+07
Resistance 50M	33	50M	R	0	5.00E+07	R	0	5.00E+07
Resistance 100M	34	100M	R	0	1.0E+08	R	0	1.0E+08
Resistance 500M	35	500M	R	0	5.0E+08	R	0	5.0E+08
Resistance 1G	36	1G	R	0	1.0E+09	R	0	1.0E+09
Resistance 5G	37	5G	R	0	5.0E+09	R	0	5.0E+09
Resistance 10G	38	10G	R	0	1.0E+10	R	0	1.0E+10
Resistance 50G	39	50G	R	0	5.0E+10	R	0	5.0E+10
Resistance 100G	40	100G	R	0	1.00E+11	R	0	1.00E11

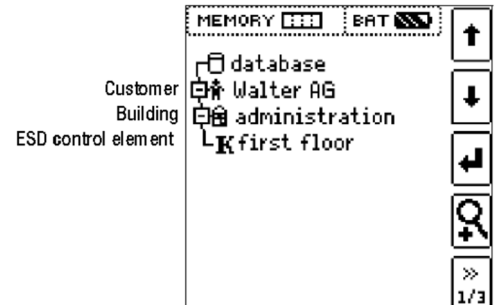
6. Transmit structure

Connect the instrument to the computer via USB and transmit the structure
(Data transfer: Transmit structure)

7.1 Measurement

Disconnect the instrument and make all predefined measurements with the MetrISO 3000.

1. Connect the probes according to the user's manual for MetrISO 3000 chapter 6.
2. Recall the structure with the **MEM** button.
3. Use the *cursor keys* ↓↑ to select the next measurement (ESD control element), confirm with *Enter* ↵
The limit values for the next measurement are assigned by this selection.
4. Turn the rotary switch to select the measurement voltage 10V or 100V.
5. Start the measurement by pressing **START**
6. If required change the measuring voltage and restart the measurement.
7. Save the values into the suggested folder by pressing →  twice or longer.
Do not change the folder at this time!



1/5
AUTO


The measurement counter is incremented automatically.
Proceed with all measurements before changing to the next measurement location.

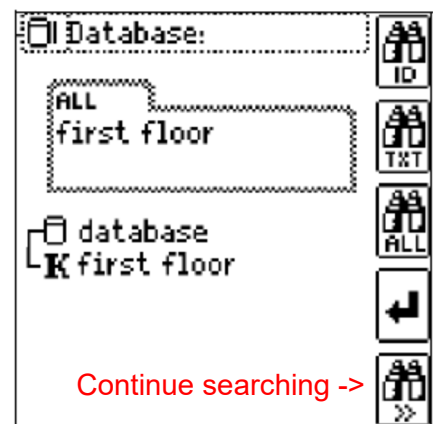
Begin each measurement location with step 1 of this instruction. Selecting the "ESD control element" with the MEM button and confirming with ENTER is required to assign the limit values for the following measurement.

Follow the steps in the user's manual for MetrISO 3000, chapter 4.6 - Setting measurement parameters.

7.2 Measurement with Barcode Scanner

Disconnect the instrument and make all predefined measurements with the MetrISO 3000.

1. Connect the barcode scanner.
2. Connect the probes according to the user's manual for MetrISO 3000 chapter 6.
3. Scan the objects barcode.
(Press "Continue searching" if required)
4. Confirm with *Enter* ↵
The limit values for the next measurement are assigned by this selection.
5. Turn the rotary switch to select the measurement voltage 10V or 100V.
6. Start the measurement by pressing **START**
7. If required change the measuring voltage and restart the measurement.
8. Save the values into the suggested folder by pressing →  twice or longer.
Do not change the folder at this time!



1/5
AUTO

The measurement counter is incremented automatically.
Proceed with all measurements before changing to the next measurement location.

Begin each measurement location with step 2 of this instruction. Confirm each "ESD control element" with ENTER to assign the limit values for the following measurement.

Follow the steps in the user's manual for MetrISO 3000, chapter 4.6 - Setting measurement parameters.

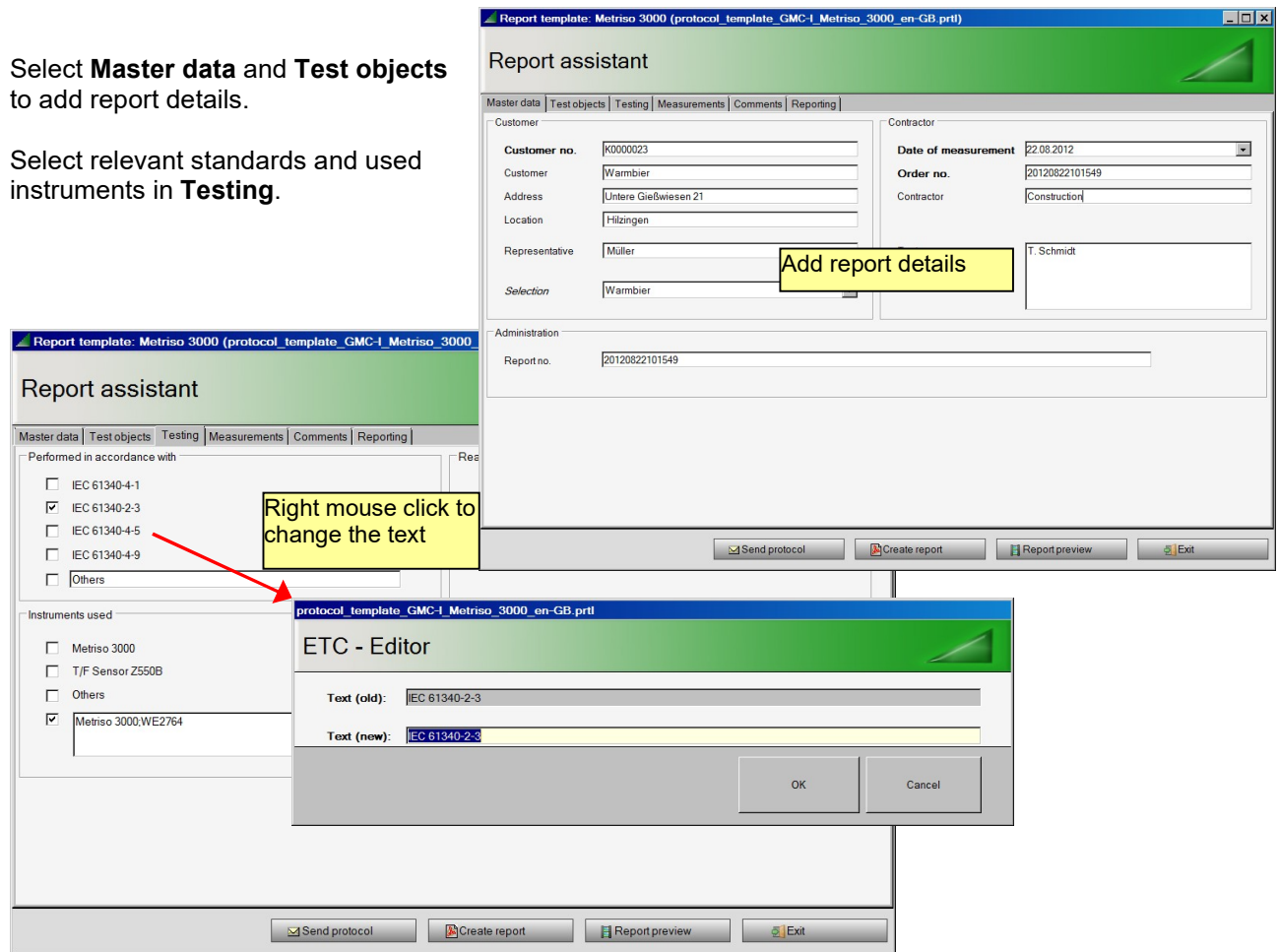
8. Load measurements

Reconnect the instrument and load the measurements to the computer (Data transfer: Read out structure)
Save the project (Project maintenance: File - save)

9. Report assistant

Select **Master data** and **Test objects** to add report details.

Select relevant standards and used instruments in **Testing**.



The screenshot shows the 'Report assistant' window with the following details:

- Master data:** Customer no. K000023, Customer Warmbier, Address Untere Gießwiesen 21, Location Hülzingen, Representative Müller, Selection Warmbier.
- Contractor:** Date of measurement 22.08.2012, Order no. 20120822101549, Contractor Constructor, T. Schmidt.
- Administration:** Report no. 20120822101549.

The 'Testing' tab is active, showing:

- Performed in accordance with:** IEC 61340-2-3 (checked), IEC 61340-4-1, IEC 61340-4-5, IEC 61340-4-9, Others.
- Instruments used:** Metriso 3000, T/F Sensor Z550B, Others, Metriso 3000.WE2764 (checked).

The 'ETC - Editor' dialog box is open, showing:

- Text (old):** IEC 61340-2-3
- Text (new):** IEC 61340-2-3

Buttons at the bottom include 'Send protocol', 'Create report', 'Report preview', and 'Exit'.

Report assistant

Master data | Test objects | Testing | **Measurements** | Comments | Reporting

Item	Control item	MP	Measure value	Limits	Passed	Comment
E0000025 Workbench_01	table_Rg Rg	MP_001	10,1 MOhm 99,9 V	< 1 GOhm	Yes	
E0000025 Workbench_01	table_Rg Rg	MP_002	10,1 MOhm 99,9 V	< 1 GOhm	Yes	

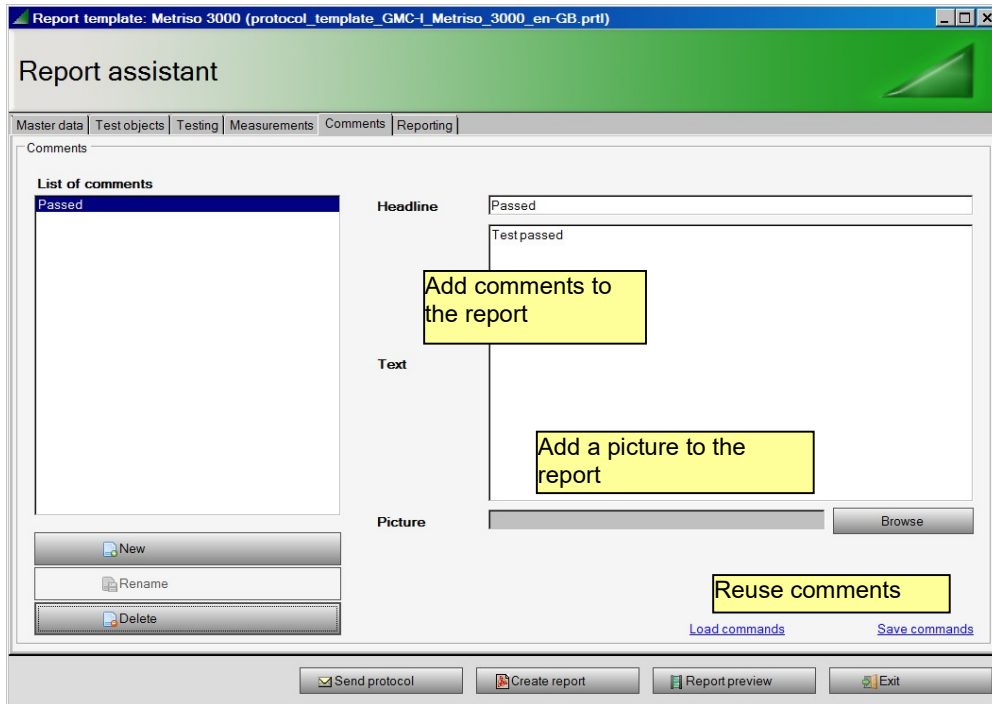
Send protocol | Create report | Report preview | Exit

Add comments to each measurement if desired.

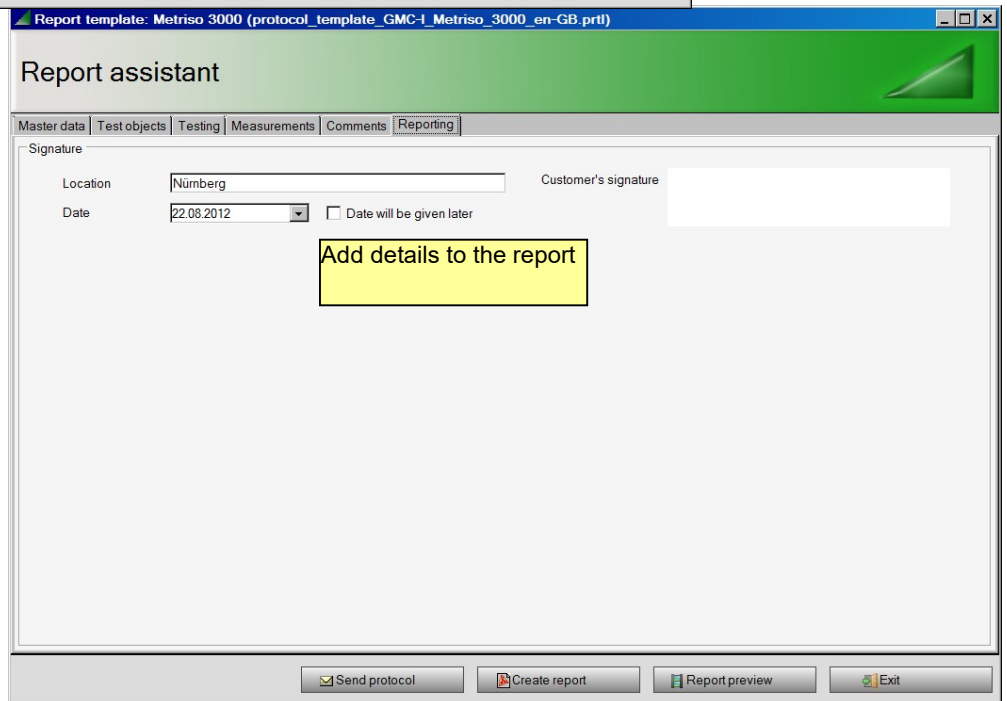


Add a comment

The report can be extended with predefined comments.



Create report
saves the report as PDF.



Create the report

10. Sample report - First page



Report no.
 20120822101549

Test report

Master data

Customer no.	K0000023	Date of measurement	22.08.2012
Customer	Warmbier Untere Gießwiesen 21 Hilzingen	Order no.	20120822101549
Representative	Müller	Contractor	Construction
		Tester	T. Schmidt

Test objects

Test object/-location	Object description
	Part number
	Charge
	Number of units 1

Testing

Beginning of testing	22.08.2012	End of testing	22.08.2012
Performed in accordance with	IEC 61340-2-3	Reason for testing	Verification
Instruments used	Metriso 3000;WE2764		

Signature

Representative			Tester		
Nürnberg	22.08.2012		Nürnberg	22.08.2012	
<i>Location</i>	<i>Date</i>	<i>Signature</i>	<i>Location</i>	<i>Date</i>	<i>Signature</i>

11. Sample report - Measurements

E0000025 Workbench_01					
Control item	MP	Measured value	Limit values	Passed	Comment
table_Rg Rg	MP_001	10,1 MOhm 99,9 V	< 1 GOhm	Yes	left
table_Rg Rg	MP_002	10,1 MOhm 99,9 V	< 1 GOhm	Yes	right

Comments

Passed
Test passed