

Elabo.  
Systematic success



# Solutions. For today and tomorrow



**Industry solutions for medical equipment**

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# Medical equipment

Safety testing

Function testing

# Elabo TestSystems. Systematical solutions

## Industry solutions for medical equipment

### Safety testing

#### High-voltage test

- Test voltage 0 .. 5,000 V AC
- Tripping current 0 .. 100 mA
- Design rating 500 VA
- Programmable automatic test sequence



# Elabo TestSystems. Systematical solutions

## Industry solutions for medical equipment

### Safety testing

#### Shockproof high-voltage test

- Flexible adaptation
- Contact monitoring
- 0 .. 5,000 V AC
- Automatic test sequence



# Elabo TestSystems. Systematical solutions

## Industry solutions for medical equipment

### Safety testing

#### Combined safety tests

- High-voltage test 0 .. 5,000 V AC
- Protective earth wire resistance measurement 6 V AC / 25 A
- Insulation resistance measurement 0 .. 35 MOhm



## Single-phase/three-phase leakage current measurement

- Voltage supply 0 .. 280 / 480 V
- Measurement ranges  
0 .. 10/100  $\mu$ A / 0 .. 1/10 mA
- Optional patient leakage current measurement
- Optional patient auxiliary current measurement
- Three-phase optional
- Optional floating supply voltage
- Optional programmable test voltage
- Programmable test sequences



## Safety testing

### Test system for infusion equipment

- High-voltage test 0 .. 5,000 V AC
- Protective earth wire resistance measurement  
6 V AC / 25 A
- Insulation resistance measurement  
0 .. 35 MOhm
- Leakage current measurement 0 .. 10 mA
- Patient leakage current measurement  
0 .. 100  $\mu$ A
- Voltage supply 0 .. 280 V AC / 5 A





### Safety testing

#### Test system for surgical equipment

- High-voltage test 0 .. 5,000 V AC
- Protective earth wire resistance measurement 6 V AC / 25 A
- Insulation resistance measurement 0 .. 35 MOhm
- Leakage current measurement 0 .. 10 mA
- Patient leakage current measurement 0 .. 100  $\mu$ A
- Voltage supply 0 .. 280 V AC / 5 A





### Safety and functional testing

#### Test systems for power supply ducts in hospitals

- High-voltage test 0 .. 5,000 V AC
- Protective earth wire resistance measurement 6 V AC / 25 A
- Insulation resistance measurement 0 .. 35 MOhm
- Leakage current measurement 0 .. 10 mA
- Voltage supply 0 .. 280 V AC / 5 A
- Current measurement 0 .. 5 A
- Software control incl. measurement data archiving
- Load bank testing



### Safety and functional testing

#### Test system for testing goods received

- High-voltage test 0 .. 5,000 V AC
- Protective earth wire resistance measurement 6 V AC / 25 A
- Insulation resistance measurement 0 .. 35 MOhm
- Leakage current measurement 0 .. 1/10 mA
- Voltage supply 0 .. 280 V AC / 16 A
- Software control incl. measurement data archiving
- Test hood with positive protection against accidental contact



### Safety and functional testing

#### Test system for final inspection and testing of equipment

- High-voltage test 0 .. 5,000 V AC
- Protective earth wire resistance measurement 6 V AC / 25 A
- Insulation resistance measurement 0 .. 35 MOhm
- Leakage current measurement 0.01 .. 10.0 mA
- Voltage supply 5 .. 300 V AC/45..500 Hz
- Power measurement 0 .. 500 VA
- Software control incl. measurement data archiving
- Load bank testing



### Safety and functional testing

#### Test system for testing of medical refrigerators

- High-voltage test 0 .. 7,000 V AC/DC
- Protective earth wire resistance measurement 6 V AC / 30
- Insulation resistance measurement 0 .. 35 MOhm
- Leakage current measurement 0.01 .. 10.0 mA
- Voltage supply 5 .. 265 V AC/ 16 A / 40 .. 400 Hz
- Voltage supply 0 .. 60 VDC / 30 A
- Power measurement 0 .. 3.000 VA
- Software control
- Conveyor control
- Dummy testing



### Safety and functional testing

#### Test system for endoscopes

- High-voltage test 0 .. 5,000 V AC
- Protective earth wire resistance measurement 6 V AC / 25 A
- Insulation resistance measurement 0 .. 35 MOhm
- Leakage current measurement/ EN60601 0.001 .. 10.0 mA
- Voltage supply 0 .. 280 V AC / 5 A
- Current measurement 0 .. 5 A
- Light measurement using an integrating sphere
- Controlling test items via test software
- Software control incl. measurement data archiving
- Auto. generation/archiving of test certificates
- Load bank testing



### Safety and functional testing

#### Test system for kilns

- High-voltage test 0 .. 5,000 V AC
- Protective earth wire resistance measurement 6 V AC / 25 A
- Insulation resistance measurement 0 .. 35 MOhm
- Leakage current measurement 0.01 .. 10.0 mA
- Voltage supply 230 .. 260 V AC / 16 A
- Power measurement 0 .. 3,500 W
- Software control incl. measurement data archiving
- Load bank testing





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