6000 VDC

Technical data	G7-1A / G7-1M
High voltage:	0.05 .. 6.00 kV • 0 .. 500 µA • 0 .. 5.00 mA
Protective earth conductor:	0 .. 500 mΩ • 12 VAC / > 10 A
Insulation resistance:	2.50 • 25.0 • 50 MΩ
Output:	30 W
Interface:	Ethernet • digital interface 1
Line voltage:	230 V ± 10%; 49 .. 61 Hz
Dimensions:	19“ / 4 HU; depth 360 mm
Weight:	25 kg • 24 kg

Front view G7-1A

Front view G7-1M

Rear view G7-1A, G7-1M

Direct current combination testing device (HVDC)

The testing device, which is also available as an automatic device, allows flexible possibilities for use in manual and automated systems for the measurement of protective earth conductor and insulation resistance as well as for high-voltage testing in systems, assemblies and components. Accessory components configurable especially for this model round out the system. For more detailed technical data, please see the table on back.

	Description	Dimensions	Item no.
HVDC combi-tester	incl. touch control unit and selector panel	19" / 4 HU	G7-1A
HVDC combi-tester	for use in automated systems, incl. selector panel	19" / 4 HU	G7-1M

Extension modules for the testing devices

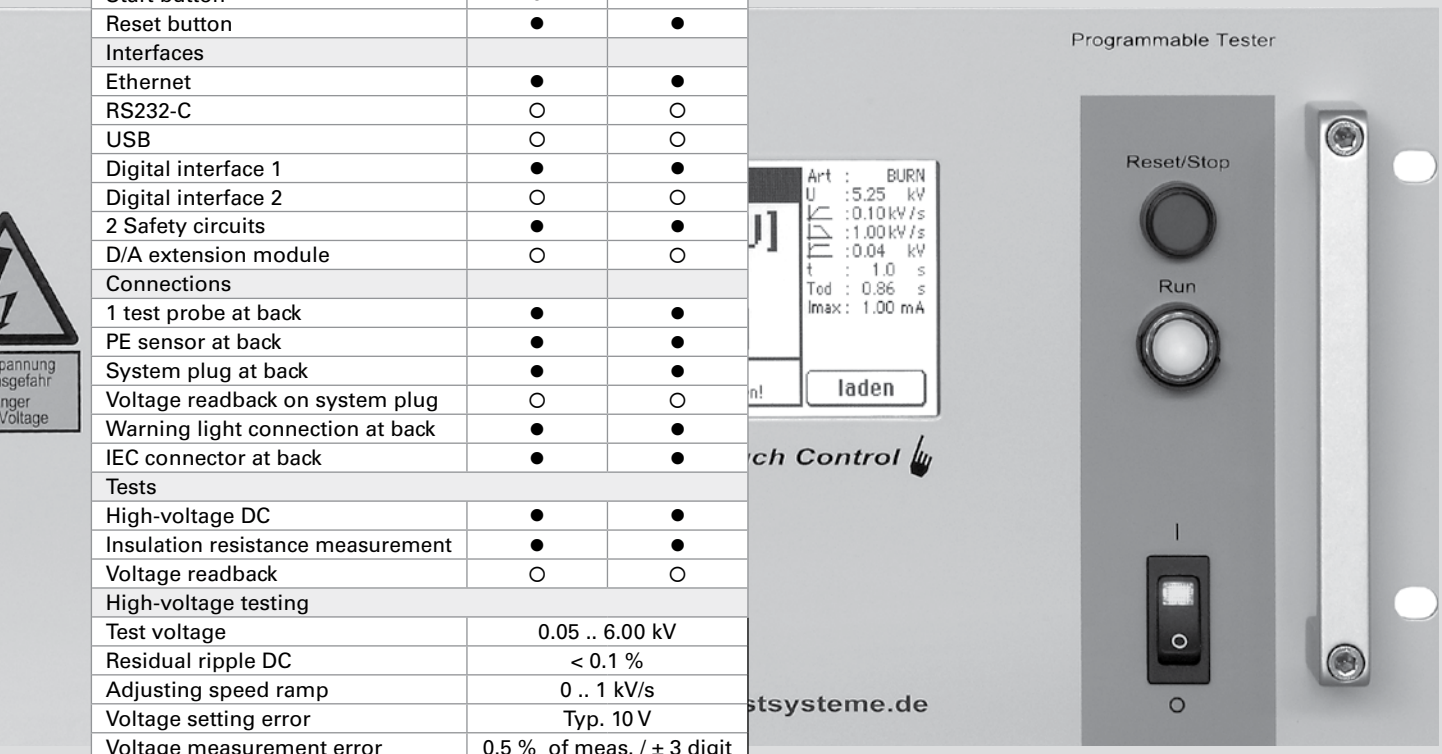
	Technical data	for device type	Item no.
Voltage readback	The module allows 4-wire measurement by reading back the test voltage. Two high-voltage receptacles are also built into the back wall of the device.	G7-1A; G7-1M	G7-1A E04
Additional digital outputs	Six additional digital outputs for controlling an external switching matrix.	G7-1A; G7-1M	G7-1A E06
RS232-C	Alternative interface to Ethernet interface	G7-1A; G7-1M	G7-1A E11
USB	Alternative interface to Ethernet interface	G7-1A; G7-1M	G7-1A E12
Software package	Elution*Device* software package	G7-1A; G7-1M	N2-1A Z7B
Device driver	On request		
Calibration	Delivery with Elabo works calibration protocol	G7-1A; G7-1M	G7-1A E99-02

The description of the accessories can be found starting on page 108.
Please also see our sample configurations starting on page 56.
Technical specifications subject to change without notice.

Device features G7-1A / G7-1M

Device	G7-1A	G7-1M
Applications		
Manual use	●	
Automated use	●	●
Operation		
Touch display 4.3“	●	
Interface	●	●
Start button	●	
Reset button	●	●
Interfaces		
Ethernet	●	●
RS232-C	○	○
USB	○	○
Digital interface 1	●	●
Digital interface 2	○	○
2 Safety circuits	●	●
D/A extension module	○	○
Connections		
1 test probe at back	●	●
PE sensor at back	●	●
System plug at back	●	●
Voltage readback on system plug	○	○
Warning light connection at back	●	●
IEC connector at back	●	●
Tests		
High-voltage DC	●	●
Insulation resistance measurement	●	●
Voltage readback	○	○
High-voltage testing		
Test voltage	0.05 .. 6.00 kV	
Residual ripple DC	< 0.1 %	
Adjusting speed ramp	0 .. 1 kV/s	
Voltage setting error	Typ. 10 V	
Voltage measurement error	0.5 % of meas. / ± 3 digit	
Current measurement ranges		
Measurement range 1 / resolution	500 µA / 1 µA	
Measurement range 2 / resolution	5.00 mA / 10 µA	
Current measurement error	0.5 % of meas. / ± 3 digit	
Measurement of PE conductor resistance		
Test voltage	12 VAC	
Test current	> 10 A (typ. 18 .. 25)	
Resistance measurement range	0 .. 500 mΩ	
Voltage drop measurement range	0 .. 5 V	
Method of measurement	4-wire-measurement	
Measurement error	1.5 % of meas. / ± 3 digit	
Insulation resistance measurement		
Test voltage DC	0.05 .. 6.00 kV	
Measurement range 1 / resolution	0.1 .. 2.50 MΩ / 10 kΩ	
Measurement range 2 / resolution	1 .. 25.0 MΩ / 100 kΩ	
Measurement range 3 / resolution	1 .. 50 MΩ / 1 MΩ	
Accuracy of measurement	2 % of meas. / ± 5 digit	
Principal technical data		
Nominal capacity	30 W	
Short-circuit current	< 12 mA	
Mains connection	230 V ± 10 %; 49 .. 61 Hz	
Dimensions	19“ / 4 HU; depth 360 mm	
Weight	25 kg	24 kg
Allowable humidity	25 .. 75 % rel.	
Working temperature	10 .. 50 °C	
Test time	0.1 .. 999.9 s	
Memory	min. 200 data sets	

6000 VDC



Flexibility is of prime importance with Elabo. That is why two versions of the devices in this line of equipment are available. Depending on the purpose, universal use or fully automated operation are possible.

● Standard ○ Optional
Technical specifications subject to change without notice.