PE resistance









Safety and functional tester

RS232
PC
LabView®

SPS

Analog

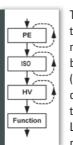
1/0

Print

20



Single or combination testers of the GLP1-e series are to test the electrical safety and function of electrical products according to defined standards. Due to the small number of adjustable parameters, GLP1-e testers are particularly suited for standardized test processes.



The tests are performed sequently step by step. The tester automatically connects the individual test methods to the test object. If various points are to be tested successively with one test method (multiple test), test points are contacted by the operator with the test probe one after the other. The test probe with integrated start switch and 3-color LED allows convenient working. The rest of the process will again be performed automatically.

After the last safety test, the GLP1-e checks automatically, whether there is a short circuit between L and N. If everything is OK, the functional test follows. Therefore, the mains voltage is connected to the test object. The test can be performed with or without evaluation of the current.

Because of the monitoring functions that can be activated, even untrained personnel can perform the tests safely and reliably.

The integrated RS232 interface allows to print the test results directly. You can use our Windows® software PrintCom to store and process the test results.

Alternatively, it allows a remote control of the device via a PC, a PLC or LabView®. For remote control, digital I/O channels are available, as well. Therefore, our testers can easily be integrated into automatic production lines.

Highlights

- ground-continuity test up to 30A AC in 4-wire configuration: indication of resistance or voltage drop
- automatic constant regulation of the test current
- automatic start when touching the test object with the test probe, optionally with start switch
- insulation-resistance test: indication of resistance or current
- high-voltage test with fixed voltage
- · short-circuit test prior to the functional test
- functional test with current measurement and evaluation
- integrated isolating transformer
- acoustic error message and optical indication via signal lamps at the front panel
- digital I/O interface and analog actual-value outputs
- interface for printer, remote control or result transmission
- PrintCom software for storing and printing the test results
- self-test via blackbox according to VDE
- design: tabletop unit, 19" installation
- ideal pre-conditions for OEM applications
- integration into automatic lines with remote control via PLC or PC



PE tester



Luminaire testing: PE \mid ISO \mid function



Testing an electric grill: PE | ISO | function





Luminaire testing: PE | ISO | HV | function

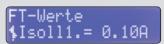


Luminaire testing: PE | ISO | HV | function

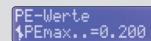


Testing device with up to 1500V DC





Input of a test parameter



Input of a test parameter

Possible combinations of test methods in a device

PE resistance	insulation resistance	high voltage AC KV mA A	short circuit	function 1-phase
	•			
•	•	•	•	•
•	•	•	•	•

Refer to:

Windows® software PrintCom	58
HV pistols and warning lamps	68
Mains-connection adapters	70
Contacting devices for leads	72
Special contacting devices	74
Test covers	76
Rolling tables	78
Calibration and black boxes	82
Test methods	94













High-voltage tester AC/DC up to 50KV

RS232 LabView[®] SPS 1/0

Analog Print



directly. You can use our Windows® software PrintCom to store and process the test results directly on the PC.

Alternatively, it allows to remote control the device via a PC, a PLC or LabView®. For remote control, digital I/O channels are available, as well. Thus, an integration of our testers into automatic production lines is no problem.



High-voltage test with 12KV AC

...with 15KV AC





...with 20KV AC

...with 50KV AC

Highlights

- · AC high-voltage testers up to 30KV
- DC high-voltage testers up to 6KV with the lowest residual ripple
- 3 modes: manual, automatic with target time and burning
- high-voltage check / cable-break detection (4-wire configuration)
- · automatic voltage adjustment with ramp
- · acoustic error message and optical indication via signal lamps at the front panel
- interface for printer, remote control or result transmission
- PrintCom software for storing and printing the test results
- digital I/O interface, two-hand start and analog actual-value outputs
- designs: table-top unit, mobile caddy, 19" installation
- ideal pre-conditions for OEM applications
- integration into automatic lines with remote control via PLC or PC

GLP1-e HV high-voltage testing devices can test the insulation capability and the electric strength (clearance and leakage paths) at electric modules and components.

They are ideal for fast and uncomplicated manual testing within the production process. Without a separate test program, the testers allow manual testing via test pistols, automatic testing (e.g. with programmed time target), various monitoring functions or the localization of isolation faults ("burning").

Our testing devices offer manually or automatically adjustable voltages. Thus, the testers deliver not only a test voltage for routine tests according to standards, but also a sufficiently high test voltage for type tests and material tests.

The tests are often performed with two safety test pistols. In order to meet your requirements best, our product range comprises a great variety of test pistols. For an application in automatic production lines or test systems, the necessary high-voltage cables and contactings are also available.

In addition to single testers, our product range offers combination testers with an internal automatic switch-over between the different test methods, to perform more complex testing tasks. The integrated RS232 interface allows to print the test results



High-voltage test under a test cover

Single tester AC

Single tester DC

insulation resistance

Combination tester

insulation resistance

high-voltage AC

high-voltage

PE resistance

function-test

current

high-voltage DC

current

current



12KV

50mA

6KV

3mA

2.5KV DC

1mA

15KV

50mA

6KV

5mA

Testing with pistols

6KV

2KV

1mA

3KV AC

100mA

100mA



50KV

10mA

6KV

20mA

Burning

30KV

30mA

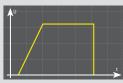
6KV

10mA

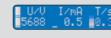


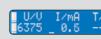
Mobile caddy





• Standard | \Diamond Option | - not available





3KV

1KV

1mA

6KV AC

100mA

100mA

Burning mode



Refer to:

58
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74
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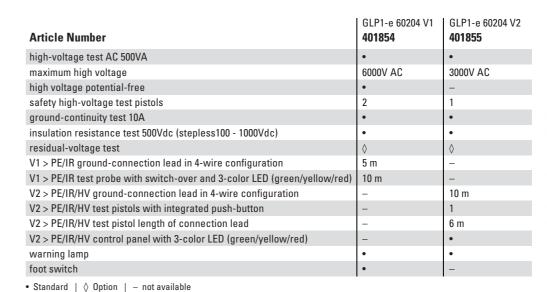




EN60204-VDE0113-safety tester







Possible combinations of



Mobile caddy

Highlights

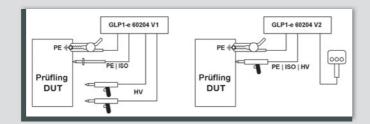
Print

24

- ground-continuity test with 10A AC in 4-wire configuration: indication of resistance or voltage drop
- insulation-resistance test: indication of resistance or current
- high-voltage test with manual voltage adjustment
- 3 modes: manual, automatic with time target and burning
- optional residual-voltage test
- · acoustic error message and optical indication via signal lamps at the front panel
- integrated result storage for later data transmission
- interface for printer, remote control or result transmission
- PrintCom software for storing and printing the test results
- digital I/O interface and analog actual-value outputs
- designs: table-top unit, mobile caddy, 19" installation
- ideal pre-conditions for OEM applications
- self-test via black-box according to VDE

GLP1e-60204 testers perform electric safety tests at machines and devices according to the Machine Guideline (EN60204/VDE0113).

They are ideal for fast and easy testing in factories and on site. It is possible to perform ground-continuity tests, insulation-resistance tests, high-voltage tests and residual-voltage tests. Two models are available - differing only in the contact method.



With Model V1, the ground-continuity tests and the insulationresistance tests with a test probe with an integrated operating unit are performed first. The high-voltage test with two safety test pistols follows. The test pistols can be delivered with or without integrated start switch and with varying cable lengths.

With model V2, the test object is contacted at ground (central PE-point). All three tests can be performed against this ground point with the same test pistol. By activating the selection switches



on the control panel, test methods can be changed. To ensure the operator's safety, it is necessary that the high-voltage switch is activated permanently during the high-voltage test. To start the test, the test probe needs to be pushed against the test object.

The integrated RS232 interface allows to print the test results directly. You can use our Windows® software PrintCom to store and process the test results directly on the PC.



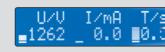
EN60204 test at a service cabinet

PEΩ+	isMΩ	вU	
0.060			

PE resistance

иU	isMΩ+	вU
	7.40	
	750	

Insulation resistance



High voltage



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