

PAC3760 Introduction

The PAC3760 performs electrical safety checks on:

- Class I appliances (CLI)
- Class II appliances (CLII)
- IEC leads
- Extension leads
- Leads and appliances with MOVs

The PAC3760 is powered from a 240v 50Hz supply via the fixed mains cord

An internal 10A fuse protects the PAC3760

- The mains supply voltage Phase-Earth (PE), Phase-Neutral (PN) and Neutral-Earth (NE), is checked at power-on and before each leakage test. A supply fault will display "HALT" and inhibit all tests

Test connections on the PAC3760 are:

- 15A mains outlet socket on front panel
- 4mm socket on top panel connects to test probe
- IEC inlet receptacle on top panel

- **Caution: during insulation tests 500v is applied to the appliance under test. Do not touch the appliance or the test probe. Do not connect the test probe to voltages greater than 30V.**

User Interface

The LCD window displays test progress and results.

Tests are controlled using three push buttons.

- CLI, CLII, LKGE.

Automated test routines (x6)

- ① Class I appliance: earth continuity and insulation test
- ② Class I appliance: earth continuity and power-on leakage test. Also appliances with MOVs
- ③ Class II appliance: insulation test only
- ④ Class II appliance: power-on leakage test only
- ⑤ Class I lead: earth continuity, insulation and polarity test
- ⑥ Class I lead: earth continuity test, power-on leakage test. Also leads with MOVs

- **Beware of moving or hot parts on the appliance under test during leakage (LKGE)**

Load tests (within test routines)

The PAC3760 checks the appliance load before progressing with tests.

LO-LOAD warning indicates that the appliance may be switched off. The user can then switch on the appliance and progress with the test automatically, or the user can manually proceed with the test by pressing CLI or CLII depending on the test in progress

HI-LOAD warning indicates that the appliance load may be greater than 10A. The user can decide whether to proceed with the test by pressing CLI or CLII depending on the test in progress

LOAD-TOO-HI warning indicates that the appliance may have a fault. The PAC3760 inhibits the test

PAC3760 Specification

Maximum appliance current 10A ac 50 Hz
Fuses are located under rear cover.
Fuse: 10A 250v F-HRC (31.75 x 6.35mm)
Fuse: 3.15 A T (20mm x 5mm)

Earth Continuity test
Pass ≤ 1.0 ohms Accuracy $\pm 5\%$
Test current 10A AC (nominal)
Max test voltage $< 12v$

Insulation resistance test
Pass ≥ 1.0 Mohms Accuracy $\pm 5\%$
Test voltage 500 VDC -0% +20%
Max test current $< 2mA$ DC

Leakage current test
Class I pass ≤ 5 mA RMS Accuracy $\pm 5\%$
Class II pass ≤ 1 mA RMS Accuracy $\pm 5\%$
Lead pass ≤ 1 mA RMS Accuracy $\pm 5\%$
Note: For MOV appliances use LKGE test.

Polarity test
Checks for Live/Neutral open circuit, short circuit and crossed connections

Environmental rating

IP40
Operating temp range 0°C to 40°C, without moisture condensation.

Simple performance check

- With the test probe disconnected, a Class I test should show an earth continuity test fail.

Maintenance

Clean only with a dry cloth; do not use solvents. Before use, ensure unit is clean and dry; visually inspect all leads, connectors, and case. Any damage or wear must be rectified to preserve user safety. Every 12 months the PAC3760 should be checked and calibrated (if required) by an authorised agent.

Service

Unless the unit is covered by the guarantee a charge will be made for checking, repair, and calibration. Estimated repair charges (where appropriate) and freight charges will be advised to the owner before work is commenced.

Warranty and repair

Units are covered by a 12 month parts and labour warranty

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PAC3760

PORTABLE APPLIANCE CHECKER

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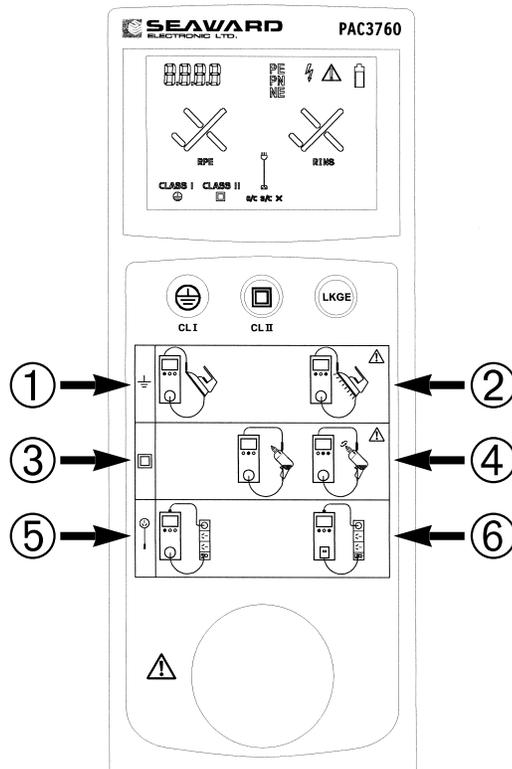
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www.seaward.co.uk
sales@seaward.co.uk
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READ INSTRUCTIONS FOR USE

Due to the potential hazards associated with any electrical circuit it is important that a user is fully familiar with instructions covering the capabilities, applications and operations of the instrument.

The user should ensure that all reasonable safety procedures are followed and if any doubt exists should seek advice before proceeding.



Front panel graphics are provided to remind the user of the six test arrangements.

Accessories and Replacement Parts

- | | |
|--------------------------|------------------|
| • Test Probe | Part No. 161A024 |
| • Carry case | Part No. 71G082 |
| • Extension lead adaptor | Part No. 325A005 |
| • Instruction manual | Part No. 325A550 |

APPLIANCE TESTS

Preparing an appliance for test

- Plug in the PAC3760 to a suitable mains supply
- Conduct a visual inspection of the appliance
- Determine the Class of the appliance to be tested
- Plug the appliance into the PAC3760 front panel mains socket and connect the test probe to a touchable metal part on the appliance
- Choose ① ② for an insulation test or ③ ④ for a 'power on' leakage test

① Class I test with insulation test

- Press the CL I button once
- A pass is indicated by two ticks ✓✓ and "PASS"
- A fail is indicated by any cross: ✗ and "FAIL"

② Class II test with insulation test

- Press the CL II button once.
- A pass is indicated by one tick ✓ and "PASS"
- A fail is indicated by a cross: ✗ and "FAIL"

③ Class I test with 'power-on' leakage test ⚡ ⚠

- Press the CL I and 'LKGE' button together once
- Wait for a ✓ and ⚠. This indicates that power can now be applied using the 'LKGE' button
- Pressing the 'LKGE' button causes ⚡ and ⚠ to appear indicating that the front panel mains socket is now live. Ensure that the appliance is powered

Beware of moving or hot parts on the appliance

- Power is applied for 30s unless the user presses the 'LKGE' button and power is terminated
- Power off is indicated by ⚠ only (no ⚡)
- A pass is indicated by two ticks ✓✓ and "PASS"
- A fail is indicated by any cross: ✗ and "FAIL"

④ Class II test using 'power-on' leakage test ⚡ ⚠

- Press the CL II and 'LKGE' button together once
- Wait for the ⚠. This indicates that power can now be applied using the 'LKGE' button
- Pressing the 'LKGE' button causes ⚡ and ⚠ to appear indicating that the front panel socket is now live. Ensure that the appliance is powered

Beware of moving or hot parts on the appliance

- Power is applied for 30s unless the user presses the 'LKGE' button and power is terminated
- Power off is indicated by ⚠ only (no ⚡)
- A pass is indicated by a tick ✓ and "PASS"
- A fail is indicated by a cross: ✗ and "FAIL"

LEAD TESTS

Preparing a lead for test

- Plug in the PAC3760 to a suitable mains supply
- Conduct a visual inspection of the lead
- Connecting IEC Leads: plug into the front panel mains socket and connect the IEC connector to the IEC inlet receptacle on top panel

Caution, do not connect the IEC inlet receptacle directly to mains power

- Connecting extension leads: plug into the front panel mains socket and connect the IEC connector to the IEC inlet receptacle on top panel using the extension lead adapter accessory
- Choose
 - ⑤ earth continuity, insulation and polarity test **or**
 - ⑥ earth continuity and 'power-on' leakage test
- NB. The PAC3760 automatically detects a "lead" indicates a lead and includes polarity testing in the sequence

⑤ Class I lead test with insulation and polarity test

- Press the CL I button once
- A pass is indicated by two ticks ✓✓ and "PASS"
- A fail is indicated by any cross: ✗ and "FAIL"

⑥ Class I test with 'power-on' leakage test ⚡ ⚠

- Press the CL I and 'LKGE' button together once
- Wait for a ⚡ and ⚠. This indicates that power can now be applied using the 'LKGE' button
- Pressing the 'LKGE' button causes ⚡ and ⚠ to appear indicating that the front panel socket is now live
- Power is applied for 30s unless the user presses the 'LKGE' button and power is terminated
- Power off is indicated by ⚠ only (no ⚡)
- A pass is indicated by two ticks ✓✓ and "PASS"
- A fail is indicated by any cross: ✗ and "FAIL"

ADVANCED DIAGNOSIS OF A TEST FAIL

PAC3760 indicates the type of failure when an appliance or lead fails a test sequence.

- If an earth continuity test fails, there is a single left hand cross ✗ and all other tests are prohibited
- If an insulation test fails there is a right hand cross ✗ with RINS underneath
- If a power-on leakage test fails there is a right hand cross ✗ with ⚠ (no 'RINS' underneath)
- If a lead polarity test fails there is a right hand cross ✗ and a further small icon at the bottom indicating open circuit Live/Neutral, short circuit Live/Neutral, or crossed Live/Neutral
- PN and NE indicates Live/Neutral reversed
- PE, PN and NE indicates a PE fault