

# Di-LOG

...measurably better

## PU690 - Proving Unit

Instruction Manual



EN  
61010-1  
CAT II  
750V

### 690V AC Proving for Voltage Indicators

## Contents

I. Overview	3
II. Safety Notice	3
III. Instrument Symbols	4/5
IV. Technical Specification	6
V. Display and Controls	7
1. Operating Instructions	7/8
2. Battery Replacement	8
3. Accessories	9
4. Warranty Information	10

## **Certificate of conformity**

As the manufacturer of the instrument listed below, we declare under our sole responsibility that the product:

### **Di-LOG PU690 - Proving Unit**

to which this declaration relates is in conformity with the relevant clauses of the following standards:

**EN 61010-1**

**EN 61010-2-030**

**EN 61326-1**

**EN 61326-2-2**

### **LVD, EMC & RoHS**

The safety and performance of this instrument is assured when operated within the specifications in this instruction manual.

**The product identified above conforms to the requirements of council directive 2014/30/EU and 2014/35/EU.**

## I. Overview

The PU690 proving unit is a compact and lightweight voltage proving unit designed for the compliance safety checking of 2 pole voltage testers prior to testing on a live circuit.

It is a requirement of the Electrical Safety Council and the HSE that every Electrician proves their voltage testers before and after confirming safe isolation. The PU690 is also high and low Z impedance compatible for proving voltage on multimeters.

## II. Safety Notices

1. Please carefully read and fully understand the warnings and operating instructions before use. If the instrument is used in a manner not specified by the manufacturer, the protection provided by the instrument may be impaired.

2. If the proving unit appears damaged or is not working properly, stop using it immediately.

The operator's safety is no longer ensured, the instrument is to be put out of service and protected against use. Safety may be compromised if the instrument:

- Shows obvious damage.
- Does not carry out the desired measurements.
- Has been stored for too long under unfavourable conditions.
- Has been subjected to mechanical stress during transport.

3. Once the indicators on the voltage tester have been visualised, please remove the test probe from the right input first, and then from the left.

## II. Safety Notices (continued)

4. Do not operate the proving unit for periods longer than 10 seconds.
3. Clean the tester casing with a damp cloth and mild detergent. Do not use abrasives or solvents!
4. When low battery indication appears, please replace the batteries.
5. Comply with local and national safety
6. The proving unit may not output voltage if the unit is used outside of the operating specifications (see technical specification for details).

## III. Instrument & Manual Symbols

Symbols displayed on the instrument and in the instruction manual:



Warning! Warns of potential danger, and to comply with the instruction manual.



Caution! Dangerous voltage, potential risk of electrical shock.



Equipment protected throughout by double or reinforced insulation.



Conformity symbol, the instrument complies with the relevant directives. It complies with EMC Directive (2014/30/EU), Standards EN 61326-2-2. It also complies with the Low Voltage Directive (2014/35/EU), Standards EN 61010-1, EN 61010-2-030 and EN61326-1 are fulfilled.

### III. Instrument Symbols (continued)



The PU690 meets the standard (2012/19/EU) WEEE. This marking indicates that this product should not be disposed with other household wastes throughout the EC. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.



The instruction manual contains information and references, necessary for safe operation and maintenance of the instrument. Prior to using the instrument the user is kindly requested to thoroughly read the instruction manual and comply with it in all sections.



Failure to read the instruction manual or to follow the warnings and references contained herein can result in serious bodily injury or instrument damage. The respective accident prevention regulations established by the professional associations are to be strictly enforced at all times.

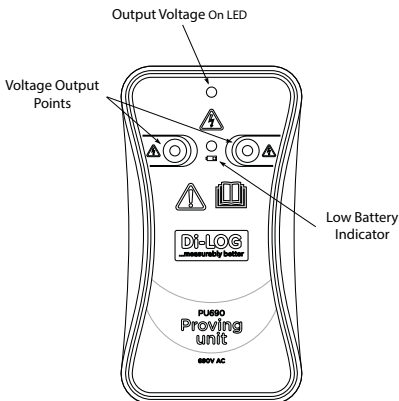
## IV. PU690 Series Specification

PU690 Proving Unit Specification	
	PU690
Voltage Output	690V AC
Output current	<3.5mA
Frequency	50 Hz
Load	≥200 KΩ
High Voltage LED	✓
Low Voltage LED	✓
Low battery indication	≤ 7.6V
Safety rating	CAT II 750V
Operating temperature	-10°C to 40°C at max
Storage temperature	-10°C - 50°C
Relative humidity	≤70% non-condensing
Altitude	Up to 2000m
Pollution Degree	2
Dimensions (H/W/D)	140mm x 80mm x 50mm
Weight (net)	400g
Power supply	6 x 1.5V (LR6) AA (supplied)
EAN	5060082543562



Measurement category II is for measurements performed on circuits directly connected to the low-voltage installation. Examples of this would be; measurements on household appliances, portable tools and similar equipment.

## V. Display and Controls



### 1. Operating Instructions

#### Proof Testing

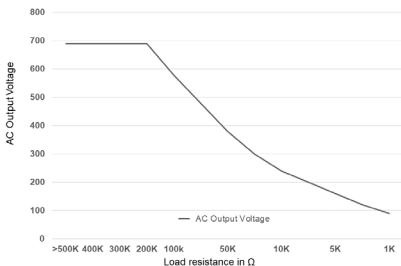
Insert the voltage tester probes into the output sockets (690V AC). Apply sufficient pressure to ensure a good connection. Check the voltage indication on the voltage tester under test. Ensure the output voltage LED is on during the test. Once visual indication has been confirmed and verified, remove the right test probe first before removing the left test probe.



Please note the output voltage may not be 690V and will depend upon the load applied by the voltage indicator.



### Voltage output against load resistance chart



All Di-LOG voltage indicators draw <math><3.5\text{mA}</math> and will indicate up to 690V but other manufacturers' instruments may vary.

## 2. Battery Replacement

Position the PU690 face down and release the single captive screw in the battery compartment cover.

Remove the battery compartment cover. Remove the discharged batteries from the compartment.

Fit a new set of LR6 (AA) 1.5v batteries.

Relocate the battery cover over the battery compartment and fasten in position with the battery cover captive screw.



## **4. 24 Month Warranty**

Di-LOG instruments are subject to stringent quality controls. If in the course of normal daily use a fault occurs we provide a 24 month warranty (only valid with proof of purchase). Faults in manufacture and material defects will be rectified by us free of charge, provided the instrument has not been tampered with and returned to us unopened. Damage due to dropping, abuse or misuse are not covered by the warranty.

### **Product Support**

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