

PROFISAFE | 690B & 690L

Voltage and Continuity Tester

in Accordance with DIN EN 61243-3 / VDE 0682-401

3-349-755-03
3/6.16

- Voltage test
- Phase test
- Polarity test
- Phase sequence indication
- Continuity test
- Rugged housing, safe use even in moist environment, Protection IP 65
- Easy to operate, VDE-GS tested
- Measuring category CAT IV devices

CAT IV

IP65



CE



Applicable Regulations and Standards

DIN EN 61010-1:2011 VDE 0411-1:2011	Safety requirements for electrical equipment for measurement, control and laboratory use – General requirements
DIN EN 61243-3 VDE 0682-401:2011-02	Live working – Voltage detectors – Part 3: Two-pole low-voltage type up to 1000 V
DIN EN 60529/ VDE 0470 Part 1	Test instruments and test procedures Protection provided by enclosures (IP code)
DIN EN 61326-1 VDE 0843-20-1	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements

Display

- 1 red LED for voltage ≥ 50 V AC / 120 V DC
- 1 green LED for continuity 0 ... 1000 k Ω
- 1 display (LCD) with background illumination, measuring rate 2/s

PROFISAFE 690B:
7 steps (bargraph)



PROFISAFE 690L:
digital display of measured values (continuously)



Characteristic Values

Nominal voltage range	PROFISAFE 690L: 12 ... 690 V AC/DC ($\pm 3\%$ + 4 D) digital display
	PROFISAFE 690B: 12 ... 690 V AC/DC 7 steps (bargraph): 12, 24, 50, 120, 230, 400, 690 V
Frequency range	0 ... 500 Hz
Current (peak value, Is)	3.4 mA at 400 V/690 V
Input resistance	167 k Ω AC/DC at 690 V 200 k Ω AC/DC at 50 V
On-time	30 s at 690 V
Continuity test	0 ... 1000 k Ω

PROFISAFE | 690B PROFISAFE | 690L Voltage and Continuity Tester

Ambient Conditions

Reference temperature 20 °C
Operating temperatures -15 ... +45 °C

Standard Equipment

- 1 Voltage and continuity tester
- 1 Set of operating instructions

Power Supply

Voltage tests can be conducted without the integrated lithium storage battery as the required energy is taken from the test source.

The power for the other tests is supplied by a lithium storage battery which can be recharged by a 230 V mains terminal.

Order Information

Description	Type	Article Number
Voltage and continuity tester 12 ... 690 V with bargraph display	PROFISAFE 690B	M630H
Voltage and continuity tester 12 ... 690 V with digital display	PROFISAFE 690L	M630J

Electrical Safety

Safety class II per IEC 61010-1
Measuring category CAT IV 600 V
CAT III 690 V

Surge withstand capability > 8 kV (1.2/50 µs)
Test voltage 6 kV

Electromagnetic Compatibility EMC

Interference emission EN 61326-1:2006 class B
Interference immunity EN 61326-1:2006

Mechanical Design

Protection Housing ABS, IP 65
Extract from table on the meaning of IP codes

IP XY (1 st digit X)	Protection against foreign object entry	IP XY (2 nd digit Y)	Protection against the penetration of water
6	dust-tight	5	water jets

Connecting table polyurethane sheathed cable 1000 V, 1m
Dimensions Display element:
W x L x D: 48 mm x 231 mm x 37 mm
Weight approx. 170 g

Edited in Germany • Subject to change without notice • A pdf version is available on the Internet



GMC-I Messtechnik GmbH
Südwestpark 15
90449 Nürnberg • Germany

Phone +49 911 8602-111
Fax +49 911 8602-777
E-Mail info@gossenmetrawatt.com
www.gossenmetrawatt.com