

## Function tester for HR/LRM

### General notes!

Before using this device, carefully read and understand the contents of this document and keep it for future reference.

The content reflects the most accurate information at the date of printing. We reserve the right to make technical changes at any time and without prior notice as necessary in the framework of on-going developments. This release of the document becomes invalid when a new issue of this document is released.

### Important terms

The following defined terms must be understood by the operator of this device. Failure to observe, recognise and act accordingly may impact the safety of the operator and/or the operable life of this device and/or connected devices/equipment.



#### **DANGER!**

... indicates a hazardous situation which, if not avoided, could lead to death or serious injury.



#### **WARNING!**

... indicates a hazardous situation which, if not avoided, may lead to death or serious injury.



#### **CAUTION!**

... indicates a hazardous situation which, if not avoided, may lead to wounds and minor injuries.



#### **NOTICE!**

... is used for application purposes and does not refer to personal injuries.

### Declaration of conformity

This device is in conformity with the requirements of the EC Electromagnetic Compatibility (EMC) Directive in its current form.

If required, the  Declaration of Conformity may be obtained from the following address:



Dipl.-Ing. H. Horstmann GmbH • Humboldtstraße 2 • 42579 Heiligenhaus, Germany

Tel.: +49 2056/976-0 • Fax: +49 2056/976-140 • [www.horstmannngmbh.com](http://www.horstmannngmbh.com)

## 1 Intended use

The function tester HR/LRM is used for functional testing of portable voltage indicators types HR-ST and LRM-ST according to VDE 0682 part 415 (IEC 61243-5). The function tester is powered by a replaceable 9 V battery and generates the test voltages 90 V/50 Hz and 5 V/50 Hz for HR and LRM systems.

## 2 Technical data

Housing	ABS
Dimensions	120 x 60 x 25 mm
Weight	approx. 140 g
Indication	LED flashing: Device is working properly LED constantly on: Battery soon exhausted LED off (despite keystroke): Battery dead and must be replaced
Battery	9 V block type 6LR61
Operating temperature	-10 to +55 °C
<b>HR system</b>	
Sockets	1 safety socket ('HR') and 1 jack ('COM') d=4 mm, distance= 19 mm
Output voltage	≥90 V
Output current	>2.5 µA
<b>LRM system</b>	
Sockets	2 jacks ('LRM', 'COM'), d=4 mm, distance= 14 mm
Output voltage	≥5 V
Output current	>2.5 µA

## 3 Testing

- Plug the voltage indicator into the corresponding sockets, i.e. 'HR' and 'COM' for HR-ST and 'LRM' and 'COM' for LRM-ST.
- Press the "Test" button.
- Within 1 s the voltage indicators must flash with a frequency ≥1 Hz.
- Release the button – the function tester is switched off.
- Pull the voltage indicator out of the function tester.

### Autorisierter Distributor



TVW Meßtechnik GmbH  
 Semmelweg 31  
 32257 Bünde  
 Fon: 05223 / 9277 - 0  
 Fax: 05223 / 9277 - 40  
 info@tvwbuende.de  
 www.tvwbuende.de

