



## HIG93T/L

- HIG93T are a series of insulation monitor devices (IMDs) for insulated systems (IT systems) in rolling stock.
- The IMDs are designed according to the EN 50155 standard and are prepared for measuring insulation resistance in trains, trams, and trolleybuses.

- The IMDs are usually applied with a range of TL \* T coupling devices, which allow monitoring of the usual operating voltages of 3 x 400 V or 3 x 500 V.

Type		HIG93T/L
Monitored IT power supply system type according to IEC 61557-8		AC
Measuring range of insulation resistance	$R_F$	0.1 ÷ 90 kΩ
Adjustable range of critical insulation resistance	$R_{an}$	0.1 ÷ 90 kΩ
Number of insulation resistance fault levels ( $R_{an}$ )		2
Rated voltage of monitored IT system (AC)	$U_n$	275 V
IMD power supply		From measured IT system, From independent power source
Nominal supply voltage AC	$U_s$	90 ÷ 265 V
Power consumption	P	5 VA
Measuring voltage	$U_m$	12 V
Measuring current	$I_m$	< 0.6 mA
Measuring input's internal impedance	$Z_i$	> 2 000 kΩ
Measuring accuracy		± 10 %
Electrical strength against internal circuits		3 750 V
Equipped with display		Yes (OLED technology)
Supported module of distant signalisation (MDS)		MDS-D, MDS-DELTA
Communication interface for user		RS485 bus
Communication protocol		ISOLGUARD, PROFIBUS
Housing material		Polyamid PA6, UL94 V-0
External control inputs		Test start
Degree of protection of front panel		IP40
Degree of protection except the front panel		IP20
Operating temperature	$\theta$	-10 ÷ 60 °C
Protection class according to IEC 61140		II
Recommended cross-section of connected conductors	S	1 mm <sup>2</sup>
Installation		On DIN rail 35 mm
Modular width		2 TE
Use for traction		Yes
Operating position		Any
Operation type		Permanent

## Designed according to standards

Equipment for testing, measuring or monitoring of protective measures		IEC 61557-1:2007
Insulation monitoring devices for IT systems		IEC 61557-8:2014
Insulation coordination for equipment within low-voltage systems		IEC 60664-1:2007
Railway applications – Rolling stock – Electronic equipment		EN 50155:2017
Railway applications – Electromagnetic compatibility		EN 50121-3-2:2016
Railway applications – Rolling stock equipment – Shock and vibration tests		IEC 61373:2010
Railway applications – Fire protection on railway vehicles		EN 45545-2:2013

## Application standards

Low-voltage electrical installations – Protection against electric shock		HD 60364-4-41:2017
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## Ordering, packaging and additional data

Mass	m	173 g
Mass (including the packaging)	m	197 g
Packaging dimensions (H x W x D)		60 x 113 x 73 mm
Packaging value	V	0.5 dm <sup>3</sup>
Customs tariff no.		90303370
EAN code		8590681120279
<b>Art. number</b>		<b>70 927/L</b>



The link in the QR code leads to the online presentation of the **HIG93T/L**.

There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit [www.hakil.com](http://www.hakil.com)



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Application wiring diagram (installation) 1/1

