



HIG93T/N24.1

- 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/N24.1
Monitored IT power supply system type according to IEC 61557-8		AC
Measuring range of insulation resistance	R_F	5 ÷ 900 kΩ
Adjustable range of critical insulation resistance	R_{an}	5 ÷ 300 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 independent power source
Nominal supply voltage AC	U_s	10 ÷ 26 V
Nominal supply voltage DC	U_s	11 ÷ 38 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 remote monitoring panels (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	θ	-25 ÷ 60 °C
Protection class according to IEC 61140		II
Recommended cross-section of connecting wires	S	1 mm ²
Installation		On DIN rail 35 mm
Modular width		2 TE
Width		36 mm
Height		90 mm
Depth		63.5 mm
Use for traction		Yes

Type		HIG93T/N24.1
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
Ordering, packaging and additional data		
Mass	m	167 g
Mass (including the packaging)	m	181 g
Packaging dimensions (H x W x D)		45 x 102 x 74 mm
Packaging value	V	0.34 dm ³
Customs tariff no.		90303370
EAN code		8590681188309
Art. number		70 927/N24.1



The link in the QR code leads to the online presentation of the **HIG93T/N24.1**. 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

