



## HIG97

- HIG97 is a very durable series of insulation monitoring devices for industrial isolated systems (IT systems).
- They are designed for monitoring the insulation resistance on systems with a high incidence of industrial interference (higher harmonic).
- They are characterized by an extremely fast response to insulation failure. Fault of insulation resistance is detected within 80 ms.
- They can be connected to the IT systems up to 3 x 1200 V, using a TL 1200 coupling device.
- IMDs are designed with independent power supply. That means that these insulation monitors can be powered from a different system than the one they measure. This has the significant effect that the IMDs are able to measure even de-energized system.
- HIG97 is equipped with a non-flammable measuring circuit, so it is suitable for environments with a risk of explosion (installation in a solid enclosure).

Type	HIG97	
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)	$U_n$	230 V
IMD power supply		From measured IT system, From independent power source
Nominal supply voltage AC	$U_s$	90 ÷ 265 V
Nominal supply voltage DC	$U_s$	120 ÷ 370 V
Power consumption	$P$	5 VA
Measuring voltage	$U_m$	18 V
Measuring current	$I_m$	< 0.48 mA
Measuring input's internal impedance	$Z_i$	> 100 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
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		4 TE
Operating position		Any

Type		HIG97
Operation type		Permanent
<b>Designed according to standards</b>		
Insulation monitoring devices for IT systems		IEC 61557-8:2014
Equipment for testing, measuring or monitoring of protective measures		IEC 61557-1:2007
Insulation coordination for equipment within low-voltage systems		IEC 60664-1:2007
Explosive atmospheres – Part 11: Equipment protection by intrinsic safety “i”		IEC 60079-11:2011
<b>Application standards</b>		
Low-voltage electrical installations – Protection against electric shock		HD 60364-4-41:2017
<b>Ordering, packaging and additional data</b>		
Mass	m	285 g
Mass (including the packaging)	m	313 g
Packaging dimensions (H x W x D)		74 x 112 x 73 mm
Packaging value	V	0.61 dm <sup>3</sup>
Customs tariff no.		90303370
EAN code		8590681709368
<b>Art. number</b>		<b>70 936</b>



The link in the QR code leads to the online presentation of the **HIG97**. 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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