



HIG91/Q

- The HIG91, HIG92, HIG93, and HIG94 series are a series of insulation monitoring devices for industrial isolated systems (IT systems).
- The maximum operating voltage of the IT system is 275 V AC. This voltage can be increased up to 6 kV when using coupling devices from the TL series.
- IMD with one R_{an} error level (HIG91, HIG92 series) or monitors with two error levels (HIG93, HIG94 series) are available.
- As standard, the IMD measure R_f in the range of 5 k Ω to 900 k Ω (HIG91, HIG93 series), alternatively in the range of 200 k Ω to 5 M Ω (HIG92, HIG94). Special IMDs are also available for different measuring ranges of insulation resistance.
- IMDs are equipped with digital processing of the measured signal, which offers the user numerical information about the measured insulation resistance.
- 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.
- The power supply of the device is AC as standard, for a nominal voltage of 230 V to 110 V / 50 Hz. However, versions with a 24 V DC supply are also available.
- All IMDs are equipped with a digital bus, which allows information to be transmitted to the master system. For signaling of the IMD status, panels from the MDS-D series can also be used (variant with RS485).

Type	HIG91/Q	
Monitored IT power supply system type according to IEC 61557-8	AC	
Measuring range of insulation resistance	R_f	5 ÷ 900 k Ω
Adjustable range of critical insulation resistance	R_{an}	5 ÷ 300 k Ω
Number of insulation resistance fault levels (R_{an})	1	
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
Nominal supply voltage DC	U_s	90 ÷ 370 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 k Ω
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, MDS10	
Communication interface for user	RS485 bus	
Communication protocol	ISOLGUARD, PROFIBUS	
External control inputs	Test start, Deblocking function	
Housing material	Polyamid PA6, UL94 V-0	
Degree of protection of front panel	IP40	
Degree of protection except the front panel	IP20	

Type		HIG91/Q
Operating temperature	θ	-10 ÷ 60 °C
Protection class according to IEC 61140		II
Recommended cross-section of connected conductors	S	1 mm ²
Installation		On DIN rail 35 mm
Modular width		2 TE
Use for traction		No
Operating position		Any
Operation type		Permanent
Designed according to standards		
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
Application standards		
Low-voltage electrical installations – Protection against electric shock		HD 60364-4-41:2017
Ordering, packaging and additional data		
Mass	m	149 g
Mass (including the packaging)	m	163 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		8590681165805
Art. number		70 911Q



The link in the QR code leads to the online presentation of the HIG91/Q. 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

