



HIG93

- 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 | | HIG93 |
|--|----------|--|
| 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}) | | 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 |
| 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 remote monitoring panels (MDS) | | MDS-D, MDS-DELTA |
| Communication interface for user | | RS485 bus |
| Communication protocol | | ISOLGUARD, PROFIBUS |
| External control inputs | | Test start |
| Housing material | | Polyamid PA6, UL94 V-0 |
| Degree of protection of front panel | | IP40 |
| Degree of protection except the front panel | | IP20 |

| Type | | HIG93 |
|--|---|----------------------|
| 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 | | 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 | 150 g |
| Mass (including the packaging) | m | 164 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 | | 8590681709153 |
| Art. number | | 70 915 |



The link in the QR code leads to the online presentation of the HIG93.

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



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Application wiring diagram (installation) 1/1

