The insulation monitoring device HIG95-DELTA produced by HAKEL for the ISOLGUARD series is designed for monitoring the insulation status of single-phase ungrounded IT power supply systems in the health sector. The insulation monitoring device enables monitoring of the ungrounded IT power supply systems according to standards IEC 60364-7-710:2002 (requirements for medical location), IEC 61557-1 and IEC 61557-8 up to the maximum operating voltage 275V AC. It is also equipped with measuring circuits which ensure evaluation and failure signalling of the monitoring system originated due to thermal (°) or current overloading of the medical transformer.

The insulation monitoring devices are equipped to display the numeric value of the measured insulation resistance. In addition, the control buttons for setting the parameters of insulation monitoring devices and signalling LED diodes can be used to display the status of the checked network.

It is possible to connect to the insulation monitoring device modules for remote signalling of the status MDS-DELTA or MDS-D produced by HAKEL.

Built-in alarm relay with a switching contact enables to connect devices for signalling the insulation status error and the thermal (°) or current overloading error.

Only one insulation monitoring device can be connected to the same ungrounded IT power supply system.

Basic characteristics

- The monitor for insulating statuses of AC networks with the voltage 0 to 275 V
- Measured value display of the $R_{\text{ins}}$ insulation resistance, thermal (°) and current overloading
- Temperature scan of the isolation transformer with one of three types of sensors
- Current overloading scan of the isolation transformer via measuring current transformer
- Signalling relay of the status of the insulating resistance with the switching contact
- Connection to the RS485 busbar, insulation strength 2500 Vrms against internal circuits and network circuits
- Option to connect the Hakel MDS-D remote monitoring panel equipped with a touch screen
- Connection for remote signalling MDS-DELTA or MDS-D modules produced by HAKEL.
- Option to set critical values, hysteresis values and other parameters via IMD’s buttons
- Access to setting the insulation monitoring device can be locked, the insulation monitoring device is unlocked by a combination of buttons
- Separated supply voltage enables to also monitor a network which is not under voltage
- Module width 2M for mounting on DIN rail 35

<table>
<thead>
<tr>
<th>Type</th>
<th>Signalling relay</th>
<th>Range of displayed value</th>
<th>Critical insulation resistance</th>
<th>Current load sensor</th>
<th>Number of temperature sensors</th>
<th>Temperature sensor</th>
<th>Remote monitoring</th>
<th>RS485</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIG95-DELTA</td>
<td>1x 1P</td>
<td>Adjustable 5 kΩ - 900 kΩ</td>
<td>Adjustable 50 - 200 kΩ</td>
<td>Measuring transformer of the current 25/5 up to 100/5.</td>
<td>1</td>
<td>Temperature sensor PT100 or PTC thermistor or thermal switching contact</td>
<td>MDS-D MDS-DELTA</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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Notes: 1P signalling relay with one switching contact

MDS-D remote monitoring module including a display

Use in health sector in accordance with the requirements of standards IEC 60364-7-710, IEC 61557-1 and IEC 61557-8.
Recommended connection of HIG95-DELTA to monitored ungrounded IT power supply system

Notes:
1. Type of measuring transformer should be selected according to the power of chosen isolation transformer
2. Recommended types and values of cables for busbar RS485 are mentioned in the description of module MDS-D
3. When using shielded cable for the RS485 busbar, the busbar shielding has to be connected throughout the whole length and grounded in one point
4. It is necessary to follow the line wiring of busbar RS485, it is not allowed to make any taps.