



ISOM K-40h / ISOM D-15h

Insulation monitoring device
for medical locations

Insulation monitoring



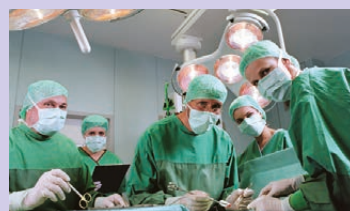
ISOM K-40h



ISOM D-15h

The solution for

- > Operating rooms
- > Anaesthesia rooms
- > Recovery rooms
- > Invasive imaging rooms



Strong points

- > Alarm log
- > Quick Access button
- > Current monitoring
- > Temperature monitoring
- > Modbus communication
- > ISOM D-15h alarm report

Conformity to standards

- > CEI 61557-8 annexe A
- > ISO 14025



Configuration
with Easy Config System.

Function

The **ISOM K-40h** insulation monitoring device monitors the insulation level in medical facilities. It can also indicate an overload (single-phase network) and an overheating of the IT medical transformer.

Advantages

Alarm log

The device records and timestamps active or finished alarms and events.

Quick Access button

The device has a dedicated button to quickly and easily navigate between the main operating screens.

Current monitoring

The device has an RJ12 current sensor input to monitor the load of the single-phase network.

Temperature monitoring

The device has a temperature monitoring function (generates an alarm if the threshold is exceeded).

Modbus communication

The device has an RS485 connection with Modbus protocol.

ISOM D-15h alarm report

It displays alarms in case of insulation fault, overheating and overload of the medical IT transformer measured by the ISOM K-40h IMD.

Applications

Monitoring the insulation of medical facilities

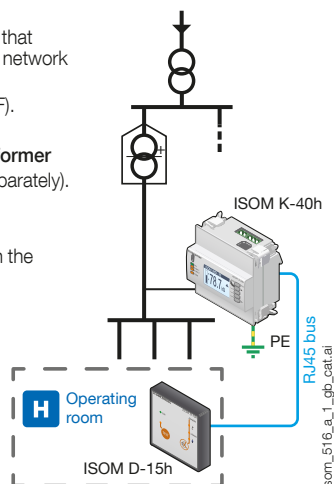
Measures the insulation level of single-phase medical IT networks that may contain DC powered parts, galvanically connected to the AC network (e.g. electronic devices, TV monitors). It automatically adapts to the leakage capacitance (maximum 5 μ F).

Monitoring the operating load current of the medical IT transformer

Carried out via Digiware TE, TR or TF current sensors (ordered separately).

Monitoring the temperature of the medical IT transformer

Monitoring via a PTC or integrated Clickson temperature sensor in the transformer (ordered separately).

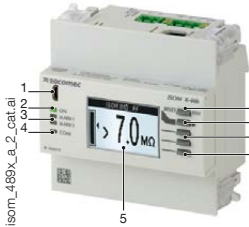


ISOM K-40h / ISOM D-15h

Insulation monitoring device
for medical locations

Front panel

ISOM K-40h

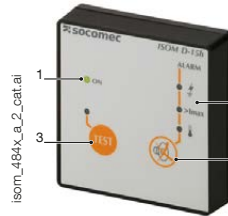


1. USB port for configuration.
2. ON LED. Lights when the device is active.
3. ALARM 1 LED. Lights if the medical IT transformer overloads or overheats. ALARM 2 LED. Lights if the insulation threshold is exceeded.
4. COM LED. Flashes when the communication bus is active.
5. Backlit graphic display.
6. TEST/RESET. Runs the autotest (long press) and resets alerts (short press).
7. Quick-Access button (short press) - HOME to main menu (long press).

8. Hotkeys.

9. OK buttons (short press) – Back (long press).

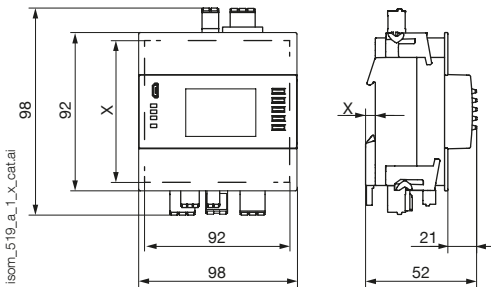
ISOM D-15h



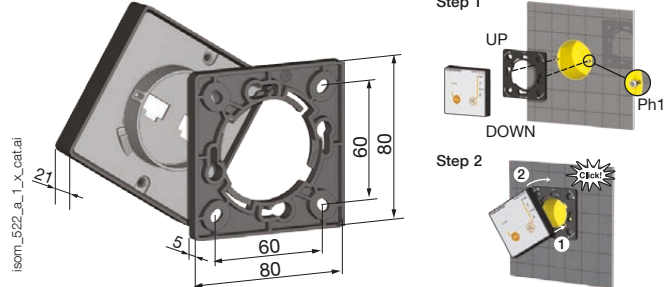
1. ON LED. Lights when the device is active.
2. LED signals:
 - Lights up if the medical IT transformer overheats.
 - >I_{max} lights up during an overload
 - ⚡ lights if the insulation threshold is exceeded.
3. TEST button, the LED flashes during the test.
4. Buzzer Stop button.

Dimensions (mm)

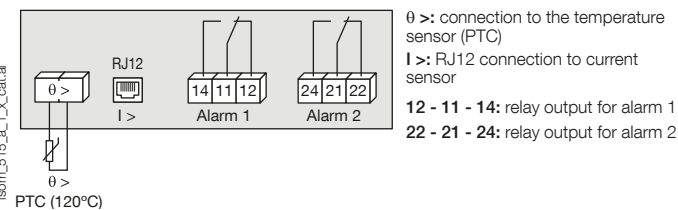
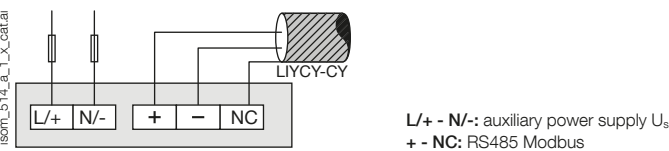
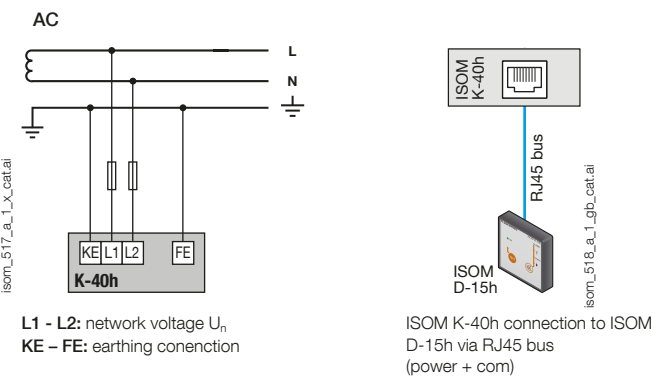
ISOM K-40h



ISOM D-15h



Terminals and connections



Characteristics

Network voltage U_n	
AC operating range	AC 24 ... 250 V
Frequency	50 ... 60 Hz
Assigned operating voltage	480 V
Auxiliary power supply U_s	
Power supply voltage	AC 110-230 V
Max. consumption	8.1 VA (K-40h) 0.2 VA (D-15h)
Fault alerts	
Number of thresholds	1
Type of threshold	Adjustable
Value of the threshold	50 kΩ ... 500 kΩ
Max. leakage capacitance	5 μF
Inputs/outputs	
Temperature or inhibition	PTC or digital inputs - 2 wires
Current sensors	TE, TR, TF models - RJ12
K-40h / D-15h connection	RJ45 Socomec cable
Output contacts	
Number of contacts	2
Contact type	Changeover switch
AC nominal voltage	230 V
DC nominal voltage	30 V
Sustained current	3 A
Operating mode	Standby / On
Preset operating mode	Standby
Operating conditions	
Operating temperature range	-10 ... +55 °C
Storage temperature	-40 ... +85 °C
Relative humidity	95% at 55 °C

References

ISOM Digware	Network voltage U_n	Auxiliary power supply U_s	Alarm threshold	Reference
K-40h	AC 24 ... 250 V	AC 110-230 V	50-500 kΩ	4725 0122

Accessories	Reference
ISOM D-15h alarm report indicator	4729 0200
TE current sensors (not TE-90), TR or TF	
PTC temperature sensor	4729 0560