



# ISOM K-40h / ISOM D-15h

Insulation monitoring device  
for medical locations

Insulation monitoring



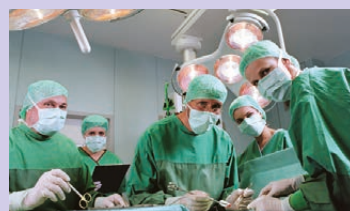
ISOM K-40h



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

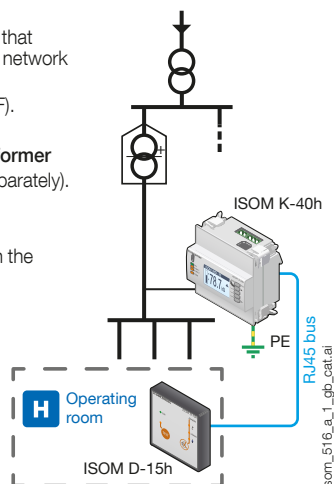
Measures the insulation level of single-phase medical IT networks that may contain DC powered parts, galvanically connected to the AC network (e.g. electronic devices, TV monitors). It automatically adapts to the leakage capacitance (maximum 5  $\mu$ F).

### Monitoring the operating load current of the medical IT transformer

Carried out via Digivare 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).

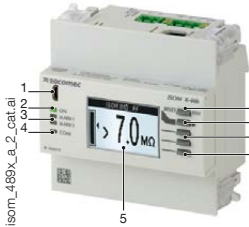


# ISOM K-40h / ISOM D-15h

Insulation monitoring device  
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## Front panel

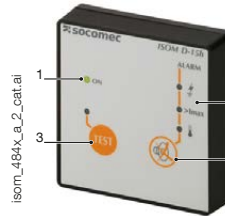
### ISOM K-40h



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).

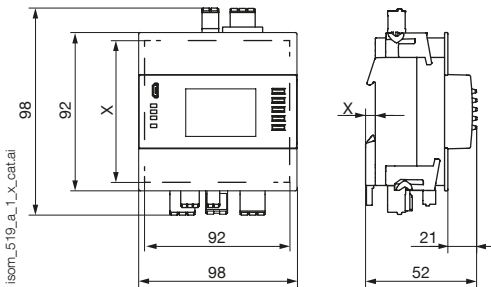
### ISOM D-15h



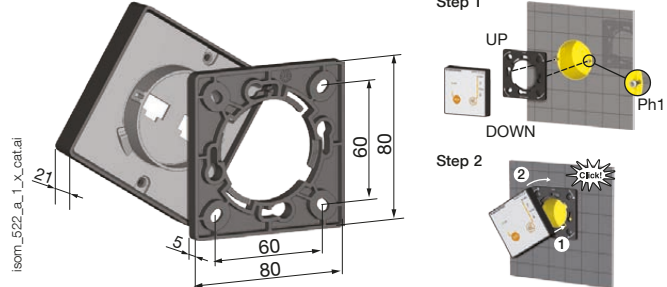
1. ON LED. Lights when the device is active.
2. LED signals:
  - Lights up if the medical IT transformer overheats.
  - >I<sub>max</sub> lights up during an overload
  - ⚡ lights if the insulation threshold is exceeded.
3. TEST button, the LED flashes during the test.
4. Buzzer Stop button.

## Dimensions (mm)

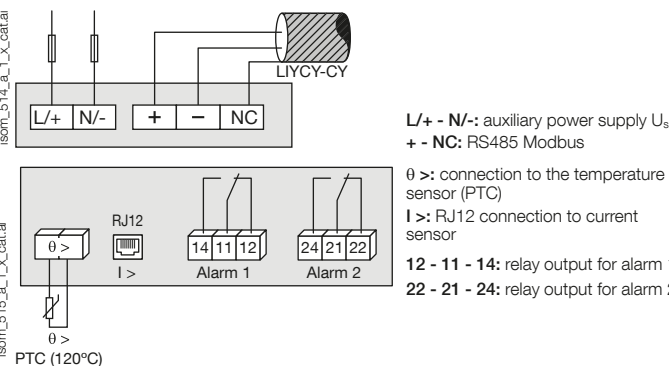
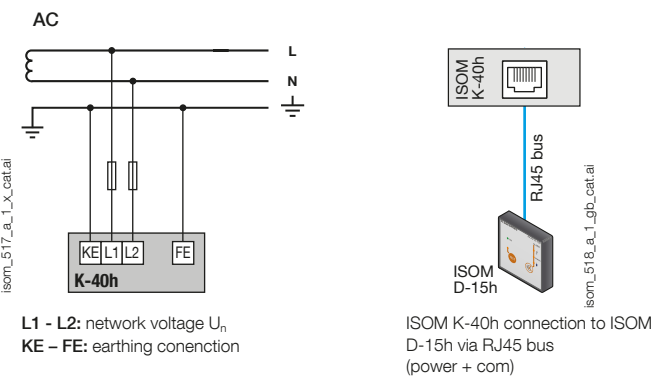
### ISOM K-40h



### ISOM D-15h



## Terminals and connections



## Characteristics

<b>Network voltage <math>U_n</math></b>	
AC operating range	AC 24 ... 250 V
Frequency	50 ... 60 Hz
Assigned operating voltage	480 V
<b>Auxiliary power supply <math>U_s</math></b>	
Power supply voltage	AC 110-230 V
Max. consumption	8.1 VA (K-40h) 0.2 VA (D-15h)
<b>Fault alerts</b>	
Number of thresholds	1
Type of threshold	Adjustable
Value of the threshold	50 kΩ ... 500 kΩ
Max. leakage capacitance	5 μF
<b>Inputs/outputs</b>	
Temperature or inhibition	PTC or digital inputs - 2 wires
Current sensors	TE, TR, TF models - RJ12
K-40h / D-15h connection	RJ45 Socomec cable
<b>Output contacts</b>	
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
<b>Operating conditions</b>	
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