ISOM K-20

Insulation monitoring device

for power networks or control/command circuits

ISOM K-20

Configuration with Easy Config System.

Function

The **ISOM K-20** insulation monitoring device monitors the insulation level of standalone power networks in an IT neutral arrangement. It is also designed for monitoring control-command networks.

Advantages

Intuitive interface

display and a dedicated “Quick-Access” button for fast and easy navigation between the main operating screens.

Recess-mounted box

Because of the product’s housing design, you can recess-mount the device or modularly integrate it on a DIN rail.

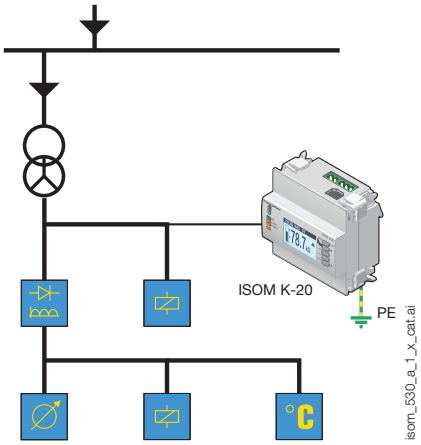
Applications

These IMDs can be used for multiple applications:

- Universal use in industry
- Monitoring standalone AC, DC and combined networks (up to 30 µF of leakage)

The ISOM K-20 is intended for circuits where the signalling of continuous symmetrical faults is essential and is suitable for AC and DC control circuits.

Note: In accordance with IEC 61557-8 and EN 61557-8, the use of IMDs capable of detecting symmetrical defects is mandatory for low-voltage DC circuits (> 120 VDC regular or 140 VDC peak).



Typical monitored loads: rectifiers, relays, sensors and probes.

The solution for

- Industries
- Energy production
- Infrastructures

Strong points

- Intuitive interface
- Recess-mounted box

Conformity to standards

- IEC 61557-8
- ISO 14025

Even more functionality

ISOM K-40

- RS485 MODBUS communication
- Alert log
- Current input and temperature monitoring

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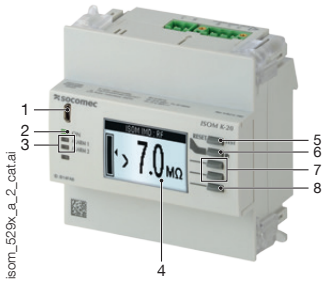
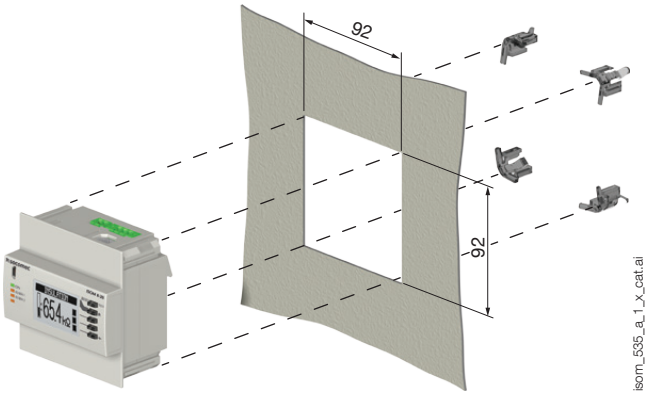
Front panel

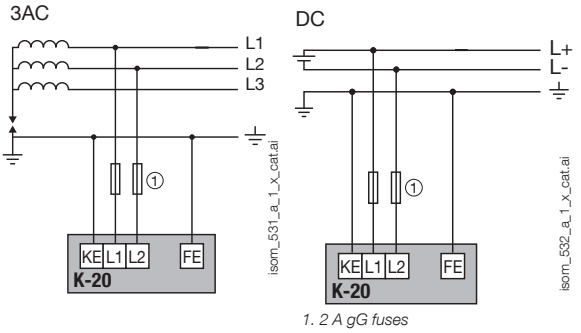


1. USB port for configuration.
2. ON indicator. Lights up when the device is active.
3. ALARM 1 and 2 indicators. Light up when the preset thresholds for Alert 1 or Alert 2 are reached.
4. Backlit graphic display.
5. TEST/RESET button. Starts the autotest (long press) and resets alerts (short press).
6. Quick-Access button (short press) - HOME to main menu (long press).
7. Hotkeys.
8. OK buttons (short press) - Back (long press).

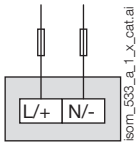
Dimensions (mm)



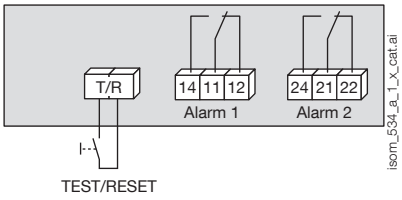
Terminals and connections



1. 2 A gG fuses



L1 - L2: network voltage U_n
KE - FE: earthing connection
L/+ - N/-: auxiliary power supply U_s
AC power supply: 1 A gG fuses
DC power supply: T1AH300VDC fuses



T/R: external TEST/RESET
12 - 11 - 14: alarm relay output 1
22 - 21 - 24: alarm relay output 2

Characteristics

Network voltage U_n	
AC range	AC 24 to 480 V
DC range	DC 24 to 240 V
Frequency	DC 50 to 460 Hz
Assigned operating voltage	480 V
Auxiliary power supply U_s	
Power supply voltage	As per reference
Max. consumption	10 VA
Fault alerts	
Number of thresholds	2
Type of threshold	Adjustable
Value of the threshold	1 kΩ to 1 MΩ
Max. leakage capacity	30 µF

Inputs	
External TEST/RESET	2-wire inputs
Output contacts	
Number of contacts	2
Contact type	Changeover switch
AC nominal voltage	230 V
DC nominal voltage	30 V
Steady-state current	3 A
Operating mode	Standby / On
Preset operating mode	Standby
Operating conditions	
Operating temperature	-10 to +55 °C
Storage temperature	-40 to +85 °C
Relative humidity	95% at 55 °C

References

ISOM Digiware	Network voltage U_n	Auxiliary power supply U_s	Alert threshold	Reference
K-20 AC	AC 24 to 480 V / DC 24 to 240 V	AC 110-230 V 50-60 Hz / DC 120-240 V	1 to 1,000 KΩ	4725 **0110**
K-20 DC	AC 24 to 480 V / DC 24 to 240 V	24 VDC(1)	1 to 1,000 KΩ	4725 **0111**

(1) Power supply separate from the monitored network.

Accessories	Available for order in multiples of	Reference
Fuse circuit breakers to protect auxiliary and mains power supplies (type RM) 2-pole	4	5701 **0020**
gG 10x38 1 A fuses	10	6012 **0001**
gG 10x38 2 A fuses	10	6012 **0002**