

GSM-Module

Transmission of alarm messages by SMS

The GSM module enables the transmission of alarm messages by mobile phone or fixed network, using SMS. An activated SIM card is needed for this. There must be sufficient reception strength at the installation location.

The connection to the GSM module is done via potential-free contact (connection to the remote alarm device as pictured below) in a refrigerator or freezer. The GSM module has two digital inputs allowing two refrigerators or freezers to be connected at the same time.

A temperature sensor is available at an extra cost for connecting refrigerators or freezers that don't have a potential-free contact (connection via analog input). The alarm thresholds (the lower and upper warning points), can be set using the software supplied.

An optical and acoustic alarm is triggered at the GSM module when a threshold value is reached and an SMS alarm message is sent (consisting of freely definable text).

The acoustic alarm is confirmed at the GSM module by pressing a button or via sending a confirmation by SMS. The optical alarm remains until the fault has been cleared and additionally confirmed.



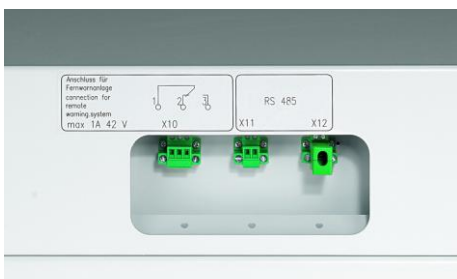
One of three alarm profiles is assigned to the two digital inputs. Each SMS message text can be considered with a maximum length of 100 characters.

Minimum and maximum temperature limits between -50°C and $+50^{\circ}\text{C}$ can be assigned to the analogue input and an alarm is triggered if the temperature goes below or above the limit respectively. The alarm profiles and SMS message texts are assigned in the same way as the digital inputs.

The module is equipped with an exchangeable li-ion battery to buffer the unit in the case of a power-failure. If SMS alarm messages are not acknowledged by an SMS, an attempt is made to resend the message every 5 minutes. In this operating mode, the battery gives a buffer of 72 hours.

The GSM module is configured via the USB interface. Delivery includes a CD with the corresponding software. Only Windows 2000 or higher are supported. The USB connection is located inside the device and is accessible once it has been opened.

The GSM module is equipped with a potential-free change-over contact.



Connection of the potential-free contact with KIRSCH refrigerators or freezers

Technical values

Power supply

230 V +/- 10%, 50/60 Hz, power consumption 5VA

Environmental conditions

Storage temperature: -20° C to +70° C

Operating temperature: 0 to + 55° C

Relative humidity: max. 75 %

Weight

500 g

IP rating

IP65

Protection class

II

Installation details

Wall-mounted housing with screw cable connections

Housing dimensions (without screw cable connection and antenna): 122 x 120 x 60 mm

An activated SIM card is needed (no part within scope of delivery)

Scope of delivery

- GSM-module with power cable, 3 m
- CD with software for configuration by USB-interface
- Connection cable, 5 m
- Installation material

Option available at extra cost

- External temperature sensor, 3 m including cold block

Standards/Norms

- CE Low Voltage Directive 73/23/EEC
- EN 60335-1:2002 Specification for safety of household and similar electrical equipment
- EN 60730-1:2002 Automatic electrical control for household and similar use
- EN 61010-1:2001 Safety requirements for electrical equipment for measurement, control and laboratory use
- CE EMC-Guideline 89/336/EEC, severity level 3

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- Blood plasma freezers
- Laboratory refrigerators
- Laboratory freezers
- Refrigerators and freezer with explosion-proof interior
- Multi-user refrigerators