DATA SHEET NRE-LITE

Version 1.3

Notice:

No liability or warranty can be accepted for any errors.
We reserve the right to make technical changes at any time.

Data Sheet NRE-lite

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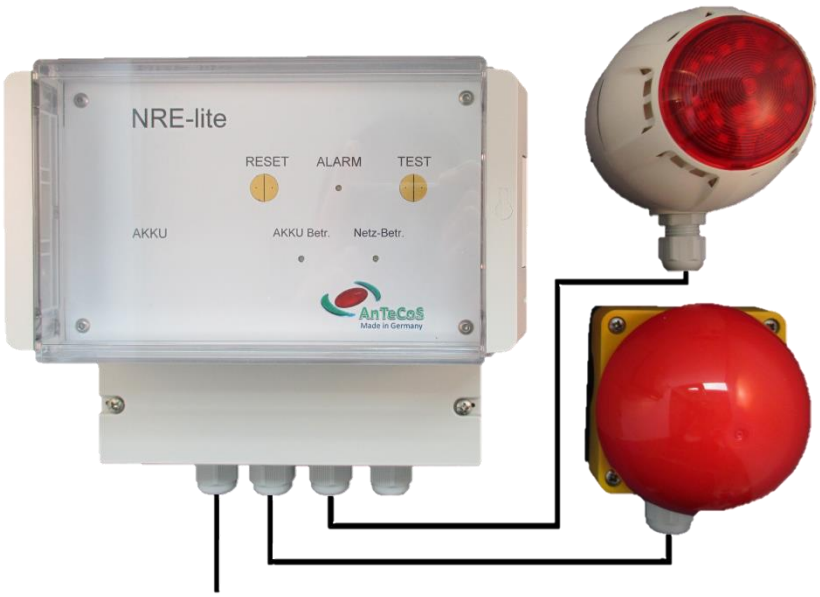


Contents

1 Aim/Purpose /Task

1.1 General Description

In cold rooms with temperatures below -10°C and a floor area above 10m³, an emergency call device independent of the general power supply network must be provided. Emergency call devices are life-saving equipment and require careful installation, commissioning and maintenance.
Executions according to VDE0100, 0800, etc. the respective national standards and may only be carried out by electrical specialists.

1.2 Installation

When installing, make sure that the controller is mounted on non-conductive surfaces or on grounded conductive surfaces. Unless the installation surface cannot be touched. The emergency control panel should be placed outside the rooms to be monitored in places that are permanently occupied by people (work rooms, telephone exchanges, porters' rooms, etc.). The installation location should be chosen so that the control indicators are clearly visible and the acoustic and visual alarm signals can be perceived by people at all times. The emergency call buttons for alarm triggering should be installed in the immediate area of the exit and must be accessible while lying down. Each exit must be equipped with an emergency call button, and the triggering point must be easily accessible. An emergency call button can be connected to the emergency call center. When connecting the bliz lamp or siren, the polarity must be observed, otherwise no alarm will be triggered and displayed.
In addition to the connected siren, a flashing light can be connected to terminal A1. All cables should be kept as short as possible and
must not be laid together with power lines. Avoid the vicinity of motors, control cabinets, etc. If this is not possible, shielded lines must be laid (connect shield to **terminal T1.1 ground**, e.g. with motor connections)..

2 Technical Data

Technical Data:

Case		IP 65, 166 x 161 x 121mm (BxHxT)
Operating mode		Operating regulation and control unit
Pollution level		2 (normal)
Mode of operation		Type 1C
Software Class		B
Overvoltage category		III
Rated current		1A, $\cos\varphi$ = 1,0
Power supply		230v, 50Hz, +5%/-10%
Battery		12V, 2700mAh
Total discharge protection		Shutdown at approx. 10.8V
Input		
	Terminal A2	Voltage-free changeover contact for additional technical alarm, ext. Personal alarm
	Terminal T1.3 + T1.4	Opener (emergency stop, personal alarm)
Output	**Terminal A1**	Siren/Flashlight, max. 50mA
	Terminal T1.1 + T1.2	Emergency stop light (switch),18mA
Input		
Fuse		Microfuse 5 x 20mm, 0,1AT to IEC 127 Rated breaking capacity 16A/ 250V AC, 50-60Hz
Connection terminals		0,75 - 1,5mm²
Alarm relay		Changeover contact, load max. 1A at 24V $\cos\varphi$ = 1,0

(The voltage-free relay contacts are not suitable for 230VAC line).

3 Start-up

1. Before applying the power supply, unscrew the battery cover and insert the battery pack into the housing. It is essential to observe the correct polarity when inserting the battery pack. 2.
2. Apply the 230V mains voltage to the L and N terminals. 3.
3. Press the following keys one after the other:

   TEST and RESET

   This arms all the alarm inputs
4. Full operational capacity of the battery pack of the emergency alarm device is reached only after approx. 240 hours of operation (shortened to approx. 1 hour if charged battery pack is used), as the battery pack requires a certain charging time to reach its full charging capacity.

4 Functional test

1. **Normal operation** Only the green LED for mains operation is allowed to light up
2. **Personal alarm** Press the pushbutton in the cold rooms and check the alarm function. Check the alarm function and acknowledge it with the RESET button after unlocking.

5 Functional Description

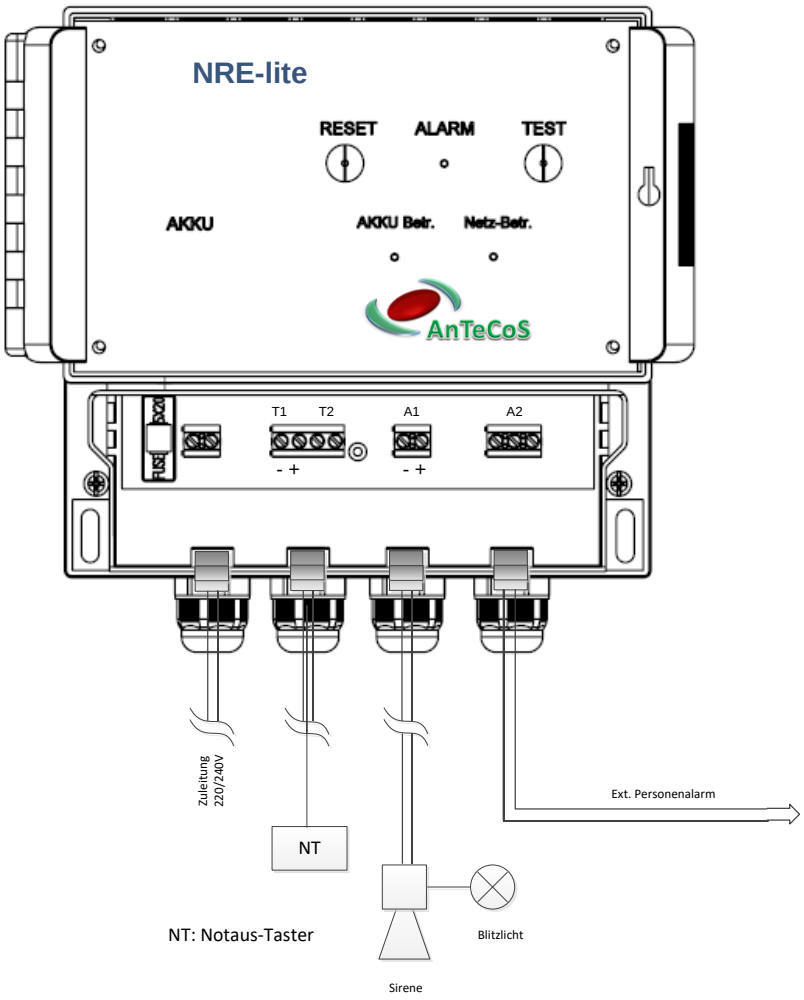
The emergency call central unit contains a power supply unit that supplies the electronics with extra-low voltage and keeps the built-in rechargeable battery constantly charged. The built-in rechargeable battery enables a visual and acoustic alarm for several hours in the event of a power failure.

Power operation (green LED)	lights up during power supply operation
Battery operation (red LED)	lights up in case of power failure
Personal alarm (ALARM LED)	lights up when the emergency call buttons are pressed or when the power to the button line is interrupted can also flash if the flashing lights are different.
Test- button	Alarmauslösung am Notrufzentralgerät
Reset button	for alarm acknowledgement, whereby the emergency call button must first be unlocked. Attention: In the event of a technical alarm (mains/battery operation), the pending alarm is acknowledged (deleted) by pressing the RESET button and the siren/flashing light is switched off and no longer displayed. The error must be eliminated before pressing the RESET button.
Relay output	Voltage-free relay changeover contact for transmitting personal alarms
Audible alarm signal	for personal alarm: approx. 2 sec. signal, approx. 2 sec. pause

6 Error Messages

Error message	Possible causes/suggested solutions for troubleshooting
1.LED (green) Power operation does not light up	- Check mains voltage - Check microfuse in the emergency call central device - Press RESET key after power is applied for new start-up.
2.LED (red) personal alarm and alarm lamp lights up with acoustic alarm In intervals(approx. 2 sec. signal approx. 2 sec. pause)	- Release point in the cold rooms are actuated. - Check the triggering point. The button at which the personal alarm was triggered must be reset, i.e. the trigger button must be pulled out. - This unlocks the trigger point and the personal alarm can be deactivated by pressing the RESET button on the emergency alarm device. - The alarm flash lamp and LED must switch off. - In case of line interruption of the pushbutton line (terminals 5 and 6) - Check the line - Then press RESET key. Alarm and red LED must switch off. - The error has now been fixed.

7 Circuit Diagram



8 Terminal Assignment

Inputs

Terminal A2 Voltage-free changeover contact for additional technical alarm

Terminal T1.3 + T1.4 Opener (emergency stop, personal alarm)

Outputs

Terminal A1 Siren/flashlight, max. 50mA

Terminal T1.1 + T1.2 LED, 18mA (Emergency stop light)

9 Maintenance

A functional check of the entire emergency alarm system must be performed monthly as follows:

- Switching off the power supply
- Alarm triggering with the subsequent acknowledgement at all installed triggering points.

A functional check of the entire emergency alarm system must be documented and performed once every 6 months as follows:

- Actuation of the test button
- Acknowledgement after alarm signal by RESET button
- Disconnection of the power supply
- Alarm triggering with the following acknowledgement at all installed triggering points

The display elements (Mains oper. LED, ALARM LED, ACU oper. LED) must be subjected to a regular visual inspection.

For further data, please refer to the functional test or functional description..

Important!

The usual life of the battery is about 3 years, but due to the safety aspects, the battery must be replaced at least every 2 years.

The test for operational availability of min. 10h according to EN 378-1 was carried out using the following intended signaling devices:

- Siren: ROSHNI LP, 547017FULL-0801X
- Flashlight: SOLISTA MAXI, 811024FULL-0040
- Pushbutton LED AN-TAS-LED-151308

The above-mentioned operational availability time is only observed for the devices listed above.

The emergency alarm device may only be connected and operated in accordance with the circuit diagram in Chapter 7.

Modifications or circuit modification, incorrect connection or modified devices (flash lamp, siren, button LED) will invalidate the warranty..