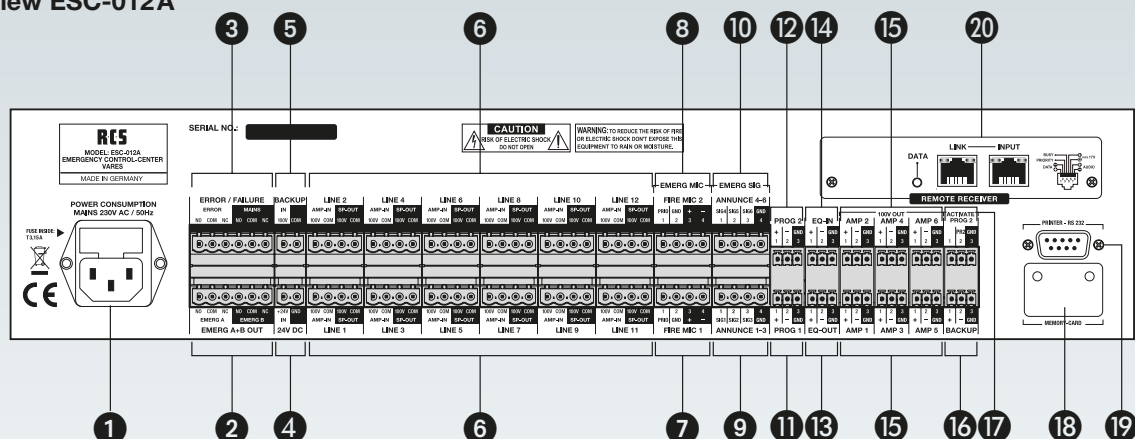FOR 12 LINES

ELECTROACOUSTIC
EMERGENCY WARNING SYSTEM

EN 54-16 / VDE 0833-4 / VDE 0828 / IEC 50849

for a maximum of system security

R·C·S

CONTROL-CENTER VARES 1000

EN 54-16 CERTIFIED SYSTEM / DIN IEC 50849 / VDE 0828 CERTIFIED / COMPLIANT TO VDE 0833-4

Rear view ESC-012A

1. Power supply input 230 V AC
2. Output relay contact „Emergency" A + B
3. Output relay contact „Error" and „Power failure"
4. Input 24V-DC emergency power supply
5. Input backup amplifier
6. Speaker line 1-12
7. Fire brigade call station 1 (FWS1 with priority of FWS2)
8. Fire brigade call station 2 (FWS2)
9. Input for annunciator 1-3
10. Input for annunciator 4-6
11. Line-level input program 1
12. Line-level input program 2
13. Line-level output for Equalizer
14. Line-level input for Equalizer
15. Line-level output for 100V amplifier 1-6
16. Line-level output for 100V backup amplifier
17. Contact input to activate program 2
18. Memory card for Textmessages
19. Serial Interface RS232 for Printer
20. Digital Interface RR-120 (optional)

Technical data	VARES ESC-012 A
Speaker lines	12 lines, max. 480 W each (6 lines with ELM-106)
Fire Brigade call stations	2x ESM-100 D suitable for connection
Digital microphone stations	up to 10 devices ELM-106 (not monitored)
Signal outputs	13x NF 0dB; transformer balanced; 12 x 100V
Signal inputs	2x NF 0dB; unbalanced (Prg 1 + Prg 2); 13x 100V; 6x upervised switching inputs for text or alarm activation (input 6 has a special function to analyse external errors r)
Switching outputs (max. 120V AC; max. 2A AC)	2x „Emergency" (break or open contact)
	1x „Error" (break or open contact)
	1x „Power failure" (break or open contact)
PC-interface	RS-232
Voice memory	SD-card
Display	LCD 64 x 128 px, LEDs
Control panel	2 buttons, 6 programming buttons, selection wheel
Power supply	230V AC, 24V DC
Power consumption	< 40 W
Dimensions (WxHxD)	483 x 89 x 340 mm, 2 RU
Weight	6,7 kg

Digital Microphone Station

ELE-006 ELE-004
ELM-106

Description

ELM-106 manages announcements into one or more selected zones and all-calls. An expansion to handle 12 call zones is possible by the use of an optional six-button module ELE-006.

● On an overall bus length of 100 m on CAT7 cable up to ten pcs. ELM-106 can be connected to a single ESC-012A. For larger distances please use lower resistance cables.

● With the extension module ELE-004 can be extended to a covered alarm button, three buttons for special functions and 2 fault LED's .

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Digital Microphone Station, Electret microphone with cardioid characteristic **ELM-106**
Digital Microphone Station, as ELM-106, but without interface RR-120 . . . . **ELM-106WO**
Button Extension Module, for ELM-106 to handle 12 call zones **ELE-006**
Function Extension Module, for ELM-106 to expand with further functions **ELE-004**

VARES 1000 CONTROL-CENTER

EN 54-16 CERTIFIED SYSTEM / DIN IEC 50849 / VDE 0828 CERTIFIED / COMPLIANT TO VDE 0833-4

R·C·S

MADE IN GERMANY

Lifesaving in the case of an emergency!

In the case of an alarm, an electroacoustic emergency warning system may avoid panic by understandable speaker announcements, which are, contrary to the howling of a siren, a much more efficient way of initiating the evacuation of a building.

Certainly, the availability and safe working of such systems has to be guaranteed at any time by monitoring the complete signal path. The standard **IEC 50849/ VDE 0828 and VDE 0833-4** defines the requirements for such systems.

Description Control-Center ESC-012A

VARES ESC-012A has been developped in full accordance to the latest rules and regulations for security. Targeted towards small and medium-scaled usage scenarios, it handles all the tasks and challenges a voice alarm systems faces in everyday life.

Installation is handled in an easy and straightforward way by using the LCD based user interface. All connected auxiliary components are scanned and registered automatically.

Speaker lines can be configured in 12 single or 6 A/B lines for an increasd of security. Even a mix of single and redundant line setups for custom scenarios is possible.

A logging function stores all system conditions on non-volatile memory in any case of a technical failure. The generated protocol can be viewed immediately or sent to a printer.

Specifications:

- Graphical user interface with adjustable colour scheme, in any case of an alarm the display flashes in red colour.

- Menu interface with digital rotary encoder.

- Password protected menu interface.

- Fully variable assignment of up to 12 speaker lines to a maximum of 6 power amplifiers, maximum amplifer power is 480 W each.

- A faulty power amplifier is detected and replaced by the backup amplifier automatically.

- Two line level inputs of different priority levels can be used for various tasks, like background music distribution or paging via a telephone system.

- Free assignment of the program to any of the 12 speaker lines.

- The internal digital message memory (based on an SD card) is equipped with an evacuation announcement, a siren according to DIN 33404 and various different chimes (one tone and four tones).

- All 12 speaker lines are monitored for short circuits, line breaks and impedance variation.

- Error messages are provided by clear text display, signalling LED, sounder and dry contact.

- Up to 10 digital call stations ELM-106 can be connected.

- ELM-106 call stations can be expanded to address 12 zones by ELE-006 expansion units.

- Emergency microphones ESM-100D and ESM-020H enjoy individual 3-band equalisation for best intelligibility of any announcement (up to two emergency microphones can be connected).
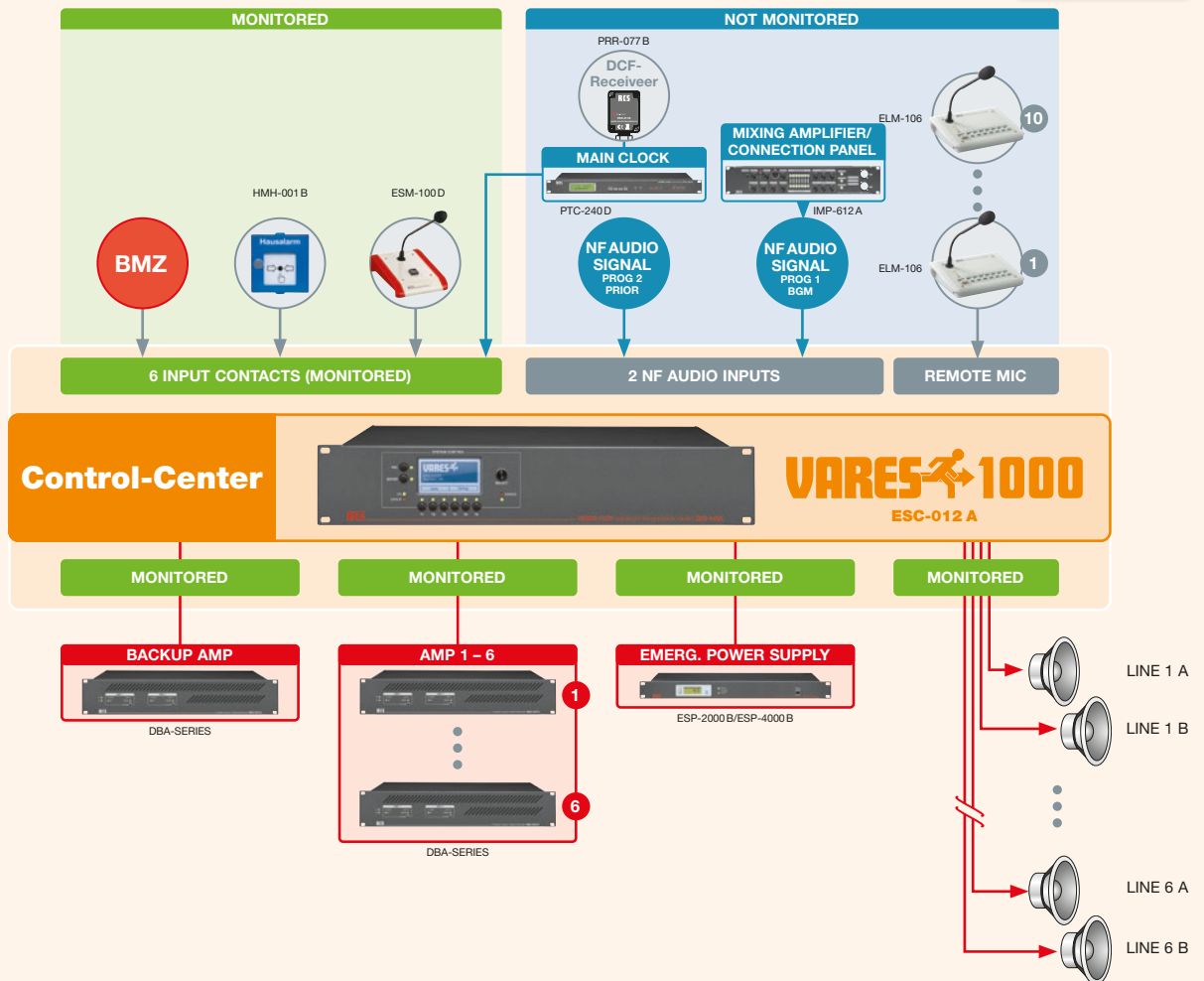
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Indicated here is the different reaction pattern to siren signals or a spoken message.

Model designation

VARES Control-Center, 2 RU **ESC-012A**

R·C·S

EXAMPLE OF USE VARES 1000
EN 54-16 CERTIFIED SYSTEM / DIN IEC 50849 / VDE 0828 CERTIFIED / COMPLIANT TO VDE 0833-4

MADE IN GERMANY

COMPACT EMERGENCY WARNING SYSTEM

MONITORED	NOT MONITORED

PRR-077 B

DCF-Receiver

ELM-106 · 10

HMH-001 B   ESM-100 D

MAIN CLOCK

MIXING AMPLIFIER/ CONNECTION PANEL

BMZ

PTC-240 D   IMP-612 A

NF AUDIO SIGNAL PROG 2 PRIOR

NF AUDIO SIGNAL PROG 1 BGM

ELM-106 · 1

6 INPUT CONTACTS (MONITORED)	2 NF AUDIO INPUTS	REMOTE MIC

Control-Center

VARES 1000
ESC-012 A

MONITORED	MONITORED	MONITORED	MONITORED

BACKUP AMP

AMP 1 – 6
1

EMERG. POWER SUPPLY

LINE 1 A

DBA-SERIES

6

ESP-2000 B/ESP-4000 B

LINE 1 B

DBA-SERIES

LINE 6 A

LINE 6 B

FEATURES

Main functions of the system:

+ **Amplifier and Microphone Monitoring**

+ **Text Module & Digital Speech Memory**

+ **Mains voltage and battery monitoring**

+ **Connection of up to six power amplifiers possible**

+ **Monitoring of the fire alarm handover**

+ **Monitoring of the speaker lines**

+ **Automatic recording of error logs**

+ **Shutdown of all non-safety-relevant components in emergency announcements**

Fire Brigade Call Station

MADE IN GERMANY

In addition to the monitored microphone, the station ELM-106 can be used.

Description

The call station is electronically monitored compliant to VDE 0828/IEC 50849. Measured values of the microphone cap, the entire signal path and the press-to-talk bar are detected and analysed.

The direct connection with VARES is made by a 4-pin shielded cable. The stable "slim" desktop housing has a functional design. It is suitably coloured for the specially targeted application.

VARES Fire Brigade Call Station .... **ESM-100 D**

VARES Software Languages

VARES Language Options

As alternatives to English and German ESC-012 A offers a variety of menu languages as options:

1. German (factory setting, at no extra charge)

2. English   ESL-001/2

3. Czech   ESL-001/3

4. Spanish   ESL-001/4

5. Italian   ESL-001/5

6. Polish   ESL-001/6

VARES Software Language **ESL-001/X**

(Please replace the „X" by corresponding last digits, at ordering)

Fire Brigade Handheld Mic

MADE IN GERMANY

Description

The handheld microphone is electronically monitored compliant to VDE 0828/IEC 50849. Measured values of the microphone cap, the entire signal path and the press-to-talk bar are detected and analysed.

The direct connection with VARES is made by a 4-pin shielded cable. The handy, coloured housing with its lateral press-to-talk bar is optimized for its special purposes.

VARES Fire Brigade Handheld Mic .... **ESM-020 H**

Housing and Mounting Panel for ESM-020 H

VCF-020 A

VMF-020 A

MADE IN GERMANY

Description

The Mounting Panel VMF-020 A for the fire brigade microphone ESM-020 H provides installation in a standard housing according to DIN 14661 and DIN 14662 and can thus be integrated in a fire control panel.

The housing VCF-020 A is optional, if no fire brigade control panel is available. It is designed as a standard housing according to DIN 14661 and DIN 14662, in red (RAL 3000). The housing with transparent door, lockable with on-site fire brigade profile half cylinder according to DIN 18252.

- Protection type: IP40, DIN 40050
- Surface design according to DIN 14663
- The ESM-020 H is part of the certification to EN 54-16

Mounting Panel, for ESM-020 H .... **VMF-020 A**

Housing, for ESM-020 H (without mounting panel) .... **VCF-020 A**

Dimensions (WxHxD): 250x180x60 mm, 4 kg