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info

Fault annunciator with internal modem

Performance characteristics:

- Alarm and fault messages on mobile phone or fax optional as email or pager
- Basic module with 8 digital inputs, optionally upgradable to a maximum of 16 digital and 4 analogue inputs as well as 8 digital and 4 analogue outputs
- Up to 4 receivers can be assigned for each message
- Internal real time clock, optional external time signal receiver
- Function monitoring by means of cyclical "alive" messages
- Parameterisation using serial interfaces by means of easy-to-use PC program
- Remote parameterisation by SMS or modem

Functional description

The **MFW fault annunciator** is a device from the MFW family of products. It transmits faults or alarm signals as SMS, fax or email to the corresponding terminal equipment. The fault annunciator incorporates an internal GSM, analogue or ISDN modem. According to the version, the inputs are supplied with messages directly or the inputs are connected with each other for a maximum of 8 logical messages. The operations "AND", "OR", "XOR" and "NOT" can be used for the connection of the inputs. An individual delay for the individual messages is possible. When a fault occurs the assigned alarm message (measure point designations, text message, date and time) is sent. For each message a maximum of 4 receivers (phone number, fax number or email address) can be given.

For triggering the messages the following events can be parameterised:

digital input   - incoming messages or outgoing messages
analogue input   - limiting value shortfall, limiting value overrun or too high speed of   change

Acknowledgement function: If the receiver is an SMS address the fault annunciator waits for an acknowledgement within the programmable delay time. Only with an absence of acknowledgement will the alarm message be sent to the next respective call number. The acknowledgement can be done with a mobile phone simply by using the SMS function "answer" or by modem connection with a PC.

The basic module has 8 digital inputs. For extending the I/O range, each basic module can be combined with a maximum of 4 **expansion modules**, each of the following types can only be used once.

- EM-G8DEX-0-BB-0   8 digital inputs
- EM-G8DAR-0-BX-0   8 relay outputs
- EM-G4AE0-0-BX-0   4 analogue inputs
- EM-G4AA0-0-BX-0   4 analogue outputs

The expansion modules are connected via the CAN bus interface. You can find more detailed information in the separate datasheet «Expansion modules».

The **time** is set by a built-in battery backed real time clock that can optionally be maintained by a connectable standard time receiver. The regular transmission of an "alive" message can be configured to monitor the functioning of the device. That means that the MFW sends a message cyclically - e.g. once a week.
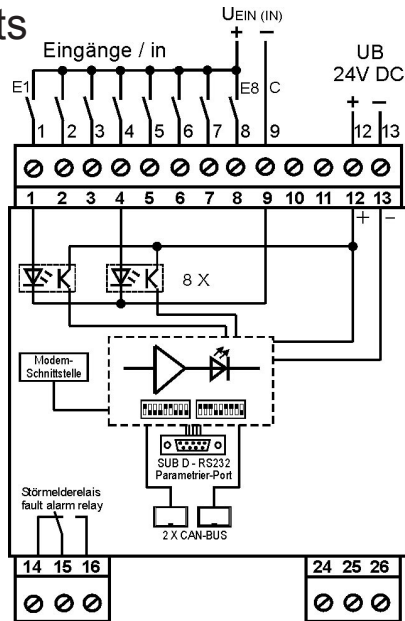
Type	US-GWMOD-G8DEX-DIA-0-BB-0	US-AWMOD-G8DEX-DIA-0-BB-1 US-IWMOD-G8DEX-DIA-0-BB-1	US-AWMOD-G8DEX-DIA-0-BB-2 US-IWMOD-G8DEX-DIA-0-BB-2
Item number	97IGAGAN0BB0	97IAAGAN0BB1 97IIAGAN0BB1	97IAAGAN0BB2 97IIAGAN0BB2
Modem	Dualband GSM 900 and 1800 MHz	Analogue / ISDN-EURO-DSS1	Analogue / ISDN-EURO-DSS1
Basic module inputs	8	8	8
Possible expansions	8DE / 4AE / 8DA / 4AA	8DE / 4AE	8DE / 4AE / 8DA / 4AA
Max. amount of messages	8	8	20
Assignation of the messages	Connection	Connection	Direct assignation input and message
Type of message	SMS, fax, email	SMS	SMS,fax
Remote parameterisation	by SMS or modem	not possible	by modem
Acknowledgement function	by SMS	not possible	by modem
Control of outputs	by SMS	not possible	by modem

Various messages are sent using the service provider services. Not all providers support all services. Current information on this can be provided by your service provider.
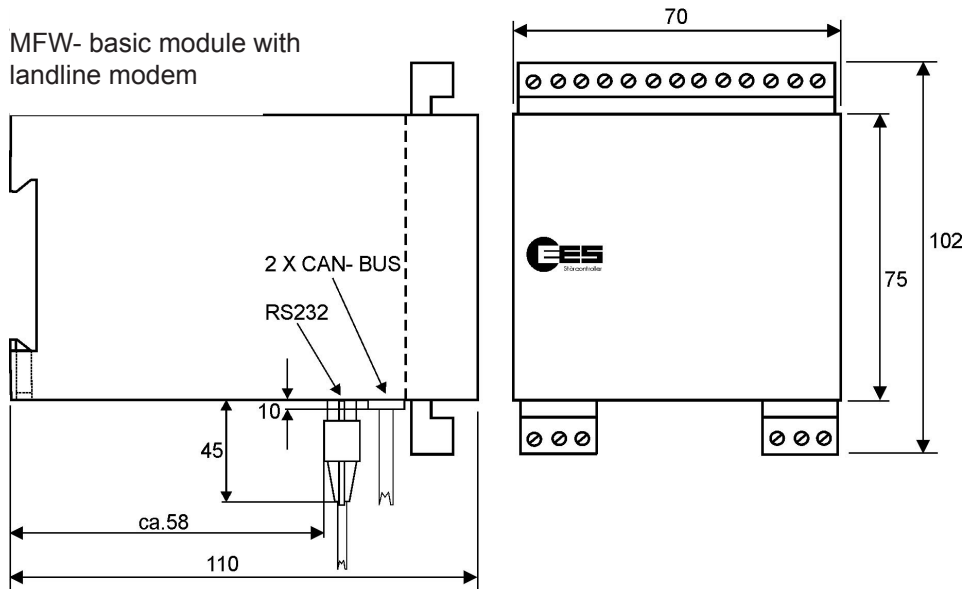
For fault annunciators with GSM modem adequate reception quality in the respective network is prerequisite for the error-free functioning of the device. We are glad to answer your questions on this.
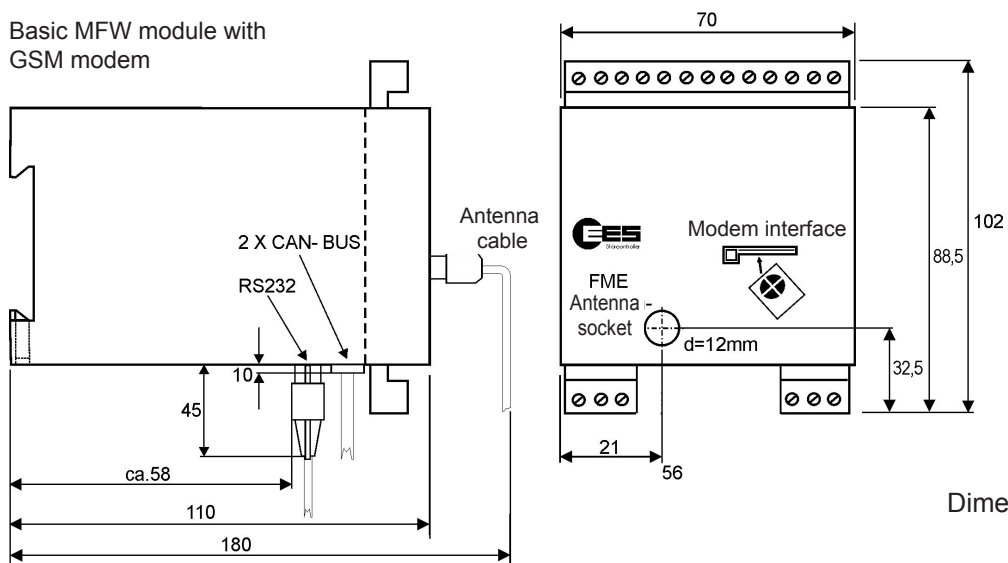
Terminal assignments

Dimensional drawing

MFW- basic module with landline modem

Basic MFW module with GSM modem

Dimensions in mm

Technical data

Rated operating voltage	24V DC
Operating voltage range	
Basic module	10 ... 32V DC
with expansions	20 ... 32V DC
Power consumption of basic module	approx. 2.5 W
Operating and ambient temperature	0°C ... +55°C
Air humidity	maximum 95%, non-condensing
Connection terminals	nominal cross section 2.5 mm^2
Housing / protection class	Plastic / IP 40
Signal voltage	approx. 16 ... 48V AC/DC*
Input resistance	approx. 10 kΩ
Minimum pulse width	50ms
Electrical insulation between signal and supply voltage	$4kV_{eff}$

* Other figures on request   The right to make technical changes is reserved

Order identification

Basic modules

US-GWMOD-G8DEX-DIA-0-BB-0	GSM modem / 8 digital inputs
US-AWMOD-G8DEX-DIA-0-BB-1	Analogue modem / 8 digital inputs / version 1
US-IWMOD-G8DEX-DIA-0-BB-1	ISDN modem / 8 digital inputs / version 1
US-AWMOD-G8DEX-DIA-0-BB-2	Analogue modem / 8 digital inputs / version 2
US-IWMOD-G8DEX-DIA-0-BB-2	ISDN modem / 8 digital inputs / version 2

Expansion modules

Please find more information in our special datasheet.

Accessories

Connecting cable to PC or laptop, power supplies, DC/DC converter, battery back-up charging unit, incl. battery packs.

Further accessories and more detailed information may be found in the appropriate product sections in the catalogue.

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