Monitoring Technique

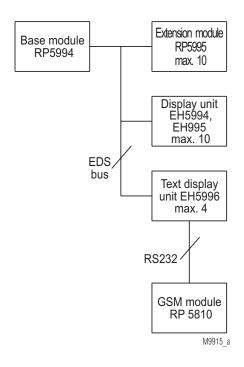
INFOMASTER B Fault Monitoring System with Bus Connection Text display Unit EH 5996





System Overview

In one fault monitoring system INFOMASTER B with one base module RP 5994 up to 4 text displays EH 5996 can be operated. In addition it is possible to connect 10 extension modules RP 5995 and 10 Display units EH 5994 or EH 5995. Via the RS230 interface on EH 5996 a GSM Module RP 5810 can be controlled, that transfers SMS on coming or going fault signals to pre-defined receivers.



Your Advantages

- Easy to extend up to 10 displays because of bus connection
- Easy to change the operating language for menus and failure text

Features

- Text display for DOLD fault annunciator system INFOMASTERB with base module RP 5994
- To display up to 88 fault messages with 80, 40 or 20 characters each
- Operating mode adjustable on base module RP 5994 for new, first or common alarm
- Reset buttons for individual alarm signal, audible alarm and common alarm on front side
- RS 485 bus connection, as option with galvanic separation
- Alarms and resets can be transmitted by SMS via GSM module RP 5810
- SMS communication is possible with up to 16 receivers
- Configuration of the text display via USB-Stick (acceccories OA 5996 Article-No. 0065659), therefore no laptop on site is necessary
- Real time clock
- Operating language for menus and failure text in English, German and French
- Up to 3 variable parameters in one message text
- 2 password levels for device configuration

Approvals and Marking



Additional Information about this topic

- General information for INFOMASTER B see datasheet INFOMASTER B, systemoverview
- Informations about the additional Base module, Extension module and Display unit see datasheet RP 5994, RP 5995
- Informations about the additional GSM-module for alarm and reset via SMS see datasheet RP 5810

Application

- To monitor industrial plants and buildings
- For fast localisation of failures and their causes
- For reduction of standstill times in production

Indication

green LED "ON": on when supply connected red LED "CA": on, when output common alarm

is active

yellow LED "BUS": on, when bus is active

Setting and Adjustment

Devices with DC 24V auxiliary supply have to be operated on a galvanic separated power supply.

Configuration cycle

- Wire the system
- 2.) Adjust module address on all connected modules with switch "ADR" (different addresses for all modules)
- 3.) Set "MODE" switch on base module to position "Config"
- 4.) Power up the system
- While fault signal LEDs of the base module are flashing 5.)
- 6.) the text display Eh 5996 detected by the base module RP 5994 shows the following text:

"System is in configuration mode module has been detected on bus"

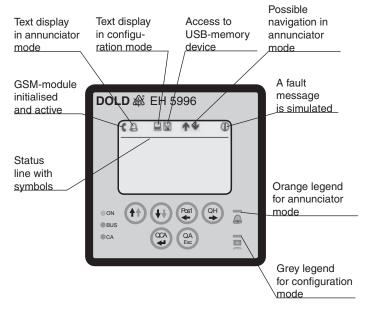
- 7.) Fault signal LEDs change to continuous state and indicate number of detected extension modules in binary code
- The detected modules are stored no voltage safe in the base module memory. The fault annunciator only works with the detected modules. If a new module is added, the configuration cycle has to be run again.
- Configuration of the text display unit (see user manual)

Operation of Text Display Unit

The text display is either in annunciator or configuration mode. A symbol in the status line of the display indicates the mode (see table and drawing and picture below). Depending on the actual mode the pushbuttons on the front have a different function. In annunciator mode the orange legend is valid and in configuration the grey legend.

	Symbols in status line	
C	GSM module is initialised and ready	
A	Annunciator mode	
	Configuration mode	
	Reading from or writing to USB-memory device	
1	Simulation mode	

Description text display unit EH 5996



Operation of Text Display Unit

Function of Push Buttons

	Annunciator mode	Configuration mode
(+1)	Previous active fault message	one menu item up or increase value in data entry field
41)	Next active fault message	one menu item down or decrease value in data entry field
Post	Beginning of active messages list	one character to the left in data entry field
QH →	Acknowledging the audible alarm	one character to the right in data entry field
QCA CAC	Acknowledging the common alarm	select menu item or confirm entered data
QA Esc	Acknowledging alarm message	cancel changes and leave data entry field
QA Esc	Change into configuration mode	

SMS Function

In conjunction with the GSM module RP 5810 the text display can transmit SMS on coming and going alarm messages. For each alarm message an SMS text each for coming and going can be defined together with max. 16 possible receivers. Also it is possible to enable receivers out of the possible 16 to acknowledge alarms.

Technical Data

Input

Nominal voltage A1-A2: AC 230 V, DC 24 V

Voltage range: 0.8 ... 1.1 U_N

Nominal consumption A1-A2

at AC 230 V: 2.5 VA at DC 24 V: 1.9 W

Nominal frequency A1-A2

at AC 230 V: 50 Hz

Output

RS485 Bus

EH 5996: not isolated EH 5996/1 isolated (1KV) Bus wire: screened twisted pair

Data transmission rate: 115.2 KB/s

> Attention: both ends of the twisted pair have to be terminated by inserting the links A/Ra and B/Rb!

General Data

Nominal operating mode: continuous operation Temperature range: - 20 ... + 55°C

Clearance and creepage

distance

rated impuls voltage /

pollution degree 4 kV / 2 IEC 60 664-1

EMC Electrostatic discharge (ESD): IEC/EN 61 000-4-2 8 kV (air) HF irradiation: 10 V / m IEC/EN 61 000-4-3 Fast transients: 2 kV IEC/EN 61 000-4-4

Surge voltage

between

wires for power supply: 1 kV IEC/EN 61 000-4-5 between wire and ground: 2 kV IEC/EN 61 000-4-5 Interference suppression: Limit value class B EN 55 011 IEC/EN 60 529

Degree of protection:

Front: IP 64 Enclosure: IP 20

thermoplastic with VO behaviour **Enclosure:**

according to UL Subjekt 94

2 18.04.13 en / 327 **Technical Data**

Vibration resistance: 0.35 mm amplitude,

frequency 10 ... 55 Hz, IEC/EN 60 068-2-6 Climate resistance: 20 / 055 / 04 IEC/EN 60 068-1

Terminal designation: Wire connection

EN 50 005

DIN 46 228/1-/-2/-3/-4

plug-in screw terminal:

0.1 ... 2.5 mm² solid or

0.1 ... 1.5 mm² stranded wire with sleeve Wire fixing: Captive plus-minus-terminal screws

M2.5 with self raising terminal box

IEC/EN 60 715

Weight: 260 g

Dimensions

Mounting:

Width x height x depth: 96 x 96 x 123 mm

Standard Types

EH 5996 AC 230 V 50 Hz

Article number: 0061784

EH 5996 DC 24 V

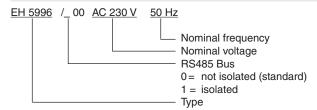
Article number:

0061813 AC 230 V or DC 24 V

 Nominal voltage U_N: fixed screw terminals

Width: 96 mm

Odering example



Accessories

Base module RP 5994 Article number: 0060029 Article number: 0060034 Extension module RP 5995 Display unit EH 5994 Article number: 0060589 Display unit EH 5995 Article number: 0060593 Article number: 0059906 Buzzer RK 8832 GSM-Module RP 5810 Article number: 0065146 USB-Stick OA 5996

(FAT 16 formated): Article number: 0065659

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