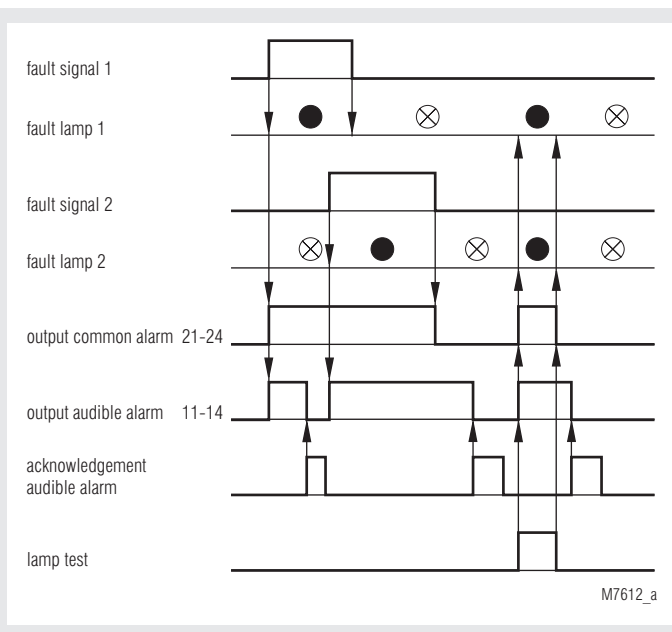




- According to IEC/EN 60 255, DIN VDE 0435-303
- Common alarm annunciator for 12 signals
- 1 relay for common signal and horn
- Inputs up to AC/DC 230 V
- 1 connection for acknowledgement button of horn and lamp test
- Width: 45 mm

### Function Diagram



### Approvals and Marking



### Application

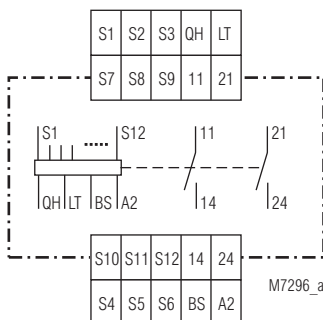
Monitoring of industrial plants and buildings

### Notes

The inputs and the lamp test input "LT" are to be controlled with the same phase voltage. In case of connection of different phases the fault annunciator can be destroyed. The fault annunciator AD 5960 is not suitable for the use of lamps with transformers. If the fault annunciator lamps should be controlled with another voltage than that of the inputs, we recommend our fault annunciators AN 5969 or EP 9969, which have relay outputs.

By shock or vibration during transportation the relay contacts may switch to the wrong state. This is typical when bistable relays are used. By connecting nominal voltage to one of the inputs the contacts are brought into right state to achieve a safe switching, the inputs  $S_1 \dots S_{12}$  have to be activated at least 60 ms.

### Circuit Diagram



## Technical Data

### Input

<b>Nominal voltage <math>U_N</math>:</b>	AC/DC 24, 42, 110, 230 V
<b>Voltage range:</b>	0.8 ... 1.1 $U_N$
<b>Nominal frequency:</b>	50 / 60 Hz
<b>Fault signal current per input</b>	
Voltage AC/DC:	24 42 110 230 V
Current $\hat{I}_s$ :	440 280 180 150 mA
<b>Input current load* at input of lamp test</b>	
Voltage AC/DC:	24 42 110 230 V
Current $\hat{I}$ :	5.3 3.4 2.2 1.8 A
	Current shape see characteristic
	* without connection of the external signal lamp

### Output

**Contacts:** 1 NO contact each for common alarm and audible alarm

**Operate time of Relay "Horn":** approx. 20 ms  
**Recovery time "Horn":** approx. 5 s  
 (min. necessary time between the occurrence of a fault and the acknowledgement of the audible alarm)

**Operate time of common alarm relay:**  $\leq 1$  s

**Actuation time for lamp test input:**  $\geq 2$  s

**Switching capacity:** AC 250 V / 5 A

**Loading:** 1 A per external signal lamp, however totally max. 5 A

**Thermal current  $I_{th}$ :** 8 A

## General Data

<b>Operating mode:</b>	Continuous operation
<b>Temperature range:</b>	- 20 ... + 60°C
<b>Clearance and creepage distances</b>	
rated impuls voltage / pollution degree:	4 kV / 2 IEC 60 664-1
<b>EMC</b>	
HF-irradiation:	10 V / m IEC/EN 61 000-4-3
Fast transients:	2 kV IEC/EN 61 000-4-4
Surge voltages between wires for power supply:	2 kV IEC/EN 61 000-4-5
between wire and ground:	4 kV IEC/EN 61 000-4-5
Interference suppression:	Limit value class B EN 55 011
<b>Degree of protection</b>	
Housing:	IP 40 IEC/EN 60 529
Terminals:	IP 20 IEC/EN 60 529
<b>Housing:</b>	Thermoplast with V0-behaviour according to UL subject 94
<b>Vibration resistance:</b>	Amplitude 0.35 mm frequency 10...55Hz/IEC/EN 60 068-2-6
<b>Climate resistance:</b>	20 / 060 / 04 IEC/EN 60 068-1
<b>Terminal designation:</b>	EN 50 005
<b>Wire connection:</b>	2 x 2.5 mm <sup>2</sup> solid or 2 x 1.5 mm <sup>2</sup> stranded wire with sleeve DIN 46 228-1/-2/-3/-4
<b>Wire fixing:</b>	Flat terminal with self-lifting clamping piece IEC/EN 60 999-1
<b>Mounting:</b>	DIN rail IEC/EN 60 715
<b>Weight:</b>	200 g

## Dimensions

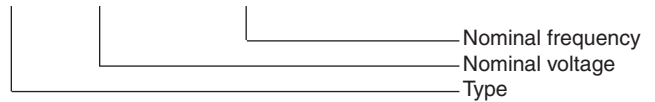
**Width x height x depth:** 45 x 77 x 127 mm

## Standard Type

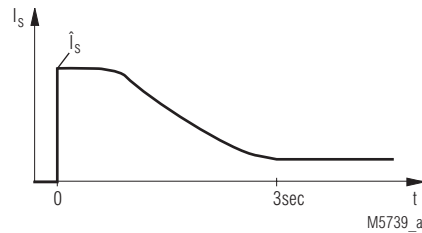
AD 5960 AC/DC 230 V 50/60 Hz	
Article number:	0028134 stock item
• Output:	1 NO contact each for common alarm and audible alarm
• Auxiliary voltage $U_H$ :	AC/DC 230 V
• Inputs:	AC/DC 230 V

## Ordering Example

AD 5960 AC/DC 230 V 50 / 60 Hz



## Characteristic



Current curve of the inputs and of the lamp test inputs

## Connection Example

