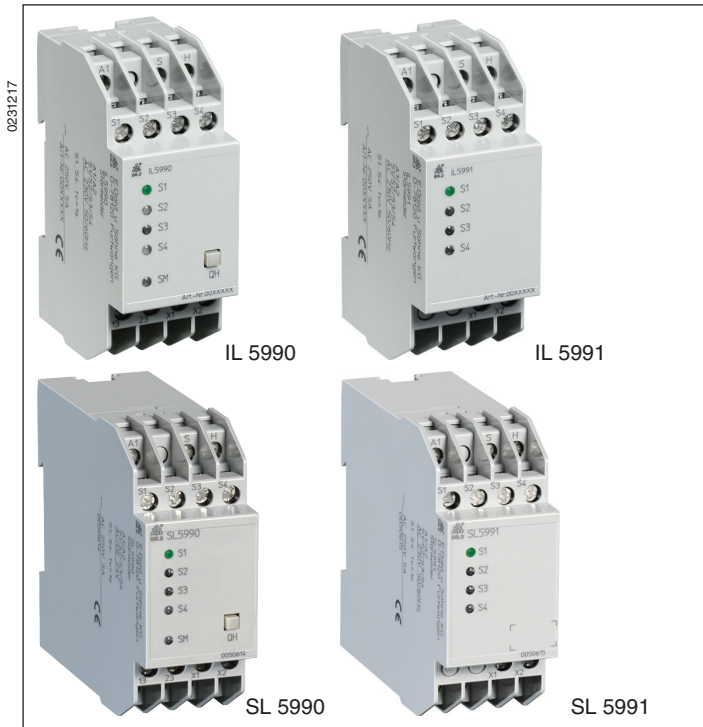


## INFOMASTER Fault Annunciator System IL 5990, IL 5991, SL 5990, SL 5991



- According to DIN 19235
- Common alarm annunciator
- Expandable from 4 up to 160 inputs
- Open circuit inputs / closed circuit inputs selectable via bridges X1-X2
- Delayed inputs up to 10 s
- Acknowledgement push button QH for external buzzer built in
- Accessories: Buzzer IK 8832, SK 8832
- Devices available in 2 enclosure versions:
  - I-model: depth 61 mm, with terminals at the bottom for installations systems and industrial distribution systems according to DIN 43 880
  - S-model: depth 100 mm, with terminals at the top for cabinets with mounting plate and cable duct
- Width 35 mm

### Fault annunciator IL 5990, SL 5990:

- 4 inputs with LED on control unit
- 1 output for common signal and 1 output for audible alarm

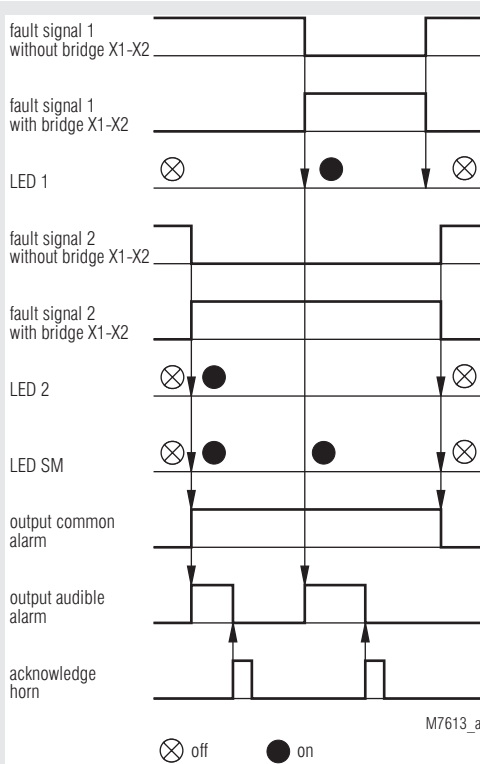
### Extension unit IL 5991, SL 5991:

- 4 inputs with LED on control unit

### Approvals and Markings



### Function Diagram



### Application

For monitoring of industrial plants and buildings

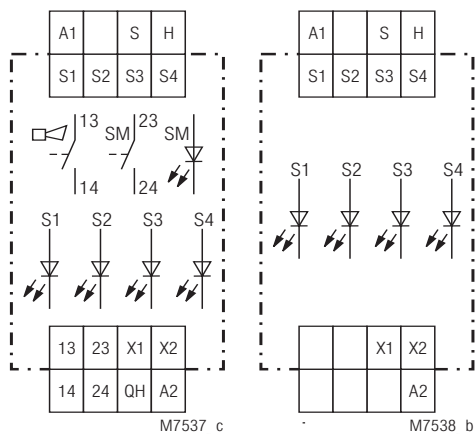
### Notes

The terminals A1, inputs S1 - S4 and the acknowledgement input Q<sub>H</sub> have to be connected at the same phase. The NO contacts 13 - 14 , 23 - 24 have to be connected to the same phase. The bus-circuits H and S have a low voltage and are not allowed to be connected to any external voltage. If inductive or capacitive superimposed voltages are expected from power cables, it is recommended, to use screened cables for these lines. The screen is to be connected to ground.

Bridge X1 - X2 = open circuit operation

A different setting of the fault annunciator IL 5990 and the extension unit IL 5991 is possible.

## Circuit Diagrams



IL 5990, SL 5990

IL 5991, SL 5991

## Connection Terminals

Terminal designation	Signal designation
A1	+ / L
A2	- / N
S1, S2, S3, S4	Measuring input for alarm
X1, X2	Control input for closed - / open circuit operation
QH	Control input for acknowledgement audible alarm
13, 14	Relay output for audible alarm
23, 24	Relay output for common alarm
H	Bus leads audible alarm
S	Bus leads common signal

## Technical Data

### Input

<b>Nominal voltage A1-A2 and inputs S1-S4:</b>	AC 230 V, AC/DC 24 V
<b>Voltage range:</b>	0,8 ... 1,1 U <sub>N</sub>
<b>Nominal consumption:</b>	8 VA
<b>Nominal frequency:</b>	50 / 60 Hz
<b>Min. time for input signal:</b>	≥ 100 ms
<b>Min. time for acknowledgement:</b>	≥ 200 ms
<b>Operate delay:</b>	1 s, 3 s, 10 s

### Output

<b>Contacts:</b>	1 NO contact for common signal and audible alarm
<b>Thermal current I<sub>th</sub>:</b>	5 A
<b>Switching capacity to AC 15:</b>	1 A / 230 V IEC/EN 60 947-5-1
<b>Electrical life to AC 15 at 1 A, AC 230 V:</b>	IEC/EN 60 947-5-1 ≥ 1,5 x 10 <sup>6</sup> switching cycles
<b>Short circuit strength max. fuse rating:</b>	4 A gL IEC/EN 60 947-5-1
<b>Mechanical life:</b>	≥ 30 x 10 <sup>6</sup> switching cycles

### General Data

<b>Operating mode:</b>	Continuous operation
<b>Temperature range:</b>	- 20 ... + 60°C
<b>Clearance and creepage distances</b>	
rated impulse voltage / pollution degree:	4 kV / 2 IEC 60 664-1
<b>EMC</b>	
Electrostatic discharge:	8 kV (air) IEC/EN 61 000-4-2
HF-irradiation	
80 MHz ... 1 GHz:	10 V / m IEC/EN 61 000-4-3
1 GHz ... 2.7 GHz:	3 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:	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
<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>	0,35 mm Amplitude, frequency 10 ... 55 Hz 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>Terminal designation:</b>	2 x 2,5 mm <sup>2</sup> solid or 2 x 1,5 mm <sup>2</sup> stranded ferruled DIN 46 228-1/-2/-3/-4
<b>Wire connection:</b>	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1
<b>Fixing torque:</b>	0,8 Nm IEC/EN 60 999-1
<b>Mounting:</b>	DIN rail IEC/EN 60 715
<b>Weight</b>	
IL 5990:	approx. 140 g
IL 5991:	approx. 120 g
SL 5990:	approx. 170 g
SL 5991:	approx. 150 g

### Dimensions

<b>Width x height x depth</b>	
IL 5990, IL 5991:	35 x 90 x 61 mm
SL 5990, SL 5991:	35 x 90 x 100 mm

## Standard Types

IL 5990 AC 230 V 50 / 60 Hz 1 s  
Article number: 0049188  
SL 5990 AC 230 V 50 / 60 Hz 1 s  
Article number: 0051721  
• Nominal voltage  $U_N$ : AC 230 V  
• Operate delay: 1 s  
• Width: 35 mm

IL 5991 AC 230 V 50 / 60 Hz 1 s  
Article number: 0049189  
SL 5991 AC 230 V 50 / 60 Hz 1 s  
Article number: 0050615  
• Nominal voltage  $U_N$ : AC 230 V  
• Operate delay: 1 s  
• Width: 35 mm

## Ordering example

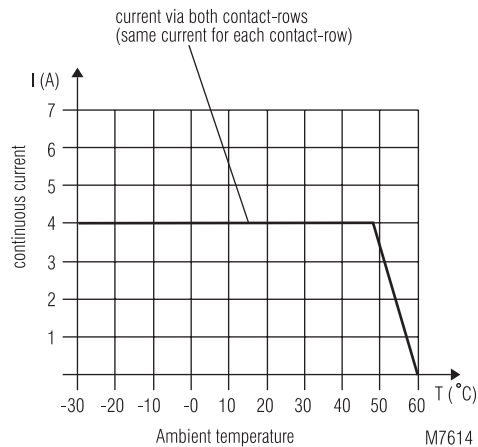
IL 5990 AC 230 V 50 / 60 Hz 1 s

Operate delay  
Nominal frequency  
Nominal voltage  
Type

## Accessories

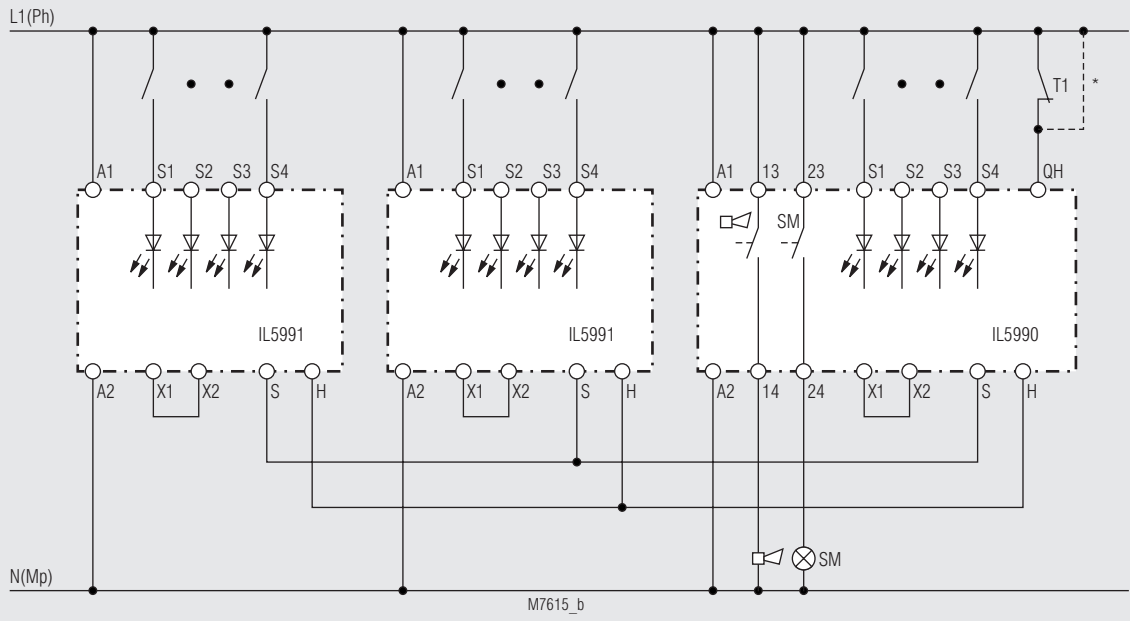
Buzzer IK 8832, SK 8832: Article number: 0049528

## Characteristics



Continuous current-limit curve

## Connection Example



with bridge X1/X2 open circuit operation  
without bridge X1/X2 closed circuit operation

T1 external acknowledgement push button for audible alarm  
\* without external acknowledgement push button has to be replaced by a bridge