



- According to IEC/EN 61 812-1
- EO 9983 with 11-pole socket
- BA 7983 and EO 9983 with LED indication for operation
- Fleeting time 0,3 ... 0,6 s fixed
- Repeat accuracy  $< \pm 5\%$
- Available or programmable: fleeting on make, fleeting on break or fleeting on make and break
- Available 1 or 2 changeover contacts
- AI 983 N available with GL-approval
- BA 7983, AI 983 N: width 45 mm
- EO 9983: front surface 35 x 48 mm

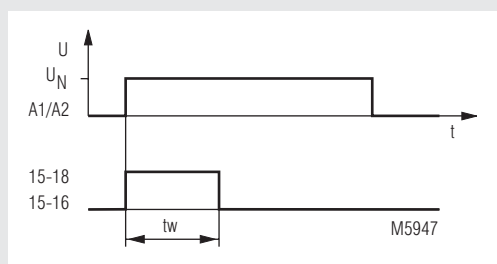
### Approvals and marking



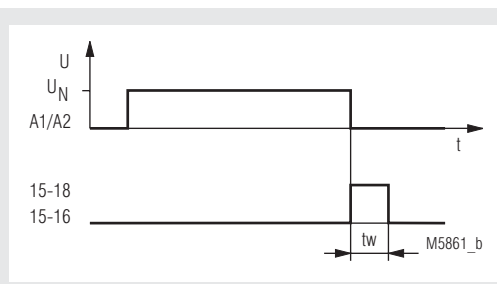
### Application

Time dependent controls

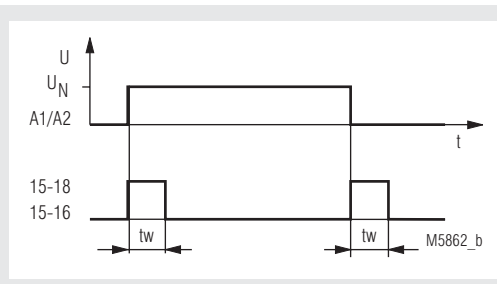
### Function diagram



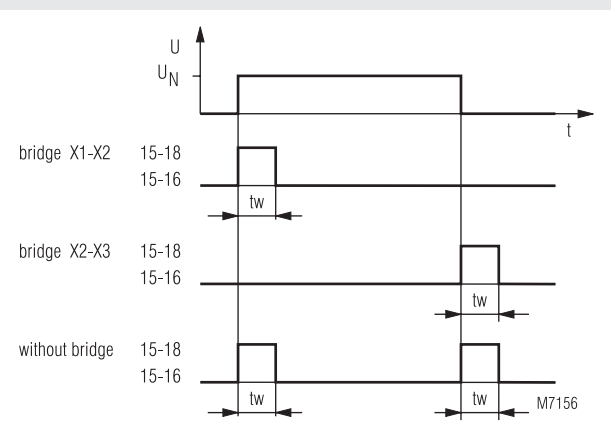
BA 7983, AI 983 N fleeting on make



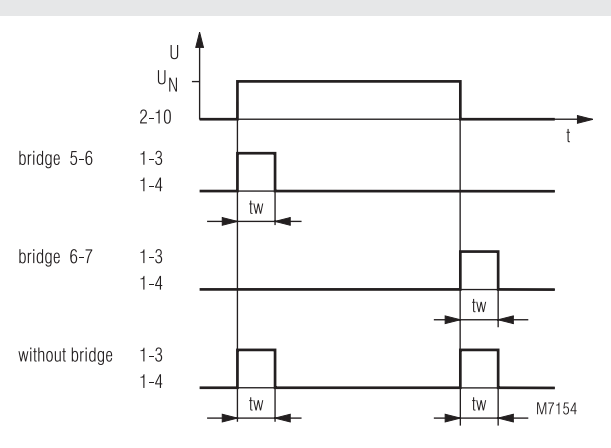
BA 7983, AI 983 N fleeting on break



BA 7983, AI 983 N fleeting on make and break

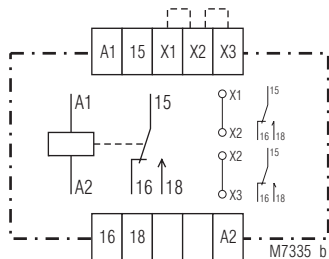


BA 7983, AI 983 N fleeting on make, break or both

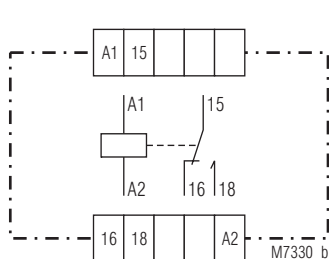


EO 9983

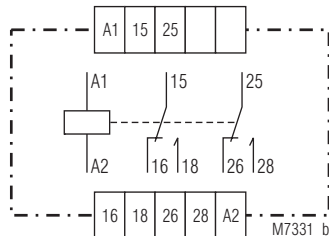
## Circuit diagrams



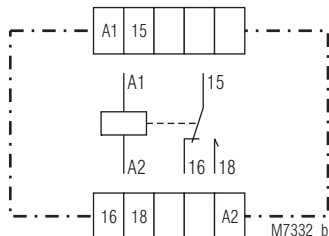
BA 7983.51, AI 983N.0051



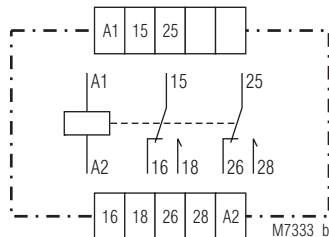
AI 983N.7100



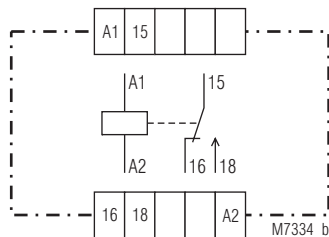
AI 983N.7200



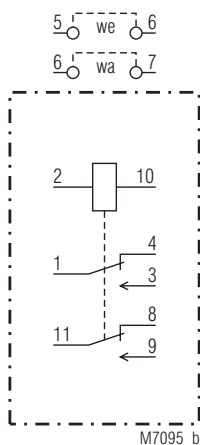
AI 983N.0071



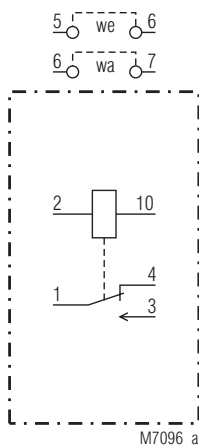
AI 983N.0072



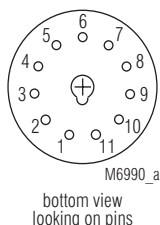
AI 983N.5100



EO 9983.77



EO 9983.76



bottom view looking on pins

## Function

### Fleeting on make or break or make and break contact

#### BA 7983.76, AI 983N.0051:

Combination of three fleeting action relays in one device. By changing the bridges, one of the three fleeting types is possible.  
 Bridge X1 - X2: fleeting on make  
 Bridge X2 - X3: fleeting on break  
 Bridge X1 - X2, X2 - X3: fleeting on make and break

### Fleeting on make contact AI 983N.7100, AI 983N.7200:

When connecting the control voltage, the output contact is switched for the fleeting time. When turning off the control voltage the contacts do not switch.

### Fleeting on break contact AI 983N.0071, AI 983N.0072:

When connecting the control voltage no operation of the output contact will be effected. When turning off the auxiliary voltage, the output contact is switched for the fleeting time.

### Fleeting on make and break contact AI 983N.5100:

When connecting and disconnecting the control voltage, the output contact will be turned on for the fleeting time.

## Function

The EO 9983 is programmable for the following functions via bridges on the plug-in-socket:

### Fleeting on make function (bridge 5 - 6):

When connecting the control voltage, the output contact is switched for the fleeting time. When disconnecting the control voltage the contacts will not be effected.

### Fleeting on break function (bridge 6 - 7):

When connecting the control voltage, no operation of the output contacts will be effected. When disconnecting the control voltage the output contact switches for the fleeting time.

### Fleeting on make and break function (without bridge):

When connecting and disconnecting the control voltage, the output contact will be operated for the fleeting time.

## Indication

LED: on when operating voltage applied

## Technical data

### Time circuit

**Fleeting time:** 0,3 ... 0,6 s fixed  
**Recovery time:** 1 s  
**Repeat accuracy:**  $< \pm 5 \%$   
**Voltage influence:** - 30 % / + 15 %  
**Temperature influence:**  $< \pm 0,25 \%$  / K

## Input

**Nominal voltage  $U_N$ :** AC 24, 42, 110, 127, 230, 240 V  
 DC 24, 48, 60, 110, 220 V  
**Voltage range:** 0,8 ... 1,1  $U_N$   
**Nominal consumption:** AC 2,5 VA  
 DC 1,5 W  
**Nominal frequency:** 50 / 60 Hz

## Output

### Contacts:

BA 7983.51, AI 983N.0051, EO 9983.76: 1 contact fleeting on make or break or both  
 AI 983N.7100: 1 contact fleeting on make  
 AI 983N.7200: 2 contacts fleeting on make  
 AI 983N.0071: 1 contact fleeting on break  
 AI 983N.0072: 2 contacts fleeting on break  
 AI 983N.5100: 1 contact fleeting on make and break  
 EO 9983.77: 2 contacts fleeting on make or break or both

### Operate time of contacts:

**Thermal current  $I_{th}$ :** 5 A  
**Switching capacity** IEC/EN 60 947-5-1  
 to AC 15: 5 A / AC 230 V  
**Electrical life** IEC/EN 60 947-5-1  
 to AC 15 at 3 A, AC 230 V:  $\geq 5 \times 10^5$  switching cycles  
**Short circuit strength**  
**max. fuse rating:** 4 a gL IEC/EN 60 947-5-1  
**Mechanical life:**  $> 30 \times 10^6$  switching cycles

## General data

**Operating mode:** Continuous operation  
**Temperature range:**  
 AI 983 N, BA 7983: - 20 ... + 60°C  
 EO 9983: - 20 ... + 50°C  
**Clearance and creepage distances**  
 overvoltage category / contamination level: 4 kV / 2 IEC 60 664-1  
**EMC**  
 Electrostatic discharge: 8 kV (air) IEC/EN 61 000-4-2  
 HF irradiation: 10 V/m IEC/EN 61 000-4-3  
 Fast transients: 2 kV IEC/EN 61 000-4-4  
 Surge voltages: 1 kV IEC/EN 61 000-4-5  
 Interference suppression: Limit value class B EN 55 011

## Technical data

<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 arrangement</b>	
BA 7983, AI 983 N:	DIN 46 199-5
<b>Terminal designation:</b>	EN 50 005
<b>Wire connection</b>	
BA 7983, AI 983 N:	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
EO 9983:	via plug-in-socket, suitable for the 11-pole-socket according to IEC 67-1-18 a
<b>Wire fixing</b>	
BA 7983, AI 983 N:	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1
<b>Mounting</b>	
BA 7983, AI 983 N:	DIN rail IEC/EN 60 715
<b>Weight</b>	
BA 7983, AI 983 N:	250 g
EO 9983:	160 g

## Dimensions

### Width x height x depth

AI 983 N:	45 x 77 x 127 mm
BA 7983:	45 x 73 x 133 mm
EO 9983:	35 x 48 x 109 mm
Front-panel cut-out	
EO 9983:	45 <sup>+0,6</sup> x 45 <sup>+0,6</sup> mm

## Standard types

BA 7983.51 AC 230 V 50/60 Hz	
Article number:	0022527 stock item
EO 9983.76 AC 230 V 50/60 Hz	
Article number:	0006768 stock item
• Output:	1 contact fleeting on make or break or both
• Nominal voltage U <sub>N</sub> :	AC 230 V
• Width BA 7983:	45 mm
Front surface EO 9983:	35 x 48 mm

## Ordering example

BA 7983	.51	AC 230 V	50 / 60 Hz	
				Nominal frequency
				Nominal voltage
				Contacts
				Type

## Accessories

for DIN rail mounting:	
ET 4048-21:	plug-in-socket without fixing clamp
ET 4048-22:	plug-in-socket with fixing clamp
for flush mounting:	
ET 4048-13:	plug-in adapter
ET 4048-3:	front frame

