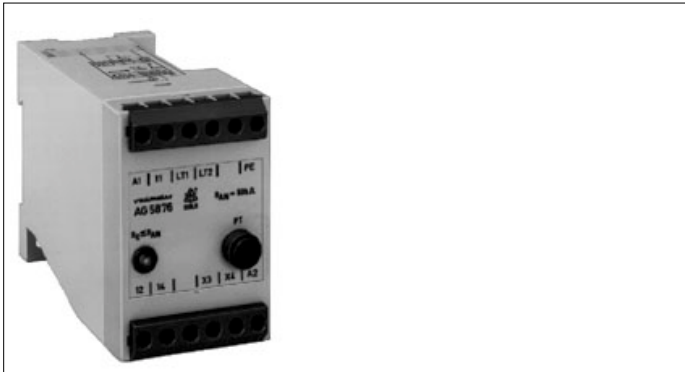
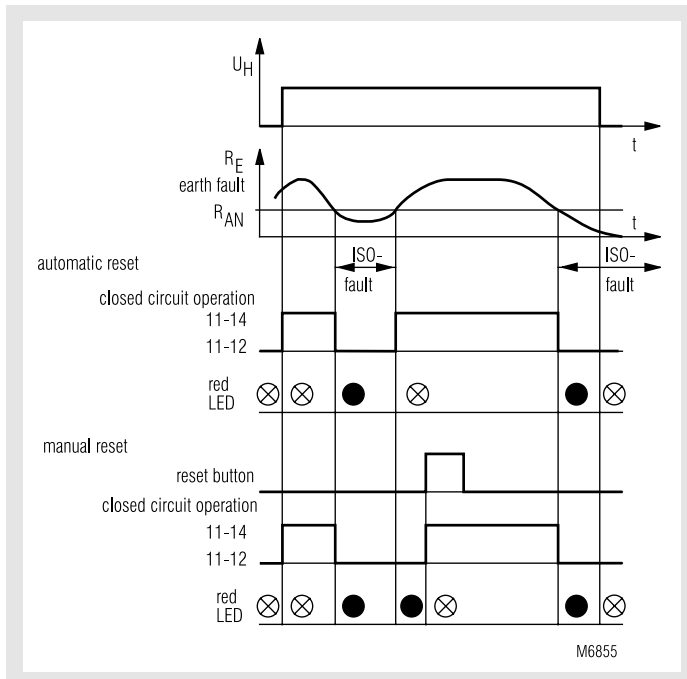


0225235



- According to VDE 0413
- For single- and 3-phase AC-voltage systems, IT-system
- Without auxiliary supply
- Fixed response value $R_{AN} = 50 \text{ k}\Omega$
other values on request
- LED indicator for ground fault
- Programmable with automatic or manual reset (bridge LT1/LT2)
- 1 changeover contact
- Closed circuit operation
- Test button to check the function of the device
- External reset button on LT1-LT2
- External test button and indicating instrument possible
- Can be used as pre-warning device AG 5876.11/0--
- Width 50 mm

Function diagram



Approvals and marking



Applications

Monitoring of the resistance to earth in ungrounded single- and 3-phase-voltage systems.

Technical data

Measuring circuit

Nominal voltage U_N:	AC 24, 42, 110, 230, 400 V
Voltage range:	0,8 ... 1,1 U_N
Frequency range:	40 ... 400 Hz
Response value R_{AN}:	50 k Ω , 5 ... 200 k Ω on request
Setting R_{AN}:	fixed
Internal test resistor:	5 k Ω
Internal AC resistance:	> 300 k Ω
Internal DC resistance:	> 30 k Ω
Measuring voltage:	DC 15 V
Max. measuring current ($R_E = 0$):	< 0,5 mA
Max. permissible noise	
DC voltage:	DC 250 V
Operate delay	
at $R_{AN} = 50 \text{ k}\Omega$, $C_E = 1 \text{ mF}$	
R_E from ∞ to $0,9 R_{AN}$:	< 1,3 s
R_E from ∞ to 0 k Ω :	< 0,3 s
Hysteresis	
at $R_{AN} = 50 \text{ k}\Omega$:	approx. 8 %
Measuring error	
at $R_{AN} = 50 \text{ k}\Omega$,	< 10 %
	ambient temperature - 5 ... 50 °C, within the permitted voltage range

Nominal consumption:

Phase failure bridging:

approx. 2,5 VA

> 300 ms

Output

Contacts

AG 5876.11: 1 changeover contact

Max. switching voltage: AC 250 V

Thermal current I_{th} : 8 A

Switching capacity

to AC 15

NO contact: 3 A / AC 230 V

EN 60 947-5-1

NC contact: 1 A / AC 230 V

EN 60 947-5-1

Short circuit strength

max. fuse rating: 6 A gL

EN 60 947-5-1

Technical data

General data

Permissible ambient and stocking temperature: Clearance and creepage distances

-20 ... +60°C / -25 ... 70°C

overvoltage category / contamination level:

4 kV / 2 IEC 60 664-1

EMC

Electrostatic discharge: 8 kV (air) EN 61 000-4-2
Fast transients: 2 kV EN 61 000-4-4

Surge voltage between

wires for power supply: 2 kV EN 61 000-4-5
between wire and ground: 4 kV EN 61 000-4-5

Interference suppression: Limit value class B EN 55 011

Degree of protection:

Housing: IP 40 EN 60 529
Terminals: IP 20 EN 60 529

Housing:

Thermoplastic with V0 behaviour according to UL subject 94

Vibration resistance:

Amplitude 0,35 mm frequency 10 ... 55 Hz EN 60 068-2-6
20 / 060 / 04 EN 60 068-1

Climate resistance:

EN 50 005

Terminal designation:

Wire connection:

2 x 2,5 mm² solid or 2 x 1,5 mm² stranded wire with sleeve DIN 46 228-1/-2/-3/-4

Wire fixing:

Flat terminals with self-lifting clamping piece EN 60 999

Mounting:

DIN rail EN 50 022

Weight:

450 g

Dimensions

Width x height x depth: 50 x 75 x 111 mm

Standard type

AG 5876.11 AC 230 V 40 ... 400 Hz 50 kΩ
Article number: 0031854 stock item
• Output: 1 changeover contact
• Nominal voltage U_N : AC 230 V
• Frequency range: 45 ... 400 Hz
• Response value R_{AN} : 50 kΩ
• Width: 50 mm

Variants

AG 5876.11/0--: pre-warning device
This device can indicate a second resistance value. It is possible to connect several pre-warning devices to one insulation monitor. With this device an early detection of a slowly decreasing insulation resistance with pre-warning is possible.
The following pre-warning devices are available:
AG 5876.11/010 für AG 5870, AG 5876, AN 5871, AN 5872, EH 5878
AG 5876.11/030 für AN 5890
AG 5876.11/031 für AN 5873

Ordering example for variants

AG 5876 .11 / _ _ _ AC 230 V 50 kW
Response value
Nominal voltage
Variant, if required
Contacts
Type

Accessories

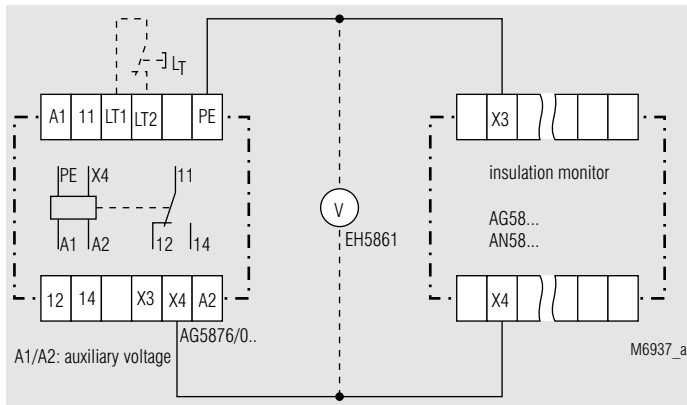
AG 5876.11/010: pre-warning device
EH 5861/002: indicating instrument



The indicating device EH 5861 externally connected to the insulation monitors and shows the actual insulation resistance of the voltage system to ground.

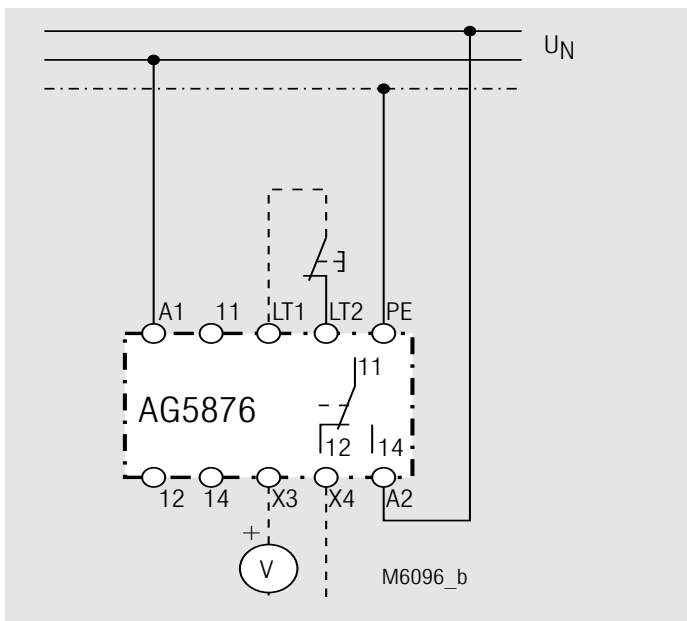
Dimensions:
Width x height x depth
96 x 96 x 52 mm

Application example



Insulation monitor with pre-warning device

Connection example



A1/A2: $U_N = U_H$
Bridge LT1/LT2: manual reset
without Bridge LT1/LT2: automatic reset