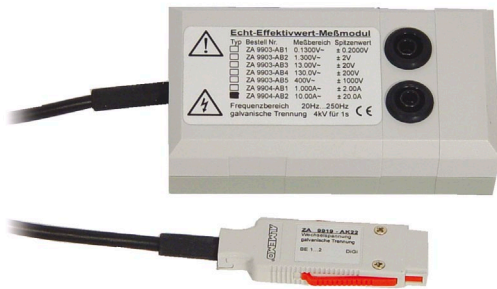


Electrical variables

True/Effective Measuring Modules for AC Voltages and AC Current ZA 9903 AB / ZA 9904 AB

06/2018 • We reserve the right to make technical changes.



- Independent, full digital acquisition of the true/effective values of an AC variable.
- Measuring signals with any course of a curve are digitised with 1kHz.
- Pure digital data transmission to the measuring instrument.
- Acquisition of the frequency through a second measuring channel.
- Connector sockets electrically isolated and overvoltage-protected.

Technical Data

TRMS		Frequency range:	20.0 ... 250Hz
Accuracy:	0.1% of fin. val. ± 2 digits for AC Current 20 A: ± 4 digits	Meas. period/transient time:	0.5s
Sampling rate:	1kHz	Electrical isolation:	1kV permanent, 4kV for 1s
Resolution:	12 bit, ± 2048 digits for U _{ss}	Nominal conditions	23 °C ±2 K, 10 to 90 % r.H. (non-condensing)
Frequency range:	20.0 ... 250Hz	Housing:	polystyrene, dim. L 100 x W 54 x H 31mm
Meas. period/transient time:	0.5s	Sockets:	touchproof, Ø 4mm
Frequency		Operating voltage:	6 ... 14V through ALMEMO® device
Accuracy:	± 0.1Hz	Current consumption:	< 40mA (connector and module)
Sampling rate:	1kHz		
Resolution:	0.1Hz		
Sensitivity:	10% of final value		

Types (incl. touchproof connecting cable)

AC Voltage					Order no.
Meas. range	Resolution	Peak	Overload	Internal resistance	
130.0mV _{eff} ¹⁾	0.1mV	±0.2V	±400V	0.5MΩ	ZA9903AB1
1.300V _{eff}	1mV	±2V	±400V	0.8MΩ	ZA9903AB2
13.00V _{eff}	10mV	±20V	±500V	1MΩ	ZA9903AB3
130.0V _{eff}	0.1V	±200V	±500V	1MΩ	ZA9903AB4
400V _{eff}	1V	±1000V	±1000V	4MΩ	ZA9903AB5

¹⁾ When using the measuring module for the purposes of current measurement with an external shunt. the shunt must be looped into the neutral conductor (not into the phase).

AC Current

Meas. range	Resolution	Peak	Overload	Internal resistance	Order no.
1.000A _{eff}	1mA	±2A	±10A ²⁾	0.10Ω	ZA9904AB1
10.00A _{eff}	10mA	±20A	±20A ²⁾	0.01Ω	ZA9904AB2
20.0 A _{eff}	0.1 A	±30 A	±30 A ²⁾	0.002 Ω	ZA9904AB3

²⁾ Without fuse, overload condition only up to 1 minute maximum

DAkKS or factory calibration KE90xx electrical for digital measuring module (see chapter Calibration certificates).
DAkKS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.