

ALMEMO® 4390-2



ALMEMO® precision measuring instrument in fitted panel design with data logger function.
Comprehensive range of functions for all application areas
Increased measuring accuracy, fast measuring rate, 1 measuring input, 2 limit value relays, integrated. Option with double analog output.

Technical data and functions

- Increased measuring accuracy and stability
- Fast measuring rate, up to 50 measuring operations per second
 With SD memory card, up to 100 mops, optional for 1 channel up to 400 mops
- 1 ALMEMO® input socket, suitable for all ALMEMO® sensors or 6-contact clamp connector socket, also for 26 V and 20 mA
- More than 65 standard measuring ranges
- Support for ALMEMO® plugs with multi-point adjustment, special linearization, and special measuring ranges
- Higher measuring quality thanks to electrical isolation between measuring inputs and device power supply (device ground)
- Data logger with internal EEPROM, sufficient for 16,000 measured values, configurable as linear or ring memory
- Memory connector with micro SD (accessory)
- As standard 2 limit value relays can also be driven via interface
- Option with double analog output can also be driven via interface
- 2 ALMEMO® output sockets, suitable for digital interfaces, analog output, trigger input, alarm contacts, memory card
- 8-character alphanumeric 14-segment display
- **new:** Programming functions displayed in normal text (3 languages)
- **new:** 5 programming menus
 Measuring function, memory, sensor, device, output
- Measuring functions
 Measured value, dual display, smoothing, zero-setting, setpoint adjustment, maximum / minimum / average values, temperature compensation, atmospheric pressure compensation
- Sensor programming: Measuring range, measured value correction, scaling, units, limit value monitoring, graduated locking of functions, scaling of analog output
- Device programming: Conversion rate, real-time clock with date, output cycle, baud rate, choice of languages

Technical data

Precision class	AA (see page 01.05)	Option with double analog output 10 V or 20 mA (programmable)
Measuring rate	2.5 / 10 / 50 / 100 mops	16-bit DAC, electrically isolated
Measuring inputs	1 ALMEMO® input socket, suitable for all ALMEMO® sensors or 6-contact screw connector with input for 26 V (integrated divider) or 20 mA (integrated shunt)	0.0 to 10.0 V 0.0 to 20.0 mA Accuracy Temperature drift Time constant
Accuracy	Divider / shunt ± 0.1 % of measured value	0.5 mV / digit, load >100 kilohms 0.1 mA / digit, load <500 ohms 0.1 % of final value 10 ppm / K 100 μ s
Channels	4 channels for double sensors and function channels	Standard equipment
Electrical isolation for analog sensors	between measuring input and power supply (device ground)	Display Keypad Date and time-of-day Memory, internal EEPROM sufficient for 16,000 measured values
Sensor power supply	12 V / 0.1 A; 9 V / 0.15 A; 6 V / 0.2 A	Power supply
Outputs	2 ALMEMO® sockets, suitable for all output modules (analog / data / trigger / relay cables, memory, etc.)	Mains operation Option U
2 limit value relays	Mechanical changeover, 230 V, 2 A	90 to 250 VAC, 50 / 60 Hz 10 to 30 V, 0.5 A, electrically isolated
		Housing
		Standard plastic housing 96 x 48 x 132 mm (WxHxD)
		Panel opening
		90 x 42.5 mm

Accessories

	Order no.
Memory connector with micro SD, including USB card reader (see chapter „Output modules“)	ZA1904SD

Options

	Order no.
Measuring rate 400 mops (SD card required)	SA0000Q4
Power supply 10 to 30 VDC, electrically isolated	OA4390U
2 analog outputs (common ground), electrically isolated 10 V or 20 mA (programmable)	OA4390R02
Temperature ranges for 8 refrigerants	SB0000R2

Standard delivery

	Order no.
Operating instructions, manufacturer's test certificate, Precision measuring instrument ALMEMO® 4390-2	MA43902

DAkKS or works calibration KE90xx, electrical, for measuring instrument (see chapter „Calibration certificates“).
 DAkKS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.