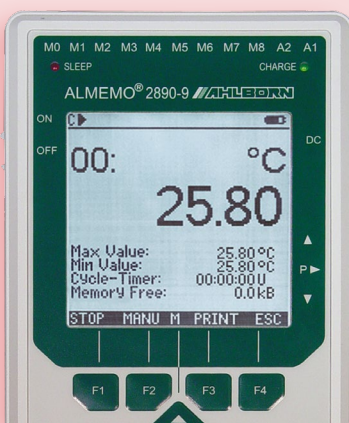## Data logger ALMEMO® 2890-9

ALMEMO® data logger
Precision measuring instrument
Comprehensive range of functions for all application areas.
Increased measuring accuracy, fast measuring rate.
Generously dimensioned graphics display, bright illumination. 9 measuring inputs
Runs on rechargeable batteries, charging via the device itself
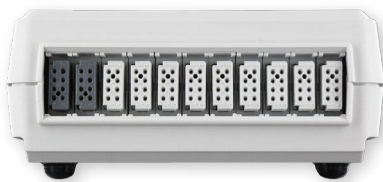
Technical data and functions

- 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 500 mops
- 9 measuring inputs, electrically isolated
- Over 65 standard measuring ranges
- Support for ALMEMO® plugs with multi-point adjustment, special linearization, and special measuring ranges
- Option KL for independent multi-point adjustment or special linearization programmable in 30 points and management of calibration data saved in the sensor connector and the measuring instrument
- Higher measuring quality thanks to electrical isolation between measuring inputs and device power supply (device ground)
- Improved cold junction compensation with 2 sensors
- Data logger with internal EEPROM, sufficient for 100,000 measured values, configurable as linear or ring memory
- Memory connector with micro SD (accessory)

- Sleep mode for long-term recording
- Generously dimensioned graphics display, bright illumination, large display of measured values
- Measured values can be displayed graphically in line chart or bar chart form or numerically in various sizes.
- 3 user-defined menus can be freely configured from a range of 50 functions.
- Easy to operate by means of 4 soft-keys and cursor block, menu-guided with wizards and context-sensitive help windows
- Choice of languages: German, English, French
- 2 ALMEMO® output sockets, suitable for digital interfaces, analog output, trigger input, alarm contacts, memory card
- Runs on rechargeable batteries (as standard), high-speed charging in the device itself using mains unit, included in delivery

Technical data

Precision class	AA (see general technical specifications)	Keypad	9 membrane keys (4 soft-keys)
Measuring rate	(100), 50, 10 and 2.5 mops (measuring operations per second)	Memory, EEPROM	sufficient for 100,000 measured values
		Date and time-of-day	Real-time clock, buffered with battery
Measuring inputs	9 ALMEMO® input sockets	Power supply	
Electrical isolation for analog sensors	with semiconductor relays (50 V) Additional electrical isolation between measuring inputs and power supply (device ground)	Rechargeable battery pack	6 rechargeable NiMH batteries, 1600 mA Integrated high-speed charging (2.5 h)
		Mains adapter	ZB1112NA12 100 to 230 VAC to 12 VDC, 1.5 A electrically isolated
Additional channels	4 function channels, device-internal	DC adapter cable	electrically isolated ZB2590-UK 10 to 30 V, 1 A
Sensor power supply Rechargeable battery/ies Mains adapter	9 or 12 V, maximum 0.5 A 12 V, maximum 0.3 A	Current consumption (without input and output modules) Active mode With illumination Sleep mode	approx. 37 mA approx. 45 to 100 mA approx. 0.05 mA
Outputs	2 ALMEMO® sockets, suitable for all output modules (analog / data / trigger / relay cables, memory, etc.)	Housing	204 x 109 x 44 mm (LxWxH) ABS, 550 g
Standard equipment Display Graphics display Illumination	128 x 128 pixels, 16 rows 5 white LEDs, 3 brightness levels	Environmental conditions see general technical data	

ALMEMO® Measuring Instruments

ALMEMO® 2890-9

Precision measuring instrument, 9 measuring inputs
Data logger with internal memory or external memory connector (accessory)

Accessories	Order no.
Memory connector with micro SD, including USB card reader (see chapter „General accessories")	**ZA1904SD**
DC adapter cable, 10 to 30 VDC, 12 V / 1 A, electrically isolated	**ZB2590UK**
Generously dimensioned carry case, aluminum profile frame / ABS	**ZB2590TK2**

Connecting cables	Order no.
V24 data cable, electrically isolated	**ZA1909DK5**
Ethernet data cable, electrically isolated	**ZA1945DK**
Analog output cable, electrically isolated, 1 x 20 mA	**ZA1601RI**
Analog output cable, electrically isolated, 2 x 10 V	**ZA1602RU**
Trigger and alarm cable (2 relays, 0.5 A, 50 V)	**ZA1006EKG**
Network technology, wireless modules (see chapter „Networking")	

Options	Order no.
Multi-point adjustment, special linearization, management of calibration data	**OA2890KL**
Temperature ranges for 8 refrigerants	**SB0000R2**
Measuring rate 500 mops (SD card required)	**SA0000Q5**

Standard delivery	Order no.
Rechargeable battery pack, mains unit ZB1112NA12, USB data cable ZA1919DKU, case ZB2490TK2, Operating instructions, manufacturer's test certificate	
Precision measuring instrument ALMEMO® 2890-9	**MA28909**

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