

ALMEMO® 2890-9

Multi functionally measuring instrument and data logger with 9 measuring inputs, 2 outputs, for USB, RS232, Ethernet, analog



Technical features

- ▶ 9 ALMEMO® input sockets, electr. isol., for 9 ALMEMO® sensors 36 sensor chann., 4 additional internal function chann.
- ▶ 2 ALMEMO® output sockets for digital interfaces, analog output, trigger input, alarm contacts, memory card.
- ▶ High-speed, high-resolution A/D converter, 24-bit, 50 measuring operations per second
Electr. isolated between measuring inputs and supply
New measuring ranges Pt100, 0.000 to 65.000 °C.
- ▶ Ideal display with large, brightly illuminated graphics.
- ▶ Easy and convenient operation by means of 4 soft-keys, cursor block, and thumb-wheel Comprehensive menu system with wizards and help windows.
- ▶ 9 measuring menus (3 can be freely configured by user from range of 50 functions).
- ▶ Measured values can be displayed graphically in line diagram or bar chart form and from 1 to 20 measured values can be displayed numerically in various sizes.
- ▶ Measuring functions : Measured value, zero-setting, setpoint adjustment, maximum and minimum values stored with date and time-of-day, smoothing, average values over time or measuring points, limit value monitoring, cold junction compensation, temperature compensation, and atmospheric pressure compensation.
- ▶ 8 programming menus for easy-to-understand parametrization of cycles, times, memory, output modules, and power supply. Sensor programming with range, units, comments, scaling, error correction, etc.
- ▶ Option KL : Multi-point calibration, calibration data management, user-defined linearization, special ranges in the ALMEMO® connector, e.g. 0.000 to 50.000 Ω, NTC -5.000 to 46.000 °C, YSI 400, etc.
- ▶ 10 wizards for quickly and easily mastering otherwise complex configurations : Sensor scaling, two-point adjustment, calculation functions, and reference channels; Sensor programming for determining thermal coefficients and wet-bulb globe temperature (WBGT), alarm relay assignment, scaling, and analog output assignment.
- ▶ Choice of languages : German, English, French.
- ▶ EEPROM with capacity for 100,000 measured values, internally configurable as linear or ring memory.
- ▶ SLEEP mode for long-term recording.
- ▶ Memory connector with micro SD card and standard file format.
- ▶ Device software update via interface.

Technical data

Measuring inputs	9 ALMEMO® input sockets, electr. isol. with semiconductor relay (50 V)
Channels	9 primary chann., maximum 32 additional chann. for double sensors and function chann. (e.g. differential values)
A/D converter	Delta-sigma 24-bit, 50 mea. op. p. sec, electr. isol. see Technical data, page 01.05
Sensor power supply	Recharg. battery 9 or 12 V, max. 0.5A Mains adapter 12 V, max. 0.3A
Outputs	2 ALMEMO® sockets for all output modules (analog, data, trigger, relay cables, memory, etc.)
Standard equipment	
Display	Graphics, 128x128 pixels, 16 rows Lighting, 5 white LEDs, 3 levels
Keypad	9 membrane keys (4 soft-keys), thumb-wheel
Memory	512-KB EEPROM (100,000 meas. values)
Date and time-of-day	Real-time clock, buffered with battery
Power supply	
Rechargeable batt. pack	6 NiMH rechargeable batteries, 1600 mA 2.5-hour high-speed charging, internal circuit
Mains adapter	ZB1112NA7 230V AC to 12 V DC, 1A, electrically isolated DC adapter cable, electrically isolated ZB2590-UK, 10 to 30 V, 1 A
Current consumption without input and output modules	
Active mode	approx. 37 mA
with lighting	approx. 45 to 100 mA
SLEEP mode	approx. 0.05 mA
Housing	(LxWxH) 204 x 109 x 44 mm ABS (maximum 70 °C), 550 g

Other general data see Technical Data, page 01.05

Extent of the delivery

Data logger ALMEMO® 2890-9 in case including rechargeable battery pack and mains adapter for charging unit, Operating instructions, ALMEMO® Manual, manufacturer's test certificate, AMR-Control software **MA28909**

Option KL (see pages 01.17 and 03.03)	Order no.
Multi-point calibration, special ranges	OA2890KL
Option R (see page 11.08)	
Temperature ranges for 8 coolants	SB0000R2
Option Q4 : 400 mops measuring rate (see 01.05)	SA0000Q4

Accessories

DC adapter cable, 10 to 30 V DC, 12 V / 1 A, electrically isolated	ZB2590UK
Memory connector with micro SD card, including USB card reader (see page 04.03)	ZA1904SD
Analog output cable, -1.25 to 2.0 V, 0.1 mV / digit	ZA1601RK
Trigger and relay cable (2 relays, 1 ohm, 0.5A, 50 V)	ZA1006EKG
V24 data cable, electr. isol., max. 115.2 KB	ZA1909DK5
Ethernet data cable, electr. isol., max. 115.2 KB	ZA1945DK
Network cable, electr. isol., max. 115.2 KB	ZA1999NK5
Transport case, large (aluminum), see Chapter 07	ZB2590TK2
Network technology, Bluetooth modules, see Chapter 05	
Other general data see Technical Data, page 01.05	

03/2012 We reserve the right to make technical changes.