

ALMEMO® MEASURING INSTRUMENTS

ALMEMO® 2690-8

Multi functionally measuring instrument and data logger with 5 measuring inputs, 2 outputs, RS232, Ethernet, analog



Technical features

- ▶ Modern housing with rubberized impact protection and positioning clip; also moisture-proof thanks to new, injection-molded connectors and sealing lips.
- ▶ 5 ALMEMO® input sockets, electrically isolated, for 5 ALMEMO® sensors, 20 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 meas. op. per sec. 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 and cursor block. 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 ohms, NTC -5.000 to 46.000 °C, YSI 400.
- ▶ 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.
- ▶ Memory connector with MMC card and standard file format.
- ▶ SLEEP mode for long-term recording.
- ▶ Device software update via interface.

Technical data

Measuring inputs:	5 ALMEMO® input sockets, electr. isol., with semiconductor relay (50 V)
Channels	5 primary chann., maximum 19 additional chann. for double sensors and function chann. (e.g. differential values)
A/D converter	Delta-sigma 24-bit, 50 meas. op. p. s. see Technical data, page 01.05
Sensor power supply	Battery 6 / 9 / 12 V, maximum 100 mA Mains adapter 12 V, maximum 100 mA
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 tactile silicone keys (4 soft-keys)
Memory	512-KB EEPROM (100,000 meas. values)
Date and time-of-day	Real-time clock, buffered with battery
Power supply	
Battery	3 AA alkaline batt. or rechargeable batt.
Mains adapter	ZA1312NA7, 230 V AC to 12 V DC, 1000 mA, electrically isolated DC adapter cable, electrically isolated ZA2690-UK, 10 to 30 V, 0.25 A
Current consumption without input and output modules	
Active mode	approx. 30 mA
with lighting	approx. 50 to 150 mA
SLEEP mode	approx. 0.05 mA
Housing	(LxWxH) 209 x 107 x 54 mm ABS (maximum 70 °C), 570 g
Protection	IP54 if splash-proof connectors / sensors are used Included as standard

Other general data see Technical Data, page 01.05

Extent of the delivery

Data logger ALMEMO® 2690-8, Operating instructions, ALMEMO® Manual, including manufacturer's test certificate, AMR-Control software	Order no. MA26908
Data logger set ALMEMO® 2690-8 in case, as above including mains adapter and data cable in case	MA26908KS
Option KL (see pages 01.17 and 03.03)	
Multi-point calibration, special ranges	OA2690KL
Option R (see page 11.08)	
Temperature ranges for 8 coolants	SB0000R2
Option Q4 : 400 mops measuring rate (see 01.05)	SA0000Q4
Top hat rail mounting	OA2290HS

Accessories

Mains adapter 12 V / 1000 mA	ZA1312NA7
Rechargeable battery set with 3 NiMH AA cells 1600 mAh, coded, and adapter for high-speed charging, maximum 2 A	ZA2690AS
DC adapter cable, 10 to 30 V DC, 12 V / 0.25 A, electr. isol.	ZA2690UK
Memory connector with MMC card, including USB card reader (see p. 04.07)	ZA1904MMC
Analog output cable, -1.25 to 2.0 V, 0.1 mV / digit	ZA1601RK
Trigger and alarm cable (2 relays, 1 ohm, 300 mA, 50 V)	ZA1000EGK
V24 data cable, electr. isol., max. 115.2 KB	ZA1909DK5
Ethernet data cable, electr. isol., max. 115.2 KB	ZA1945DK
Transport case, large (aluminum), see Chapter 07	ZB2590TK2
Network technology, Bluetooth modules, see Chapter 05	

10/2008 We reserve the right to make technical changes.