ALMEMO[®] Measuring Instruments

ALMEMO® 2690-8A



ALMEMO[®] precision measuring instrument with data logger function. Comprehensive range of functions for all application areas. Increased measuring accuracy, fast measuring rate. Generously dimensioned graphics display, bright illumination, 5 measuring inputs. Runs on rechargeable batteries, charging via the device itself

Technical data and functions ALMEMO[®] 2690-8A

- 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
- 5 measuring inputs, electrically isolated
- Integrated atmospheric pressure sensor, for automatic pressure compensation, inter alia for Pitot tube flow measurement and humidity variables
- Over 65 standard measuring ranges
- New measuring range Pt100 with very high resolution of 0.001 K in range -8 to +65 °C
- 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
- Option GT for higher measuring quality thanks to electrical isolation between measuring inputs and device power supply (device ground)
- Improved cold junction compensation with 2 sensors

Technical data

- Data logger with internal EEPROM, sufficient for 200,000 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 (other options also available)
- 2 ALMEMO[®] output sockets, suitable for digital interfaces, analog output, trigger input, alarm contacts, memory card
- Runs on rechargeable batteries (standard), high-speed charging in the device itself using the mains unit, included in delivery
- Modern housing with rubberized impact protection and folding stand, splash-proof

Precision class	AA (see page 01.05)	Keypad	9 tactile silicone keys (4 soft-keys)	
Measuring rate	2.5 / 10 / 50 / 100 mops	Memory	EEPROM	
Measuring inputs	5 ALMEMO [®] input sockets		sufficient for 200,000 measured values	
Electrical isolation	with semiconductor relay?*?s (50 V)	Date and time-of-day	Real-time clock, buffered with battery	
Option GT	for analog sensors Additional electrical isolation between measuring inputs and power supply (device ground)	Power supply Rechargeable battery/ies Mains adapter	3 AA batteries NiMH or alkaline integrated, high-speed charging (2.5 hours) ZA1312NA7 230 VAC to 12 VDC, 1 A	
Additional channels	4 function channels, device-internal	1	electrically isolated	
Sensor power supply Rechargeable battery/ies	6 / 9 / 12 V, maximum 0.5 A	DC adapter cable	electrically isolated ZA2690-UK2 10 to 30 V, 1 A	
Mains adapter	12 V, maximum 0.5 A	Current consumption (without input and output modules)		
<i>new:</i> Atmospheric pressure Measuring range Accuracy	sensor Integrated 700 to 1100 mbar ±2.5 mbar (at 0 to 65 °C)	Active mode With illumination Sleep mode	approx. 17 mA approx. 25 to 140 mA approx. 0.05 mA	
Outputs	2 ALMEMO [®] sockets, suitable for all output modules (analog / data / trigger / relay cables, memory, etc.)	Housing	209 x 107 x 54 mm (LxWxH) ABS (maximum +70 °C), 570 g	
		Protective class	IP54	
Graphics display Illumination	128 x 128 pixels, 16 rows 5 white LEDs, 3 brightness levels	- 	(if water-proof plugs / sensors are used)	

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Precision measuring instrument, 5 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") DC adapter cable, 10 to 30 VDC, 12 V / 1 A, electrically isolated Generously dimensioned carry case, aluminum profile frame / ABS	ZA1904SD ZA2690UK2 ZB2590TK2
Generously dimensioned carry case, aluminum profile frame / ABS	ZB2590TK

Connecting cables Order				
Ethernet data cable, electrically isolated Analog output cable, -1.25 to +2.0 V, 0.1 mV / digit	ZA1945DK ZA1601RK	Trigger and alarm cable (2 relays, 0.5 A, 50 V)ZA1006EINetwork technology, Bluetooth modules (see chapter "Networking	-	

Options	Order no.
Measuring module electrically isolated	OA2690GT
Multi-point adjustment, special linearization, management of calibration data	OA2690KL
Temperature ranges for 8 refrigerants	SB0000R2
Measuring rate 500 mops (SD card required)	SA0000Q5
DIN rail mounting	OA2290HS

Standard delivery

3 rechargeable NiMH batteries, rubberized protection, desktop mains unit ZA1312NA7, USB data cable ZA1919DKU, Case ZB2490TK2, Operating instructions, manufacturer's test certificate

Precision measuring instrument ALMEMO® 2690-8A in case set as above but with RS232 data cable ZA1909DK5

Precision measuring instrument ALMEMO® 2690-8A in case set

DAkkS / DKD or works calibration KE90xx, electrical, for measuring instrument (see chapter ,,Calibration certificates")

Operating concept as for precision measuring instruments ALMEMO[®] 2690, 2890 und 5690 / 5790

C 🕨 REC COM 🕪 🕨 R01 * 🚥 ALMEMO 2690-8 C 🕨 REC COM 🕪 RO1 * 🚥 MERSURING-Menus: Standard display UI Meas: Value correction U2 Averaging U3 Volume flow Data logger Multi channel display *List of measuring Points Bar charts Line diagram Time: 12:34:56 Date: 01.01.04 01: 25.45 °C • 01: m/s Velocity м Ntc TemPeratur 28.67 11: 54.5 %H HerH r. Humidity Max Value: Mig. value: 31.34 25.37 Min Value: Cycle-timer: Memory free: 25.37 mls 00:02:30 Un 512.0 kB -12.5 °C 21: Menul PROGRAMMING-Menus Menu2 ASSISTENT-Menus H DT Dew Point POFF *ON F MENU1 MENU2 STOP MANU M PRINT ESC START MANU M PRINT ESC Standard display Menu selection Multi-channel display Measuring points list * ALMEMO 2690-8 ASSISTENT-Menus: ALMEMO 2690-8 C 🕨 REC COM INNI RO1 * 🚥 C ▶ REC COM * 80 PROGRAMMING-Menus: Times, cycles Recording to memory Time: 12:34:56 Date: 01.01.04 01: 21.67 °C TemPeratur 10.00 Ntc °C 30.0 40.0°C NiCr 16:33 ASSISTENT-Menus: Start-Stop Oversains Volume flow Scaling Sensor adjustment Limits. Alarm Analog outPut Thermal coefficient Wet-Bulb-Globe-TemPeratur ۲ • 0 Nto C 30.0 7.8 XH R.Humidity X HH XH 20.0 -14.2 °C Dew Point 0 H DT °C 0.0 1.2 glk R.Humidity H RH glk 1.0 Output from memory Sensor Programming ...Special functions Device configuration Output modules Power supply 10.00 11: -20.0 31: Menul MEASURING-Menus Menu2 PROGRAMMIER-Menus Menul ASSISTENT-Menus Menu2 MEASURING-Menus 0.0 START MANU M PRINT ESC POFF *ON F MENU1 MENU2 POFF *ON F MENU1 MENU2

Programming rmenu

Bar chart

10/2013 • We reserve the right to make technical changes.

Line diagram

C ▶ REC COM	* 🚥
Meas.value list: Time: 12:34:56 Cycle-timer: 00: 23:12 °C 01: 11.37 mls 02: 123:4 mU 10: 53.6 %H 20: 15.2 °C 30: 11.2 glk	Comment Date: 01.01.04 00:00:30 Sn TemPeratur Velocity U2.4 r.Humidity Dew Point a.Humidity
STOP MANU F	PRINT ESC

Order no.

MA26908AKSU

MA26908AKS

Assistent menu