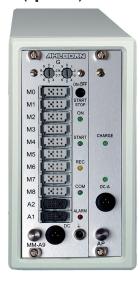
ALMEMO® MEASURING INSTRUMENTS

ALMEMO 8590-9, 8690-9A

Data acquisition module with 9 inputs, 2 outputs for RS232, Ethernet, analog Memory with external connector and micro SD card or internal 512-KB EEPROM (option S)





Technical Features:

- 9 ALMEMO® input sockets, electrically isolated, for 9 ALMEMO® sensors, 36 sensor channels, 4 additional internal function channels.
- ► 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.
 New Electrically isolated between measuring inputs and supply.
- Programming of sensor parameters in the connector, can be modified via interface using the supplied AMR-Control software.
- Measuring functions: Measured value, zero-setting, sensor adjustment, maximum / minimum values stored with date, time-of-day, smoothing, average values over time or measuring points, limit value monitoring, temperature compensation, atmospheric pressure compensation.
- ► *New* Cold junction measuring with 2 NTCs and interpolation Ranges: Pt100 0.000 to 65.000°C, timer 6500.0 seconds.
- New Special ranges in the ALMEMO® connector, provided as standard, e.g. 0.000 to 50.000 ohms, NTC -5.000 to 46.000 °C, YSI 400 etc.
- ► *New* Option KL Multi-point calibration, calibration data management, user-defined linearization.
- ► 5 LEDs for indicating various operating states.
- ► Data logger with memory connector and micro SD card, recording in standard FAT16 file format, transmission to PC using card reader.
- ► Option: EEPROM with capacity for 100,000 measured values, internally configurable as linear or ring memory.
- Sleep mode for long-term recording.
- ► Device programming using the supplied AMR-Control software, i.e. date and time-of-day, cycle, start and end of measuring, measuring rate, etc.
- Key for switching on, start / stop measuring.
- Variant with rechargeable battery system, 8 AA-type NiMH batteries, high-speed charging.
- New Device software update via interface.
- New Trigger variants, process control using command macros.

Technical Data:

Measuring inputs 9 ALMEMO® input sockets, electr. isol, with semiconductor relays (50 V)

Channels 9 primary channels, max. 32 additional channels for double sensors and

function channels (e.g. differential values)

A/D converter Delta-sigma, 24-bit, 50 measuring

operations per second, electr.isolated For technical specifications, see p. 01.05.

Sensor power supply Mains adapter, 12 V, max. 0.5A Rechargeable bat., 9 to 12 V, max. 0.5A

Outputs: 2 ALMEMO® sockets for all output

modules (analog, data, trigger, relay

cables, memory etc.)

Standard equipment:

Operation: 1 key

Memory: External memory connector ZA1904-SD
Option S: Internal 512-KB EEPROM (100,000 meas. val.)
Date and time-of-day Real-time clock, buffered with lith. battery

Power supply:

Mains adapter 230 VAC to 12 VDC, electrically isolated

1000 mA ZB1212NA7 2.5A ZB1212NA9

DC adapter cable 10 to 30 V, 250 mA, electr. isolated

250mA ZB3090UK 1.25A ZB3090-UK2

Rechargeable battery 8 NiMH rechargeable batteries, 1600mAh pack (8690-9A only) 2.5-hour high-speed charging, internal Current consumption without input and output modules :

Active mode approx. 25 mA Sleep mode approx. 0.05 mA

Housing:

8590-9 : (LxWxH) 180 x 49 x 137 mm, polystyrene Weight 490 gr 8690-9A : (LxWxH) 218 x 77 x 145 mm, polystyrene

For further general data, see technical specifications, page 01.05.

Product overview:

Data acquisition module ALMEMO 8590-9,

8-DU housing, without bus, 9 inputs, 2 outputs, real-time clock, mains adapter 1000 mA

Data acquisition module ALMEMO 8690-9A, 12-DU housing, shielded, with bus, 2 plug-in slots, 9 inputs, 2 outputs, real-time clock, with rechargeable battery pack and

MA85909

OA8590KL

OA2290HS

mains adapter for charging, 2.5A
Option S: Internal data memory, 512-KB EEPROM
Option KL: (see pages 01.17 and 03.03)

MA86909A
OA8590S

Multi-point calibration, linearization
Option R: (see page 11.08)

Temperature ranges for 8 coolants

Option Q4: 400 mops measuring rate (see 01.05)

SB0000R2

SA0000Q4

Top hat rail mounting

Accessories:

	adapter cable, 10 to 30 VDC, 12 V / 250 mA, electors	ctr. isolated ZB3090UK
	25mA	ZB3090UK2
	mory connector with micro SD card	
and	USB card reader (see page 04.03)	ZA1904SD
Ana	log output cable, -1.25 to 2.0 V, 0.1 mV / digit	ZA1601RK
Trig	ger and alarm cable (2 relays, 1 Ω , 0.5A, 50 V)	ZA1006EKG
V24	data cable, electr. isol., maximum 115.2 KB	ZA909DK5
Eth	ernet data cable, electr. isol., maximum 115.2 KB	ZA1945DK
Net	work cable, electr. isol., maximum 115.2 KB	ZA1999NK5
Net	work technology Bluetooth modules see Chanter 05	

33/2012 We reserve the right to make technical changes.