

ALMEMO® MEASURING INSTRUMENTS

ALMEMO® 2490-1L
compact measuring instrument with
more than 65 measuring ranges, with just one
measuring input, with memory for 100
measured values

ALMEMO® 2490-2L
with 2 measuring inputs



Technical features :

- ▶ Universal measuring instrument with 1 or 2 ALMEMO® input sockets, 8 channels, 4 internal function channels (e.g. differential values)
- ▶ Memory sufficient for 100 measured values, can be called up and viewed in the display
- ▶ High-resolution A/D converter, 16-bit, 10 mops
- ▶ More than 65 standard measuring ranges
- ▶ Support for ALMEMO® connectors with multi-point calibration, special linearization, and special measuring ranges
- ▶ Generously dimensioned 2-row static 7 / 16 segment display including units
- ▶ Easy and convenient to operate by means of 7 keys
- ▶ Measuring functions : Measured value, zero-setting, sensor adjustment, saving of maximum / minimum values, memory for 100 measured values, cold junction compensation, and temperature compensation
- ▶ Test functions : Segment monitoring, range monitoring, sensor breakage indication, battery voltage check and display

Extent of the delivery

Includes 3 AA alkaline batteries, operating instructions, and manufacturer's test certificate

Universal measuring instrument ALMEMO® 2490-1L
1 measuring input, memory for 100 measured values, LC display, 7 keys

Order no. MA24901L

Universal measuring instrument ALMEMO® 2490-2L
like 2490-1L, plus 2 measuring inputs

Order no. MA24902L

Technical data :

Measuring inputs	
2490-1L	1 ALMEMO® input socket
2490-2L	2 ALMEMO® input sockets
electrically isolated with semiconductor relays 50V	
Channels	Per sensor, max. 4 channels (sensor-type-specific, measuring and function channels), only 2490-2L, plus 4 internal function chan.
A/D converter	delta-sigma, 16-bit For technical data see page 01.05.
Measuring ranges	
as on page 01.06, but	
Volts DC	-2.0 to +2.6 V
Milliamperes DC	-26 to +26 mA
Connector supply	Battery 9 V, max. 0.5A
Outputs	none
Standard equipment	
LC display 7 segments	Measured value 5 char., 15 mm Function 4½ characters, 9 mm
16 segments	Units 2 characters, 9 mm 9 symbols
Keypad	7 silicone keys
Power supply	
Battery	3 AA alkaline batteries
Current consumption	approx. 20 mA without input modules
Housing	ABS (maximum 70 °C) (LxWxH) 127 x 83 x 42 mm

Other general data see Technical Data, page 01.05

Option

IP54 protection (if water-proof connectors are used) OA2490W

Accessories

Top hat rail mounting



ZB2490HS

Rubberized impact protection, green



ZB2490GS1

Magnetic fastening



ZB2490MH

Instrument case

ZB2490TK

ALMEMO® MEASURING INSTRUMENTS

01

ALMEMO® 2490-1
compact measuring instrument
with more than 65 measuring ranges, with just
one measuring input, with memory for 100
measured values, plus interface and option with
internal analog output

ALMEMO® 2490-2
with 2 measuring inputs



Technical features :

- ▶ Universal measuring instrument with 1 or 2 ALMEMO® input sockets, 8 channels, 4 internal function channels (e.g. differential values)
- ▶ Memory sufficient for 100 measured values, can be called up and viewed in the display
- ▶ High-resolution A/D converter, 16-bit, 10 mops
- ▶ More than 65 standard measuring ranges
- ▶ Support for ALMEMO® connectors with multi-point calibration, special linearization, and special measuring ranges
- ▶ Generously dimensioned 2-row static 7 / 16 segment display including units
- ▶ Easy and convenient to operate by means of 7 keys
- ▶ Measuring functions : Measured value, zero-setting, sensor adjustment, saving of maximum / minimum values, memory for 100 measured values, cold junction compensation, and temperature compensation
- ▶ Test functions : Segment monitoring, range monitoring, sensor breakage indication, battery voltage check and display

Universal measuring instrument ALMEMO® 2490 with ALMEMO® interface :

- ▶ 2 ALMEMO® output sockets for all interface cables, network cables, trigger / relay cables
- ▶ Complete sensor and device programming.
- ▶ ALMEMO® socket DC for mains adapter.
- ▶ **Option with electrically isolated internal RS485:** via ALMEMO® socket DC.
- ▶ **Option with electrically isolated internal analog output :** ALMEMO® socket P0 for analog output (see Chapter 02 ALMEMO® transmitters).

Extent of the delivery

Includes 3 AA alkaline batteries, operating instructions, and manufacturer's test certificate

Universal measuring instrument ALMEMO® 2490-1
1 measuring input, memory for 100 measured values, LC display, 7 keys, interface via 2 ALMEMO® output sockets A1, A2, and 1 ALMEMO® socket DC for mains adapter

Order no. MA24901

Universal measuring instrument ALMEMO® 2490-2
like 2490-1, plus 2 measuring inputs **Order no. MA24902**

Technical data :

Measuring inputs	
2490-1	1 ALMEMO® input socket
2490-2	2 ALMEMO® input sockets
electrically isolated with semiconductor relays 50V	
Channels	Per sensor, max. 4 channels (sensor-type-specific, measuring and function channels), only 2490-2: plus 4 internal function chan.
A/D converter	delta-sigma, 16-bit For technical data see page 01.05.
Measuring ranges as on page 01.06, but	
Volts DC	-2.0 to +2.6 V
Milliamperes DC	-26 to +26 mA
Connector supply	Battery / mains: 9 V, max. 0.5A
Option U	9 V, maximum 70 mA
Outputs	2 ALMEMO® sockets for all interface cables, version V6
with option OA2490I	RS485 interface internal, electrically isol., via socked DC
Standard equipment	
LC display 7 segments	Measured value 5 char., 15 mm
16 segments	Function 4½ characters, 9 mm
	Units 2 characters, 9 mm
	9 symbols
Keypad	7 silicone keys
Power supply	10 ... 30V DC not electr. isol.
Battery	3 AA alkaline batteries
Current consumption	approx. 20 mA without input modules
Mains adapter	ZA1312NA7 230 VAC to 12 VDC, 1A
Housing	ABS (maximum 70 °C) (LxWxH) 127 x 83 x 42 mm
Other general data see Technical Data, page 01.05	

Options :

Power supply, electrically isolated, 9 to 30 VDC, 80 mA, including ALMEMO® connector for socket DC OA2490U
RS485 interface, built-in, including Option U OA2490I
Analog outputs, electrically isolated , built-in, see Chapter 02 ALMEMO® transmitters
IP54 protection (if water-proof connectors are used) OA2490W

Accessories (see ALMEMO® 2490-1L/-2L page 01.14)

Top hat rail mounting	ZB2490HS
Rubberized impact protection,gray	ZB2490GS2
Magnetic fastening	ZB2490MH
Mains adapter 12 V, 1A, with ALMEMO® connector	ZA1312NA7
DC adapter cable	
10 to 30 VDC, 12 V / 0.25 A, electrically isolated	ZA2690UK
Analog output cable, -1.25 to +2.0 V, 0.1 mV / digit, V6	ZA1606RK
V24 data cable, electr. isol., maximum 115.2 KB	ZA1909DK5
USB data cable, electr. isol., maximum 115.2 KB	ZA1919DKU
Ethernet data cable, electr. isol., maximum 115.2 KB	ZA1945DK
Instrument case	ZB2490TK

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

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