ALMEMO® Measuring Instruments

ALMEMO® 2490

ALMEMO® basic measuring instrument
Ideal for all sorts of application, quick and easy to operate
1 or 2 measuring inputs,
over 65 measuring ranges

Technical data and functions ALMEMO® 2490 series

- Generously dimensioned 2-row static 7 / 16 segment display including units
- Easy and convenient to operate by means of 7 keys
- Over 65 standard measuring ranges
- Memory sufficient for 100 measured values, can be called up and viewed in the display
- Good measuring accuracy, measuring rate up to 10 measuring operations per second (mops)
- Support for ALMEMO® plugs with multi-point adjustment, special linearization, and special measuring ranges

- Measuring functions : Measured value, zero-setting, sensor adjustment, saving of maximum / minimum values, memory for 100 values, cold junction compensation, and temperature compensation
- Test functions : Segment monitoring, range monitoring, sensor breakage indication, battery voltage check and display
- 2 ALMEMO® output sockets, suitable for all interface cables, network cables, trigger / relay cables (except Ethernet data cable ZA1945-DK)
- Complete sensor and device programming via interface
- ALMEMO® DC socket for mains adapter.

Technical data ALMEMO® 2490 series

Precision class	B (see page 01.06)
Measuring rate	2.5 / 10 measuring operations per second
Measuring ranges as on page 01.08 / 01.09 - but	
Milliamperes DC	-26 to +26 mA
Measuring input	
2490-1	1 ALMEMO® input socket
2490-2	2 ALMEMO® input sockets, el. isol., with semicond. relays (50V)
Additional channels	4 function channels, device-internal
Sensor power supply	9 V, maximum 0.5 A
Option U	9 V, maximum 70 mA
Outputs	2 ALMEMO® sockets, suitable for all interface cables
with option OA2490I only	RS485 interfac, internal electrically isolated, via DC socket

Standard equipment	
LCD 7 segments	Measured value 5 characters, 15 mm
	Function 4½ characters, 9 mm
16 segments	Units 2 characters, 9 mm
	9 symbols
Keypad	7 silicone keys
Power supply:	
Battery set	3 AA alkaline batteries
DC socket	10 to 30 VDC not electr. isolated
Mains adapter	ZA1312NA10
	100 to 240 VAC to 12 VDC, 2 A
Current consumption	approx. 20 mA without input modules
Housing	ABS
	127 x 83 x 42 mm (LxWxH)
Operating temperature	-10 to +60 °C
Atmospheric humidity (ambient)	10 to 90 % RH (non-condensing)

ALMEMO® Measuring Instruments

ALMEMO® 2490-1	ALMEMO® 2490-2
Basic measuring instrument, 1 measuring input with interface Runs in battery mode or via mains unit	**Basic measuring instrument, 2 measuring inputs with interface Runs in battery mode or via mains unit**

Accessories	Order no.
DIN rail mounting	**ZB2490HS**
Rubberized impact protection, green	**ZB2490GS1**
Magnetic fastening	**ZB2490MH**
Instrument case	**ZB2490TK2**
Mains adapter 12 V, 2 A, with ALMEMO® plug	**ZA1312NA10**
DC adapter cable 10 to 30 VDC, 12 V / 0.25 A, electrically isolated	**ZA2690UK**

DIN rail mounting

Rubberized protection

Magnetic fastening

Connecting cables	Order no.
USB data cable, electrically isolated	**ZA1919DKU**
Analog output cable, -1.25 to +2.0 V, 0.1 mV / digit	**ZA1601RK**
V24 data cable, electrically isolated.	**ZA1909DK5**
Network technology, Bluetooth modules (see chapter „Networking")	

Option	Order no.
Power supply, electrically isolated, 10 to 30 VDC, 80 mA including ALMEMO® plug for DC socket	**OA2490U**
RS485 interface, internal, including option U	**OA2490I**
Analog outputs, electrically isolated, integrated internally (see page 01.56) ALMEMO® transmitter	
Measuring instrument IP54 (if water-proof plugs are used)	**OA2490W**

Standard delivery	Order no.
Batteries, operating instructions, manufacturer's test certificate	
Basic measuring instrument ALMEMO® 2490-1	**MA24901**
Basic measuring instrument ALMEMO® 2490-2	**MA24902**

DAkkS or works calibration KE90xx, electrical, for measuring instrument (see chapter „Calibration certificates").
DAkkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.