

Measuring amplifier MV LKM 274

1 Features

- Voltage supply 15...35 V DC
- Input Pt100 / Pt1000 / 2- and 3-wire
- Output 0...10 V DC



2 General descriptions

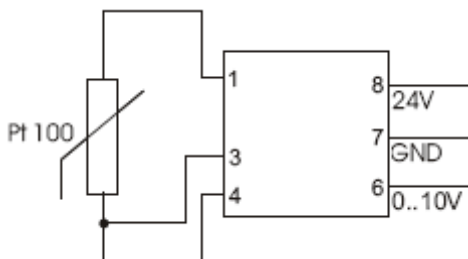
The measuring amplifier MV LKM 274 converts a temperature-dependent resistance signal into a standard voltage signal 0 ... 10 V. Through the 3-wire connection it is possible to achieve a greater distance between the sensor and measuring amplifier without loss of precision.

3 Order designation

Measuring amplifier Pt100/Pt1000

MV LKM 274

4 Connection diagram



5 Specifications

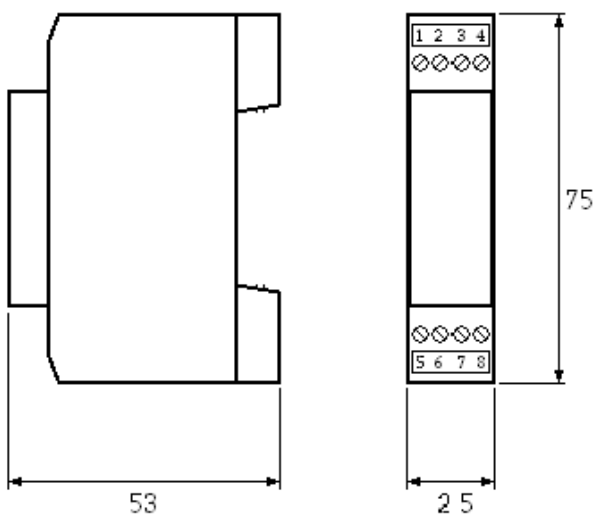
5.1 Electrical data

Voltage supply:	15 ... 35 V DC, reverse-polarity protected
Acceptable ripple:	< 10 %
Input:	Pt100, Pt1000, 2-/3-wire connection
Output:	0 ... 10 V DC
Current consumption:	max. 10 mA
Linearity failure:	< 0.1 % FS
Sensor break:	> 10 V
Short circuit:	= 0V
Measuring current:	0.25 mA

5.2 Mechanical data

Operating temperature	-25 ... 85 °C
Relative humidity:	< 95 %
Fastening:	DIN Rail 35 mm
Dimensions:	75 x 25 x 53 mm
Weight:	60 g
Case material:	Polycarbonate
Color:	Green
Connector:	Screw terminal
Terminal:	0.2 ... 2.5 mm ²
Vibration:	5 g / 10...200 Hz

6 Dimensions



7 Configuration

With the 4 DIP-Switches it's possible to change between 13 different measuring ranges. The amplifier will be delivered with the measuring range 0...50°C. All other settings are shown in the table below. The query for the measuring range is permanent. After a change of the measuring range, the power supply doesn't need not be interrupted. The detection of the sensor (Pt100/Pt1000) is also automatically while in operation.

For Pt1000, the measuring ranges MB6...MB8 are not available.

Name	Measuring range	DIP-Switch 1-2-3-4
MB1:	-20°C ... 150°C	1-1-1-1
MB2:	0°C ... 50°C	0-1-1-1
MB3:	0°C ... 100°C	1-0-1-1
MB4:	0°C ... 200°C	0-0-1-1
MB5:	0°C ... 300°C	1-1-0-1
MB6:	0°C ... 400°C	0-1-0-1
MB7:	0°C ... 500°C	1-0-0-1
MB8:	0°C ... 600°C	0-0-0-1
MB9:	-50°C ... 50°C	1-1-1-0
MB10:	-100°C ... 100°C	0-1-1-0
MB11:	-30°C ... 70°C	1-0-1-0
MB12:	-40°C ... 60°C	0-0-1-0
MB13:	0°C ... 250°C	1-1-0-0

DIPx = 1 = on

DIPx = 0 = off

8 Revision history

Version	Revision date	Responsible	Modifications
65005-014-57-001	16.11.2012	Hy	1. Version