

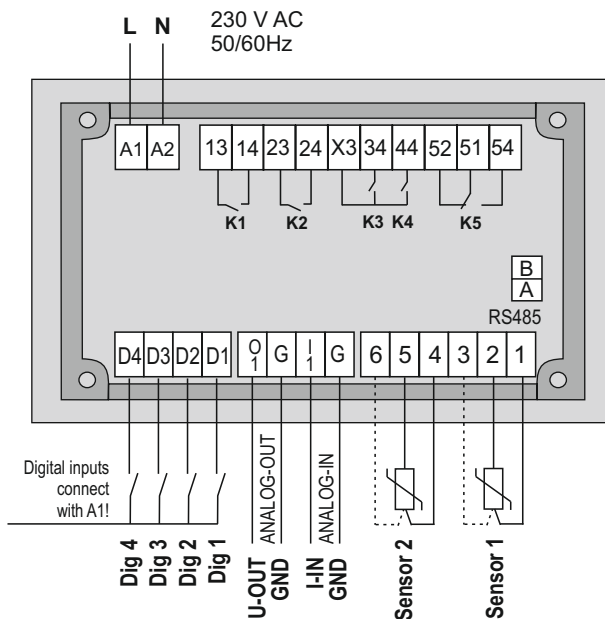
Accompanying Device Documentation

Programmable PID multichannel temperature controller



The device has to be mounted, connected and parameterized according to the user manual no. 105978 (for plant engineering companys). All herein indicated Safety Instructions must be strictly observed!

The user manual is available on the Internet at www.welba.de/pdf-englisch/ba/105978.pdf. You can request a printed version at Welba.



K1 to K5 relays must be connected only with a uniform voltage!

Software default switchable:
 PT100-2/3L - PT1000
 KTY 81-110 - KTY 81-210
 Analog-IN = 4-20 mA
 Analog-out = 0-10V

Items supplied

- Controller
- Holder (only at MRFC-3..)
- Rubber seal
- Fixing screws

Unpacking and storage

If the packaging is damaged or something is missing, do not fit the temperature controller. In this case please contact Welba.

If you keep the temperature controller for a period before using it, store it in a clean dry place.



The plant engineering company must prepare operating instructions for the operator, taking account of the controller's parameters as supplied.

We recommend referring only to the parameters which the end user needs for safe operation.

In preparing the operating instructions for the end user, especially the chapter on "Safety", account must be taken of local regulations.

Technical data

Operating voltage	230 V AC - 50/60 Hz
Relay contacts	see connection diagram
max. switching current	up to max. 5 A AC1 depending on version
max. switching voltage	230 V
Display	240 x 320 Pixel Full Color TFT Display - 2,0 inch
Active display area:	ca. 30,6 x 40,8 mm
Number of sensor inputs	2
Useable sensors	PT 100 (2- or 3- wires) PT 1000 KTY 81-210 KTY 81-110
Measure range	
- PT 100	-50° to +400°C
- PT 1000	-50° to +400°C
- KTY 81-210	-50° to +150°C
- KTY 81-110	-50° to +150°C
Interface RS-485	WE-Bus / Modbus
Digital inputs	4
Analog input	
- Current 4-20 mA	Ri =< 100Ohm
Analog Output	
- Voltage 0-10 V	Load resistance > 1 kOhm
Temperature alarms	2 (independently)
Control mode	two step control / three step control / PID
Housing	
- MRFC-3 (Front panel mounting)	- Front size 106 x 68 mm
	- Front panel cut 87 x 56 mm
- MRHC-3 (Rear wall mounting)	- Frontsize 106 x 68 mm
	- Front panel cut 87 x 66 mm
	build-in-appliance - installation depth 45 mm
Installation conditions	
Protection class	
- Housing front	IP 64
- Rear	IP 00
Electrical safety	
- pollution degree	Overvoltage category III
- rated impulse voltage	2
Connection	1500 V
	Plug-in screw connections for cables up to 2,5 mm² / 1,5 mm²
Environment specifications:	
- Operation temperature	0° .. +50°C
- Storage temperature	-20° .. +70°C
- max. humidity	75% (no dew)

105979 D/E - Technical data subject to change. 14.07.2020

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