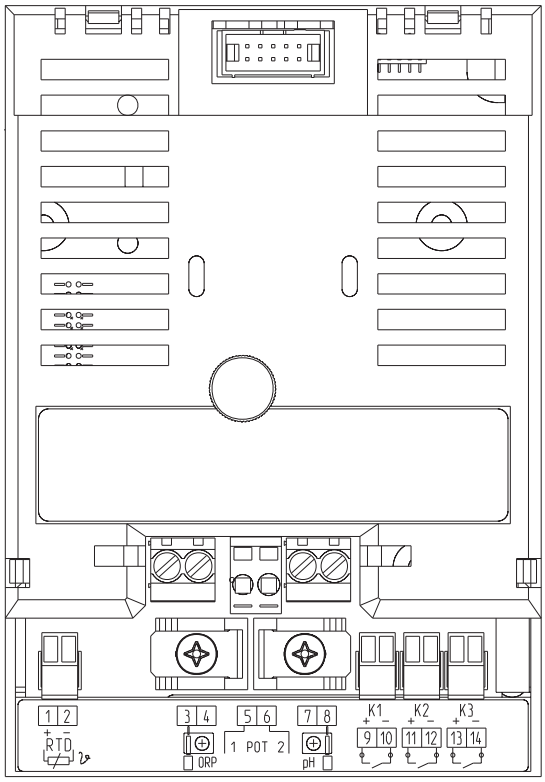
Supplementary Instructions

DULCOMARIN® II, Sensor Module
(pH, redox/ORP, temperature)
DXMaM



DXMa ___ ___ ___ ___ ___ ___

Please enter the identcode of your module!

These supplementary instructions apply only in conjunction with the "Operating Instructions DULCOMARIN® II, Part 1: Mounting and Installation"!

Please carefully read these operating instructions before use! · Do not discard!
Damages due to improper operation will invalidate the warranty!

Imprint:
Supplementary Instructions
DULCOMARIN® II, Sensor Module
(pH, redox/ORP, temperature)
DXMaM
© ProMinent Dosiertechnik GmbH, 2004

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Identcode

The identcode describes the external modules for the **DULCOMARIN® II, series DXM**

DXMa	External module for DULCOMARIN® II, series DXM

Module:

M	Sensor module pH, redox/ORP, temperature
A	Actuator module pumps and analogue output
R	Cl_2 actuator module for motor actuator
N	Power module without relay

Mounting type:

W	Wall mounted (IP 65)
H	DIN rail (IP 20)

Design:

0	with controls
2	without controls

Applications:

S	swimming pool

Language:

00	no operation
DE	German
EN	English
ES	Spanish
FR	French
IT	Italian

Approvals:

01	CE-mark

DXMa	M	W	0	S	00	01

Only the sensor module in the mounting type W “wall-mounted” is available with controls and different languages.

DXMa Internal modules for DULCOMARIN® II, series DXC

These modules can be ordered via the identcode of the DXC (see “Operating Instructions DULCOMARIN® II, Part 1: Mounting and Installation”).

About this module

The sensor module DXMaM provides the following functions to the DULCOMARIN® II compact e.g.:

- Measurement and control of the pH value
- Measurement and display (optional control) of the redox/ORP
- Measurement and display of the temperature of the sample water
- Monitoring of the sample water throughput

The sensor module DXMaM is equipped with the following inputs:

- 1 temperature input for Pt1000 (Pt100, automatic sensor detection)
- 2 sensor inputs for pH or redox/ORP measurement with equipotential bonding
- 3 digital inputs for pause, changeover of parameter sets, sample water monitoring

Mounting and Installation



IMPORTANT

- ***The installation may only be performed by specially trained personnel!***
- ***Please carefully read the instructions in the "Operating Instructions DULCOMARIN® II, Part 1: Mounting and Installation" before carrying out any mounting and installation work!***

NOTE

The terminal diagram is enclosed at the end of these operating instructions.

Technical data

Electrical data

Pt1000/Pt100 input (RTD) (Kl. 1, 2):
Input range: -20 ... 150 °C
Accuracy: ± 0.5 % °C
Representation: 0.1 °C

Sensor input (ORP) Kl. 3, 4) for redox/ORP:
Input resistance: > 10^{12} Ohm
All reference electrodes with diaphragm can be connected.
Input range: redox/ORP: -1200 mV ... +1200 mV
Accuracy: ± 0.5 % of the input range
Representation: 1 mV (0.01pH)
Connection of reference electrode through shield connection
Connection options for an liquid reference potential electrode

Sensor input (pH) (Kl. 7, 8) for pH:
Input resistance: > 10^{12} Ohm
Input range: pH: -1 ... 15 (0 ... 100 °C)
Representation: 0.01 pH
Further data as "Sensor input (ORP)".

Digital inputs (K1, K2, K3) (Kl. 9 – 14):
galvanically isolated among each other
Insulation voltage: 500 V
max. switch frequency: 2 kHz
Connectable contacts: mechanical relays
max. connectable cable length: 20 m

Environmental conditions

Storage temperature: -10...70 °C

Type of protection: IP 20 (within the housing DXM: IP 65)

Humidity: Permissible relative humidity: 95 %, non-condensing (DIN IEC 60068-2-30)

Materials

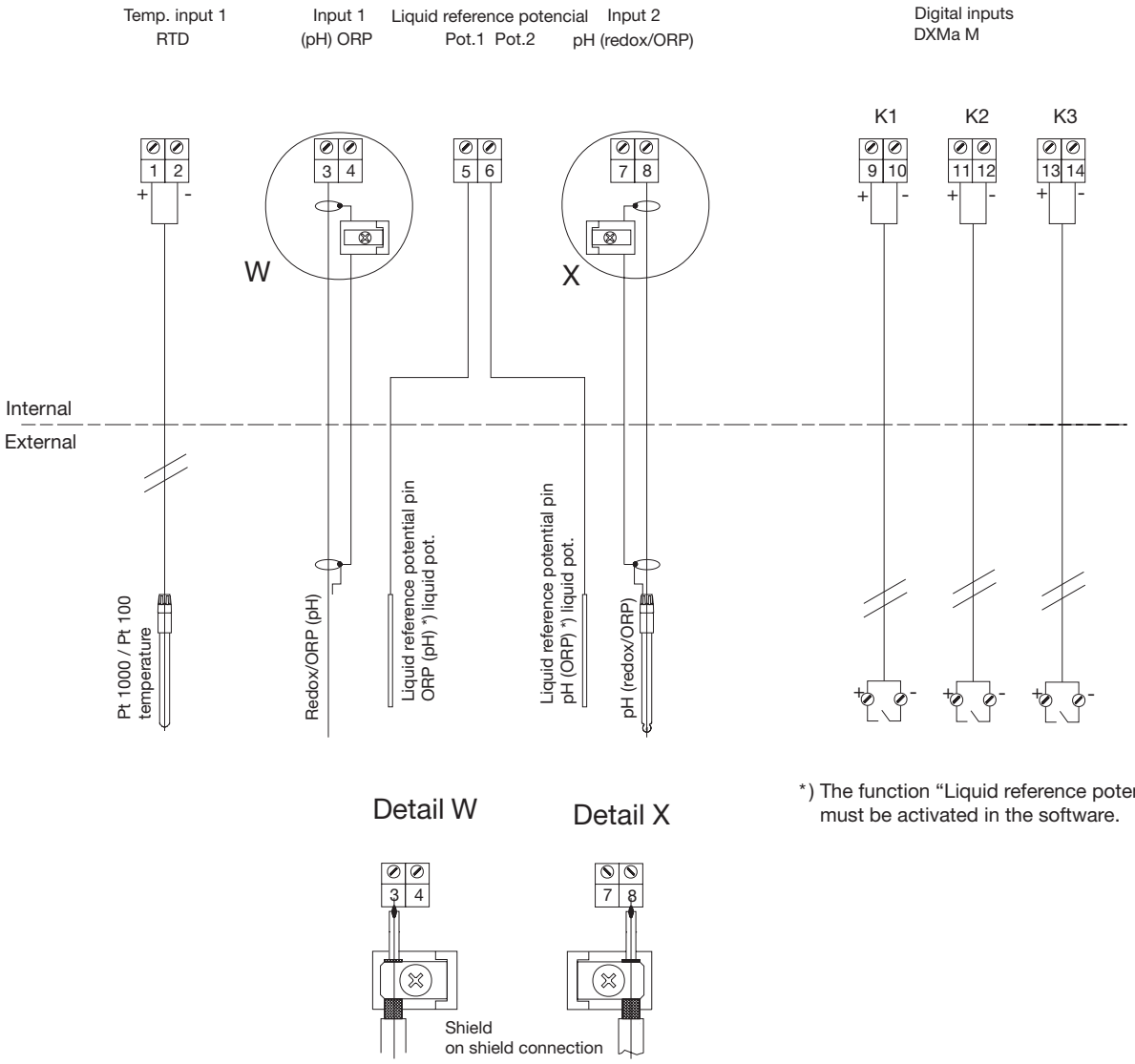
Housing: PPE-GF 10

Terminal assignment

Description	Terminal designation	Terminal no.	Pol.	Function
Temp. input **Pt1000**/100	RTD	1	+	Pt1000/100 (temp. sensor)
		2	-	
pH/**ORP** input 1	(pH)ORP	3	Ref.	ORP sensor
		4	meas. sig.	
Liquid reference potential 1	POT 1	5		
Liquid reference potential 2	POT 2	6		pH sensor
pH/ORP input 2	pH(ORP)	7	Ref.	
		8	meas. sig.	
Digital input 1	K 1	9	+	Sample water (error)
		10	-	
Digital input 2	K 2	11	+	Pause control (backflushing)
		12	-	
Digital input 3	K 3	13	+	ECO!Mode
		14	-	

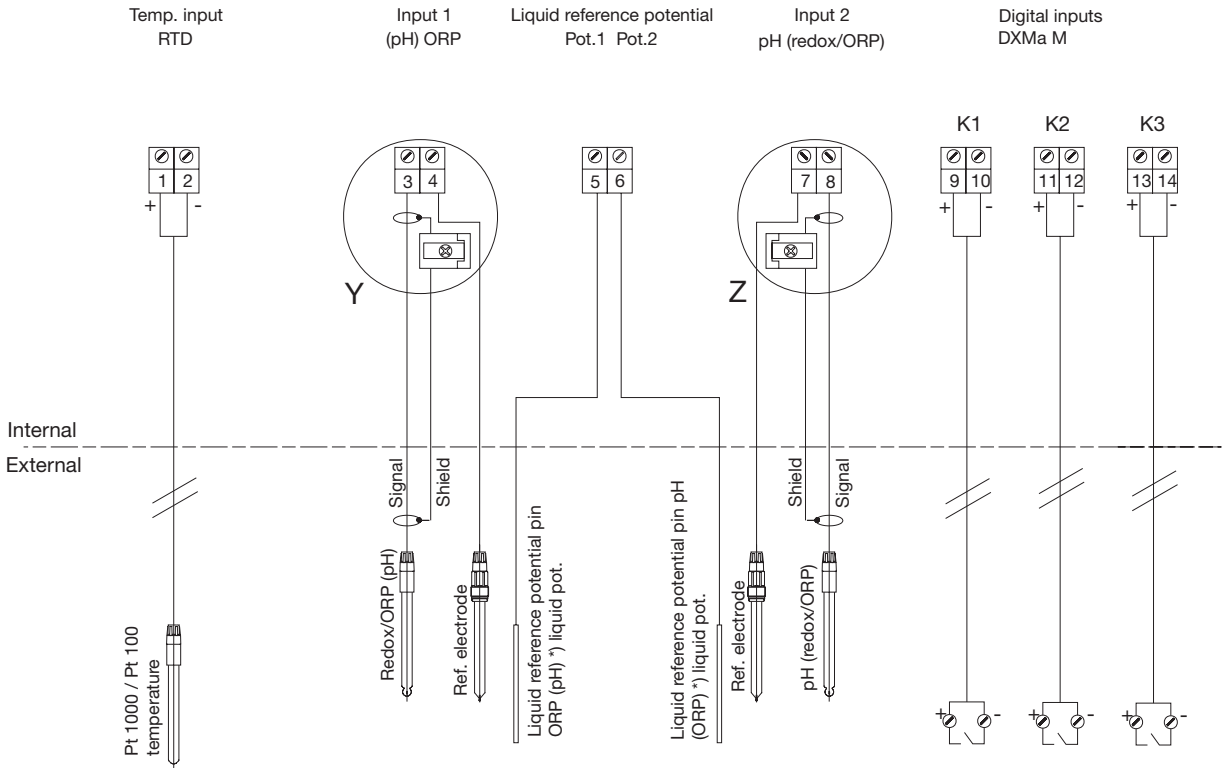
Terminal diagram

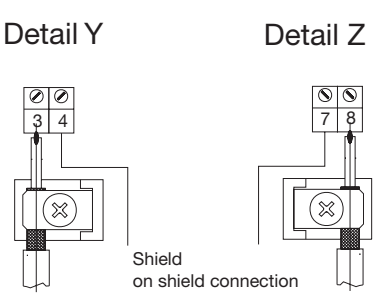
Terminal diagram combination probe



*) The function “Liquid reference potential” must be activated in the software.

Terminal diagram Two-probe measuring chain





*) The function “Liquid reference potential” must be activated in the software.

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