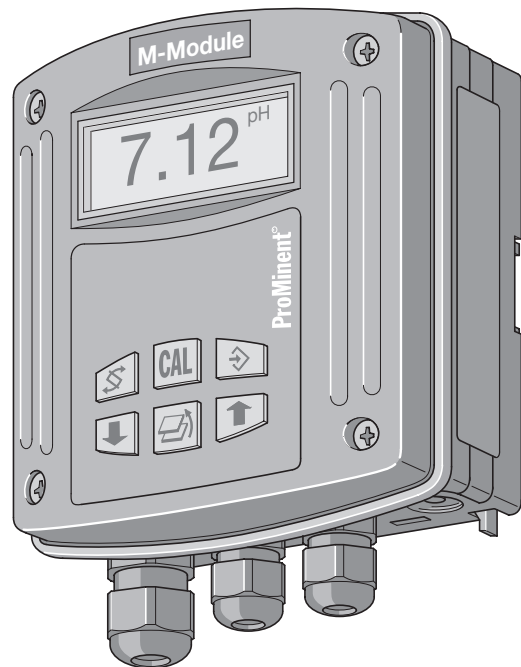
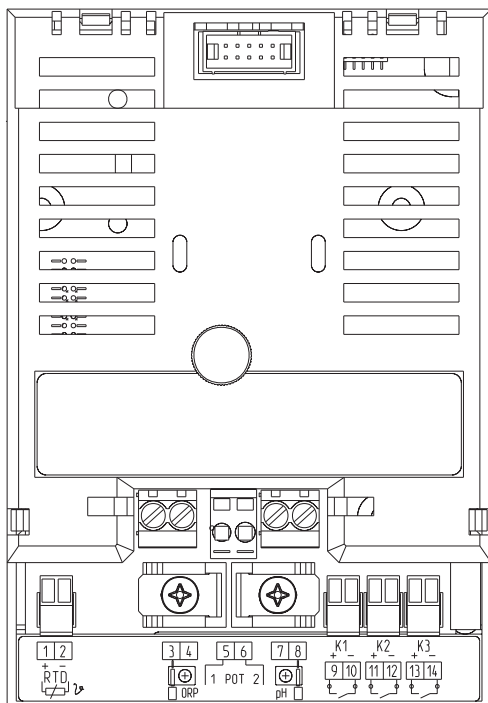


Supplementary Instructions

DULCOMARIN® II, M Module

(Measurement Module for pH, redox/ORP, temperature)

DXMaM: Connection



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!
The operator shall be liable for any damage caused by installation or operating errors!

Imprint:

Supplementary Instructions
DULCOMARIN® II, M Module
(Measurement Module for pH, redox/ORP, temperature)
DXMaM: Connection
© ProMinent Dosiertechnik GmbH, 2004

ProMinent Dosiertechnik GmbH
Im Schuhmachergewann 5-11
69123 Heidelberg
Germany

Phone: +49 6221 842-0
Fax: +49 6221 842-419

info@prominent.com
www.prominent.com

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Mounting and installation	5
Technical data	5
Terminal assignment	6
Terminal diagram	6

Identcode

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

DXMa		Measurement module for DULCOMARIN® II, series DXM						
		M	Module: M-module, measurement module: pH, ORP, temperature					
		W H E	Type of mounting: W Wall mounting (IP 65) H Mounting rail (IP 20) E Retrofit module (installation module for DXCa, IP 20)					
			0 2 3	Version: 0 With controls (only M module, mounting type W) ¹⁾ 2 Without controls 3 Without controls (only mounting type “E” and “H”)				
				S	Application: S Swimming pool (only M module)			
						Language: 00 No controls ²⁾ DE German EN English ES Spanish FR French IT Italian		
						01	Approval: CE mark	
		DXMa	M	W	0	S	00	01

1) only with Installation: “W”

2) only with Version: 2, no operator control

1) only with Installation: “W”
2) only with Version: 2, no operator control

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 measurement module DXMaM provides the following functions to the DULCOMARIN® II 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 measurement 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



CAUTION

- **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: > 10¹² 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: > 10¹² 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)

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

Materials

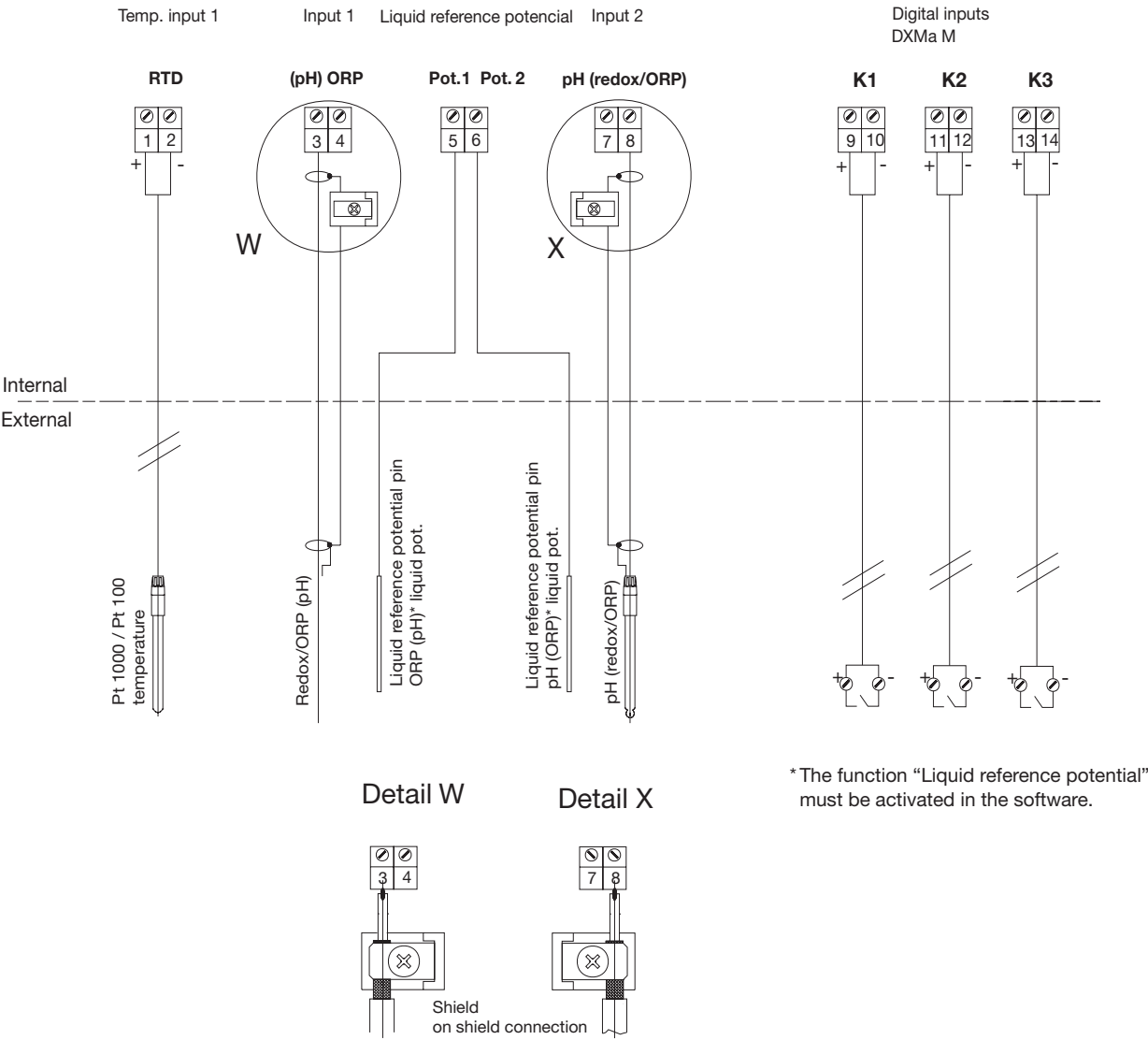
Housing: PPE-GF 10

Terminal assignment

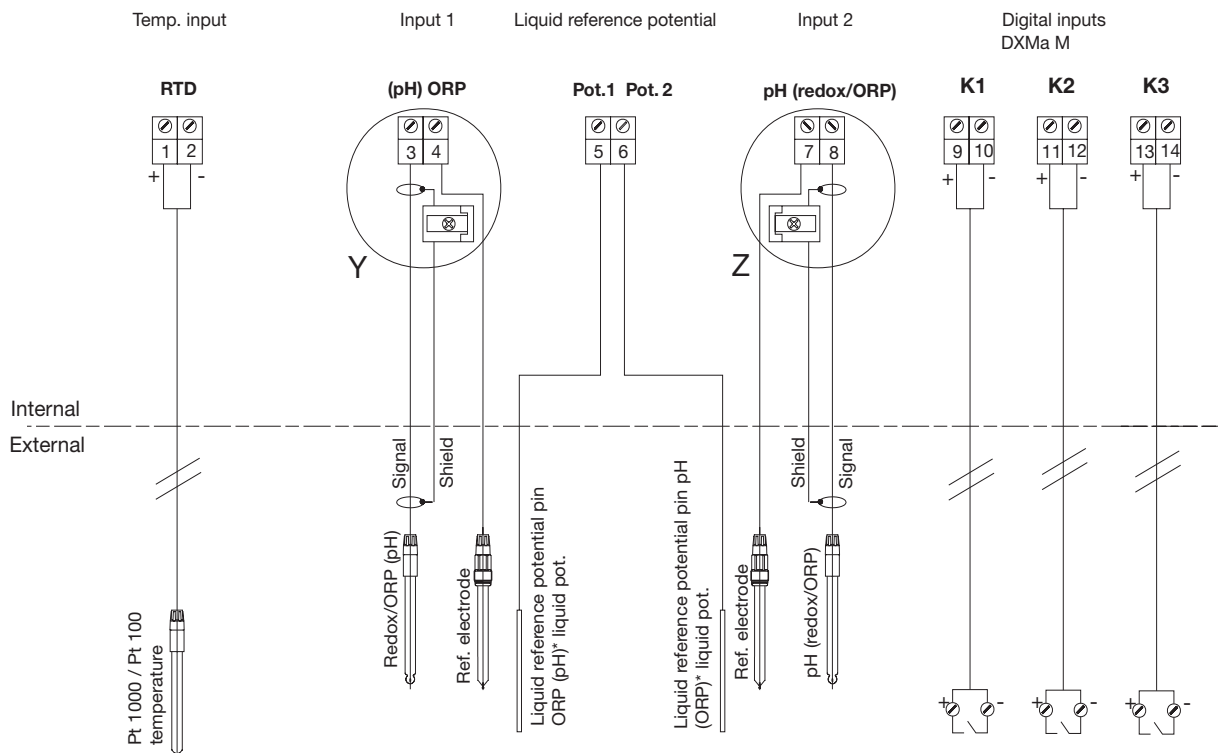
Description	Terminal designation	Terminal no.	Pol.	Function
Temp. input Pt1000/100	RTD	1	+	Pt1000/100 (temp. sensor)
		2	-	
pH/ORP input 1	(pH) ORP	3	Ref.	ORP sensor
		4	meas. sig.	
Liquid reference potential 1	POT 1	5		pH sensor
Liquid reference potential 2	POT 2	6		
pH/ORP input 2	pH (ORP)	7	Ref.	
		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

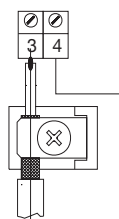
Terminal diagram combination probe



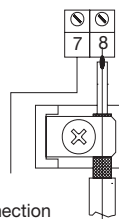
Terminal diagram two-probe measuring chain



Detail Y

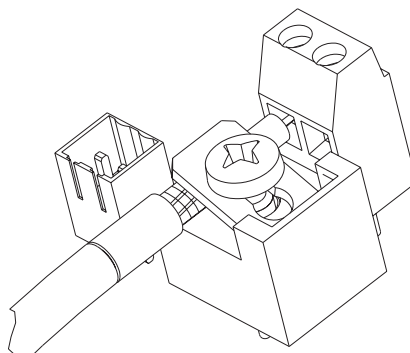


Detail Z



Shield on shield connection

*The function "Liquid reference potential" must be activated in the software.



3713_DXC

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