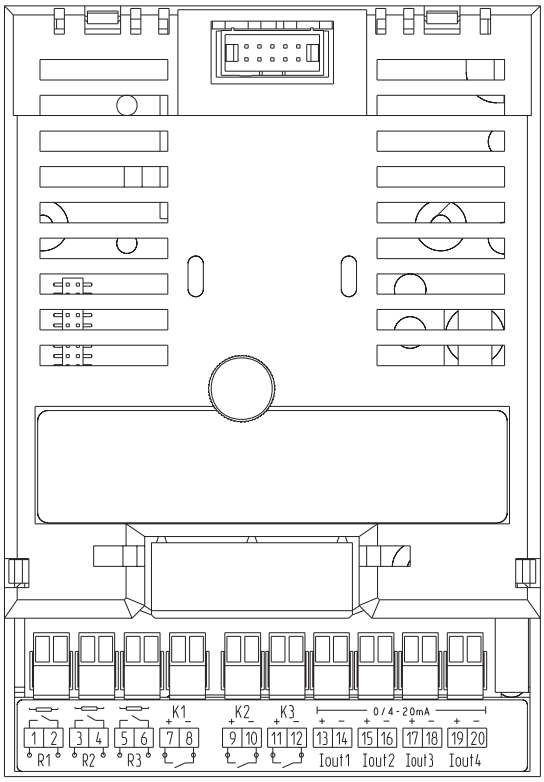
Supplementary Instructions

DULCOMARIN® II, Actuator Module
(Pumps and standard signal outputs mA)
DXMaA



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, Actuator Module
(Pumps and standard signal outputs mA)
DXMaA
© 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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Printed in Germany

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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”).

1 About this module

The actuator module DXMaA provides to the DULCOMARIN® II compact with the control options for 3 dosing pumps via pulse frequency, e.g. to raise and lower the pH value or to dose disinfectants.

The actuator module DXMaA is equipped with the following outputs:

- 4 standard signal outputs 0/4…20 mA, user-programmable and scalable for the measuring values of e.g. pH value, redox/ORP, concentration of free chlorine or total chlorine or combined chlorine or temperature.
- 3 frequency outputs for controlling dosing pumps, e.g. to raise and lower the pH value or to dose disinfectants.

and the following inputs:

- 3 digital inputs for evaluating the alarm relay of the dosing pumps and for monitoring of the tank level.

2 Safety chapter

The actuator module DXMaA may only be used as component part of the DULCOMARIN® II compact.

The installation may only be performed by specially trained personnel!

3 Storage and transport

Only store and transport the module in its original packaging.



IMPORTANT

Also protect the packaged module against humidity and exposure to chemicals.

Environmental conditions for storage and transport:

Temperature: - 10 °C to 70 °C

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

4 Mounting and Installation



WARNING

- ***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.

Carry out the CAN connection as described in the "Operating Instructions DULCOMARIN® II, Part 1: Mounting and Installation".

5 Technical data

Electrical data

Frequency outputs (Opto-MOS relay) for pump control (R1, R2, R3):
Contact type: make contact with series inductance, interference-suppressed
Load rating: 400 V peak, 250 mA switching current, max. 0.8 W
maximum frequency: 8.33 Hz (500 strokes/min.)
Close/open time: 5 ms

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

Standard signal outputs mA (I out 1 - I out 4):
jointly galvanically isolated from the other inputs and outputs
Insulation voltage: 500 V
Output range: 0/4-20 mA (programmable)
23 mA for error message
maximum load: 400 Ω
Accuracy: 0.5% of the output range

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

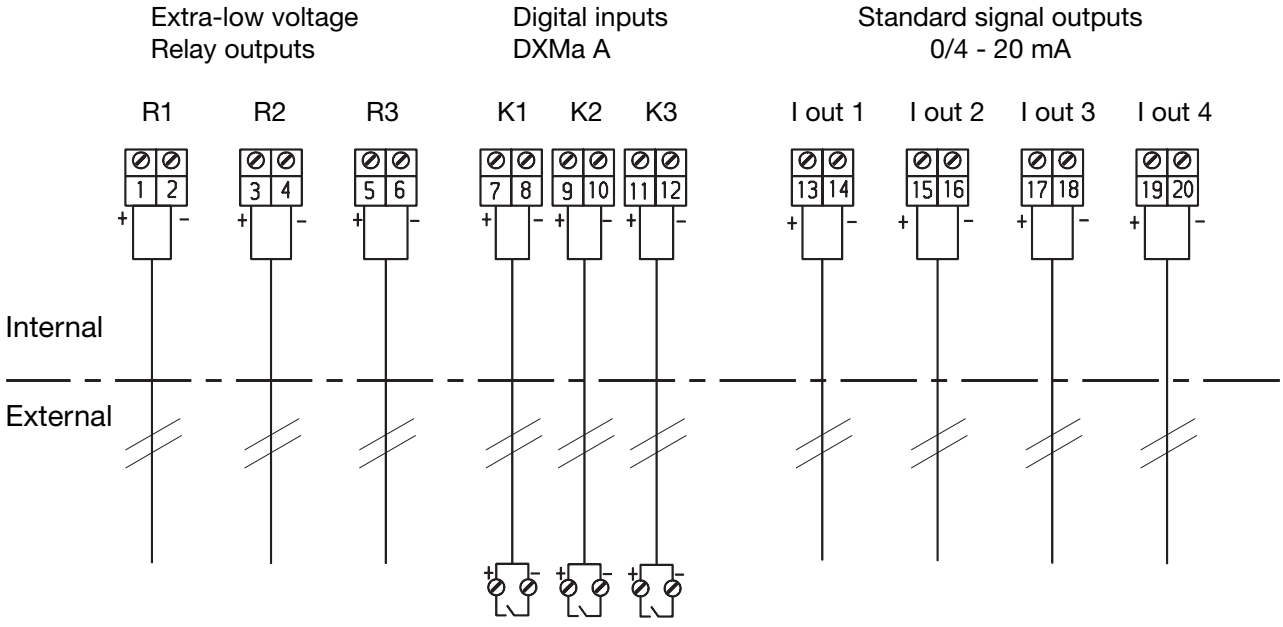
Housing: PPE-GF 10

6 Terminal assignment

Description	Terminal description	Terminal no.	Pol.	Function
Frequency output 1	R 1	1	+	acid pump (control)
		2	-	alkaline pump
Frequency output 2	R 2	3	+	chlorine pump (control)
				redox pump
		4	-	acid pump
Frequency output 3	R 3	5	+	flocculant pump
		6	-	chlorine pump
Digital input 1	K 1	7	+	Error pump acid
		8	-	Error pump alkaline
Digital input 2	K 2	9	+	Error chlorine pump
		10	-	Error acid pump
Digital input 3	K 3	11	+	Error flocculant pump
		12	-	
Power output 0/4-20 mA 1	I out 1	13	+	pH value
		14	-	pH lowering
				pH raising
				chlorination
				flocculation
				(Recorder connection)

Description	Terminal description	Terminal no.	Pol.	Function
Power output 0/4-20 mA 2	I out 2	15	+	redox/ORP value
		16	-	pH lowering
				pH raising
				chlorination
				flocculation
				(Recorder connection)
Power output 0/4-20 mA 3	I out 3	17	+	Chlorine value
		18	-	pH lowering
				pH raising
				chlorination
				flocculation
				(Recorder connection)
Power output 0/4-20 mA 4	I out 4	19	+	Combined chlorine
		20	-	pH lowering
				pH raising
				chlorination
				flocculation
				(Recorder connection)

7 Terminal diagram



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