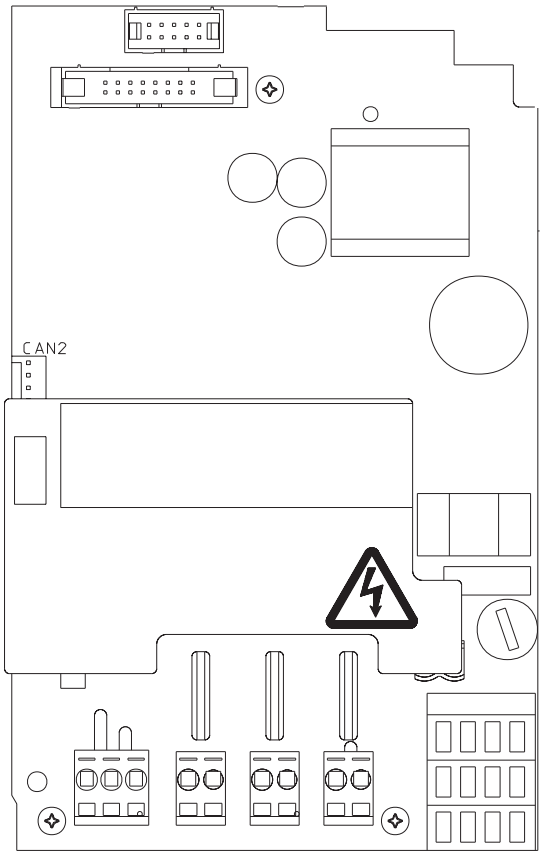
Supplementary Instructions

DULCOMARIN® II, P Module
(Power Supply Module with relays)
DXMaP



DXMa ___ ___ ___ ___ ___ ___

Please enter the identcode of your module!

These supplementary instructions apply only in conjunction with the "Operating Instructions DULCOMARIN® II"!

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, P Module
(Power Supply Module with relays)
DXMaP

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Identcode

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

DXMa | **Measurement module for DULCOMARIN® II, series DXM**

P	**Module:** P-module, power supply module with relays, only mounting type „0“ [1) 2)]
0	**Type of mounting:** No housing, only P module (IP 00)
3	**Version:** Without controls (only mounting type “0”)
0	**Application:** Standard
00	**Language:** No controls [2)]
00	**Approval:** No approval, only P module without housing

1) only with Installation: “W”

2) only with Version: 2, no operator control

DXMa P 0 3 0 00 00

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 power supply module DXMaP with alarm relay and solenoid valve relay provides power to the DULCOMARIN® II compact and facilitates control of 3 solenoid valves or peristaltic pumps via pulse frequency, e.g. to raise and lower the pH value, to dose disinfectants or flocculants, to minimise combined chlorine.

The power supply module DXMaP is equipped with the following outputs:

- power relay output for alarm signalling
- power relay output for solenoid valve or peristaltic pump (pH correction)
- power relay output for solenoid valve or peristaltic pump (disinfectant)
- power relay output for peristaltic pump (flocculant) or relay output (minimizing combined chlorine)

and a power input.

2 Safety chapter

CAUTION

- ***The power supply module DXMaP may only be used for controlling alarm horns, solenoid valves, and peristaltic pumps as well as for voltage supply to the DULCOMARIN® II DXCa.***
- ***The power supply module DXMaP may only be used as component part of the DULCOMARIN® II.***
- ***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" when mounting and installing the module!***

NOTE

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

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

Arrange power supply modules in main branch of CAN-bus DULCOMARIN® II DULCO-Net)

There is always one power supply module in the CPU (central unit).

Divide the number of pools by "2"; round off if there is a remainder:

Number of pools	Additional N or P modules	Number of of pools	Additional N or P modules
1	-	9	4
2	-	10	5
3	1	11	5
4	2	12	6
5	2	13	6
6	3	14	7
7	3	15	7
8	4	16	8

(Exception: Number of pools = 2)

The two light-emitting diodes LED 1 and LED 2 (see last illustration in Section 8 “Terminal connection diagram“) indicate the load on the 24 V power supply for the CAN-bus.

Flash code LEDs, power supply monitoring DULCOMARIN® II (N and P module)

Operating status	LED 1 (H2, current)	LED 2 (H3, voltage)	Current	Remark
Normal	OFF	Green	< 1.1 A	Everything OK
Limit load	Red	OFF	> 1.1 A	Loop in a further power supply module
Overload/short-circuit	Red, flashing	OFF	> 1.35 A	Check wiring

5 Repairs

WARNUNG

- ***Only the fuse may be replaced by specially trained personnel. All other repairs may only be carried out by the customer service!***
- ***The fuse may only be replaced after the module or device has been disconnected from the power supply and has been secured against re-activation (effect on plant?)***
- ***System voltage may be present at the terminals P1 - P4 even when the power supply has been switched off.***
- ***Only use genuine fuses (Order no. 712030)***
- ***Otherwise, all general safety regulations apply.***

6 Technical data

Electrical data

Power relay output for alarm signalling (P1):
Contact type: changeover contact with varistors, interference-suppressed
Load rating: 250 VAC, 3 A max., 700 VA
Contact lifetime: > 10^5 switching cycles (at 3 A)

Power relay output for controller output signalling or limit value signalling (P2 - P4):
Contact type: make contact with varistors, interference-suppressed
Load rating: 250 VAC, 3 A max., 700 VA
Contact lifetime: > 20 x 10^6 switching cycles

Nominal voltage (X1):
90 - 253 VAC (50 / 60 Hz)
Maximum consumption: 500 mA at 90 VAC
180 mA at 253 VAC
Protection from internal with: miniature fuse 5 x 20 mm
630 mA, 250 V, slow
Electrical power consumed: 30 W

The power supply module with relais DXMaP is equipped with the 1A DC power supply unit, 24 VDC.

Environmental conditions

Storage temperature: -10...70 °C

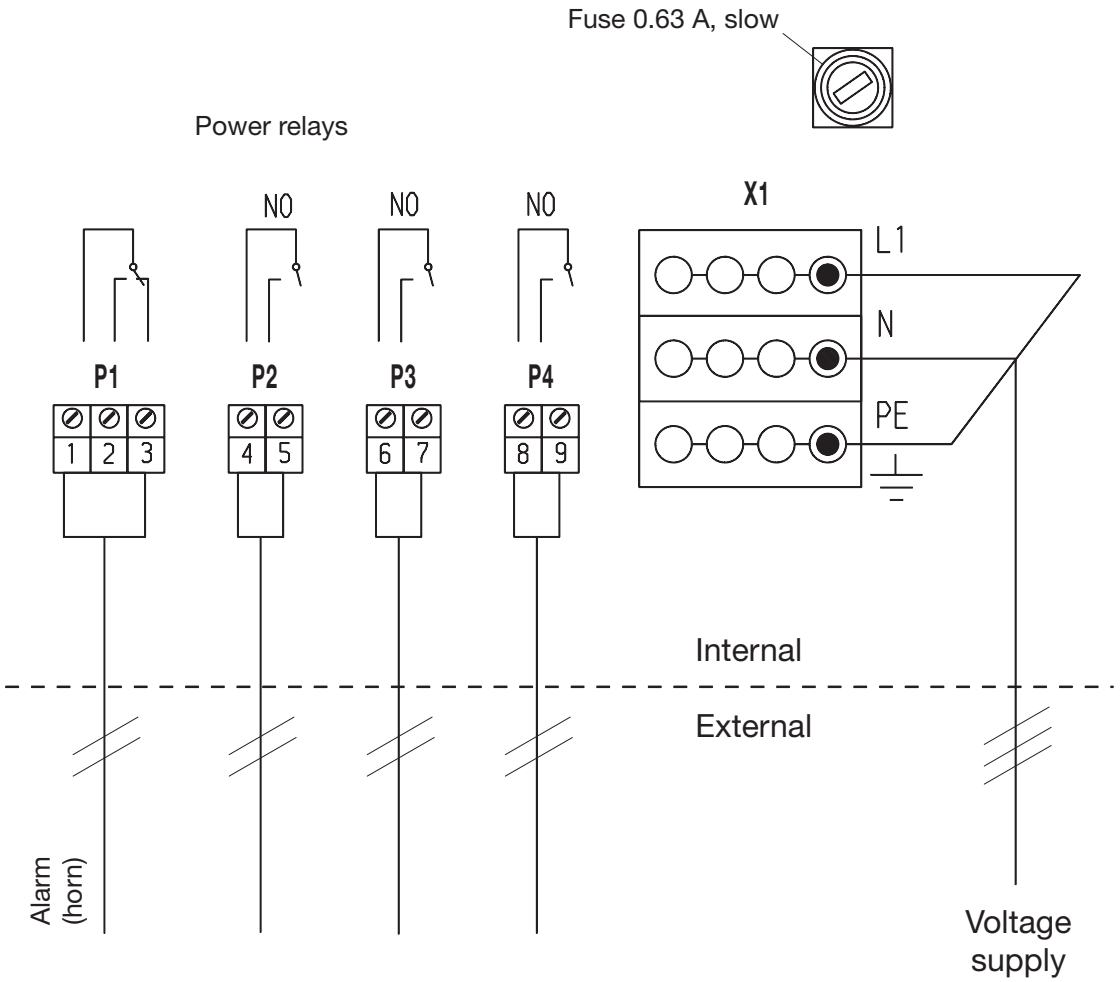
Type of protection: IP 20

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

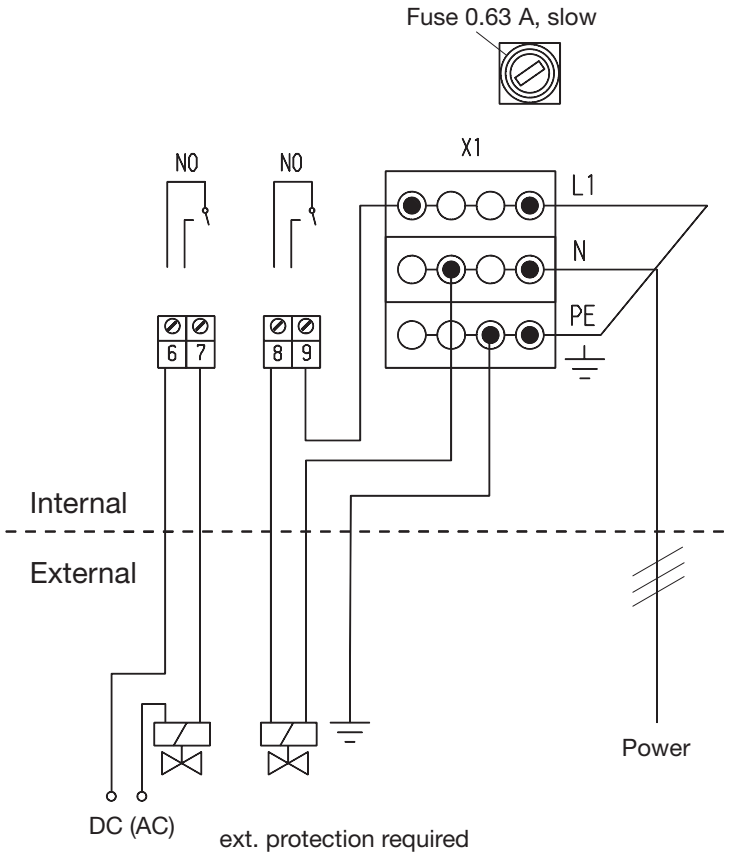
7 Terminal assignment

Description	Terminal designation	Terminal no.	Pole	Function
Alarm relay	**P 1**	1		Signal-horn (control)
		2		
		3		
Power relay 1	**P 2**	4		PWM acid (control)
		5		Solenoid valve (dulco®flex) PWM alkaline (control)
Power relay 2	**P 3**	6		PWM pH lowering
		7		PWM alkaline (control) (Control solenoid valve dulco®flex)
Power relay 3	**P 4**	8		Enabling UV plant PWM chlorine (control)
		9		PWM ORP (control) Enabling heater
Voltage supply	**X 1**	10	PE	
		11	N	
		12	L(1)	

8 Terminal connection diagram



Example for the connection of a solenoid valve (or peristaltic pump DULCO®flex DF2a or motor dosing pump alpha)

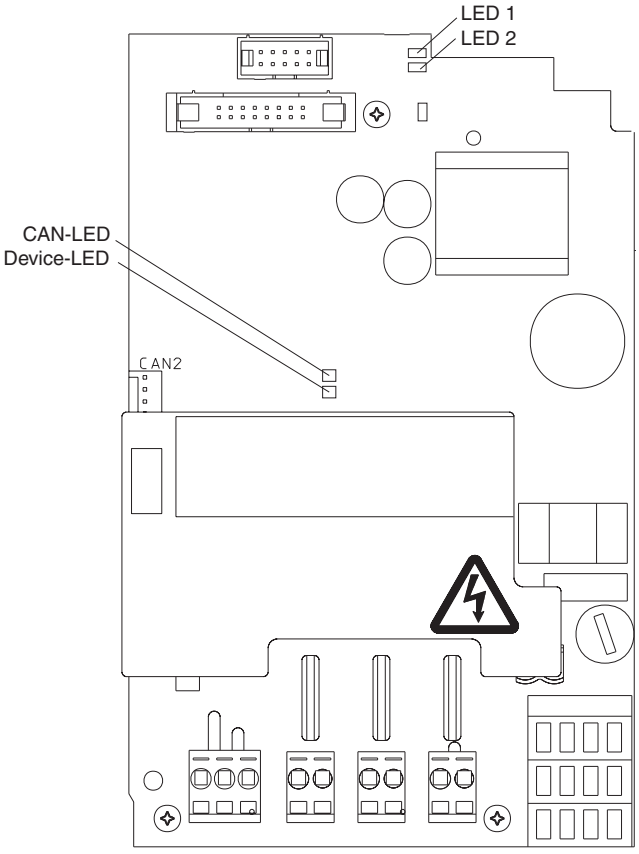


ext. protection required

Diagram also applies to DF2a, Alpb

IMPORTANT

External protection required!



Technical changes reserved.

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