

- **Simple usage over membrane keyboard and lit display**
- **Diaphragm metering pump max. 15 l/h against 0.6 bar**
- **Inductive conductivity control unit which switches over automatical into the adjustment ranges:**
  - 0 – 30 mS/cm**
  - 0 – 100 mS/cm**
  - 0 – 200 mS/cm**
- **Maintenance-free measuring principle**
- **Exact control and compliance of the concentration**
- **Encoded user authorisation**
- **Automatical measuring and compensation of temperature**



The **P3 CDI 01** is a diaphragm metering pump driven by an electric motor, and with integrated inductive conductivity controller. The unit is used for concentration depending metering of P3 products, alcalic and acid cleaning solutions. Concentration is detected by a microprocessor on the main board. As soon as the concentration remains under the pre-adjusted value, the detergent is sucked off the storing vessel and metered into the process.

As soon as the concentration comes up to the pre-adjusted value approximately, the system switches over to a „pulse-pause operation“, until the value is reached completely. Over ranging, the concentration is suppressed one by a self-learning system (fuzzy logic).

The temperature compensation can be used for alcalic (1.9 % / K) or acid detergents (1.25 % / K).

All parameters can be adjusted over the multilingual menu guidance, e.g.:

- maximal metering time
- manual metering time
- empty signal delay
- maximal detergent concentration
- minimal temperature limit etc.

During the adjustment over keyboard, all values are shown in the display.

The installation of a plugable additional PCB allows an external zero-potential metering release and an automatical pre-metering. The pre-metering time has to be adjusted in the parameter level. With help of the interface module for enable signal, also decontrol-signals from 12 to 230 V AC/DC can be connected to the additional PCB.

With the unit P3 CDI 01 and its accessory parts, we offer you a complete delivery performance for the reliable use in the food industry.

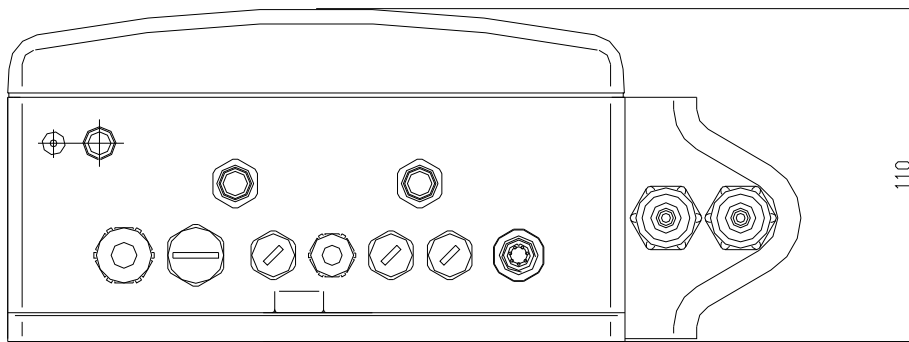
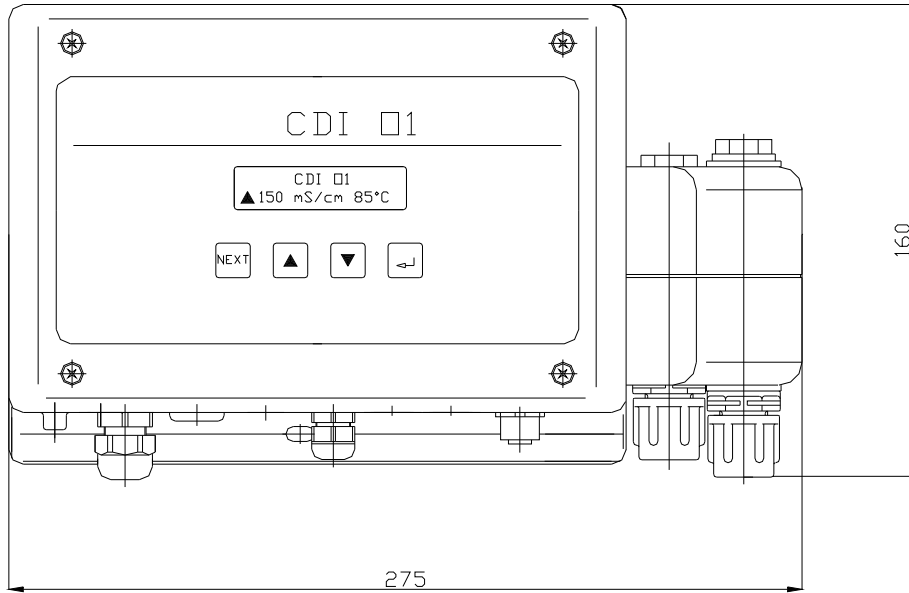


## Technical Data:

<p>Power supply: (230 V, 50/60 Hz), depending on (115 V, 50/60 Hz), the version (24 V, 50/60 Hz)</p> <p>max. power input: 65 mA</p> <p>Power supply main board: 2x 12V AC, 15VA 50/60Hz</p> <p>Type of protection: IP 65</p> <p>Protection class: II</p> <p>Metering capacity: approx. 15 l/h against 0.6 bar</p> <p>Suction height: max. 2 m</p> <p>Pump materials: Pump head, valves: PVDF Diaphragm: PTFE Sealing: EPDM Valve balls: stainless steel</p> <p>Inputs: on the main board: - power supply 2 x 12 VAC - conductivity probe, inductive - temperature sensor for the washing tank - detergent empty signal, 5 VAC</p> <p>Outputs: on the main board: - detergent metering pump, 24 V AC - acoustic alarm, 24 V AC (buzzer) - external valve, 24 V AC</p>	<p>Indication: two-lined, 16-digit LC-display</p> <p>Controlling functions: conductivity control time control</p> <p>Adjustment ranges: 0 – 200 mS/cm 0.1 – 19.9 mS/cm in steps of 0.1 mS/cm each 20 – 200 mS/cm in steps of 1 mS/cm each automatical switch over to range</p> <p>Accuracy: ± 2.5% of the conductivity adjustment &gt; 10 mS/cm</p> <p>Reproducibility: amplitude fluctuation max. ± 2.5 % of the adjustment</p> <p>Max. metering time: 10 – 9999 Sec.</p> <p>Manual metering time: 1 – 9999 Sec.</p> <p>Pre-metering time: 0 – 9999 Sec.</p> <p>Temperature of the surrounding area: max. 45° C</p> <p>Dimensions: 360 x 110 x 160 mm (w * d * h)</p> <p>Weight: approx. 4.8 kg</p>
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**Notice:** To guarantee the newest state of our products, we reserve the rights for single technical changes.

**Dimensions:**



**Ordering data:**

**Item Description**

- CDI 01, 230 V, 50/60 Hz
- CDI 01, 230 V, 50/60 Hz, incl. additional PCB
- CDI 01, 115 V, 50/60 Hz
- CDI 01, 115 V, 50/60 Hz incl. additional PCB
- CDI 01, 24 V, 50/60 Hz
- CDI 01, 24 V, 50/60 Hz incl. additional PCB

**Material No.**

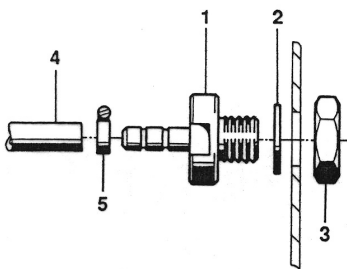
- 123519
- 123524
- 123525
- 123526
- 123527
- 123528

**Accessories:**

<b>Article</b>	<b>Material No.</b>
<b>Inductive conductivity measurement probes with integrated temperature sensor</b>	<b>287410</b>
Construction:	oval spherical cap, streamline-shaped with 8 mm meter flume diameter
Material:	PP (polypropylene)
Dimensions:	39 x 50 mm (Ø * h), (without fixing adapter)
Pressure resistance:	PN = 10 bar at 20° C
Temperature resistance:	max. 90° C
Temperature sensor:	NTC resistor (R25 = 10 kΩ)
Response time of temp. sensor in measuring cell:	approx. 30 s (90 %-value) with VA-sensor
Material of the sensor's protecting tube:	stainless steel, 1.4571
Sealing element:	O-ring, EPDM 281
Connection cable length:	6 m, possible extension with terminal box 288101!
Type of cable:	7-pin special cable
Connection of measuring lead:	sensor side permanent connection device side circular plug



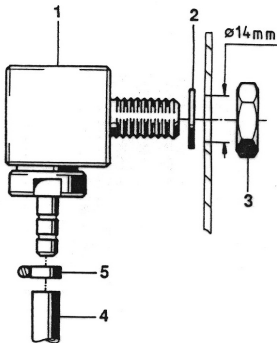
<b>Article</b>	<b>Material No.</b>
Mounting plate for the simple attaching of the housing to the wall	223512
Additional PCB for external zero-potential release and pre-metering expandable as plugable PCB	223552
Interface module for enable signals for connection to additional PCB for decontrol-signals from 12 to 230 V AC/DC	223595
Extension cord incl. appropriate round plug	E99000128



Tank connection straight, stainless steel, to the metering line for textile reinforced hose 6/12 (id/od) and PE-pipe 8/10 (id/od)	240620
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**Article**

**Material No.**



Tank connection angular, stainless steel, to the metering line for textile reinforced hose 6/12 (id/od) and PE-pipe 8/10 (id/od)

240624

Hose clamp, VA ,D12  
Textile-reinforced hose , 6/12  
PE-tube 8/10

415013183  
417400123  
417400310



**Suction lance**

with single empty signal report inclusive ball non-return valve, suction strainer, zero-potential empty signal contact (empty = contact interrupted)

Material: PVC  
Seals: Viton B  
Ball: glass  
Pipe diameter: 32 mm  
Hose connection: 6/12 mm  
Connection cable: circular connector

for vessel	20 l	length 475 mm	188473
for vessel	30/60 l	length 725 mm	188474
for vessel	100/200 l	length 975 mm	188475
for vessel	200 l	length 1125 mm	188444



**Calibration box for conductivity measurement (inductive)**

255195

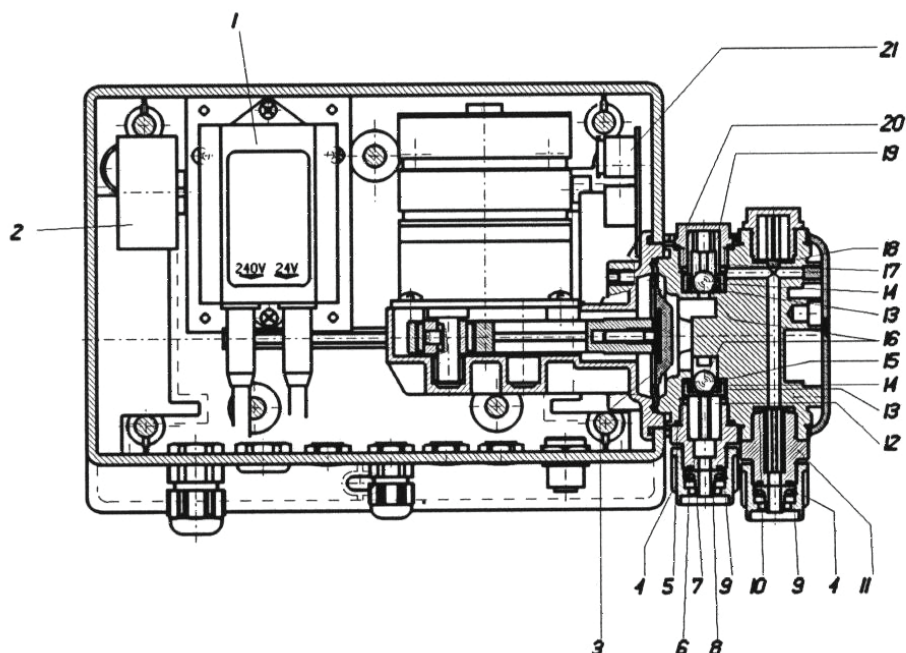
with simulation resistances  
for the measurement ranges 0 ... 2 mS/cm (shielded probe 287520)  
0 ...2, 0 ... 20, 0 ... 200 mS/cm (not shielded probe 287502)

**Conductivity simulator**

289190

with 5 measuring range specific simulation resistors

**Spare parts:**



**Article**

1. Mains o. power transformer 240 VAC / 2x12 V  
Mains o. power transformer 120 VAC / 2x12 V  
Mains o. power transformer 24 VAC / 2x12 V
2. Acoustical signal
3. Membrane, PTFE
4. Union nut, PVDF
5. O-ring, EPDM, 18 x 2
6. O-ring, EPDM, 10 x 2.5
7. Connection item, suction valve
8. Connection nipple
9. Cutting ring, NW 12
10. O-ring, EPDM, 10 x 3
11. Connection item
12. Valve insert
13. O-ring, EPDM, 6 x 2
14. O-ring support
15. O-ring, EPDM, 12 x 2
16. Ball  $\varnothing = 8$  mm, 1.4401
17. Cone thrust spring
18. Disc valve
19. Suction valve insert
20. Valve top
21. Condensator PCB
22. CDI 01 - PCB
23. Pump head  
Suction connection  
Suction valve insert  
Pressure valve  
Pressure connection  
Pump head complete

**Material No.**

- 418931009
- 418931015
- 418931016
- 418271008
- 240617
- 34800142
- 417001170
- 417001080
- 34060144
- 34800159
- 34040107
- 417001081
- 34060143
- 32170147
- 417001034
- 32400104
- 417001101
- 414203031
- 30610108
- 30590309
- 32170163
- 34060138
- 223556
- 287670
- 224033
- 227962
- 227933
- 227963
- 227961
- 227964