# LMI 03

# A complete conductivity measuring and control unit

The inductive conductivity measuring and control unit LMI 03 is specially designed for permanent concentration measurement and control of alkaline or acidic cleaning and disinfection solutions.

ECXLAB

The LMI 03 is designed as a wall-mounted unit. The measurement works according to the electrodeless measuring principle. The conductivity probe is combined with a selectable temperature compensation for alkaline or acidic product. Function keys on the front with digital display guarantee simple and reliable icon driven operation. The self-optimizing controller integrated into the LMI 03 keeps the detergent concentration at a constant and accurate level.

### **KEY PRODUCT BENEFITS**

- Adjustable mode of operation:
- Concentration control
- CIP phase separation
- Precise, fast temperature sensor
- Digital display of conductivity and temperature
- Two adjustable set points
- USB import/ export functions
- Fault signal output
- Pre-metering output
- Time-controlled pre-metering for initial charge
- Adjustable pre-metering time delay
- Metering time limit
- 0/4 20 mA current output for conductivity and temperature



## Range of applications of conductivity measurement

#### DAIRY

- ► CIP facility
  - Concentration control
  - 1-phase separation
- ► Bottle washers
  - Concentration control
  - Rinse zone monitoring
- Cooling water monitoring

#### **BEVERAGE INDUSTRY**

#### ► CIP facility

- Concentration control
- 1-phase separation
- ► Bottle washers
  - Concentration control
  - Rinse zone monitoring
- Keg- and container washers
  Concentration control
- Spring water monitoring
- Cooling water monitoring

#### MEAT AND FISH HANDLING

- ► CIP facility
  - Concentration control
  - 1-phase separation
- Crate washers
  Concentration control

#### Technical specification:

Model:	LMI 03
EBS no.:	10240763*
Housing:	Polycarbonate housing for wall mounting
Dimensions:	271 x 190 x 90 mm (w x h x d)
Safety type:	IP 65
Measurement range:	0 mS/cm – 500 mS/cm
Conductivity/Temp indication:	digital, LC-display with colored backlight
Temperature compensation:	0 – 100 °C, automatically with temperature sensor NTC 2 possible temperature compensation factors: acid (1.25 %/K) and caustic (1.9 %/K) (ex-works settings)
Pre-metering:	0 – 9999 s, adjustable in steps of 1 s
Pre-metering time delay:	0 – 9999 s, adjustable in steps of 1 s
Metering time limitation:	10 – 9999 s, adjustable in steps of 1 s
Switch outputs:	1 floating change-over contact for SP 1, load capacity 8 A/230 V AC 1 floating change-over contact for SP 2, load capacity 4 A/230 V AC 1 floating change-over contact for fault message signal, load capacity 4 A/230 V AC 1 floating change-over contact for pre-metering (additionally configurable), load capacity 4 A/230 V AC
Current output:	0/4 - 20 mA corresponding to 0 - 100 % of the set measuring range max. electric burden resistor 400 $\Omega$
Inputs:	1 floating make contact for pre-metering start 1 floating break contact for metering lock 1 empty signal input for empty signal monitoring by means of reed contact
Mains power supply:	24V - 240 VAC 50/60 Hz
Ambient temperature:	0 – 50 °C
Weight:	approx. 3 kg

\*The LMI03 comes without the measuring probe

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