Manufacturer Information

for users regarding software updates
(following the NAMUR recommendation 53)

1   Type of device

☒ Field device / signal processing device
☐ Monitoring- / operation system / hand held terminal etc.
☐ Modem / interface

Manufacturer	: Endress+Hauser
Device	: Liquiline
Type	: CM442, CM444, CM448
Previous software version	: 1.04.01

How can the previous software version number be identified:

(a) With standard fieldbus communication
(b) with FieldCare/DTM
(c) Display

2   Software

New software version   : 1.05.00

Description of the modification in comparison with the predecessor version:

Enhancements & Improvements:
- Support of the optical sensors for fresh water turbidity CUS51D
- Implementation of ChemoClean Plus for freely programmable state machine up to 4 relays
- Cleaning scheduler enhanced with calender function
- Measurement range switch enhanced to more measurement parameter
- HOLD function enhanced to 8 individual channels
- New supported fieldbus protocol EtherNet/IP
- Integrated webserver enhanced with login
- External pressure sensor usable for dissolved oxygen measurement
- External temperature sensor usable for conductivity measurement
- Print of configuration optimized
- Feed forward control of PID parameter via fieldbus
- Calibration data sets for SAC, nitrate and turbidity selectable via fieldbus
- Oxygen measurement: salinity calculation via external conductivity sensor possible
- Conductivity measurement: output value according display value

3   Compatibility

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Is the operating tool compatible with the installed device software?

☒ Yes
☐ No, description:

Is a software update generally recommended?

☐ Yes, reason:

    The software update can be performed by means of ...
    • SD card

☒ No, reason:

    Update only necessary if functional enhancements are desired

4 Instruction manual

Is a new instruction manual necessary due to the modification of the software?

☐ Yes
☒ No

Which manual corresponds to the new software:

Device	Communication options		Manual Marking
CM442/444/448	All	BA00444CEN.pdf	Liquiline Commissioning
		BA00445CEN.pdf	Liquiline Maintenance & Diagnostics
		BA00450CEN.pdf	Liquiline Operation & Setting
		BA00451CEN.pdf	Liquiline Calibration

The new instruction manuals can be referred in Internet:
http://www.endress.com   - area „DOWNLOAD"
                         - declaration of the device and kind of manual

5 Price

Change in price of device in comparison with the predecessor version?

☐ Yes, new list price and update costs (without installation) are enclosed

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☒   No

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