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	: Liquistation
Type	: CSF48, CSF34
Previous software version	: 1.03.01

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 : 1.04.00

Description of the modification in comparison with the predecessor version:

Samper - New Features, Enhancements & Improvements

- Start screen with direct link to edit the sampling program
- After power reset the sampling program continues
- Inline sampler with sampling volues 10 ml ... 1 l
  All other sampler: minimal volume 20 ml
- Sup-program active selectable for binary output or relay
- Optimized sampling volume for vacuum sampling with capacitive media detection
- Bottle change according edited time interval allow empty bottles now
- Bottle change according time zone configuration

New Features/Modules:

- New extension module: 2x digital input & 2x digital output ("DIO") featuring:
- Input: Measuring range switch for conductivity
- Input: External Hold
- Input: triggering of a cleaning cycle via an external signal
- Input: PID-controller enable/disable e.g. via CCA250-Proximity switch
- Input: usable as "analog input" for Pulse Frequency Modulated (PFM) input signals
- Output: static, usable comparable to a relay, e.g. for signalizing diagnostic states, limit switches, etc.
- Output: dynamic, usable comparable to a wearless "analog output" with Pulse Frequency Modulated (PFM) signals (e.g. for dosing pump control)
- Status of Relays, digital inputs and digital outputs can be displayed also in user definable

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measurements screens
- Key lock (by long pressing the Navigator) with optional password protection
- The printing of the device configuration via FieldCare is optimized
- PID-Controller: now supports also disturbance feed forward control allowing e.g. flow proportional dosing via 0/4..20mA, digital fieldbus or the new digital inputs.
- Mathematics: pH out of conductivity value is now also calculable basing on LiOH (according the new "VBG Powertech group guideline" for the power & energy industry)

Enhancements & Improvements:
- Offset Icon - Harmonization across all parameters to not display the offset icon anymore Note: Offset Icon will only be displayed at pH and ORP
- Human Machine Interface (HMI): Translation of all new menu items (including the items of the release 3a) into all available languages

ISE: New Features, Enhancements & Improvements
- Re-arranged and simplified calibration menu implemented
- Calibration of any two parameters in one sequence is possible (except pH/temperature)
- Slot numbers in the menus are replaced by parameter name
- A user defined ISE type can be chosen
- At the end of the standard addition the concentration of the original sample is displayed.

pH/ ORP: New Features, Enhancements & Improvements
- Support of CPSx6 combined pH/ORP electrodes
- Icon for automatic, manual or medium compensation (ATC/ MTC/ MED) same as with conductivity are available

Conductivity: New Features, Enhancements & Improvements
- The raw value in resistivity mode at the unit "µS" is available with three decimal places
- Extension of ISO Temperature compensation table by "Water ISO7888 (20°C)"
- Integration of new & enhancing existing concentration tables

Dissolved Oxygen: New Features, Enhancements & Improvements
- All units now available with three decimal places (e.g. 0.003 mg/l)
- A warning message for zero current now also for negative values (before: just+1nA, now: +/- 1nA)
- After successful calibration the new slope and in addition the used calibration pressure value is now shown. User can now cross check if the calibration pressure of the extended setup/calibration setting is used.

Turbidity, Nitrate, SAC: New Features, Enhancements & Improvements
- Turbidity: auto ranging can be switched on or off. In the Off-mode, the units mg/l or g/l
- or % can be chosen. In the On-mode, the system selects the units mg/l or g/l automatically.
- Turbidity, SAC, Nitrate: A Dataset can be saved also after editing its name
- Turbidity, SAC, Nitrate: When copying datasets, it is now indicated what will be used as source and as target.
- Turbidity, SAC, Nitrate: Values for Offsets can now be entered for a wide range. The range is not defined anymore by the sensor.

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3 Compatibility

Is the operating tool compatible with the installed device software?

☒ Yes
☐ No, description:

The HART DD and the HART DTM are fully compatible.

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

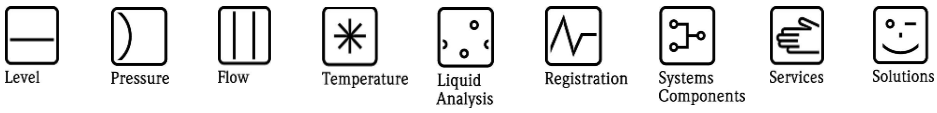
Which manual corresponds to the new software:

Device	Communication options		Manual Marking
CSF48, CSF34	All	BA00443CDE.pdf	Liquistation Commissioning
		BA00463CDE.pdf	Liquistation Maintenance & Diagnostics
		BA00464CDE.pdf	Liquistation Operation & Setting
		BA00467CDE.pdf	Liquistation 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?



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☐ Yes, new list price and update costs (without installation) are enclosed
☒ No

Endress+Hauser
People for Process Automation