**Technical Documentation** 



# COMS

COMS with SECON, Installation Quick Guide for 2-float probes

(en)



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# 1 Installation of VISY-Stick Oil and VISY-Sludge

#### The oil separator is Ex zone. Observe safety regulations!

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During the six-monthly inspection of the oil separator, the VISY-Stick Oil probes with two floats and the VISY-Sludge must be cleaned of dirt and adhesions with a damp cloth.



The COMS system fulfils the functions of an automatic warning system for separators of light liquids. **Some** alarms can be forwarded on request with potential-free change-over contacts.

- a) To connect the sensors, a 4-core cable from the oil separator to the petrol station building must be available.
- b) Clean the oil separator (light liquid separator and sludge trap) and fill it to overflowing with water.
- c) Install VISY-Command Web or alternatively VISY-Command with a SECON client.
- d) Install VISY-Stick Oil (mechanically). For installation of the measuring sensor, the oil reservoir of the oil separator must be within the measuring range of the VISY-Stick Oil. <u>Note:</u> The dimensions  $a_3 = 240$  mm and  $a_4 = 100$  mm must not be undercut!

See also

User guide for determining the length and positioning of the probes for an oil separator. (See next figure)

e) Install VISY-Sludge (mechanically).

The measuring sensor must be installed that it

- is positioned below the maximum oil layer thickness and
- at least 200 mm above the maximum sludge thickness, and
- has a maximum distance of 1400 mm to the bottom of the sludge trap.
- f) Electrically connect VISY-Stick Oil and VISY-Sludge with the FAFNIR connection cable and, if necessary, an extension to VISY-Command (Web).







- 1 = VISY-Stick Oil
- 2 = Interface float
- 2.1 = Product float
- 3 = VISY-Sludge
- 4 = Cable connector (2-1)
- 5 = Coalescence filter
- 6 = Oil layer
- 7 = Mud layer
- 8 = Mounting bracket

- O<sub>max</sub> = Maximum oil layer thickness
- S<sub>max</sub> = Maximum sludge layer thickness
- $a_1$  = Separator depth
- a<sub>2</sub> = Distance (road overflow)
- $a_3$  = Safety distance = 240 mm
- $a_4$  = Safety distance to the ground = 100 mm



# 2 Basic settings in VISY-Setup

To configure the VI-4 board in VISY-Command (Web), you must use **VISY-Setup** software in the **version 4.9.3.255** or higher. The recent version you will find on our homepage <u>https://www.fafnir.com</u>

The VI-4 board must be equipped with firmware of the version 4.2.9.255 or higher.

To update the firmware please contact our Technical Support department with the telephone number +49 40 398207-0.

a) Adjust the "*Data protocol* for communication with VISY-Stick" to "Multi Probe 4800 bps":
 <u>Menu</u>:

Central unit [F2]  $\rightarrow$  Advanced settings  $\rightarrow$  Data Protocol for VISY-Stick communication  $\rightarrow$  Select and accept "Multi Probe 4800 bps"

b) Enter the *device numbers* of VISY-Stick Oil / VISY-Sludge:

Menu:

Select Probes [F4]  $\rightarrow$  select the "Probe Terminal No." of the sensor  $\rightarrow$  select the measuring sensor (VISY-Stick or VISY-Sludge)  $\rightarrow$  enter the "**Serial number of the probe**".

- c) Select *Type of product* for the oil separator: <u>Menu:</u> Probes [F4] → Type of Product: - Select "light fluid"
- d) Enter the *Product Name*:
   Menu:
   Probes [F4] → Product name: Enter Oil separator TF<sup>1)</sup>
  - Oil separator TF (=tank field) or
     Oil separator WS (=washing street)



# 3 Configuration

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For configuration we recommend the internet browser "Mozilla Firefox".



The router must be set to Dynamic Host Configuration Protocol (DHCP)!



The SECON software must be in version 2.4.21.03 or higher.

#### 3.1 Network connection between SECON-Client and notebook

- a) Connect your notebook via network cable to the router which is connected with SECON-Client / VISY-Command Web.
- b) To access the configuration menu of the SECON-Client, please enter: User: admin Password: vap22765
- c) Change the *language*:
   Configuration → Settings → Language and select your language (e. g. <u>English</u>)

VAPORIX LEVEL Environmental History Configuration Information Truck Drv Dsp Language Tank 2 Tank 4 Tools Services Super 95 (E10) (E10) Super 95 Alarm Volume 5182.7 L L 17336.7 L 12960.7 kg 3883.2 kg Network kg





### 3.2 Further configuration with the notebook

#### • Open the WEB GUI:

Configuration  $\rightarrow$  Info  $\rightarrow$  WEB GUI

VAPORIX LEVEL Umwelt-Sensorik Historie		Konfiguration	
	Tankstelle	Info	
Tank_1	WEB GUI	Einstellungen	Tank 3
	WebDAV	Tools	
Normal 0.0 L	Software-Version		Diesel 0.0 L
0.0 kg	Netz IP-Adresse		0.0 kg
	Route-Tabelle	٨	
Tank,4	VPN		Tank 6

#### Following window opens:

VAPORIX LEVEL U	nwelt-Sensorik Historie Konfiguration
	Konfiguration » Info » WEB GUI
	User GUI
Adresse	https://10.28.199.213
Benutzer	fafnir
Passwort	fafnir22766
Manuals	MENU: Info > Manuals
Documents	MENU: Info > Documents
	Admin GUI
Adresse	https://10.28.199.213/admin
Benutzer	admin
Passwort	******

• For configuration with the Internet browser (FireFox), copy the Admin GUI address from the Admin GUI field and enter it in the browser's address bar, in this example: https://10.28.199.213/admin



• After confirming the Admin GUI address in the internet browser, a new window opens for logging in with username and password:

User: admin

Password: Fafnir22765Altona

⊕ 10.28.199.217			
Diese Website fordert Sie auf, sich anzumelden.			
Benutzername			
admin			
Passwort			
•••••			
Anmelden Abbrechen			

- With the button "Anmelden" you will be logged in.
- The configuration wizard starts. Press the "Next" button





• Select options "Station data" and "Oil Separator"

Konfiguration	Ansicht	
		Konfiguration » Wizard
		Step 1 of 3 » Select Steps «
3	Please select option(s)	Configuration Step(s)         ♥         Station data         ●         WEB-Access to the SECON-GUI         □         Time Zone         ●         ∨APORIX         ●         ○ <td< td=""></td<>
В	ACK	Reset NEXT

Press the "NEXT" button

• Enter the station data:

Configuration » Wizard			
S	Step 2 of 3 » Station data «		
	Station / Object		
Internal No. Name Street	12345 Petrol Station Street No. 1		
Postal Code City Country	D-12345 Hamburg Germany		
	Geographic Coordinates		
Latitude Longitude	53,5686 ÷ 10,0386 ÷		
BACK	Reset	NEXT	

- Determination of geographic coordinates (latitude and longitude, optional):
  - 1. Open the internet browser
  - 2. Start Google Maps
  - 3. Right click on the location of the station with the mouse
  - 4. In the opened context menu select "What is here?"
  - 5. The coordinates are displayed (latitude / longitude)
  - 6. Enter the geographical coordinates in the according fields
  - 7. Press the "NEXT" button



• Configuration of the oil separators and the evaluation

#### The following window is divided into three sections:

- 1. INFORMATION: Detected probes (sludge probe / tank probe)
- 2. Common settings for all oil separators
- 3. Settings for individual oil separators

#### 1. INFORMATION: Detected probes

The measured values of the Sludge Probe »VISY-Sludge« and the Tank Probe »VISY-Stick« are displayed here.

	INF	FORMATION: Detektierte	Sonden [ 2019-05-20 13:33:15 ]		
Schlammsonde » VIS	Y-Sludge «		Tanksonde » VISY-Stick «		
Sonde Nr.	Messwerte	Lev.[mm]	Desdukt Name / Canda Na	Messwerte	Lev.[ mm ]
			A CONTRACT OF A		
6		900.0	Frodukt-Hanle / Sonde Nr.	Produkt	Water

The smallest detectable light liquid layer is 33 mm. Measurements below 33 mm are not possible due to the physical structure of the VISY-Stick Oil probe.

#### 2. Common settings for all oil separators

#### "Logging" area:

The settings in this area <u>should remain unchanged</u>. The checkbox "Activation" is already activated by default.

#### "Options" area:

- Time-out maintenance after: 8 hours (recommendation)
- Day of monthly inspection: 0 (recommendation)
- Alarm repeat »Light fluid too long constant« after: 1 or 2 day (s) (recommendation)

(	emeinsame Einstellungen für alle Ölabscheider
Aktivierung V Intervall 1 Std. Start Zeit 00:00 V	Optionen       Autom. Beenden der Wartung nach       8       Std.         Tag der monatlichen Sichtprüfung       0       0       1         Alarmwiederholung »Leichtflüss. zu lange konstant« nach       2       Tag(e)



#### 3. Settings for individual oil separators

#### "Oil separator" area:

- Number: freely selectable; e.g. 1 for the first oil separator ...
- Name: choose a significant name, e.g.: City (HH); Station Number: 54; Number of the oil separator: 12345678

The name would then be, for example: HH-54-12345678

ldx.		Settings for individual Oil Separators
	Oil Sep Number 1	atator

#### "Sludge probe »VISY-Sludge«" area:

- Probe assigned to this oil separator: Activate the checkbox by a check mark
- Probe No.: Probe terminal to which VISY-Sludge is connected.
- Distance to oil separator bottom: measured value VISY-Sludge
- Alarm threshold of the mud layer: 50% of the maximum permitted mud layer





#### "Tank probe »VISY-Stick«" area:

- Assign probe to this oil separator: Activate the checkbox by a check mark
- Probe No.: Probe terminal to which VISY-Stick Oil is connected.
- Reference filling height: Corresponds to the reference height: measured value VISY-Stick
- Max. light liquid volume: enter here the maximum oil storage volume of the oil separator in **litres** see also nameplate
- Max. light liquid level: enter here the maximum oil layer thickness that can be absorbed by the oil separator see also nameplate
- »Light liquid layer too thick« Alarm threshold: Enter 80% of the maximum permitted oil layer thickness (see nameplate). It is necessary to check if the average volume can be taken up by the remaining 20%. Otherwise, the alarm threshold must be set to e.g 70%.

The average volume is calculated from the pump capacity of the dispenser with the highest flow rate per min. x 3.

Example 1: The highest pump capacity of the dispenser are 40 litres/minute => (40 L/min) x 3 min. = 120 litres

Example 2: The highest pump capacity of the dispenser are 80 litres/minute => (80 L/min) x 3 min. = 240 litres

 »High level, retention« Alarm threshold: enter here a value between 120 and 200 mm (measured from the reference height)





#### "Alarm »light liquid too long constant«" area:

- Recognition time span: 25 days (recommendation)
- Minimum level change: 5 mm(recommendation)

<u> </u>	Alarm » Light fluid too long constant «		
	Recognition time span	25	Day(s)
	Min. Level change	5	mm

If another oil separator is to be added, then press the "Add new Oil Separator" button:

Add new Oil Separator

ldx.	Settings for in	ndividual Oil Separators
	Oil Sepatator           Number         1         Identifier         HH-54-123	345678
1	Sludge Probe » VISY-Sludge « Assign probe to this Oil Sep. Probe No. 2 Distance to Oil sep. bottom 980 mm Alarm threshold sludge layer 216 mm	<ul> <li>Tank Probe » VISY-Stick «</li> <li>Assign probe to this Oil Sep.</li> <li>Probe No.</li> <li>Max. filling level</li> <li>494 mm</li> <li>Max. filling level</li> <li>494 mm</li> <li>Max. Light fluid Volume</li> <li>300 L</li> <li>Level at max. Light fluid</li> <li>whigh fluid layer too thick« Alarm threshold</li> <li>whigh level, retention« Alarm threshold</li> <li>Max</li> <li>Alarm » Light fluid too long constant «</li> </ul>
		Min. Level change 5 mm

If no further oil separator is to be added, then press the "**NEXT**" button:



#### END of configuration



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