

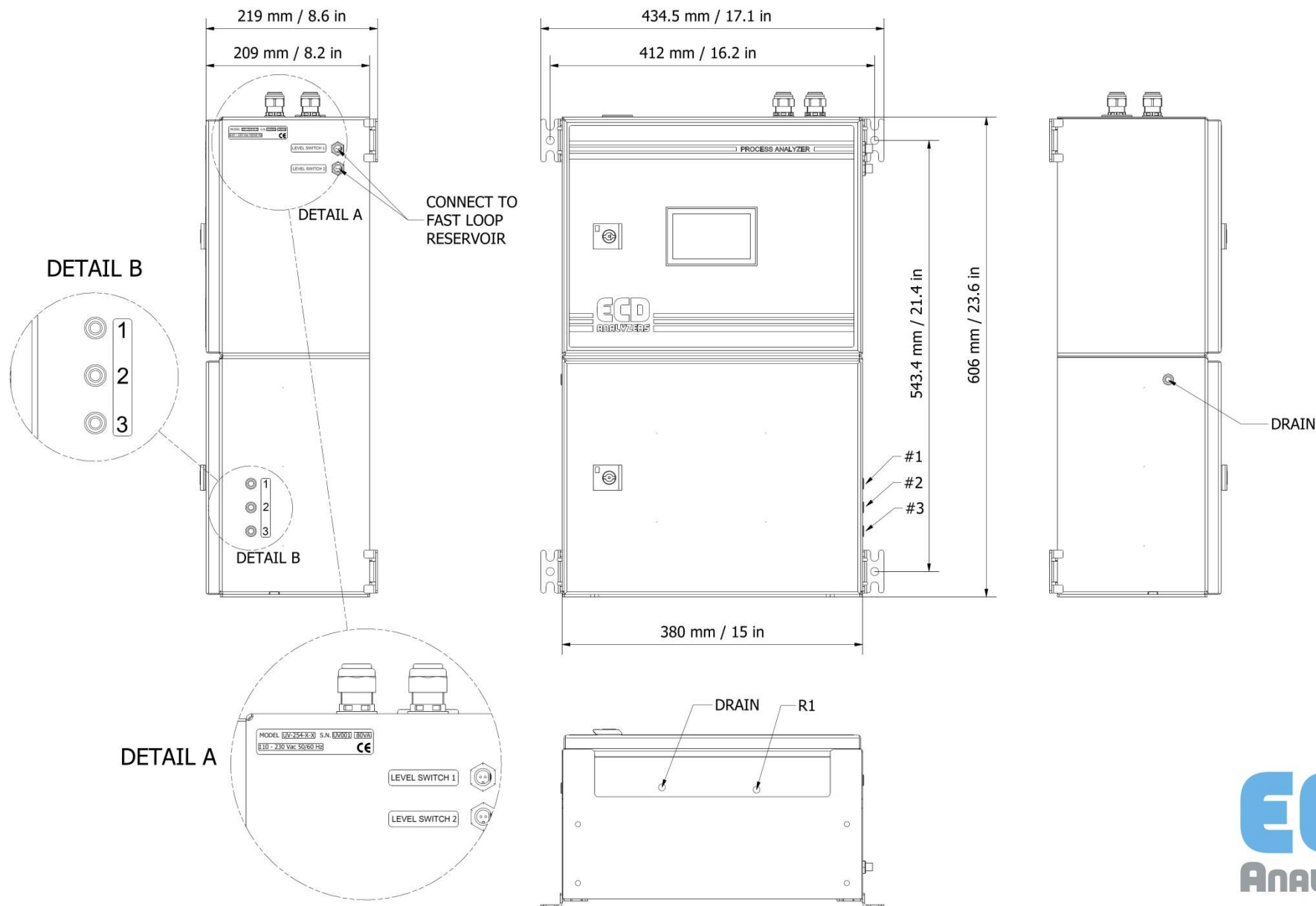
UV6 Color Analyzer– INSTALLATION



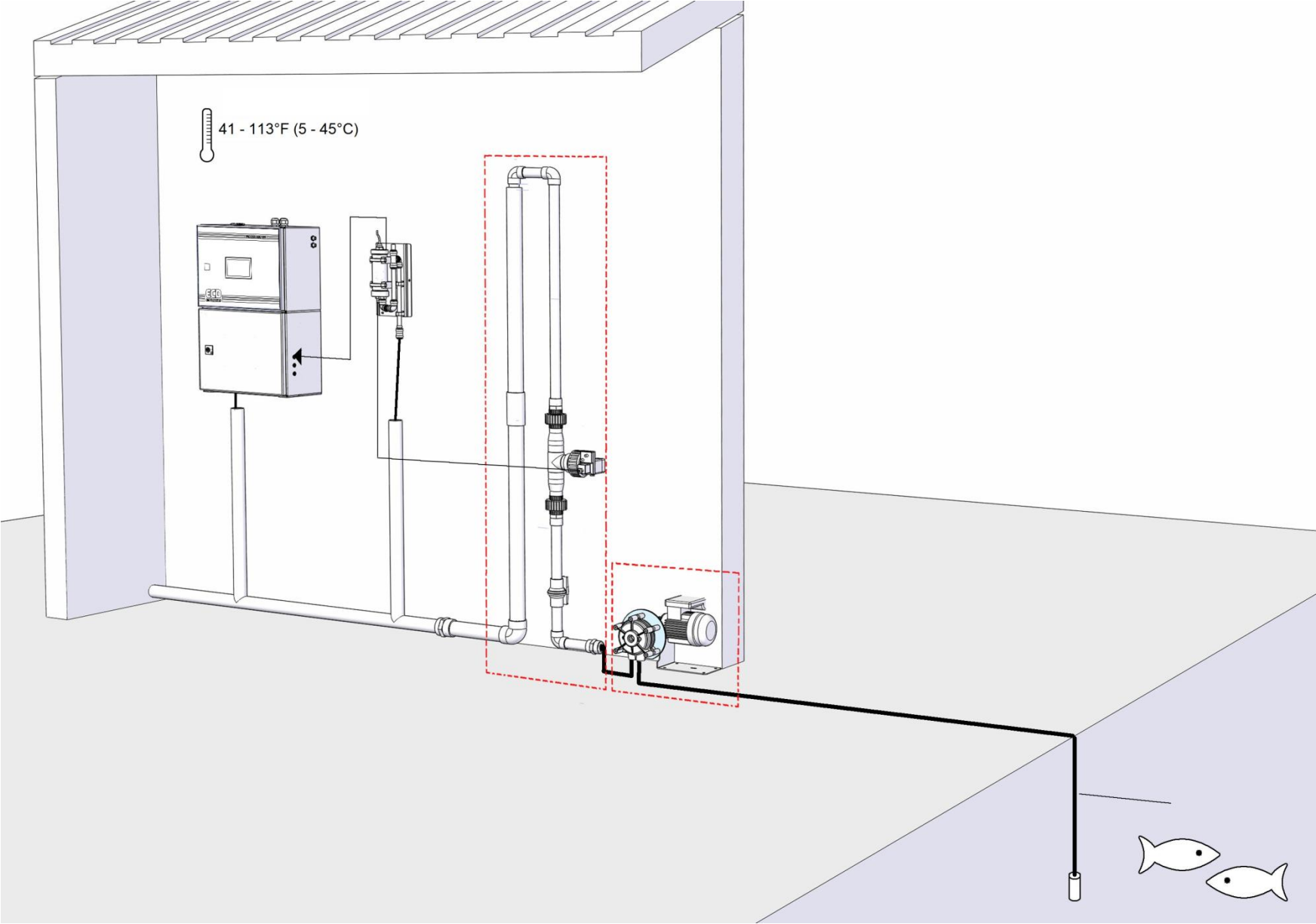
Installation

The UV6 analyzer is supplied with four mounting brackets for wall or stainless steel support rack installation. Use 4 screws M8 to fix the analyzer.

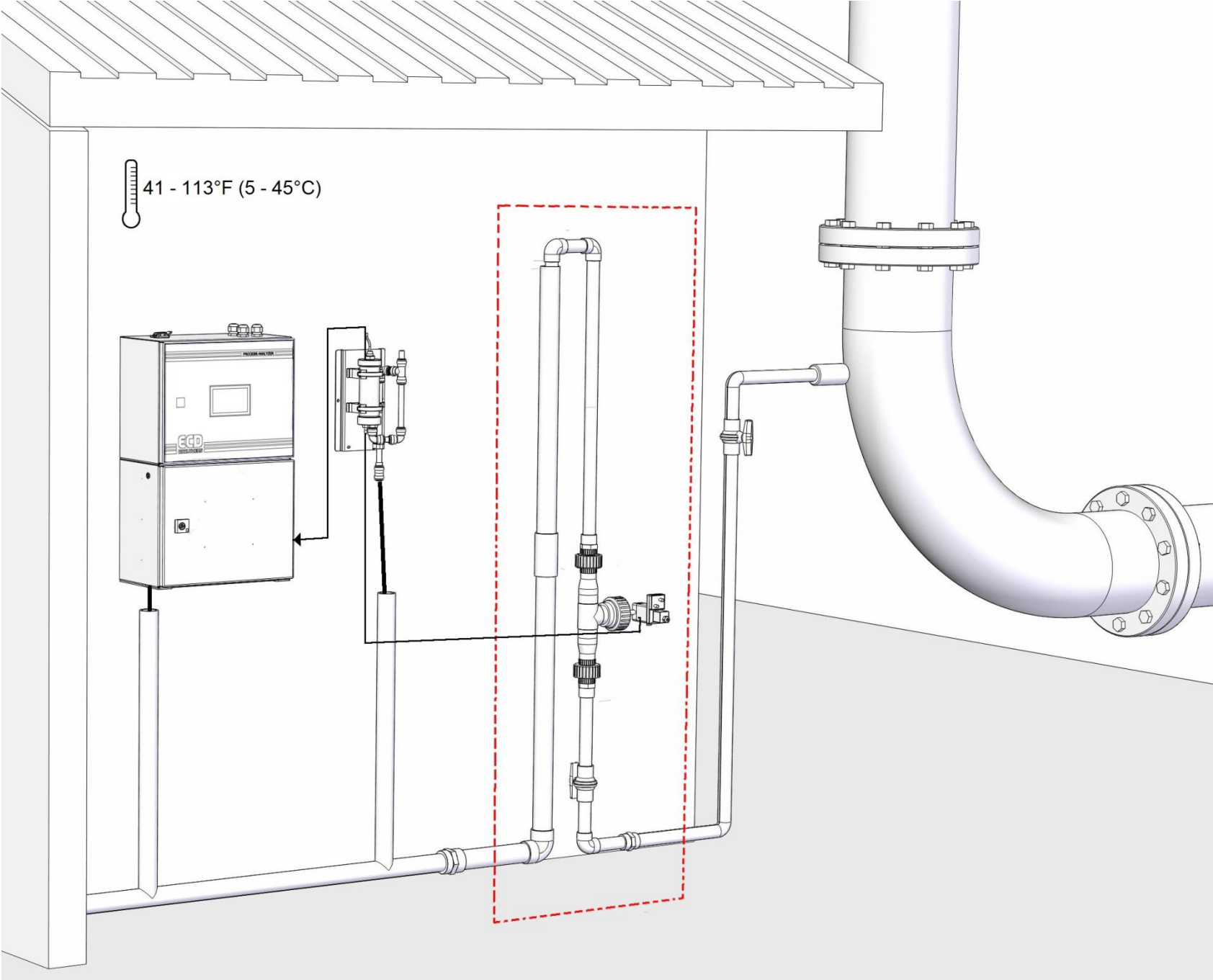
The analyzer should be mounted with the display at eye level for easier operation and access.



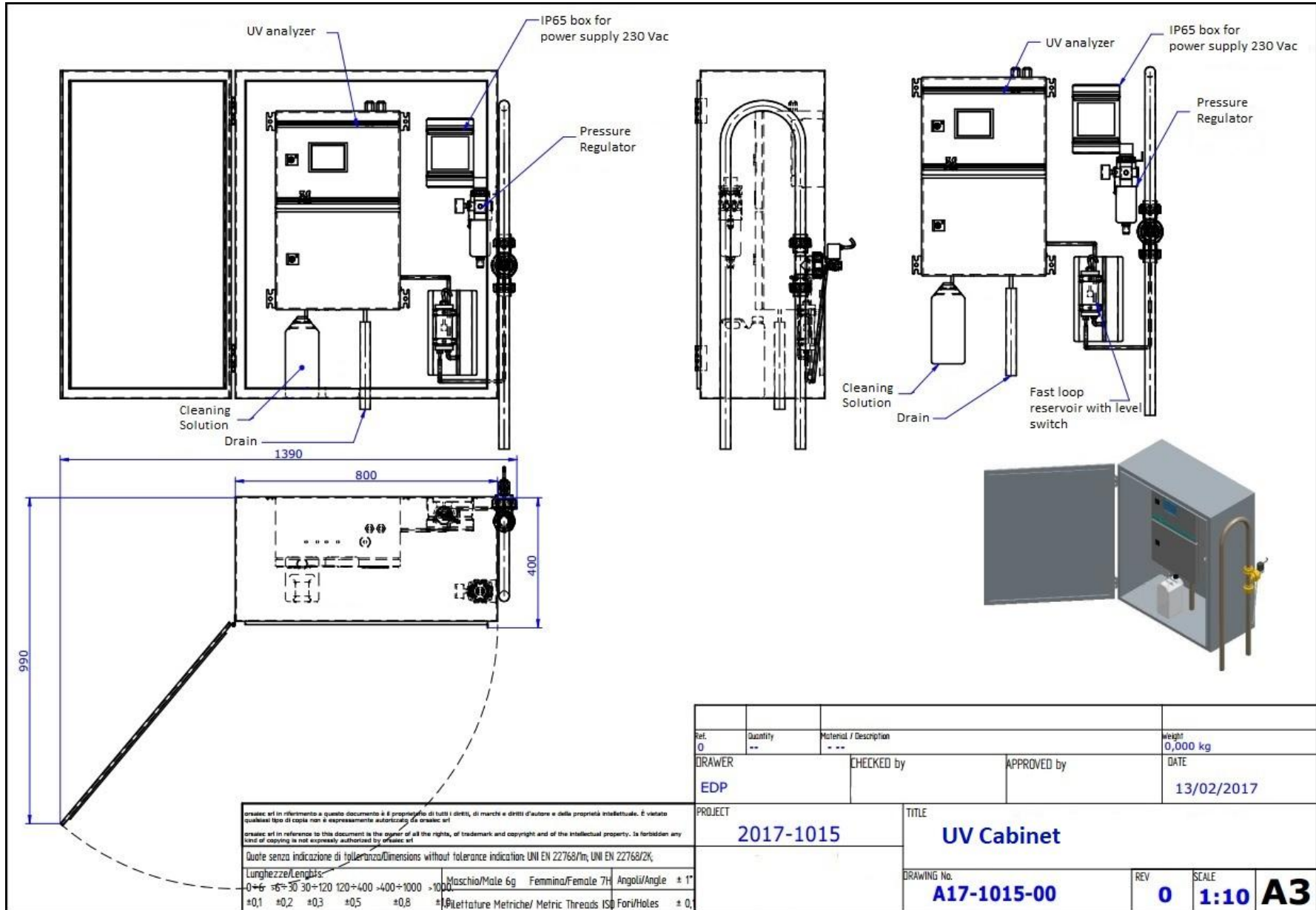
Installation



Installation



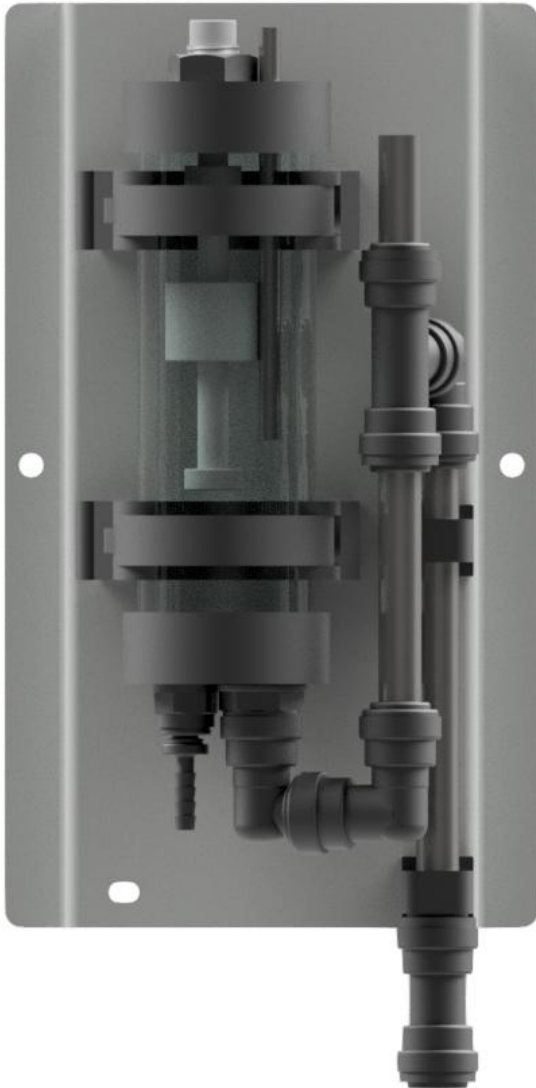
Installation



Installation of optional equipments – Sample reservoirs

Fast loop reservoirs:

- Polycarbonate
- SS



Right side of the analyzer



Installation of optional equipments – Dilution Water Reservoirs

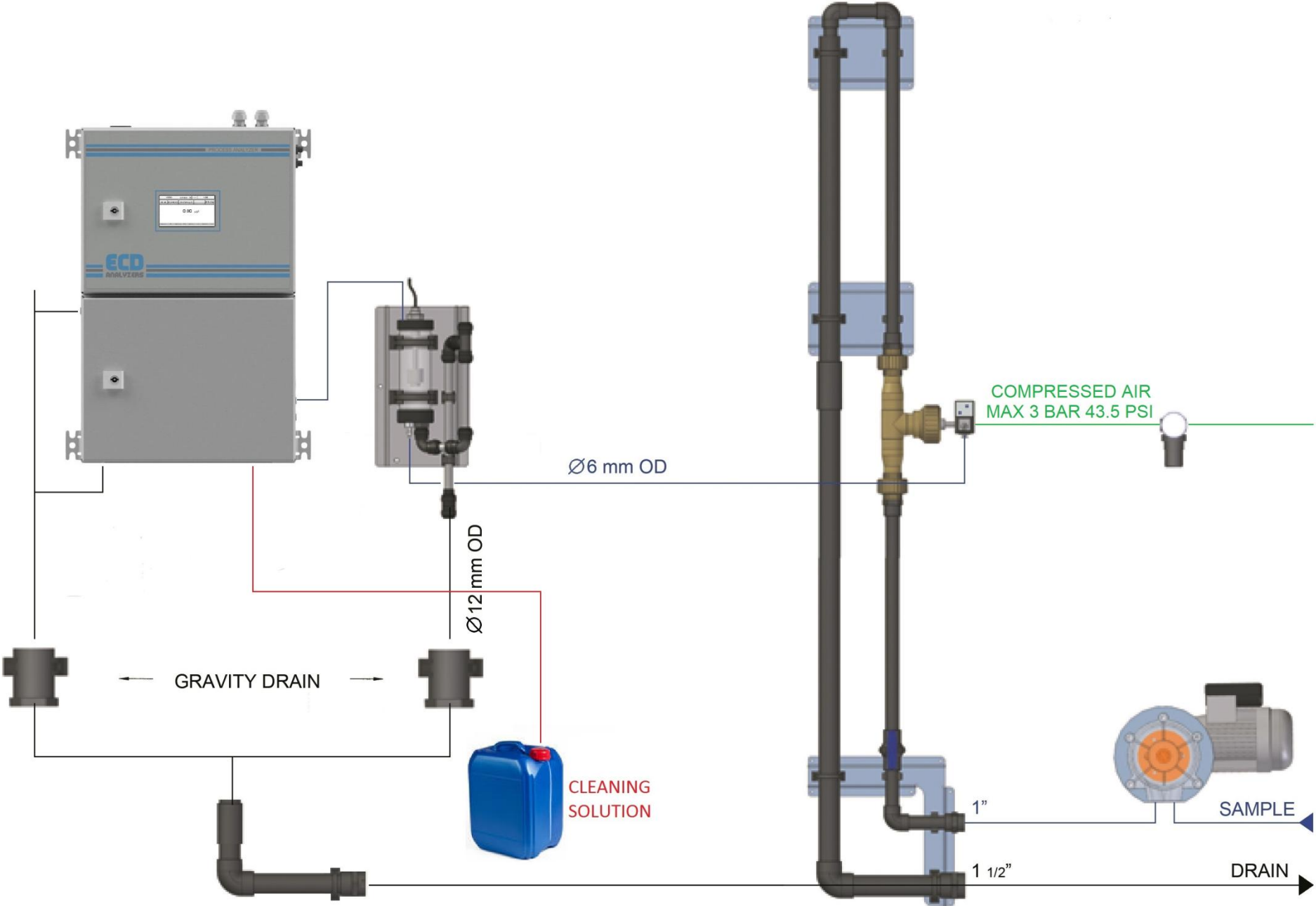
Fast loop reservoirs:

- Dilution water reservoir
- Tank for dilution water (30L, 50L, 100L)

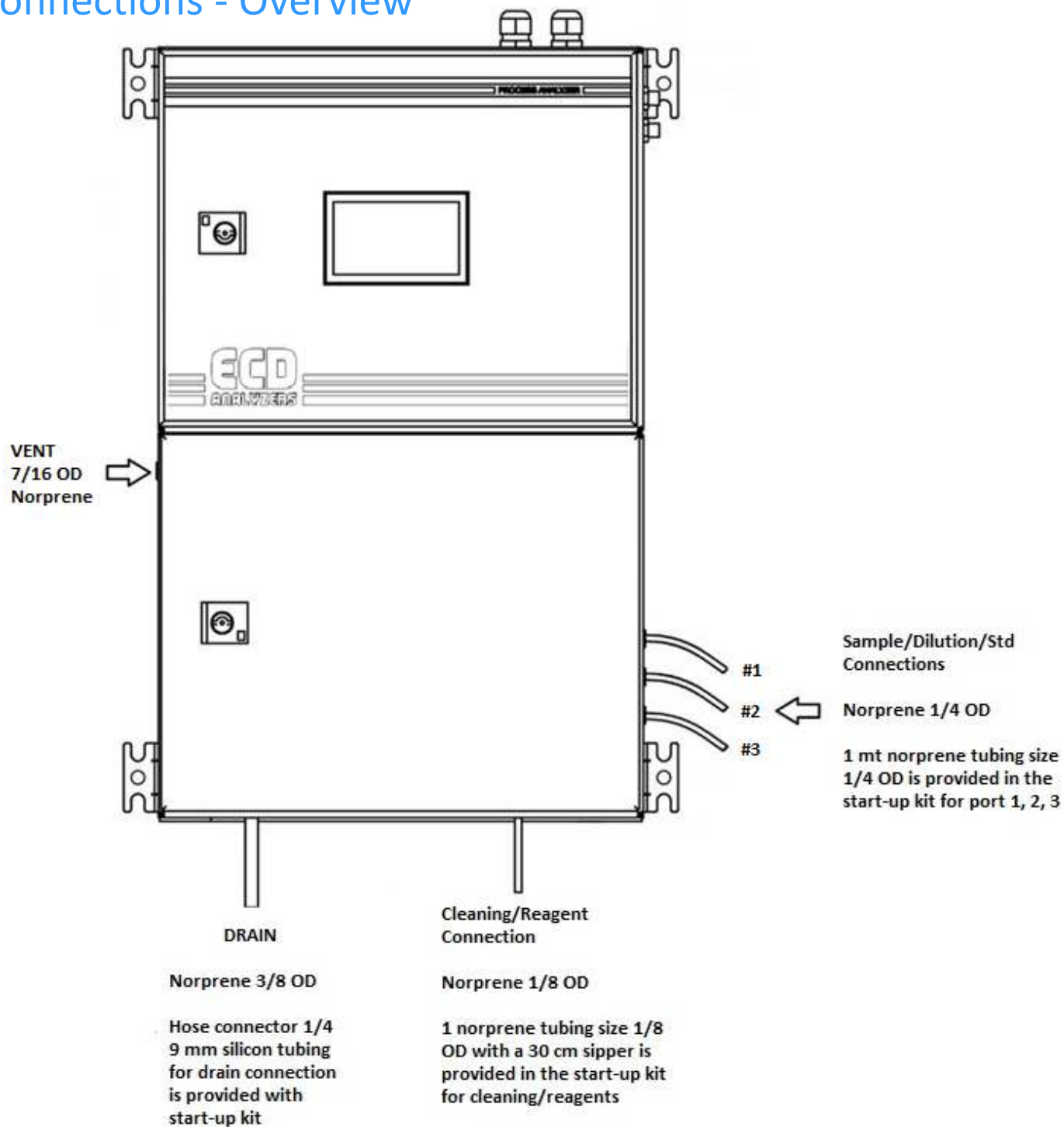
Right side of the analyzer



Installation of optional equipments – Sampling pump and Filtration unit



Hydraulics connections - Overview



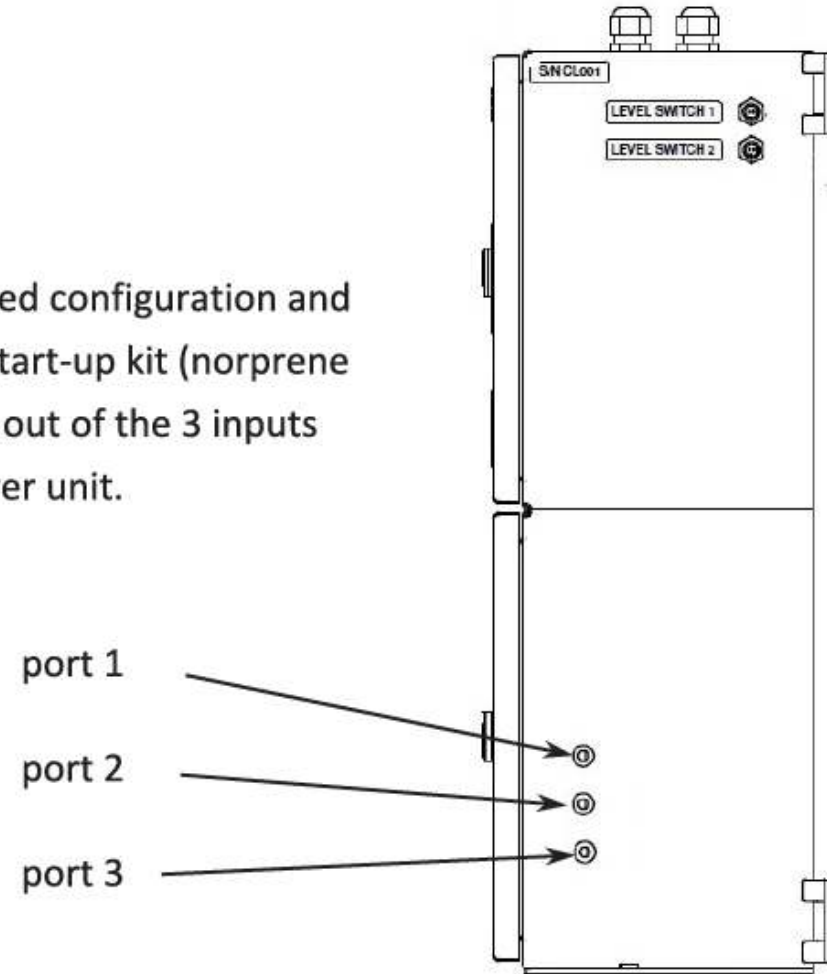
Hydraulics connections (side view) – Port 1, 2, 3

The analyzer takes samples or standard solutions through a peristaltic pump.

The same pump can pick up to 3 different liquids through 3 clamp valves.

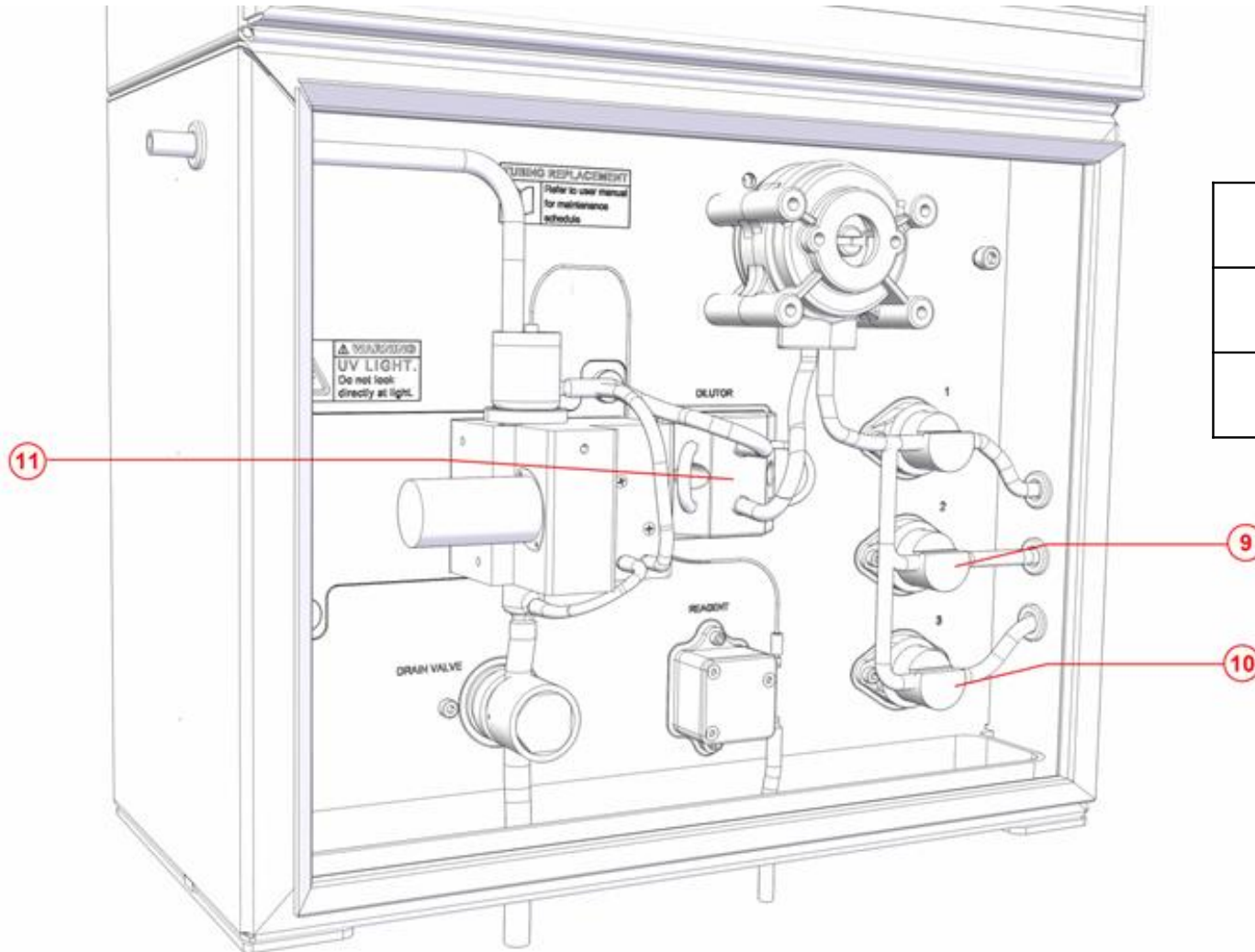
For the connection, identify the defined configuration and connect the pipes supplied with the start-up kit (norprene 1/4 OD) to its straight fittings coming out of the 3 inputs on the right side of the hydraulic power unit.

CONFIGURATION	VALVES	CONNECTIONS
single channel without autocalibration or dilution	0	port 1 : sample
single channel with autocal(zero) or dilution	2	port 1 : sample port 2 : zero water or dilution
dual channel without autocal or dilution	2	port 1: sample 1 port 2: sample2
dual channel with autocal (zero) or dilution	3	port 1: sample 1 port 2: sample2 port 3: zero water or dilution
dual channel with autocal	3	port 1: sample 1 port 2: sample 2 port 3: standard solution



Hydraulics connections (inside view) – Optional components

Some optional components can be added in the lower hydraulic compartment. A maximum of 2 streams can be programmed, while the third can be set up to be a dilution or automatic function stream.

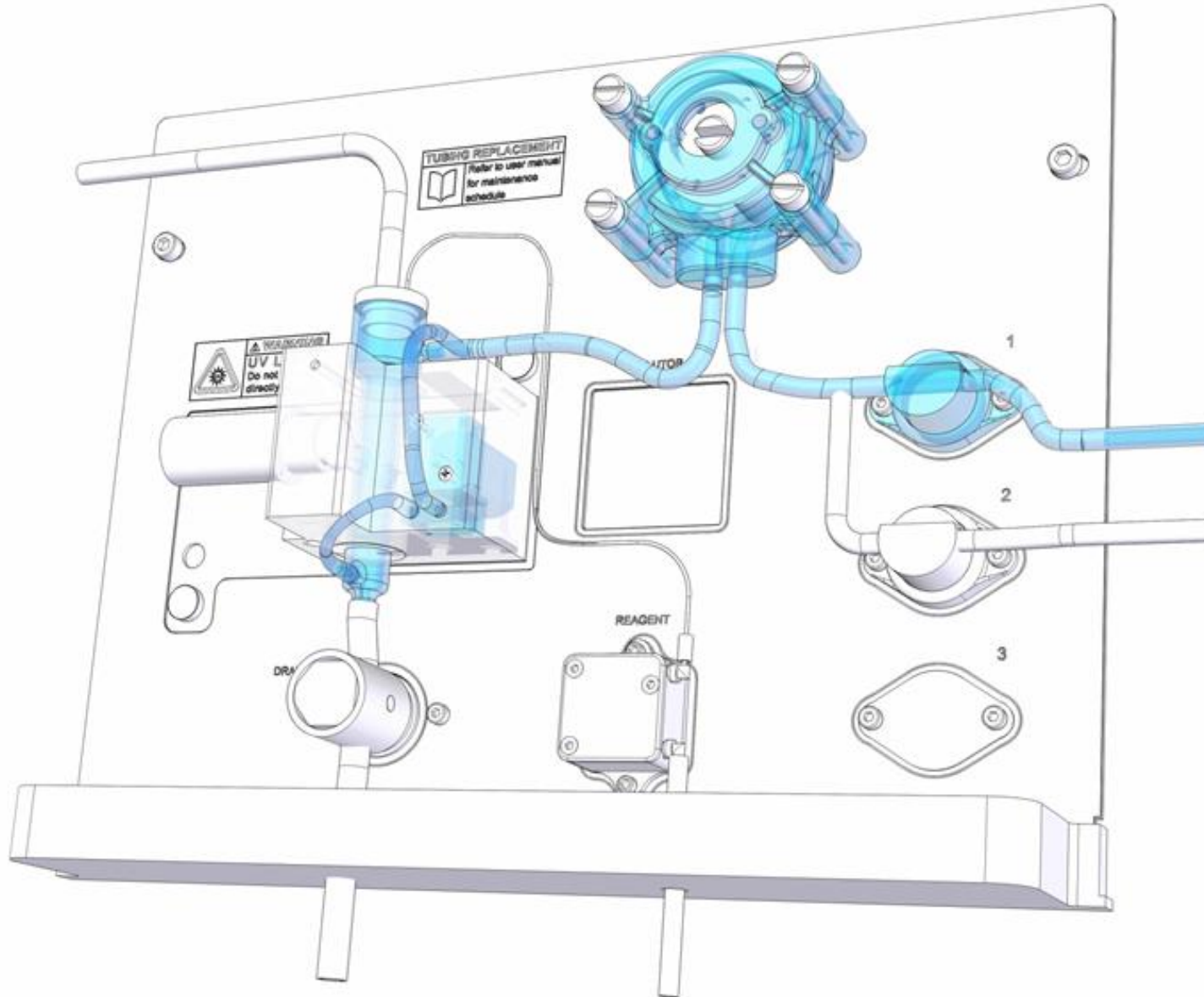


9	VALVE 2
10	VALVE 3
11	DILUTOR BLOCK

Hydraulics connections (inside view) – Port 1 and 2

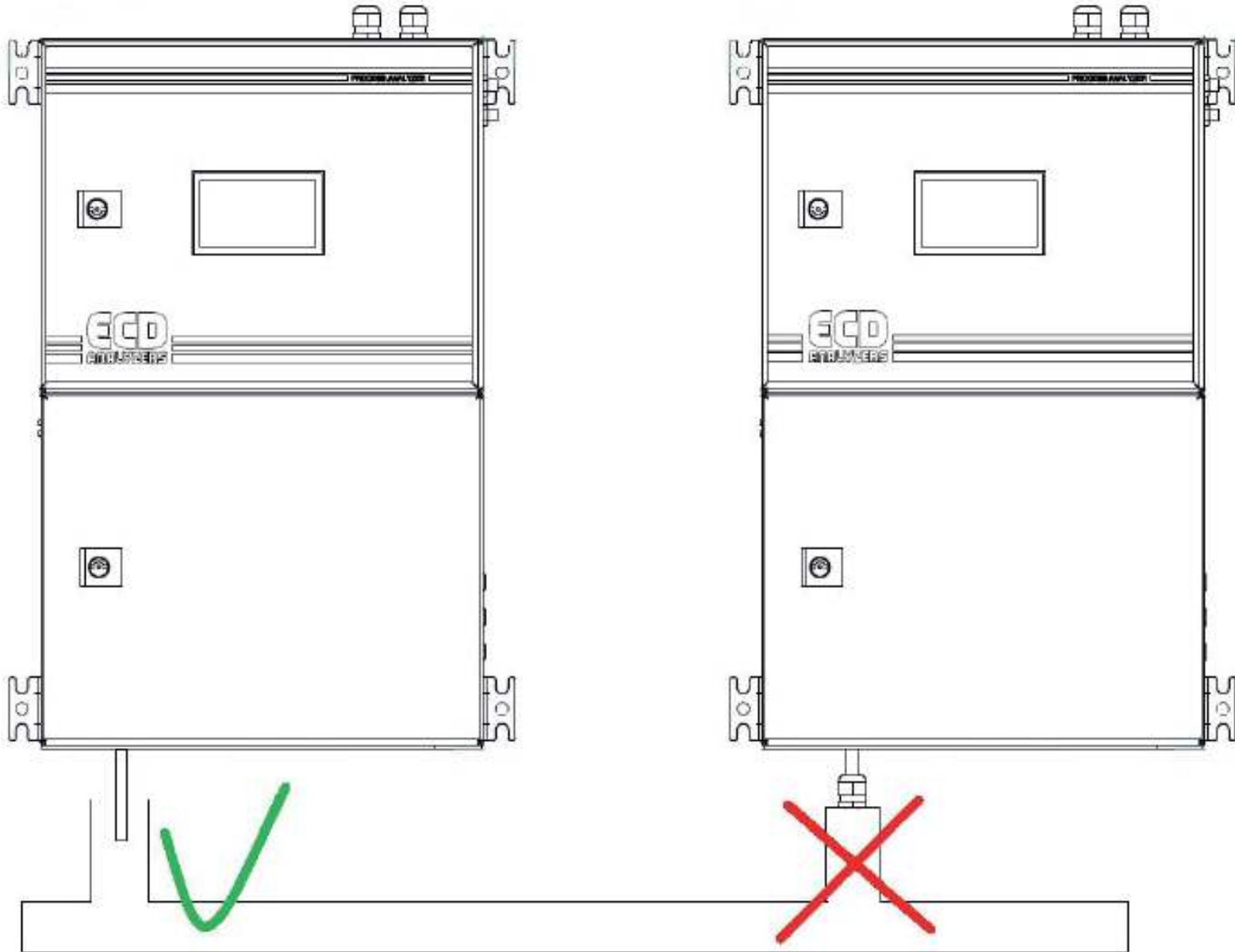
The analyzer connects inlet ports 1 and 2.

The 2 valve configuration can be used to have Sample 1 + Sample 2 Streams, Single Stream + Dilution Stream, or a Single Stream + Automatic Function.



Hydraulics connections – Drain

Free draining waste with no restriction. The drain tube must not be submerged and the outlet sample must be carried out by gravity.



External Terminal Block connections - Overview

EXTERNAL TERMINAL BLOCK											
-	INPUT										
+	INPUT										
-	SIGNAL 2										
+	SIGNAL 2										
-	SIGNAL 1										
+	SIGNAL 1										
	COM 1/2										
	OUT RELAY 1										
	OUT RELAY 2										
	OUT RELAY 3										
	OUT RELAY 4										
	COM 3/4										

TERMINAL	CONNECTION	NOTE
1	- remote input	connect to a SPDT contact
2	+ remote input	
3	- 4-20 mA analogic signal channel 2	max impedance 500 ohm protected by 50mA Fuse
4	+ 4-20 mA analogic signal channel 2	
5	- 4-20 mA analogic signal channel 1	
6	+ 4-20 mA analogic signal channel 1	
7	COMMON relay 1 and 2	load max 5 A 250Vac configurable as NC o NO SPDT or powered 24 Vdc (jumpers setting)
8	relay 1	
9	relay 2	
10	relay 3	
11	relay 4	
12	COMMON relay 3 and 4	

External Terminal Block connections - Input

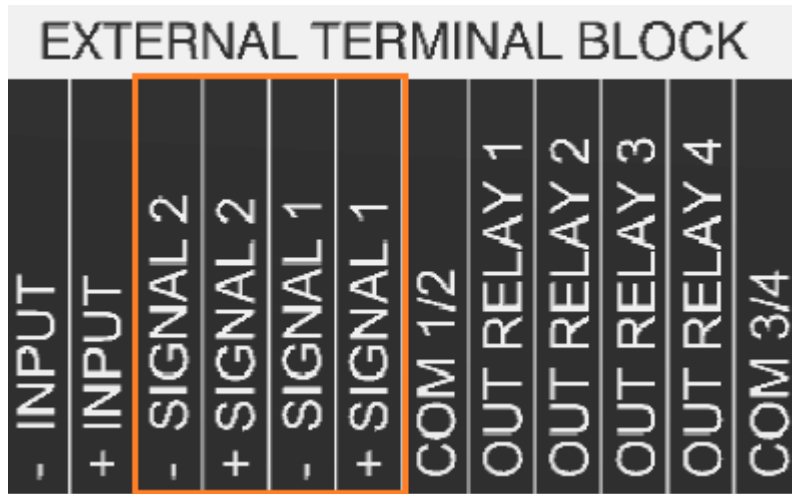
EXTERNAL TERMINAL BLOCK											
- INPUT	+ INPUT	- SIGNAL 2	+ SIGNAL 2	- SIGNAL 1	+ SIGNAL 1	COM 1/2	OUT RELAY 1	OUT RELAY 2	OUT RELAY 3	OUT RELAY 4	COM 3/4

Service #1			
Version 240517 -13	Unit Pt-Co	Method Color	Ext.Input On line
Back light delay min. 180	Ch1 process ratio 1.00	fullscale 200	Relay #1 loss of sample 1
Modbus slave i.d. 12	Ch2 process ratio 1.00	fullscale 200	Relay #2 loss of sample 2
Output simul. 0 %	Cal. min 0	Cal. max 2000	Relay #3 Fault Alarm
Manual Blank 3	Turb max 100	Blank toler. 50	Relay #4 Result Alarm

Online or None

If Online is selected, the analyzer can be started / stopped from remote

External Terminal Block connections – Analog outputs



Service #1			
Version 240517 -13	Unit Pt-Co	Method Color	Ext. Input On line
Back light delay min. 180	Ch1 process ratio 1.00	fullscale 200	Relay #1 loss of sample 1
Modbus slave i.d. 12	Ch2 process ratio 1.00	fullscale 200	Relay #2 loss of sample 2
Output simul. 0 %	Cal. min 0	Cal. max 2000	Relay #3 Fault Alarm
Manual Blank 3	Turb max 100	Blank toler. 50	Relay #4 Result Alarm

Analog Output 1 – channel 1 – set full scale
 Analog Output 2 – channel 2 – set full scale



Output Simulation

Setting Page – Output Signal Disable
 Service Page + connect a multimeter
 Set 0% = 4 mA
 Set 50% = 12 mA
 Set 100% = 20 mA

External Terminal Block connections - Relays

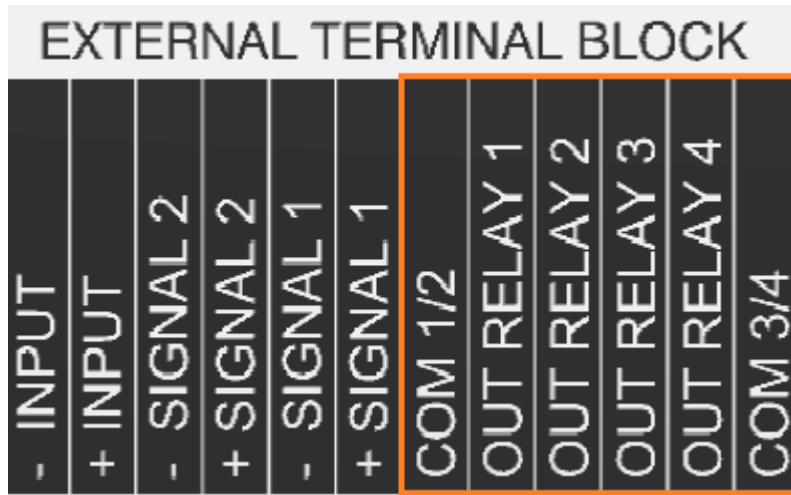
EXTERNAL TERMINAL BLOCK											
- INPUT	+ INPUT	- SIGNAL 2	+ SIGNAL 2	- SIGNAL 1	+ SIGNAL 1	COM 1/2	OUT RELAY 1	OUT RELAY 2	OUT RELAY 3	OUT RELAY 4	COM 3/4

4 programmable relays, potential free.

Each contact relay can be independently set as normally open or normally closed

Relay 1	scrolling	The user can choose one among the below list: -Result alarm -Loss of sample 1 -Loss of sample 2 -Fault alarm
Relay 2		-Cycle command -Latch/Unlatch -Power on -Optic failure -Calibr alarm
Relay 3	scrolling	The user can choose one among the below list: -Result alarm
Relay 4		-Loss of sample 1 -Loss of sample 2 -Fault alarm

External Terminal Block connections – Relays functions

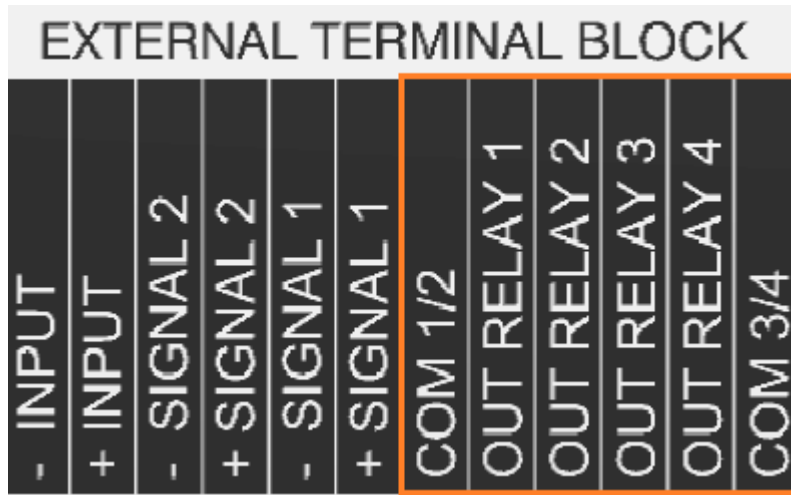


RESULT ALARM	The relay so configured is activated when the last measured value exceeds the set limit. Once the value is within the limits, the alarm is reset.
LOSS OF SAMPLE 1 , 2	the relay so configured is activated when the low contact of the recirculating tank indicates the absence of a sample (1 or 2)
FAULT ALARM	The relay is activated in case of forced stop of the analyser as a result of an emergency stop.
CYCLE COMMAND	The relay is activated by a command in the cycle programming and can be used for external components and accessories (e.g. external sampling pump, or end/start of analysis contact, etc.)
LATCH/UNLATCH	The relay changes its status according to cycle programming (for example, it is activated at a point in the cycle and is deactivated at another point).
POWER ON	The relay is always active when the analyser is electrically powered.
OPTIC FAILURE	The relay is activated in the presence of a malfunction alarm involving optical equipment
CALIBR ALARM	The relay is activated when there is an out-of-limits calibration alarm

Result alarm settings Expressed in full scale %



External Terminal Block connections – Relays functions

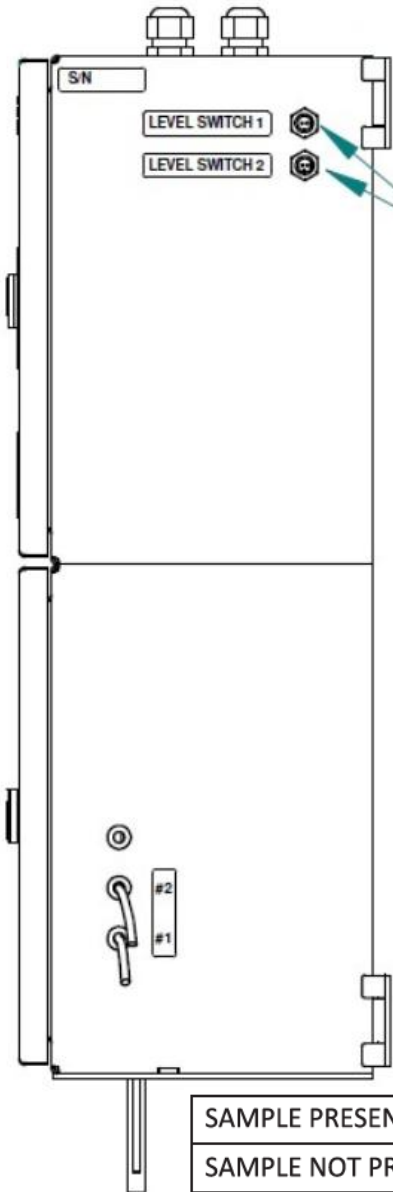


RESULT ALARM	The relay so configured is activated when the last measured value exceeds the set limit. Once the value is within the limits, the alarm is reset.
LOSS OF SAMPLE 1 , 2	the relay so configured is activated when the low contact of the recirculating tank indicates the absence of a sample (1 or 2)
FAULT ALARM	The relay is activated in case of forced stop of the analyser as a result of an emergency stop.
CYCLE COMMAND	The relay is activated by a command in the cycle programming and can be used for external components and accessories (e.g. external sampling pump, or end/start of analysis contact, etc.)
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Result alarm settings Expressed in full scale %



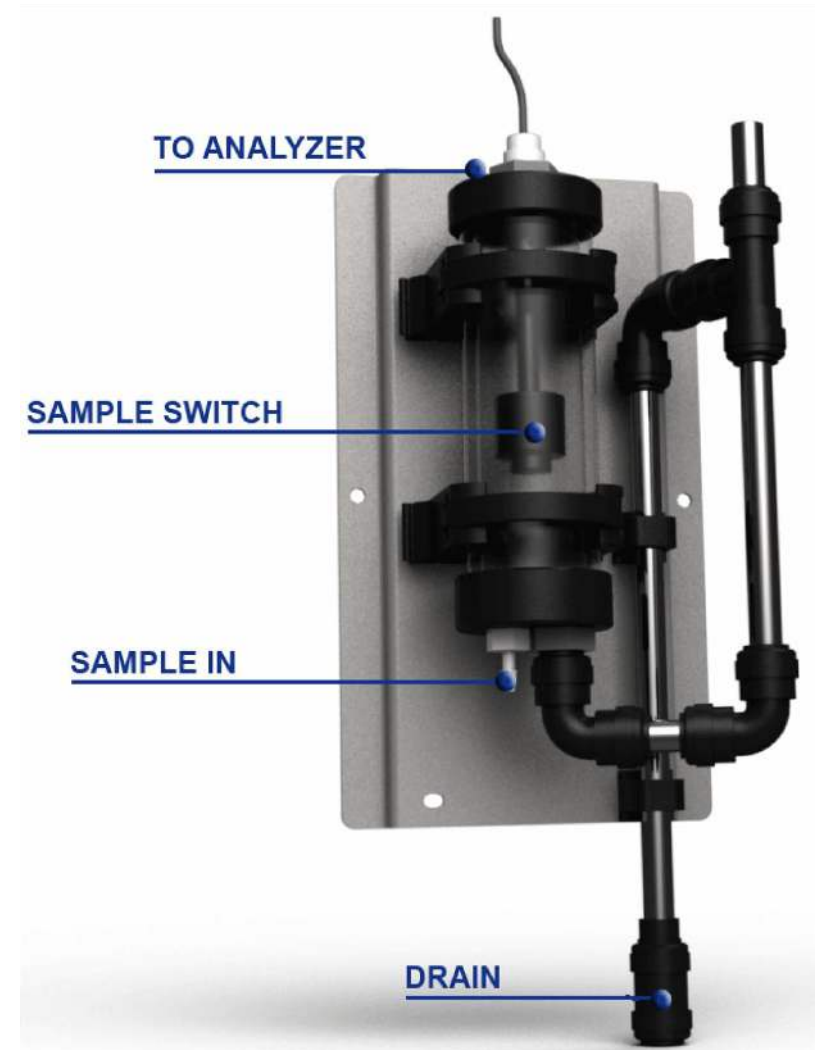
Level switch connections



CONNECT TO
FAST LOOP
RESERVOIRS



SAMPLE PRESENT	floating element UP	Contact OPEN
SAMPLE NOT PRESENT	floating element DOWN	Contact CLOSED



Relays 1,2,3,4
Loss of sample 1
Loss of sample 2

RS485 connections

Using this connection a modbus RTU connection can be made.

Baud Rate	9600
Data bits	8
Parity	E
Stop bit	1
Analyser I.D. (slave , node number)	the last two digits of the serial number (i.e. s/n UV145 = I.D. no. 45)

Indirizzo	formato	alias
900	32-bits float (CD-AB)	result CH1
902	32-bits float (CD-AB)	result CH2
800	bit	"online" condition
801	bit	single cycle running
802	bit	"stopped" condition
803	bit	extra cycle running
806	bit	loss of sample 1
807	bit	loss of sample 2
808	bit	optics alarm
809	bit	calibration alarm

Service #1			
Version 240517 -13	Unit Pt-Co	Method Color	Ext. Input On line
Back light delay min. 180	Ch1 process ratio 1.00	fullscale 200	Relay #1 loss of sample 1
Modbus slave i.d. 12	Ch2 process ratio 1.00	fullscale 200	Relay #2 loss of sample 2
Output simul. 0 %	Cal. min 0	Cal. max 2000	Relay #3 Fault Alarm
Manual Blank 3	Turb max 100	Blank toler. 50	Relay #4 Result Alarm

Modbus slave i.d.

keyboard

RS485 modbus node number