Quick Basic Installation Guide for CP 112 & CP 212

The knob

The knob has two functions:

- By turning the knob, you can;

  - Stepping to through the menus
  - Change the value in the menus (the value is a figure or a function in a list of different options; push the knob to confirm your choice and for saving)

- By pressing the knob, you can;

  - Confirm/Save/Access a function
  - Enter a menu/submenu
  - Acknowledge alarms

At the start point

Reset the cabinet the first time when power up by do a factory default by hold push down Ecs and the knob for 10 seconds. The cabinet will restart with the factory default settings. Check the firmware version by using the knob, update if necessary. Download latest firmware from C&M ftp site. Be aware of that CP 112 & CP 212 has same firmware. CP112/212 communicate always with *9600 baud, 8 Data Bits, No Parity and Modbus protocol at the service port*
The built-in Air Pressure sensor has a fix range; 0 – 3.5 meter.

Basic Settings

Adjust those parameters which are needed by turn the knob

1. Set the Language

2. Set 1-phase or 3-phase supply

3. Are the Temp- and Leakage sensors in use?

4. Dry Run ON/OFF [1]

5. Nominal current (see the technical spec. at the pumps) [2]

6. Are you using Level Sensor or built-in Air Pressure tube?

7. Start and stop levels

8. If using a High- and/or Low float; the function must be "Normally Closing" to activate the alarms respency

[1] Dry run and **Delta cos ψ**

Turn the knob to "Cosine ψ Px" and start the pump manually; let it pump water, -note the value in display.
Then let the pump run until the pit is empty; when the pump is running dry; -note the valve in display once again. The different from the first and the last value is **Delta cos ψ** and that value shall be at *Dry Run ON* – [*Delta cos ψ*]

[2] Nominal Current

If the pump consume more current than the value at "*Nominal Current Px*" –the pump will be blocked after a few seconds. The blocking will be realised first after the alarm acknowledge is done by pressing the knob.
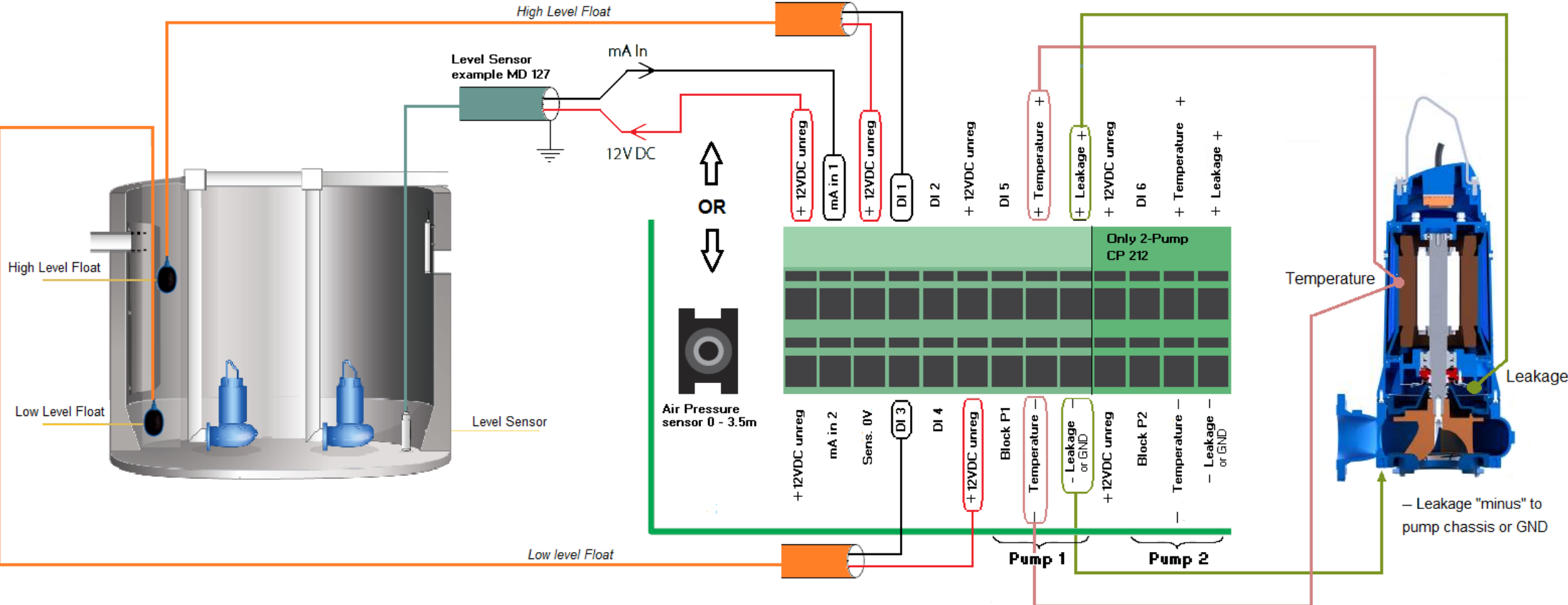This function works similar to a motor protection.

SULZER

High Level Float

Level Sensor
example MD 127

mA In

12V DC

High Level Float

OR

Air Pressure
sensor 0 - 3.5m

Low Level Float

Low level Float

Level Sensor

Only 2-Pump
CP 212

+ 12VDC unreg
mA in 1
+ 12VDC unreg
DI 1
DI 2
+ 12VDC unreg
DI 5
+ Temperature
+ Leakage
+ 12VDC unreg
DI 6
+ Temperature
+ Leakage +

+ 12VDC unreg
mA in 2
Sens. 0V
DI 3
DI 4
+ 12VDC unreg
Block P1
– Temperature
– Leakage or GND
+ 12VDC unreg
Block P2
– Temperature
– Leakage or GND

Pump 1
Pump 2

Temperature

Leakage

– Leakage "minus" to
pump chassis or GND

Table 1   Functions for 'Digital In'

Digital In	Default configuration in CP 112/212
1	High-Level float (alarm) Normally open
2	Not used
3	Low-level Float Normally open
4	Stop-float P1 and P2. Configurable: normally open/closed
5	Start-float for pump 1. Normally open
6	Start-float for pump 2. Normally open

Table 2   Analogue inputs: —'mA In 1' and 'mA In 2'

mA In	Usage in CP 112/212
1	Level Sensor
2	Back-pressure sensor or an optional sensor