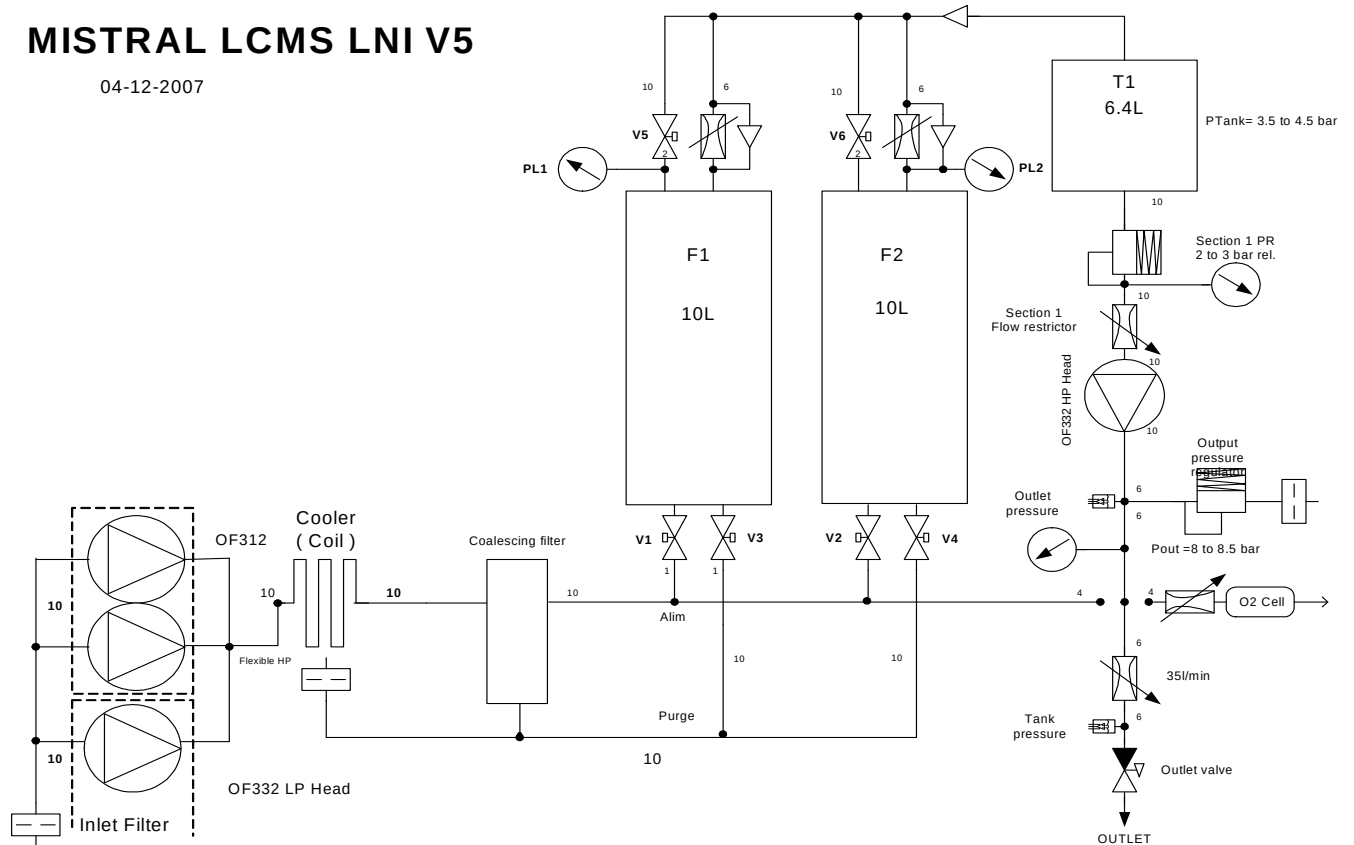


Fluidic schematic.

MISTRAL LCMS LNI V5

04-12-2007



1. Date and time settings

Use menu :Set Clock

2. Parameters menu (default LNI)

Pressure units : bar
 Temperature units : °C
 Flow units : l/m
 Auto start : Yes
 Display contrast : 5
 Enable buzzer : Yes
 Pre alarms in list : No
 StandBy Mode : No

3. Pressure sensor calibration

- o External tank pressure sensor (CO9)
- o Section # 1 pressure sensor(CO8)
- o Outlet pressure sensor (CO6)
- a. Special function « Etalonnage des 3 capteurs » : 03003 (without pressure – tube disconnected)
- b. Adjustment gain and offset for each sensor (Check with 5bar), See § 5

4. Temperature sensor calibration

- o Section #1 sensor (CO3) – Compressor 1
- o Section #2 sensor (CO5) – Compressor 2
-  A difference of approx. 10°C is normal when device is running properly
- a. Adjustment offset for each sensor (test with external thermometer)

5. Configuration menu

Password : 12345

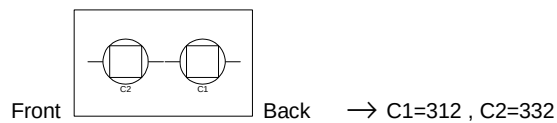
The below table is an example of factory configuration. A particular table is available for each device on demand with serial number higher than LN2-0911.....

MISTRAL LCMS			
Name	Default value	Settled	values
Flow min	0 l/m	0	
Flow max	35 l/m	35	
Volume	6.2 l	6.4	
Cycle Time	35 s	35	
Equilibration Time	3 s	3.8	
Capacity Calc.Time	10 s	50	
Line Frequency	50/60 Hz	10	
Fan stop time	10 s	25	
Disable time PressMin	25 m	48	
Prealarm Temperature	48°C	48	
Alarm Temperature	52°C	52	
Prealarm P min S#1	2 bar	2	
Alarm P min. S#1	1.7 bar	1.7	
P ist. Tank	1 bar	1	
P max. Tank	8 bar	8	
P max. Outlet	8.5 bar	9	
O2 max prealarm	3%	3	
O2 max alarm	5%	5	
Comp.Work Time preal.	8500 hour	8500	
Comp.Work Time alarm	9000 hour	9000	
Service 4000h preal.	3800 hour	3800	
Service 4000h alarm	4200 hour	4200	
Service Check preal.	15000 hour	15000	
Service Check alarm	15500 hour	15500	
Offset Temp.Section 1	0 °C	0	
Offset Temp.Section 2	0 °C	0	
Offset P.Outlet	0 bar	0	
Gain P.Outlet	1,00	1	

Offset P.Sec.#1	0 bar	0
Gain P.Sec.#1	1,00	1
Offset P.Tank	0 bar	0
Gain P.Tank	1,00	1
Oxygen Type Sensor	0..30%	0-30
Offset Oxygen	0%	-0.2
Gain Oxygen	»1,00	1
Soft Start Time	2 s	2
Start Time	3 s	3

6. Starting compressor verification

C1 start before C2 and stop after C2.



7. Fans

- 4 Hot Air outputing fans
- 1 internal cooling fan

8. Intermediate flow setting

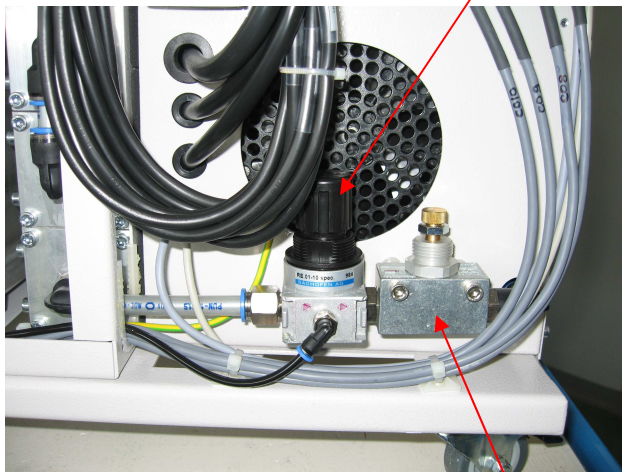
Turn clockwise max the output pressure regulator.
With a 8bar external input of Air, measure 35l/min.

9. Flow to O2 cell setting

Should be approx 300 ncc.

10. Started procedure

Turn clockwise (pressure up) section 1 pressure regulator.



Turn counterclockwise (open) section 1 flow restrictor

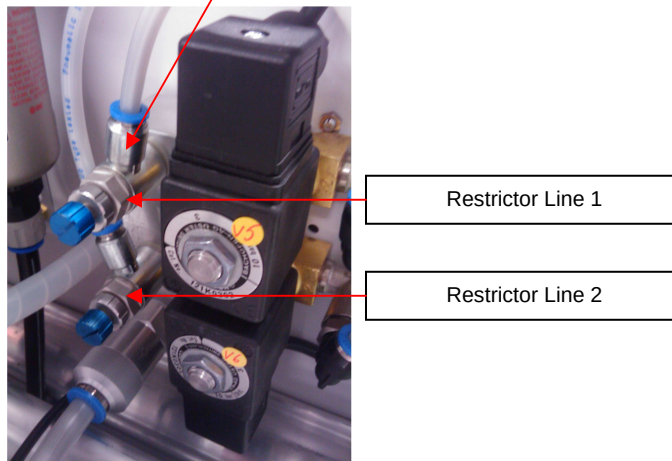
Start the device.

11. Regeneration flow setting

BE CAREFULL. WHEN 8mm GREY TUBE IS DISCONNECTED A HIGH PRESSURE COULD GO OUT (LINE EXCHANGE AT EVERY 35 SEC CYCLE)

Restrictors should be settled to approx 9 l/min.

Measure directly on the restrictor when flow is the smaller one.



12. Intermediate setting of output flow regulator

Set to 8 bar. Adjust outlet flow to 35l/min.

13. Final section 1 flow and pressure settings

Use the « input pressure section 2 » gauge on the left side of the device.

Set the pressure between 2 and 3 bar. Adjust the flow with the restrictor to have no move of the needle (vibration) when the cycle is changing.

Check if pressure line (1 and 2) works between 3.5 and 4.5 (end of cycle.)

NOTE : O2 concentration is modified with a pressure value variation. (Better close to 2bar)

14. Final settings of outlet flow and pressure

Set to 8 bar. Adjust outlet flow to 35l/min.

Go back to § 13 if necessary.

15. O2 sensor calibration

- Disconnect the black tube of the O2 cell.
- Put 300 ml of N2 into the O2 cell
- Adjust Offset O2 (configure menu)
- Let the tube disconnected and wait 10 mn with ambient Air in contact.
- Adjust Gain O2 (configure menu) to display 20.9%

16. Calibration of displayed flow.

Connect a flowmeter at the outlet.

Adjust parameters « Capacity Calc.Time » or «Volume» (configure menu) to reach approximately the value of the flowmeter.

17. Counter reset

- | | | | |
|----|-----------------------------------|---|-------|
| a. | Special function « Compresseurs » | : | 26101 |
| b. | Special function « Service 4000 » | : | 26103 |
| c. | Special function « Service 8000 » | : | 26104 |