First level maintenance

CDU-S

CDU-M

CDU-L

1. First level maintenance and monitoring
2. Access to reading parameters
3. List of error codes

January 2023

100% CO2 condensing units

ECO-FRIENDLY REVOLUTION

1. First level maintenance and monitoring

1. Regular visual and acoustic checks.

2. We recommend 4 visits per year by a technician specialized in refrigeration

3. Clean the gascooler with a soft brush or a hoover in case of dust deposit

4. If the gas cooler is dirty or even clogged, cleaning with water and neutral solvent is allowed.
   Perform this cleaning from inside and outside the CDU.
   The CDU must be stopped during this operation, cleaning with a high pressure water jet is prohibited.

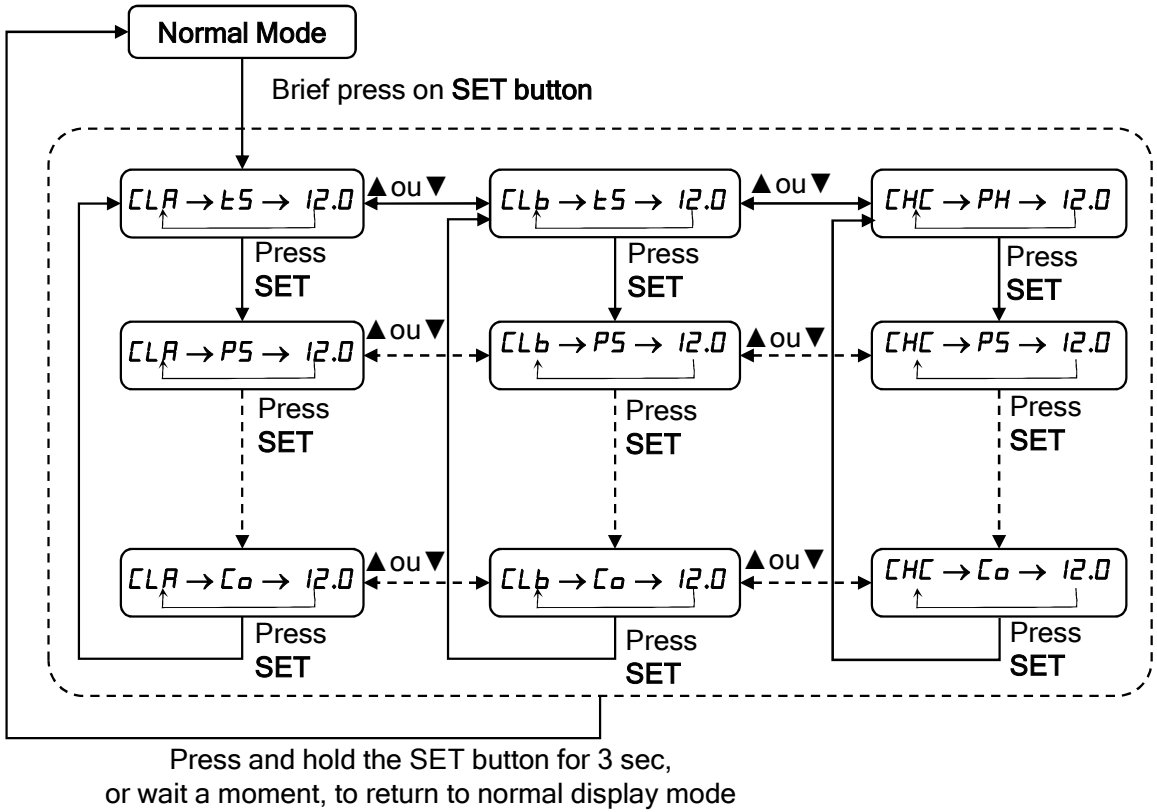
5. Check with your hands that the fans are running well / rotating correctly (no hard points)

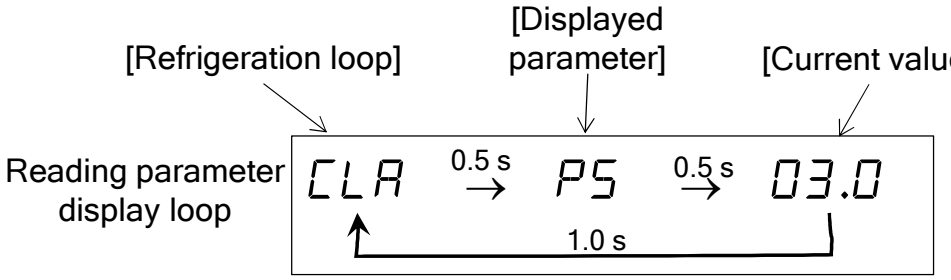
6. Check operating parameters 10 minutes after compressor start. At a minimum, check low and high pressure in relation to their respective target, as well as dischage temperature of compressors (access to reading parameters on next page)

Reading parameters

Briefly press the button SET in normal display mode

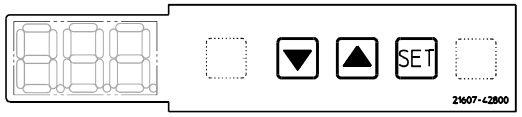
- Choose buttons with ▲or▼ the refrigeration loop [CLA, CLB ou CHC]
- Briefly press the button SET to scroll through the reading parameters according to the table. Change the refrigeration circuit with ▲or▼.

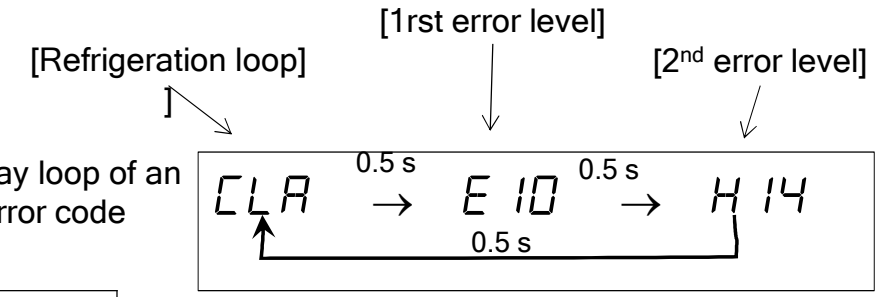




N°	Cooling loop	Code	Content	Unit
1	A / B	tS	Suction Temperature sensor input	°C
	C	PH	Subcooler temperature calculation, difference between inlet and outlet (tI - tu)	K
2	A / B / C	PS	Suction pressure (LP)	MPaG
3	A / B / C	Pd	Discharge pressure (HP)	MPaG
4	A / B / C	td	Discharge temperature sensor input	°C
5	A / B / C	tI	Subcooler inlet temperature sensor input	°C
6	A / B / C	tu	Subcooler outlet temperature sensor input	°C
7	A / B / C	tr	Electronic expansion valve position	Pulse
8	A / B / C	CI	Inverter compressor motor operating frequency	Hz
9	A / B / C	toL	Electronic enclosure temperature sensor input	°C
10	A / B / C	tAr	Ambient air temperature sensor input	°C
11	A / B / C	FF1	Gas cooler fan rotation speed (lower side)	rpm
12	A / B / C	FF2	Gas cooler fan rotation speed (upper side)	rpm
13	A / B / C	Fu1	Gas cooler fan control voltage (lower side)	V
14	A / B / C	Fu2	Gas cooler fan control voltage (upper side)	V
15	A / B / C	PSo	Target suction pressure	MPaG
16	A / B / C	Pdo	Target discharge pressure	MPaG
17	A / B / C	Co	Inverter compressor motor target frequency	Hz

Error codes list





Error code	Error content
EEE	Microprocessor error
Err	EEPROM error
E01	Maximum discharge temperature triggered
E02	Maximum discharge pressure triggered
E10	Inverter compressor error
E16	Gas cooler (top) fan speed error
E17	Gas cooler (bottom) fan speed error
E20	High-pressure sensor error
E21	Low-pressure sensor error
E23	Ambient air temperature sensor error
E24	Discharge temperature sensor error
E26	Heat exchanger inlet temperature sensor error
E27	Heat exchanger outlet temperature sensor error
E40	Communications error with master controler (if using an external communication system)
E41	Low pressure alarm
E42	Inverter communications error
E50	EEV control error 1
E51	EEV control error 2
E70	Inverter control error 1
E71	Inverter control error 2

Error code	Error content
E10-H04	Inverter overcurent error
E10-H08	Inverter overcurent error
E10-H0A	Inverter overcurent error
E10- H20	Inverter overcurent error
E10-HOC	Heat sink high level temperature error
E10-H10	Inverter overload error
E10-H14	Inverter low input voltage error
E10-H18	Inverter high input voltage error
E10-H1C	Inverter controller communication error
E10-H24	Inverter voltage drop detection
E10-H28	Inverter voltage drop detection
E10-H30	Inverter voltage drop detection
E10-H2C	Control PCB power supply error
E10-H38	Inverter phase shift error
E10-H40	Heat sink thermistor error
E10-H44	Converter overcurent error
E10-H46	Converter overcurent error
E10-H48	Converter overcurent error
E10-H4C	Converter overcurent error
E10-H5O	Compressor operation error
E10-H52	Compressor operation error
E10-H54	Compressor operation error
E10-H56	Compressor operation error
E10-H80	Compressor type error

➢ **Refer to the maintenance guide**