	OPERATING GUIDE	GU 7036_2 EN E
ALMA	**MICROCOMPT+ FOR TOP LOADING**	www.alma-alma.fr

This document sketches out the main menus (please refer to operating manual MU 7036 EN for further information).

USING THE BUTTONS

🔴 - Come back to the previous stage   🔵 - Choose the menu option   - Validate the displayed option
    - Increment the blinking figure   - Access to the following figure   🟢 - Validate the entry data

CONNECT GROUND   🟢 ▶ **Loading operation**

🔵

DISPLAY   🟢 ▶ **Display (Totaliser, Diary, Parameters)**

🔵
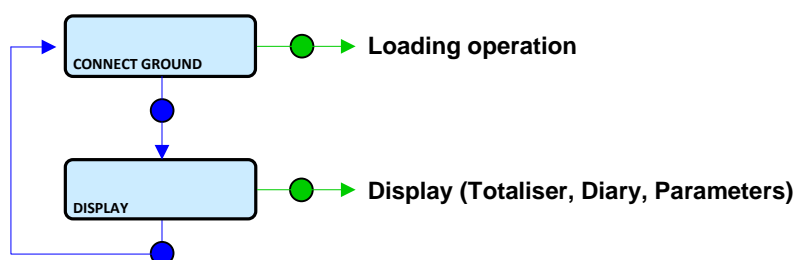
NOTE: If the MICROCOMPT+ communicates with a system via µConfig, the message 'UCONFIG…' appears on the prompter

RUN A LOADING OPERATION

1. PREPARE THE LOADING OPERATION

8000 L — Vm — EmA
CONNECT GROUND

▲ CONNECT THE GROUND
　✋ Connect the ground

8000 L — Vm — EmA
MOVE THE ARM

▲ MOVE THE LOADING ARM
　✋ Move the arm (right or left)

0 L — Vm — EmA
> LOWER THE ARM

▲ LOWER THE LOADING ARM
　✋ Lower the loading arm

0 L — Vm — EmA ●(green)
OPEN DEADMAN DEVICE
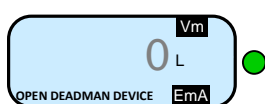
▲ OPEN THE DEADMAN DEVICE
　✋ Open the deadman device

2. CARRY OUT THE LOADING OPERATION

▲ START LOADING OPERATION

3000 L — Vm — EmA ●(green)
START LOADING
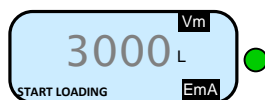
Display during the loading operation:

536 L — Vm — EmA
LOADING... ☼

Volume { **Vm**: volume at temperature
indication { **Vb**: converted volume (usually at 15°C)

The volume unit is set in
metrological mode (L, m3, Kg)

Default text
(depending on option: product name…)

Measuring system identifier { **EmA**: principal measuring system
{ **EmB**: secondary measuring system
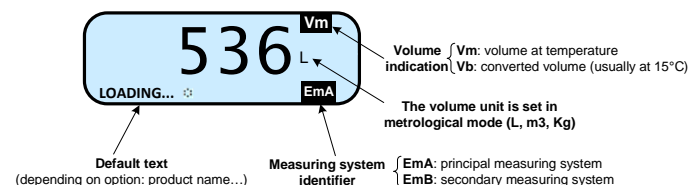
The loading operation may be interrupted by several situations:

▶ *APPEARANCE OF A FAULT AND DISPLAY OF AN ALARM*

1280 L — Vm — EmA ●(green)
(see list of alarms)

1280 L — Vm — EmA
PICK UP THE ARM

✋ Pick up the arm

Continue or stop the loading operation (§3 or §4)

▶ *INTENTIONAL INTERRUPTION OF THE LOADING OPERATION*

●(red) **1280** L — Vm — EmA ●(green)
STOP LOADING

1280 L — Vm
PICK UP THE ARM — EmA
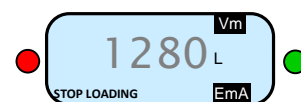
✋ Pick up the arm

Continue or stop the loading operation (§3 or §4)

▲ DISPLAY LOADING INFORMATION

●(blue) **060,0** m³/h
INSTANTANEOUS FLOW HF

●(blue) **+18.6** °C — EmA
PRODUCT TEMPERATURE ⚠ with active option

●(blue) **8.2** — EmA
PRODUCT PRESSURE ⚠ with active option

●(blue) **465** L — Vm — EmA
MEASURING VOLUME or **463** L — Vb
CONVERTED VOLUME ⚠ with active option

●(blue) **0.99582** — EmA
CONVERSION FACTOR

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3. CONTINUE THE LOADING OPERATION

1280 L — Vm — EmA ●(green)
CONTINUE ?

1280 L — Vm — EmA
LOAD>ARM DOWN
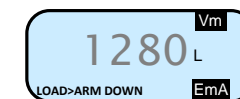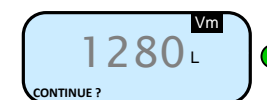
✋ Lower the loading arm
Start the loading operation §2

4. END THE LOADING OPERATION

1280 L — Vm ●(blue)
CONTINUE ?   **1280** L — Vm ●(green)
END OPERATION?

1280 L — Vm
MOVE THE ARM
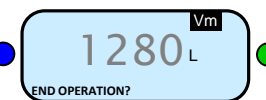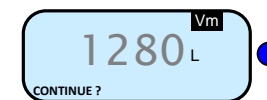
▲ PUT THE LOADING ARM ASIDE
　✋ Put the loading arm aside

1280 L — Vm
MOVE THE ARM

▲ REMOVE THE GROUND
　✋ Remove the ground

1280 L — Vm — EmA
CONNECT GROUND   Volume reset

▲ CLOSE THE DEADMAN DEVICE
　✋ Close the deadman device
Back to main menu §1

MEANING OF SYMBOLS
▲ Mandatory action
▲ Optional action
▶ *Event during loading operation*
✋ Action by operator

DISPLAY THE LOADING DATA

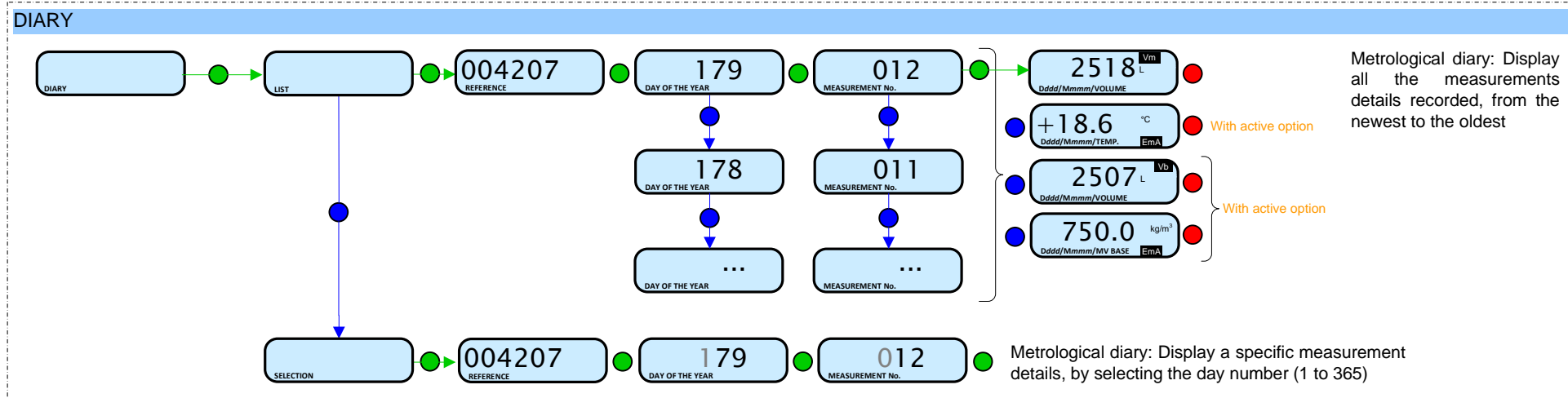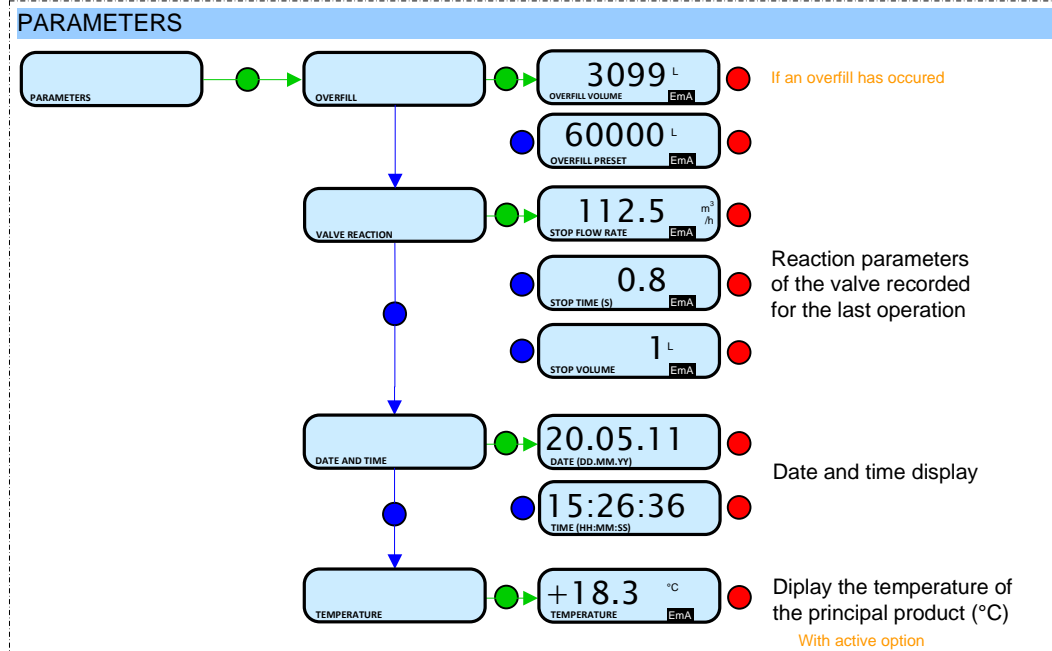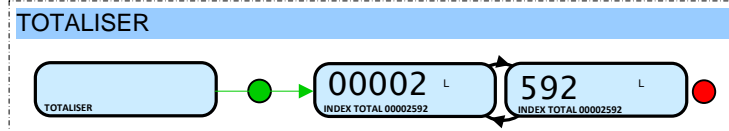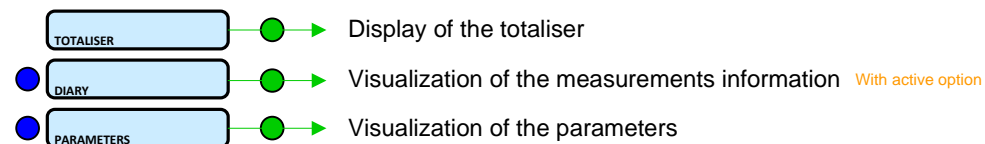This menu is available in stand-by mode or during an intermediate stop of the loading operation.

TOTALISER → Display of the totaliser

DIARY → Visualization of the measurements information *With active option*

PARAMETERS → Visualization of the parameters

TOTALISER

TOTALISER → 00002 L | 592 L
INDEX TOTAL 00002592 | INDEX TOTAL 00002592

PARAMETERS

PARAMETERS → OVERFILL →

3099 L — OVERFILL VOLUME — EmA   *If an overfill has occured*

60000 L — OVERFILL PRESET — EmA

VALVE REACTION →

112.5 m^3/h — STOP FLOW RATE — EmA

0.8 — STOP TIME (S) — EmA

1 L — STOP VOLUME — EmA

Reaction parameters of the valve recorded for the last operation

DATE AND TIME →

20.05.11 — DATE (DD.MM.YY)

15:26:36 — TIME (HH:MM:SS)

Date and time display

TEMPERATURE →

+18.3 °C — TEMPERATURE — EmA

Diplay the temperature of the principal product (°C)
With active option

DIARY

DIARY → LIST →

004207 — REFERENCE →

179 — DAY OF THE YEAR
178 — DAY OF THE YEAR
... — DAY OF THE YEAR →

012 — MEASUREMENT No.
011 — MEASUREMENT No.
... — MEASUREMENT No. →

2518 L Vm — Dddd/Mmmm/VOLUME

+18.6 °C — Dddd/Mmmm/TEMP. — EmA   *With active option*

2507 L Vb — Dddd/Mmmm/VOLUME

750.0 kg/m^3 — Dddd/Mmmm/MV BASE — EmA   *With active option*

Metrological diary: Display all the measurements details recorded, from the newest to the oldest

SELECTION →

004207 — REFERENCE → 179 — DAY OF THE YEAR → 012 — MEASUREMENT No.

Metrological diary: Display a specific measurement details, by selecting the day number (1 to 365)

LIST OF ALARMS

		DISPLAY	MEANING	ACTION
USER		STOP LOADING	Intentional interruption of the loading operation	Continue or stop the loading operation
		EMERGENCY STOP	Detection of an emergency stop	Check the status of the emergency stop
		COMMUNICATION FAULT	Absence of communication network	Check the status on the control device
		POWER SUPPLY PROBLEM	Power outage during discharge	Check the cause / Restore power supply
		LOW FLOW FAULT	Low flowrate (less than minimum flowrate)	Check the hydraulic system (valve, strainer, nozzle…)
		HIGH FLOW FAULT	High flowrate (greater than maximum flowrate)	Check the hydraulic system (valve, pumping)
		ZERO FLOW FAULT	Zero flow principal product	Check the hydraulic system (safety valve)
		METERING PROBLEM	Metering problem with the principal measuring device	Check if the pulse transmitter is powered (red indicators)
		OVERFILL FAULT	Over-filling of the compartment	Dry out the wet probe or end measurement
		MANDATORY END	Measurement end is required	End operation
		NO MORE AUTHORISATION	No more loading authorisation	Check the reason on the control device
		GROUND FAULT	Loss of ground signal	Check the connection of the dead-man switch
		TICKET FAULT	No ticket in the local mechanical printer	Check the ticket is well-positioned
		ARM POSITION FAULT	Loading arm in high-position	Check the loading arm position
		ARM DIRECTION FAULT	Problem with the direction of the arm in low-position	Check the loading arm direction (left or right)
		DIRECTION /2 RACKS	Detection of a loading arm on both sides of the rack	Check the loading arm direction (left or right)
		DEAD MAN SWITCH	The dead man switch is not connected	Check the dead man switch
		LEAKAGE FAULT	Metering detection without measurement	Check the tightness of the loading valve
		SAMPLING FAULT	Problem with the sampler	Check the status of the sampler
		SELECTION QUALITY	No product selected	Choose a product
		GAS DETECTED	Detection of gas (principal product circuit EMA)	Make a purge (manual or automatic)
		NO ADDITIVATION	Additivation null	Check the additive hydraulic system
		ADDITIVE LEAKAGE	Metering detection without injection	Check the additive hydraulic system
		ADDITIVATION <--->	Additivation rate too low	Check the additive hydraulic system
		ADDITIVATION <+++>	Additivation rate too high	Check the additive hydraulic system
		ADDITIVATION FAULT	Problem with the additivation electronic device	Check the additivation electronic device
		DIARY FAULT	Reset of the events diary	Acknowledge the alarm, check the date in supervisor mode
		LINE RINSING FAULT	Rinsing cycle not finished by the injector	Wait for the end of the rinsing cycle
		INJECT. LEAKAGE	Metering detection on injector XX without injection	Check the additive hydraulic system
REPARATOR	NON BLOCKING	DISPLAY FAULT	Problem with display card	If steady alarm, substitution of the display card
		WATCHDOG FAULT	Fault with display or power card or AFSEC+ card	If steady alarm, substitution of the faulty card
		VOLUME CONVER. FAULT	Problem during conversion of volume	If steady alarm, substitution of the AFSEC+ electronic card
		TOTALISER LOST	Loss of totaliser EMA	Substitution of the backup battery
		TEMPERATURE FAULT	Temperature determination failure EMA	If steady alarm, see a reparator for trouble shooting
		VALVE FAULT	Inappropriate reaction of the EMA control valve	If steady alarm, inspect the autorization valve
		FILTER FAULT	Filter fouling	The pressure switch and the product line must be cleaned
		ANTI-POLLUTION VALVE	Mismatch between the status awaited and the actual status of the antipollution valve	Check the status of the antipollution valve
	BLOCKING	PRINTER FAULT <->	Problem with the IT2 mechanical printer	If steady alarm, inspect the printer
		PRINTER FAULT <+>	Problem with the IT2 mechanical printer	If steady alarm, inspect the printer
		MEMORY LOST (PILE)	Loss of saved memory	Substitution of the backup battery
		MEMORY LOST	Error on SIM memorization	Enter and exit the METRO mode / If steady alarm, substitution of the backup battery
		COEFFICIENTS FAULT	Deviation between coefficient LF/HF greater than 0.5%	Modification of the low flow coefficient (K1)
		PROM FAULT	Loss of software or resident integrity	Substitution of the AFSEC+ electronic card
		RAM FAULT	Saved memory fault	Substitution of the AFSEC+ electronic card
		EEPROM MEMORY LOST	Loss of metrological configuration	Substitution of the AFSEC+ electronic card
		MEMORY OVER LOADED	Loading diary is full	Substitution of the AFSEC+ electronic card
		DATE AND TIME LOST	Loss of date and time	Set date and time in supervisor mode (supervisor key)
		POWER BOARD FAULT	Disparity between the software and the version of the power supply board	Remove the disparity
		GAS DETECTOR FAULT	Problem with the EMA gas detector	Check the gas detector
		VISCOSITY FAULT	Viscosity out of range	Check the curve in METROLOGICAL mode