ALMA	**OPERATING GUIDE** **GRAVICOMPT MANIFOLD**	GU 7038 EN A www.alma.alma.fr

This document sketches out the main menus (please refer to operating manual MU 7038 EN for further information).

USING THE BUTTONS

🔴 - Come back to the previous stage
   - Increment the blinking figure

🔵 - Choose the menu option
   - Access to the following figure

🟢 - Validate the displayed option
   - Validate the entry data

DELIVERY → 🟢 ▶ **Delivery control**

PRINT → 🟢 ▶ Printing (Delivery ticket, Daily summary, Totaliser, Parameters, Events recorded)

DISPLAY → 🟢 ▶ **Display (Totaliser, Memorization)**

MAINTENANCE → 🟢 ▶ Maintenance parameters (End of counting probe status, Liquid height, Instantaneous temperature)

Document available for sotware 348++v2.00.XX
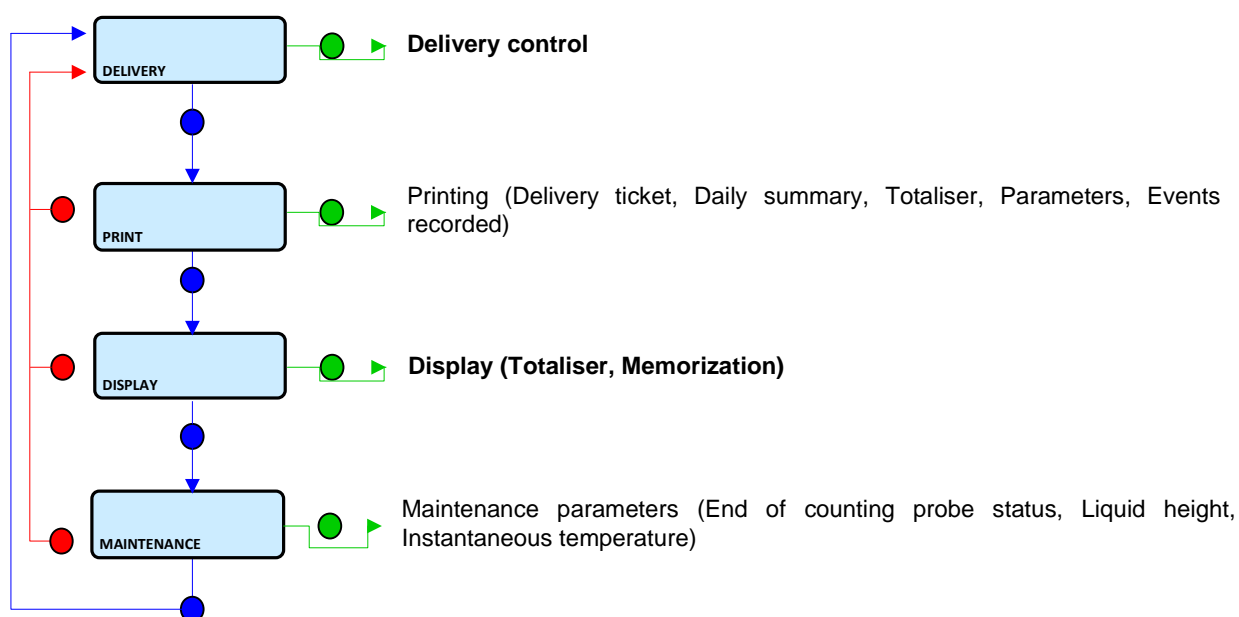
RUN A DELIVERY

1. PREPARE THE OPERATION

DELIVERY 🟢

▲ CHOOSE THE COMPARTMENT

C1 / – – – – – – 0 Vm L

C2 / – – – – – – 0 Vm L 🔵

...

Validate with 🟢

END DELIVERY? 🔵 🟢   This menu is choosen when all the operations of a same delivery have been carried out (§4)

▲ CHOOSE THE PRODUCT

PRODUCT→GO

PRODUCT→SP95 🔵

PRODUCT→XXX 🔵
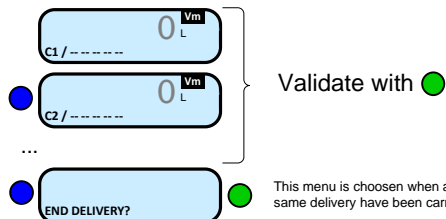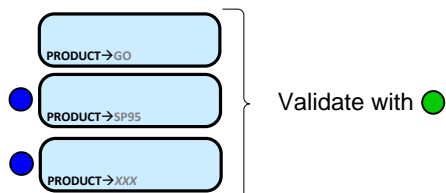
Validate with 🟢

▲ CHOOSE THE DISTRIBUTION MODE

MODE→PRESET

MODE→FREE 🔵

MODE→NOT COUNTED 🔵
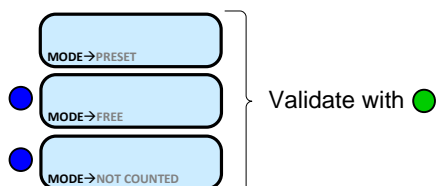
Validate with 🟢

▲ SET THE VOLUME ⚠ with PRESET MODE

ENTER PRESET 000000 L

🔴 Change the blinking figure value
🔵 Access to the following figure
🟢 Validate the entry data

2. CARRY OUT THE OPERATION

▲ START THE OPERATION

C1/ GO /START 300 Vm L 🟢 **FILLING** ✣ 0 Vm L

Display during discharge:

C1/ GO / PRESET 536 Vm L

Volume indication { **Vm**: volume at temperature / **Vb**: converted volume

Compartment used | Product | Distribution mode

The discharge may be interrupted by several situations:

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

(see list of alarms) 689 Vm L

🟢 *Continue or stop the operation (§3)*

▶ *INTENTIONAL INTERRUPTION OF THE OPERATION*

🔴 **STOP OPERATION** *volume* Vm L

🟢 *Continue or stop the operation (§3)*

▲ DISPLAY DISCHARGE INFORMATION

🔵 **INSTANTENEOUS FLOW** 🟢 **INSTANTENEOUS FLOW H** 59,3 m³/h   Unit: m³/h or L/min

🔵 **PRODUCT HEIGHT** 🟢 **PRODUCT HEIGHT** 471 mm
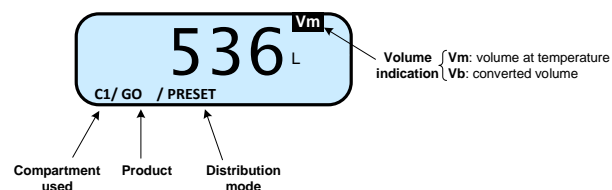
🔵 **INSTANTANEOUS TEMP.** 🟢 **INSTANTANEOUS TEMP.** +18,3 °C   ⚠ with active option
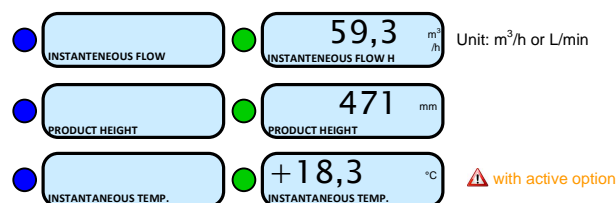
3. CONTINUE OR STOP THE OPERATION

🟠 CONTINUE OPERATION

CONTINUE OPERATION 1285 Vm L 🟢 Start the operation §2

▲ END THE OPERATION

🔵 **END OPERATION** 1285 Vm L 🟢 **DRAIN IN PROGRESS** ✣ 1285 Vm L **OPERATION FINISHED** 1285 Vm L 🟢
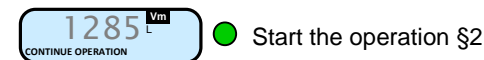
Back to compartment selection menu §1

4. END THE DELIVERY

>DELIVERY TICKET? 🔴 *Cancel the printing of the delivery ticket*

🟢 **ADD PAPER** **PRINTING IN PROGRESS** ✣ **>PRINTING FINISHED**
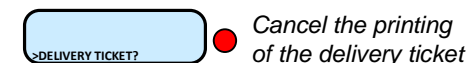
Back to main menu §1

MEANING OF SYMBOLS
▲ Mandatory action
🟠 Optional action (depends on configuration choosen)
▶ *Event during delivery*
✋ Action by operator

DISPLAY THE DELIVERY DATA

The DISPLAY menu is available in stand-by mode or in case of an intermediate stop

INDEX TOTAL ● ▼ Display of the totaliser

● **MEMORIZATION** ● ▼ Visualization of the measurements information
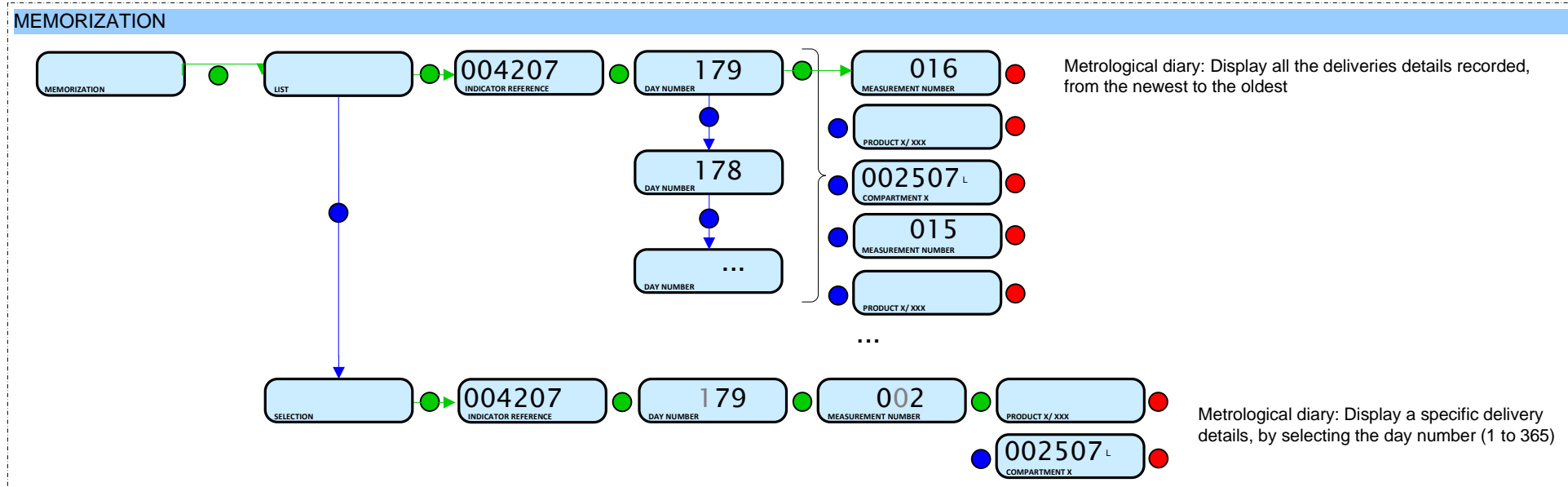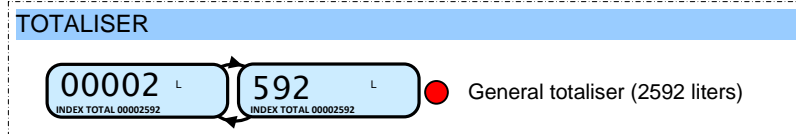
TOTALISER

00002 L	592 L	● General totaliser (2592 liters)
INDEX TOTAL 00002592	INDEX TOTAL 00002592	

MEMORIZATION

MEMORIZATION ● **LIST** ● | 004207 | ● | 179 | ● | 016 | ●
INDICATOR REFERENCE — DAY NUMBER — MEASUREMENT NUMBER

● | PRODUCT X/ XXX | ●

● | 002507 L | ●
COMPARTMENT X

● | 015 | ●
MEASUREMENT NUMBER

| 178 |
DAY NUMBER

● | PRODUCT X/ XXX | ●

| ... |
DAY NUMBER

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

...

SELECTION ● | 004207 | ● | 179 | ● | 002 | ● | PRODUCT X/ XXX | ●
INDICATOR REFERENCE — DAY NUMBER — MEASUREMENT NUMBER

● | 002507 L | ●
COMPARTMENT X

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

LIST OF ALARMS

		DISPLAY	MEANING	ACTION
USER		STOP OPERATION	Intentional interruption of discharge	Continue, stop or finish the operation
		PRINTER DEFAULT	No more communication with the printer	Check the connection cable, on-off switch and fuse
		POWER SUPPLY PROBLEM	Power outage during operation	Check the cause / Restore power supply
		ZERO FLOW DEFAULT	Zero flow	Check if the pulse transmitter is powered (red indicators)
		LOW FLOW DEFAULT	Low flowrate (less than $4m^3/h$)	Check the hydraulic system (valve, strainer, nozzle…)
		HIGH FLOW DEFAULT	High flowrate (greater than maximum flowrate)	Check the parameters / Reduce flowrate
		METERING PROBLEM	Metering problem with the measuring device	Check if the pulse transmitter is powered (red indicators)
		MANIFOLD NOT EMPTY	The manifold is not empty at the beginning of the operation	Follow the manifold release sequence
		FLAP LEAK DEFAULT	Product leakage from a flap	Check the flap
		DIARY DEFAULT	Reset of the events diary	Acknowledge the alarm, check the date in supervisor mode (supervisor key)
REPARATOR	**NON BLOCKING**	WATCHDOG DEFAULT	Fault with display or power card or AFSEC+ card	Switch on-off the MICROCOMPT+ / If steady alarm, substitution of the faulty card
		DISPLAY DEFAULT	Problem with display card	If steady alarm, substitution of the display card
		TOTALISER LOSS	Loss of totaliser	Substitution of the backup battery
		END OF POURING	End of pouring probe out of order	If steady alarm, see a reparator for trouble shooting
		PRESSURE DEFAULT	Pressure determination failure	If steady alarm, see a reparator for trouble shooting
		TEMPERATURE FAULT	Temperature determination failure	Check the temperature probe status / If steady alarm, see a reparator for trouble shooting
	BLOCKING	MEMORY LOST (PILE)	Loss of saved memory	Substitution of the backup battery
		MEMORY LOST	Delivery diary lost	Enter and exit the METRO mode / If steady alarm, substitution of the backup battery
		DATE AND TIME LOST	Loss of date and time	Set date and time in supervisor mode (supervisor key)
		GAS DEFAULT	Détection d'air en phase de grand débit	If steady alarm, see a reparator for trouble shooting
		PROM DEFAULT	Loss of software or resident integrity	Substitution of the AFSEC+ electronic card
		RAM DEFAULT	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	Delivery diary is full	Substitution of the AFSEC+ electronic card