

OPERATING MANUAL

LPG TRONIC

Document valable pour le logiciel N° : 384+ à partir de la version : 2.30

A	10/12/09	Creation	DSM	MV
Rev.	Date	Nature of modifications	Writer	Approb.

	MU 7051 EN A GPL TRONIQUE	Page 1/17
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SOMMAIRE

1. GENERALE PRESENTATION AND DESCRIPTION	3
2. OPERATING RECOMMENDATIONS	4
3. OPERATION MODE OF THE INDICATOR DEVICE.....	4
4. DRIVER GUIDE	5
4.1 DELIVERY.....	6
4.2 PRINT	8
4.3 DISPLAY.....	9
4.5 LPG TRONIC FAULTS PROCESSING	10
5. SUPERVISOR GUIDE.....	11
5.1 PARAMETERS	11
5.2 PRODUCTS.....	12
5.3 VEHICLE	12
5.4 SETTINGS.....	13
5.5 DATE AND HOUR.....	13
5.6 GAUGING.....	14
6. METROLOGICAL GUIDE.....	15
ANNEXES.....	16



1. GENERALE PRESENTATION AND DESCRIPTION

The LPG TRONIC measuring system must be fitted on road tankers only.

The LPG TRONIC measuring system comprises:

- A turbine meter
- A MICROCOMPT+ electronic calculator-indicator
- A gas separator
- A pump
- An automatic pressure control valve
- A full hose
- If required, a PT100 temperature sensor
- A printer

There are two models of LPG TRONIC: volume at temperature or volume at 15°C (measure and compensation of temperature at 15°C). An embedded computing option is also available (LPG TRONIC CD). This document presents all the possibilities. Some menus are the same; others are specific and are differently identified.

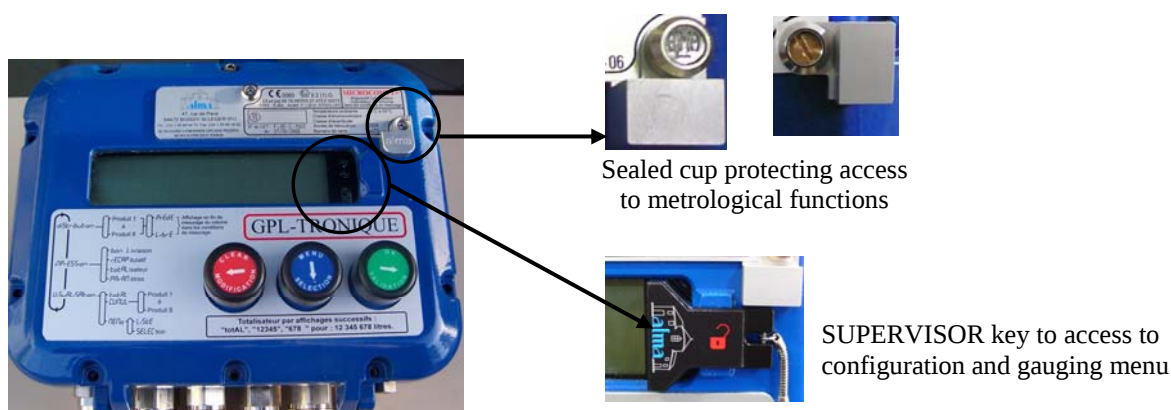
Identification of the different models of LPG TRONIC in the following pages:

V15 model

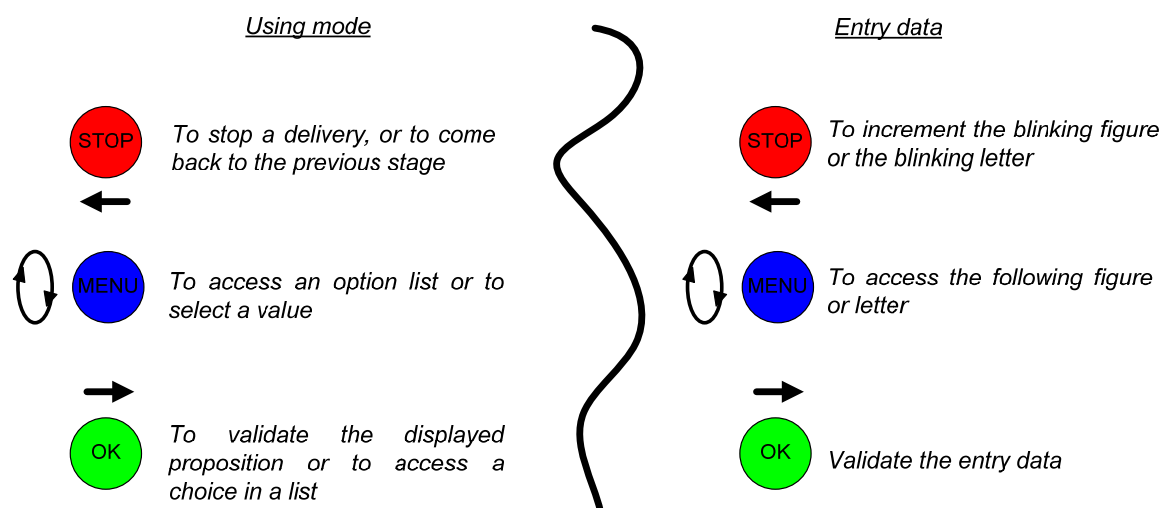
Embedded computing option

Vt model

Presentation of the MICROCOMPT+ calculator-indicator:



Buttons function:



The MICROCOMPT+ calculator-indicator manages measuring operation and computerizes the measuring system defaults.

2. OPERATING RECOMMENDATIONS

Safety valves may be incorporated in the LPG TRONIC measuring system. If they are located downstream of the turbine meter they must open to the atmosphere or be connected to the receiving tank.

3. OPERATION MODE OF THE INDICATOR DEVICE

Driver mode

This is the normal using mode in exploitation.

Refer to DRIVER GUIDE

Supervisor mode

To access the supervisor mode, the key must be put at the right of the MICROCOMPT display. This mode is used to set the measuring system and to access the calibration menu. Before using the LPG TRONIQUE, enter the value of the parameters such as:

- ⇒ Products
- ⇒ Vehicle identification
- ⇒ Volumes and duration settings
- ⇒ Date and time

Refer to SUPERVISOR GUIDE for setup.

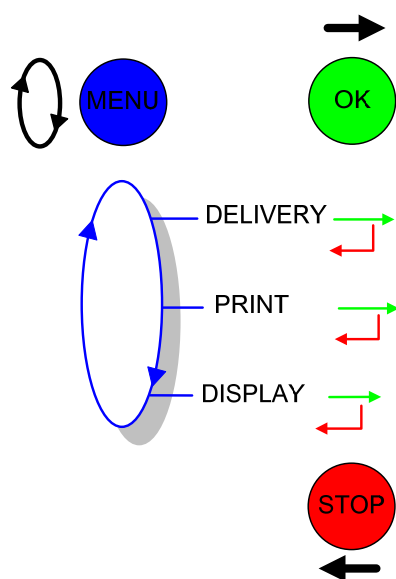
Metrological mode

To access the METROLOGICAL mode, the MICROCOMPT+ has to be unsealed. Only an authorized person can remove the seal. This mode allows setting all metrological parameters. It's done at the putting into use of the measuring system and sometimes during metrological controls.

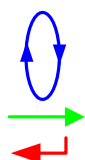
Refer to METROLOGICAL GUIDE for configuration.



4. DRIVER GUIDE



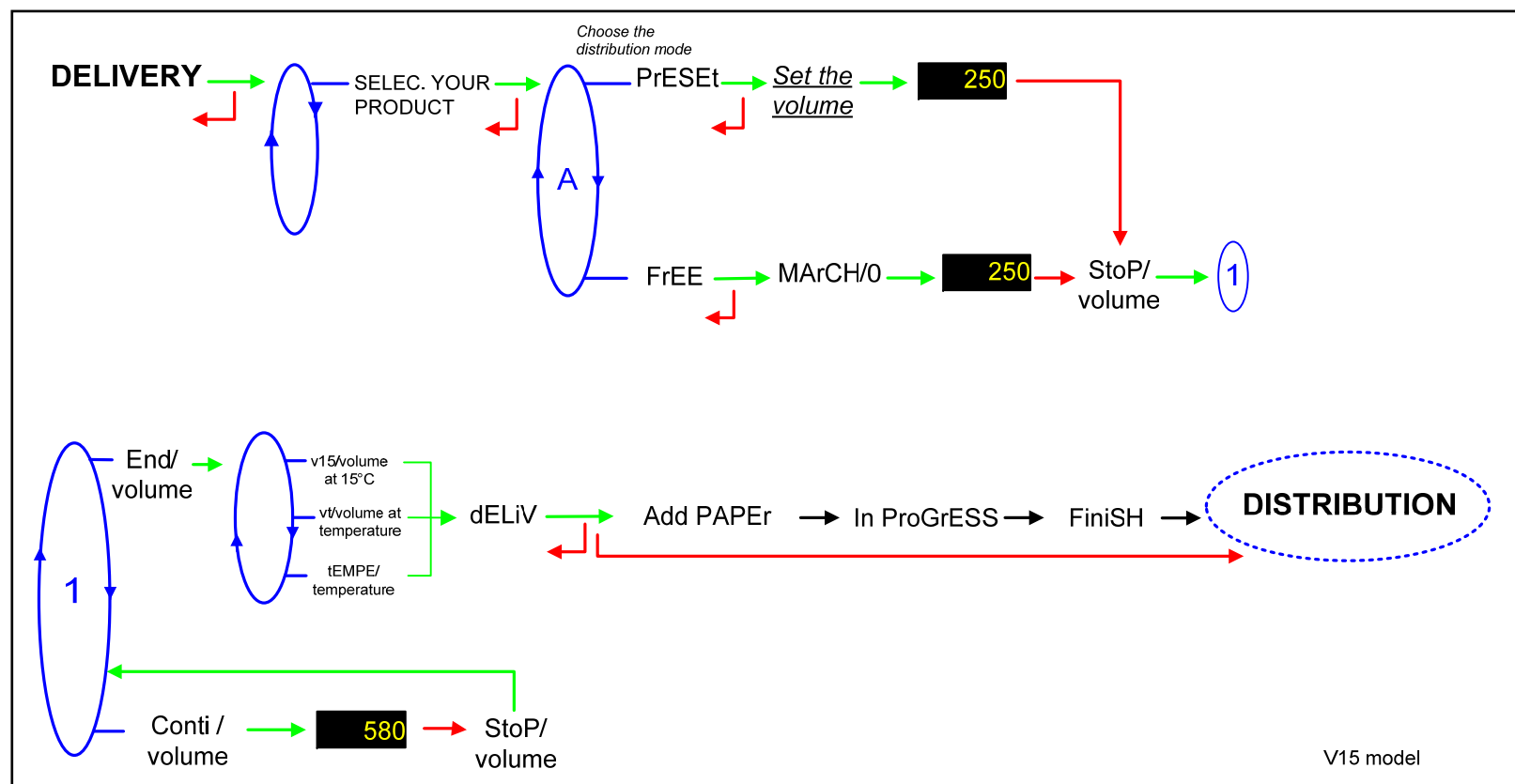
LEGEND:

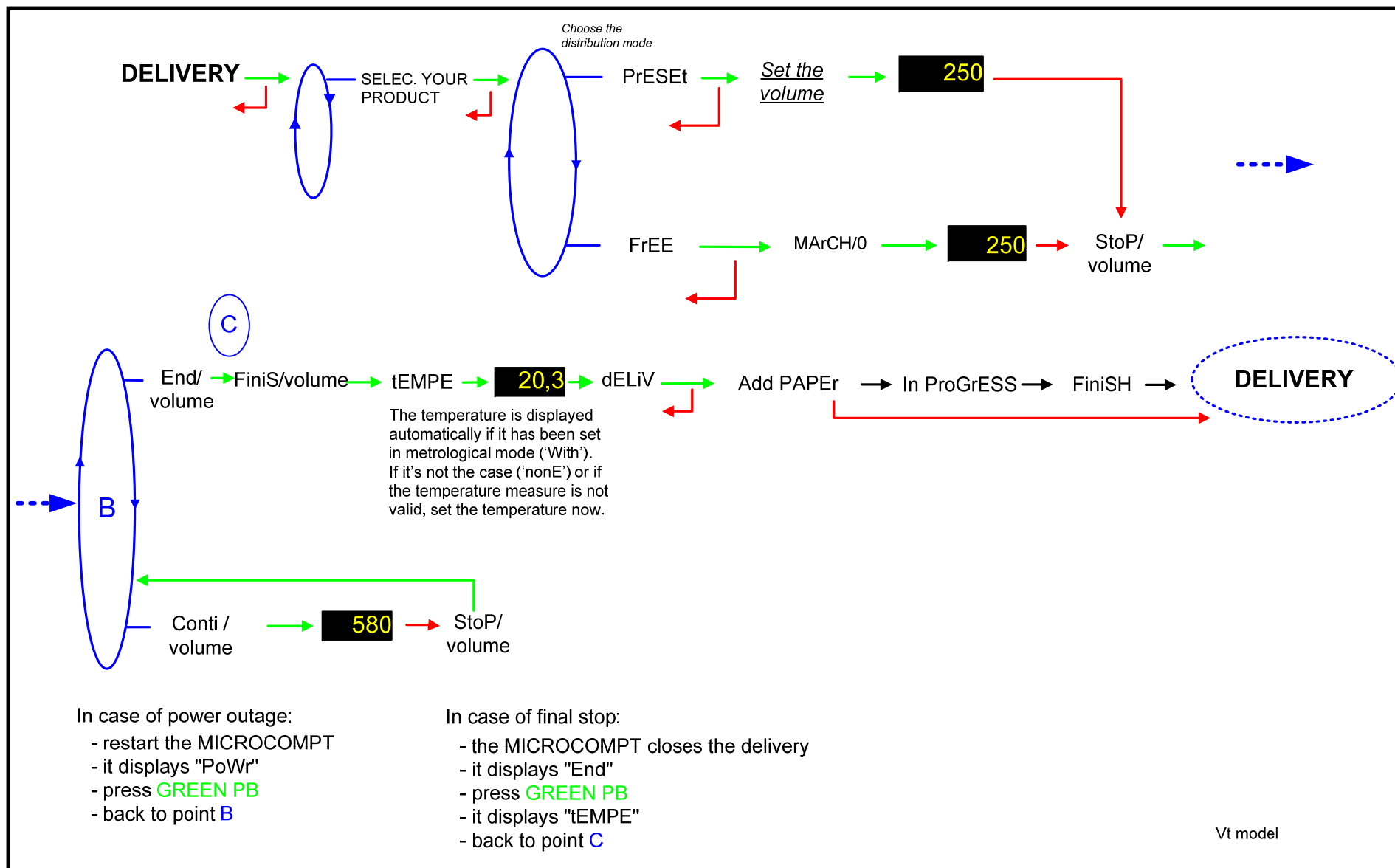


Press the button (red, blue or green) as many times as necessary to display the next message

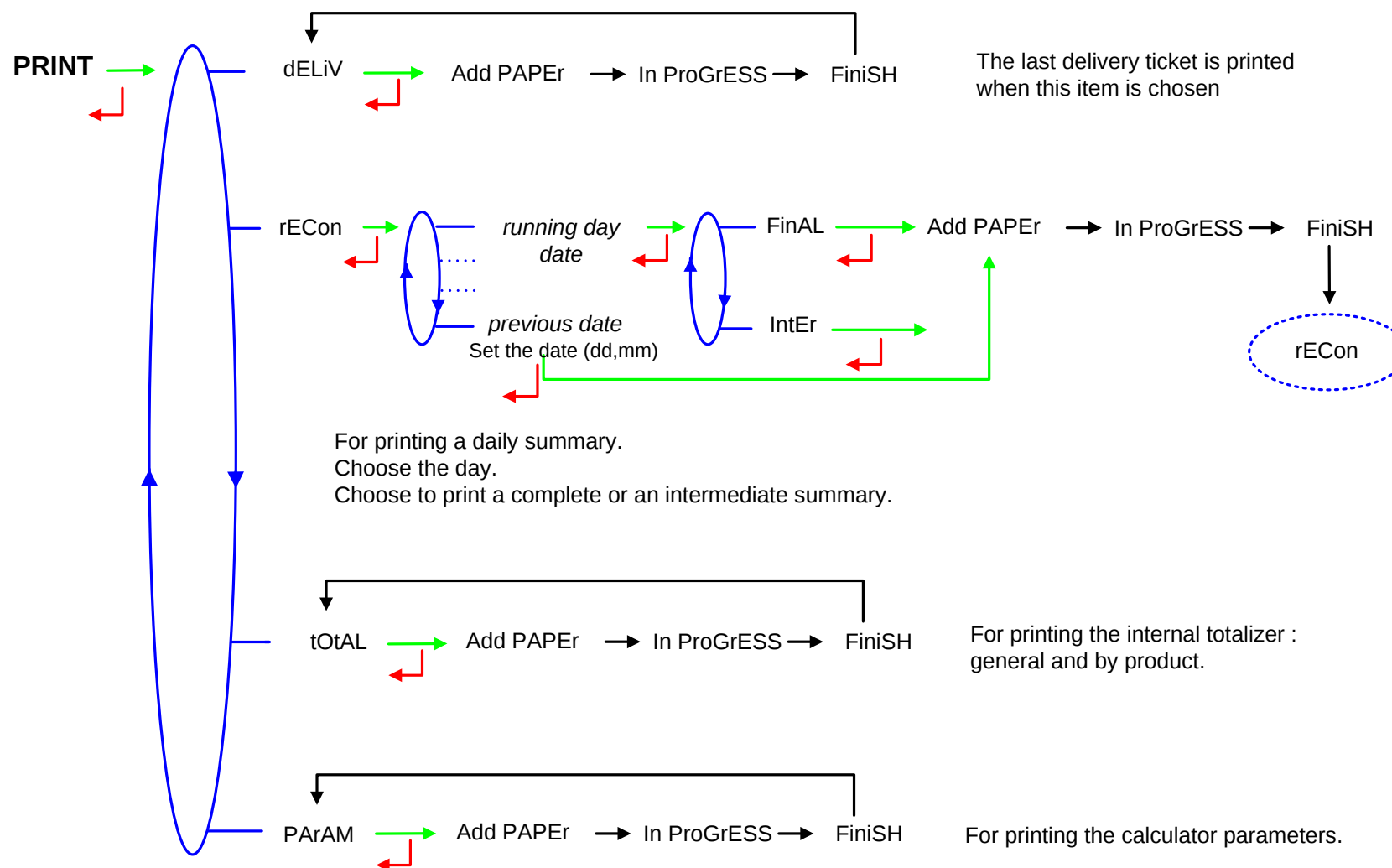
4.1 DELIVERY

During delivery, press blue pushbutton to visualize instantaneous flowrate (m^3/h).
Press a second time to display the temperature ($^{\circ}\text{C}$) if it is used. If not, the message 'nonE' appears.

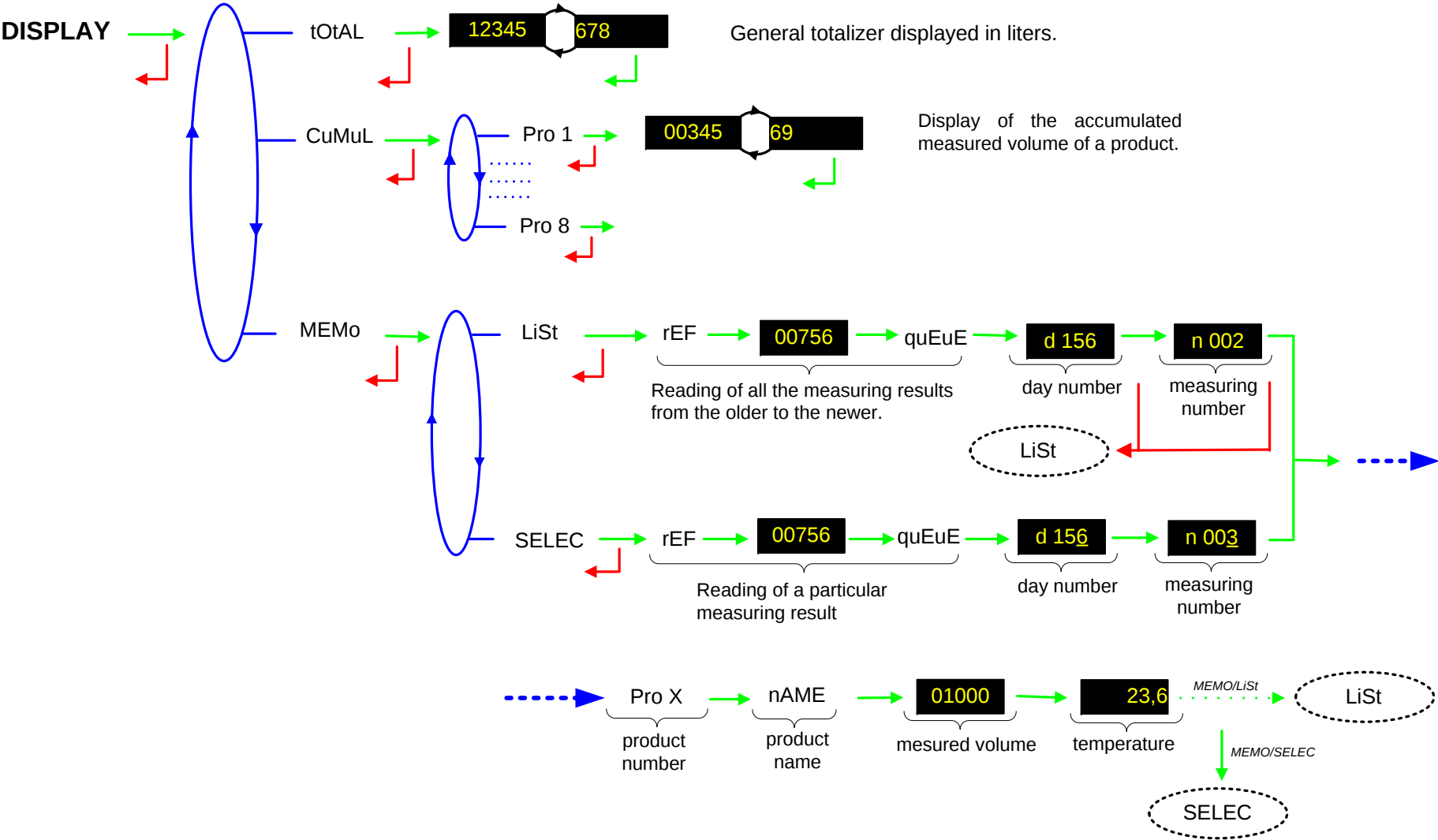




4.2 PRINT



4.3 DISPLAY



4.5 LPG TRONIC FAULTS PROCESSING

	Display	Meaning	Action
USER	STOP	Intentional interruption of delivery	Continue or stop the delivery
	PRINT	Communication with the printer lost	Check the connexion cable, on-off switch, and fuse
	POWER	Power outage during delivery	Check the cause / Restore power supply
	L - FLO	Low flowrate (less than minimum flowrate)	Check the parameters / Check the hydraulic system
	H - FLO	High flowrate (greater than maximum flowrate)	Check the parameters / Reduce flowrate
	DATE AND HOUR	Loss of date and time	Set date and time in supervisor mode (supervisor key)
	MESUR	Coherence failure in metering lines	Check if the pulse is powered. If not, check the wiring. Change the sensor if required

	Display	Meaning	Action
REPARATOR	DISPLAY	Problem with display card	If steady alarm, substitution of the display card
	DOG	Fault with display, power card or AFSEC+ card	Switch OFF/ON the MICROCOMPT+ If steady alarm, substitution of the faulty card
	TOTAL	Loss of totaliser	Substitution of the backup battery
	TEMPERATURE	Temperature determination failure	Check the temperature probe If steady alarm, see a reparator for trouble shooting
	PERTE MEMORISATION	Perte du journal des livraisons	Remplacement de la pile de sauvegarde
	FULL	SIM memory full	Enter and exit the metrological mode If steady alarm, substitution of the AFSEC+ electronic card
	PROM	Loss of software or resident integrity	Substitution of the AFSEC+ electronic card
	RAM	Saved memory fault	Substitution of the AFSEC+ electronic card
	EEPROM	Loss of metrological configuration	Substitution of the AFSEC+ electronic card
	SAVED RAM	Loss of saved memory	Substitution of the backup battery



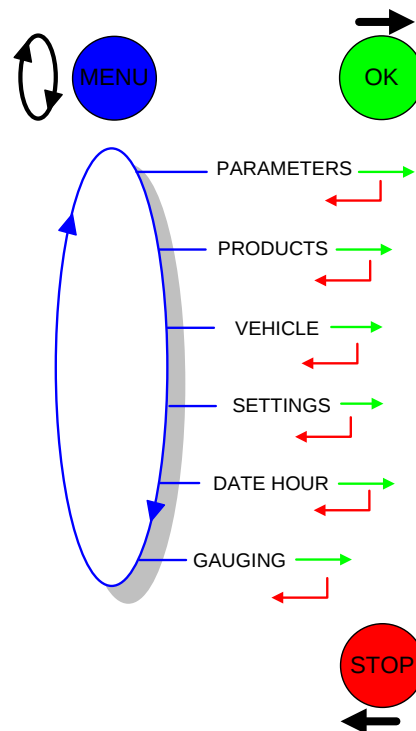
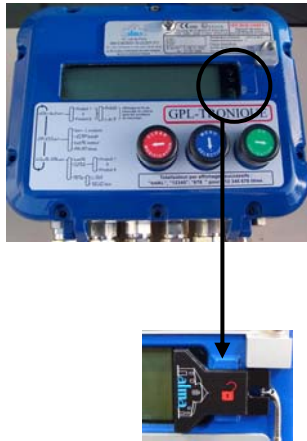
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Page 10/17

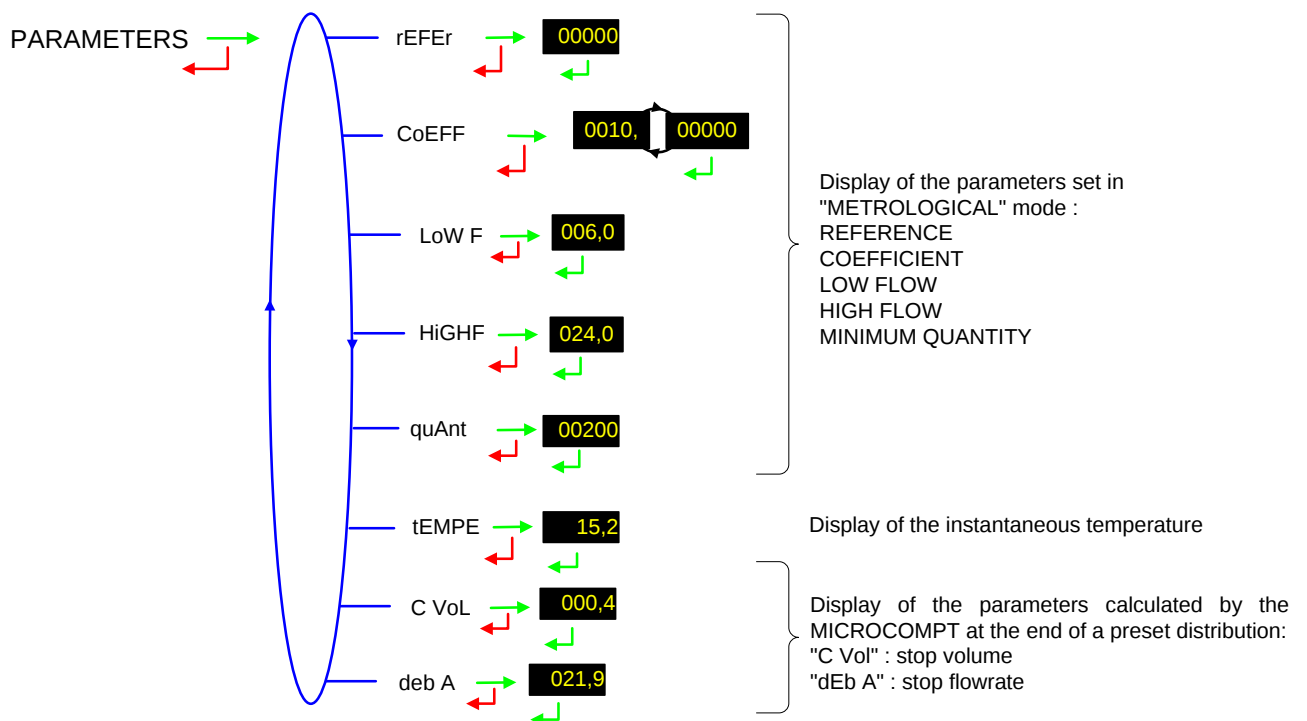
USER

5. SUPERVISOR GUIDE

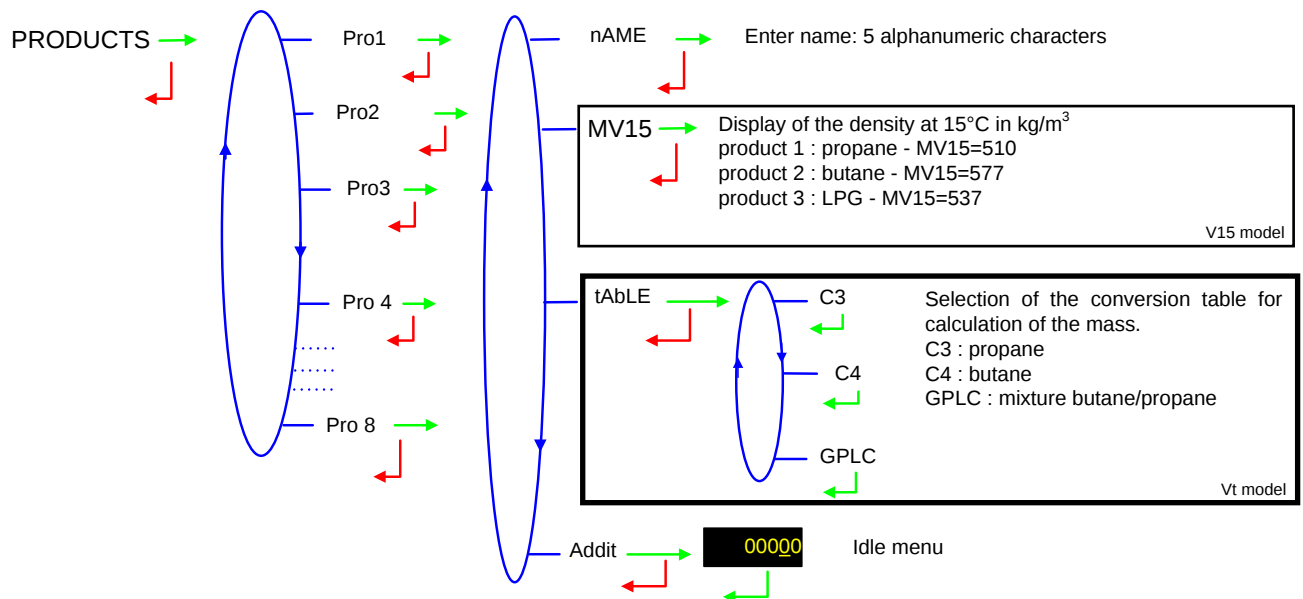

SUPERVISOR

5.1 PARAMETERS

This menu displays the parameters set in metrological mode, the instantaneous temperature. It also allows to control the values measured at the end of a preset delivery: stop volume and flowrate.

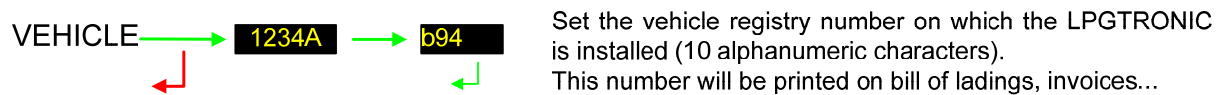


5.2 PRODUCTS

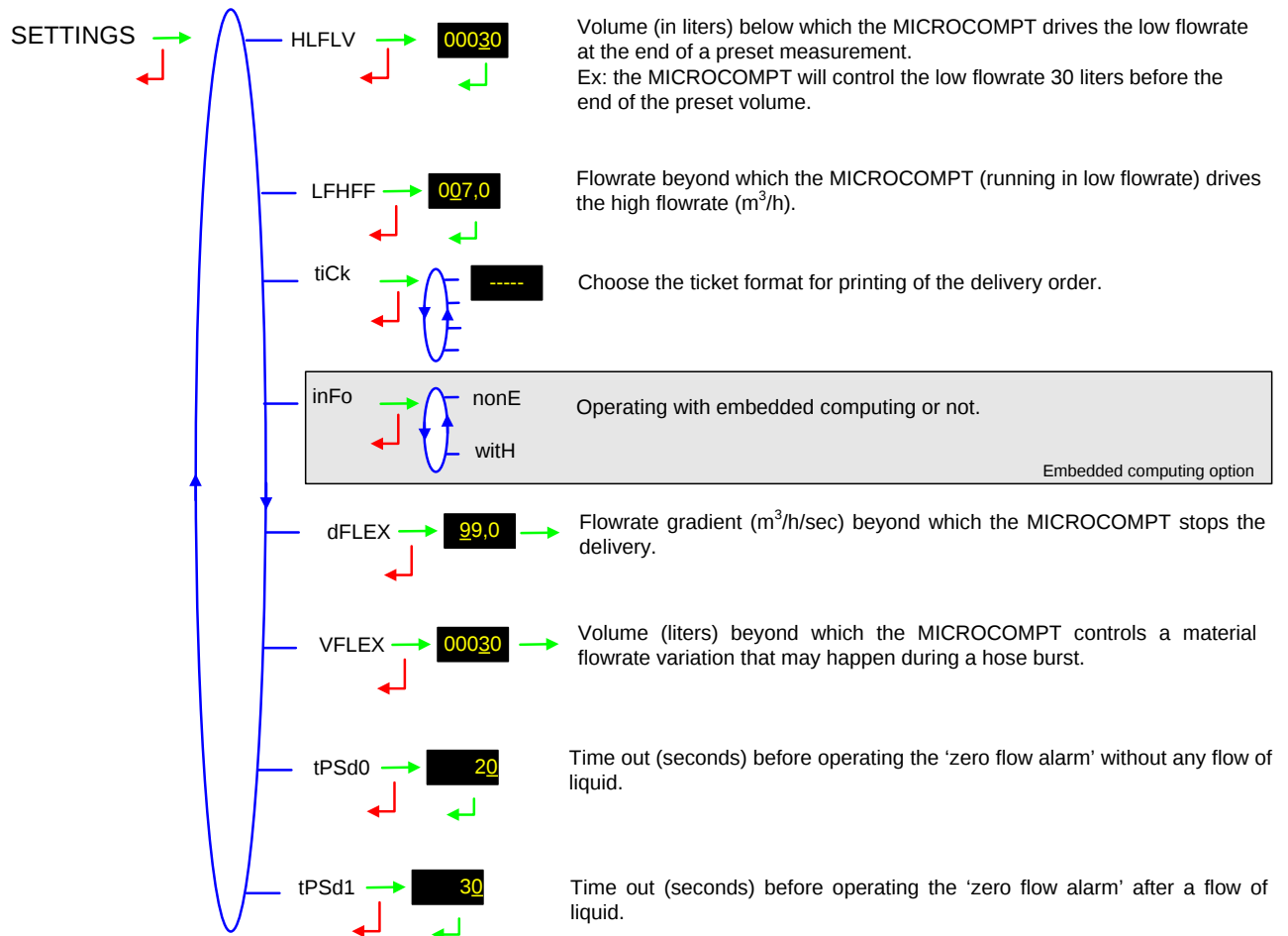


SUPERVISOR

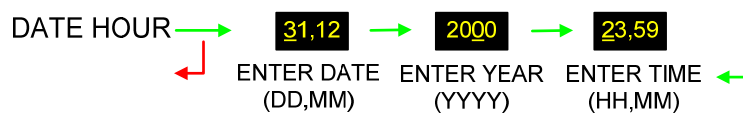
5.3 VEHICLE



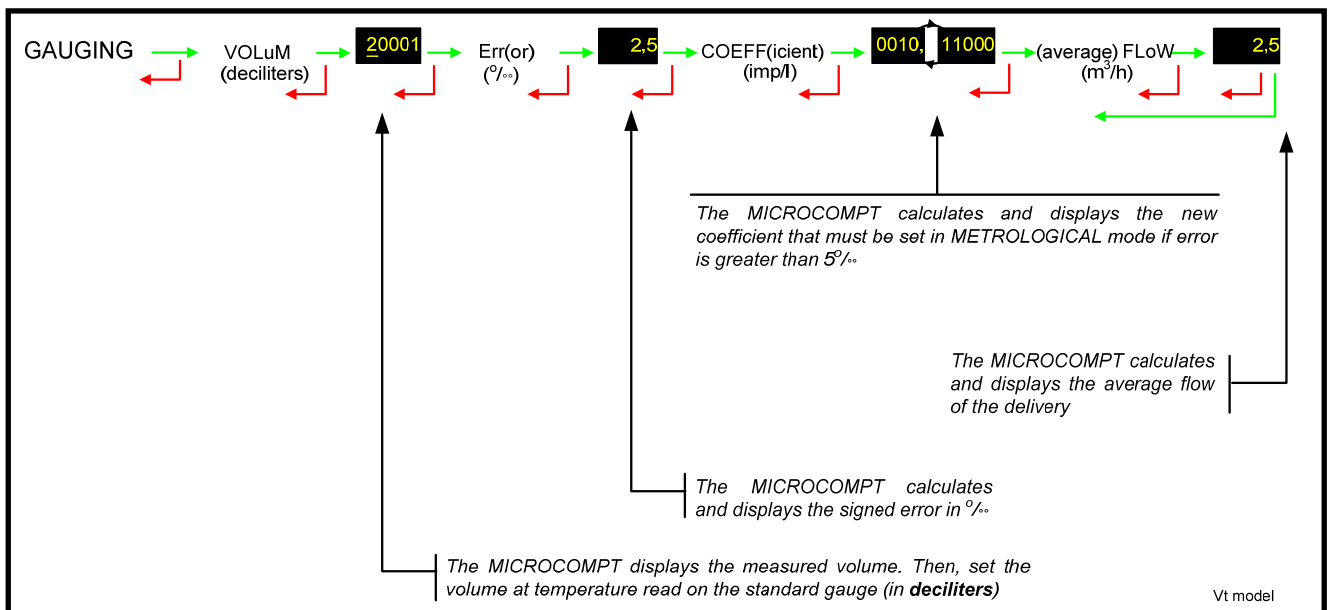
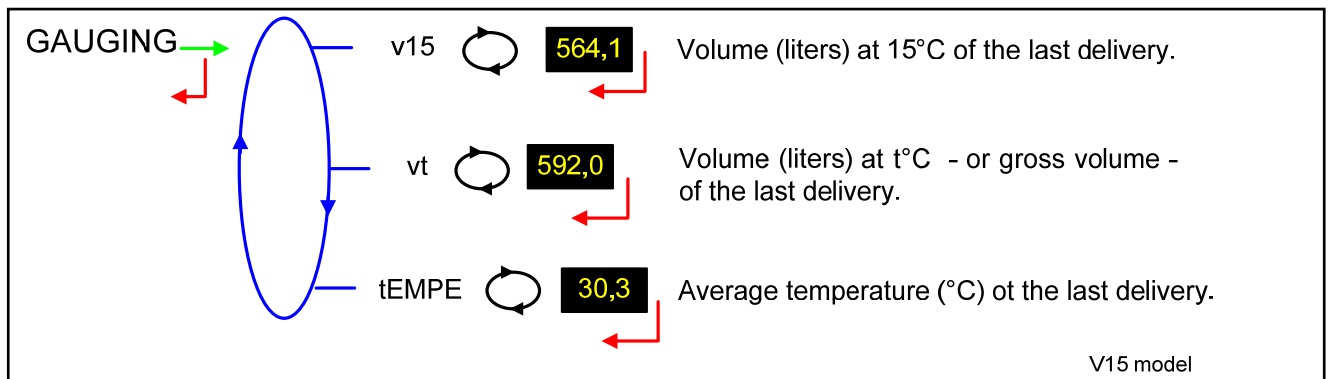
5.4 SETTINGS



5.5 DATE AND HOUR

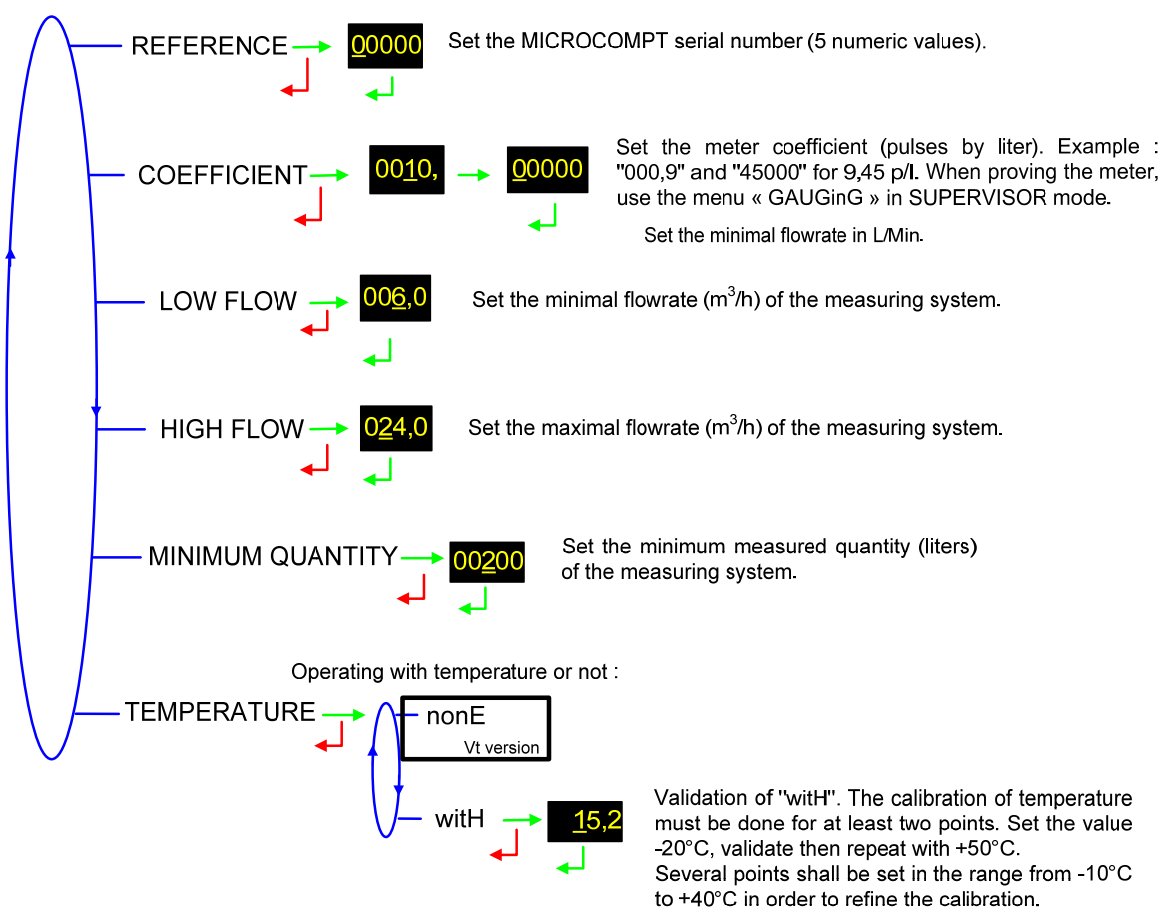
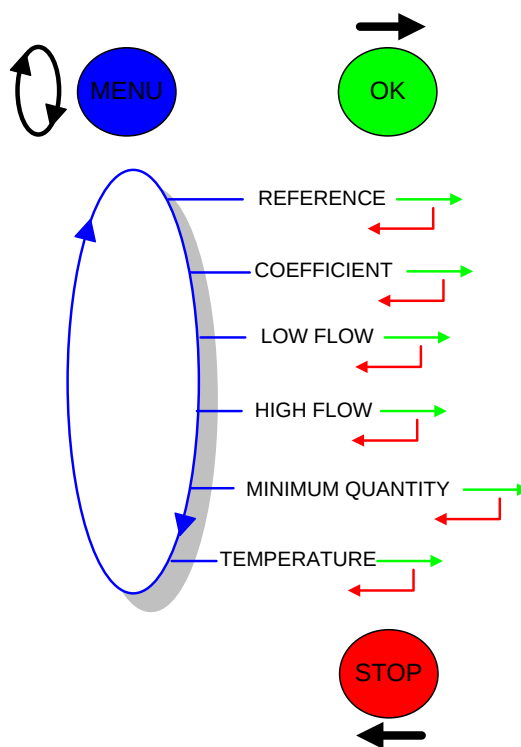


5.6 GAUGING



SUPERVISOR

6. METROLOGICAL GUIDE



ANNEXES

RECONCILIATION

LPG.TRONIQUE 384+.10 ALIM rev7
Version 2.30 du 17/07/09
Printed 20/09/10 at 10h31
Vehicule number : AA215EL
Liter counter reference : 03201

Measurements intermediate
reconciliation 20/09/10
Day 263 003 memorised measurements

TICKET NUMBER: 005

**** DAILY TOTALISATERS ****

ProPA	(1) :	00026000 L	+11,3°C
buTa	(2) :	00005000 L	+10,6°C
LPG	(3) :	00000000 L	+00,0°C
SAnS	(4) :	00000000 L	+00,0°C
SAnS	(5) :	00000000 L	+00,0°C
SAnS	(6) :	00000000 L	+00,0°C
SAnS	(7) :	00000000 L	+00,0°C
SAnS	(8) :	00000000 L	+00,0°C

1 to 8 sum: 00031000 L +11,2°C

***** RECONCILIATION *****

Hre	Hre	N°		(L)	(°C)
beg	end	Mesur	Prod	Volume	Temp
09:40	09:50	01	ProPA	1400	+11,3
09:51	10:01	02	buTa	1200	+11,3
10:02	10:23	03	buTa	0500	+10,6

PARAMETERS

LPG.TRONIQUE 384+.10 ALIM rev7
Version 2.30 du 17/07/09
Printed 20/09/10 at 10h31
Vehicule number : AA215EL
Liter counter reference : 03201

***** PARAMETERS *****

Reference: 03201
Coefficient: 10.00000 imp/l
Minimum flowrate: 6.00 m3/h
Maximum flowrate: 24.00 m3/h
Quantite minimale: 200 l
Temperature: +11.4 °C
Closing volume: 0.0 l
Débit d'arrêt: 0.1 m3/h

***** PRODUCTS *****

ProPA	(1)	C3	00000 l/rec
buTa	(2)	C4	00000 l/rec
LPG	(3)	GPLC	00000 l/rec
ProPA	(4)	C3	00000 l/rec
ProPA	(5)	C3	00000 l/rec
ProPA	(6)	C3	00000 l/rec
ProPA	(7)	C3	00000 l/rec
ProPA	(8)	C3	00000 l/rec

***** SETTINGS *****

Ending low flow volume: 30 L
High flowrate volume: 7.0 m3/h
Ticket: sans
dDebit flexible: 99.0 m3/h/sec
vDebit flexible: 30 l
Tempo courte deb_0: 20.00 secs
Tempo longue deb_0: 30.00 secs



TOTALISERS

LPG.TRONIQUE 384+.10 ALIM rev7
 Version 2.30 du 17/07/09
 Printed 20/09/10 at 11h30
 Vehicule number: AA215EL
 Liter counter reference: 03201

***** TOTALISERS*****

General totaliser: 00056638 L

ProPA	(1) :	00028000 L
buTa	(2) :	00028000 L
LPG	(3) :	00000000 L
nonE	(4) :	00000000 L
nonE	(5) :	00000000 L
nonE	(6) :	00000000 L
nonE	(7) :	00000000 L
nonE	(8) :	00000000 L

1 to 8 sum: 00056000 L

