



9 **OPERATION**

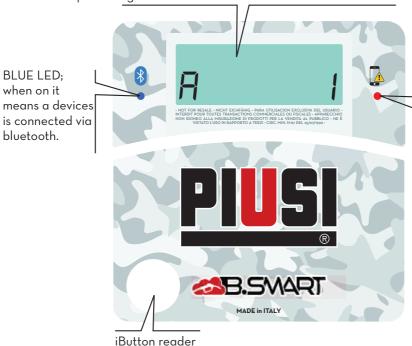
The controller is powered at 100/240 VAC and drives a motor that can absorb a maximum current of 15 A. It has a 4-character backlit display, iButton reader, a blue bluetooth connection LED and a red warning/alarm LED:

DISPLAY

Backlighting active: this means the driver or manager has been successfully authenticated via smartphone or the driver has been authenticated by the iButtton.

The display shows:

- firmware version installed,
- value of the dispensing,
- time,
- warning or alarm code (when red LED is on).
- boot status for firmware update,
- percentage of firmware transferred.



RED LED:

when this lights up an alarm code comes on the display to indicate a series of warnings or alarms. See the error codes table

NOTE



Red LED on - It switches on due to several factors, each time the LED lights up the display shows a code indicated by a letter A and by an incremental number. Whenever the led is on, it is not possible to dispense.

Below are the possible coded errors with their respective resolution methods.

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Coding	Description	Explanation/Solution	
[]	WARNING_MASTER_PUMP_ GROUPA_LEVEL1_CONTACT	Contact 1 associated with pump A of the main controller is active: red LED flashing.	
C2	WARNING_MASTER_PUMP_ GROUPA_LEVEL2_CONTACT	Contact 2 associated with pump A of the main controller is active: red LED flashing.	
[3	WARNING_MASTER_PUMP_ GROUPA_THR1	The tank associated with pump A of the main controller has reached the level 1 threshold: red LED flashing.	
[4	WARNING_MASTER_PUMP_ GROUPA_THR2	The tank associated with pump A of the main controller has reached the level 2 threshold: red LED flashing.	
C 5	WARNING_MASTER_PUMP_ GROUPB_LEVEL1_CONTACT	Contact 1 associated with pump B of the main controller is active: red LED flashing.	
£5	WARNING_MASTER_PUMP_ GROUPB_LEVEL2_CONTACT	Contact 2 associated with pump B of the main controller is active: red LED flashing.	
[7	WARNING_MASTER_PUMP_ GROUPB_THR1	The tank associated with pump B of the main controller has reached the level 1 threshold: red LED flashing.	

C8	WARNING_MASTER_PUMP_ GROUPB_THR2	The tank associated with pump B of the main controller has reached the level 2 threshold: red LED flashing.
C9	WARNING_SLAVE_PUMP_ GROUPA_LEVEL1_CONTACT	Contact 1 associated with pump A of the secondary controller is active: red LED flashing.
C 10	WARNING_SLAVE_PUMP_ GROUPA_LEVEL2_CONTACT	Contact 2 associated with pump A of the secondary controller is active: red LED flashing.
	WARNING_SLAVE_PUMP_ GROUPA_THR1	The tank associated with pump A of the main controller has reached the level 1 threshold: red LED flashing.
C 12	WARNING_SLAVE_PUMP_ GROUPA_THR2	The tank associated with pump A of the secondary controller has reached the level 2 threshold: red LED flashing.
E 13	WARNING_SLAVE_PUMP_ GROUPB_LEVEL1_CONTACT	Contact 1 associated with pump B of the secondary controller is active: red LED flashing.
E 14	WARNING_SLAVE_PUMP_ GROUPB_LEVEL2_CONTACT	Contact 2 associated with pump B of the secondary controller is active: red LED flashing.
E 15	WARNING_SLAVE_PUMP_ GROUPB_THR1	The tank associated with pump B of the secondary controller has reached the level 1 threshold: red LED flashing.
C 16	WARNING_SLAVE_PUMP_ GROUPB_THR2	The tank associated with pump B of the secondary controller has reached the level 2 threshold: red LED flashing.
ΕП	WARNING_MASTER_PUMP_ GROUPA_PROBE_OCIO	Fault detected on the level sensors connection line. (The system allows manual dispensing).
C 18	WARNING_MASTER_PUMP_ GROUPB_PROBE_OCIO	Fault detected on the level sensors connection line. (The system allows manual dispensing).
C 19	WARNING_MASTER_SLAVE_ GROUPA_PROBE_OCIO	Fault detected on the level sensors connection line. (The system allows manual dispensing).
C20	WARNING_MASTER_SLAVE_ GROUPB_PROBE_OCIO	Fault detected on the level sensors connection line. (The system allows manual dispensing).
	WARNING_CANBUS_COM	Fault detected on the connection line between controllers.
C25		The system behaves as for probe alarms, allowing manual dispensing.
C25 A I	ALARM_MASTER_PUMP_ GROUPA_LEVEL1_CONTACT	The system behaves as for probe alarms, allowing manual dispensing. Contact 1 associated with pump A of the main controller is
	ALARM_MASTER_PUMP_	The system behaves as for probe alarms, allowing manual dispensing.
ΑI	ALARM_MASTER_PUMP_ GROUPA_LEVEL1_CONTACT ALARM_MASTER_PUMP_	The system behaves as for probe alarms, allowing manual dispensing. Contact 1 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. Contact 2 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not pos-
A 1	ALARM_MASTER_PUMP_ GROUPA_LEVEL1_CONTACT ALARM_MASTER_PUMP_ GROUPA_LEVEL2_CONTACT ALARM_MASTER_PUMP_	The system behaves as for probe alarms, allowing manual dispensing. Contact 1 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. Contact 2 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 1 threshold: red LED on (not flash-
A I A2 A3	ALARM_MASTER_PUMP_ GROUPA_LEVEL1_CONTACT ALARM_MASTER_PUMP_ GROUPA_LEVEL2_CONTACT ALARM_MASTER_PUMP_ GROUPA_THR1 ALARM_MASTER_PUMP_	The system behaves as for probe alarms, allowing manual dispensing. Contact 1 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. Contact 2 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 1 threshold: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 2 threshold: red LED on (not flashing) reached the level 2 threshold: red LED on (not flashing).
A I A2 A3 A4	ALARM_MASTER_PUMP_ GROUPA_LEVEL1_CONTACT ALARM_MASTER_PUMP_ GROUPA_LEVEL2_CONTACT ALARM_MASTER_PUMP_ GROUPA_THR1 ALARM_MASTER_PUMP_ GROUPA_THR2 ALARM_MASTER_PUMP_	The system behaves as for probe alarms, allowing manual dispensing. Contact 1 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. Contact 2 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 1 threshold: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 2 threshold: red LED on (not flashing). Dispensing not possible. Contact 1 associated with pump B of the main controller is
A I A2 A3 A4 A5	ALARM_MASTER_PUMP_ GROUPA_LEVEL1_CONTACT ALARM_MASTER_PUMP_ GROUPA_LEVEL2_CONTACT ALARM_MASTER_PUMP_ GROUPA_THR1 ALARM_MASTER_PUMP_ GROUPA_THR2 ALARM_MASTER_PUMP_ GROUPB_LEVEL1_CONTACT ALARM_MASTER_PUMP_ GROUPB_LEVEL1_CONTACT ALARM_MASTER_PUMP_	The system behaves as for probe alarms, allowing manual dispensing. Contact 1 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. Contact 2 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 1 threshold: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 2 threshold: red LED on (not flashing). Dispensing not possible. Contact 1 associated with pump B of the main controller is active: red LED on (not flashing). Dispensing not possible. Contact 2 associated with pump B of the main controller is
A I A2 A3 A4 A5 A6	ALARM_MASTER_PUMP_ GROUPA_LEVEL1_CONTACT ALARM_MASTER_PUMP_ GROUPA_LEVEL2_CONTACT ALARM_MASTER_PUMP_ GROUPA_THR1 ALARM_MASTER_PUMP_ GROUPA_THR2 ALARM_MASTER_PUMP_ GROUPB_LEVEL1_CONTACT ALARM_MASTER_PUMP_ GROUPB_LEVEL2_CONTACT ALARM_MASTER_PUMP_ GROUPB_LEVEL2_CONTACT ALARM_MASTER_PUMP_	The system behaves as for probe alarms, allowing manual dispensing. Contact 1 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. Contact 2 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 1 threshold: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 2 threshold: red LED on (not flashing). Dispensing not possible. Contact 1 associated with pump B of the main controller is active: red LED on (not flashing). Dispensing not possible. Contact 2 associated with pump B of the main controller is active: red LED on (not flashing). Dispensing not possible. The tank associated with pump B of the main controller has reached the level 1 threshold: red LED on (not flashing).
A I A2 A3 A4 A5 A6 A7	ALARM_MASTER_PUMP_ GROUPA_LEVEL1_CONTACT ALARM_MASTER_PUMP_ GROUPA_LEVEL2_CONTACT ALARM_MASTER_PUMP_ GROUPA_THR1 ALARM_MASTER_PUMP_ GROUPA_THR2 ALARM_MASTER_PUMP_ GROUPB_LEVEL1_CONTACT ALARM_MASTER_PUMP_ GROUPB_LEVEL2_CONTACT ALARM_MASTER_PUMP_ GROUPB_THR1 ALARM_MASTER_PUMP_ GROUPB_THR1	The system behaves as for probe alarms, allowing manual dispensing. Contact 1 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. Contact 2 associated with pump A of the main controller is active: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 1 threshold: red LED on (not flashing). Dispensing not possible. The tank associated with pump A of the main controller has reached the level 2 threshold: red LED on (not flashing). Dispensing not possible. Contact 1 associated with pump B of the main controller is active: red LED on (not flashing). Dispensing not possible. Contact 2 associated with pump B of the main controller is active: red LED on (not flashing). Dispensing not possible. The tank associated with pump B of the main controller has reached the level 1 threshold: red LED on (not flashing). Dispensing not possible. The tank associated with pump B of the main controller has reached the level 2 threshold: red LED on (not flashing). Dispensing not possible.





A 10	ALARM_SLAVE_PUMP_GROU- PA_LEVEL2_CONTACT	Contact 2 associated with pump A of the secondary controller is active: red LED on (not flashing). Dispensing not possible.
AII	ALARM_SLAVE_PUMP_GROU- PA_LEVEL1_THR1	The tank associated with pump A of the main controller has reached the level 1 threshold: red LED on (not flashing). Dispensing not possible.
A 15	ALARM_SLAVE_PUMP_GROU- PA_LEVEL1_THR2	The tank associated with pump A of the secondary controller has reached the level 2 threshold: red LED on (not flashing). Dispensing not possible.
A 13	ALARM_SLAVE_PUMP_ GROUPB_LEVEL1_CONTACT	Contact 1 associated with pump B of the secondary controller is active: red LED on (not flashing). Dispensing not possible.
A 14	ALARM_SLAVE_PUMP_ GROUPB_LEVEL2_CONTACT	Contact 2 associated with pump B of the secondary controller is active: red LED on (not flashing). Dispensing not possible.
A 15	ALARM_SLAVE_PUMP_ GROUPB_LEVEL1_THR1	The tank associated with pump B of the secondary controller has reached the level 1 threshold: red LED on (not flashing). Dispensing not possible.
A 16	ALARM_SLAVE_PUMP_ GROUPB_LEVEL1_THR2	The tank associated with pump B of the secondary controller has reached the level 2 threshold: red LED on (not flashing). Dispensing not possible.
A28	ALARM_BUFFER_FULL	The dispensing buffer is full. All the dispensing operations stored in the controller must be uploaded to the cloud.
A29	ALARM_INACTIVE_PUMP	No pumps are active. (Check system configuration on WebApp)
A30	ALARM_RTC_RESET	The time has been lost. The current time must be uploaded to the controller via a smartphone.
A3 !	ALARM_RTC_FAULT	Time synchronization not possible. (Contact the Service Department).
A35	ALARM_SOFT_MEMORY_ DATA_FAULT(Cumulative)	Corrupted memory (data can be reset from WebApp backup).
R33	ALARM_HARD_MEMORY_ DATA_FAULT(Cumulative)	Corrupted memory (data can be reset from WebApp backup).
A34	ALARM_VERY_HARD_MEMO- RY_DATA_FAULT(Cumulative)	Damaged memory (contact the Service Department).

With regard to the warning/alarm logics, it should be noted that one or more pump units can be connected to the same tank, or share common level contacts as outlined in the paragraph describing

In these situations, warnings and alarms from one controller will be propagated to the other controllers sharing the same resource.

For more specific details on modes of connection and communication between controllers, please refer to the manual found in the system management WebApp.