

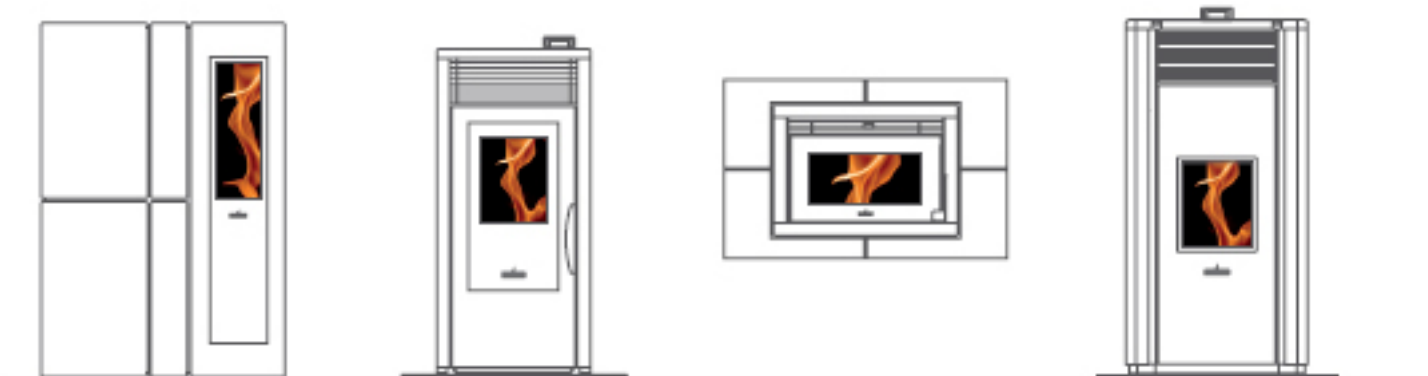


Technical Manual

"RAPID"

RDS System

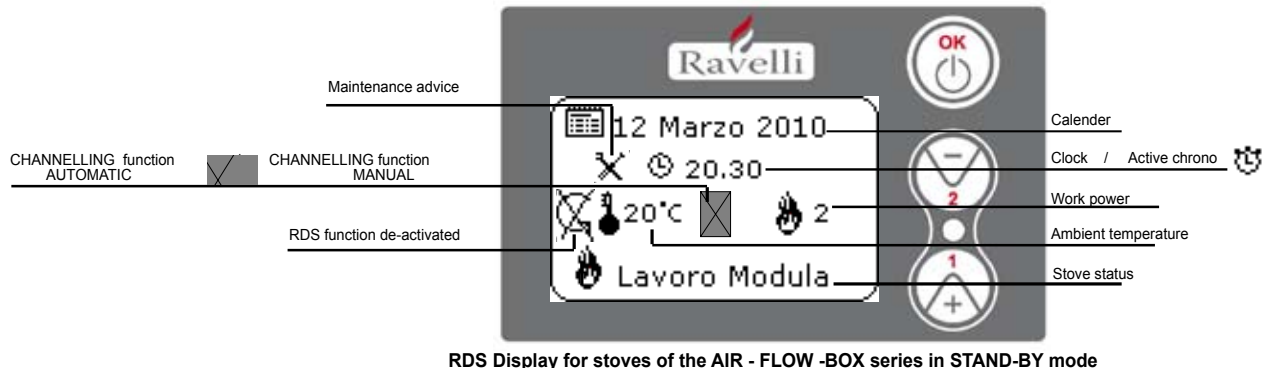
Rev.2 of 05/06/2012



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RAPID DISPLAY DESCRIPTION



BASIC mode

Button "1" : access to "Set environment" and adjustment

Button "2" : access to "Set power" and adjustment

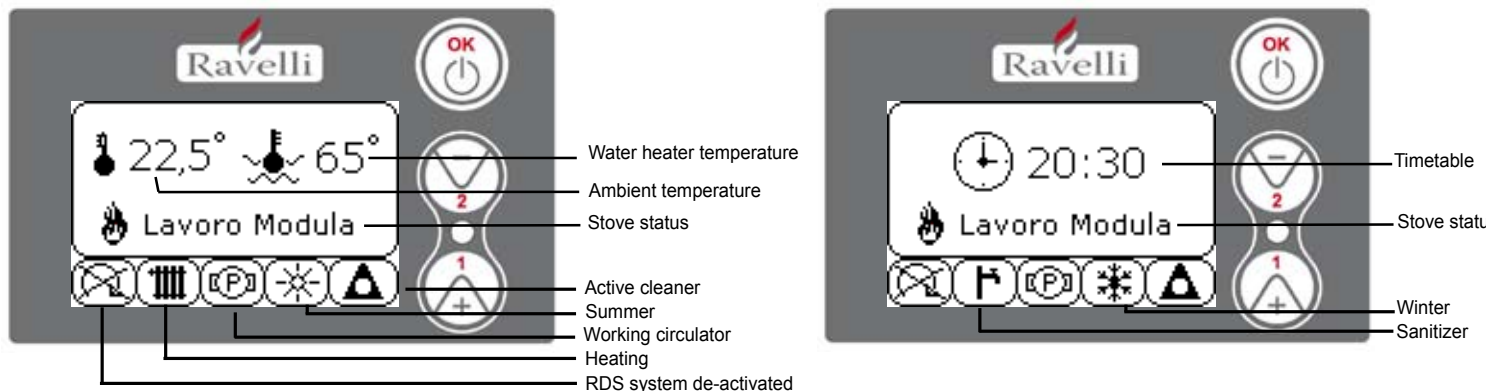
Button "OK": brief pressure on the button for confirmation and return to the main screen; pressure on the button of 3 seconds duration for lighting and extinguishing stove.

ADVANCED mode

Press key "1" : pushbutton for scrolling and changing settings

Press key "2" : scroll button and change of settings

Press "OK" key : pushbutton to access the ENTER menu and confirm the selected settings.



BASIC mode

Button "1" : access to "Set environment temp. - Set water heater temp." and adjustment with buttons 1 and 2.

Button "2" : access to "Set power" and adjustment with buttons 1 and 2 (only Min and Max power can be set)

Button "OK": brief pressure on the button to confirm and return to the main screen; pressure lasting 3 seconds on the button for switching stove on and off.

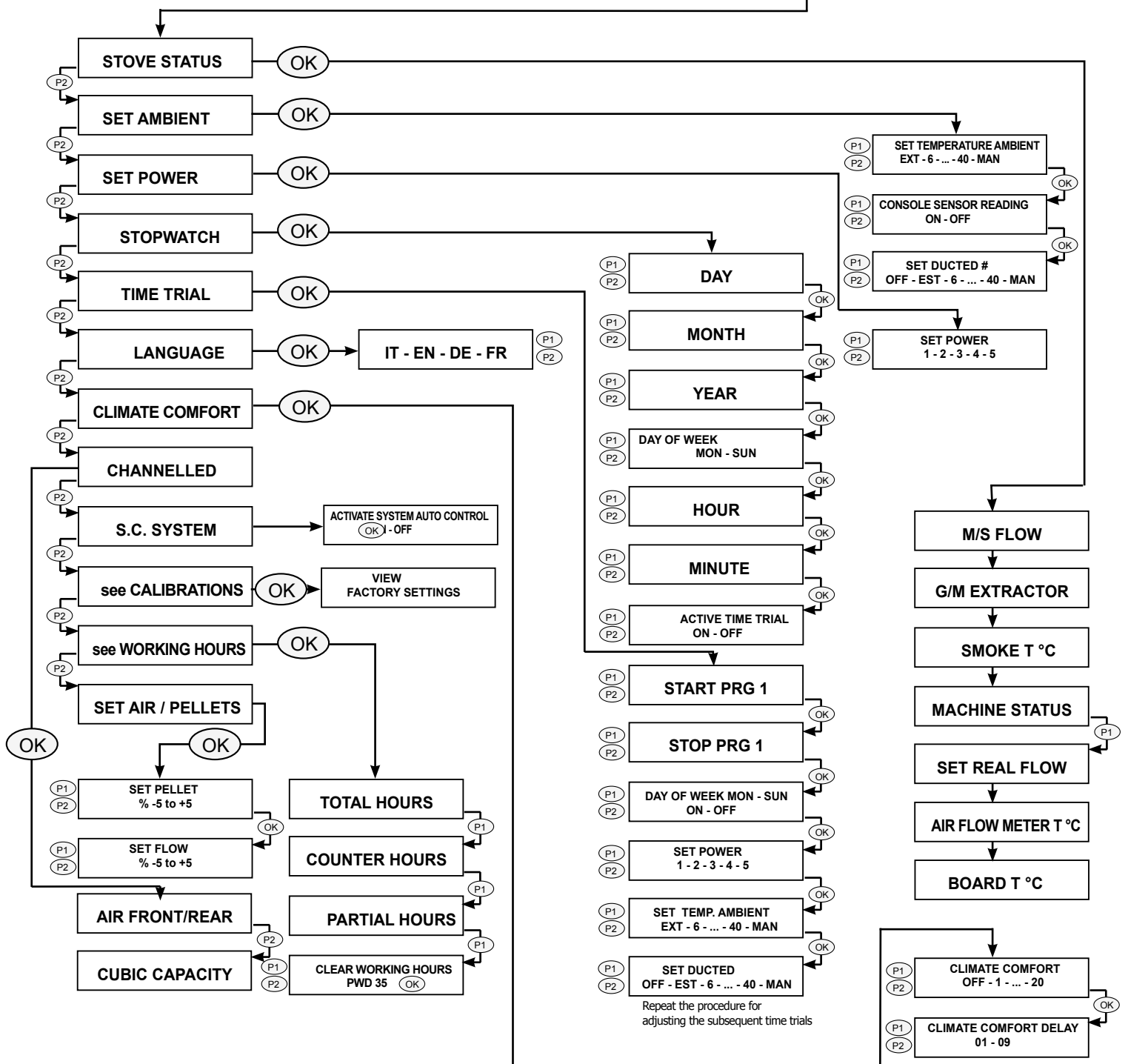
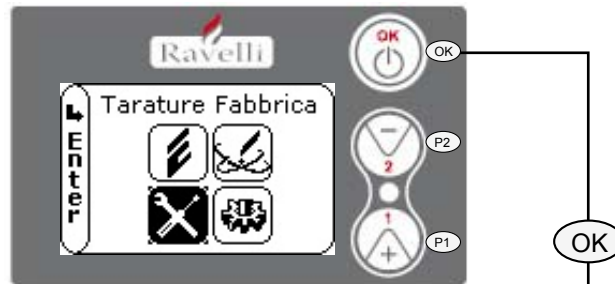
ADVANCED mode

Press key "1" : pushbutton for scrolling and changing settings

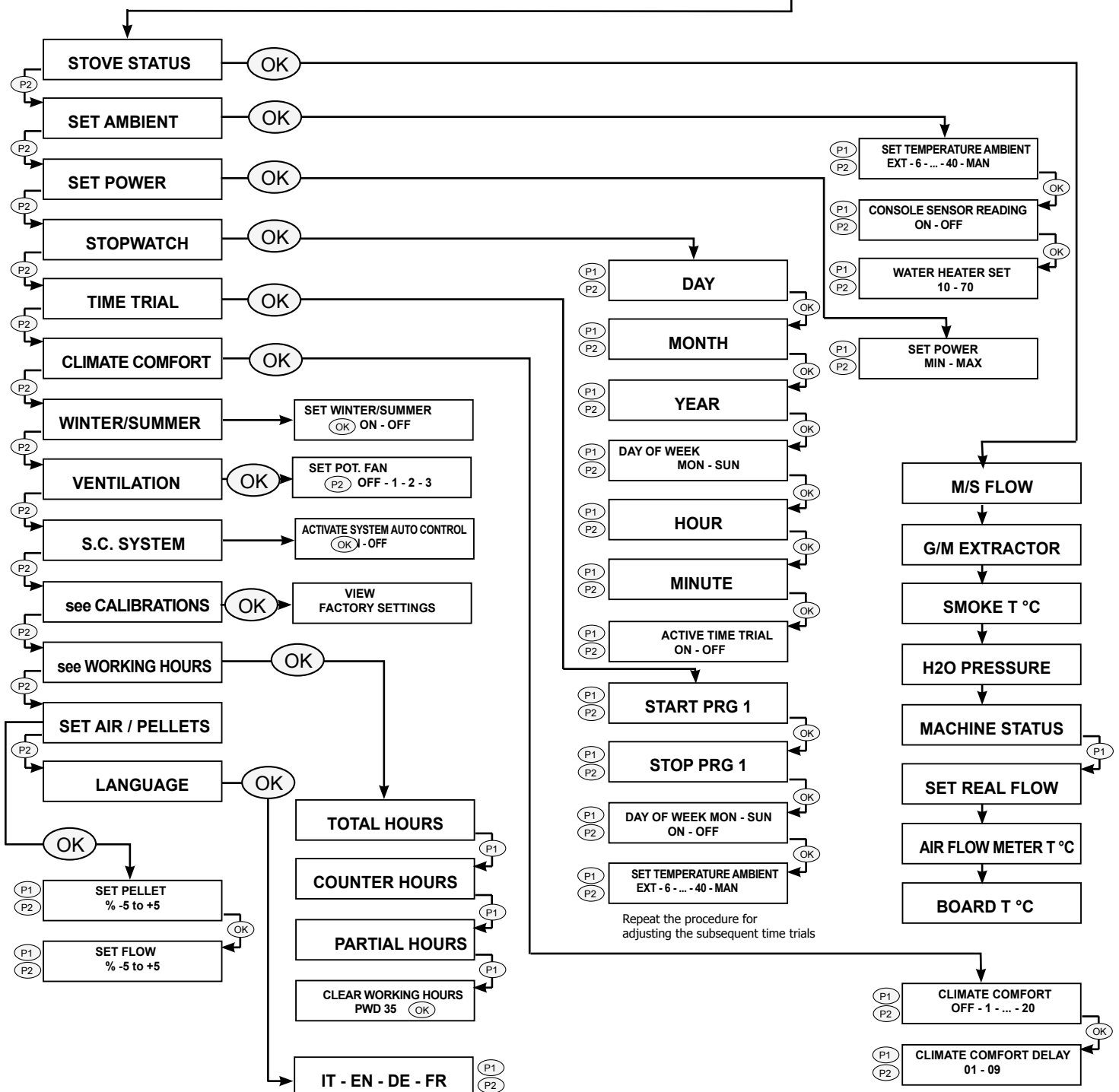
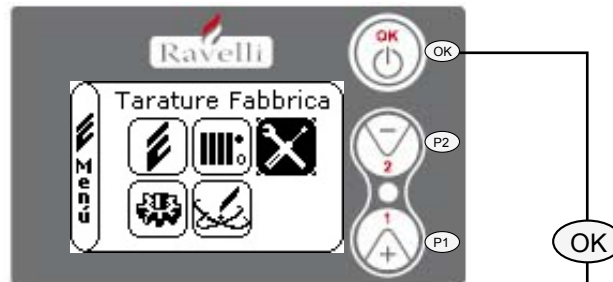
Press key "2" : scroll button and change of settings

Press "OK" key : pushbutton to access the ENTER menu and confirm the selected settings.

USER MENU FOR FLOW SERIES



USER MENU FOR HYDRO SERIES



MEMBER OF AN OPERATING SYSTEM WITH PELLET STOVE RDS

STATUS	Code	CONDITION	PARAMETER INVOLVED IN CONDITION	MESSAGE DISPLAYED	PARAMETERS INVOLVED IN OFF
STATUS	0	if T. SMOKE < TF15 after T. MIN. POWER	TF15/TF46	STATUS	NONE (NON-OPERATING STATUS)
ON / PRE-HEATING	1	if T. SMOKE < TF15	TF15	LIGHT	TF48/TF49/TF04/TF02/TF01
		if T. SMOKE > TF15 & T. SMOKE < TF07	TF07/TF15	LIGHT UP - RESET	TF48/TF32/TF04/TF02/TF01
DELAY FLAME	2	After PRE-HEATING	TF 04	DELAY FLAME	TF48/TF31/TF02/TF05/TF01
THIS FLAME	3	After DELTA FLAME	TF05	THIS FLAME	TF09/TF08/TF32
WORK	4	After MIN. START	TF09	WORK	TF16/19/22/25/28 TF17/20/23/26/29 TF18/21/24/27/30 TF06
AIR MODULATION	4	if Amb. T. > SET Amb. T.	NONE	AIR MODULE	TF16/TF17/TF18 TF16/TF17
WATER MODULATION	4	if T.H2O > SET T.H2O	NONE	WATER MODULE	TF16/TF17
WORK MODULE	4	if H2O and T.AMB reached	NONE	WORK MODULE	TF16/TF17
BRAZIER CLEANING	5	Each CADENCE CLEANING	TF13 TF12	CLEANING BRAZIER	TF12 /TF14/TF11 TF13/TF14/TF18
CLEANING with CLEANER	4	each CLEANING FREQUENCY	TF12/TF11	ACTIVE CLEANER	TF14/TF18/TF27orTF21
TURNING OFF	6	With Keystroke P3	NONE	FINAL CLEANING	TF15/TF06/TF46
ATTEMPT RESTART	7	if T. SMOKE < TF07 after RESTART BLOCKAGE	TF15/TF45	FAN – START DELAY	NONE (NON-OPERATING STATUS)
		if T. SMOKE > TF15 & T. SMOKE < TF07 After RESTART BLOCKAGE.	TF07/TF15/TF45	FAN RESTART DELAY	NONE (NON-OPERATING STATUS)
ECO AIR STOP	7	if Amb. T. > SET Amb. T. with CLIMATE COMFORT active	CLIMATE COMFORT DELAY SELECTED ON MENU	ECO STOP	NONE (NON-OPERATING STATUS)
AIR MODULATION with display of "AIR FLOW METER FAILURE 09."	4	Flow meter failure or disconnection	NONE	WORK MODULE	TF33-37
WORK With RDS disabled	4	After switching by OK	TF39	WORKING with a symbol on display indicating RDS off	TF16/19/22/25/28 TF18/21/24/27/30 TF06 TF33/34/35/36/37

Legend:
 COLOUR BLUE (CURSIVE) --> Function phases with relation to the HYDRO range stoves and related involved parameters.

UTILITY PASSWORD FOR INSTALLER

CODE	FUNCTION	ACCESS TO MENU
A9	Functioning parameters	"FACTORY SETTINGS"
35	Reset WORKING HOURS	"SEE WORKING HOURS -> CANCEL HOURS"
O0	Restore parameters	"FACTORY SETTINGS ->RESTORE PARAMETERS"
11	Deactivation debimeter	"FACTORY SETTINGS"
F1	10% canalization increase (gamma FLOW)	"FACTORY SETTINGS"
F2	20% canalization increase (gamma FLOW)	"FACTORY SETTINGS"
C2	RDS adjustment system activation	"RDS ADJUSTMENT"
<i>B9</i>	<i>Setting hydraulic system type</i>	<i>"HYDRAULIC SYSTEM"</i>

INSTALLER MENU: Factory setting (TF) for AIR and FLOW gamma


From STAND-BY status, with a short press of the OK key you can access the selection menu icons; press key 2 to position cursor on the FACTORY SETTINGS icon and press the OK key for access. Enter the password **A9** by pressing key 2 and confirm with OK. The parameters are divided into groups by type; press keys 1 and 2 to change the data; press the OK key to confirm and you will automatically move to the next digit in each unit. To exit the screens by steps, press the OK key or press the keys 1 and 2 simultaneously to go directly to the status of STAND-BY.

Unit: LIGHTING

TF	NAME	DESCRIPTION	UNIT
TF01	SCREW PUMP: start flame	T on the screw pump motor phase "DELAY FLAME"	sec
TF02	SCREW PUMP MAX LOAD	Interval time limit to make the pre-feed pellets	min
TF04	Preheat SPARK PLUG	Time for preheating heating element	sec
TF05	FLAME DELTA	Increment value of the flame for passage to the next step	°C
TF06	FAN THRESHOLD	Smoke temperature threshold to start the exchanger	°C
TF07	RESTART THRESHOLD	Reference threshold for restarting	°C
TF31	LIGHTING PHASE SMOKE SPEED	Smoke aspiration speed during the "FLAME DELAY"	t/min

Unit: FLAME PRESENT

TF	NAME	DESCRIPTION	UNIT
TF08	START SCREW PUMP	"ON" time of screw pump motor in the "FLAME PRESENT" phase	sec
TF09	START MINUTES	Stabilization time of the flame during "FLAME PRESENT"	min
TF32	SPEED GAS CHAMBERS	Smoke aspiration speed during the "FLAME PRESENT"	t/min

Unit: CLEANING OF BRAZIER

TF	NAME	DESCRIPTION	UNIT
TF11	SCREW PUMP CLEANING	Cochlea motor ON times in the “CLEANING BRAZIER” phase	sec
TF12	CLEANING DURATION	Duration of brazier cleaning	sec
TF13	CLEANING SCHEDULE	Time interval between two cleanings of brazier	min
TF14	CLEANING OF SMOKE ASPIRATOR	Smoke aspiration speed in the “BRAZIER CLEANING” phase	t/min

Unit: TURNING OFF

TF	NAME	DESCRIPTION	UNIT
TF15	TURN OFF THRESHOLD	Reference threshold for START (t smoke <= TF15) or RESTART (t smoke > TF15)	°C

Unit: POTENZE da 1 a 5

TF	NAME	DESCRIPTION	UNIT
TF16	COCHLEA POWER 1	ON time of the cochlea motor in work phase at power 1	sec
TF17	FLOW POWER 1	Inlet flow to the brazier during work phase at power 1	m / s
TF18	AIR SPEED P1	Primary exchanger voltage in work phase at power 1	v
TF19	COCHLEA POWER 2	ON time of the cochlea motor in work phase at power 2	sec
TF20	FLOW POWER 2	Inlet flow to the brazier during work phase at power 2	m / s
TF21	AIR SPEED P2	Primary exchanger voltage in work phase at power 2	v
TF22	COCHLEA POWER 3	ON time of the cochlea motor in work phase at power 3	sec
TF23	FLOW POWER 3	Inlet flow to the brazier during work phase at power 3	m / s
TF24	AIR SPEED P3	Primary exchanger voltage in work phase at power 3	v
TF25	COCHLEA POWER 4	ON time of the cochlea motor in work phase at power 4	sec
TF26	FLOW POWER 4	Inlet flow to the brazier during work phase at power 4	m / s
TF27	AIR SPEED P4	Tensione scambiatore primario in work phase at power 4	v
TF28	COCHLEA POWER 5	ON time of the cochlea motor in work phase at power 5	sec
TF29	FLOW POWER 5	Inlet flow to the brazier during work phase at power 5	m / s
TF30	AIR SPEED P5	Primary exchanger voltage in work phase at power 5	v

NB: In the range of canalization which the RFS (Ravelli Flow System) uses, the ventilation value at the various power settings is not seen as it is not possible to carry out any modification to the ventilation. This is because the factory values have been set to guarantee the best output with the minimum of noise.

Unit: EXTRACTOR SPEED

TF	NAME	DESCRIPTION	UNIT
TF33	SMOKE SPEED P 1	Smoke aspiration speed during work phase at power 1	t/min
TF34	SMOKE SPEED P 2	Smoke aspiration speed during work phase at power 2	t/min
TF35	SMOKE SPEED P 3	Smoke aspiration speed during work phase at power 3	t/min
TF36	SMOKE SPEED P 4	Smoke aspiration speed during work phase at power 4	t/min
TF37	SMOKE SPEED P 5	Smoke aspiration speed during work phase at power 5	t/min

Unit: ALTITUDE

TF	NAME	DESCRIPTION	UNIT
TF38	ALTITUDE	Altitude above sea level	t/min

Unit: ON / OFF air flow meter

TF	NAME	DESCRIPTION	UNIT
TF39	AIR FLOW METER ON / OFF	"OFF" disables the RDS. "Auto Status" RDS system active with start of extractor rpm	val

Unit: FORMULA

TF	NAME	DESCRIPTION	UNIT
TF40	ACTIVE FORMULA	Formula OFF / Low / Low / Medium / High Draft	str

Unit: ALARMS

TF	NAME	DESCRIPTION	UNIT
TF41	NO PELLETS THRESHOLD	Reference threshold for reporting "NO PELLETS"	°C
TF42	MAXIMUM THRESHOLD	Working limit temperature threshold	°C
TF43	ALARM DELAY	ALARM DELAY	sec
TF44	BLACK OUT	"BLACK OUT" activation limit seconds	sec
TF45	RE-LIGHTING BLOCK	Delay timer START or RESTART (FAN)	min
TF46	T. MIN. SIGNING	Timer for cleaning before "OFF" status	min
TF47	MINIMUM FLOW	Minimum flow under which the stove recognizes clogging of the brazier or load loss	m / s
TF48	MAXIMUM DURATION LIGHTING UP.	Maximum time for a turn ON cycle	min

Unit: EXTRA PARAMETERS

TF	NAME	DESCRIPTION	UNIT
TF49	ENABLE LIGHTER	Enabling/disabling resistance	on / off
TF50	FREQUENCY xHZ	Frequency Network	Hz
TF51	DEGREES	A unit of temperature	°C / ° F
TF52	FLUE DRAFT	Option to activate to allow user to set draft rate	on / off
TF53	VOLT MAX	Voltage for domestic power supply (230V Italy)	v
TF54	SERVICE HOURS	Hours of operation of the stove before carrying out a special cleaning operation	h

INSTALLER MENU: Factory settings (TF) for HYDRO range


From STAND-BY status, with a short press of the OK key you can access the selection menu icons; press key 2 to position cursor on the FACTORY SETTINGS icon and press the OK key for access. Enter the password **A9** by pressing key 2 and confirm with OK. The parameters are divided into groups by type; press keys 1 and 2 to change the data; press the OK key to confirm and you will automatically move it to the next digit in each unit. To exit the screens by steps, press the OK key or press the keys 1 and 2 simultaneously to go directly to the status of STAND-BY. The following pages contain a description of the Hydro parameters.

Unit: LIGHTING

TF	NAME	DESCRIPTION	UNIT
TF01	SCREW PUMP: start flame	T on the screw pump motor phase "DELAY FLAME"	sec
TF02	SCREW PUMP MAX LOAD	Interval time limit to make the pre-feed pellets	min
TF31	LIGHTING PHASE SMOKE SPEED	Smoke aspiration speed during the "FLAME DELAY"	t/min
TF04	Preheat SPARK PLUG	Time for preheating heating element	sec
TF05	FLAME DELTA	Increment value of the flame for passage to the next step	°C
TF06	PUMP THRESHOLD	Smoke temperature threshold to start the exchanger	°C
TF07	RESTART THRESHOLD	Reference threshold for restarting	°C

Unit: FLAME PRESENT

TF	NAME	DESCRIPTION	UNIT
TF08	START SCREW PUMP	"ON" time of screw pump motor in the "FLAME PRESENT" phase	sec
TF09	START MINUTES	Stabilization time of the flame during "FLAME PRESENT"	min
TF32	SPEED GAS CHAMBERS	Smoke aspiration speed during the "FLAME PRESENT"	t/min

Unit: CLEANING OF BRAZIER

TF	NAME	DESCRIPTION	UNIT
TF11	ACTIVE CLEANER	Parameters aimed at activating the cleaner	str
TF12	CLEANING SCHEDULE	Time interval between two cleanings of brazier	min
TF13	CLEANING DURATION	Duration of brazier cleaning (with cleaner de-activated)	sec
TF14	CLEANING OF SMOKE ASPIRATOR	Smoke aspiration speed in the "BRAZIER CLEANING" phase	g/min
TF18	SCREW PUMP CLEANING	Cochlea motor ON time in the cleaning with cleaner phase	sec
TF21	CLEANER SECONDS	Seconds of cleaner functioning	sec
TF27	CLEANER HITS	Cleaner passes at every cleaning phase	num

Unit: TURNING OFF

TF	NAME	DESCRIPTION	UNIT
TF15	TURN OFF THRESHOLD	Reference threshold for START (t smoke <= TF15) or RESTART (t smoke > TF15)	°C

Unit: SANITATION MODULE POWER

TF	NAME	DESCRIPTION	UNIT
TF16	COCHLEA POWER MOD.	Cochlea motor ON time in the work phase at MOD power.	sec
TF17	FLOW POWER MOD.	Inlet flow to the brazier in the work phase at MOD power.	m / s
TF19	MIN COCHLEA POWER	Cochlea motor ON time in the work phase at MIN power.	sec
TF20	MIN FLOW POWER	Inlet flow to the brazier in the work phase at MIN power.	m / s
TF22	MAX COCHLEA POWER	Cochlea motor ON time in the work phase at MAX power.	sec
TF23	MAX FLOW POWER	Inlet flow to the brazier in the work phase at MAX power.	m / s
TF25	SANI COCHLEA POWER	Cochlea motor ON time in the work phase at SANI power	sec
TF26	SANI FLOW POWER	Inlet flow to the brazier in the work phase at SANI power	m / s

Unit: EXTRACTOR SPEED

TF	NAME	DESCRIPTION	UNIT
TF33	MOD. SMOKE P SPEED.	Smoke suction speed in the work phase at MODULE power	g/min
TF34	MIN SMOKE P SPEED.	Smoke suction speed in the work phase at MINIMUM power	g/min
TF35	MAX SMOKE P SPEED.	Smoke suction speed in the work phase at MAXIMUM power	g/min
TF36	SANI SMOKE P SPEED	Smoke suction speed in the work phase at SANI power	g/min

Unit: ALTITUDE

TF	NAME	DESCRIPTION	UNIT
TF38	ALTITUDE	Altitude above sea level	meters

Unit: ON / OFF air flow meter

TF	NAME	DESCRIPTION	UNIT
TF39	AIR FLOW METER ON / OFF	"OFF" disables the RDS. "Auto Status" RDS system active with start of extractor rpm	val

Unit: RECIPES

TF	NAME	DESCRIPTION	UNIT
TF40	ACTIVE FORMULA	Formula OFF / Low / Low / Medium / High Draft	str

Unit: DELTA ACCUMULATORS

TF	NAME	DESCRIPTION	UNIT
TF54	DELTA BOILER	Hysteresis which determines the Boiler water heating	°C
TF55	DELTA PUFFER	Hysteresis which determines the water puffer heating	°C

Unit: ALARMS

TF	NAME	DESCRIPTION	UNIT
TF41	NO PELLETS THRESHOLD	Reference threshold for reporting "NO PELLETS"	°C
TF42	MAXIMUM THRESHOLD	Working limit temperature threshold	°C
TF43	ALARM DELAY	ALARM DELAY	sec
TF44	BLACK OUT	"BLACK OUT" activation limit seconds	sec
TF45	RE-LIGHTING BLOCK	Delay timer START or RESTART (FAN)	min
TF46	T-MINIMUM EXTINGUISHING	Timer for cleaning before "OFF" status	min
TF47	MINIMUM FLOW	Minimum flow under which the stove recognizes clogging of the brazier or load loss	m / s
TF48	MAX RE-LIGHTING DURATION	Maximum time for a turn ON cycle	min
TF37	MAX H2O THRESHOLD	Working limit water heater temperature threshold	°C


Unit: EXTRA PARAMETERS

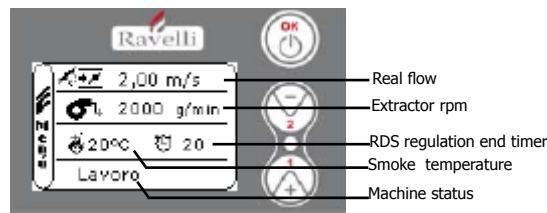
TF	NAME	DESCRIPTION	UNIT
TF49	EXCLUDE PRESSURE	Exclude reading of pressure transducer	on / off
TF50	FREQUENCY xHZ	Frequency Network	Hz
TF51	DEGREES	A unit of temperature	°C / ° F
TF52	FLUE DRAFT	Option to activate to allow user to set draft rate	on / off
TF53	SERVICE HOURS	Hours of operation of the stove before carrying out a special cleaning operation	h
TF30	ACTIVE FUNCTION. FAN	Parameter aimed at activation of the air exchanger function	str
TF28	MOD SPEED FAN	Modulation power exchanger voltage	v
TF29	MAX SPEED FAN	Maximum power exchanger voltage	v
TF56	VOLT MAX	Voltage for domestic power supply (230V Italy)	v

RDS SYSTEM ADJUSTMENT PROCEDURE



This particular RDS adjustment method allows for the calibration of the parameters related to the oxygen intake for combustion in a more or less automatic manner. A detail of the new firmware is the presence of the “Regular sist. RDS” warning on putting the stove into function and every time it is intended to light/extinguish it; in any case, the message which is seen for a few seconds in no way prejudices its function. This signal will only disappear when the installer has carried out the following operations.

- Start the RDS system adjustment process: the icon to be selected to start the RDS adjustment process is the following  and is situated in the main menu (brief pressure on the OK button from the STAND-BY state). Click on the icon and insert the password “C2” to start the process (illustration below).



Frame "RDS Regulation system setting"

Extractor revolutions adjustment in the various phases of turning the stove on: The “RDS system adjustment” illustration indicates the various progressive phases from lighting up to the working condition in the “machine status”.

These phases are: Lighting up/Awaiting flame, Flame present, Working. It is possible to adjust the rpm in the “extractor revolutions” choice in every phase, with buttons 1(-) e 2(+) in order to obtain the best functional conditions in the different states.

Awaiting flame: as soon as this phase is reached, the rpm number appears (second line of the screen), the variation in value that the installer sets with buttons 1 and 2 of the display has the aim of improving the lighting up process;

Flame present: as soon as it passes into this phase, the rpm number appears (second line of the screen), the variation in value that the installer sets with buttons 1 and 2 of the display has the aim of improving stabilization of the flame;

Work: the stove reaches maximum, and an acoustic signal accompanied by the appearance of the rpm (second line of the screen) indicates the possibility of varying the value with the aim of perfecting combustion in order to obtain the ideal flame. From this moment, the 20' timer starts to wind down; this timing is useful to the debimeter for reading a correct value (hot RDS adjustment) and to work in optimum manner.

Modifications parameter block and flow sampling: two minutes before the timer ends, the system blocks the modification of the rpm (revolutions per minute) and starts to sample the debimeter reading.

End test and automatic saving of the various power settings: when the stove passes into the classical standby screen, the system has found the flow value at maximum power (specific value for that installation and for the type of pellet used) and, in automatic, all the lower values are calculated (0,05 m/s for the flow and 100 rpm for the extractor revolutions). Always in automatic, the RDS system is re-activated with the new parameters.

NB: In the event of an alarm during the process, the system exits the calibration phase; It will, therefore, be necessary to restart it to eliminate the “Adjust sist. RDS” signal. Each time the firmware is updated, the obligatory restoration of the parameters phase will make the “Adjust sist. RDS” signal re-appear; it will, therefore, be necessary to restart the calibration test.

Example: Medium flow sampled with extractor set to P5 2000g/m --> flow 2m/s.

Power	Extractor revolutions	Flow
5	2000	2.00
4	1900	1.95
3	1800	1.90
2	1700	1.85
1	1600	1.80

ALARMS

Code	DISPLAY	MOTIVATION	RESOLUTION
02	SMOKE PROBE	Smoke probe either disconnected or unserviceable.	<ul style="list-style-type: none"> - verify exact reading of the probe in STOVE STATUS; - check cabling; - change the smoke probe.
03	SMOKE TEMPERATURE	High smoke temperature (over 289°C) The words HOT SMOKE only indicates a pre-alarm.	<ul style="list-style-type: none"> - check for pellet over-load; - check that the smoke ducts are not obstructed; - Check for inactivity of the environmental exchanger.
05	FAILURE TO LIGHT	The stove has not gone beyond Delta of lighting up.	<ul style="list-style-type: none"> - Check for the correct pellet supply to the brazier; - check the status of the resistance and its correct centring; - Check that the brazier is correctly positioned in its housing; - Adjust the revolutions on rising.
06	PELLETS FINISHED	<ul style="list-style-type: none"> - The pellet container is empty; - The reduction motor does not load properly. 	<ul style="list-style-type: none"> - Check for the presence of pellets in the container; - Check if foreign bodies (screws etc.) impede the normal function of the cochlea; - Verify the effective working of the reduction motor; - Check if the alarm has been sounded for lack of pellets or excess load.
01	BLACK-OUT	Power failure during the stove operating phase.	<ul style="list-style-type: none"> - Reset the alarm (long press on the OK button) and restart the stove; - Check whether electrical components (reduction motor, etc.) could be the cause of the alarm; - Check the dwelling's electrical installation.
08	DEPRESSURIZATION	The smoke stack is obstructed.	<ul style="list-style-type: none"> - Check on the cleanliness of the chimney; - Check the correct positioning of the tube in position “H” and of the clamps (C and N.C).
07	THERMAL	A temperature above 90°C has been identified at the position of the thermal safety bulb.	<ul style="list-style-type: none"> - Unscrew the black plug in the rear of the stove and re-set the thermal coupling (red button); - Verify the working of the environmental exchanger; - <i>For stoves of the HYDRO range, check for correct functioning of the circulator or of the hydraulic installation.</i>
04	EXTRACTOR FAULT	<ul style="list-style-type: none"> - smoke expulsion motor unserviceable; - The encoder does not identify the number of revolutions. 	<ul style="list-style-type: none"> - Check for defects of the electrical component; - Check whether the encoder is connected correctly or if there is a fault in the cable.
12	EXTRACTOR RPM	The extractor works at a speed lower than 15% with respect to the reference value.	<ul style="list-style-type: none"> - Check that the smoke extractor turns freely
17	NO FLOW	- Rotating at maximum speed (2700r/m circa) it does not achieve half of the minimum lowest stable flow	<ul style="list-style-type: none"> - Check that the door, the cinder tray and various inspection hatches close properly. - Check that the brazier is not clogged and that the debimeter is clean; - Check the general state of clogging in the stove; - Check the correct calibration of the parameters (RDS ADJUSTMENT CHAPTER).

Code	DISPLAY	MOTIVATION	RESOLUTION
09	AIR FLOW FAILURE	The air flow meter does not properly read the flow rate.	<ul style="list-style-type: none"> - Check cable connection of air flow meter; - Check for defects of the air flow meter (check STOVE STATUS if the delta of the flow meter temperatures are not greater than 30°C)
15	SCREW PUMP TRIAC	The electronic component that manages of the screw pump ON/ OFF is damaged.	<ul style="list-style-type: none"> - Check defectiveness electronics board
14	SCREW PUMP PHASE	Make sure the wiring of the screw pump is properly connected to the board there are no interruptions	Check the electrical connections to the gear motor and the conditions of the cables.
16 rate-determining step	PRESSURE	The pressure read from the pressure transducer is less than 0.5 bar or greater than 2.5 bar.	<ul style="list-style-type: none"> - Verify that when cold, the pressure reading on the display is about 1 bar; - Verify the absence of air in the system; - Verify the need for an additional expansion chamber; - Check operation of circulator.
10	HOT WATER	The water temperature has exceeded the threshold of 90°C	<ul style="list-style-type: none"> - Check operation of circulator. - Check for proper water circulation in the hydraulic system.

Signaling by display without alarm code:

DISPLAY	MOTIVATION	RESOLUTION
EXCESSIVE LOAD	The gear motor is about to turn in continuous due to incorrect parameter setting.	<ul style="list-style-type: none"> - Check parameter-based setting to make sure the "screw pump power load" is not excessive; - Check that in the "Set air/pellet" the pellet is set to +5. Note: the load +5 is added to the setting of the parameter "power based screw pump load."
CLEAN BRAZIER	The RDS detects clogging in the brazier	Clean brazier

SUMMARY TABLE OF COMPATIBILITY BOARD /MOTHERBOARD- DISPLAY - FIRMWARE

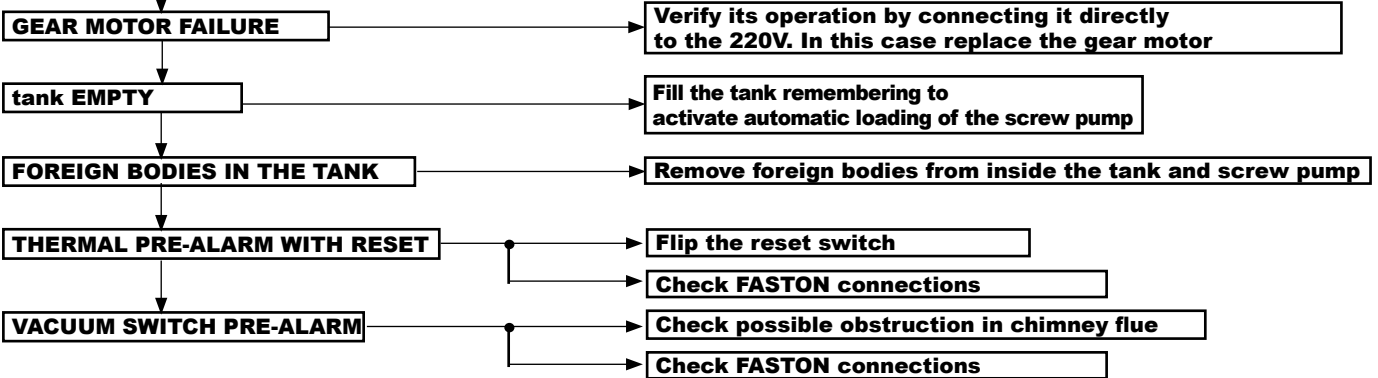
Modello	Serie	tipo	scheda principale	firmware	display	firmware
Sofia	Air	Flash	55229	ECT2008AIR03	7 tasti	-
		Triac Coclea (da matr. B00230001)	55300	RAV2010_AIR_VX *	7 tasti	-
Rebecca	Air	Flash	55229	ECT2008BOX03	palmare	-
Matilde	Air	Flash	55229	ECT2008BOX03	palmare	-
Serena	Air	Flash	55229	ECT2008AIR03	7 tasti	-
		Triac Coclea (da matr. B00462001)	55300	RAV2010_AIR_VX *	7 tasti	-
Ilaria	Air	Flash	55229	ECT2008AIR03	7 tasti	-
		Triac Coclea (da matr. B00462001)	55300	RAV2010_AIR_VX *	7 tasti	-
Monica	Air	Flash	55229	ECT2008AIR03	7 tasti	-
		Triac Coclea (da matr. B00560295)	55300	RAV2010_AIR_VX *	7 tasti	-
		RDS (da matr. B10108001)	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
Milena	Air	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
Holly vent.	Air	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
RV 120	Air	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
Cora	Air	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
Lisa plus	Air	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
Mavi	Air	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
Olivia	Air	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
Arianna	Air	Flash	55229	ECT2008AIR03	7 tasti	-
		Triac Coclea (da matr. B00372001)	55300	RAV2010_AIR_VX *	7 tasti	-
R 120	Air	Flash	55229	ECT2008ECO04	6 tasti	-
		Triac Coclea (da matr. B00712101)	55300	RAV2010_ECO_VX *	6 tasti	-
		RDS (da matr. B10112001)	55300	RAV_2010_ECO_RDS_VX *	6 tasti	-
R 70	Air	Flash	55229	ECT2008ECO04	6 tasti	-
		Triac Coclea (da matr. B00907001)	55300	RAV2010_ECO_VX *	6 tasti	-
		RDS (da matr. B10107001)	55300	RAV_2010_ECO_RDS_VX *	6 tasti	-
Eva	Air	Flash	55229	ECT2008BOX03	palmare	-
Silvia	Air	Flash	55229	ECT2008AIR03	7 tasti	-
		Triac Coclea (da matr. B00234001)	55300	RAV2010_AIR_VX *	7 tasti	-
Ecovision	Air	Flash	55229	ECT2008AIR03	7 tasti	-
Camilla	Air	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
Veronique	Flow	Flash	55229	ECT2008AIR03	7 tasti	-
		Triac Coclea (da matr. B00558001)	55300	RAV2010_AIR_VX *	7 tasti	-
Laura	Flow	Flash	55229	ECT2008AIR03	7 tasti	-
		Triac Coclea (da matr. B00558001)	55300	RAV2010_AIR_VX *	7 tasti	-
Flavia	Flow	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
RC 120	Flow	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
Holly canal.	Flow	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
Snella	Flow	Flash	55229	ECT2008AIR03	7 tasti	-
		Triac Coclea (da matr. B00464001)	55300	RAV2010_AIR_VX *	7 tasti	-
		RDS (da matr. B1011D001)	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
500	Box	Flash	55229	ECT2008BOX03	palmare	-
		Triac Coclea (da matr. B00378001)	55300	RAV2010_BOX_VX *	palmare	-
550	Box	Flash	55229	ECT2008BOX03	palmare	-
		Triac Coclea (da matr. B00468001)	55300	RAV2010_BOX_VX *	palmare	-
650	Box	Flash	55229	ECT2008BOX03	palmare	-
		Triac Coclea (da matr. B10169001)	55300	RAV2010_BOX_VX *	palmare	-
700	Box	Flash	55229	ECT2008BOX03	palmare	-
		Triac Coclea (da matr. B00378001)	55300	RAV2010_BOX_VX *	palmare	-
900	Box	Flash	55229	ECT2008BOX03	palmare	-
		Triac Coclea (da matr. B10153001)	55300	RAV2010_BOX_VX *	palmare	-
901 canal.	Box	Flash	55229	ECT2008BOX03	palmare	-
		Triac Coclea (da matr. B10159001)	55300	RAV2010_BOX_VX *	palmare	-
R 1000	Box	RDS	55300	ECT2010RDS_MB_VX.XX *	3 tasti	ECT2010_RDS_UI_VX.XX *
HR 100	Hydro	RDS	55300	RAV2011IDRORDS_MB_VX.XX *	3 tasti	RAV2011_IDRO_RDS_UI_X.XX *
HRV 120	Hydro	RDS	55300	RAV2011IDRORDS_MB_VX.XX *	3 tasti	RAV2011_IDRO_RDS_UI_X.XX *
HRV 135	Hydro	Flash (Riviera)	55230	ECT_2010_Riv_03_V4	7 tasti	-
		RDS (da matr. B10217001)	55300	RAV2011IDRORDS_MB_VX.XX *	3 tasti	RAV2011_IDRO_RDS_UI_X.XX *
HRV 160	Hydro	RDS	55300	RAV2011IDRORDS_MB_VX.XX *	3 tasti	RAV2011_IDRO_RDS_UI_X.XX *
HR 200	Hydro	RDS	55300	RAV2011IDRORDS_MB_VX.XX *	3 tasti	RAV2011_IDRO_RDS_UI_X.XX *
Venezia	Hydro	Flash	55230	ECT2008IDRO03	7 tasti	-
Amalfi	Hydro	Flash	55230	ECT2008IDRO03	7 tasti	-
Genova	Hydro	Flash	55231	ECT2008IDRO03	7 tasti	-
Pisa	Hydro	Flash	55231	ECT2008IDRO03	7 tasti	-

NB: Table updated as at 16-12-2011. Additional updates are available in the Download Area of website www.ravelligroup.it in the Firmware Area.

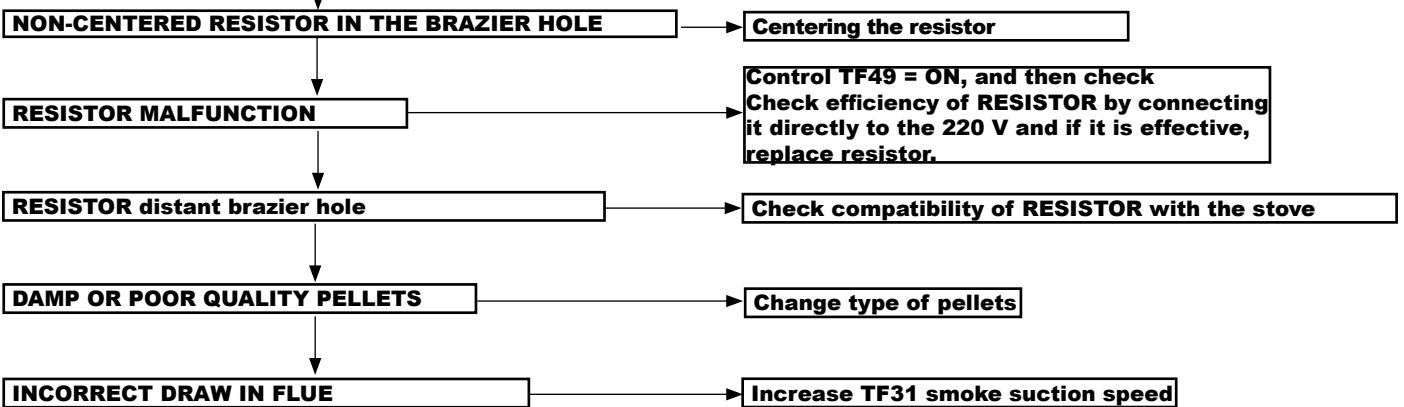
TROUBLESHOOTING

Code 05 DOES NOT TURN ON

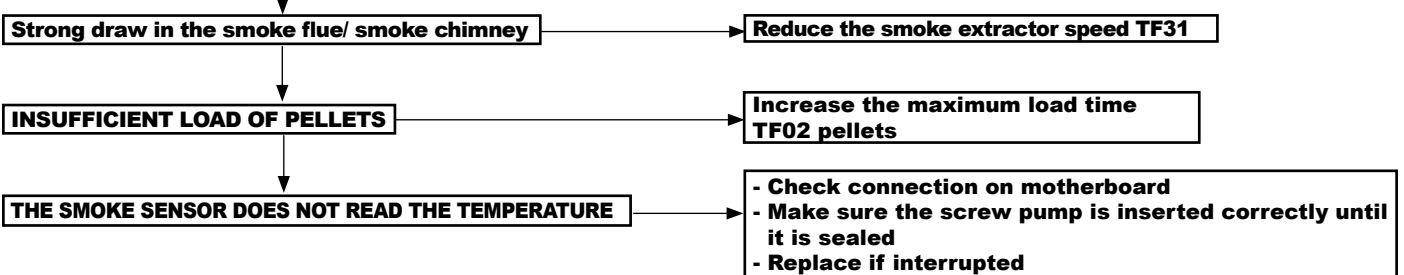
PELLET DOES NOT DROP DOWN



PELLETS COME DOWN BUT STOVE DOES NOT TURN ON



STOVE TURNS ON BUT HAS NOT GONE BEYOND DELTA TEMPERATURE/ DELTA FOR SWITCHING ON (TF05)



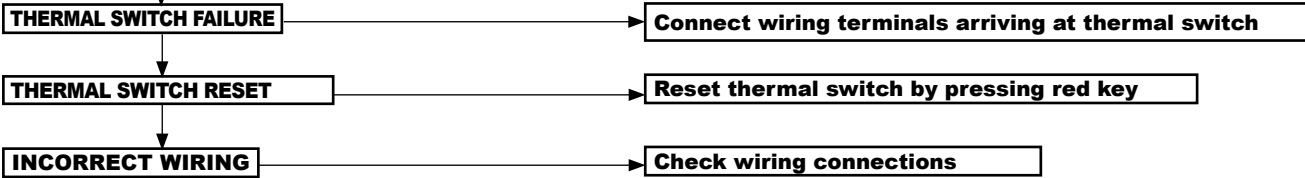
Cod.17 NO FLOW

THE HEATER HAS GONE OUT



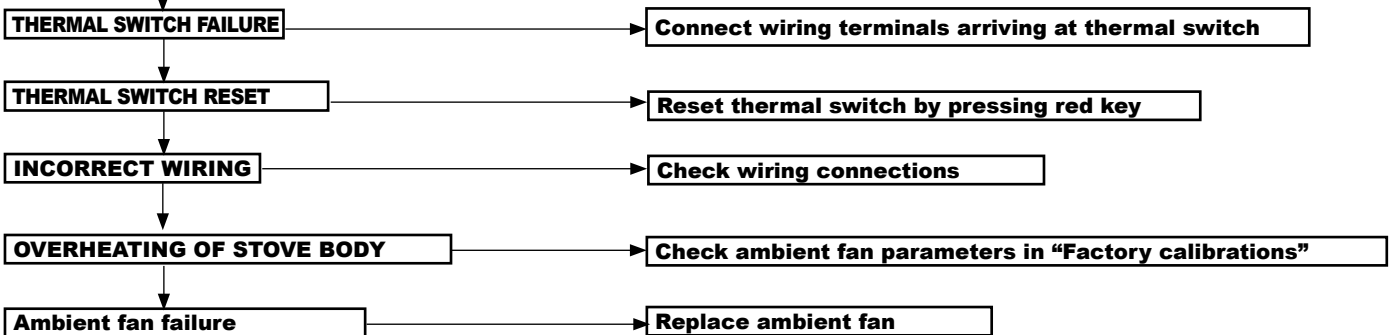
Code 07 RESET THERMAL SWITCH (in start phase)

PELLET DOES NOT DROP DOWN



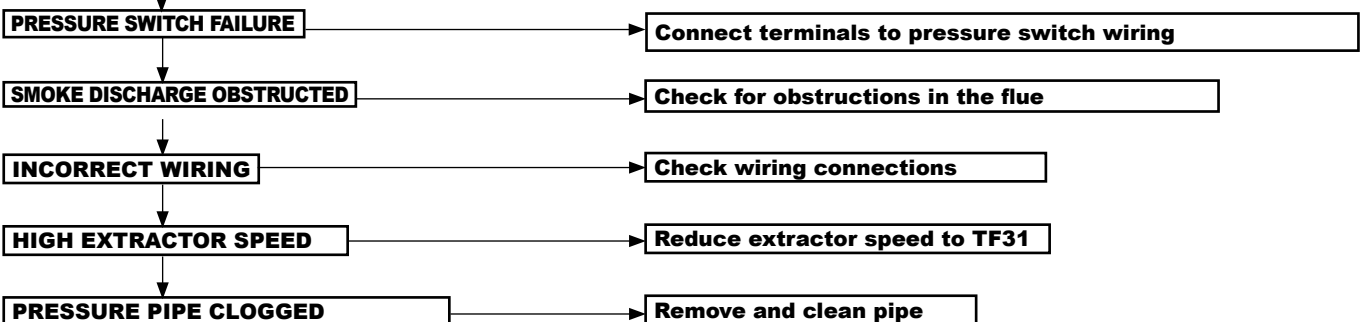
Code 07 RESET THERMAL SWITCH (in working phase)

PELLET DOES NOT DROP DOWN



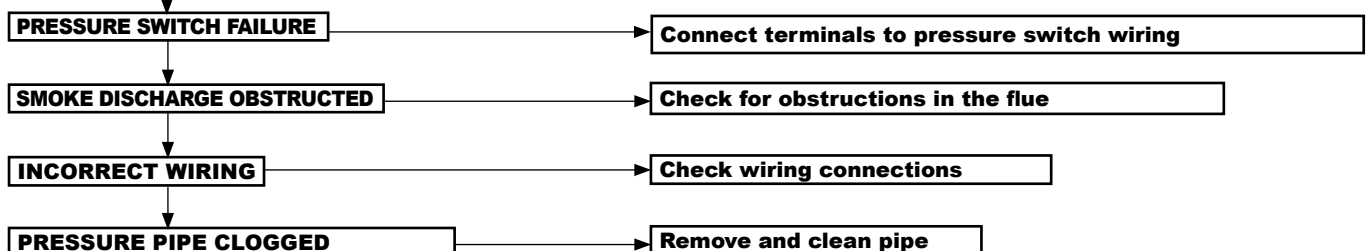
Code 08 DEPRESSURIZATION (in start phase)

PELLET DOES NOT DROP DOWN



Code 08 DEPRESSURIZATION (in working phase)

PELLET DOES NOT DROP DOWN



Code 06 PELLETS USED UP

STOVE IS OFF

TANK IS EMPTY

Fill tank with pellets

STRONG DRAW IN SMOKESTACK
FLUE (flame goes out)

Adjust the flow parameters to the various power levels

PELLET LOADER MALFUNCTIONING

Check functioning of a were, if jammed due to a mechanical or electrical defect (gear motor)

STOVE TRANSITIONS TO WORKING
PHASE UNDER THRESHOLD NO PELLETS

Lower threshold value TF41

EXTRACTOR SPEED Code12

THE SMOKE EXTRACTOR DOES NOT FUNCTION PROPERLY

DIRT ON THE BLADES

Cleaning of fan blades

FOREIGN BODY IN EXTRACTOR

Removal of foreign body that hits against the fan blades

SUDDEN DROP IN PRESSURE IN THE
ELECTRONICS BOARD

Check the electric cabinet and/or
The power supply of the board

Code 04 AND EXTRACTOR MALFUNCTIONING

ELECTRONICS BOARD DOES NOT RECOGNIZE OPERATION

ENCODER NOT CONNECTED
PROPERLY

CHECK CONNECTION OF WIRING HARNESS

CONDENSER FAILURE

Replace the condenser

ERRONEOUS INSERTION OF
CONNECTOR INTO BOARD

Check connection between white
connector and the board

SMOKE EXTRACTOR MALFUNCTIONING

Verify its operation by connecting it directly
to the 220V. If it is, replace the smoke extractor

BOARD CANNOT READ
EXTRACTOR RPM

Replace electronics board

Code 03 TEMPERATURE SMOKE

STOVE IS OFF

Low extractor speed or pellet load excessive

Check specific parameters of screw pump and extractor speed

Smoke Sensor too deeply inserted

Move smoke Sensor

Smoke loop clogged

Clean this goes

EXCHANGER MALFUNCTIONING or BROKEN

Directly connect to the 220v and in the event of replacing the exchanger

Insufficient exchange of the machine body (e.g. gamma BOX)

Increase ventilation on the housing where the stove is located

Code 02 SMOKE SENSOR

STOVE IS OFF

Smoke sensor not connected to the BOARD OR CONNECTOR

Connect Sensor in the connector and to the motherboard

Damaged SMOKE SENSOR

Check the reading in STOVE STATUS; in case of out of range Reading (>300°C), replace the smoke Sensor

Code 01 BLACK OUT

STOVE IS OFF

ELECTRICAL POWER OUTAGE

Check to see if the electrical components are short circuited or not

Check electrical system of plant premises

Reset by pressing the OK key and turn on again

Code 09 AIR FLOW METER MALFUNCTIONING

**STOVE TRANSITIONS TO MANUAL MODE
Forced to power 1**

CONNECTION CABLE or EFFECTIVE AIR FLOW METER

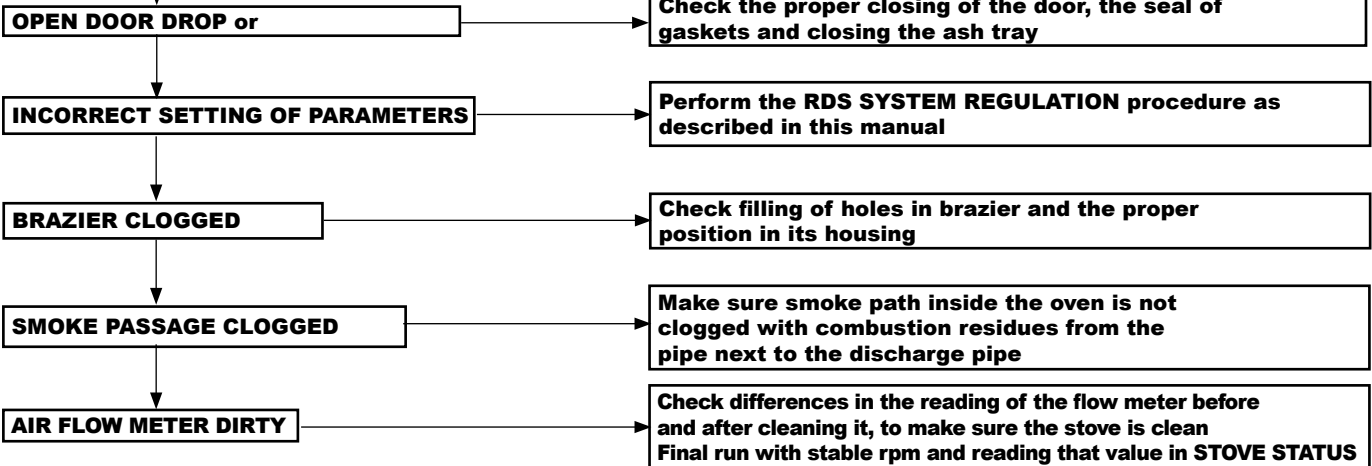
Check for interruptions in the connection cables

CHECK CONNECTIONS TO THE AIR FLOW METER

Replace the air flow meter

Warning: CLEAN BRAZIER

THE HEATER IS OFF



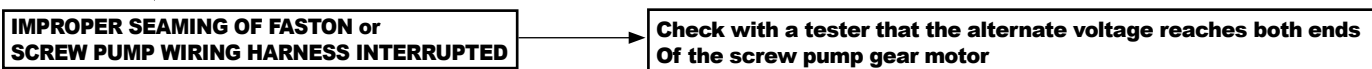
Code 15 TRIAC SCREW PUMP

THE HEATER IS OFF



Code 14 SCREW PUMP PHASE

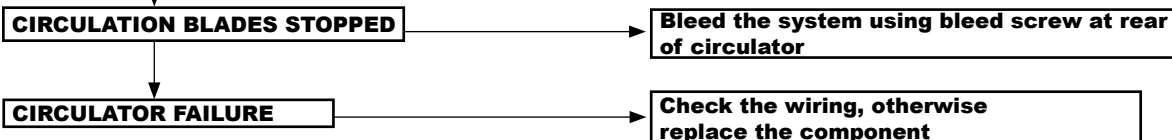
THE HEATER IS OFF



Code 10 HOT WATER

WATER OVERHEATING INSIDE THE BOILER

NB: CIRCULATOR FAILURE
Check the wiring, otherwise



Code 16 PRESSURE

Lack of pressure or excessive pressure inside the hydraulic circuit

NB: Check in STOVE STATUS the pressure in the circuit, being especially careful about the proper dimensioning of the expansion vessel

Pressure under 0.5 BAR

Fill the tank circuit up to 1.2 bar cold

PRESSURE OVER 2.5 BAR

Vent the valve on the stove body and the vent valves of the circuit

The infrared remote control signals NO FIELD

BATTERIES DEPLETED

Replace batteries

FIELD INTERFERENCE

Associate the free channel by following the procedure indicated in the user manual or installer manual

POWER OUTAGE

Check stove power supply (BOX model - SAFETY MICRON)

The heater has no power (display off and lack of power to the motors)

STOVE IS NOT FED

INCORRECT CONNECTION IN BOARD

Check electrical wiring

BURNT FUSE

Check interruption of fuses in the board and in the network filter

The writing on the display is not being read correctly

DISPLAY FAILURE

CONNECTION BETWEEN CABLE AND DISPLAY INCORRECT

Ensure correct polarity of the electrical cables

CABLE DAMAGED

Replace connection cable

OVERHEATING STOVE BODY

Increase ambient ventilation and check the correct combustion (e.g. excessive pellet load)

DISPLAY WITH WRITING UPSIDE DOWN

SURGE TO ELECTRONICS BOARD

Cut power to stove and hold down the OK key to restore power to the same. Do not release the OK key until the correct screen appears.



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