SeccoAsciutto   SeccoAsciutto Thermo

TECHNICAL FEATURES

	Secco Asciutto	Secco Asciutto Thermo
Power Supply	230V - 50Hz	230V - 50Hz
Input Power (27°C - 65% U.R.)	185 W	230 W
Max Input Power (32°C - 80% U.R.)	220 W	280-1280 W
Heating Element Input power	--	1000 W
Dehumidification Capacity 27°C - 65% U.R. (liters)	7 /24 h	8 /24 h
Dehumidification Capacity 32°C - 80% U.R. (liters)	12 /24 h	14 /24 h
Fan Speeds	1	2
Refrigerant type	R 134A	R 134A
Refrigerant quantity	0,140 kg	0,140 kg
Air Flow	160 m^3/h	190 m^3/h
Tank Capacity (liters)	3,5	3,5
Dimensions (HxWxD) mm	420x490x150	420x490x150
Weight	11 kg	12 kg
Noise level	38 dB(A)	40 dB(A)
Water Proof Level	IPX1	IPX1
OPERATING WORKING LIMITS		
Max working conditions in dehumidification mode: DB / WB	35°C/31°C	35°C/31°C
Min working conditions in dehumidification mode: DB / WB	5°C/4°C	5°C/4°C

INTRODUCTION

The dehumidifier is fitted with an electronic logic system which controls operation and optimises consumption and performance.
The keys and information on the control panel have the following meanings
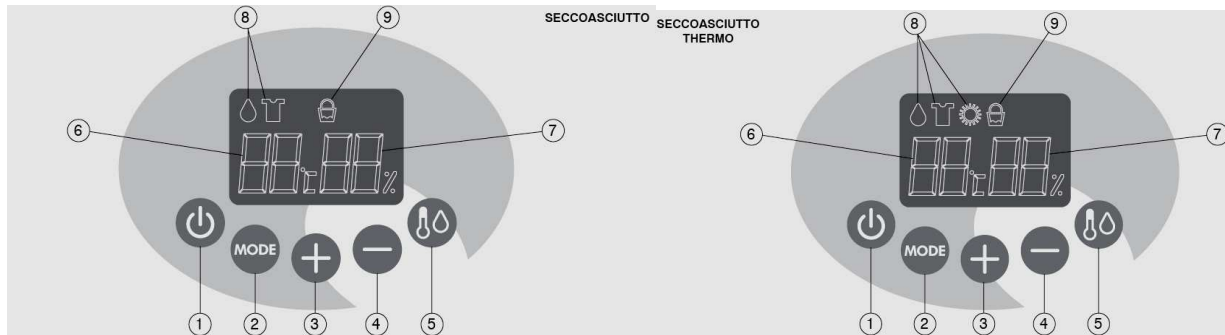
1) Start / Stand-by key
2) Operating mode selection key
3) Desired humidity / temperature increment key (selection range from 30 to 90% and from +6℃ to +30℃).
4) Desired humidity / temperature decrement key (selection range from 30 to 90% and from +6℃ to +30℃).
5) Detected ambient humidity / temperature warning key
6) Temperature indication
7) Humidity indication
8) Operating mode indications
9) Condensate collection tank full or tank shortage (LED ON),
  Continuous discharge function enabled (LED BLINKING with frequency 1.25Hz).
  Tank empty/present with continuous discharge disabled (LED OFF).

SELECTING FUNCTIONS

Stand-by. Key (1)

This key activates the dehumidifier or puts it in Stand-by mode. In the latter case, the display shows ' - - - - ' and the dehumidifier is deactivated.

Mode (SECCO ASCIUTTO). Key (2)

Pressing this button the following operating modes can be set:
• DRYING, indicated by the "drop" symbol light on the display.
• SUPER-DRYING, indicated by the "T-Shirt" + "HI" symbols light on the display.

Mode (SECCO ASCIUTTO THERMO). Key (2)

Pressing this button the following operating modes can be set:
• DRYING, indicated by the "drop" symbol light on the display.
• SUPER-DRYING, indicated by the "T-Shirt" + "HI" symbols light on the display at the same time.
• DRYING + HEATING, indicated by the "drop" and "sun" symbols lit on the display at the same time.
• SUPERDRYING + HEATING, indicated by the "T-Shirt", "HI" and "sun" symbols lit on the display at the same time.
• HEATING, indicated by the "sun" symbol lit on the display.

Indication of ambient temperature and humidity on the display
In the DEHUMIDIFICATION and DEHUMIDIFICATION + HEATING modes, the ambient temperature and humidity values detected by the appliance are visualised flashing for 5 seconds on the display by pressing key (5).

OPERATION WITH CONTINUOUS DISCHARGE
To operate the dehumidifier with continuous discharge, carry out the following operations:
• Take the tank out of the appliance.
• Connect the rubber pipe provided in the outfit to the condensate collection tank (at the top of the tank compartment).
• Secure the pipe with the metal clamp provided.
• Simultaneously press the increment (3) and decrement (4) keys for three seconds, with the machine in function
The activation of this function is indicated by the flashing "tank" symbol (9).
The continuous discharge function is cancelled if the empty tank is refitted.

FUNCTION DETAILS

• DEHUMIDIFICATION indicated by the "drop" symbol light on the display.
Compressor and fan are switched on if the minimum OFF time (**Cf**) has elapsed and if the relative humidity
value is higher than the set point + 3; compressor and fan remain ON as long as the relative humidity value is
above the set point – 3; when below the set point – 3, compressor and fan switch off (the fan switch-off is
delayed by 30 seconds with respect to the compressor, and by 45 seconds for SeccoPur Thermo) and remain off for a minimum
time equal to **Cf** (measured as from switch-off of the compressor), at the end of which compressor and fan are switched back on
again if the relative humidity value is greater than the set point +3.
The set point can be adjusted from 30% to 90% Rh in steps of 5%; pressing the UP (Key 3) or DOWN (Key 4) keys increases or
decreases the set point value by 5%. The fan speed is always the minimum speed (winding no. 1 is energized).

• DRYING MODE (Secco Asciutto)
Compressor and fan are switched on if the minimum OFF time (**Cf**) has elapsed.
Compressor and fan switch off only in the following cases:
cut in of the tank full switch,
operation in defrosting mode,
alarms (the switching off of fan always delays for 30 seconds compared with compressor.
The fan speed is always the minimum speed (winding no. 1 is energized).

• DRYING MODE (Secco AsciuttoThermo)
Compressor and fan are switched on if the minimum OFF time (**Cf**) has elapsed.
Compressor and fan switch off only in the following cases:
cut in of the tank full switch,
operation in defrosting mode,
alarms (the switching off of fan always delays for 45 seconds compared with compressor.
The fan speed is always the minimum speed (winding no. 2 is energized).

• DEHUMIDIFICATION+ HEATING
Compressor, heating element and fan are switched on if the minimum OFF time of the compressor (**Cf**) has elapsed and if
the relative humidity value is greater than the set point +3; compressor, resistor and fan remain on as long as the relative
humidity value is greater than the set point –3; when it is below the set point –3, compressor, resistor and fan switch off (fan
switch-off is delayed by 45 seconds with respect to the compressor and the resistor) and remain off for a minimum time
equal to **Cf** (measured as from switch-off of the compressor), at the end of which compressor, resistor and fan switch back
on again if the relative humidity value is greater than the set point +3.
The set point can be adjusted from 30% to 90% RH in 5% steps; pressing the UP or DOWN keys increases or decreases
the set point value by 5%.
The resistor switches off if the ambient temperature is above **tC** and is re-activated if the Room air
temperature is below **tC** -2℃. In this mode the display on the digits must be the same as in 'Dehumidification' mode. The
fan speed is always the maximum speed (winding no. 2 is energized).

• COMBINED DRYING+HEATING MODE
The compressor, fan and heating element are switched on in continuous mode if the
minimum OFF time (**Cf**) has elapsed. Compressor, fan and resistor switch off only in the following cases: cut
in of the tank full switch, operation in defrosting mode, alarms (fan switch-off is delayed by 45 seconds compared with
compressor and the resistor).
The resistor can be switched off if the ambient temperature is above **tC** and will be re-activated if the ambient
temperature drops back to below **tC**-2℃.
The fan speed is always the maximum speed (winding no. 2 is energized).

• HEATING MODE
Heating element and fan are switched on if the HEATING function is selected and if the Room air temperature value is
below the set point value selected.
When this function is selected, instead of showing the set point of the relative humidity, the display shows on digits at the left
side the Room air temperature set point (which can be set from 6℃ to 30℃ in steps of 1℃); pressing the U P or DOWN
keys increases or decreases the set point.
Heating element and fan remain on while the ambient temperature is reaching the set point value defined,
When ambient temperature rise over the set point they switch off (fan switch-off is delayed by 45 seconds with respect to the
heating element) and remain off until the ambient temperature drops by 2℃ to the set temperature.
The fan speed is always the maximum speed (winding no. 2 is energised).

If there is a frost condition (evaporator temperature < **Ft** and compressor ON) the compressor remains on for a maximum time equal to **Co** minutes, at the expiry of which air defrosting takes place (fan on at minimum speed, resistor not active in models with resistor, compressor off) which terminates when the pre-set temperature is reached (evaporator temperature > **St**), compatibly with the minimum compressor OFF duration **Cf**.

If the formation of frost is detected and the compressor is stopped due to reaching of the set point before the expiry of **Co** the fan remains on until the end of defrosting temperature is reached.

ALARM CODES

Display Indication	Likely Cause	Suggested Solution
"**Hr**" flashing	Relative humidity drops below very low values (<22%).	Activate the dehumidifier with higher ambient humidity conditions.
	Humidity sensor broken.	Change humidity sensor or whole PCB (according to the model).
"**tE**" flashing	The ambient evaporator temperature sensor is damaged.	Change ambient temperature sensor or whole PCB (according to the model).
"**Lo**" flashing	The ambient temperature is too low. It means that after 30 minutes of operation in defrosting mode (compressor stopped and fan working) the defrosting temperature does not exceed **St.** Alarm reset automatically after room temp rise up **St.**	Activate the dehumidifier with higher ambient humidity conditions.
"**Fi**" flashing	The air filter is dirty or the inlet or outlet airflow from the appliance is obstructed. After the 3rd cut-in of the thermostat (no voltage at related input with resistor relay energized) the output to the heating element is disabled and the error code is displayed in blinking mode. All the other functions must remain active or it must be possible to activate them; in Standby and in the operating modes in which operation of the heating element is not scheduled, the malfunction must not be displayed. The fault can be reset in all the operating modes in which it is signalled by keeping the Standby key pressed uninterruptedly for at least 5 seconds (after 5 seconds it must reset even if the key is still pressed). Reset of the malfunction eliminates display of it (the display goes back to the normal operation display), and enables ctivation of the resistor, in addition to zero-setting the number of thermostat cut-ins. The thermostat must be zero-set also when the operating mode including Stand-by) is changed and the power supply is disconnected. These operations obviously do not reset any "dirty filter" malfunction present**.**	Clean the air filter and remove the causes of obstruction of the airflow.
"**EE**" flashing	The EEPROM of the PCB is damaged.	Change the PCB (for some model models only).

Mnemonic	Range scheduled		Parameters set	Description
Co	20 min	50 min	20	Compressor in defrosting ON time
Cf	3 min	15 min	5	Compressor minimum OFF time
Ft	-9℃	+9℃	0	Frost accumulation temperature
St	0℃	+9℃	5	End of defrosting temperature
tC	20℃	40℃	26	Set point temperature in combined mode

AUTOTEST MODE

By pressing the keys 4+5 for 3 seconds in sequence with the unit in Stand-by, the following
sequence is started (each phase has a duration of 3 seconds):
- switch-on of all symbols of the displays
- display of the SW release
- activation of the fan (max speed managed according to the model, resistor powered when provided) and
compressor, displaying the code **At** on digits to the right side and the Evaporator probe temperature
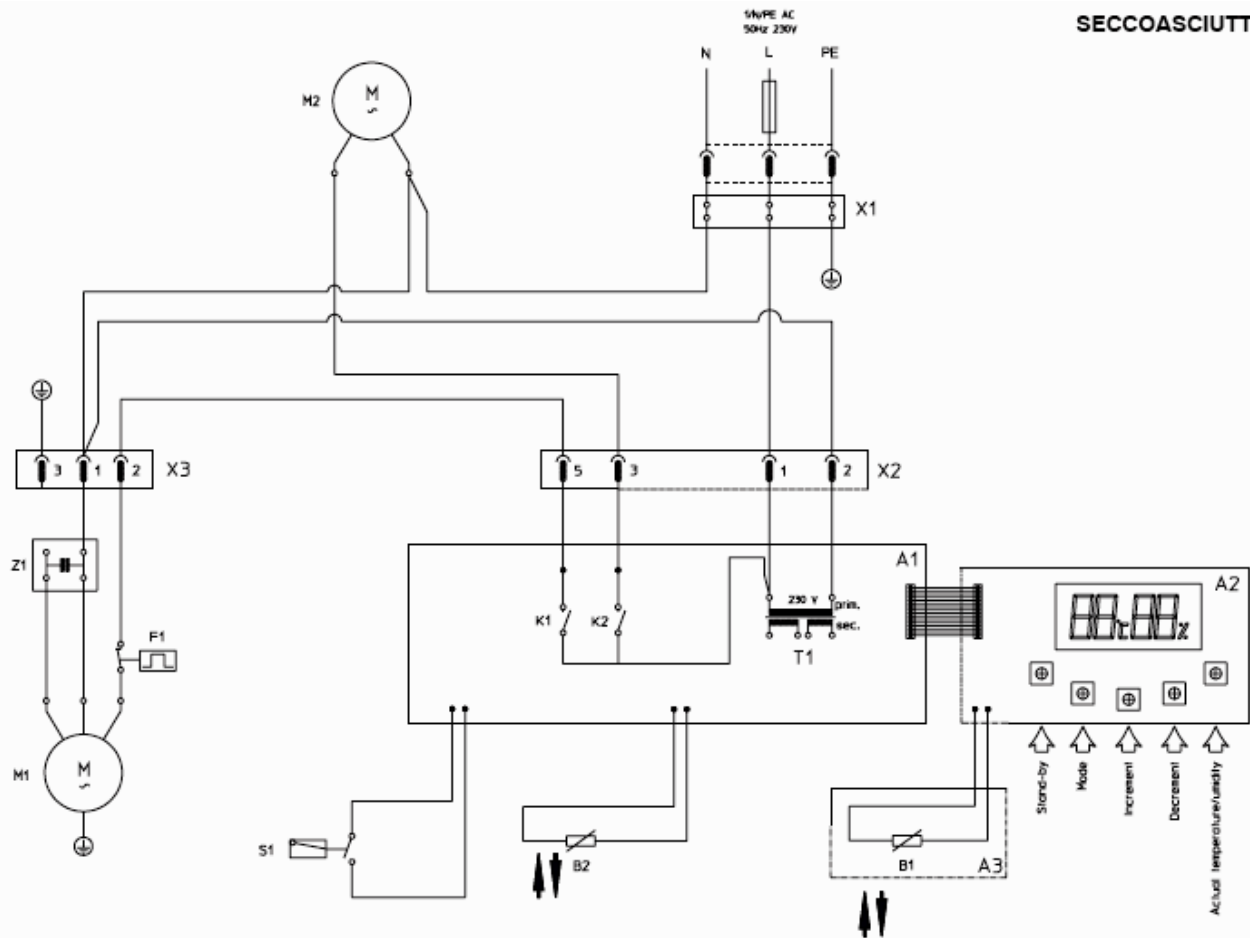to the left side.
The compressor remains ON continuously, independently of the set point and the tank level switch; the
pause between stop and subsequent start and the defrosting function are also excluded.
The tank level symbol is active if the tank is absent (switch open), off if the tank is present (input closed).
Pressing the key 5 the SW refresh the standard display mode as room air temperature and relative humidity values. Press
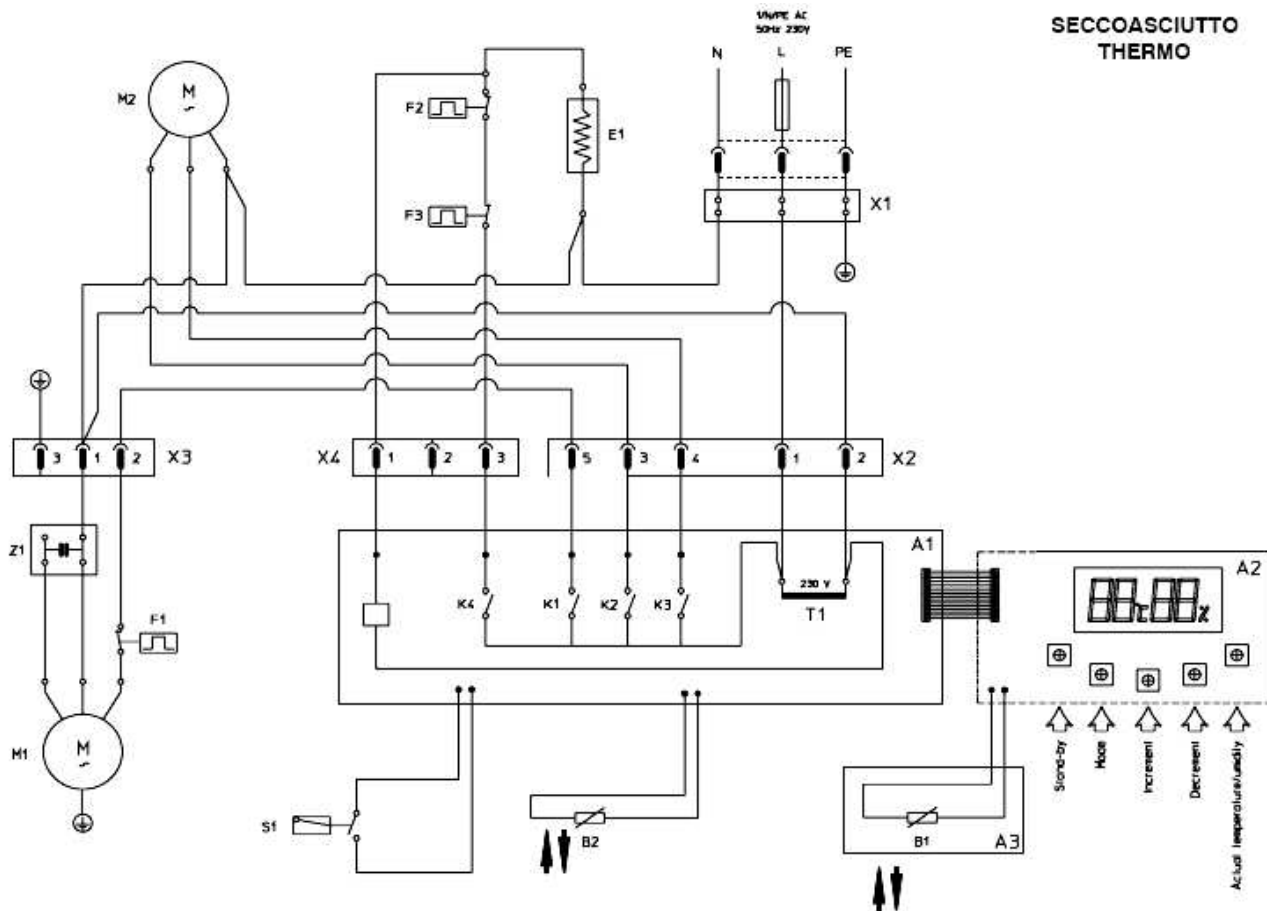the stand-by key or disconnect the power supply to quit the auto test mode.

WIRING DIAGRAM

A1 - Electronic card (power)
A2 - Electronic card (control)
A3 - Humidity/temperature sensor card
B1 - Humidity/temperature sensor
B2 - Evaporator sensor
F1 - Compressor thermal cu-tout
K1 - Compressor relay
K2 - Fan relay
M1 - Motor-driven compressor
M2 - Fan
S1 - Tank full micro-switch
T1 - Transformer
X1 - Power supply terminal board
X2 - Connector
X3 – Connector

WIRING DIAGRAM

SECCOASCIUTTO THERMO

A1 - Electronic card (power)
A2 - Electronic card (control)
A3 - Humidity/temperature sensor card
B1 - Humidity feeler/temperature
B2 - Evaporator sensor
E1 - Electrical heating element
F1 - Compressor thermal cut-out
F2 - Thermostat with manual reset, 140°C
F3 - Thermostat with automatic reset, 90°C
K1 - Compressor relay
K2 - Fan relay
K3 - Fan relay
K4 - Electrical heating element relay
M1 - Motor-driven compressor
M2 - Fan
S1 - Tank full switch
T1 - Transformer
X1 - Power supply terminal board
X2 - Connector
X3 - Connector
X4 - Connector
Z1 - Compressor capacitor