FRRIDO

Technical data:

Cooling capacity (1) / (3)	kW	**1,90/2,09**
Power input in cooling mode (1)	W	**720**
Current absorption (1)	A	**3,1**
Annual energy consumption in cooling mode (1)	kWh	**360**
E.E.R		**2,64**
Energy efficiency class in cooling mode (3)	-	**B**
Power supply voltage	V-F-Hz	**230-1-50**
Minimum/maximum power supply voltage	V	**196 / 253**
Maximum power input (2)	W	**820**
Maximum input (2)	A	**3,7**
Dehumidification capacity	l/h	**1,0**
Air flow rate (max.)	m^3/h	**380**
Pipe length	m	**1**
Maximum remote control range (distance/angle)	m / °	**8 / 80°**
Dimensions (Width X Height X Depth)	mm	**485x795x440**
Weight (without packaging)	kg	**39**
Noise level (sound pressure)	dB(A)	**40-52**
Protection rating of the casings	-	**IP20**
Refrigerant gas / charge	Type	**R410a**
Maximum working pressure	MPa	**5,2**
Power supply cable		**3 X 1.5**
Fuse	-	**10 AT**
	Indoor ambient temperature	**Outdoor ambient temperature**
Maximum working temperatures in cooling mode	35°C -24°C	43°C -32°C
Minimum working temperatures in cooling mode	18°C -16°C	18°C - 16°C
	Indoor ambient temperature	**Outdoor ambient temperature**
(1) Cooling capacity test conditions (EN 14511)	27°C -19°C	27°C -19°C
(2) High load test conditions	35°C -24°C	43°C -32°C
(3) Efficiency class test conditions (EN 14511)	35°C -24°C	35°C -24°C

INTRODUCTION

The user interface consists in 5 selection buttons and 10 LEDs indicating the status of the appliance:

- 1 on/stand by LED;
- 4 temperature LEDs;
- 2 indoor fan speed LEDs;
- 1 night status LED
- 2 cooling – dehumidification LEDs

1. ELECTRONIC/ELECTRIC COMPONENTS

- Rotary compressor featuring 1.3 kW max. power input (maximum current absorption: 6 A; max. starting current: 25A).
- 4-speed centrifugal fan motor featuring 200 W maximum power input.
- NTC temperature sensor with standard cylindrical housing and connection cable.
- Single board for logic and power control selection (device power supply: 230 Vac).
- Management of two fan speeds thanks to a relay on the board (motor with various stator windings).
- System control thanks to single temperature sensor located on intake evaporator side (connected to the board by a dedicated 2-pole connector);

2. STAND-BY MODE

- Press the relative button to select. The corresponding LED lights up to indicate that the mode is enabled; all outputs are switched off. Press STAND-BY again (the only enabled button) to reset the functions selected beforehand (fan, cooling, dehumidification or night mode). Any timer settings are cancelled (the night program is re-started).

3. FAN MODE

- Press MODE repeatedly until the cooling and dehumidification LEDs switch off.

4. COOLING MODE

- Press MODE repeatedly until the cooling LED switches on. The fan always stays on at the set speed if the compressor is also on (unless the anti-explosion subprogram is triggered); otherwise, the fan runs at minimum speed. The compressor is switched on if Ta>=SP+Hy (Ta= ambient temperature; SP=setpoint; Hy= hysteresis) and is switched off if Ta<=SP (unless the antifrost program is triggered).
- The anti-explosion subprogram forces the fan to run at maximum speed if the ambient temperature Ta>32°C; the subprogram finishes when Ta<=30°C.
- The antifrost subprogram starts if Ta<Tmin and stops when Ta>Tmin+2°K; it stops compressor function in cycles consisting in Tp_on and Tp_off time lapses

- The setpoint (SP) can be adjusted in 2°C steps starting from 18°C and continuing up to 30°C. To adjust, act on the 'modify temperature' button as indicated in the table below:

	LED 1	LED 2	LED 3	LED 4
18	O			
20	O	O		
22		O		
24		O	O	
26			O	
28			O	O
30				O

- When power is supplied to the circuit, or when the compressor is switched off, the compressor will not start until a 3-minute minimum pause has passed.

5. DEHUMIDIFICATION MODE

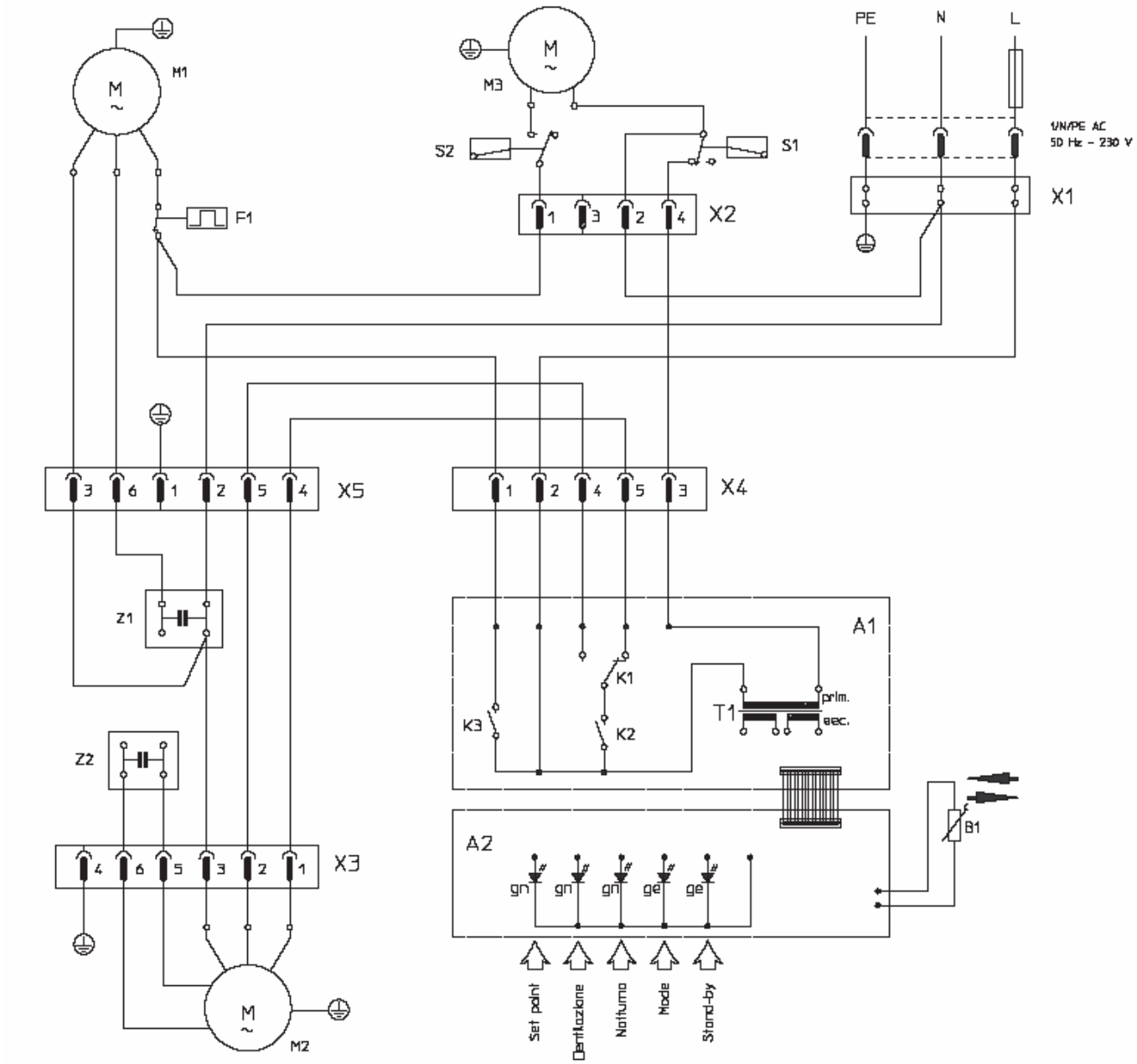
- Press MODE repeatedly until the dehumidification LED switches on. This function is similar to cooling mode except that the fan is forced to run at minimum speed and the compressor is controlled as follows:
  i. continuously ON if Ta>SP+2°K
  ii. 8 minutes ON and 4 minutes OFF if Ta=SP+1°K
  iii. 4 minutes ON and 4 minutes OFF if Ta=SP
  iv. continuously OFF if Ta<SP

6. NIGHT MODE

- Press the relative button to select; the corresponding LED will light up. This function can be used in conjunction with the cooling or dehumidification modes. If active, the fan is forced to run at minimum speed and SP is increased by 1°K after 1 hour and by a further 1°K after 2 hours.

7. SPECIAL FUNCTIONS

- - DIAGNOSTICS: The following functions have been included to make the appliance easier to check:
  i. SENSOR MALFUNCTION: if the sensor malfunctions, the appliance goes into standby and the relative LED flashes.
  ii. SKIP the compressor pause when the appliance is switched on for the first time: supply power to the circuit while the night mode button is pressed to activate this feature
  iii. SELF-TEST: to access, supply power to the circuit while the Mode and Fan buttons are pressed.



A1) Electronic board (power)
A2) Electronic board (control)
B1) Thermostat sensor
F1) Compressor thermal overload cutout
K1) Fan switch relay
K2) Fan switch on relay
K3) Compressor relay
M1) Motor-driven compressor
M2) Fan
M3) Condensate drainage pump
S1) Safety microswitch
S2) Pump microswitch
T1) Transformer
T2) Timer
X1) Main power supply terminal board
X2) 4-pole connector
X3) 6-pole connector
X4) 5-pole connector
X5) 6-pole connector
Z1) Compressor condenser
Z2) Fan condenser