

# SERVICE MANUAL REFRIGERATION



© ELECTROLUX ITALIA S.p.A. Spares Operations Europe Corso Lino Zanussi, 30 I - 33080 PORCIA /PN (ITALY)

Fax +39 0434 394096

Edition: 2010-05

Publication no.

599 73 05-64

ΕN

DAC 5

SOI/TD - PR 1/11 599 73 05-64

# **Contents**

1. Intro	oduction	3
	nponents	
2.1.	Assembly view	4
2.2. F	Fan motor	4
2.3. \	Wiring diagram	5
2.3	3.1 Version with ON/OFF button	5
2.3	3.2 Version without ON/OFF button	5
3. Serv	/iceability	6
3.1	Switch & DAC 5 deflector check and assembly (version with switch only)	
3.2	Mount the switching wiring (version with switch only)	
3.3	Rubber damper and DAC 5 front deflector assembly	7
3.4	Fan assembly	7
3.5	Rubber damper and fan support assembly	g
3.6	Fan motor and fan support + DAC 5 deflector assembly	9
3.7	Push button assembly (version with switch only)	
3.8	Fan cover assembly	10
3.9	"PE" sponge gasket assembly	
	Fan hlades assembly	11

#### 1. Introduction

The DAC (Dynamic Air Cooling) is a cooling system in which air is circulated by a fan inside the refrigerator compartment. This system distributes uniformly the temperature in every part of the refrigerator. The temperature quickly returns to this level after the door has been opened.

The new DAC is referred to as **DAC 5** so that it is distinguished from the previous version.

The DAC 5 system features an ON/OFF switch that can be used to select the operating mode for the refrigerator: conventional mode or forced air circulation (which is recommended for operation in the summer.

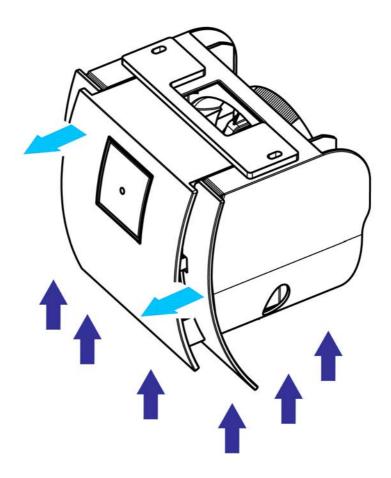
**IMPORTANT NOTE**: Only in the appliances with a rapid drink cooler device RDC (see Service Manual 599382974) is used a DAC 5 version without the ON/OFF switch.



**WARNING**: For safety reasons the DAC does not feature the ON/OFF button to avoid the explosion or fire risks in case of gas leakage inside the appliance.

Should the components of the DAC be replaced, use only the original parts indicated in the spare part lists!

The DAC 5 system is located in the upper section of the refrigerator. The air enters from the rear side along the refrigerator bottom and exits from the front side, as shown in the figure below:

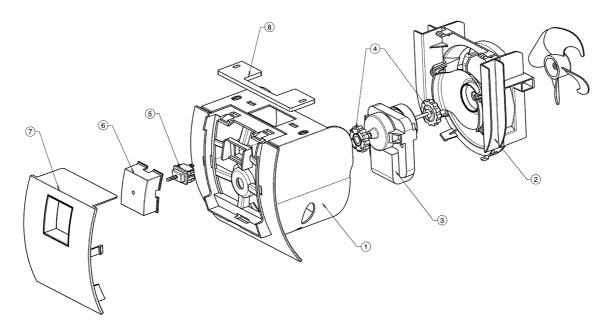


SOI/TD - PR 3/11 599 73 05-64

# 2. Components

#### 2.1. Assembly view

Please find below the descriptions of the components of DAC 5:



- 1. deflector;
- 2. fan support;
- 3. motor;
- 4. rubber bushes;
- 5. bipolar switch (not featured in the models with rapid drink cooler RDC);
- 6. push button;
- 7. printed cover;
- 8. sponge;

#### 2.2. Fan motor

The fan is supplied with the Ø90 mm. axial fan.

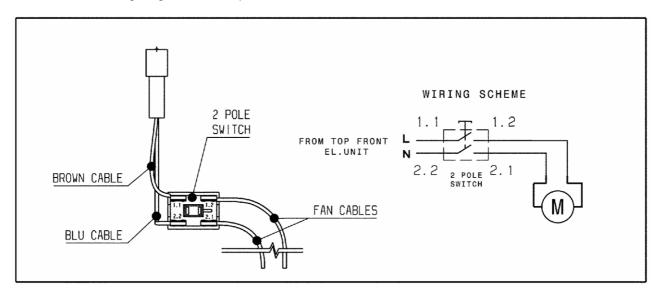
The voltage is  $220/240 \text{ V} \sim 50/60 \text{ Hz}$ , the power is 2.9 W (tolerance of + or - 1 W) and the run no. is 1550 (tolerance of + or - 150 rpm).

SOI/TD - PR 4/11 599 73 05-64

## 2.3. Wiring diagram

## 2.3.1 Version with ON/OFF button

Find below the wiring diagram of the bipolar switch:

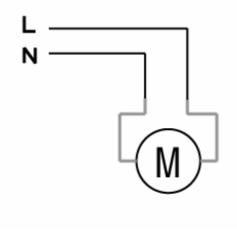


Key:

L = Line
N = Neutral
M = Fan motor

#### 2.3.2 Version without ON/OFF button

Find below the wiring diagram of bipolar switch for models which feature the rapid drink cooler RDC:



Key:

L = Line N = Neutral M = Fan motor

SOI/TD - PR 5/11 599 73 05-64

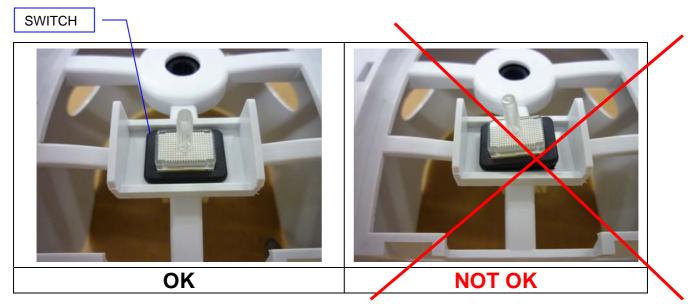
## 3. Serviceability

The DAC 5 is fitted to the upper section of the refrigerator by 2 screws that must be removed to access to the internal components.

#### 3.1 Switch & DAC 5 deflector check and assembly (version with switch only)

Check the components and in particular:

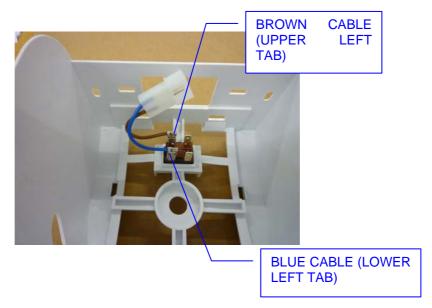
- a. The contact terminal must be straight.
- b. The DAC 5 deflector must mount the switch in the hole present on the DAC 5 deflector as described in the picture below:



Shake the switch with fingers to verify that there is no gap or it will not come out from DAC 5 deflector housing.

## 3.2 Mount the switching wiring (version with switch only)

Mount the switch wiring in the right terminal tabs of the switch as indicated in the picture below:

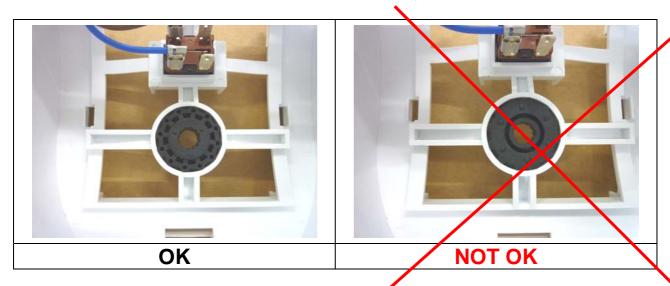


The wiring terminal must be pushed completely into the switch terminal tabs and they must not touch one each other.

SOI/TD - PR 6/11 599 73 05-64

#### 3.3 Rubber damper and DAC 5 front deflector assembly

Insert one rubber dumper in the DAC 5 deflector as described in the pictures below:

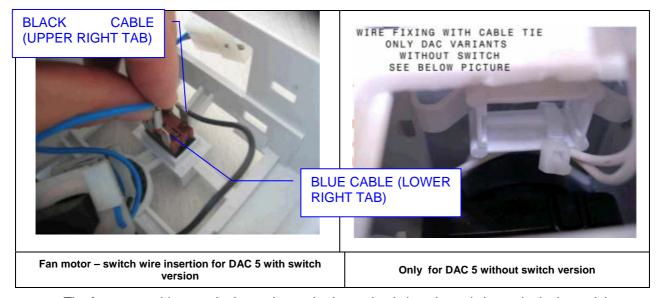


Pay attention to the right rubber damper orientation according to the pictures above!

#### 3.4 Fan assembly

Connect the fan motor connectors to the switch terminal tabs as described in the picture below.

For DAC 5 (version without switch) fix the motor wiring to the DAC 5 deflector using a plastic tie as described in the picture below.

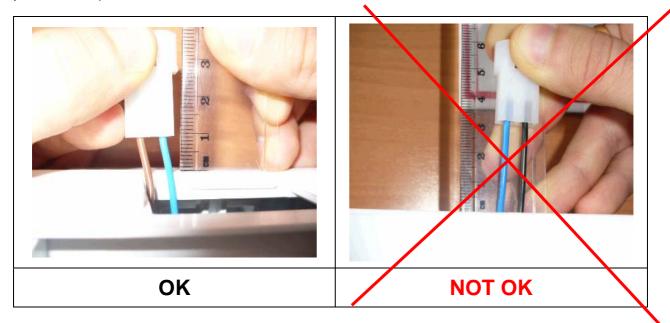


The fan motor wiring terminal must be pushed completely into the switch terminal tabs and they must not touch one each other.

SOI/TD - PR 7/11 599 73 05-64

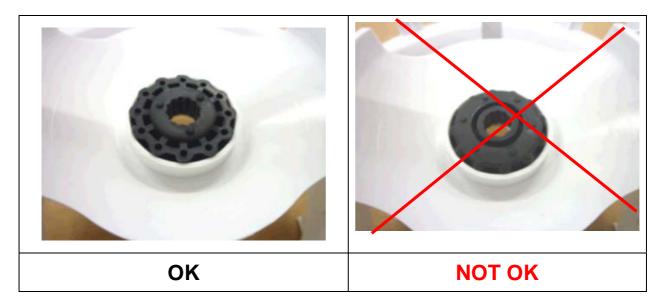
## ONLY DAC VARIANT WITHOUT SWITCH:

The free cable length from the plastic case must be 10 mm with tolerances +5/-0 mm (see enclosed pictures below):



#### 3.5 Rubber damper and fan support assembly

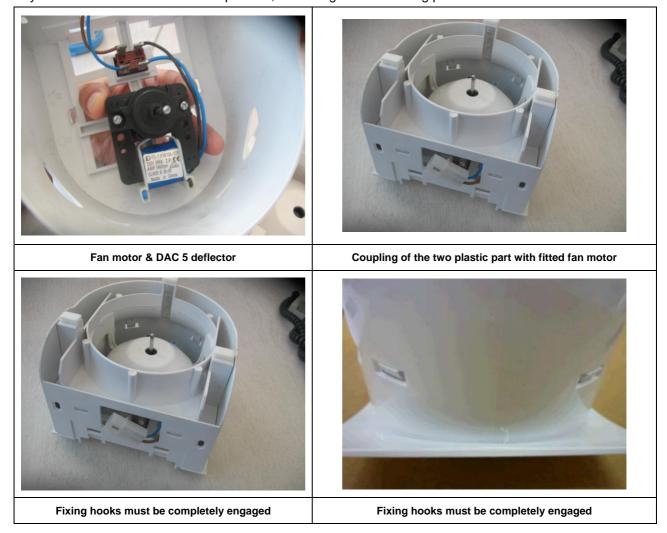
Insert one rubber damper in the fan support as described in the pictures below:



Pay attention to the right rubber damper orientation according to the pictures above!

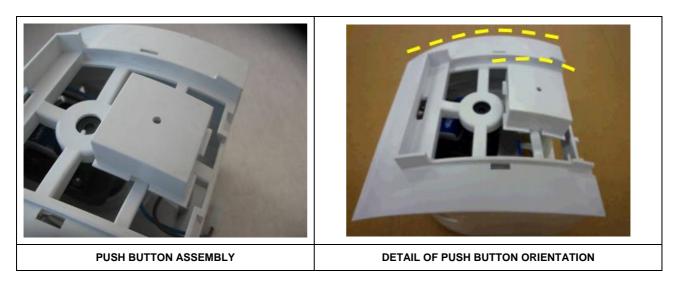
## 3.6 Fan motor and fan support + DAC 5 deflector assembly

Insert the fan motor on the DAC 5 deflector housing and cover both components with the fan support. Pay attention to the fan motor shaft position, according to the following pictures:



## 3.7 Push button assembly (version with switch only)

Mount the push button on the transparent switch light guide, paying attention about the orientation of the upper surface of the push button that must follow the curvature surface of the fan deflector:



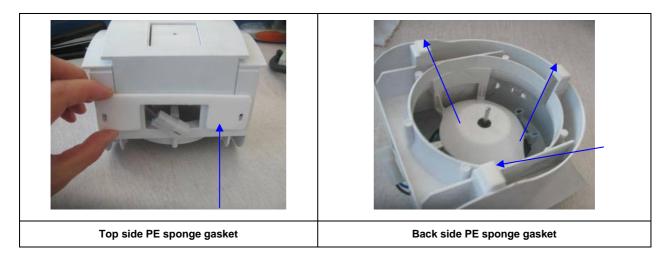
After the assembly, the push button must allow the correct switch functionality.

#### 3.8 Fan cover assembly

Mount the fan cover on the DAC 5 deflector:

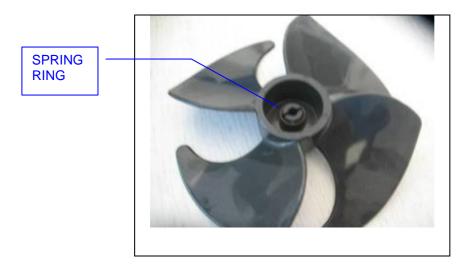


## 3.9 "PE" sponge gasket assembly



## 3.10 Fan blades assembly

The fan blades must be with the spring ring already mounted:



Assembly the fan blades and check that the fan blades rotate freely:

