

Description	Technical
ART.	S134
Volt	230 V.
Hz	50/60Hz
Watt	150 W.
Speed	20 - 400 Rpm
Weight	3.100 Kg
Degree of protection	IP 20

The following symbols are used for this equipment. You need to understand their meaning before using the equipment.



Read use and maintenance manual.



To be used only indoors



Attention



Do not unplug with the engine running



Do not dispose of electrical equipment in the household waste. According to the European Directive 2002/96/CE of electronic and electrical waste equipment and its implementation in compliance of the national rules, the spent electric equipment must be collected separately, at order to be recycled in an eco-friendly way.



**Warning, read carefully these instructions.**

## CONSERVE THESE INSTRUCTIONS:

Before using the honey extractor engine, read all instructions and cautionary warnings. This S134 engine must to use only for the honey extractor.

Uses a power supply with the correct voltage specified on the engine name plate.

Do not use the engine near to inflammable gas or fluids.

Do not expose the engine to rain, snow, moisture and weather.

Do not carry the engine by holding the cable.

Do not unplug the source cable by pulling it.

Before any cleaning or maintenance operations, unplug the source cable of the engine.

Do not use the engine if the source cable or the plug is damaged.

If the source cable or plug is damaged call a qualified technician for repair the equipment.

Do not use or disassemble the equipment if it received a strong hit, a drop or a damage.

Bring the equipment to a qualified technician for the maintenance and the repair. The wrong use or assemble can cause electric shock or fire hazards or malfunction.

The engine mustn't be use by children or invalids without a supervisor.

Do not use the engine if the temperature is BELOW 20°C or ABOVE 40°C.

Make sure the supply cable is not where it is likely to be stepped on or tripped over or where it may be damaged or subjected to stress.

Do not use a booster transformer, a generator for engine or a direct current socket.

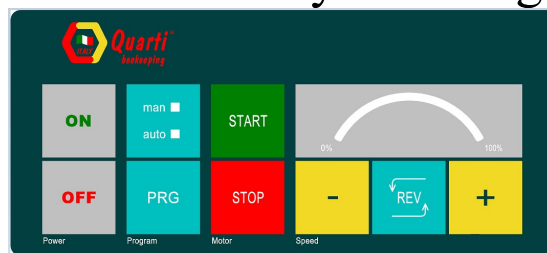
### Maintenance:

The reducer is greased only by the manufacturer.

The external part can be kept clean using a damp cloth.



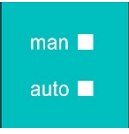
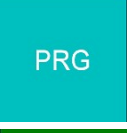






Do not wet or wash the engine with water or other fluid or inflammable products.

## User manual for honey centrifuge engine



Picture 01 Control panel

### KEYS DESCRIPTION

	<b>ON – Auxiliary Start</b>
	<b>OFF – Auxiliary Stop</b>
	<b>man / auto – spy light- Manual or Automatic selection of the operations</b>
	<b>PRG –Manual or Automatic selection of the processing program</b>
	<b>START – Start of the centrifuge</b>
	<b>STOP – Stop of the centrifuge</b>
	<b>speed/signals indicator light</b>
	<b>- reduces the speed</b>
	<b>REV – reverses the direction of rotation</b>
	<b>+ increases the speed</b>

## 01 - Starting:

When the engine switched on the red LED flashes to confirm the presence of the power supply. No other LEDs are on or flashing. The centrifuge is in the OFF state.

Press the key ON  to insert the drive power.

After few moments if the program is set to Manual the LED *man* will light up. 

While if the program is set to Auto the LED *auto* will light up. 


*In any case, the engine is in the ON state.*


If the engine has **safety lock on the lid**, the power will be turned on a few seconds after pressing the key ON only if the lid is securely closed.

### 01.1- Start the Manual Cycle


- Press ON , Press **PRG**  so that the LED  *man* is ON.

- Press **START**,  the red LED from flashing remains fixed.

The engine is in the CYCLE MANUAL state  and the basket doesn't rotate.

- Press +  to increase the rotation speed

- Press -  to decrease the rotation speed

- Press the key **REV**  to reverse the direction of rotation. (Even if the basket is rotating).




**During the rotation reversal** the speed LEDs start to flash, the basket decreases its speed until the rotation stops. It waits a few moments and the speed LEDs stop flashing. After that, the engine starts to accelerate in the opposite direction until to **reach the speed previously set**.





### 01.2 - Stop the Manual Cycle

Press **STOP**  to stop the rotation or press **OFF**  to stop the rotation and to end the manual cycle, with the unlock the lid if has safety lock. The honey extractor basket decreases its speed until it stops.

**Warning:** The maximum spin time is limited to 30 minutes of continuous run, after that the engine will turn off.


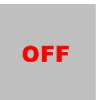
## 02.1 – Auto-learning Cycle

In the  state, hold press the key **PRG**  so that the LED *auto* flashes . Only in this setting the honey extractor engine is in **AUTO-LEARNING** state.



- Proceed as for the manual cycle, press , then run a normal cycle of extraction with a soft start  i.e. very low rotation speed. At last, gradually increase the speed in function of the amount of honey and the imbalance / vibrations  of the honey extractor.
- During this cycle the increase, the decrease or the change of direction  will be stored.
- The variations are stored only if they are **separated by at least 5 seconds of each operation.**


**Warning:** The maximum spin time is limited to 30 minutes of continuous run time, after that the engine will turn off.

## 02.2- Auto-learning stop.

Press the **STOP**  key or **OFF**  to stop the operation and to end the Auto-learning cycle. The extraction cycle performed has been stored.

## 02.3 – Automatic cycle rerun

- Press ON 
- Press **START**  the red LED from flashing it remains fixed.

With  *auto cycle* the centrifuge starts the previously stored cycle.

**Note** – during this cycle, the change of the speed is permitted, instead the change of direction and the total time are prohibited.

## 02.4 - Automatic cycle stop

The automatic cycle stop occurs when the time in the auto-learning phase ends. The honey extractor basket decreases its spin speed until to stop.

Or press the **STOP**  or **OFF**  keys.

## 03 – Non-resettable alarms or partially resettable alarms

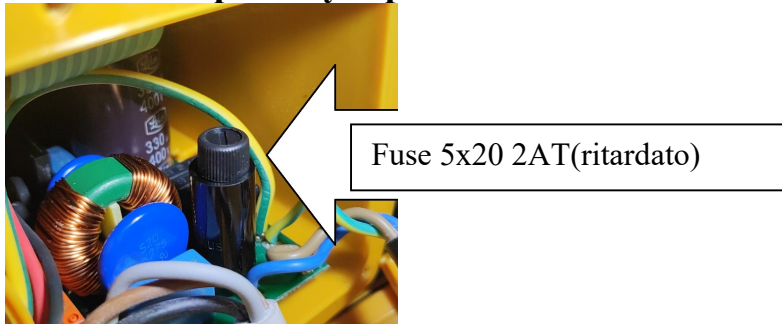
When an alarm occurs, the centrifuge turns to the OFF phase and no command can be perform. The green speed LEDs starts flashing to indicate the type of failure:

6 green LED flashing = short circuit (possible engine or drive failure)

5 green LED flashing = over temperature (too high temperature or heatsink failure)

- 4 green LED flashing = over voltage (high power supply, heavy load or failure)
- 2 green LED flashing = hardware failure (failure of the drive electronics)

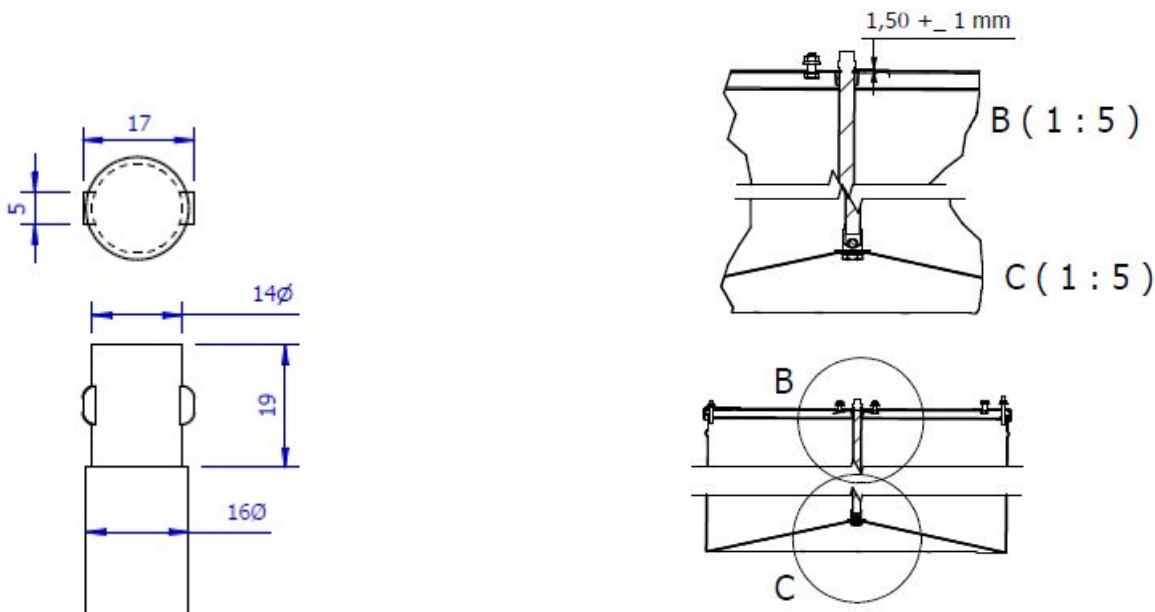
### – Check and possibly replace the internal fuse



### 05 - Resettable alarms

- 1 green LED flashing = storage error (try to repeat the learning)
- 4 green LED flashing = over voltage (high power supply, heavy load or failure) check the voltage of the electrical system and empty the centrifuge
- 5 green LED flashing = over temperature (to high temperature or heatsink failure) wait the engine to cool down.
- 3 green LED flashing = lid open alarm. If the lid is not closed when the engine turns to ON phase. Close the safety lid and wait for the engine goes to ON phase.

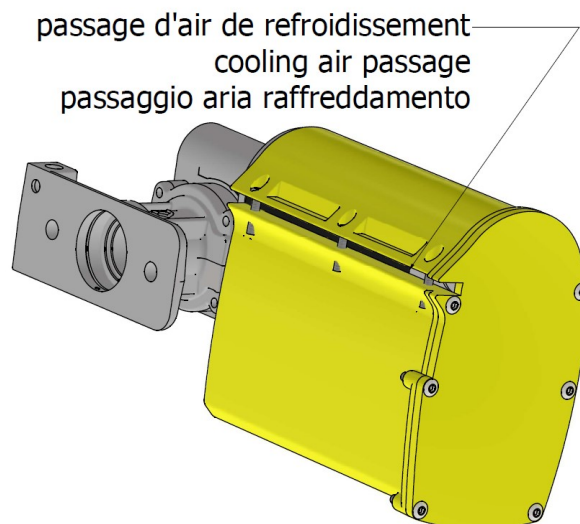
### 06 – Type of shaft-motor coupling on the crosspiece of the honey extractor.



– **Picture 2** necessary technical characteristics of the shaft, for the correct assembly of the engine on the extractor.



**WARNING:**

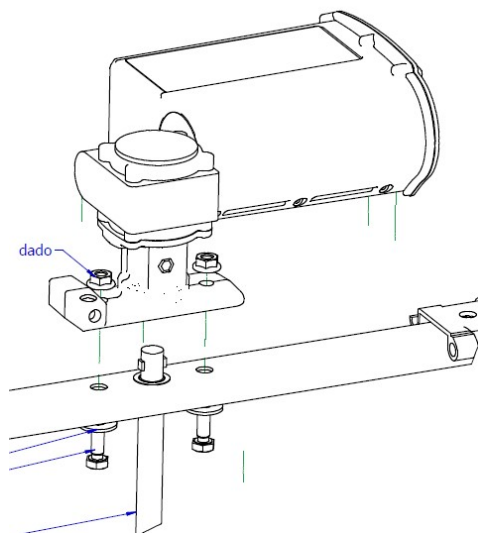


### Engine assemble without safety device (lid lock)

If the engine is purchased separately, the buyer must make the honey extractor in compliance with safety as envisaged by 2012 machinery law. Failure to comply of this safety compliance can cause risks of accidents that are harmful to the operator and third parties. QUARTI SRL DISCLAIMS ALL LIABILITY FOR DAMAGES PROVOKED TO PEOPLE FOR AN INSTALLATION NOT COMPLIANT WITH THE EUROPEAN LEGISLATIVE REGULATION (EC).

#### 07 Picture - Assemble

- **WARNING : THESE OPERATIONS MUST BE CARREID OUT WITHOUT POWER SUPPLY (THE ENGINE MUST BE NOT FEEDING)**
- **Arrange the engine on the crosspiece and in correspondence with the honey extractor shaft.**

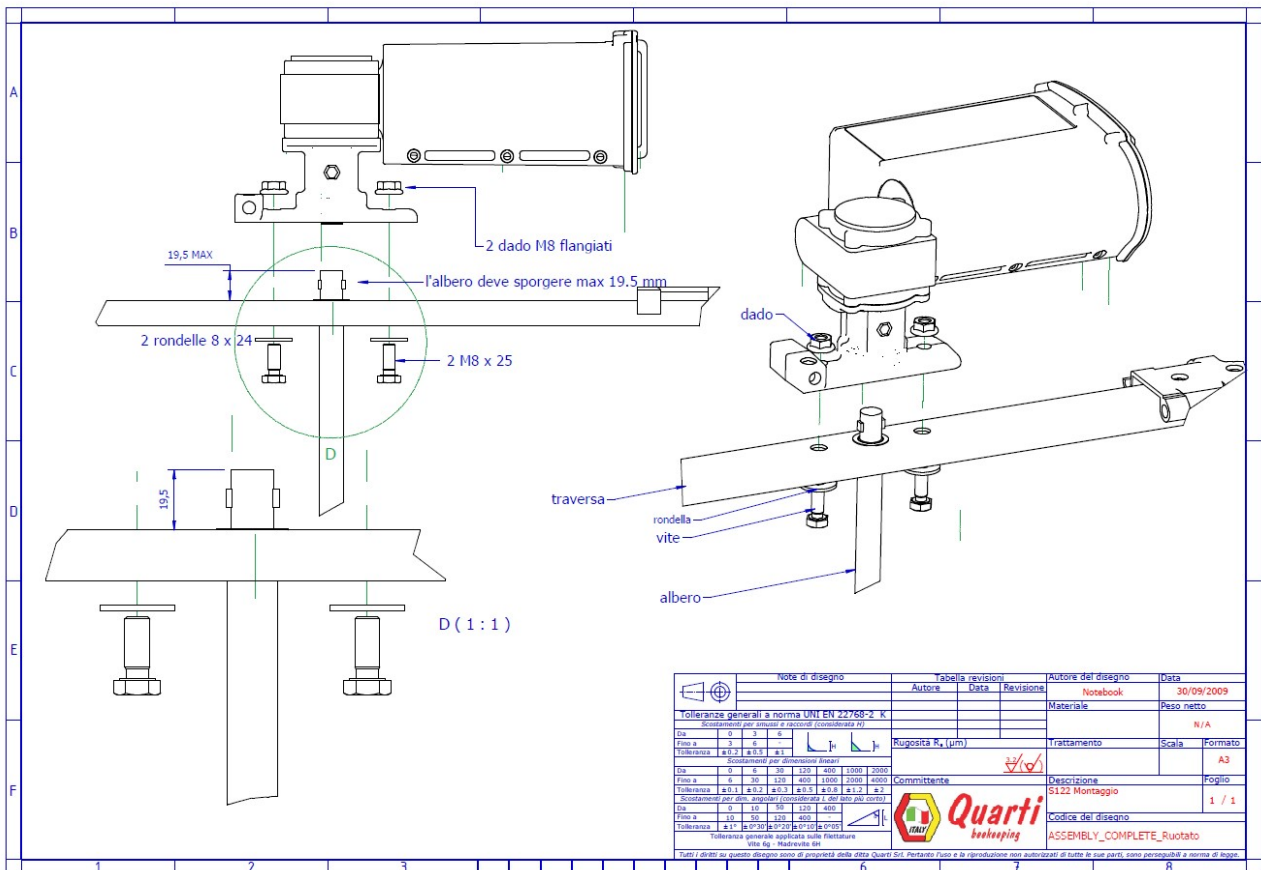
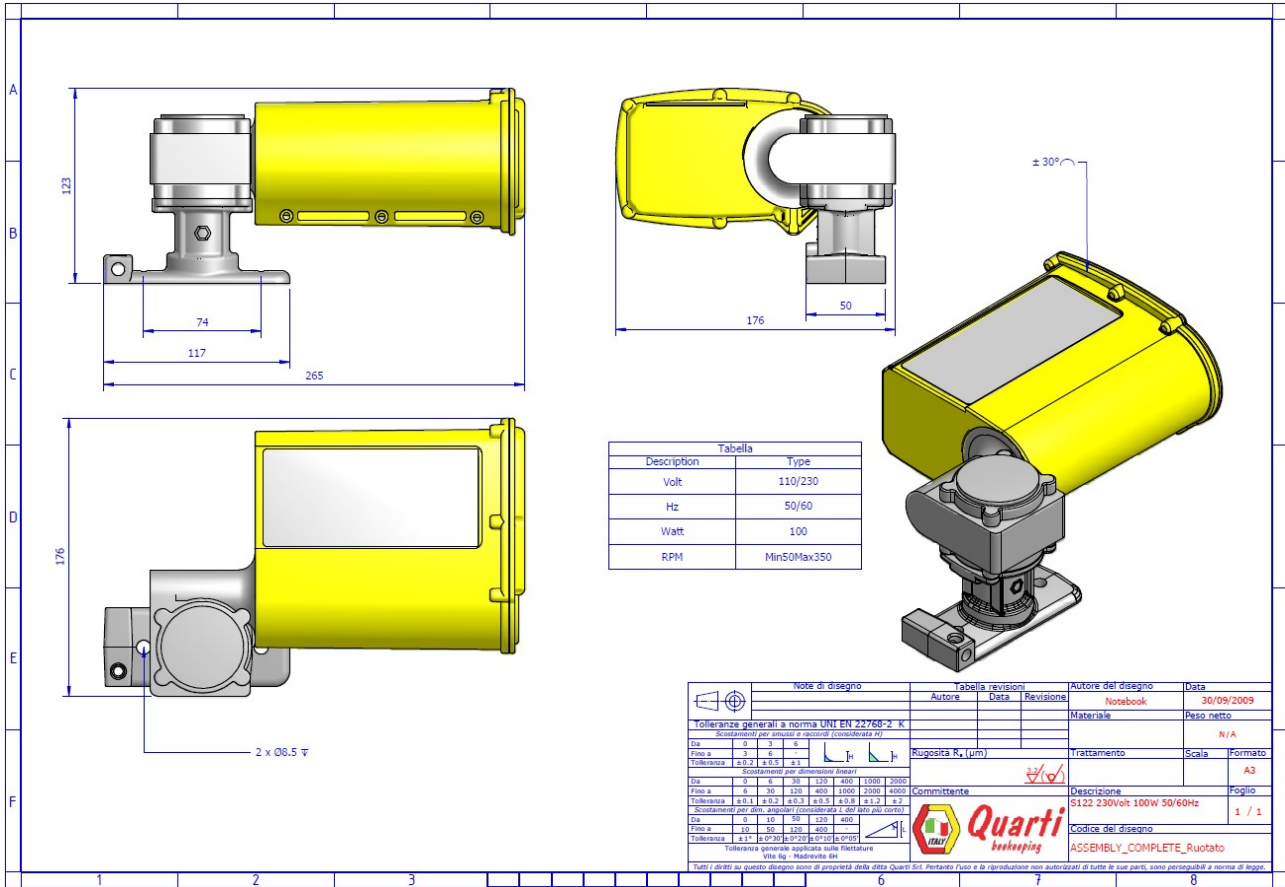


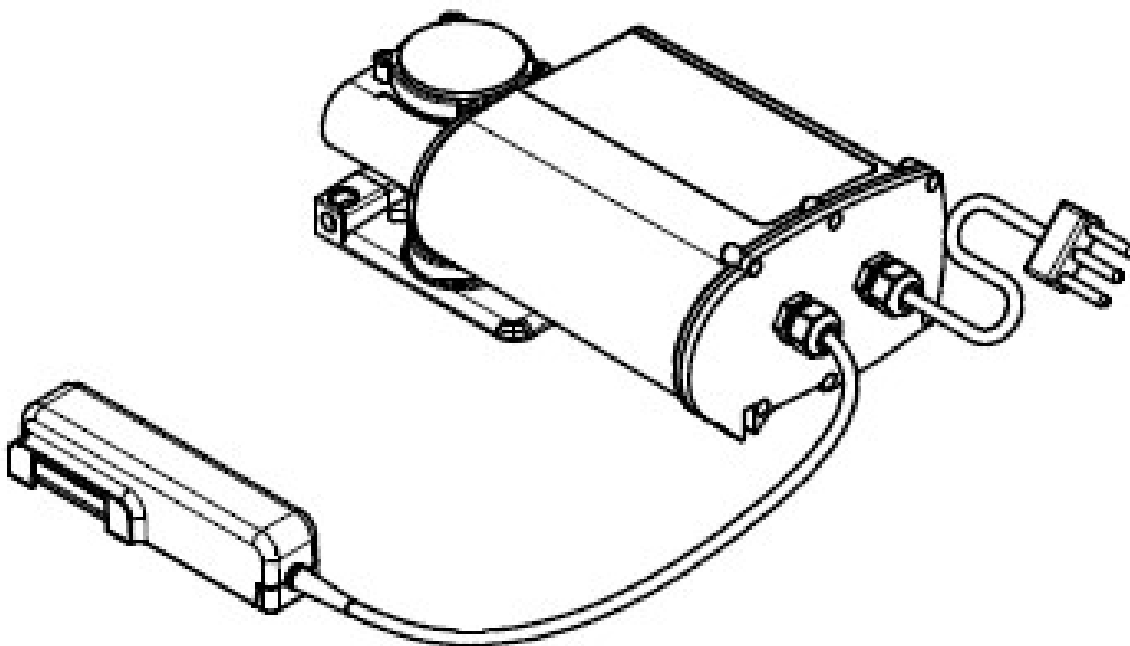
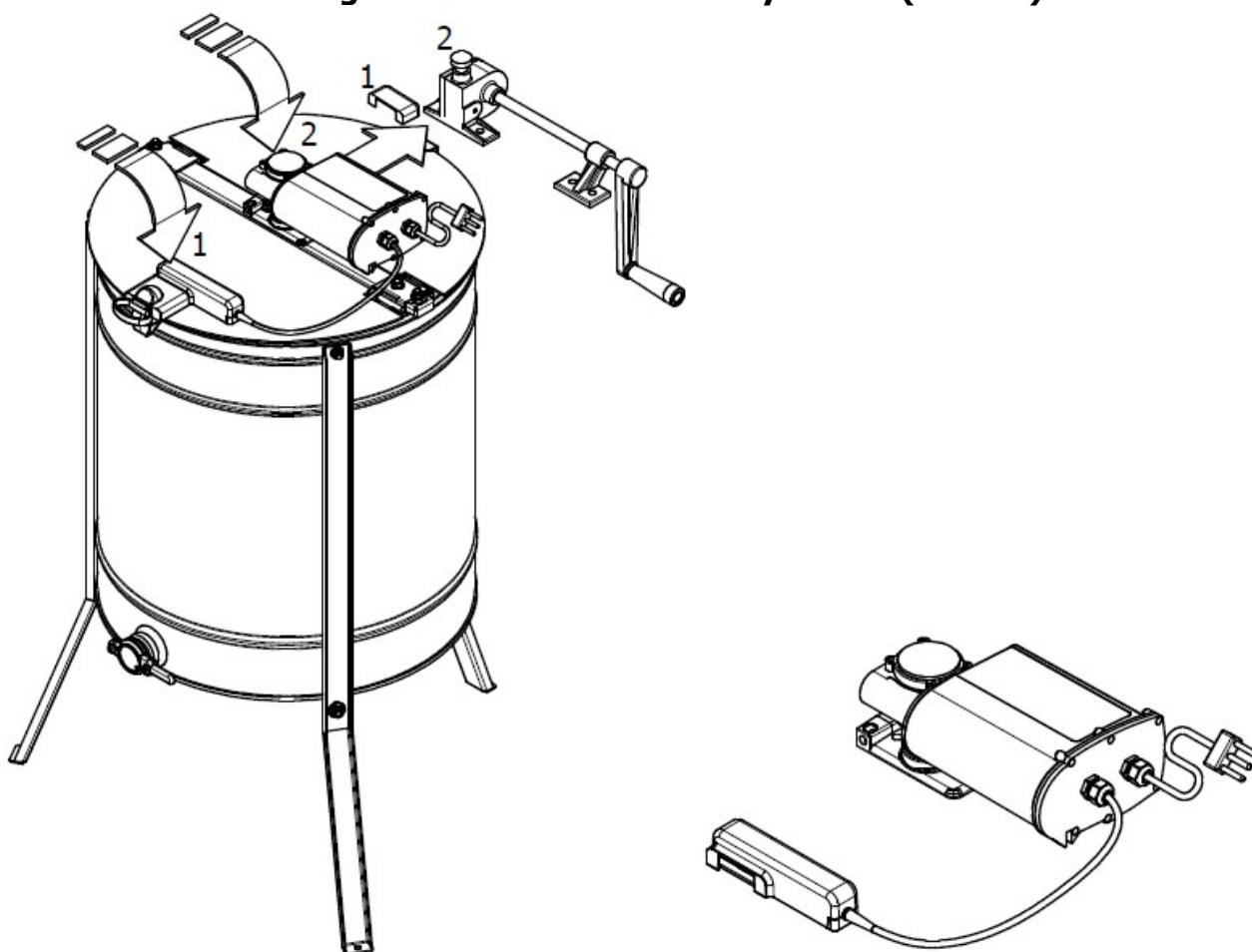
**F - Picture**

- Center the shaft on the engine
- Put the screws without tighten them
- Turn with the hand the honey extractor basket to better center the engine
- Make sure that the engine doesn't move, then to center and to tighten the screws

**At the first run, start the engine in manually mode with low speed, with empty honey extracor basket and make sure that everything is working properly.**

**Engine data**



**07.02 Foto – Monting** of the engine with the safety device (lid lock)**07.02 Photo - Mounting the motor with the safety device (lid lock)**



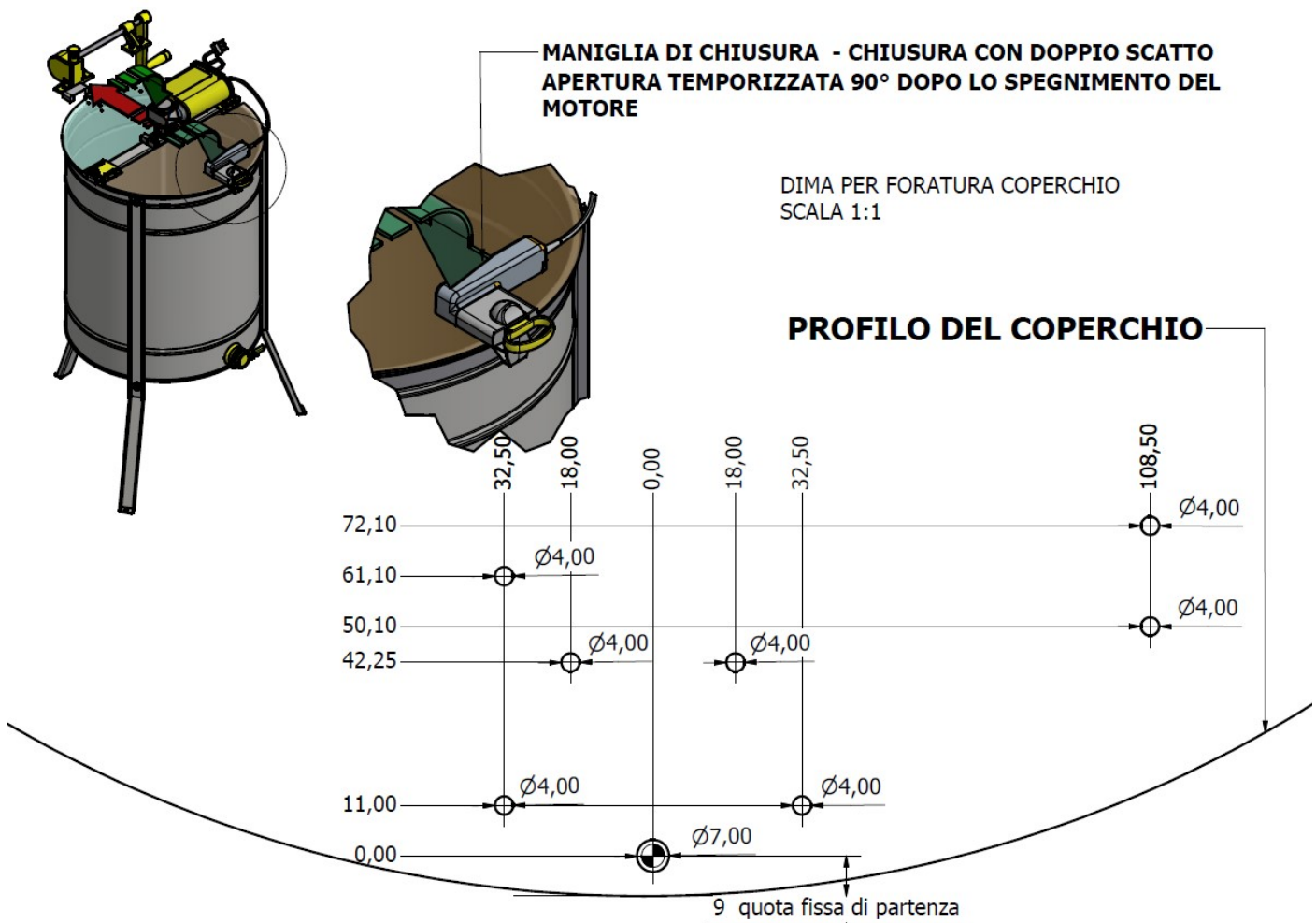
Demount :

- **Transmission (number 2) and protective cover (number 1) manual safety lock**

Reassemble:

- **Engine as indicated in point 07.01**
- **Safety group instead of the protection cover (number 1) manual safety lock**

**If the honey extractor lid does not have holes for fixing the safety device, drill with the dimensions as shown below**



## 08 - Photo - Lid Lock

Close the lid, the manger has a first lid closure click, a second click that activates the safety lock.

- Start engine, **START** the handle locks preventing opening.
- Press **OFF** and wait for the release (about 90 seconds)

