Watch ID unit operational description

When the Sensomatic unit (milk meter) starts the milking process it sends a signal (wired signal) to the activator. The activator will send an LF RF signal to the Watch ID through the internal antenna. The activator identifies the post ID from the Sensomatic (internal antenna is directly connected to the activator).
The Watch ID will save the post ID and turn on the TIRIS RFID module, that is inside the Watch ID enclosure and will look for an RFID tag (at 134 KHz).
When the RFID module will pick up a tag signal (at 134 KHz) it will transfer the tag ID to the Watch that is attached to it.
Then the Watch ID will transmit the data (Post number and Tag ID) to the Receiver (at 433.92 MHz, 4800pbs).

WatchID antennas data

1) Description

Watch ID Antenna is located on the front part of the Watch ID enclosure and connected directly to the PCB.

General Measure

Diameter: 8 mm

Number of wrapping: 15

Wire thickness: 0.5mm

Wire type: 1X0.5 / 0.95 PVC Covered

Electrical Specifications

Center Frequency: 433.92 MHz

COIL VALUE : 116uH

Q = 60

Gain: -5 dB.

2) The antenna gain for the 134 kHz is not important because it is only producing a magnetic field.

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