#### **OPERATIONAL DESCRIPTION**

### 1.1. EUT description

# Benefits

The Series are full-featured continuous inkjet (CIJ) printers designed for demanding manufacturing environments, general purpose as well as very specific applications like high contrast and high performance marking.

### Consumables

Designed to print on all types of substrates from standard to specific applications (food grade, sterilization, UV cure, egg coding, etc.); alcohol-based, water-based, ketone-free and MEK-free inks available; wide variety of colors.

RFID is used to recognize and validate the consumables.

### Substrates

Plastics, glass, metal, cardboard and directly onto food.

### Markets

Food, beverage, cosmetics, toiletries, electrical equipment, electronics, cables, tubes and profiles.

# 1.2. Related Submittal(s) / Grant(s)

All host equipment used in the test configuration are FCC granted, when relevant.

## 1.3. Tested System Details

The system was configured for testing in a typical fashion (as a customer would normally use it). All configurations of EUT is considered, worst cases are presented in this test report.

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Printer 9018 & 9028 are same electronic, differences are:

- 1. Index of protection IP44 (9018), IP54 (9028)
- 2. Pressurization of the print head by external compressed air to the printer, air-network customer (9018); by autonomous compressor provided inside the printer(9028)
- 3. Possibility of impression of 3lines maximum (9018), 4 lines (9028).

RFID is activated by software following option choice by user.

All tests are performed on 9028 with RFID ON, worst case.

- Internal max frequencies: 80MHz

Power supply:

100-240VAC, 50-60Hz, P+N+E

#### Input/output:

- 1 x Power supply, unshielded cable, length: 2m
- 1 x Umbilical, shielded cable, length: 3m
- 1 x Alarm, unshielded, length: 2m
- 1 x Tachymeter, unshielded, length: 6m
- 1 x Cell, unshielded, length: 9m

# Auxiliary equipment used during test:

- 1 x Cell

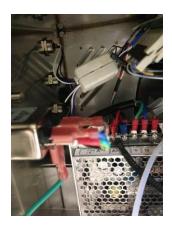
- 1 x Tachymeter

Continuous printing message 24 points and reading in loop of 3 TAGs ink, additive cartridge and MI box.

<u>Firmware-version</u> Boot: 1.0162-13 CPU: 9028\_NOTAG\_V3.0765M FPGA: 0.3.0 RFID: 0.2

# **Modification**

1 x Ferrite Würth Elektronic 74271132, 1 way, on alarm / tachymeter / cell cables together.



## 1.4. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-2003 FCC Part 15 Subpart B and C.

Radiated testing was performed at an antenna to EUT distance of 10 meters. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

# 1.5. Test facility

Tests have been performed on August 27<sup>th</sup>, 2013.

This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4-2003 in a letter dated March 25<sup>th</sup>, 2008 (registration number 94821). This test facility has also been accredited by COFRAC (French accreditation authority for European Union test lab accreditation organization) according to NF EN ISO/IEC 17025, accreditation number 1-1633 as compliant with test site criteria and competence in 47 CFR Part 15/ANSI C63.4 and EN55022/CISPR22 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.