



TYPE EXAMINATION CERTIFICATE

SC0207-15

Accessory device to a taximeter

Issued to

Finn Frogne A/S, Ishøj Søndergade 19, DK-2635 Ishøj, Danmark

Type of accessory and intended use

Printer designated Printer V4, and accompanied software, intended to generate the print-outs required from STAFS 2012:5. The printer shall be used together with taximeter designated Frogne TM3 covered by EC Type Examination Certificate No. 0402-SC0583-10 revision 6 dated 2015-07-09 issued in accordance with directive 2004/22/EC.

In accordance with

The Swedish Act on Metrology and Verification STAFS 2012:5.

Certificate

SP Technical Research Institute of Sweden, hereby certify that the product described above fulfils the requirements stated in STAFS 2012:5. The certification is verified by assessment according to the procedure described in STAFS 2012:5, which includes type testing and surveillance of the factory production control.

Rated operating conditions

Mechanic environment class:	M3 according to directive 2004/22/EC
Climatic environment:	-25 to +55 °C, Condensing, Closed (installed in a car)
Electromagnetic environment class:	E3 according to directive 2004/22/EC

Miscellaneous

Valid until: 9th July 2025

Conditions according to STAFS 2012:5 and SPs Certification Rules SPCR 179 apply.

This is the first issue of this certificate. The certificate was originally issued on 9th July 2015.

The principal characteristics and approval conditions are set out in the appendix hereto, which forms part of the approval document and consists of 2 pages. All the plans, schematic diagrams and documentations are recorded under reference file ELe 5P01622.

9th July 2015

SP Technical Research Institute of Sweden Certification

Lennart Aronsson
Certification Manager

Anders Nilsson
Certification Officer



Certificate no. SC0207-15, issue 1, 9th July 2015

SP Technical Research Institute of Sweden

Box 857, SE-501 15 Borås, Sweden

Phone: +46 10-516 50 00

E-mail/internet: info@sp.se/www.sp.se

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The accessory must correspond with the following specifications:

1 Design of the instrument

1.1 Construction

Product names

Printer V4 (printer part)

Supply voltage

Printer: 9-16 V



Picture 1: Printer V4

1.2 Software

The validation of software was based on the essential requirements given in STAFS 2012:5.

Software version

The following program versions are approved:

Designation	Program version	Checksum
MID	1.4.1213	0x5CDB
Nm	1.4.1213	0x3EC6

The taximeter versions can be seen by pressing "Funktioner" (Functions), "System" (system), "Versioner" (versions) and software. If the taximeter is in the mode "Avstängd" (Closed) the versions can be seen by pressing arrow forward and then continue from "System" above. The taximeter has three levels of software identification where MID SW version and "checksumma" (checksum) are including the parts specified in the directive, NM SW version and "checksumma" are including national requirements and FF version and "checksumma" are including functions not specified in neither the directive nor national regulations.

Alternatively if a printer is connected the number and the checksum can be read by making a "Taxameterkontroll"* ("Kontroll" (check) and "T-kontroll" or if the taximeter is in the mode "Avstängd" (Off) the check is reached by arrow forward and then "Kontroll" in accordance with above.

The trace numbers (seen by "Funktioner" (Functions), "ID/info" (ID/information) and "Löppnummer" (trace number)) are to be the following:

	Version 1.4.1213
<i>MCFG</i>	
MID version	1
NM version	2
<i>Printer</i>	
Nm version	3
Nm dato	10/05/11-09:43
<i>Meny</i>	
Nm version	2
Nm dato	30/03/12-13:30

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Form	
Nm version	2
Nm dato	30/03/12-13:30

1.3 Parameter settings

Parameters are included in the checksum calculation for the country specific part.

2 Labelling and inscriptions

2.1 Information to be borne by the instrument

The marking on the accessory shall contain the following information:

the name of the manufacturer

the serial number

the designation or type name (according to "Product names" Appendix page 1)

the certificate number

the national Swedish marking STAFS 2012:5

2.2 Further inscriptions, if necessary

Further inscriptions can be necessary.

3 User's manual

User's manual intended to show how the different parts required by STAFS 2012:5 is to be shown had the title "Manual til FROGNE TM3 Taxametersystem" and had the version number 0.34.

4 Applied environmental testing

Vibration

IEC 60068-2-64 revision 1, test Fh (this is a higher severity than Class M3 in accordance with OIML R211):

- 10-20 Hz: $1 \text{ m}^2\text{s}^{-3}$
- 20-500Hz: -3 dB/octave

Testing was carried out in three mutually perpendicular axes for 0.5 hours in each direction and the taximeter system was connected to power during testing.

Dry Heat

OIML R21 with testing according to IEC 60068-2-2 test Bd, but with the duration 16h and the highest temperature +55°C.

The test object was connected to power during the test.

Cold

OIML R21 with testing according to IEC 60068-2-1 test Bd, but with the duration 16h and the lowest temperature -25°C.

The test object was not connected to power during the test.



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Cyclic damp heat

OIML R21, two cycles of damp heat was carried out according to IEC 60068-2-30 edition 2 revision 1. test Db. temperature: +55 °C. The taximeter was not connected to power during testing.

Emission

EN 55022:2006, /A1:2007 class B

Immunity

OIML R21 A.5.4.5.1 Radiated RF immunity according to IEC61000-4-3, 24 V/m

OIML R21 A.5.4.5.2 Injected RF immunity according to IEC61000-4-6, 24 V

OIML R21 A.5.4.7.1 Automotive voltage transient immunity according to ISO 7637-2, level 4, pulses 1, 2a, 2b, 3a, 3b, 4 and 5a

OIML R21 A.5.4.7.2 Automotive voltage transient immunity ISO 7637-3, level 4, pulses 3a and 3b

OIML R21 A.5.4.6 Electrostatic discharged according to IEC61000-4-2, level 3

OIML R21 A.5.4.3.1 Supply voltage limit variations according to ISO 16750-2, 9VDC/16VDC

OIML R21 A.5.4.3.2 Voltage drop below limit according to ISO 16750-2, 0-40-90%

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