TYPE EXAMINATION
CERTIFICATE
SC0229-11

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 HSP V3.01, 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-MID-SC0583-10 revision 8 dated 2021-03-30 issued in accordance with directive 2014/32/EU.

In accordance with

The Swedish Act on Metrology and Verification STAFS 2012:5 (updated in accordance with STAFS 2016:15).

Certificate

RISE Research Institutes of Sweden AB hereby certify that the product described above fulfils the requirements stated in STAFS 2012:5 (updated in accordance with STAFS 2016:15). 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. Rise Certification Rule SPCR 179 issue 2019-03-28 has been applied.

Rated operating conditions

Mechanic environment class:	M3 according to directive 2014/32/EU
Electromagnetic environment class:	E3 according to directive 2014/32/EU
Climatic environment:	-25 to +55 °C, Condensing, closed (installed in a car)

The principal characteristics and approval conditions are set out in the appendix hereto, which forms part of the approval document. All the plans, schematic diagrams and documentations are recorded under reference file P112394.

Originally issued: 2011-04-08
Expiry date: 2032-02-07

This certificate replaces earlier issues.

Signed by: Martin Tillander
Reason: I am the author of this document
Date & Time: 2022-03-08 19:04:22 +01:00

Martin Tillander

RISE Research Institutes of Sweden AB | Certification
Box 857, SE-50115 Borås, Sweden
+46 10 516 50 00 | certifiering@ri.se | www.ri.se

Specifications:

1 Design of the instrument

1.1 Construction

Product names
HSP V3.01 (printer part)

Supply voltage
Printer: 9-16 V

Picture 1: Taximeter HSP V3.01

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:

Unit	*Program version*	*Checksum*
MID	1.4.1213	0x5CDB
NM	1.6,1568	0xD2A1

The software identification number and the checksums can be seen in the following way The version can be seen by pressing “Funktioner”, (Functions), “SyStem” (system), “Versioner” (versions), “Hardware” or “Software”.
The version of the software in the printer was 81.10.1233. This can be seen by pressing “Funktioner”, (Functions), “System” (system), “Enheter” (Unit), “Printer” and the version is displayed by “ID”.

1.3 Parameter settings

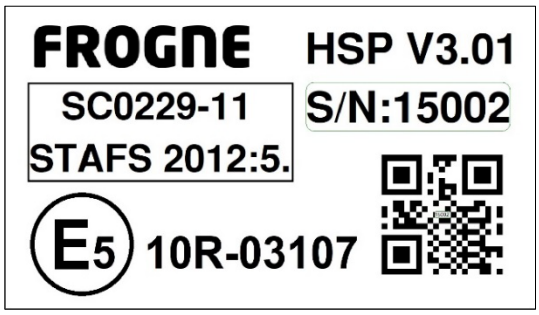
Parameters are included in the checksum calculation for the country specific part.

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" above)
- the certificate number
- the national Swedish marking STAFS 2012:5



Picture 2: Marking plate of printer HSP V3.01

2.2 Further inscriptions, if necessary

Further inscriptions can be necessary, e.g. to show conformity with other Directives and/or Regulations.

3 User's manual

User's manual titled "Vägledning till FROGNE TM3 Taxametersystem", version 0.35.

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 D11):
10-20 Hz: 0,05 g2/Hz
20-500Hz: -3 dB/octave
Testing was carried out in three mutually perpendicular axes for 0.5 hours in each direction and the test object was connected to power during testing.

Dry Heat

OIML D11 with testing according to IEC 60068-2-2 test Bd, but with the duration 16h and the highest temperature +70°C. The test object was connected to power during the test.

Cyclic damp heat/cold

Testing of cold and damp heat was carried out in accordance with the climate sequence of IEC 60068-2-61.
First one cycle damp heat was carried out according to IEC 60068-2-30 edition 2 revision 1. test Db. temperature: +55 °C. The test object was not connected to power during testing.
After recovery in controlled atmosphere during 1 h ±5 min cold test according to IEC 60068-2-2 edition 5 revision 2 test Ab at -40 °C during 16 h was carried out. Functional testing was carried out at -25 °C.
After finalisation of the cold test 5 cycles of damp heat was carried out according to IEC 60068-2-30. edition 2. revision 1. test Db. +55 °C. The test object was not powered during testing.

Emission

EN 55022:2006, /A1:2007 class B

Immunity

OIML D11 12.2 Electrostatic discharged according to IEC61000-4-2, level 3
OIML R21 A.5.4.5.1 Radiated 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 D11 14.2.2 Automotive voltage transient immunity according to ISO 7637-2, level 4, pulses 1, 2a, 2b, 3a, 3b, 4 and 5
OIML R21 A.5.4.7 and CT-007 Test pulse 4
Directive 2014/32/EU and CT-007 test pulse 5b (load dump)
OIML D11 14.2.3 Automotive voltage transient immunity ISO 7637-3, level 4, pulses 3a and 3b
PTB-A 18. (2005) Immunity to fast transients according to EN 61000-4-4

5 Traceability of reports concerning type examination

Type examination reports

Report	*Title*	*Date*
PX01883	EC Type examination of taximeter (module B)	2011-04-07
PX01883-02	Evaluation of Taximeter TM3 software	2011-03-31
PX01883-03b Rev 1	EMC measurements of TM3 taximeter system	2011-01-13 Rev 1. 2012-03-19
PX01883A	Supplementary information to the reports PX01883 and PX01883-03b	2011-08-15
PX01885	Typprovning av tillsatsanordning	2008-04-08
P112394.DP01.A01	Type examination of accessory device to taximeter according to STAFS 2012:5	2022-02-07

Supplementary type examination reports concerning changes

Report	*Description of change*	*Date*
PX01885A	Kompletterade typprovning av tillsatsanordning	2011-05-18
PX22406:TS	Kompletterade typprovning av tillsatsanordning	2012-07-09
5P01622-01	Evaluation of the software related requirements according to STAFS 2012:5 on ancillary device to taximeters	2015-07-09
P112394.DP01.A01	Type examination of accessory device to taximeter according to STAFS 2012:5	2022-02-07