Nederlands Meetinstituut

EC-type examination certificate

Number **T10138** revision 0
Project number 707573

Issued by	NMi Certin B.V. Hugo de Grootplein 1 3314 EG Dordrecht The Netherlands Notified Body number 0122
In accordance with	The "Metrologiewet" (Stb. 2006, 137) as Dutch implementation of Directive 2004/22/EC on measuring instruments (MID).
Manufacturer	HALE electronic GmbH Eugen-Müller Straße 18 A-5020 Salzburg Austria
In respect of	A model of an **electronic taximeter**. Manufacturers mark or name : HALE Type : Microtax®-06 / MCT-06
Characteristics	Mechanical environment class M3 Electromagnetic environment class E3 Temperature range -25 °C / +85 °C In the description number T10138 revision 0 further characteristics are described.
Valid until	13 October 2018
Description and documentation	The taximeter is described in the description number T10138 revision 0 and documented in the documentation folder number T10138-1, appertaining to this EC type-examination certificate.

Dordrecht, 13 October 2008
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1 General information about the taximeter

All properties of the taximeter, whether mentioned or not, may not be in conflict with the legislation.

1.1 Essential parts

Description	Drawing number	Rev.	Remarks
Leiterplatte MCT-5021	mct-5021	02	3 pages including parts list with only essential parts

1.2 Essential characteristics

1.2.1 Specifications

Power Supply	:	9 - 18 V DC
Range of device constant	:	k = 500 km^{-1} to 65535 km^{-1};
Resolution of device constant	:	1 km^{-1};
Range of time tariff	:	0.02 [1]CU/h to 163830.00 CU/h;
Resolution of time tariff	:	0.02 CU/h;
Range of distance tariff	:	0.002 CU/km to 32766.00 CU/km;
Resolution of distance tariff	:	0.002 CU/km;
Time measuring signal frequency	:	10 Hz

[1] CU = Currency Units

1.2.2 Sealing and securing

Sealing and securing of parameters:
- The general settings (country settings) are protected by an identifier and a checksum;
- The tariffs are protected by a checksum and can only be changed by using a service key;
- The adjustments to the vehicle are protected by a mechanical sealing and an event counter.

1.2.3 Software

Software specification (refer to WELMEC guide 7.2):
- Software type P;
- Risk Class C;
- Extensions L and T (for HALE CAN).

Software version	Identification number (checksum)	Remarks
M.EUd60	58963	On a 7-segment display the letter M is displayed identical to the capital letter N.

Recalling the totaliser data:
From the position "For hire":
- Press button 2;
- Press button 4;
- Press button 4 to scroll through the shift totalizers dxx;
- Press button 4 to scroll through the absolute totalizers Axx.

Recalling the firmware and the country settings identification and checksum and the tariff checksum:
From the position "For hire":
- Press button 2 and 3 together;
- Press button 3;
- Press button 4 to show the firmware version and country setting identification;
- Press button 4 to show the firmware checksum (P.CSU);
- Press button 4 to show the country settings checksum (C.CSU);
- Press button 4 to show the checksum of the current tariff (ATCS);
- Press button 4 to show the checksum of the future tariff (FTCS, only if programmed).

Recalling the event counter over the device constant, the device constant and the tariff parameters:
From the position "For hire":
- Press button 2 and 3 together;
- Press button 3;
- Press button 1 to show the device constant event counter and the device constant;
- Press button 4 to show the tariff modification counter;
- Press button 4 to scroll through the tariff variables.

1.2.4 Devices

The following devices are present:
- Display check;
- Calculation modes S or D, incorporated in the tariff structure;
- Automatic change of tariffs due to:
  - distance of the trip;
  - duration of the trip;
  - time of the day;
  - date;
  - day of the week;
  - fare;
  - change of speed.
- Operating positions "For Hire", "Hired", "Stopped";
- Totaliser data;
- Long term data storage;
- Test connector, see document: Connection diagram microtax®-06, document number 4.1 - Connection diagram, Page 1.

1.3 Essential shapes

Description	Drawing number	Rev.	Remarks
General instructions for operation of Microtax®-06	4.4 - Initialisation, page 2	12.09.2008	

Markings:
- The markings have to fulfil the requirements stated in the legislation.
- The data plate is fixed to the front of the taximeter.

To secure components that may not be dismantled or adjusted by the user, the taximeter has to be secured in a suitable manner on the locations indicated in the drawing:
- General instructions for operation of Microtax®-06, drawing number 4.4 - Initialisation, page 2 (see item 15).

The securing component for the conformity procedure has to bear either:
- A mark of the manufacturer laid down in an approved quality system by a Notified Body, or;
- A mark of a Notified Body.

1.4 Conditional parts

Devices:
The taximeter can be fitted with the following peripheral device:
- Printer;
- Device(s) prescribed by national legislation.

The taximeter may be equipped with one or more of the following secured interfaces, either by mechanical or software sealing:
- RS232;
- (HALE) CAN;
- CEY-contact;
- Distance sensor input:
  Low voltage : 0 – 1.6 V;
  High voltage : 3.5 – 18 V;
  Trigger : high-low transition;
- Passenger sensor input;
- Roof sign output;
- External lamps directly or via serial lamp driver (SLD);
- taximeter status and trip record (intended for data radio).

1.5 Conditional characteristics

Cut-off power supply voltage : 8.5 V DC.

1.6 Non-essential parts

The taximeter may be connected to non-essential devices, for example but not limited to mobile data terminal, printer, card readers, seat sensors and roof lights, provided that:
- They do not present primary data not presented by the taximeter;
- They do not lead to an instrument having other essential characteristics than those fixed by this type-examination document.

2 Seals, inscriptions and verification marks

See chapter 1.2, essential characteristics and 1.3, essential shapes.