

Coin Box

EMS-58

Operating Manual

EMS-58 SEKUND VERSJON
24Vac med NO-kontaktsett og døråpner
knapp funksjon.
varenr:101403



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1 Equipment features

- processor controlled
- electronic coin selector for five different types of coins + one free adjustable token
- 3-digit LED-display
- programming via keyboard
- programmable minimum insertion
- programmable maximum time
- additional coin insertion during operation possible
- several electronic cash counters
- two electronic hour meters (one erasable)
- door opener for washing machines or dryers

2 Safety precautions

The coin operated timers of the EMS 58 series are built by the state of technology and the generally accepted safety-related rules. Nevertheless there may occur risks for the user or other persons as well as impairments of the device or other values. Use the device only under faultless conditions, as well as due, safety- and risk-conscious regarding the user manual! Especially eliminate faults, that may impair safety, immediately! Keep the user manual always on site of the device! Pay attention - additional to the user manual- to the general valid legal and other obligatory rules such as accident prevention and environmental protection! Do not make any changes and / or modifications without the authorization of the manufacturer.

Spare parts have to correspond to the manufacturer-defined standards. This is only guaranteed, if original spare parts are used. Maintain the required or within this manual stated deadlines for repeating maintenance intervals! Provide a safe and non-polluting disposal of plastic or electrical replacement parts!

This coin operated timers are exclusive designed for managing different electric devices in rooms. Any other or further use is not provided. The manufacturer is not liable for losses, that result from misuse. A due use contains to heed the user guide and to observe the terms of service and maintenance as well.

3 Installation and maintenance

3.1 Mounting the EMS 58

The unit is provided for fixed wiring and assembly in rooms. For fixing the device there are 3 drillings with a diameter of 6 mm at the back side. It must be taken care that the case is mounted vertically, because otherwise the functioning of the coin selector may be reduced. The EMS 58 should be mounted at a solid wall in order to avoid heavy vibrations.



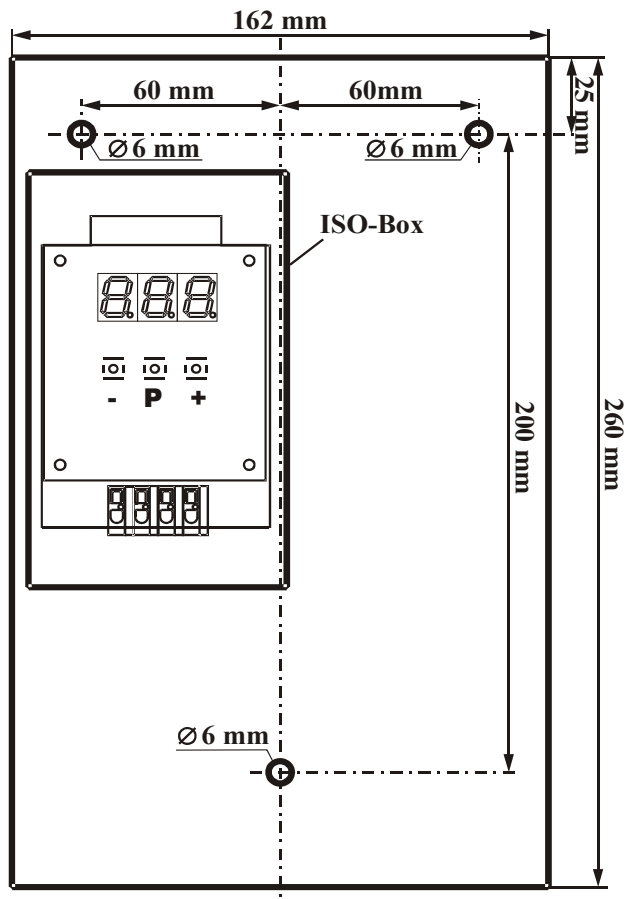


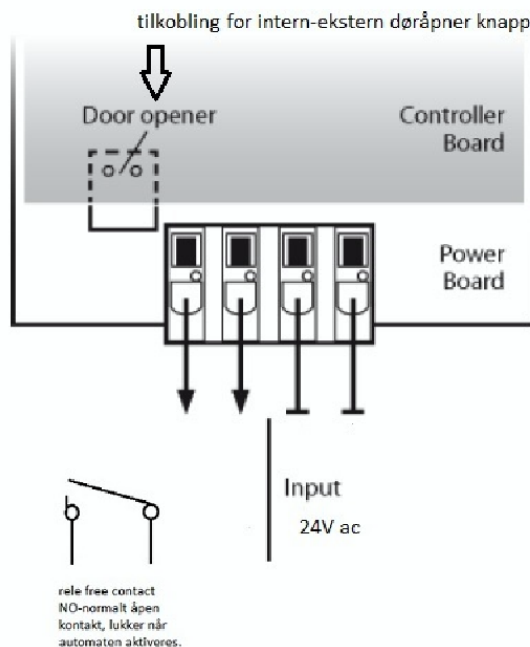
Figure 1: Dimensions

3.2 Electrical installation

CAUTION:

The installation has to be effected by authorized staff only! Please arrange that the assembly is carried out by a specialist electronic company.

The installation of the EMS 58 is limited to the connection of the mains and the switched output according to the connection survey installed in the device.
Note that all wires are fitting exactly into the ISO box.



Connector layout



3.3 Maintenance

The devices of the EMS 58 series are nearly maintenance-free. Only the coin selector has to be cleaned sometimes, in order to guarantee a proper operation.

4 Operation

After final programming a time sale can be effected with the EMS 58. The following description refers to factory default programming of the EMS 58.

4.1 Time selling

The EMS 58 has a 3-digit LED-Display, that shows the customer the current state of the device. A survey you can find in the following figure.

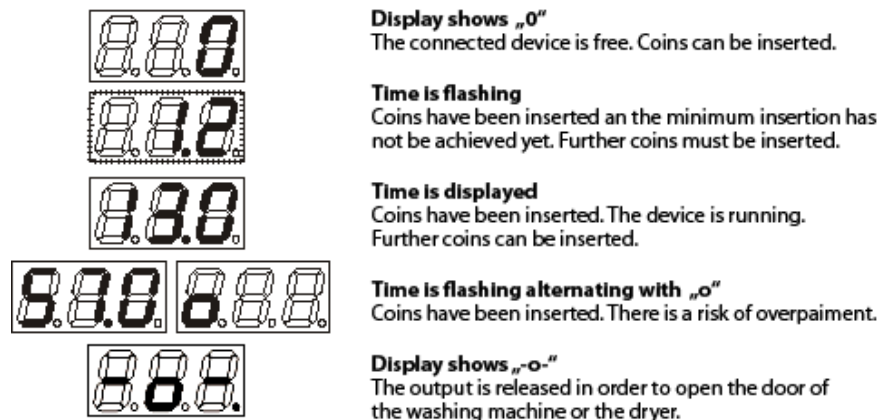


Figure 3: Display reports

Before starting the payment, the device must be free, i.e. the display must show "0". After insertion of the first coin, the EMS 58 indicates the released time. As far as the minimum insertion is not achieved, the time is indicated flashing. When the min. insertion is achieved by inserting a further coin, the display does not flash any more and the device starts. If further coins are inserted, the currently released time is indicated. During the risk of an overpayment, i.e. by inserting the next coin the maximum time would be exceeded, the EMS 58 signals a warning by indicating the time and "0" alternating. If the maximum time is achieved, the coin selector will be blocked and additional coins can not be inserted anymore.

CAUTION:

In case of overpayment, the overpaid amount of money will be lost (additional time will not be added beyond the maximum time). The coin counter however will register all the money.

While the time runs down, the decimal point will blink and the displayed time will decrease by one every minute that expires. During the last minute the display changes

and the remaining seconds are displayed. After the time has run out completely the display shows „0“ and the output shuts off.

4.2 Door opener (optional)

This feature is mainly provided for washing machines and dryers. As some washing machines or dryers need power in order to open the door, the EMS 58 TE owns a push button at the front, that can be used for switching the output for a moment. The duration can be determined by parameter P12 within the programming area. During this time the door of the device may be opened. This procedure may be repeated as often as programmed at parameter P14. If the key was pressed too often, the door opener will be blocked for a certain time. This time can be programmed with parameter P15. After the blocking time has run out the output can be switched again as described before.

5 Programming

5.1 Procedure

For the programming of the EMS 58, the device has to be opened. At the control board inside of the ISO box there are three buttons available.

CAUTION:

You absolutely have to pay attention that the EMS 58 is in "free" state (display must show 0) because otherwise an emergency stop occurs by pressing the "P" button. The device immediately goes over into "free" state.

By pressing the "P" button you are in the programming mode. The display shows alternating a "P", followed by the parameter number and the value of the respective parameter. Press the "P" button several times until you reach the required parameter. You can find a listing of all parameters in Table 1, section 5.5. When you leave the last parameter all settings are stored and the EMS 58 is in "free" state again. All parameters are stored electronically and do not lose their values even if the device is switched off. If no button is pressed for a period of at least 30 seconds, all settings are stored automatically and the EMS 58 changes over to "free" state.

In the following sections the 3 types of parameters, counter, operating values and switches, are described.

5.2 Counter editing

Counters are cash counters, customer counters or hour meters. There are erasable and non-erasable counters. The erasable counters can be erased by pressing the "+" or "-" button. The counters have a range reaching from "0" to "99999.9". As the display has only 3-digits, the notation is segmented on values higher than 1000. The display changes between the parameter-number, the high level digits (digits 4 - 5) and the low level digits (digits 1 - 3). The high level digits are indicated by the flashing decimal point at the right side. In Figure 4 you can see an example for the counter **operating hours 1** with a counter value of 21 740 hours. If the value is lower than 1.000 the display changes only between the parameter number and the low level digit display.

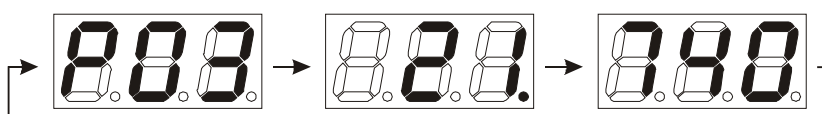


Figure 4: Counter display for larger values

5.3 Adjusting operating parameters

Operating parameters are values, you can adjust the prices or the maximum time with. These values can be increased by pressing the button "+" and decreased by pressing the button "-". The rate is either 1 or 0,1 depending on the parameter. On pressing the "+" resp. "-" button for a longer time, the value can be changed faster.

5.4 Switch-parameter

By means of the switches a function can be switched on or off. These parameters have two options only, which can be changed by pressing the "+" or "-" button.

5.5 Parameter overview

P.-No	Parameter name/Parameter explanation	Param.	Range
P01	Total receipts. Cash money and token values are added.	Counter	0 to 99999.9
P02	Cash-day. Only cash money is added.	Counter	0 to 99999.9
P03	Cash-total (not erasable) Only cash money is added.	Counter	0 to 99999.9
P04	Tokens-day. The number of tokens is added.	Counter	0 to 49999
P05	Tokens-total (not erasable). The total number of tokens is added.	Counter	0 to 49999
P06	Customer counter. All operations are added.	Counter	0 to 49999
P07	Operating hours 1-day. Counts the operating hours of the connected device	Counter	0 to 99999.9
P08	Operating hours 2 - total(not erasable). Counts the operating hours of the connected device	Counter	0 to 99999.9
P09	Minimum insertion Minimum NOK som må legges på Indicates the amount of money, that has to be inserted at least.	Operator	0.1 to 99.9
P10	Time release. Minutter=sekunder Indicates, how many minutes the device permits on minimum insertion.	Operator	1 to 999
P11	Maximum time. Minutter=sekunder Indicates the maximum time, that can be sold per operation (minutes)	Operator	1 to 999
P12	Door opener duration. Tidsinstilling for dørknapp Determines the duration of the door opener feature.	Operator	1 to 250
P13	Door blocking time. Determines the door opener blocking time in case the door opener was used too often.	Operator	1 to 250
P14	Max. number of door openings. Determines how often the door opener may be used before the blocking time starts.	Operator	1 to 99
P15	Token value. Pollett verdien Determines the value of one single token.	Operator	0,1 to 25
P 16	Coin release. If set to "ON", further coins may be inserted while the device is running. If set to "OFF", no coins will be accepted while the device is running.	Switch	
P 17	Emergency storage. If parameter is set to "ON", the remaining time is stored in	Switch	

P.-No	Parameter name/Parameter explanation	Param.	Range
	case of a power failure. After power on again the operation will continue. If set to "OFF", the device will be "free" again after power on.		

Table 1 : Parameter overview

6 Technical data

Power source	24V ac
Mains frequency	50 / 60 Hz
Power consumption	5W
Max. switched power	NO-kontaktsett
Operating temperature	0 up to 40 °C
Operating humidity	30 up to 70 %
Weight	3,5 kg
Dimensions	162 x 260 x 110 mm
Data retention in "off"-position	40 years

Table 2 : Technical data

7 Electronic Coin Selector

