GB CE

30 014 055 - **2**

Eltako

RS485 Bus

meter collector F3Z14D

Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!

Temperature at mounting location:
-20°C up to +50°C.
Storage temperature: -25°C up to +70°C.
Relative humidity:
annual average value <75%.

valid for devices from production week 12/15 (see bottom side of housing)

Wireless meter concentrator for electricity, gas and water meters. For 3 S0 interfaces and/or 3 AFZ scanners, standby loss only 0.1 watt.

DIN rail mounted devices for fitting on DIN-EN 60715 TH35 mounting rails.

1 pitch unit = 18 mm wide, 58 mm deep.

Connection to Eltako RS485 bus. Cross-wired bus and power supply with jumper.

This meter concentrator concentrates the data of up to three electricity, data and water meters and supplies this data to the RS485 bus. Either for forwarding to an external computer or for sending over the Wireless Building System.

Hook-up is either by connection to the S0 interface of the meters or by use of an AFZ scanner on each Ferraris meter. The scanner is bonded above the rotary disc of the meter and hooked up by its connecting wire to one of the S01-S03/GND terminals. The F3Z14D detects automatically whether an S0 interface or an AFZ is connected.

The meter reading is entered into the display by two pushbuttons as well as the impulse rate (number of impulses or revolutions per kilowatt hour or cubic meter). The settings can be locked.

Meter readings can be entered and read out using the **PCT14 PC Tool.** In addition, impulse rates can be entered. The default display is selectable and operation of the device is locked.

The display is divided into three fields.

Field 1:
The default display is the unit of the meter reading currently displayed in Field 3, either in kilowatt hours kWh or megawatt hours MWh or cubic meter M^3 or cubic decametre DM^3.

Field 2:
Momentary value of active power in watts and kilowatts or flow in centilitres and decilitres.
The arrow on the left in display field 1 indicates automatic switchover from 0-99 W or cl/s to 0.1 to 65 kW or dal/s.
The display depends on the number of impulses of the meter. The displayed minimum load is e.g. 10 watts at 2000 impulses per KWH and 2000 watts at 10 impulses per KWH.

Field 3:
The meter reading is the default display. Every 4 seconds, the display alternates between 3 integer numbers and 1 decimal point (from 0 to 999.9) and an additional 1 or to 3 integer numbers (from 0 to 999).

Select meter shown in display:
Press MODE and then press MODE again to select the **ANZ function.** Press SET to select the meter number to be displayed as default. Press MODE to confirm.

All Eltako energy meters are fitted with an S0 interface and can therefore be connected to the F3Z14D Energy Meter Concentrator. Only devices FWZ14-65A, DSZ14DRS-3x80A and DSZ14WDRS-3x5A are directly connected to the bus.

Meter types:
Type 1 = electricity meter
Type 2 = gas meter
Type 3 = water meter

Select type and set meter reading:
Press MODE then press SET to search for the ***Z1* function. *TYP*** flickers. Press SET to select type (1, 2 or 3) and press MODE to confirm. MWH or DM^3 flickers. SET changes the meter reading from 0 to 999 in Field 3. Press short on SET to increment by 1, press long to increment the value rapidly, release and press again to change direction. Confirm by pressing MODE even if there is nothing to enter. KWH or M3 flickers and SET changes the meter reading from 0 to 999.9 in Field 3, as before at MWH or DM3. Also confirm the correct input by pressing MODE. The display returns to the standard view. Carry out the same procedure for **Z2** and **Z3.**

Set S0 impulses:
The meter constant (impulses or revolutions/ kWh or m3) is printed on the meter sticker. Press MODE then press SET to search for the **S01 function.** Press MODE to select. S01 flashes. Press SET to change the number of S0 impulses per KWH from 1 to 9999 in Field 3. Tip SET to increment by 1. Hold down SET to increment rapidly. Press SET a second time to reverse the direction. Also press MODE to confirm the correct entry. The default view reappears. Proceed in the same way for ***S02*** and ***S03.***

The display switches back to default view automatically 20 seconds after the last button was operated.

Lock settings:
Tip MODE and SET together and press SET at LCK to lock. This is indicated by an arrow next to the lock symbol.

Unlock settings:
Press MODE and SET together for 2 seconds and press SET at UNL to unlock.

The power display in Field 2 depends on the number of S0 pulses of the meter. The minimum load displayable is 10 watts at 2000 impulses per KWH and 2000 watts at 10 imp./KWH.

Wireless telegrams:
A power telegram is transmitted every 180 seconds and the display is updated. Otherwise a telegram is sent within 20 seconds if the power changes by minimum 10% and the meter reading changes. A full telegram comprising meter readings and the powers of Z1, Z2 and Z3 are transmitted 10 seconds after the power supply is switched on and then every 10 minutes.

Send teach-in telegram:
Turn rotary switch on FAM14 to Position 9. Press MODE on F3Z14D, then press SET to search for the **LRN function.** Press MODE to select LRN. Z1 flashes. After you press MODE to confirm, LRN+ flashes in the display. Press SET to send the teach-in telegram for Z1. After tipping MODE, Z1 flashes again. Press SET to select Z2 and press MODE to confirm. LRN+ flashes. Press

SET to send the teach-in telegram for Z2. After tipping MODE, Z2 flashes again. Press SET to select Z3 and press MODE to confirm. LRN+ flashes. Press SET to send the teach-in telegram for Z3. You can only exit teach-in mode by pressing and holding down the MODE button for longer than 2 s. The default display then reappears. Finally, turn rotary switch on FAM14 to Position 2 or 5.

Issue device address for F3Z14D:
Turn rotary switch on FAM14 to Position 1. The LED lights up red. Press MODE on F3Z14D, then press SET to search for **LRN function.** Press MODE to select LRN. Z1 flashes. After FAM14 issues an address, its LED lights up green for 5 seconds and the default display appears on F3Z14D. Finally, turn rotary switch on FAM14 to Position 2 or 5.

Delete device address:
Press MODE, then press SET to search for the GA function. Select by pressing MODE. Press SET to change between device address and 000. When you press MODE to confirm 000, the device address is deleted and the default display appears.

Configure F3Z14D:
The following functions can be configured using the PC Tool PCT14:

- Enter meter reading
- Select meter type
- Read out meter readings
- Enter S0 impulses
- Select default display
- Lock/unlock operation on device

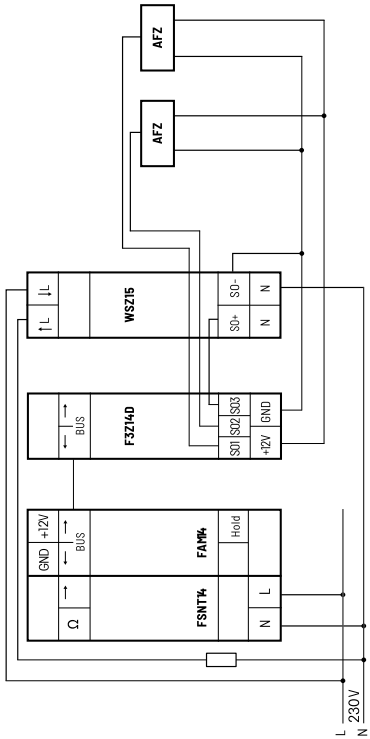
Caution! Do not forget to press 'Disconnect link to FAM' in the PC-Tool PCT14. While the PCT14 PC Tool remains connected to the FAM14, no wireless commands can be executed.

Technical specifications

Standby power loss	0.1 W

A power loss of 0.1W must be taken into account for each AFZ connected.

Wiring example



When an actuator is ready for teach-in (the LED flashes at a low rate), the next incoming signal is taught-in. Therefore, make absolutely sure you do not activate any other sensors during the teach-in phase.

Manuals and documents in further languages:

http://eltako.com/redirect/F3Z14D

Must be kept for later use!
We recommend the housing for operating instructions GBA14.

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34/2023 Subject to change without notice.