CAMMTool / CAMMMFit

Application for remote device control and configuration

User's Guide
Description

CAMMTool and CAMMFit applications can be used to control, update and configure the AKOCore and AKOGas series devices which have the CAMM (AKO-58500) module installed, as well as to configure and update the actual CAMM module.

The first application is designed to help installers in the start-up and maintenance of the devices, while the other allows users to monitor their installations.

The functions of each application are featured in the following table:

<table>
<thead>
<tr>
<th>Function</th>
<th>CAMMFit</th>
<th>CAMMTool</th>
<th>Teleservice</th>
</tr>
</thead>
<tbody>
<tr>
<td>General insight into the device status</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Remote control of the device and keyboard</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Display inputs and outputs</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Display and change the Set Point</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Display the active alarms</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Share a connection to receive teleservice (Slave)</td>
<td>×</td>
<td>✓</td>
<td>❌</td>
</tr>
<tr>
<td>Initiate remote connection to offer teleservice (Master)</td>
<td>❌</td>
<td>✓</td>
<td>❌</td>
</tr>
<tr>
<td>Display device activity</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Save and transfer complete configurations</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Display and modify operation parameters</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Create offline configurations</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Consult device manuals (online)</td>
<td>×</td>
<td>✓</td>
<td>❌</td>
</tr>
<tr>
<td>Display continuous logging charts</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Display the events log</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Display the operation trends</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Display configuration changes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Configure CAMM module parameters</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Update CAMM module firmware</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Update device firmware</td>
<td>❌</td>
<td>✓</td>
<td>❌</td>
</tr>
<tr>
<td>Export device data to Excel (continuous logging, events and audit logs)</td>
<td>✓</td>
<td>✓</td>
<td>✓ *</td>
</tr>
<tr>
<td>Export CAMM module data to Excel (events and audit logs)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Links to applications

AKO CAMMFit
For users

AKO CAMMTool
For installers

*Only events and audit logs can be exported
Registration is required to use the application.

Enter the access data saved in the log...

...and press "Enter".

Registration is required to use the application.

If you check this box, the application will not ask you to enter access data again.

The e-mail must be valid to receive the activation code.

Please check the box indicating your acceptance of the user licence.

Fill in the fields and press "Create account".
List of active devices detected (Bluetooth search)

Access device information, the app requests the Bluetooth link code (by default 123456).

Green icon: Device was identified (Installation and name)
Grey icon: The device was never accessed

Options
- Show the available devices
- Show the compatible devices, access their manuals and saved configurations
- Initiate remote connection for teleservice (p. 11)
- Show information about the application
- Android only: Activate the Pairing int. function which allows the user to perform pairing with the device without quitting the App

Shows account information
Close the session, the user name and password will be asked again
General device view

Show device information in real time

Device remote control

Open the inputs and outputs view (p. 4)

Press and hold for over 2 seconds to update the device firmware version

Share connection with another user for teleservice (p. 11)

Open the activity view (p. 5)

Show CAMM module information (p. 10)

Show the value of the Set Point

Change the value of the Set Point

Show the active alarms list

Access the parameters configuration (p. 5)

Open the configuration menu (p. 4)
### Status of inputs and outputs

<table>
<thead>
<tr>
<th>Terminals assigned to the input</th>
<th>Input value</th>
<th>Input configuration</th>
<th>Type of input and real time status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Wiring**: 6 / 9600 bps
- **Value**: MODBUS RS485
- **Type**: -
- **Polarity**: -

- **Wiring**: 25.7
- **Value**: Control Temperature
- **Type**: -
- **Polarity**: -

- **Wiring**: 26.8
- **Value**: Evaporator Temperature
- **Type**: -
- **Polarity**: -

- **Wiring**: OFF
- **Value**: Low pressure switch
- **Type**: Activates on closing contact
- **Polarity**: -

### List of saved configurations

- **My Configurations**
  - Frozen cold room
  - Fruits cold room

- **Add a new configuration**
- **Send the configuration to current device or via e-mail**
- **Create a new configuration from the current device configuration**
- **Create a new configuration from a previously saved configuration**
- **Create a new configuration from scratch with the help of the wizard**
**Parameter configuration**

Display and edit the parameters of the current device.

**Operation summary**

Change the selected period.

Show the most important operation average readings of the equipment for the selected period.

Show the events log (p. 6)

Show continuous logging charts (p. 7)

Show the audit log (Changes in the device configuration) (p. 9)

Show operation trends (p. 8)
List of logged events, press to see details

Rotate the screen 90° to show more information

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Code</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>24/05/2018</td>
<td>12:05</td>
<td>AH</td>
<td>Activate</td>
</tr>
<tr>
<td>24/05/2018</td>
<td>11:58</td>
<td>RC</td>
<td>Activate</td>
</tr>
<tr>
<td>23/05/2018</td>
<td>10:28</td>
<td>RC</td>
<td>Deactivate</td>
</tr>
<tr>
<td>23/05/2018</td>
<td>10:14</td>
<td>RC</td>
<td>Activate</td>
</tr>
<tr>
<td>23/05/2018</td>
<td>10:03</td>
<td>RC</td>
<td>Deactivate</td>
</tr>
<tr>
<td>23/05/2018</td>
<td>10:03</td>
<td>RC</td>
<td>Activate</td>
</tr>
<tr>
<td>23/05/2018</td>
<td>09:56</td>
<td>RC</td>
<td>Deactivate</td>
</tr>
<tr>
<td>23/05/2018</td>
<td>09:51</td>
<td>AH</td>
<td>Deactivate</td>
</tr>
<tr>
<td>23/05/2018</td>
<td>09:50</td>
<td>BLE</td>
<td>Activate</td>
</tr>
<tr>
<td>23/05/2018</td>
<td>09:50</td>
<td>RC</td>
<td>Activate</td>
</tr>
<tr>
<td>23/05/2018</td>
<td>09:42</td>
<td>RC</td>
<td>Activate</td>
</tr>
<tr>
<td>22/05/2018</td>
<td>08:27</td>
<td>BLE</td>
<td>Activate</td>
</tr>
</tbody>
</table>
Continuous logging charts (Probes)

Select an option to see details

Compare the charts of other probes

Change the period of the chart

Pinch on the chart to increase or shorten the shown period

Press a point on the chart to show its details (Date and logged value)
Operation trends

Select an option to see details

Slide right or left to change the shown period

Change the period of the chart

Press to see the data of the day

Select an option to see details

Graph selector
(Trends)

- Temperature Probe 1
- Cold Room Control Temperature
- Temperature Probe 2
- Evaporator temperature
- Temperature Probe 3
- Second evaporator / log temperature (if any)
- Set point Effective Temperature
- Set point working temperature
- Cool Relay
- Status Cold relay
- Fan Relay
- Status fans relay
- Defrost Relay
- Status defrost relay

Temperature Probe 2

Current value
- 26.9 °C

Maximum
- 26.9 °C

Average
- 26.8 °C

Minimum
- 24.9 °C
## Logging of configuration changes

### List of configuration changes, press to see more details

#### Rotate the screen 90° to show more information

### Change the listed period

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>User</th>
<th>Initial value</th>
<th>Final value</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/09/2017</td>
<td>16:01</td>
<td>2</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>07/09/2017</td>
<td>13:59</td>
<td>2</td>
<td>0</td>
<td>42</td>
</tr>
<tr>
<td>07/09/2017</td>
<td>13:46</td>
<td>2</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>07/09/2017</td>
<td>13:45</td>
<td>2</td>
<td>-1.0</td>
<td>-10.0</td>
</tr>
<tr>
<td>07/09/2017</td>
<td>13:45</td>
<td>2</td>
<td>-50.0</td>
<td>-1.0</td>
</tr>
<tr>
<td>07/09/2017</td>
<td>13:44</td>
<td>2</td>
<td>99.0</td>
<td>30.0</td>
</tr>
</tbody>
</table>

### Parameter modified

#### Change origin:

<table>
<thead>
<tr>
<th>User</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Device</td>
</tr>
<tr>
<td>2</td>
<td>RS485 (AKONet)</td>
</tr>
<tr>
<td>3</td>
<td>App</td>
</tr>
<tr>
<td>4</td>
<td>Selfdrive</td>
</tr>
</tbody>
</table>
**CAMM module information**

- Show the serial number of the device in which the module is installed and access the operation overview (p. 5)
- Access configuration parameters of the CAMM module
- Change the date and time
- Show the battery status
- Show the events log (p. 6)
- Function not enabled

**Export to a .csv file**

- Export the logged data of the device or CAMM module to a .csv file
- Show CAMM module information
- Check if there are firmware updates available for the CAMM module
- Change the PIN of the Bluetooth connection*
- Show the audit log (Changes in the configuration of the CAMM module)
- Delete the data saved in the CAMM module

**Export data**

- Select the data origin
- Select the type of data to export
- Select the time period and press "Accept"

*It is necessary to delete the Bluetooth connection and create a new connection
Teleservice

Enables the remote control and configuration of any device with the CAMM module installed.

**Slave** (must be together with the device):
Choose the "Share" option and notify the remote operator. This device will function as a transmitter, control over the device is passed to the Master device.

**Master** (remote operator):
Choose the "Connect to a remote device" option and enter the user (e-mail) used on the slave phone. This device will remotely control the device.
Upon establishing connection, the master device will have control over the remote device. On the master device, the upper part of the screen changes colour to red indicating that it is connected to a remote device. Controlling the remote device requires fast Internet connection and good coverage, otherwise you may experience delays and the connection may be lost.
We reserve the right to supply materials that might vary slightly to those described in our Technical Sheets. Updated information is available on our website.