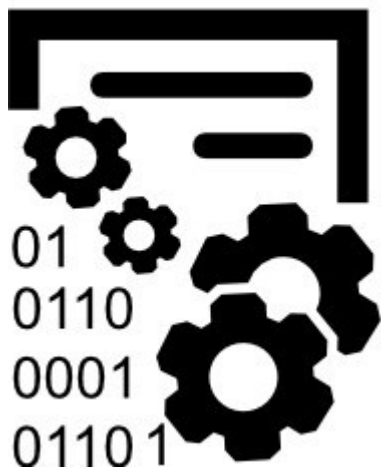




Release notes

Case Controller UA 400 E AC / UA 410 E CC 1st Generation - Firmware V2.07





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The current operating manual and information such as data sheets, more detailed documentation and FAQs are available for you on-line in E°EDP (Eckelmann ° Electronic Documentation Platform) at **www.eckelmann.de/elds**



You reach all relevant documents for this component directly using the QR code.

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Release notes

Case Controller UA 400 E AC / UA 410 E CC



A firmware update is **only** to be carried out by trained staff or factory-side by the manufacturer!

The following is a summary of new functions of the current firmware.

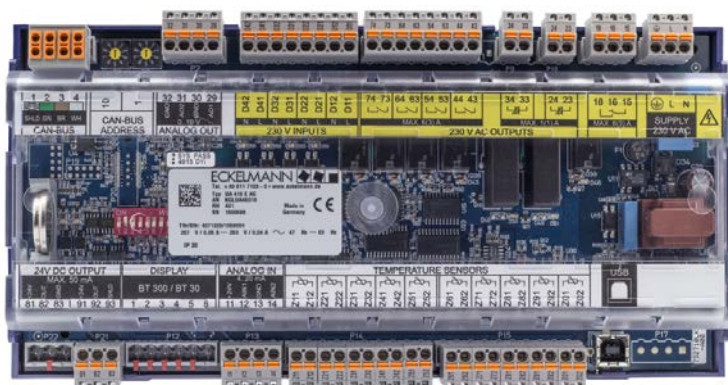
New features compared to previous versions

Version V2.07

- Implementation of the ejector functionality
- Implementation of controller type KR 160 E
- Refrigerants also supported:
R449A
- Increase of the system stability

Version V2.00

- New hardware platform UA 400 E CC / UA 410 E AC
 - blue main board
 - grey, coded mating connector with spring terminals
 - two-row CAN bus spring terminal for easier wiring



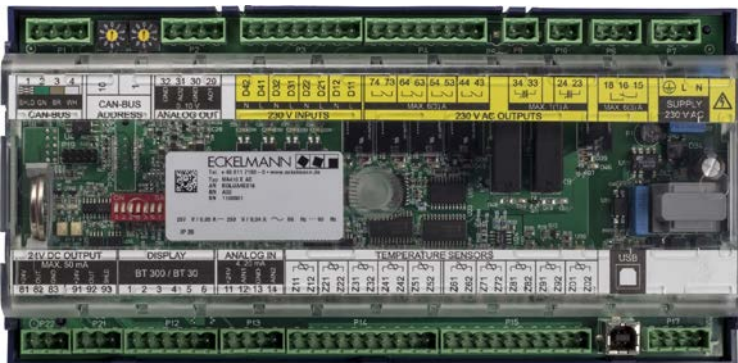
- Communication with LDSWin via the USB interface (USB2CAN)
 - Advanced defrost functions:
Separate defrost start for the two temperature zones by means of internal defrost timer, master/slave defrost via CAN bus, cDefrost sequenz (DS)
 - Advanced functions for the digital inputs:
Configurable and invertible input functions, connection of an external alarm with freely editable text, manual shutdown on zone-by-zone basis
 - Semiconductor relay (SSR) as enable relay
 - Transistor output “Frame / Pane Heating” invertible
- E*LDS for systematic cooling



- Advanced monitoring functions:
Supply air warning value
- Humidity control
- Separate suction pressure control for the 2nd temperature zone
- Continuous cooling monitoring adjusted
- COP+TEV variants for EEV controller
- R152a, R170, R600, and R600a refrigerants also supported

Version V1.87

- Sending and receiving the analogue values via CAN bus
- Fourth digital input for external alarms
- USB interface for the direct parameterisation of the case controller via LDSWin, for carrying out a firmware update of the case controller or for the parameterisation of system components via CAN bus using LDSWin.
- New hardware platform UA 400 E / UA 410 E – blue case with compact dimensions
- Coded connectors



Version V1.83

- Dynamic determination of the tc setpoint
- Setpoint switching via CAN bus
- Functions for frame heater and light during emergency power operation
- Different refrigerant for each temperature zone
- Operation of the UA 131 E LS with four return air sensors

Version V1.57

- Firmware update
- Refrigerants also:
R404A, R744 (CO₂), R134a, R410A, R717 (NH₃), R22, R290, R407C, R507, R1270, R402A

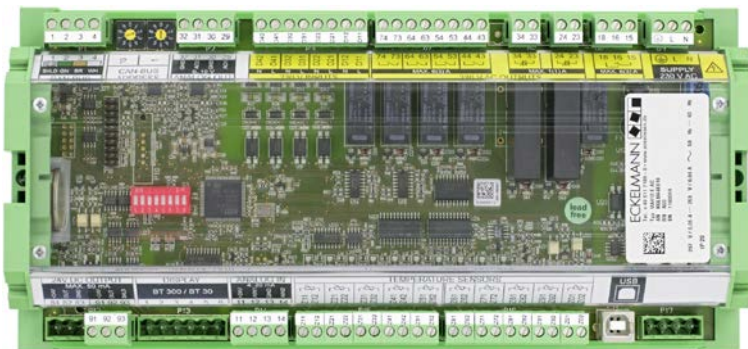


Version V1.52

- Manual adjustment of the opening degree is automatically terminated after a safety period of five minutes; the controller returns to normal controlled operation.
- With the UA121E, the relay with the function "inverted defrost" is eliminated. The relay output is now assigned the function "static cooling/ enable", similar to the function with the UA131E/ UK100E.

Version V1.50

- New hardware platform UA 400 E / UA 410 E



- Differences in the complete hardware (UA 410 E AC, see photo) compared to UA 300 E AC:
 - 2 analogue inputs 4..20 mA e.g. for the connection of pressure transmitters or a humidity sensor
 - 2 analogue outputs 1..10 V e.g. for the activation of continuous expansion valves
 - Fourth digital input currently reserved for future applications
 - USB interface for the direct parameterisation via LDWin or for a firmware update
- Adjustment and implementation on the basis of the new hardware platform:
All the controller types and their functions familiar from the UA 300 E are retained in the UA 400 E CC / UA 410 E AC.
- The UA 400 E CC is the successor (replacement controller) to the UA 300 E AC.