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Release notes

Case Controller UA 400 E AC / UA 410 E CC 2nd Generation - Firmware V3.22



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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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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 V3.22

- LDSWin support for new parameters.

Version V3.21

- Troubleshooting: In terminal mode, the parameter "Cooling On/Off AOOUT" could only be configured for the 1st zone.

Version V3.20

- Integration of temperature displays VDD 500
- Increase off the system stability

Version V3.17

- External alarm for manual OFF
- Extension of the drain heating for room controllers

Version V3.14

Supported refrigerants:
R513A, R452A

Version V3.13

- Revision of the monitoring function „Stall detect alarm“
- Only UA 410 E: optimisation of the internal memory for operating data
- Increase off the system stability

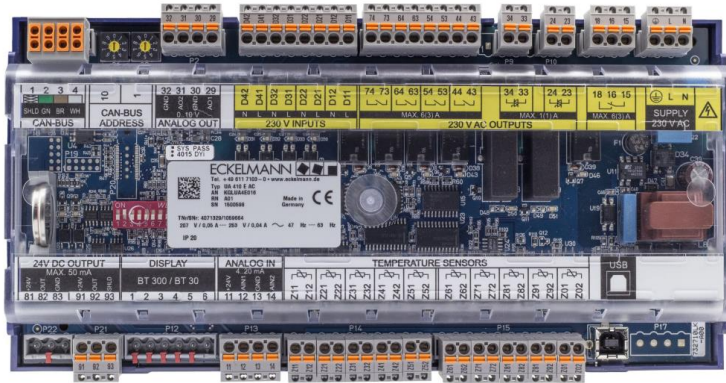
Version V3.10..V3.10

- Increase off the system stability

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Version V3.08

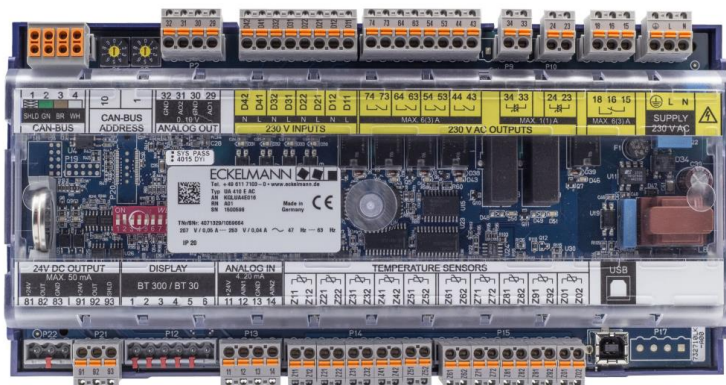
- **2nd Generation**
 - New hardware platform UA 400 E AC / UA 410 E CC
 - Processor STM32
 - 9 times DIP switch for controller type setup



- Future software development on this platform
- Supported refrigerants:
R450A, R448A, R455A, R447B, R1234ze, R1233zd, R1234yf
- Increase off 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, Defrost 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

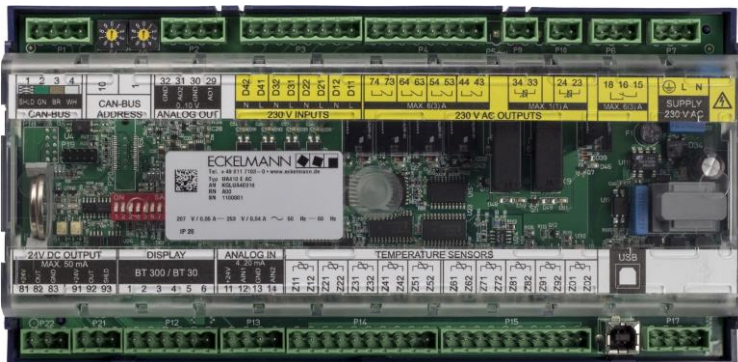
E*LDS for systematic cooling

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- Semiconductor relay (SSR) as enable relay
- Transistor output “Frame / Pane Heating” invertible
- 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

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Version V1.57

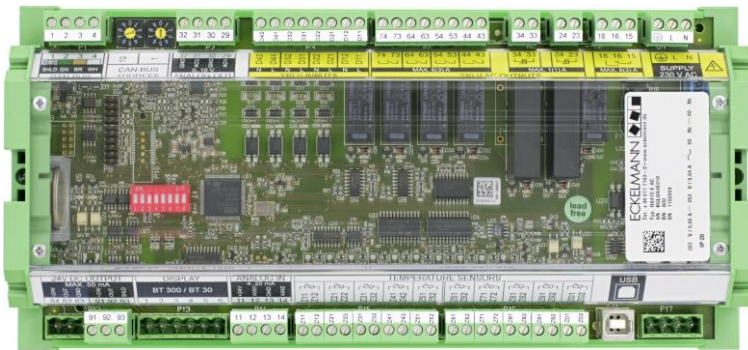
- Firmware update
- Refrigerants also supported:
R404A, R744 (CO₂), R134a, R410A, R717 (NH₃), R22, R290, R407C, R507, R1270, R402A

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

- **1st Generation**
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 0..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
 - 8 times DIP switch for controller type setup
- 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.