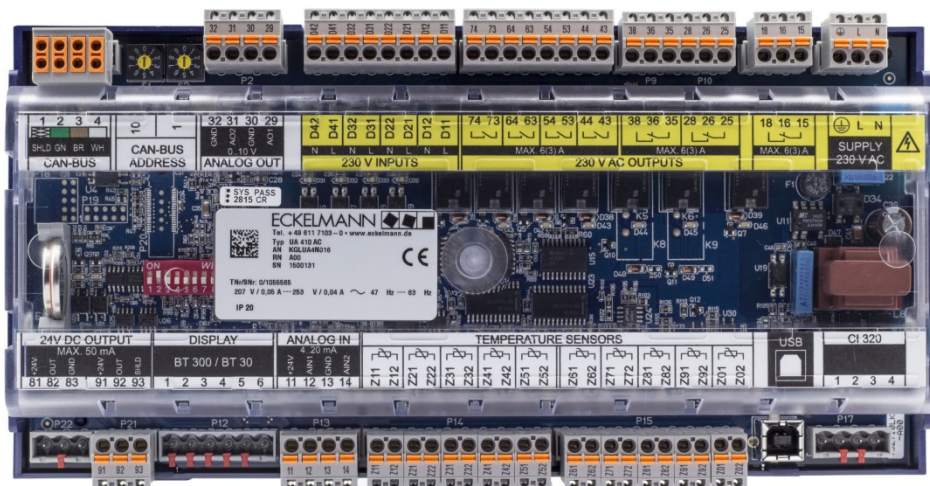


# Eckelmann

## E\*LDS UA 400 Case Controller for thermostatic expansion valves (TEV)



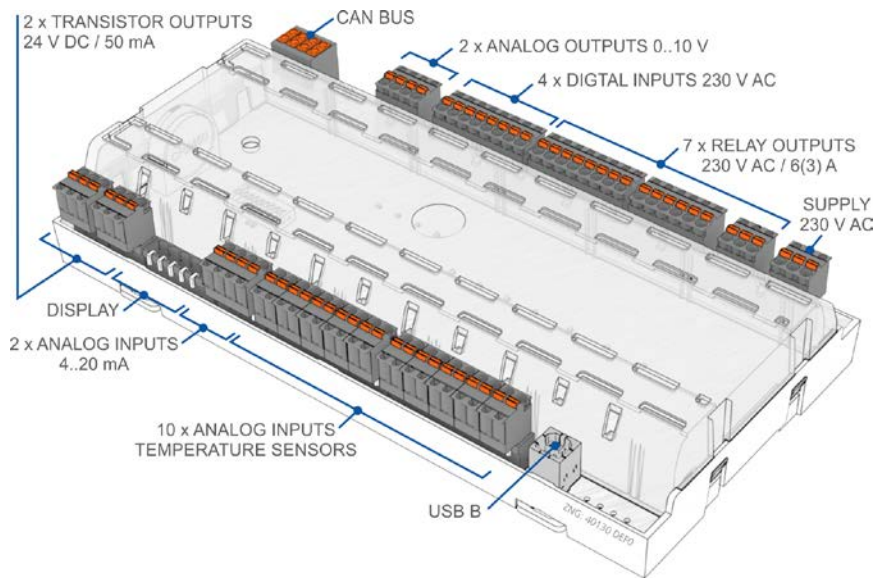
### Special functions and features

- Universal controller for refrigerated display cases with or without defrost heater, service counters, low-temperature display cases, walk-in chillers and freezers
- Controls up to 4 case units in 2 temperature zones
- Connection up to 10 temperature sensors (L243 / K277 / 5K3A1)
- Energy-saving function for pane and anti-condensation heater
- For discharge gas defrosting, demand defrosting, electric defrost heater and off-cycle defrosting
- Master-Slave function for defrost
- Integrated continuous running limiter
- Measurement data archiving:  
UA 400 AC only: stand-alone operation
- Various operation and display capabilities on separate BT 300 x operator interface, system centre, service centre by means of Virtus Control Desk (browser-based service and integral part of the Virtus System Centre) or service notebook
- USB interface for firmware update and direct parameter setting via LDSWin
- Spring terminals for easy installation
- Application in LDS1-system (CI 350) possible.
- Upon request with full electronic accessories – control boxes

### Order numbers

- KGLUA4N011 UA 400 AC, CAN bus, real-time clock, stand-alone, internal archive
- KGLUA4N012 UA 400 CC, CAN bus

# Connection diagram UA 400 AC



## Specifications

### Electrical connection

- Operating Power: 230 V AC ( $\pm 10\%$ ) / 50 - 60 Hz ( $\pm 3$  Hz) / 11 VA (energy efficient power supply)

### Interfaces

- Outputs
  - Relay: 4 N.O. / 3 changeover: 230 V AC / 6 A floating for cooling, defrosting, fan, pane heater, alarm, etc.
  - Transistor: 2 x 24 V DC / max 50 mA, for alarm, anti-condensation heater
  - Analog: 2 x 0..10 V DC for constant regulation
- Inputs
  - Digital: 4 x 230 V AC floating for setpoint toggle, manual shutoff, coldroom door, defrosting
- Field bus: CAN bus / floating
- USB: Firmware-update / direct parameter setting via LDSWin
- Other: Display: Connection to BT 300 family
- Archive memory: 1 year via system centre / store computer (if available) and 1 year in stand-alone operation (UA 400 AC / UA 410 AC only)
- Real-time clock: Power reserve, lithium cell
- Monitoring function: Watchdog

### General data

- Dimensions: W 267 x H 128 x D 50 mm
- Temperature range
  - Transport:  $-20\text{ }^{\circ}\text{C} \dots +80\text{ }^{\circ}\text{C}$
  - Operation:  $0\text{ }^{\circ}\text{C} \dots +50\text{ }^{\circ}\text{C}$
- Relative humidity
  - Transport: 8 % .. 80 %
  - Operation: 20 % .. 80 %
- Protection / Mounting: IP20 / DIN rail mounting
- Standards: Complying with EU Directives
  - 2004/108/EEC (EMC-Directive)
  - 2006/95/EEC (Low Voltage Directive)
  - 2002/95/EEC (RoHS)